

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(88)13	1971	101	457

**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.
- 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.
- DETOURS C, D AND RAMP G DETOUR ARE TO REMAIN UPON COMPLETION OF PROJECT. ALL OTHER TEMPORARY CONNECTIONS AND DETOURS ARE TO BE REMOVED.
- CONTRACTOR SHALL MAINTAIN TWO LANES OF TRAFFIC IN EACH DIRECTION AT ALL TIMES ON MOANALUA ROAD EXCEPT AS SHOWN ON PLANS.
- CONTRACTOR SHALL MAINTAIN TWO LANES OF TRAFFIC IN EACH DIRECTION AT ALL TIMES FROM MOANALUA ROAD OR MOANALUA FREEWAY TO INTERSTATE ROUTE H-1.
- CONTRACTOR SHALL MAINTAIN AT LEAST ONE LANE OF TRAFFIC IN EACH DIRECTION ON EXISTING HALAWA HEIGHTS ROAD, UNTIL SUCH TIME AS RELOCATED HALAWA HEIGHTS ROAD IS OPENED TO TRAFFIC.
- 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 SECTIONS AND RESTORING GROUND, GUARD RAILS AND OTHER ITEMS TO ORIGINAL CONDITION UPON COMPLETION OF THE PROJECT SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION.
- 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.
- 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 132 THRU 147 ARE TO BE DONE BY STATE FORCES.
- CONTRACTOR SHALL MAINTAIN ALL SIGNS IN GOOD CONDITION UNTIL COMPLETION OF PROJECT.
- PAINTED TRAFFIC DRUMS TO BE INCIDENTAL TO CONSTRUCTION. CLASS I BARRICADES OTHER THAN THOSE TO REMAIN AFTER COMPLETION OF ALL CONSTRUCTION TO BE INCIDENTAL TO CONSTRUCTION.
- PAINTED TRAFFIC DRUMS WILL BE MADE AVAILABLE FROM PREVIOUS PROJECT. RELOCATION OF SUCH DRUMS TO BE INCIDENTAL TO CONSTRUCTION.

**RIGHT LANE  
CLOSED AHEAD**

*Sign T-1 (8'-0" x 2'-6") mounted on Existing Pedestrian Overpass for phases V and VI (See Note 11)*

**← HONOLULU  
AIEA →**

*Sign T-2 (8'-0" x 3'-0") with 20" x 1 1/4" Standard Arrows for phases II thru V*

**DETOUR  
PEARL CITY  
VIA  
H-1 FREEWAY  
1500 FEET**

*Sign T-3 (7'-0" x 5'-0") for phases IV and V*

**H-1 FREEWAY  
KEEP RIGHT  
AIEA  
KEEP LEFT**

*Signs T-4 and T-5 (7'-0" x 4'-0") for phases IV and V*

**HALE STREET  
CLOSED AT  
MOANALUA RD.**

**LOCAL TRAFFIC  
ONLY**

*Signs T-6 and T-7 (8'-0" x 5'-0") for phases V and VI*

**RIGHT LANE  
HALE STREET ONLY**

*Sign T-8 (8'-0" x 2'-6") for phases I thru IV*

**MOANALUA RD.  
KEEP LEFT**

*Sign T-9 (7'-0" x 2'-6") for phases I thru IV*

**HALAWA HTS RD.  
WILL BE CLOSED  
PERMANENTLY  
ON**

*Signs T-12 and T-13 (8'-0" x 4'-6") (See Note 12)*

**NOTES FOR TEMPORARY DIRECTIONAL SIGNS**

- EXACT LOCATION OF TEMPORARY DIRECTIONAL SIGNS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- ALL SIGNS, EXCEPT SIGN T-2 AND T-8 THRU T-11 ARE TO REMAIN UPON COMPLETION OF CONTRACT.
- 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 TRANSPORTATION 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, EXCEPT SIGN T-1, WHICH SHALL HAVE BLACK SYMBOL MESSAGES AND BORDER ON A YELLOW BACKGROUND, AND SIGNS T-12 AND T-13, WHICH SHALL HAVE BLACK SYMBOL MESSAGES AND BORDER ON A WHITE BACKGROUND.
- ALL LETTERS SHALL BE 6 INCH UPPER CASE. INDIVIDUAL LETTERS, NUMERALS, SYMBOLS AND BORDER SHALL BE OF WHITE REFLECTIVE SHEETING MATERIAL EXCEPT SIGN T-1, T-12 & T-13.
- 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 INCH THICK WATERPROOF FIR PLYWOOD. CONTRACTOR MAY SUBMIT ALTERNATE, SUBJECT TO THE APPROVAL OF THE ENGINEER.
- METHOD OF MOUNTING SIGN T-1 ON EXISTING PEDESTRIAN OVERPASS TO BE AT CONTRACTOR'S OPTION, SUBJECT TO APPROVAL BY THE ENGINEER.
- THE DATE OF CLOSING OF THE SECTION OF HALAWA HTS. RD. TO BE ADDED TO SIGNS T-12 AND T-13. SIGNS TO BE PLACED 7 DAYS PRIOR TO CLOSING OF ROADWAY.

**SUMMARY OF TEMPORARY WARNING, REGULATORY, CONSTRUCTION AND MAINTENANCE SIGNS (All Phases)**

Type	Message	Quantity	
		W/ Post	W/O Post
M5-7(L)	Detour (Arrow)	2	
M5-7(R)	Detour (Arrow)	1	
R1-2	Yield	1	
W1-3(L)	(Curved Arrow)	2	
W13-1(25)	25 MPH		1
W20-1a	Road Construction 1500 Ft.	#	4
W20-1b	Road Construction 1000 Ft.	#	3
W20-1c	Road Construction 500 Ft.	#	4
W20-1d	Road Construction Ahead	#	4
W20-2b	Detour 1000 Ft.	#	1
W20-2c	Detour 500 Ft.	#	1
W20-2d	Detour Ahead	#	1
# Construction Signs			
<b>Totals</b>		<b>24</b>	<b>1</b>

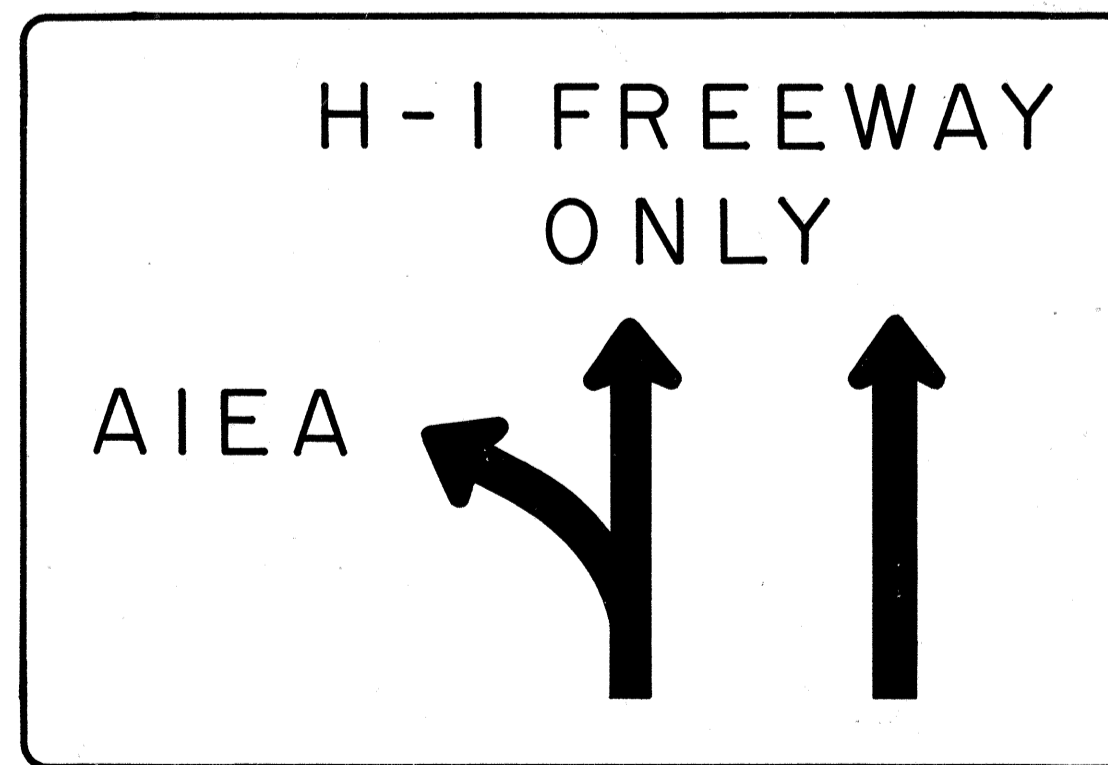
**SUMMARY OF WARNING, REGULATORY, CONSTRUCTION AND MAINTENANCE SIGNS TO REMAIN IN PLACE UPON COMPLETION OF CONSTRUCTION \***

Type	Message	Quantity	
		W/ Post	W/O Post
M5-7(R)	Detour (Arrow)	1	
R1-2	Yield	1	
R3-7(R)	Right Lane MUST Turn Right	1	
R3-8(R)	Only (Arrows)	1	
R10-2	Road Closed		4
W1-1(R)	(Curved Arrow)	1	
W3-2	Yield Ahead	1	
W13-4	Not a Through Street	4	
W20-2b	Detour 1000 Ft.	#	1
W20-2c	Detour 500 Ft.	#	1
W20-5a(L)	Left Lane Closed 1500 Ft.	#	1
W20-5b(L)	Left Lane Closed 1000 Ft.	#	1
W20-5b(R)	Right Lane Closed 1000 Ft.	#	2
W20-5c(R)	Right Lane Closed 500 Ft.	#	2
W20-5d(L)	Left Lane Closed Ahead	#	1
# Construction Signs			
<b>Totals</b>		<b>19</b>	<b>4</b>

\* For additional permanent regulatory and warning signs see Sheet 159.

**SUMMARY OF MISCELLANEOUS ITEMS (All Phases)**

Items (To remain in place upon completion of construction)	Quantity
Class I Barricades (10'-0" long)	20
Relocated Painted Traffic Drums	77



*Signs T-10 and T-11 (11'-6" x 8'-0") with oversized arrows for phase V*

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



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*J. Andrew Schuchardt*

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**GENERAL NOTES  
TEMPORARY CONSTRUCTION  
TEMPORARY DIRECTIONAL SIGNS**

INTERSTATE ROUTE H-1  
PROJECT NO I-HI-1(88)-13

NO SCALE DATE: JULY 17, 1970

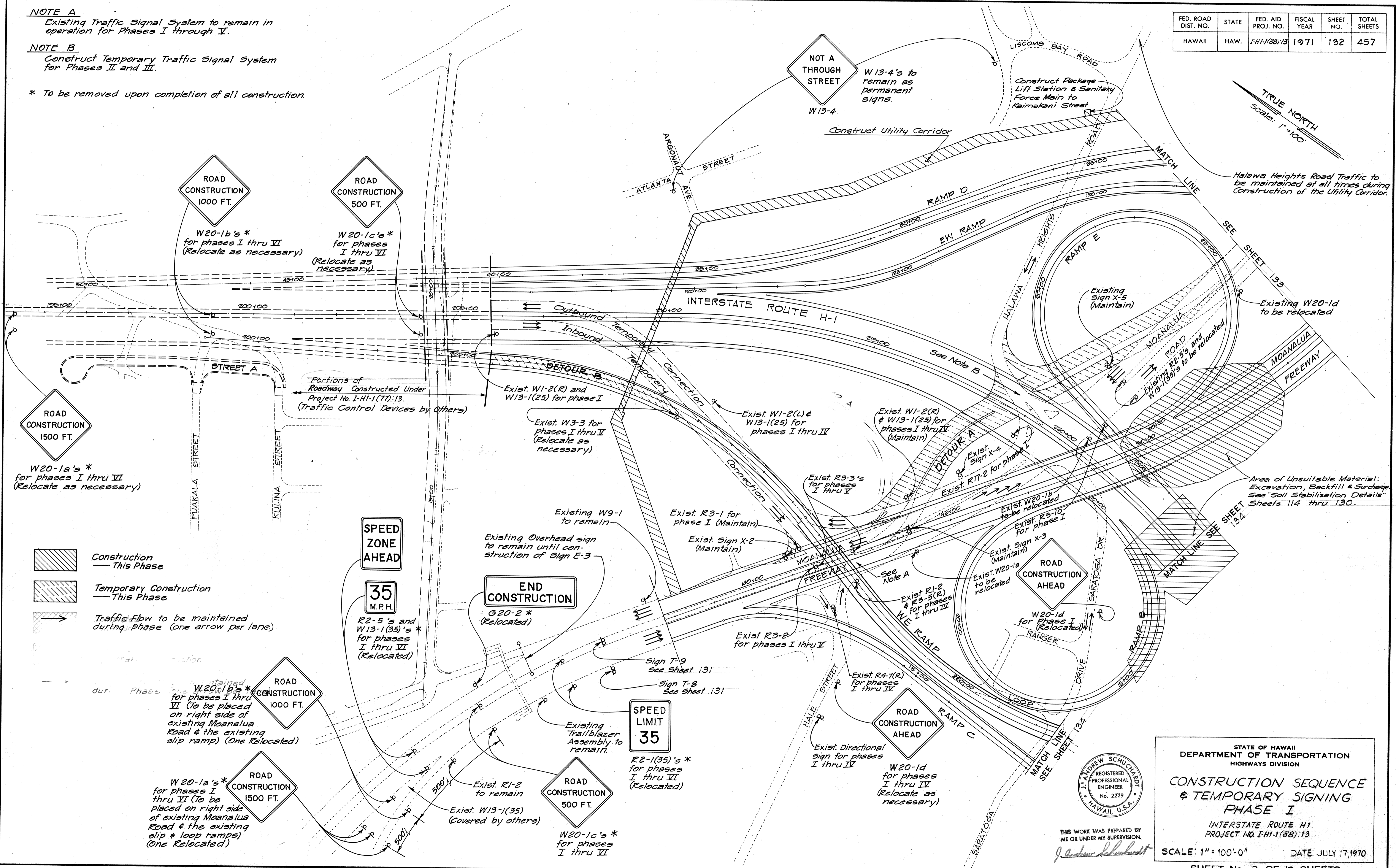
**SHEET No. 1 OF 19 SHEETS**

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(88)13	1971	132	457

**NOTE A**  
Existing Traffic Signal System to remain in operation for Phases I through V.

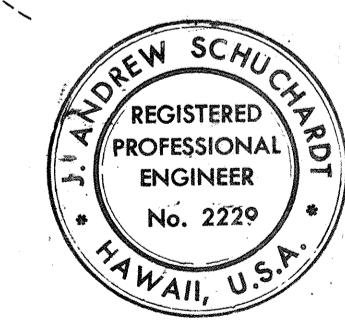
**NOTE B**  
Construct Temporary Traffic Signal System for Phases II and III.

\* To be removed upon completion of all construction.



DATE: \_\_\_\_\_  
 SURVEY PLOTTED BY: \_\_\_\_\_  
 DRAWN BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 QUANTITIES BY: \_\_\_\_\_  
 SITE WORK: \_\_\_\_\_  
 No. \_\_\_\_\_

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION  
**CONSTRUCTION SEQUENCE  
 & TEMPORARY SIGNING  
 PHASE I**  
 INTERSTATE ROUTE H-1  
 PROJECT NO. I-HI-1(88)13  
 SCALE: 1" = 100'-0" DATE: JULY 17, 1970  
 SHEET No. 2 OF 19 SHEETS



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**NOTE A**  
 All existing construction signs in this area to be removed upon completion of all construction. Existing directional signs in this area: "Halawa Valley - Powder Magazine - Animal Quarantine Station," to be relocated and/or removed after phase III by others.

