

ORIGINAL PLAN  
DRAWN BY  
NOTE BOOK  
DESIGNED BY  
QUANTITIES BY  
CHECKED BY  
No.

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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75), UNIT II	1997	2	1102

# STANDARD PLANS SUMMARY

STANDARD PLANS NO.	TITLE	DATE
B-01 ●	Notes and Miscellaneous Details	07/01/86
B-02		
B-03 ●	Typical Structure Excavation and Backfill Pay Limits	07/01/86
B-04		
B-05		
B-06	Concrete Box Girder	07/01/86
B-07	Concrete Box Girder	07/01/86
B-08	Concrete Box Girder	07/01/86
B-09		
B-10		
B-11		
B-12	Prestressed Concrete Piles	r07/16/90
B-13	Prestressed Concrete Piles	r07/16/90

D-01 ●	Chain Link Fence With Toprail	r03/06/87
D-02	Chain Link Fence Without Toprail	r07/26/90
D-03	Wire Fence With Metal Posts	07/01/86
D-04 ●	Typical Details of Curbs and/or Gutters	07/01/86
D-05	Typical Details of Reinforced Concrete Drop Driveway	07/01/86
D-06	Centerline and Reference Survey Monument	07/01/86
D-07 ●	Street Survey Monument	07/01/86
D-08 ●	Landscaping Shrubs and Tree Planting	07/01/86
D-09	Field Office	07/01/86
D-10	Field Office	07/01/86
D-11	Project Site Laboratory	07/01/86
D-12	Project Site Laboratory	07/01/86
D-13	Field Office & Project Site Laboratory	07/01/86

H-01	Type A, B, C and D Catch Basin	07/01/86
H-02	Type A1, B1, C1 and D1 Catch Basin	07/01/86
H-03	Type A2, B2, C2, and D2 Catch Basin	07/01/86
H-04 ●	Typical Reinforcing Details for Catch Basins	07/01/86
H-05 ●	Type A, B and C Storm Drain Manhole	07/01/86
H-06 ●	Type D and E Storm Drain Manhole	07/01/86
H-07	Type F Storm Drain Manhole	07/01/86
H-08 ●	Catch Basin and Manhole Casting	07/01/86
H-09 ●	Type A-9 and A-9P Frames and Grates	07/01/86
H-10 ●	Type A-9B Frames and Grates	07/01/86
H-11	Type 61614 and 61214 Grated Drop Inlet	07/01/86
H-12 ●	Type 61614 Grated Drop Inlet	07/01/86
H-13 ●	61214, 61614 & 61616 Steel Frames and Grates	07/01/86
H-14	61214B Steel Frames and Grates	07/01/86
H-15	61614B Steel Frames and Grates	07/01/86
H-16 ●	Concrete and Cement Rubble Masonry Structure	r10/16/90
H-17 ●	Inlet Structures	r10/16/90
H-18	Flared End Section for Culverts	07/01/86
H-19 ●	Outlet Structures	r02/15/91
H-20	Concrete Spillway Inlet	07/01/86
H-21	18" Slotted C.M.P. Drain	07/01/86
H-22 ●	C.M.P. Coupling Details Standard Joint	r10/16/90
H-23 ●	Hat Shaped Coupling Band	r10/16/90

STANDARD PLANS NO.	TITLE	DATE
TE-01 ●	Miscellaneous Sign Details	07/01/86
TE-02 ●	Galvanized Flanged Channel Sign Post Mounting	07/01/86
TE-03 ●	Galvanized Square Tube Sign Post Mounting	07/01/86
TE-04 ●	Regulatory Signs	r09/01/87
TE-05 ●	Warning Signs	07/01/86
TE-06 ●	Miscellaneous Signs	r11/03/89
TE-07	Reserved	07/01/86
TE-08 ●	Construction Signs	r09/01/87
TE-09 ●	Miscellaneous Intersection Signs	r03/06/87
TE-10	Reserved	07/01/86
TE-11 ●	Bike Route Sign and Supplementary Plates	07/01/86
TE-12 ●	State Route Marker and Auxiliary Markers	07/01/86
TE-13 ●	Interstate Route Marker	07/01/86
TE-14 ●	State Route Marker and border Detail for Guide Signs	07/01/86
TE-15 ●	Route Marker Assemblies	07/01/86
TE-16 ●	Miscellaneous Reflector Markers	07/01/86
TE-17 ●	Type II Object Markers	07/01/86
TE-18 ●	Mileposts	07/01/86
TE-19	Reserved	07/01/86
TE-20 ●	Overhead Sign Supports	07/01/86
TE-21	Overhead Sign Support, Box Truss Type, Aluminum	07/01/86
TE-22	Foundation Details and Schedules	07/01/86
TE-23 ●	Supports for Ground Mounted Guide Sign	r11/03/89
TE-24 ●	Breakaway Sign Supports for Ground Mounted Guide Signs	07/01/86
TE-25 ●	Laminated Aluminum Sign Panels (Overhead)	07/01/86
TE-26 ●	Laminated Aluminum Sign Panels (Ground Mounted)	07/01/86
TE-27 ●	Solid Aluminum Extruded Sign Panel and Accessory Details	07/01/86
TE-28 ●	Guide Signs Luminaire Mountings	07/01/86
TE-29	Reserved	07/01/86
TE-30 ●	Raised Pavement Markers and Striping	r05/09/90
TE-31 ●	Miscellaneous Pavement Markings	r05/09/90
TE-32 ●	Miscellaneous Pavement Markings	r05/09/90
TE-33 ●	Miscellaneous Pavement Markings	r11/03/89
TE-34	Reserved	07/01/86
TE-35 ●	Pavement Alphabets, Numbers & Symbols	07/01/86
TE-36 ●	Pavement Alphabets, Numbers & Symbols	07/01/86
TE-37	Reserved	07/01/86
TE-38	Traffic Signals System, Miscellaneous Details	r11/03/89
TE-39	Traffic Signals System, Miscellaneous Details	07/01/86
TE-40 ●	Loop Detectors	r11/03/89
TE-41 ●	Pullboxes	07/01/86
TE-42	Type III Traffic Signal Standard	07/01/86
TE-43 ●	Concrete Pullbox (2' x 3')	07/01/86
TE-44	Reserved	07/01/86

STANDARD PLANS NO.	TITLE	DATE
TE-45	Reserved	07/01/86
TE-46	Reserved	07/01/86
TE-47	Reserved	07/01/86
TE-48	Reserved	07/01/86
TE-49	Reserved	07/01/86
TE-50 ●	Metal Guardrail	r03/06/87
TE-51 ●	Metal Guardrail	r09/01/87
TE-52 ●	Metal Guardrail with Rubrail	r11/03/89
TE-53	Metal Guardrail with Rubrail of Obstruction	r09/01/87
TE-54 ●	Beam Type Guardrail with Rubrail of Obstruction (Shoulder Installation)	r11/03/89
TE-55 ●	Metal Guardrail Connection to Concrete Barrier	r11/03/89
TE-56 ●	Concrete Barrier Transition	07/01/86
TE-57 ●	Guardrail Type 3, Thrie Beam	r11/03/89
TE-57A ●	Guardrail Type 3, Modified Thrie Beam	11/03/89
TE-58 ●	Approach End Flare, One & Two Way Roadway	07/01/86
TE-59 ●	Trailing End Flare, One & Two Way Roadway	r11/03/89
TE-60 ●	Anchor Block Details	07/01/86
TE-61	Breakaway Cable Terminal (BCT)	r11/03/89
TE-62	Breakaway Cable Terminal (BCT)	r09/01/87
TE-63 ●	Guardrail Type 4 (Rigid Barrier)	r09/01/87
TE-64 ●	Portable Concrete Barrier	r11/03/89
TE-65 ●	Guardrail Type 4, Miscellaneous	r09/01/87
TE-66 ●	Barricades	07/01/86
TE-67	Delineation & Pavement Markings of Bridge	07/01/86
TE-68 ●	Wheelchair Ramps	r11/03/89
TE-69 ●	Wheelchair Ramps	r11/03/89