**EXISTING TEMPORARY DIRECTIONAL SIGNS**

HALAWA HTS RD KEEP RIGHT H-1 FREEWAY NEXT RIGHT <i>Sign X-1 for phases I thru III *</i>	AIEA KEEP RIGHT <i>Sign X-2 for phases I thru IV</i>	KAM HIGHWAY KEEP LEFT <i>Sign X-3 for phases I thru IV</i>	HALAWA HTS RD → <i>Sign X-5 for phases I thru III *</i>
---	--	--	---

KAM HIGHWAY AIEA H-1 FREEWAY ONLY

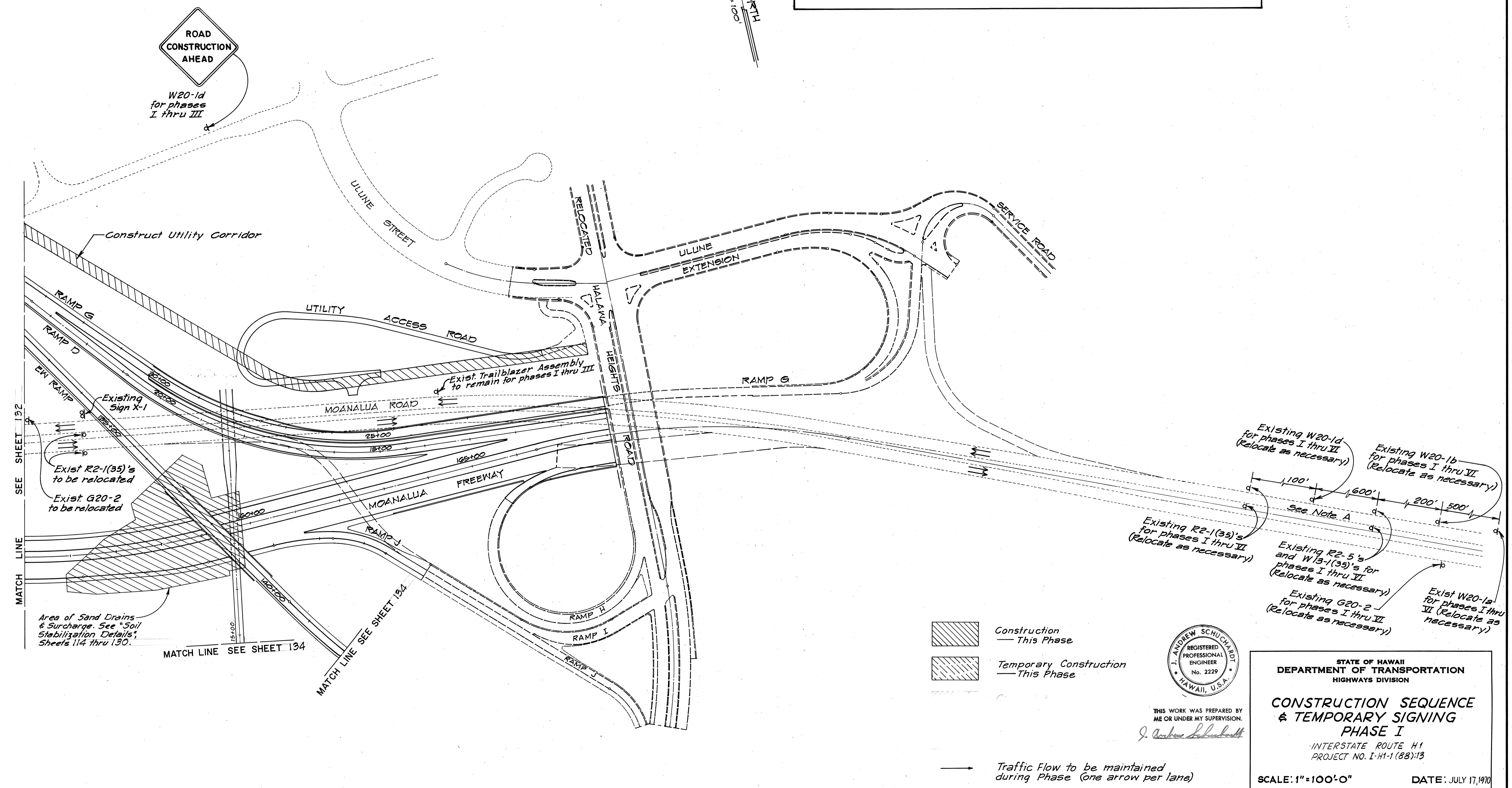
↑ ↗ ↘

*Sign X-4 for phases I thru IV*

\* Removal of signs X-1 & X-5 by Others.

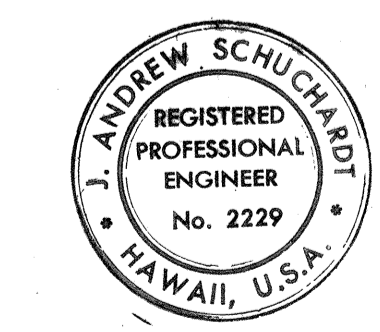
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(88)13	1971	133	457

TRUE NORTH  
 Scale: 1"=100'



SERVISED BY	DATE	DRAWN BY	NO.
DESIGNED BY		CHECKED BY	
NOTE BOOK			

Construction — This Phase  
 Temporary Construction — This Phase



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STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

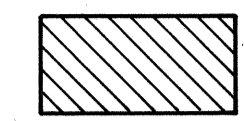
**CONSTRUCTION SEQUENCE & TEMPORARY SIGNING**  
**PHASE I**

INTERSTATE ROUTE H1  
 PROJECT NO. I-HI-1(88)13

SCALE: 1"=100'-0"      DATE: JULY 17, 1970

SHEET No. 3 OF 10 SHEETS

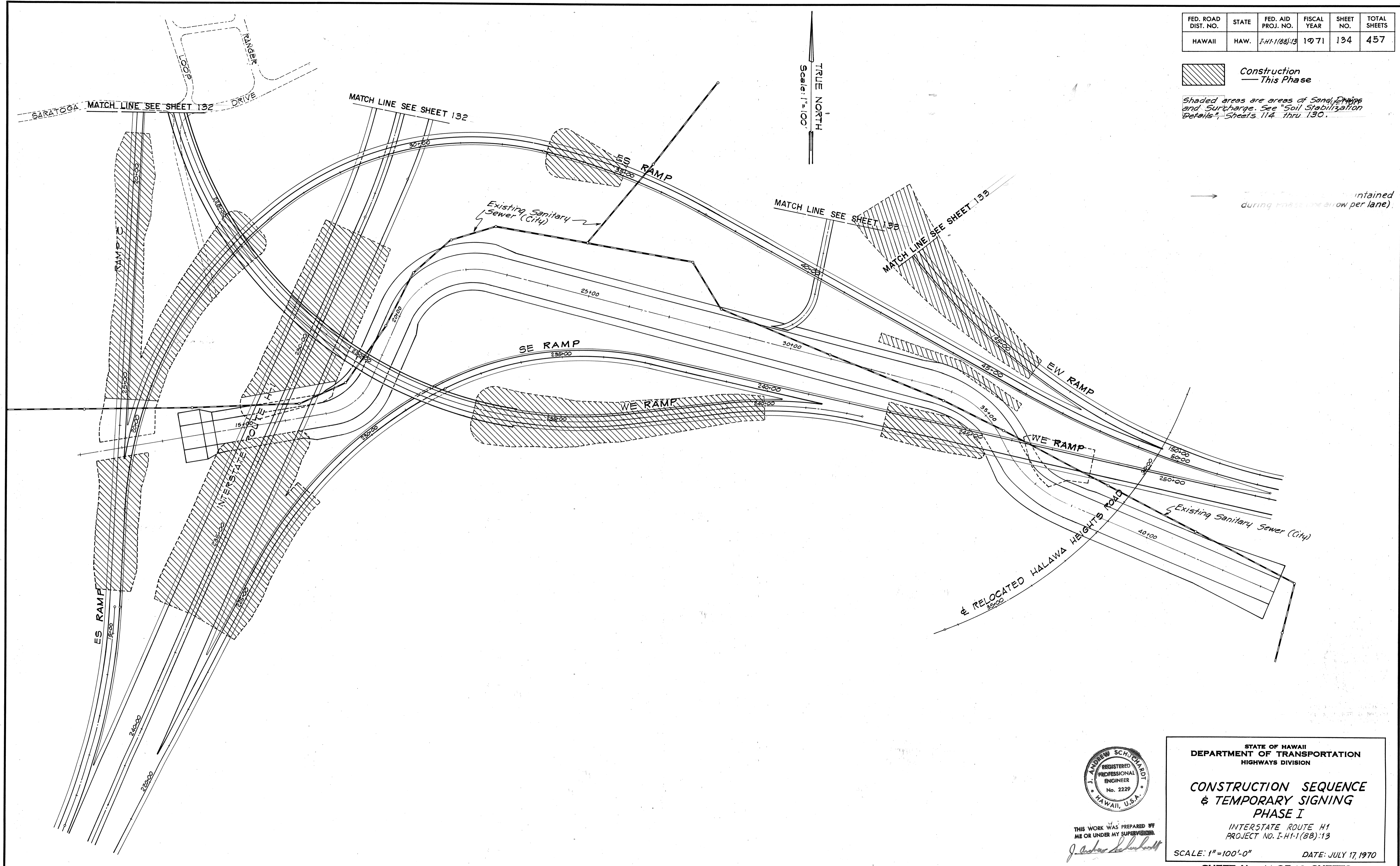
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H-1(88):13	1971	134	457

 Construction — This Phase

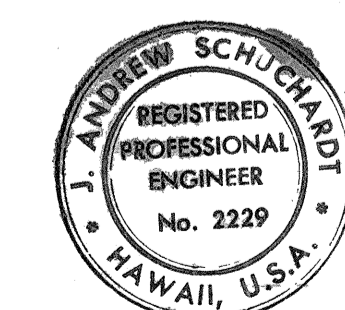
Shaded areas are areas of Sand, Drains and Surcharge. See "Soil Stabilization Details", Sheets 114 thru 130.

 Existing Sanitary Sewer (City) maintained during Phase I (allow per lane).

TRUE NORTH  
Scale: 1"=100'



DATE	.....
DESIGNED BY	.....
TRACED BY	.....
DESIGNED BY	.....
QUANTITIES BY	.....
CHECKED BY	.....
NO.	.....



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*J. Andrew Schuchardt*

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**CONSTRUCTION SEQUENCE  
& TEMPORARY SIGNING  
PHASE I**

INTERSTATE ROUTE H1  
PROJECT NO. I-H-1(88):13

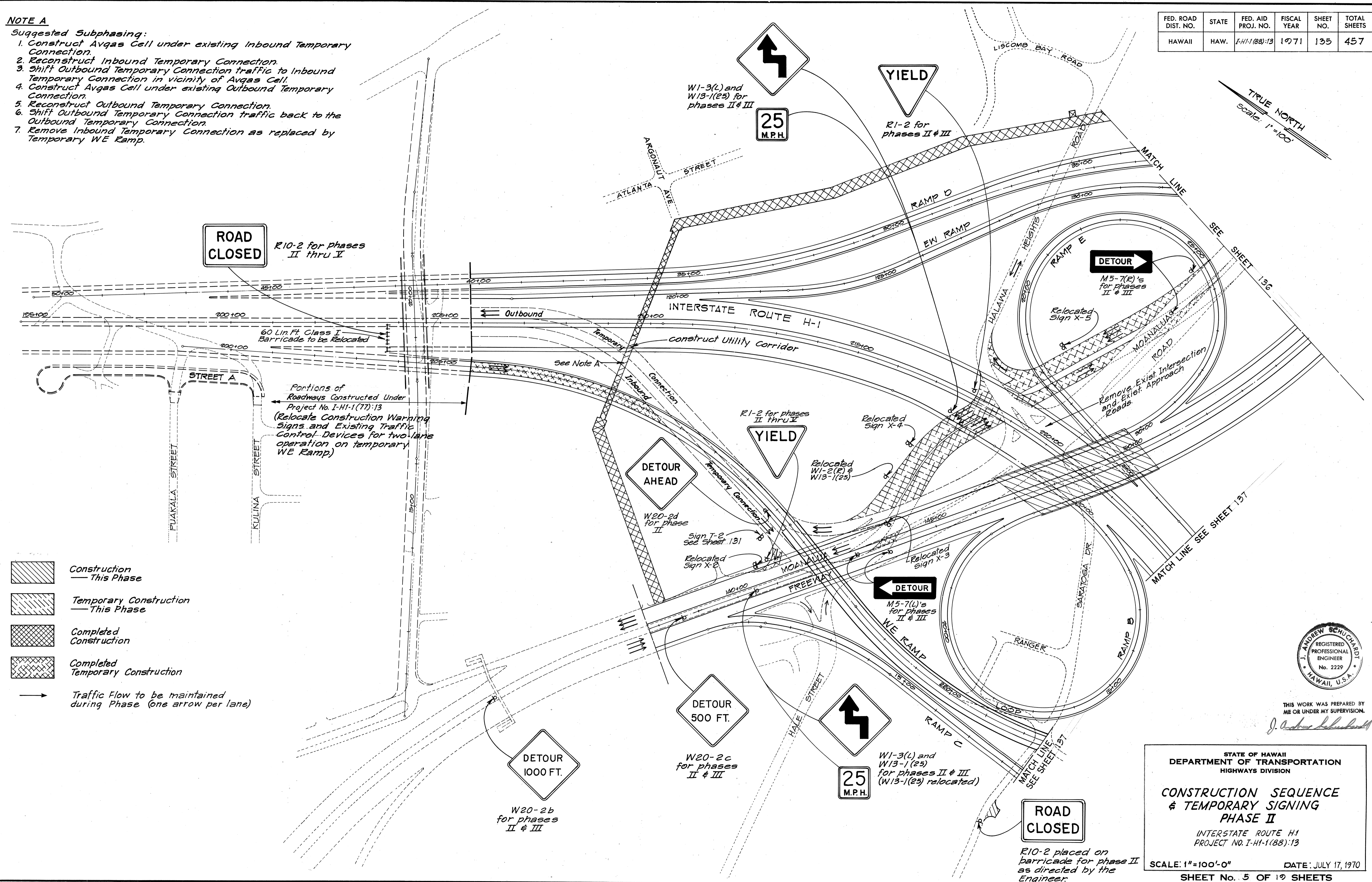
SCALE: 1"=100'-0"      DATE: JULY 17, 1970

**SHEET No. 4 OF 19 SHEETS**

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(88):13	1971	135	457

**NOTE A**

- Suggested Subphasing:**
1. Construct Avgas Cell under existing Inbound Temporary Connection.
  2. Reconstruct Inbound Temporary Connection.
  3. Shift Outbound Temporary Connection traffic to Inbound Temporary Connection in vicinity of Avgas Cell.
  4. Construct Avgas Cell under existing Outbound Temporary Connection.
  5. Reconstruct Outbound Temporary Connection.
  6. Shift Outbound Temporary Connection traffic back to the Outbound Temporary Connection.
  7. Remove Inbound Temporary Connection as replaced by Temporary WE Ramp.



DATE: \_\_\_\_\_  
 SURVEY PLOTTED BY: \_\_\_\_\_  
 DRAWN BY: \_\_\_\_\_  
 TRACED BY: \_\_\_\_\_  
 QUANTITIES BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 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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*J. Andrew Schuchard*

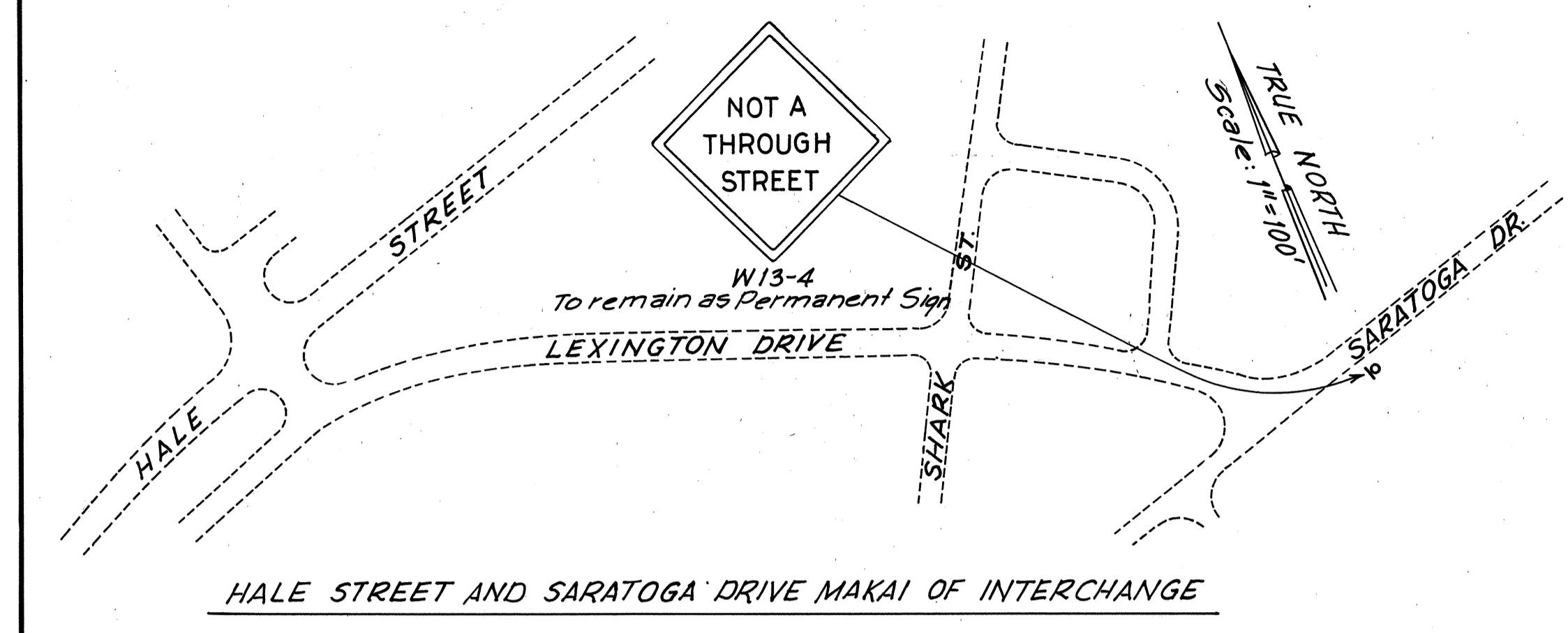
STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

**CONSTRUCTION SEQUENCE  
 & TEMPORARY SIGNING  
 PHASE II**

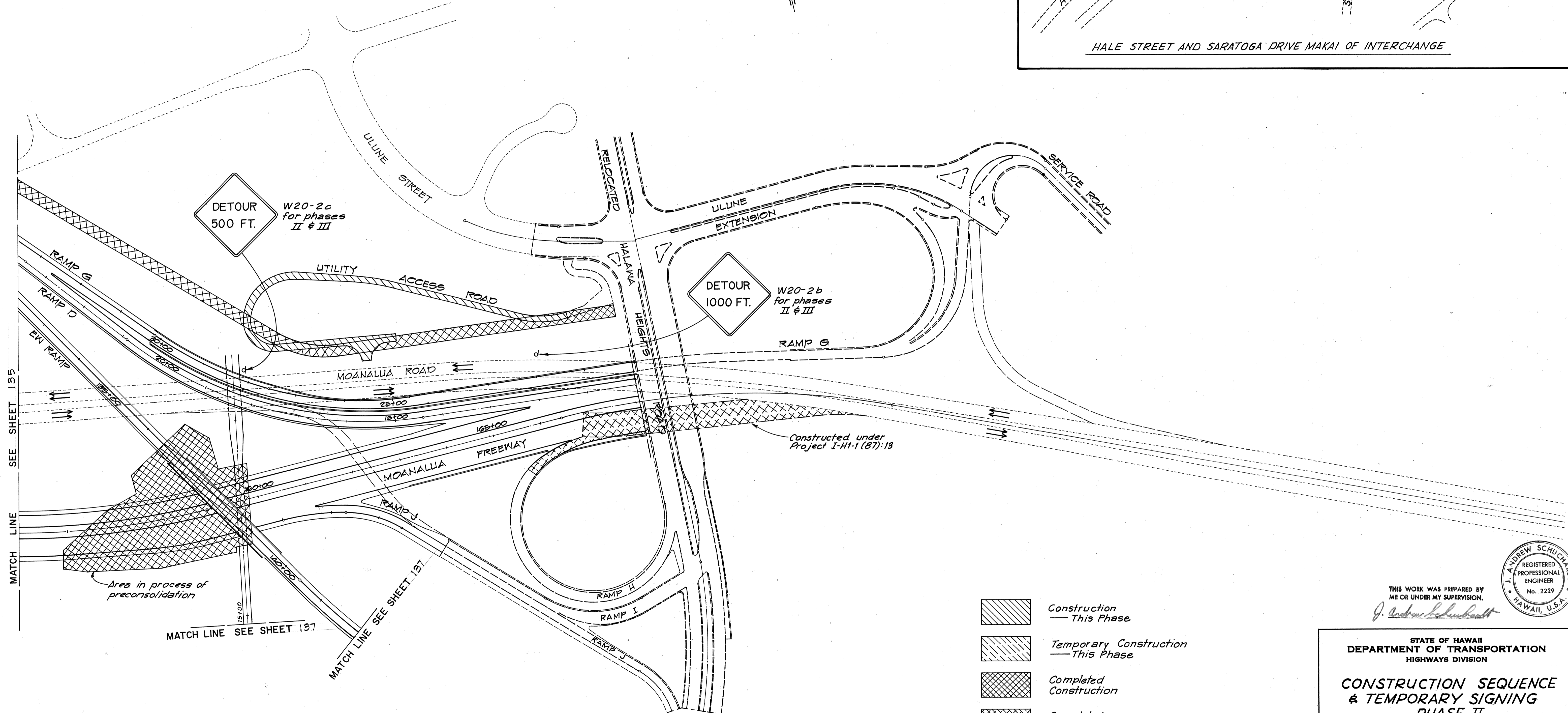
INTERSTATE ROUTE H-1  
 PROJECT NO. I-HI-1(88):13


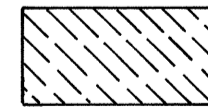
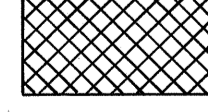


SCALE: 1"=100'-0"      DATE: JULY 17, 1970  
 SHEET No. 5 OF 19 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(88):13	1971	136	457



TRUE NORTH  
Scale: 1"=100'



-  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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*J. Andrew Schuchardt*

J. ANDREW SCHUCHARDT  
REGISTERED PROFESSIONAL ENGINEER  
No. 2229  
HAWAII, U.S.A.

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**CONSTRUCTION SEQUENCE & TEMPORARY SIGNING**  
PHASE II

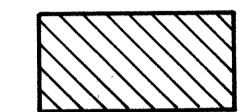

INTERSTATE ROUTE H1  
PROJECT NO. I-HI-1(88):13

SCALE: 1"=100'-0"      DATE: JULY 17, 1970

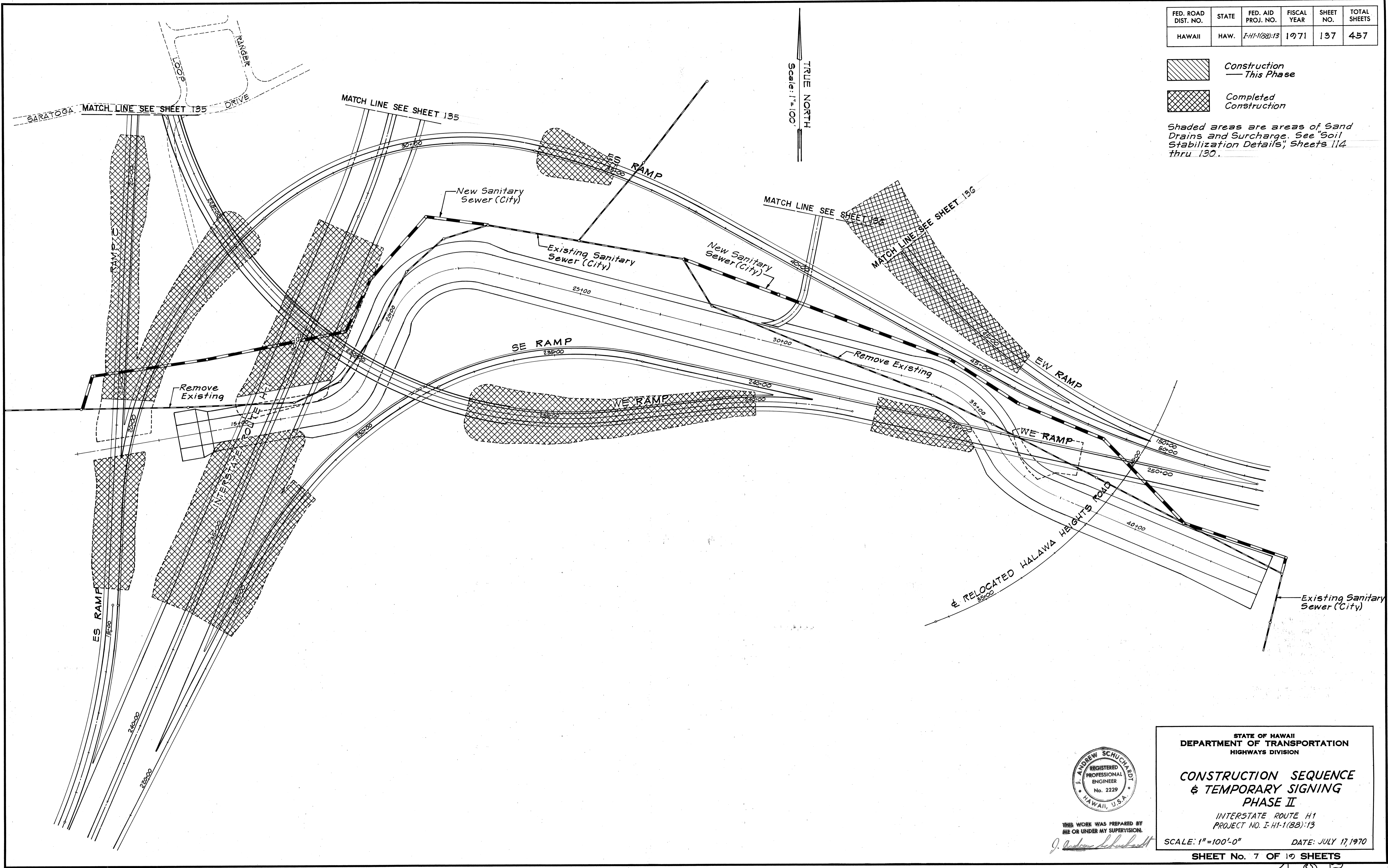
SHEET No. 6 OF 12 SHEETS

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

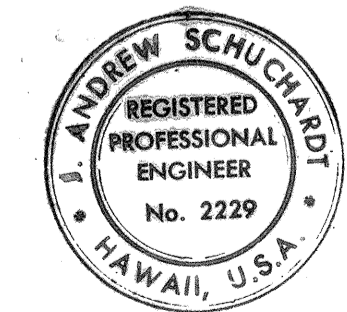
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(88)-13	1971	137	457

 Construction This Phase  
 Completed Construction

Shaded areas are areas of Sand Drains and Surcharge. See "Soil Stabilization Details", Sheets 114 thru 130.



DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
IN CHARGE BY	
APPROVED BY	
DATE	
NO.	



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*J. Andrew Schuchardt*

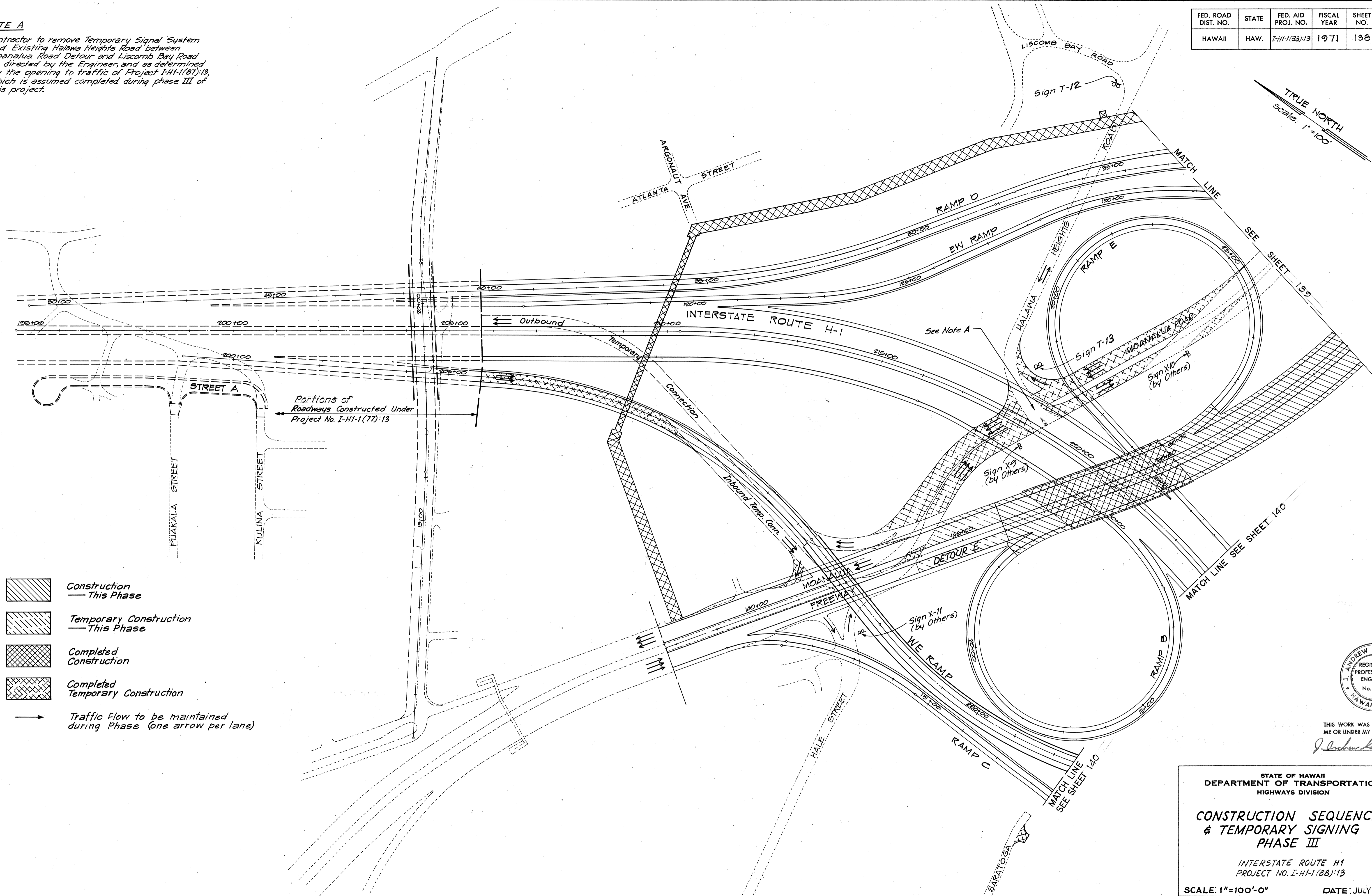
STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION  
**CONSTRUCTION SEQUENCE  
 & TEMPORARY SIGNING  
 PHASE II**  
 INTERSTATE ROUTE H1  
 PROJECT NO. I-HI-1(88)-13  
 SCALE: 1"=100'-0"      DATE: JULY 17, 1970  
 SHEET No. 7 OF 10 SHEETS

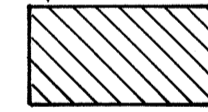



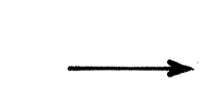
**NOTE A**

Contractor to remove Temporary Signal System and Existing Halewa Heights Road between Moanalua Road Detour and Liscomb Bay Road as directed by the Engineer, and as determined by the opening to traffic of Project I-HI-1(87)13, which is assumed completed during phase III of this project.

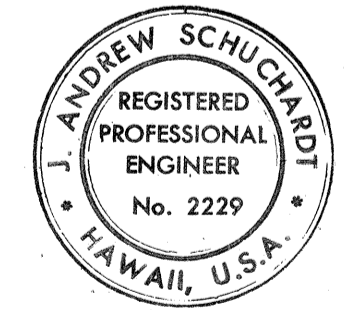
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(88)13	1971	138	457

TRUE NORTH  
Scale: 1"=100'



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

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



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*J. Andrew Schuchardt*

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**CONSTRUCTION SEQUENCE  
& TEMPORARY SIGNING  
PHASE III**

INTERSTATE ROUTE H1  
PROJECT NO. I-HI-1(88)13

SCALE: 1"=100'-0"      DATE: JULY 17, 1970

SHEET No. 8 OF 13 SHEETS

**NOTE A**

Construct detour as necessary to facilitate construction of roadways as indicated while maintaining traffic on Ramp H.

\* To be removed upon completion of all construction.