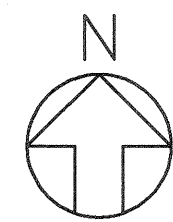
02/15/91  
10/16/90  
  
07/26/90  
07/16/90  
05/09/90  
  
11/03/89  
  
  
  
09/01/87  
  
  
  
03/06/87

REVISED STANDARD PLANS H-19  
REVISED STANDARD PLANS H-16,H-17,  
H-22 & H-23.  
REVISED STANDARD PLANS D-02.  
REVISED STANDARD PLANS B-12,B-13  
REVISED STANDARD PLANS TE-30,TE-31,  
& TE-32  
REVISED STANDARD PLANS TE-06,TE-23,  
TE-30, TE-31, TE-32, TE-33, TE-38,  
TE-40, TE-52, TE-54, TE-55, TE-57,  
TE-59, TE-61, TE-64, TE-68 & TE-69.  
ADDED TE-57A TO STANDARD PLANS  
REVISED STANDARD PLANS TE-04,TE-06  
TE-08, TE-32, TE-51, TE-53, TE-54,  
TE-55, TE-57, TE-59, TE-62, TE-63,  
TE-65, & TE-69.  
REVISED STANDARD PLANS D-01, TE-09,  
TE-40, TE-50, TE-51, TE-57, TE-59,  
TE-61, TE-63, & TE-64.

NOTE:  
STANDARD PLANS APPLICABLE TO THIS  
PROJECT ARE INDICATED BY A "●"  
NEXT TO THE STANDARD PLAN NO.

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
  
SUMMARY  
STANDARD PLANS  
  
H-3 FINISH (UNIT II)  
FAIP NO. I-H3-1(75), UNIT II  
LEEWARD SECTION  
  
SCALE: NONE DATE: JANUARY 1997  
SHEET NO. G2 OF 18 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75), UNIT II	1997	3	1102



See Windward  
Location Map  
for continuation,  
Sht. G4

NORTH HALAWA VALLEY

WAIMALU VIADUCT

INTERSTATE ROUTE H-1

To Pearl City

Interstate Route H-1

Interstate Route H-3

HALAWA INTERCHANGE

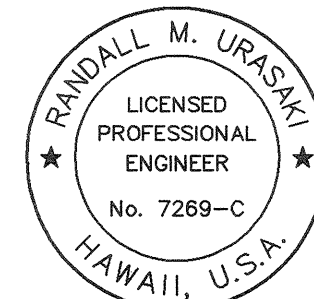
MOANALUA FREEWAY/AUXILIARY LANE

MoanaLua Freeway

To Honolulu

To Pearl Harbor

LEEWARD LOCATION MAP



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*Randall M. Urakami*

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**LOCATION MAP**  
**LEEWARD**