**TEMPORARY DIRECTIONAL SIGNS BY OTHERS**

HALAWA HTS RD  
CLOSED  
USE DETOUR  
1500 FEET

Sign X-6 to remain

DETOUR  
HALAWA HTS RD  
600 FEET  
KEEP RIGHT

Sign X-7 to remain  
Sign X-10 for phase III

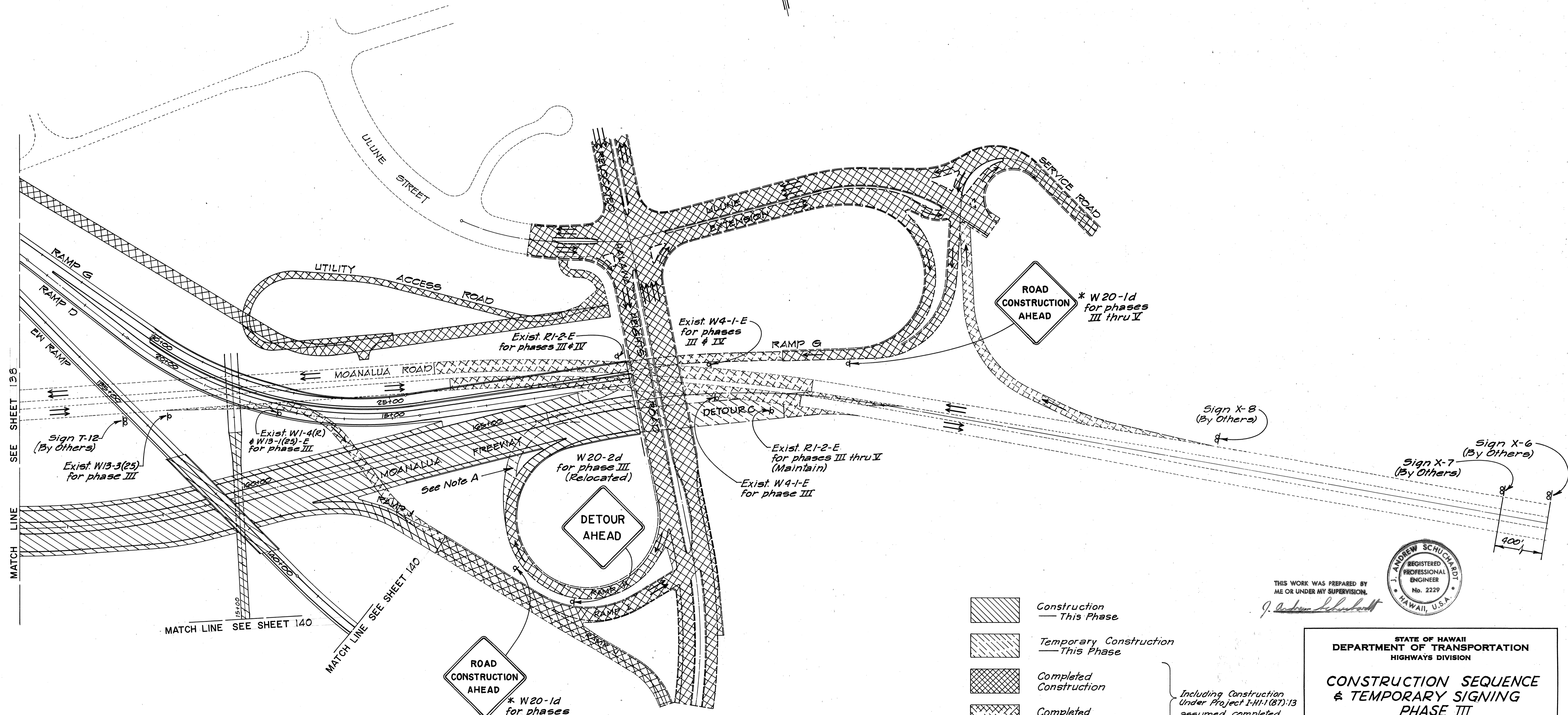
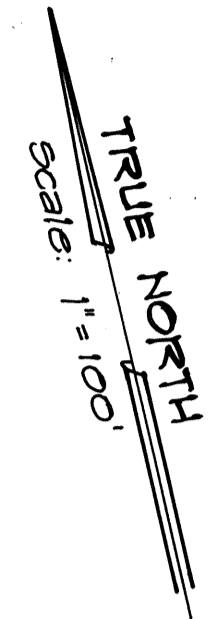
DETOUR  
HALAWA HTS RD  
→

Sign X-8 to remain  
Sign X-11 for phase III  
Sign X-12 for phase III

HALAWA HTS RD  
CLOSED  
USE DETOUR  
1000 FEET

Sign X-9 for phase III

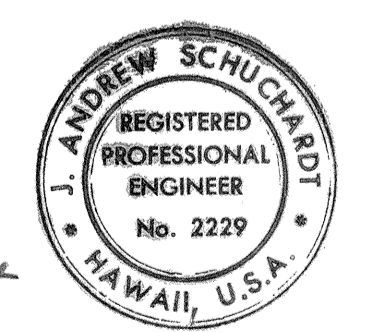
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(88):13	1971	139	457



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

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

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



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

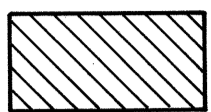
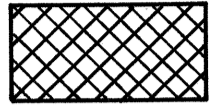
**CONSTRUCTION SEQUENCE  
& TEMPORARY SIGNING  
PHASE III**

INTERSTATE ROUTE HI  
PROJECT NO. I-HI-1(88):13

SCALE: 1"=100'-0"      DATE: JULY 17, 1970

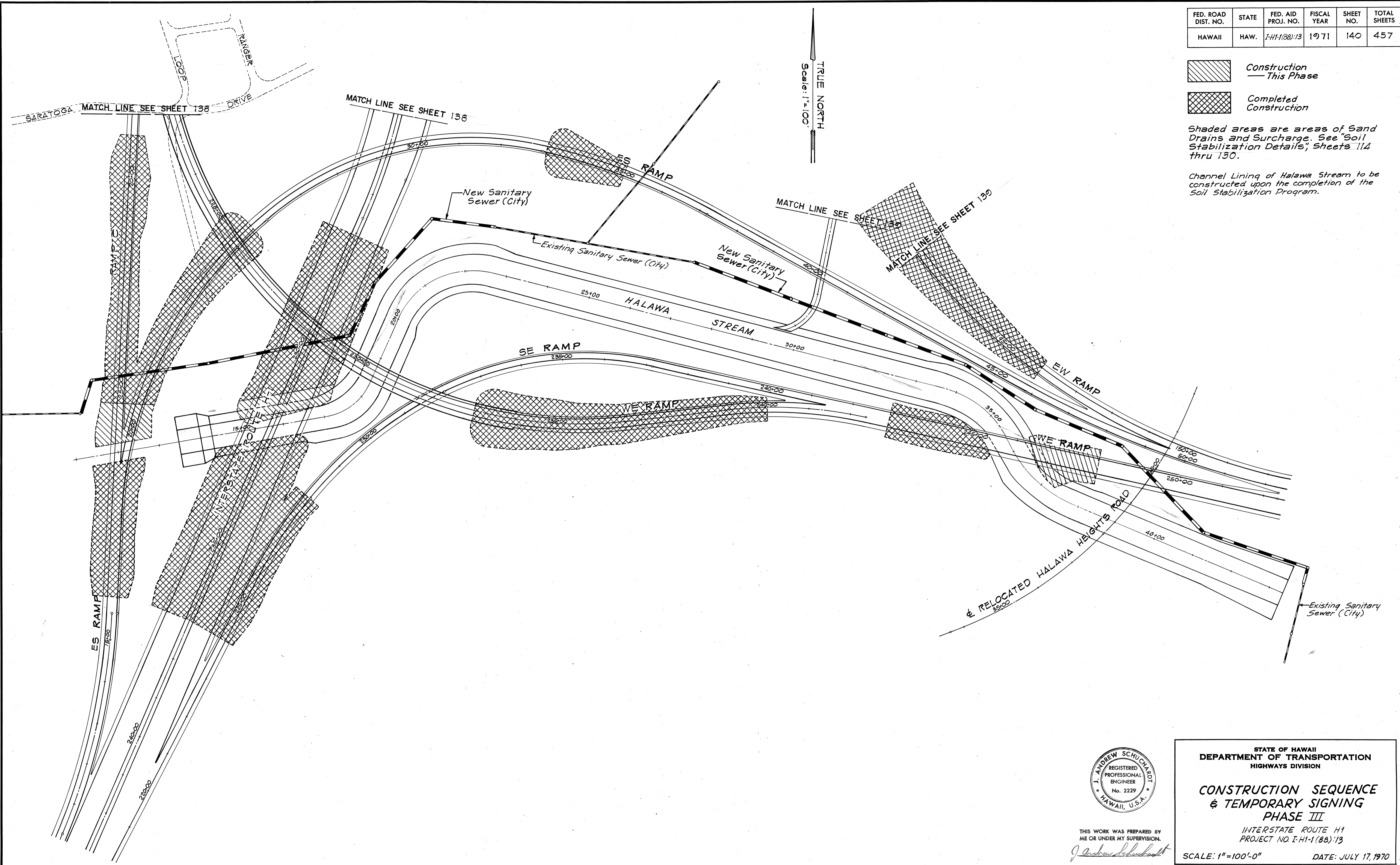
SHEET No. 9 OF 19 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(88)-13	1971	140	457

 Construction — This Phase  
 Completed Construction

Shaded areas are areas of Sand Drains and Surcharge. See "Soil Stabilization Details" Sheets 114 thru 130.

Channel Lining of Halawa Stream to be constructed upon the completion of the Soil Stabilization Program.



TRUE NORTH  
Scale: 1"=100'

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

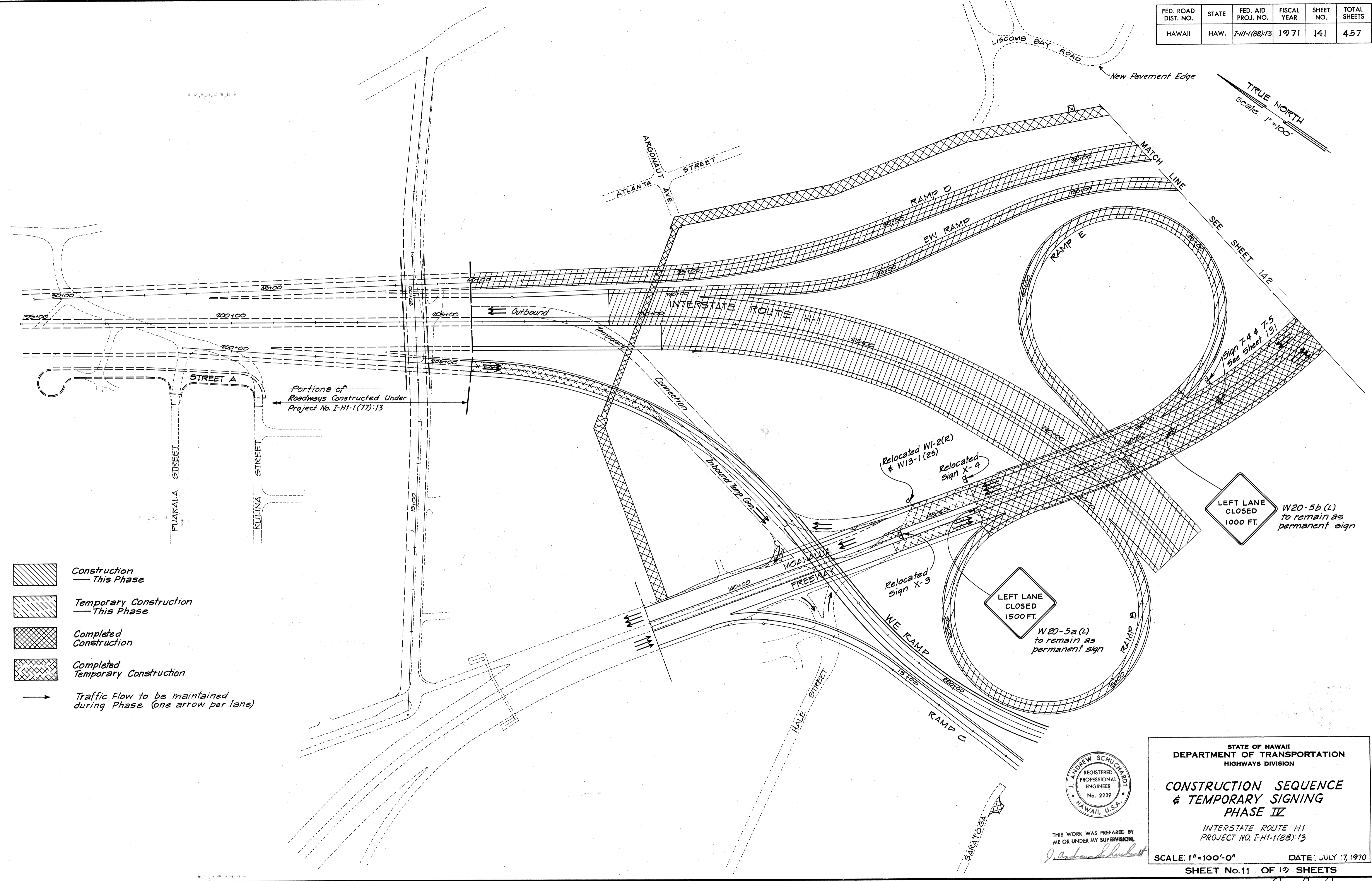


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J. Andrew Schuchardt

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION  
**CONSTRUCTION SEQUENCE & TEMPORARY SIGNING**  
 PHASE III  
 INTERSTATE ROUTE H1  
 PROJECT NO. I-HI-1(88)-13  
 SCALE: 1"=100'-0" DATE: JULY 17, 1970  
 SHEET No. 10 OF 12 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(88):13	1971	141	457

TRUE NORTH  
Scale: 1"=100'



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

DATE: \_\_\_\_\_  
 SURVEY PLOTTED BY: \_\_\_\_\_  
 PLAN: \_\_\_\_\_  
 TRACED BY: \_\_\_\_\_  
 DESIGNED BY: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 QUANTITIES BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 No. \_\_\_\_\_



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*J. Andrew Schuchard*

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

**CONSTRUCTION SEQUENCE  
 & TEMPORARY SIGNING  
 PHASE II**

INTERSTATE ROUTE HI  
 PROJECT NO. I-HI-1(88):13

SCALE: 1"=100'-0"      DATE: JULY 17, 1970

SHEET No. 11 OF 19 SHEETS

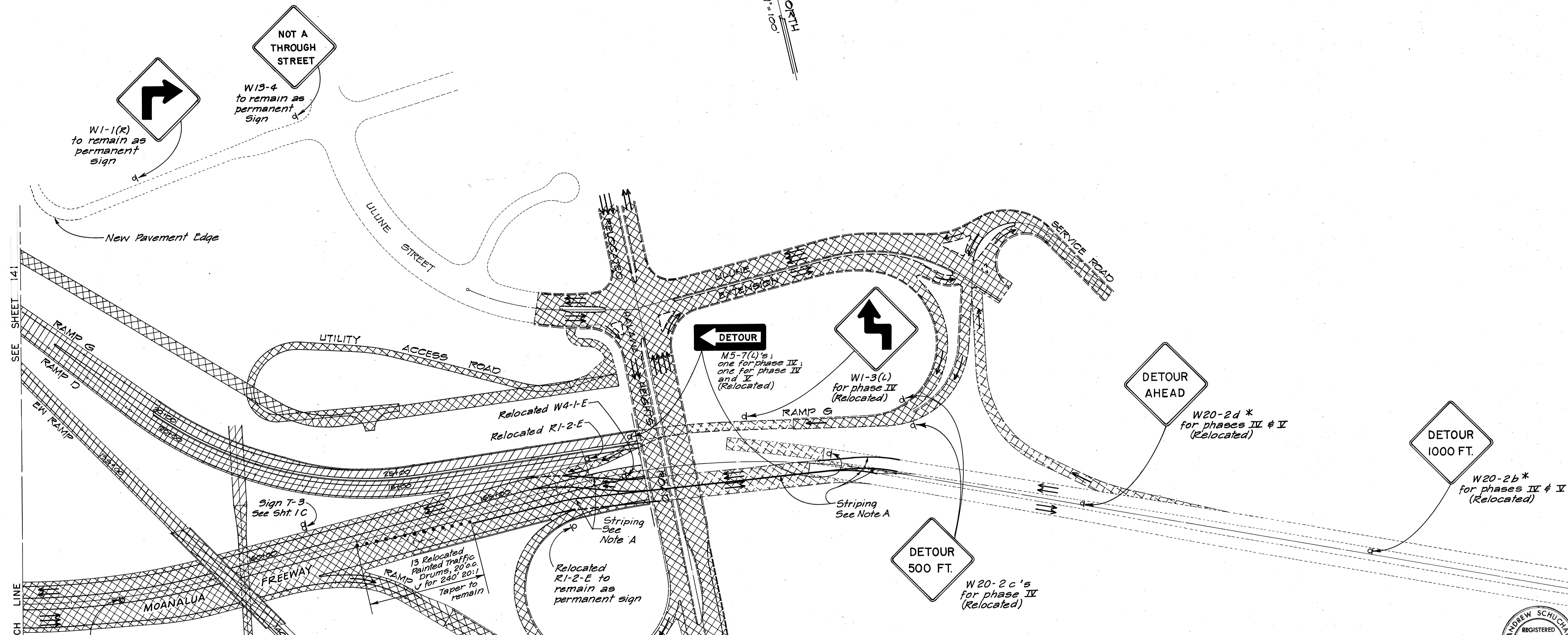
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(88)13	1971	142	457

**NOTE A**

Contractor to place painted traffic drums, as directed by the Engineer, to route all Moanalua Road Traffic over Detour C. Temporary striping by State forces. (for phases IV and V)

\* To be removed upon completion of all construction.