H-3 FINISH (UNIT II)  
FAIP NO. I-H3-1(75), UNIT II  
LEEWARD SECTION

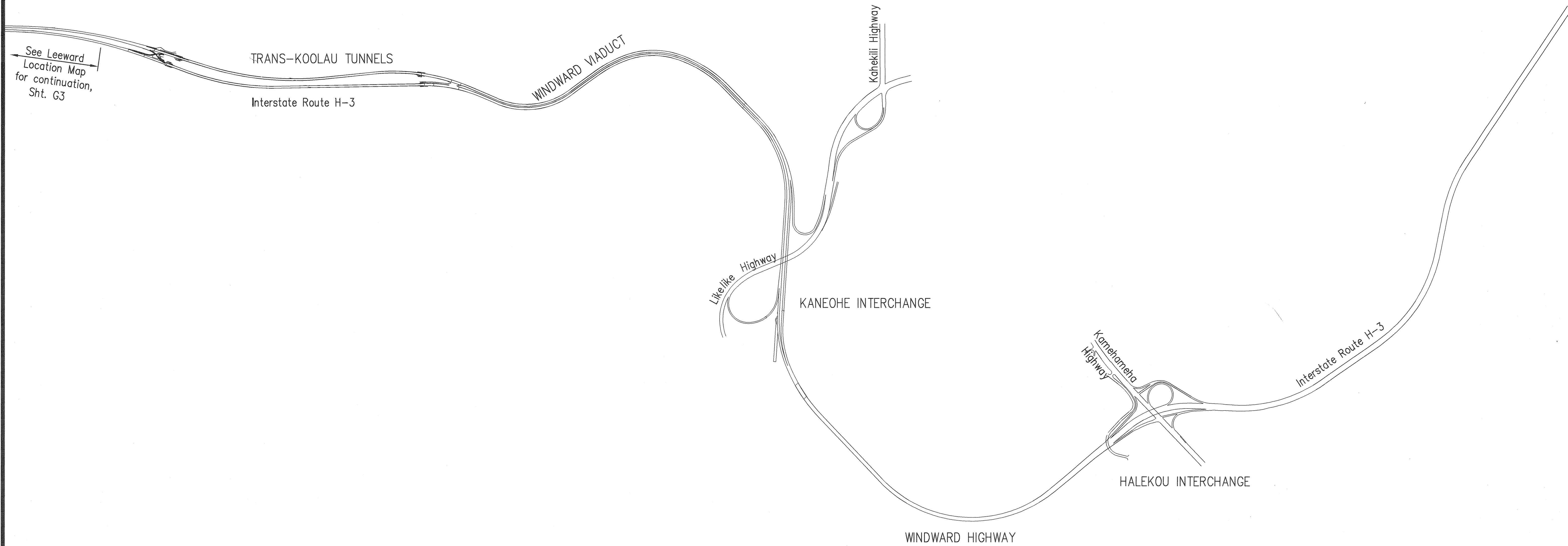
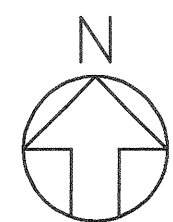
SCALE: 1" = 1000' DATE: JANUARY 1997

SHEET NO. G3 OF 18 SHEETS

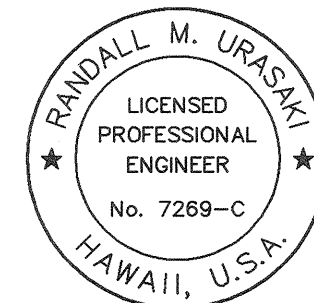
ORIGINAL SURVEY PLOTTED BY	DATE
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NOTE BOOK	
DESIGNED BY	
CHECKED BY	
No.	



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75), UNIT II	1997	4	1102



# WINDWARD LOCATION MAP



THIS WORK WAS PREPARED BY ME  
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*Randall M. Urasaki*

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
<b>LOCATION MAP WINDWARD</b>	
H-3 FINISH (UNIT II) FAIP NO. I-H3-1(75), UNIT II LEEWARD SECTION	
SCALE: 1' = 1000'	DATE: JANUARY 1997
SHEET NO. G4 OF 18 SHEETS	

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN 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-H3-1(75), UNIT II	1997	5	1102

SHEET SHEET NO. TITLE

VOLUME 1

G. GENERAL

1	G 1	Title Sheet: Volume 1 of 2
2	G 2	Summary Standard Plans
3	G 3	Location Map: Leeward
4	G 4	Location Map: Windward
ADD. 5	G 5	List of Plans - 1
ADD. 6	G 6	List of Plans - 2
ADD. 7	G 7	List of Plans - 3
ADD. 8	G 8	List of Plans - 4
ADD. 9	G 9	List of Plans - 5
ADD. 10	G 10	List of Plans - 6
ADD. 11	G 11	List of Plans - 7
ADD. 12	G 12	List of Plans - 8
ADD. 13	G 13	List of Plans - 9
14	G 14	General Abbreviations and Legend
C.O.15	G 15	Grading Notes, Erosion and Sediment Control Measures
C.O.16	G 16	Utility Abbreviations, Legend and Notes
C.O.17S-1	G 17	Utility Notes: Water, Sewer and Gas
ADD. 18	G 18	Utility Notes: Cable Television, Electric and Telephone
C.O. 18S-1	G 18A	General Notes