TRUE NORTH  
Scale: 1"=100'



SEE SHEET 141  
MATCH LINE

LEFT LANE CLOSED AHEAD  
W20-5d(L) to remain as permanent sign.

NOT A THROUGH STREET  
W13-4 to remain as permanent sign

W1-1(R) to remain as permanent sign

DETOUR  
M5-7(L)'s; one for phase IV; one for phase IV and V (Relocated)

W1-3(L) for phase IV (Relocated)

DETOUR AHEAD  
W20-2d\* for phases IV & V (Relocated)

DETOUR 1000 FT.  
W20-2b\* for phases IV & V (Relocated)

DETOUR 500 FT.  
W20-2c's for phase IV (Relocated)

Sign T-3 See Sht. 1C

Relocated R1-2-E to remain as permanent sign

Striping See Note A

13 Relocated Painted Traffic Drums, 20" dia. for 240' 20" Taper to remain

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

Including Construction Under Project I-HI-1(87)13

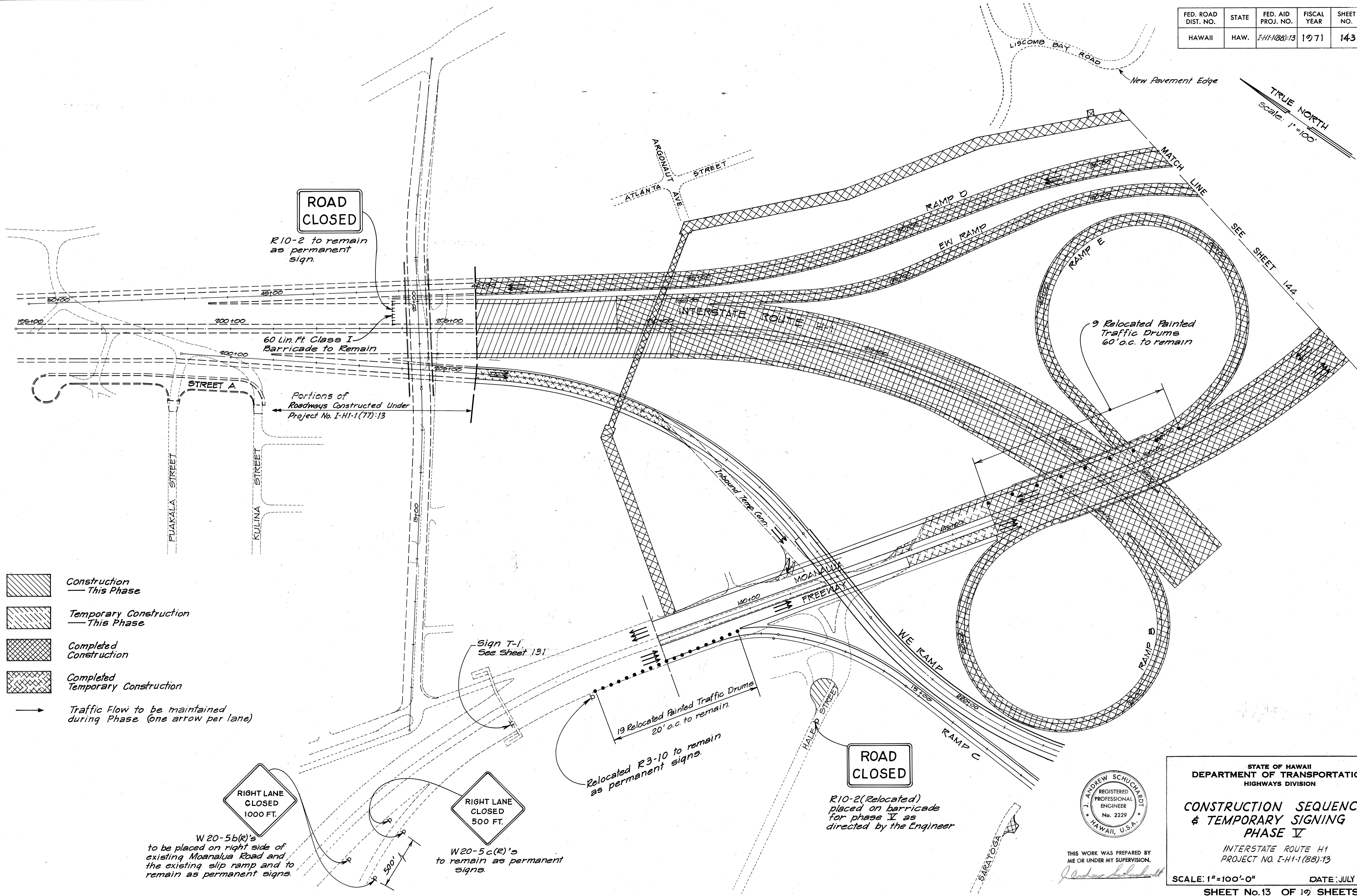
DATE: \_\_\_\_\_  
SURVEY PLOTTED BY: \_\_\_\_\_  
DRAWN BY: \_\_\_\_\_  
TRACED BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_  
NOTE BOOK No. \_\_\_\_\_

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.  
*J. Andrew Schuchardt*  
J. ANDREW SCHUCHARDT  
REGISTERED PROFESSIONAL ENGINEER  
No. 2229  
HAWAII, U.S.A.

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**CONSTRUCTION SEQUENCE & TEMPORARY SIGNING**  
**PHASE IV**  
INTERSTATE ROUTE H1  
PROJECT NO. I-HI-1(88)13  
SCALE: 1"=100'-0" DATE: JULY 17, 1970  
SHEET No. 12 OF 19 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H1-1(88)-13	1971	143	457

TRUE NORTH  
Scale: 1"=100'



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

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

**RIGHT LANE CLOSED 1000 FT.**  
W 20-5b(r)'s to be placed on right side of existing Moanalua Road and the existing slip ramp and to remain as permanent signs.

**RIGHT LANE CLOSED 500 FT.**  
W 20-5c(r)'s to remain as permanent signs.

**ROAD CLOSED**  
R10-2 (Relocated) placed on barricade for phase V as directed by the Engineer



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STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**CONSTRUCTION SEQUENCE & TEMPORARY SIGNING PHASE V**

INTERSTATE ROUTE H1  
PROJECT NO. I-H1-1(88)-13

SCALE: 1"=100'-0"      DATE: JULY 17, 1970

SHEET No. 13 OF 19 SHEETS

143

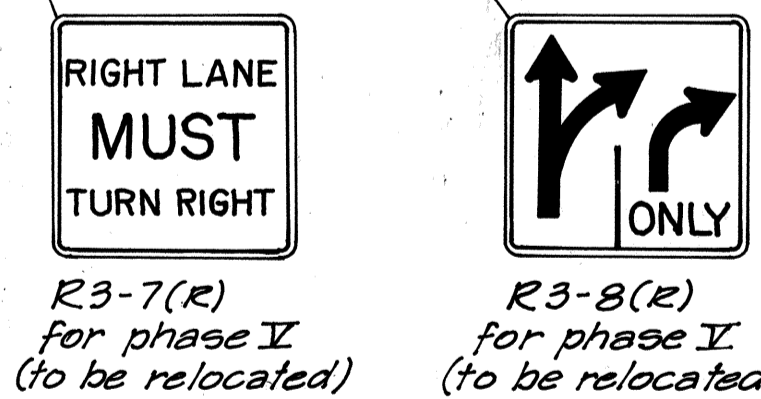
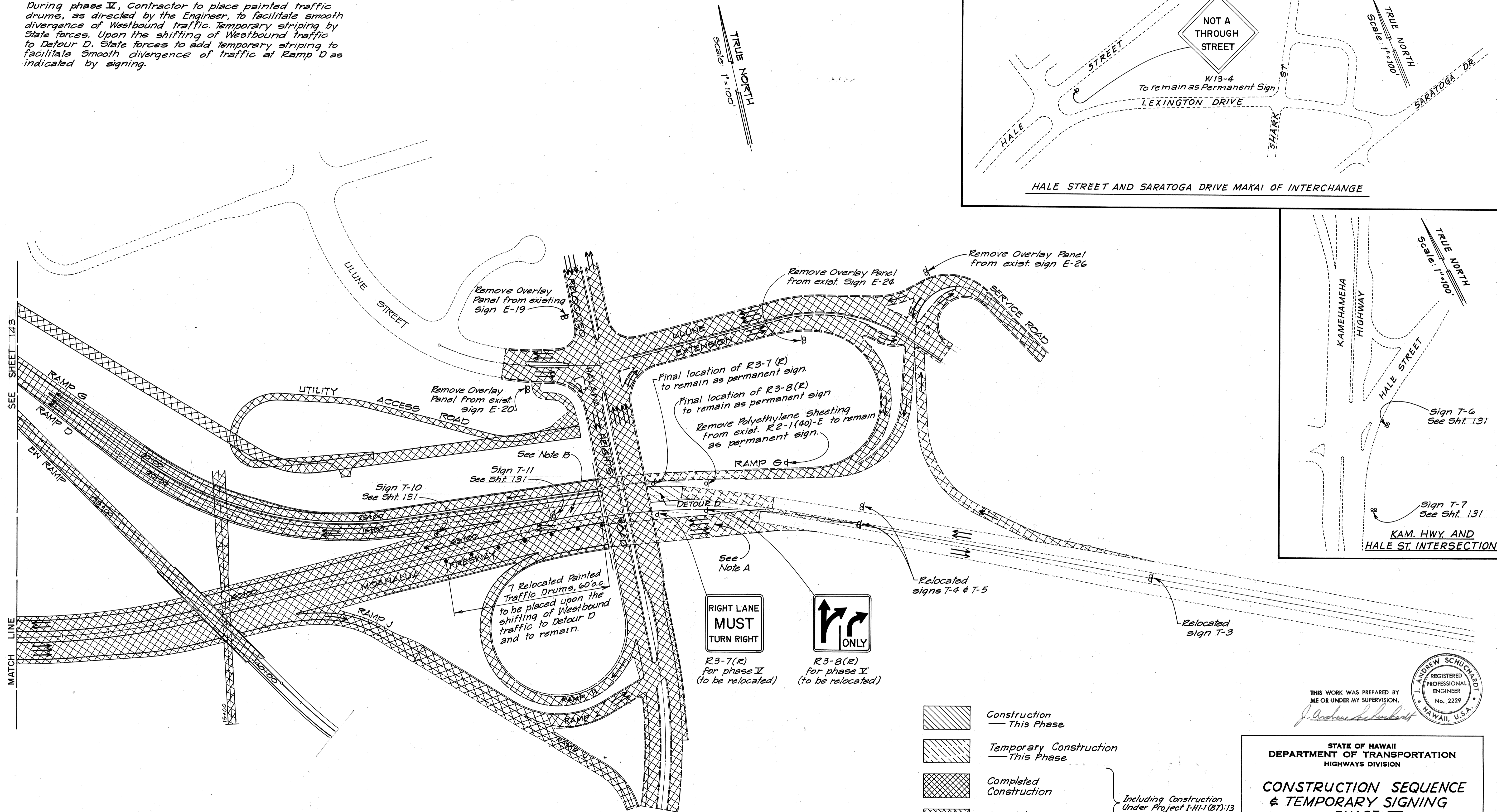
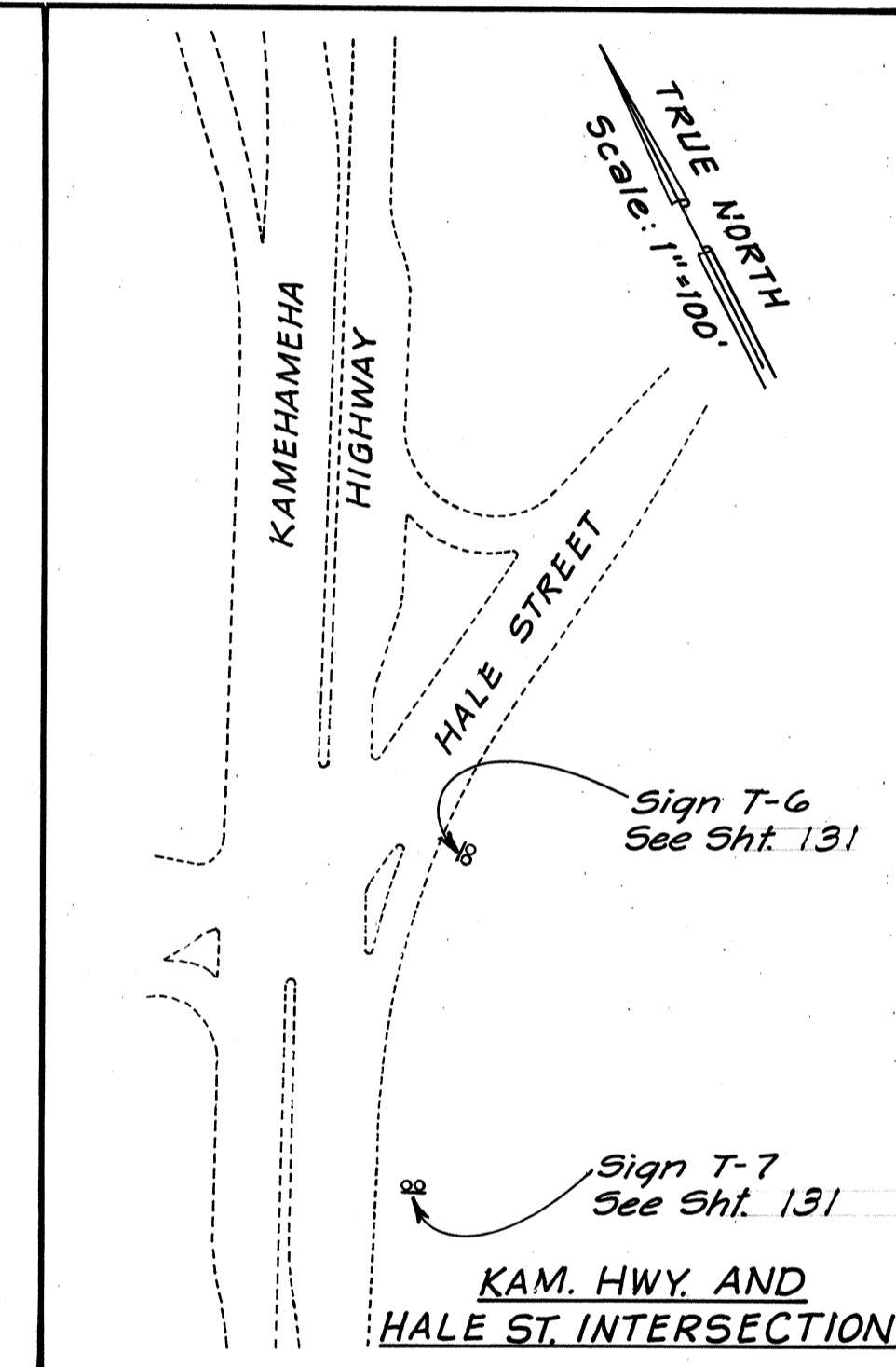
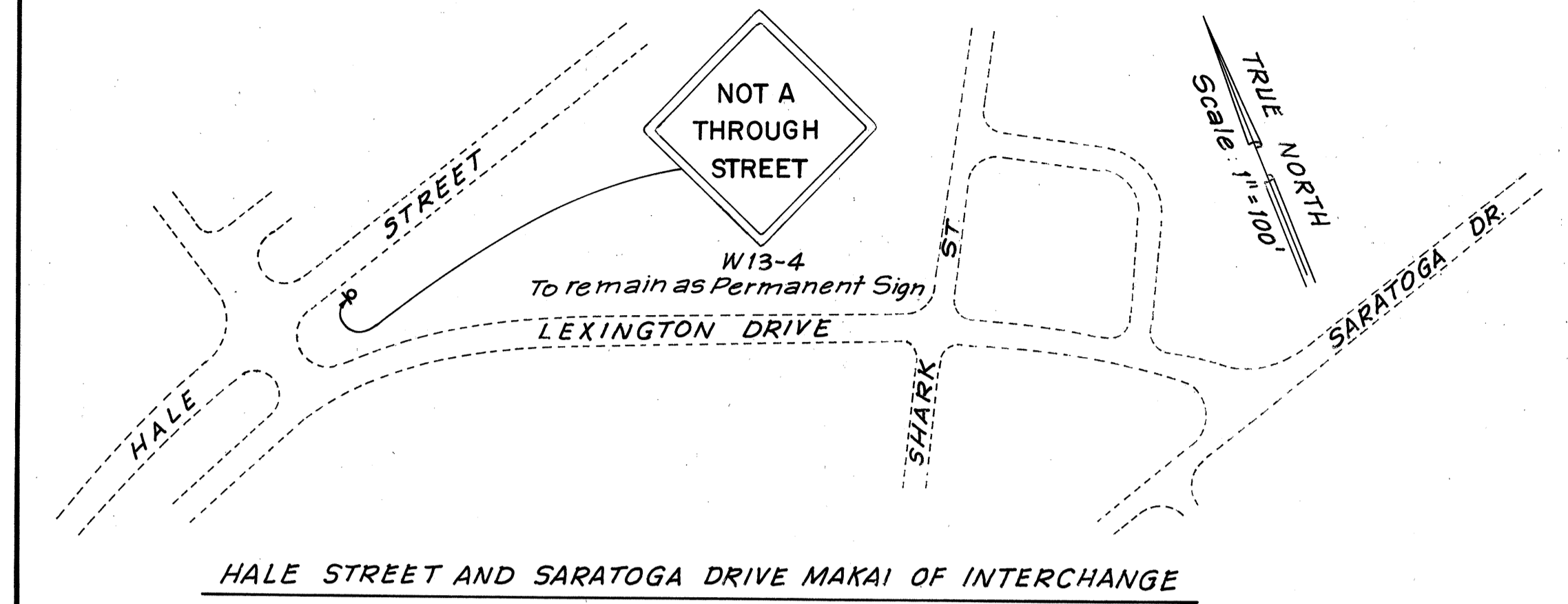
**NOTE A**

Upon the shifting of Westbound traffic to Detour D, State forces to add temporary striping to Detour C to facilitate smooth merge of Ramp H traffic.

**NOTE B**

During phase V, Contractor to place painted traffic drums, as directed by the Engineer, to facilitate smooth divergence of Westbound traffic. Temporary striping by State forces. Upon the shifting of Westbound traffic to Detour D, State forces to add temporary striping to facilitate smooth divergence of traffic at Ramp D as indicated by signing.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H1-(88)-13	1971	144	457



- Construction — This Phase
  - Temporary Construction — This Phase
  - Completed Construction
  - Completed Temporary Construction
  - Traffic Flow to be maintained during Phase (one arrow per lane)
- Including Construction Under Project I-H1-(88)-13*

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

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*J. Andrew Schuchard*

**J. ANDREW SCHUCHARD**  
REGISTERED PROFESSIONAL ENGINEER  
No. 2229  
HAWAII, U.S.A.

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**CONSTRUCTION SEQUENCE & TEMPORARY SIGNING**  
**PHASE V**

INTERSTATE ROUTE H1  
PROJECT NO. I-H1-(88)-13

SCALE: 1"=100' DATE: JULY 17, 1970

SHEET No. 14 OF 19 SHEETS

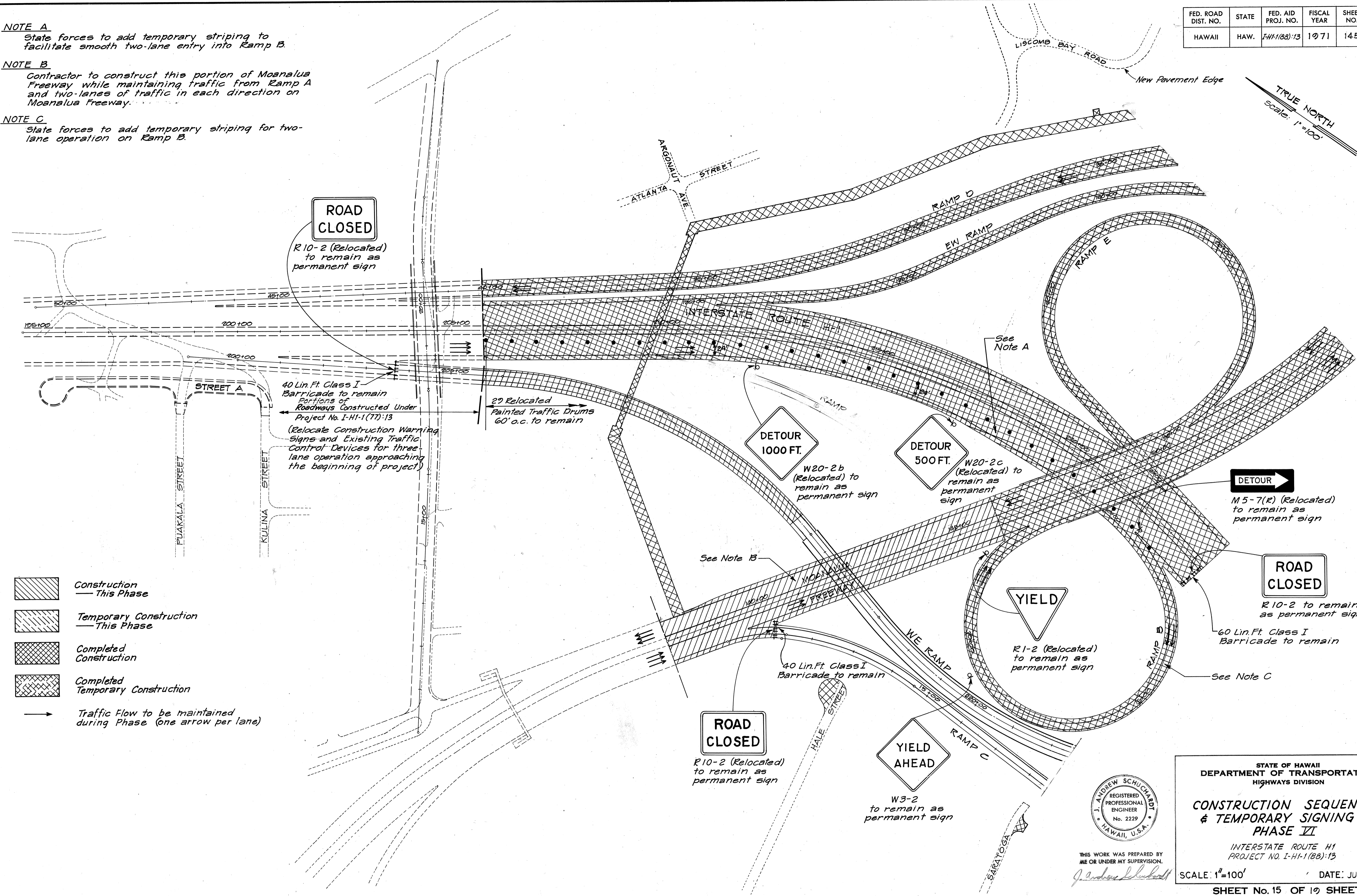
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(BB)-13	1971	145	457






**NOTE A**  
State forces to add temporary striping to facilitate smooth two-lane entry into Ramp B.

**NOTE B**  
Contractor to construct this portion of Moanalua Freeway while maintaining traffic from Ramp A and two-lanes of traffic in each direction on Moanalua Freeway.

**NOTE C**  
State forces to add temporary striping for two-lane operation on Ramp B.

TRUE NORTH  
Scale: 1"=100'



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

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



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*J. Andrew Schuchardt*

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

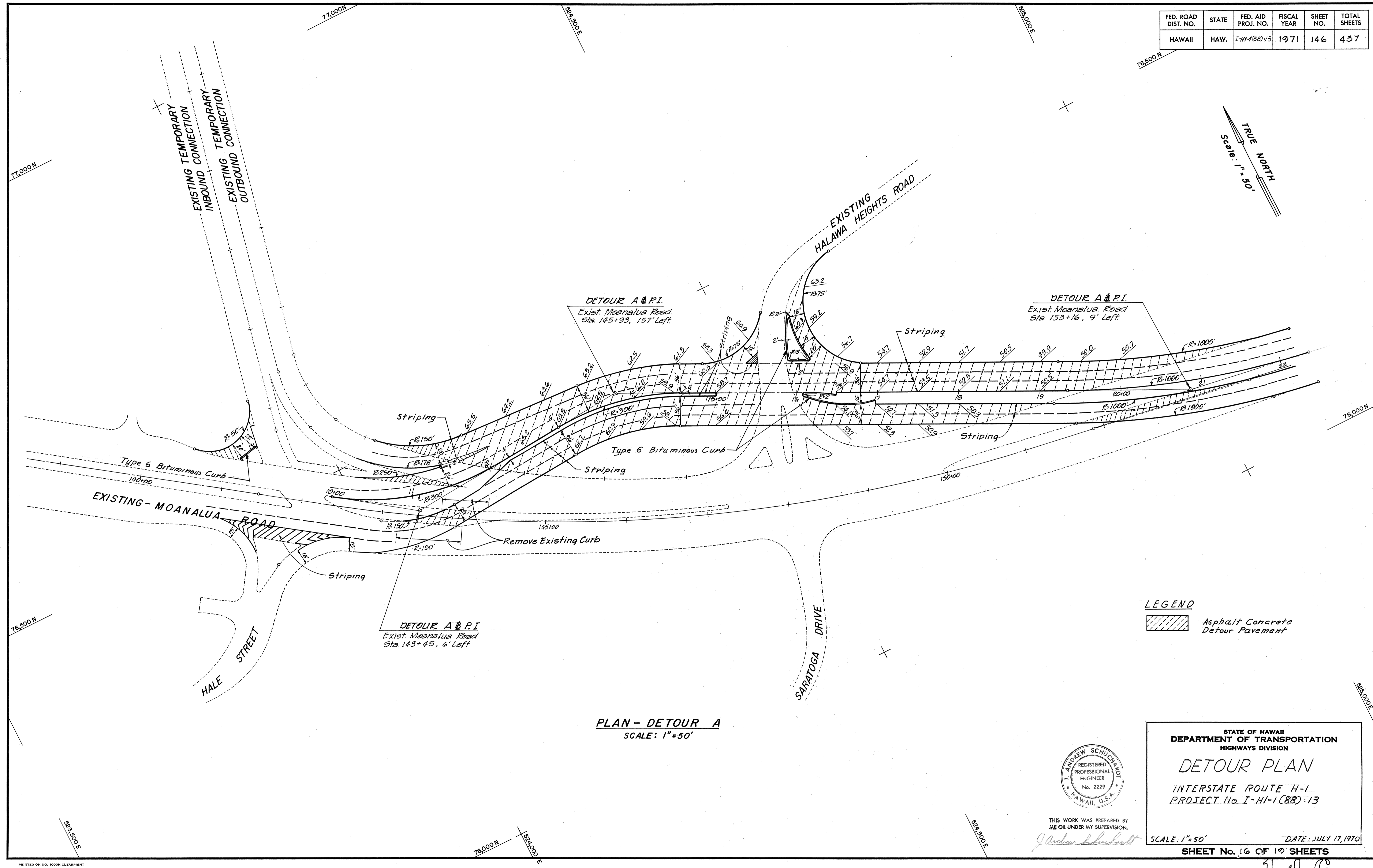
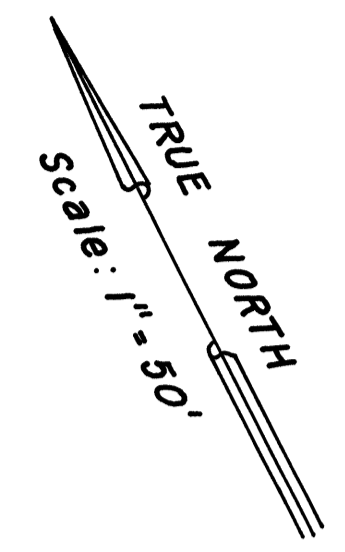
**CONSTRUCTION SEQUENCE & TEMPORARY SIGNING PHASE VI**

INTERSTATE ROUTE H1  
PROJECT NO. I-HI-1(BB)-13

SCALE: 1"=100'      DATE: JULY 17, 1970

SHEET No. 15 OF 19 SHEETS

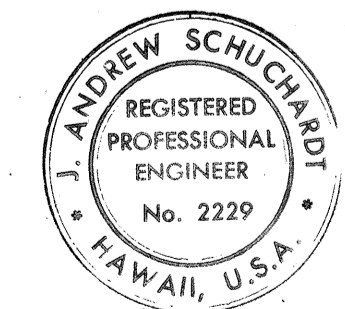
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(88)-13	1971	146	457



**PLAN - DETOUR A**  
SCALE: 1" = 50'

**LEGEND**  
 Asphalt Concrete Detour Pavement

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



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*J. Andrew Schuchardt*

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

**DETOUR PLAN**

INTERSTATE ROUTE H-1  
 PROJECT No. I-HI-1(88)-13

SCALE: 1" = 50'      DATE: JULY 17, 1970

**SHEET No. 16 OF 12 SHEETS**



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-41-1(88)13	1971	148	457



W 7-2 48" x 48"



W8-7 30" x 30"



W14-1 30" x 30"



W20-1a 48" x 48"



W20-2d 48" x 48"



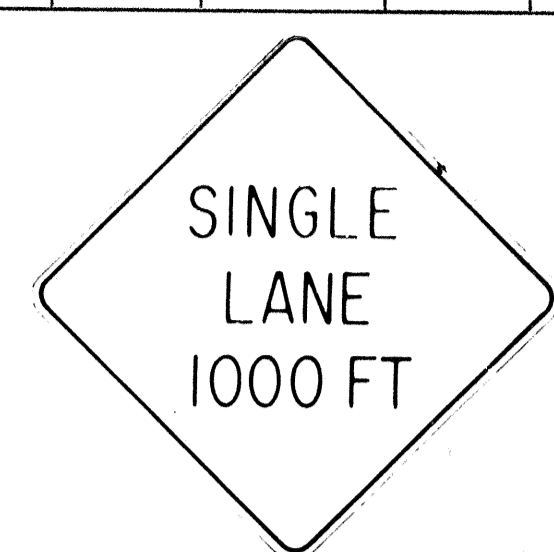
W20-3b 48" x 48"



W20-4d 48" x 48"



W20-5d(L) 48" x 48"



W20-6b 48" x 48"



W20-7c 48" x 48"



W21-1 30" x 30"



W21-2 24" x 24"



W21-3 36" x 36"



W21-4 30" x 30"



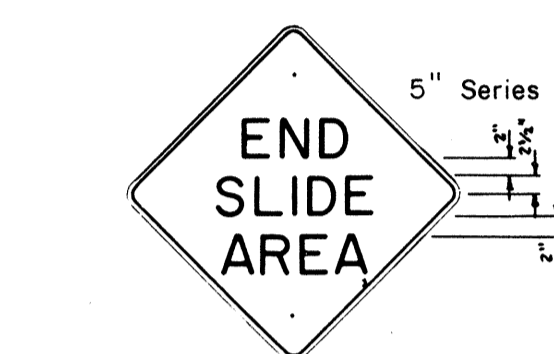
W21-5 30" x 30"