1. INTERSTATE ROUTE H-1

19	1G 1	Location Map
20	1T 1	Typical Section: Interstate Route H-1
21	1T 2	Typical Section: Interstate Route H-1
ADD. 21S-1	1T 2A	Typical Section: Interstate Route H-1
22	1T 3	Typical Section: H-1 and Ramp D
23	1T 4	Typical Section: Ramp F and Ramp M
ADD. 24	1T 5	Typical Section: Olopana Street
25	1A 1	Alignment: H-1 Sta. 121+00 to Sta. 133+00
26	1A 2	Alignment: H-1 Sta. 133+00 to Sta. 145+00
27	1A 3	Alignment: H-1 Sta. 145+00 to Sta. 157+00
28	1A 4	Alignment: H-1 Sta. 157+00 to Sta. 166+00
29	1A 5	Alignment: H-1 Sta. 166+00 to Sta. 177+00
30	1A 6	Alignment: H-1 Sta. 177+00 to Sta. 187+00
C.O. 31	1A 7	Alignment: H-1 Sta. 187+00 to Sta. 198+00
32	1A 8	Alignment: H-1 Sta. 198+00 to Sta. 209+00
C.O. 33	1A 9	Alignment: H-1 Sta. 209+00 to Sta. 219+00
34	1A 10	Alignment: H-1 Sta. 219+00 to Sta. 230+00
35	1A 11	Profile & Superelevation Diagram
36	1A 12	Profile & Superelevation Diagram
37	1A 13	Profile & Superelevation Diagram
38	1A 14	Profile & Superelevation Diagram
39	1A 15	Profile & Superelevation Diagram
40	1A 16	Profile & Superelevation Diagram
41	1A 17	Profile & Superelevation Diagram
42	1A 18	Profile & Superelevation Diagram
43	1A 19	Spot Elevations & Construction Joints
44	1A 20	Spot Elevations & Construction Joints
45	1A 21	Spot Elevations & Construction Joints
46	1A 22	Spot Elevations & Construction Joints
47	1A 23	Spot Elevations & Construction Joints
48	1A 24	Spot Elevations & Construction Joints
49	1A 25	Spot Elevations & Construction Joints
50	1A 26	Spot Elevations: Ramp D
51	1A 27	Spot Elevations: Ramp D