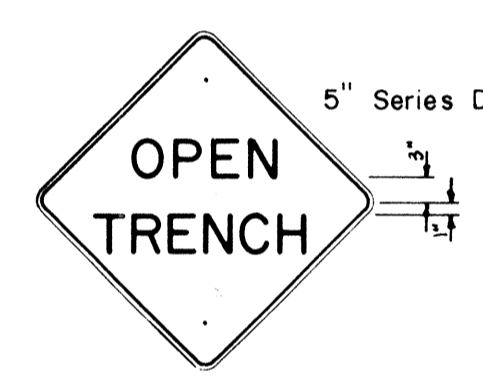
W21-6 30" x 30"



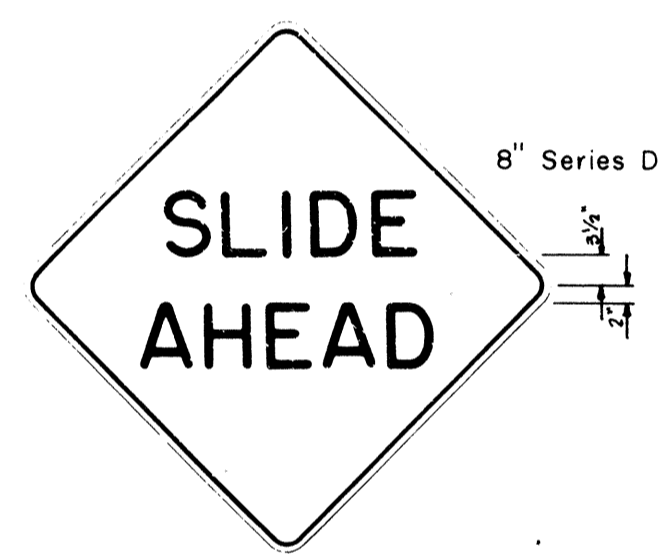
W22-1 30" x 30"



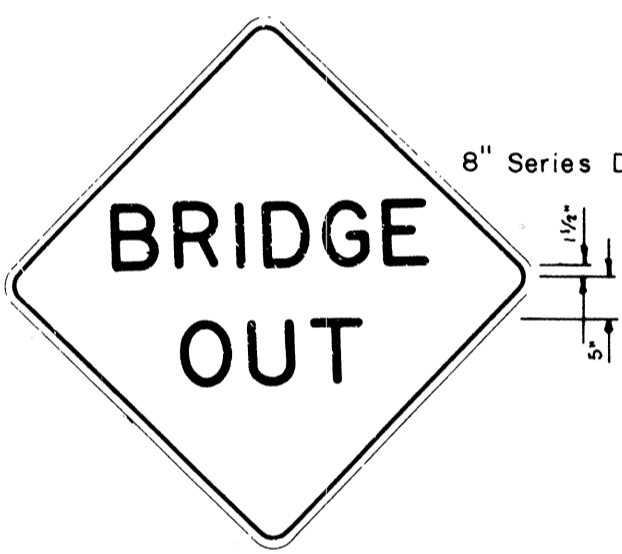
W22-2 30" x 30"



W22-3 30" x 30"



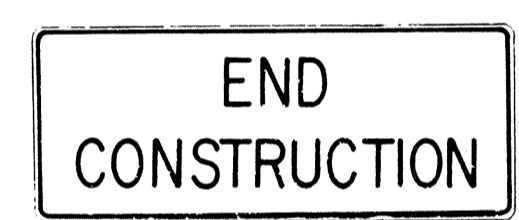
W22-4 48" x 48"



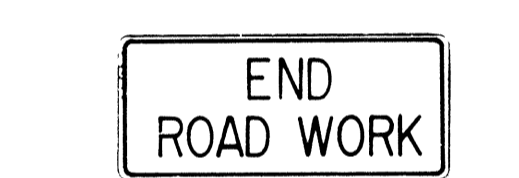
W22-5 48" x 48"



G20-1(5) 60" x 36"



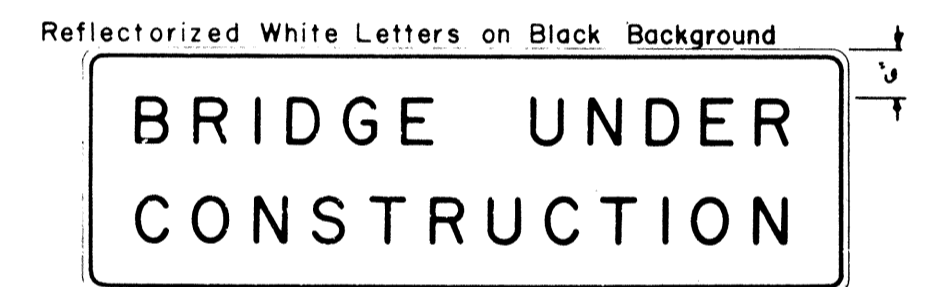
G20-2 60" x 24"



G20-3 42" x 18"



M5-7(L) 48" x 18"



CW-1 96" x 30"

- 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.

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

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

APPROVED:  
*John J. Stein*  
 ASSISTANT CHIEF, ENGINEERING 12-30-69  
 DATE

NO.	REVISION	APPROVED BY	DATE

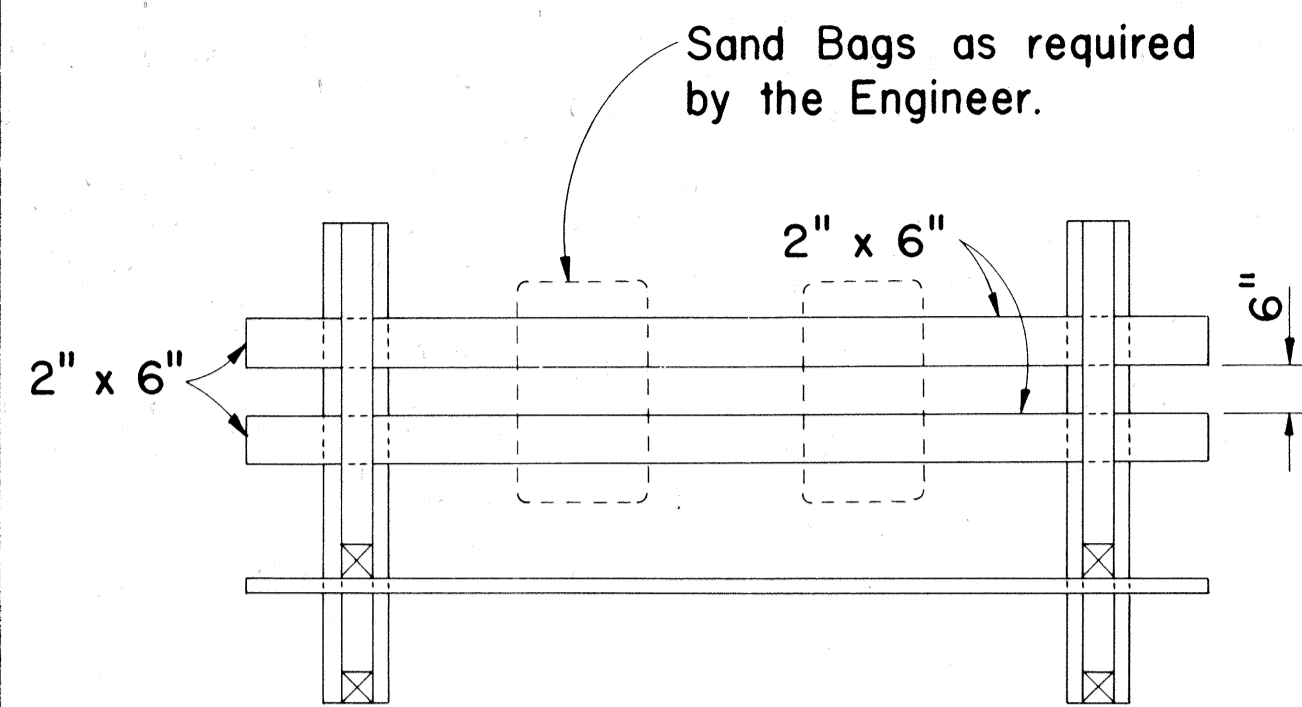
STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

**STANDARD DETAILS**

**CONSTRUCTION SIGNS**

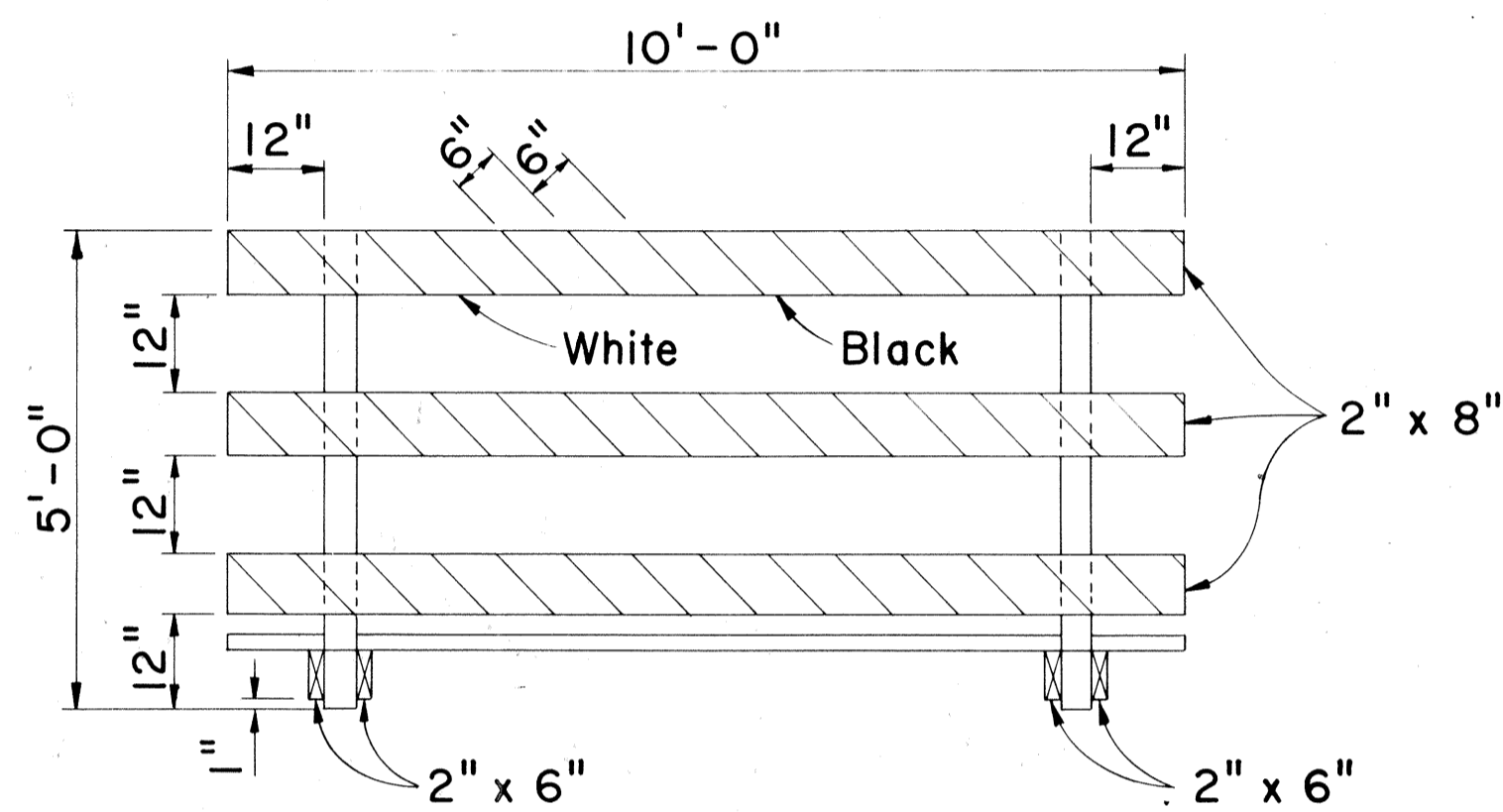
NOT TO SCALE

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IHI-1(88)13	1971	140	257



PLAN VIEW

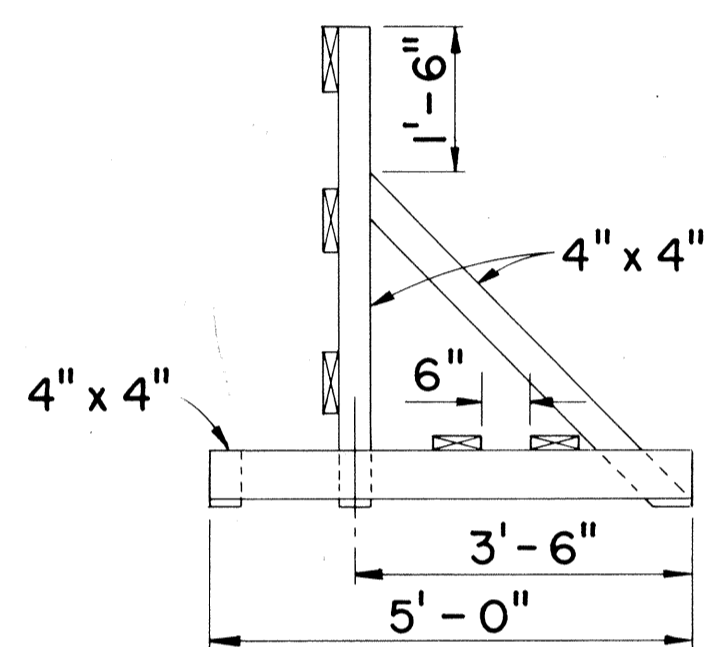
- GENERAL NOTES**
- The Contractor shall construct, install and maintain the wood barricades at the locations shown on the Plans.
  - The permanent wood barricades shall be left in place or relocated upon completion of the project as ordered by the Engineer and are to become State property.
  - Stripes shall slant downwards towards the side on which traffic is to pass.



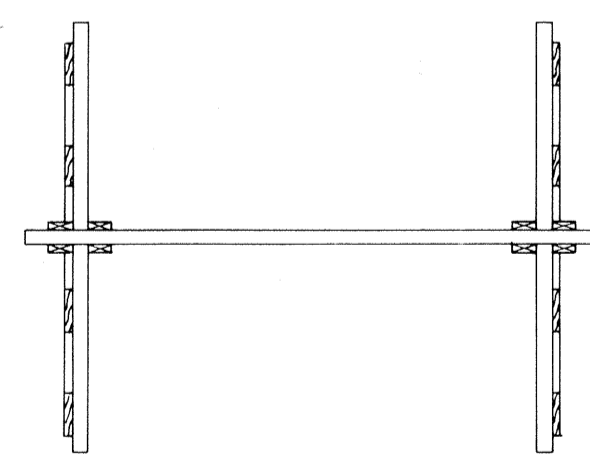
FRONT VIEW

**CLASS I BARRICADE**

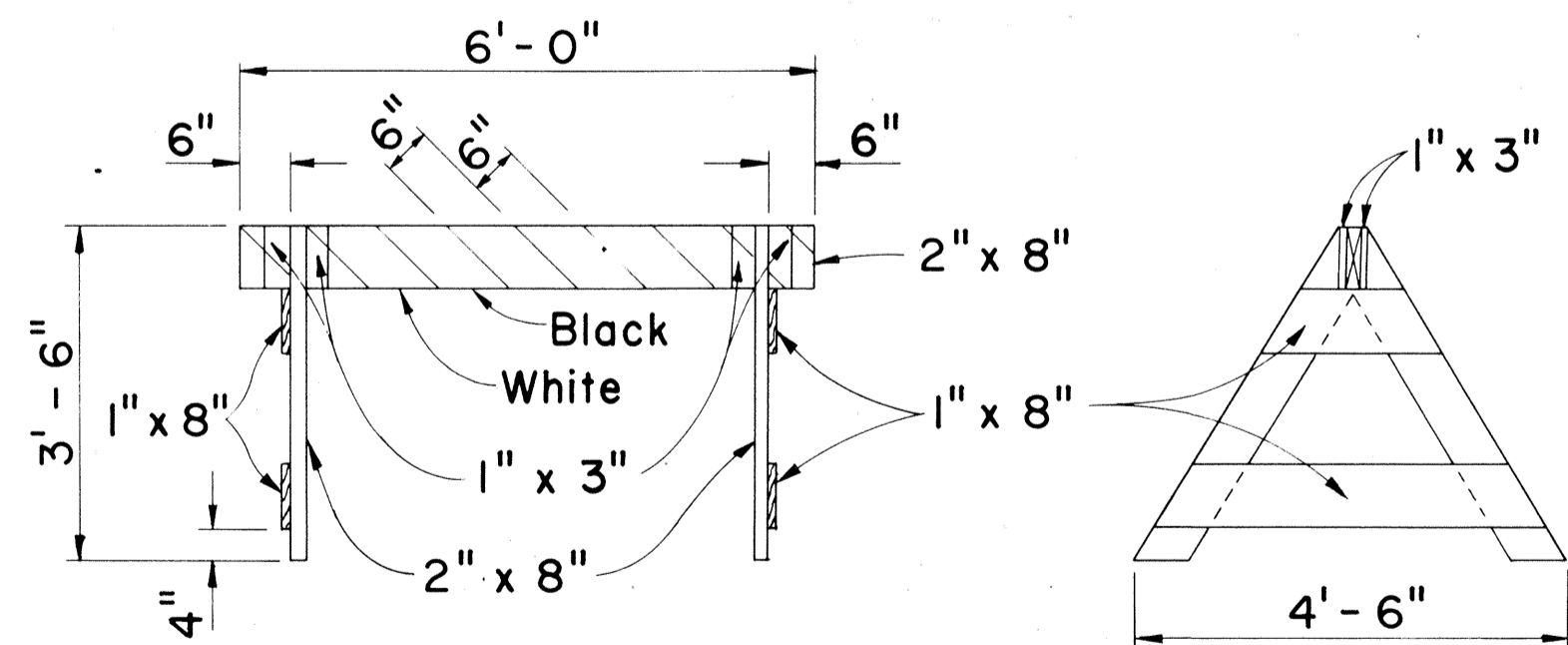
Scale: 1/2" = 1'-0"



END VIEW



PLAN VIEW

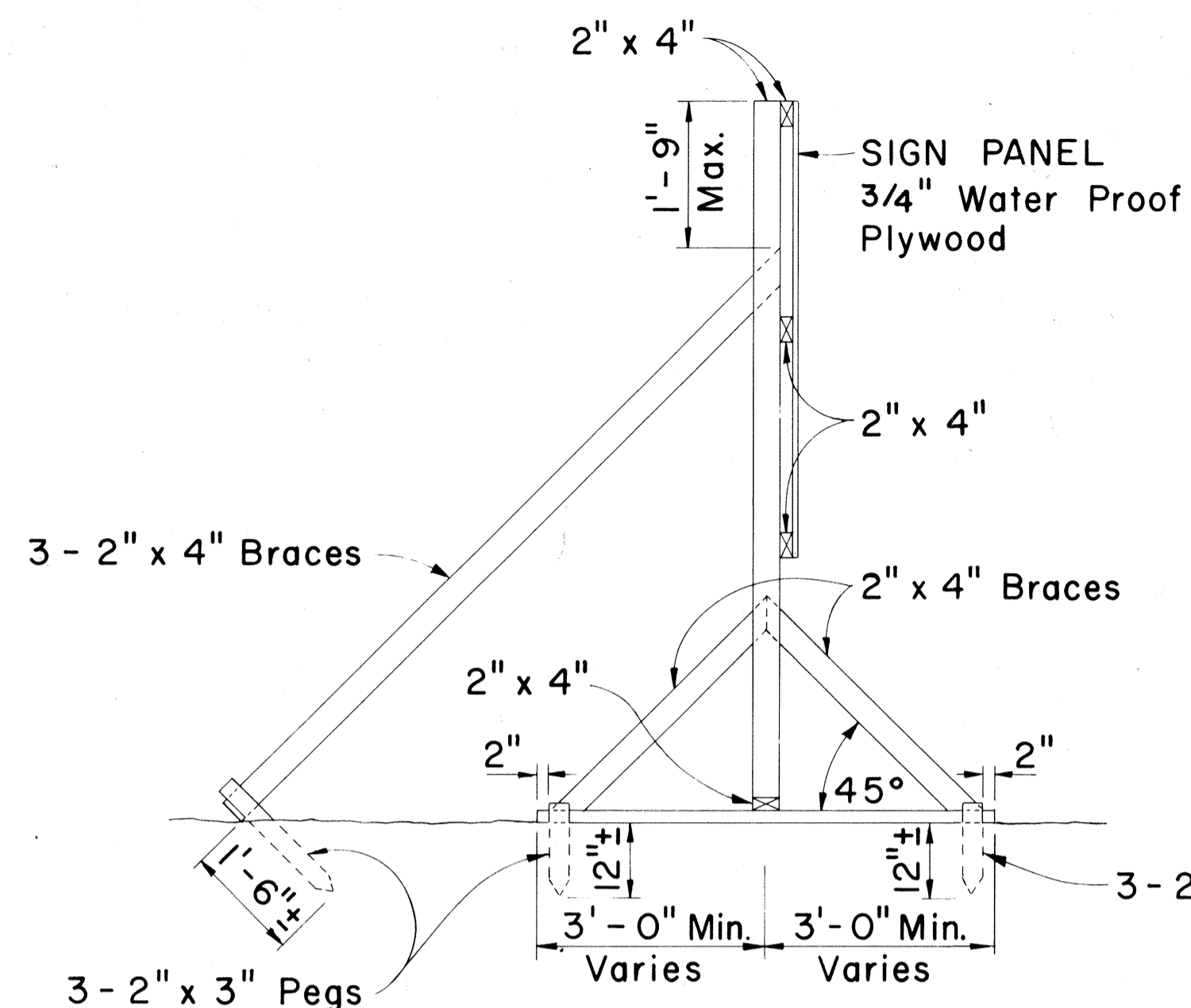


FRONT VIEW

END VIEW

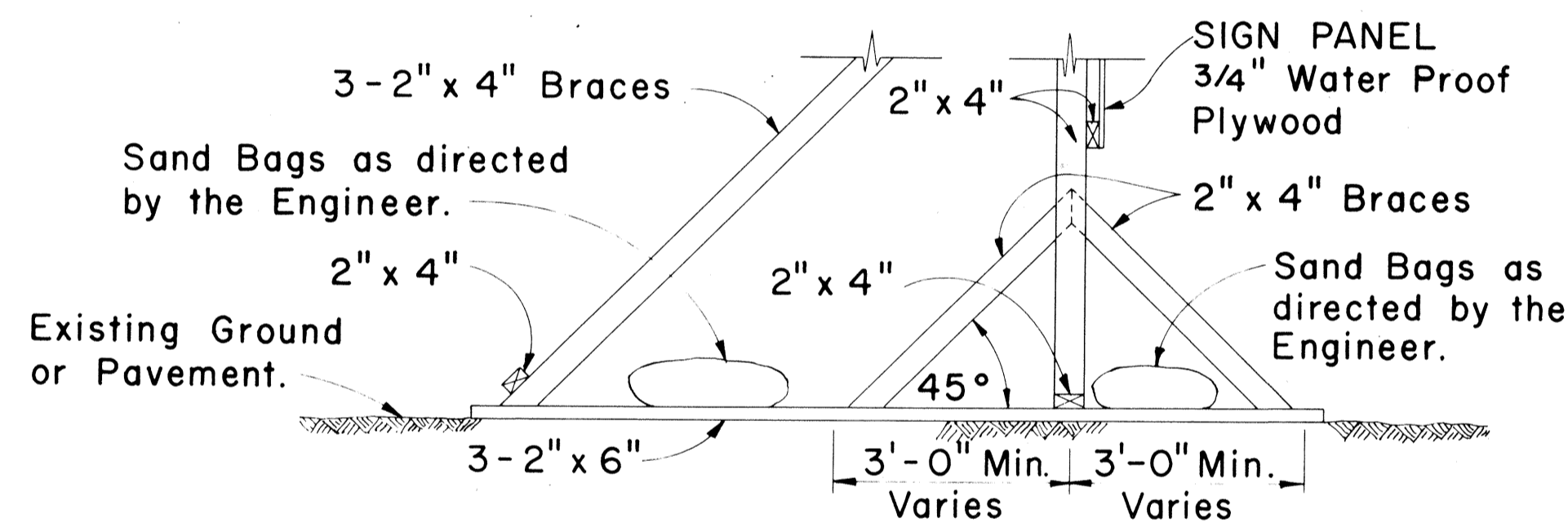
**CLASS II BARRICADE**

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



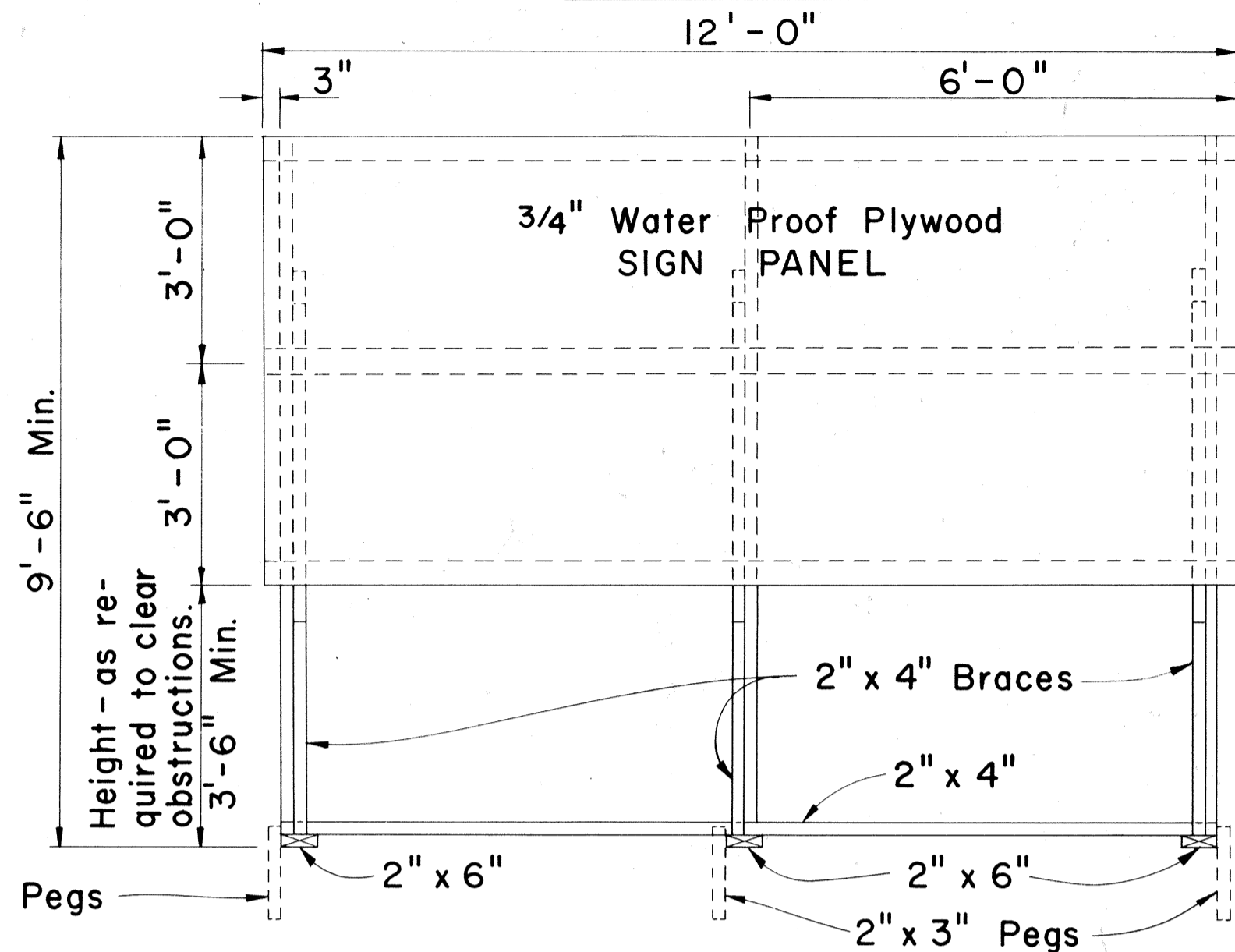
SIDE VIEW

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



SIDE VIEW

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



FRONT VIEW

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

**GENERAL NOTES**

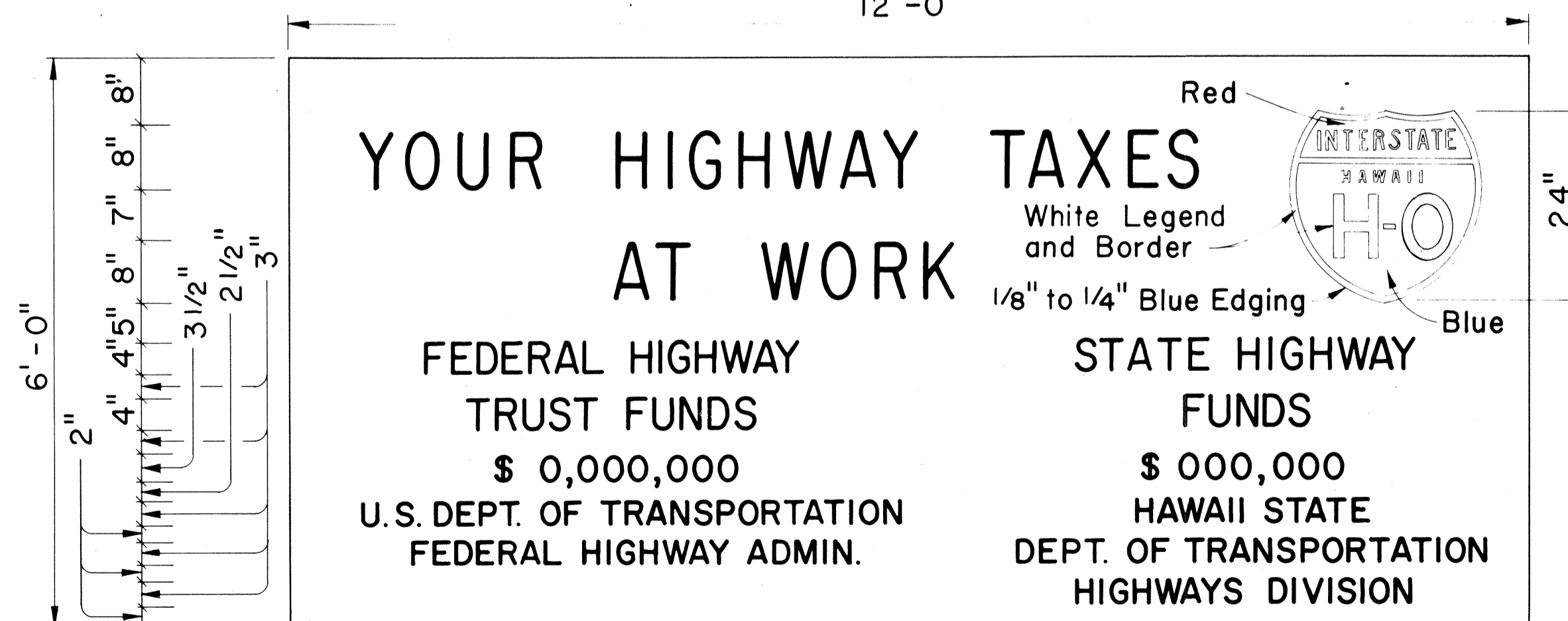
- The sign legend shall be black on white background except for the Interstate Route marker which shall be as shown on the plan.
- The Contractor shall construct, install and maintain the project signs at the locations shown on the Plans and as ordered by the Engineer.
- Letters shall be Series "C" of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

APPROVAL RECOMMENDED:

TRAFFIC ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_

APPROVED:

ASSISTANT CHIEF, ENGINEERING \_\_\_\_\_ DATE \_\_\_\_\_



SIGN PANEL

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

**INTERSTATE SYSTEM  
CONSTRUCTION IDENTIFICATION SIGN**

Scale: As Shown

NO	REVISION	APPROVED BY	DATE
1	Reduce sign width to 12'-0"	H.C.	9-3-70
2	Delete "Bureau of Public Roads"	H.C.	9-29-70

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**TYPICAL DETAILS  
CONSTRUCTION IDENTIFICATION SIGN  
AND  
WOOD BARRICADES**

SCALE: As Shown DATE:

SHEET No. 10 OF 10 SHEETS DT 800

ORIGINAL PLAN  
DATE: \_\_\_\_\_  
DRAWN BY: \_\_\_\_\_  
TRACED BY: \_\_\_\_\_  
DESIGNED BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_  
NOTE BOOK No. \_\_\_\_\_