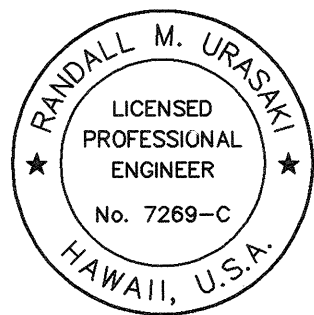
SHEET SHEET NO. TITLE

52	1A 28	Alignment: Ramp F and Ramp M
53	1A 29	Alignment: Ramp F
ADD. 54	1A 30	Alignment: Olopana Street
ADD. 55	1A 31	Alignment: Olopana Street
C.O. ADD. 56	1A 32	Alignment: Olopana Street
ADD. 57	1A 33	Alignment: Olopana Street
58	1A 34	Alignment: Aiea Heights Drive
59	1A 35	Alignment: Aiea Heights Drive
60	1B 1	Construction Phasing: Interstate Route H-1
61	1B 2	Construction Phasing: Aiea Heights-Phase 1
62	1B 3	Construction Phasing: Aiea Heights-Phase 2
63	1B 4	Construction Phasing: Aiea Heights-Phase 3
C.O. 64	1B 5	Construction Phasing: Aiea Heights-Phase 4
65	1B 6	Construction Phasing: Aiea Heights-Phase 5
66	1B 7	Construction Phasing: Aiea Heights-Phase 6
67	1B 8	Construction Phasing: Aiea Heights-Phase 7
ADD. 68	1B 9	Construction Phasing: Aiea Heights-Phase 8
ADD. 69	1B 10	Construction Phasing: Aiea Heights-Phase 9
70	1B 11	Construction Phasing: Aiea Heights-Phase 10
71	1B 12	Construction Phasing: Aiea Heights-Phase 11
72	1B 13	Construction Phasing: Aiea Heights-Phase 12
73	1B 14	Construction Phasing: Aiea Heights-Phase 13
74	1B 15	Construction Phasing: Aiea Heights-Phase 14
75	1B 16	Construction Phasing: Aiea Heights-Phase 15
76	1C 1	Roadway Construction Notes, Legend and Abbreviations
77	1C 2	Roadway Construction: H-1 Sta. 124+00 to Sta. 133+00
78	1C 3	Roadway Construction: H-1 Sta. 133+00 to Sta. 145+00
ADD. 79	1C 4	Roadway Construction: H-1 Sta. 145+00 to Sta. 157+00
ADD. 80	1C 5	Roadway Construction: H-1 Sta. 157+00 to Sta. 166+00
ADD. 81	1C 6	Roadway Construction: H-1 Sta. 166+00 to Sta. 177+00
82	1C 7	Roadway Construction: H-1 Sta. 177+00 to Sta. 187+00
83	1C 8	Roadway Construction: H-1 Sta. 187+00 to Sta. 198+00
84	1C 9	Roadway Construction: H-1 Sta. 198+00 to Sta. 209+00
ADD. 85	1C 10	Roadway Construction: Olopana Street
ADD. 86	1C 11	Roadway Construction: Olopana Street
ADD. 87	1C 12	Roadway Construction: Olopana Street
ADD. 88	1C 13	Roadway Construction: Olopana Street
89	1C 14	Roadway Construction: Moanalua Freeway and Ramp M
90	1C 15	Roadway Construction: Ramp M
91	1C 16	Profilelograph
92	1C 17	Profilelograph
93	1C 18	Profilelograph
94	1C 19	Profilelograph
95	1C 20	Roadway Construction Details
ADD. 96	1C 21	Roadway Construction Details
ADD. 97	1C 22	Roadway Construction Details
98	1C 23	Roadway Construction Details
99	1C 24	Roadway Construction Details
100	1C 25	Roadway Construction Details
101	1C 26	Roadway Construction Details
ADD. 102	1C 27	Roadway Construction Details
ADD. 102S-1	1C 27A	Curb Ramp Detail
ADD. 102S-2	1C 27B	Curb Ramp Detail
ADD. 102S-3	1C 27C	Curb Ramp Detail
103	1D 1	Drainage & Grading Notes
104	1D 2	Drainage & Grading Plan: H-1 Sta. 124+00 to 133+00
105	1D 3	Drainage & Grading Plan: H-1 Sta. 133+00 to 145+00
106	1D 4	Drainage & Grading Plan: H-1 Sta. 145+00 to 157+00
107	1D 5	Drainage & Grading Plan: H-1 Sta. 157+00 to 166+00
108	1D 6	Drainage & Grading Plan: H-1 Sta. 166+00 to 177+00
109	1D 7	Drainage & Grading Plan: H-1 Sta. 177+00 to 187+00
110	1D 8	Drainage & Grading Plan: H-1 Sta. 187+00 to 198+00

SHEET SHEET NO. TITLE

ADD. 111	1D 9	Drainage & Grading Plan: H-1 Sta. 198+00 to 209+00
112	1D 10	Drainage & Grading Plan Detail
ADD. 113	1D 11	Drainage & Grading Plan: Olopana Street
ADD. 113S-1	1D 11A	Drainage & Grading Plan: Olopana Street
ADD. 114	1D 12	Drainage & Grading Plan: Olopana Street
C.O. ADD. 114S-1	1D 12A	Drainage & Grading Plan: Olopana Street
115	1D 13	Drainage & Grading Plan: Moanalua Freeway and Ramp M
116	1D 14	Drainage & Grading Plan: Moanalua Freeway
ADD. 116S-1	1D 14A	Halawa Heights Stream: Inlet Structure Modification
117	1D 15	Drainage & Grading: Drainage Ditch Profiles
118	1D 16	Drainage & Grading: Drainage Ditch Profiles
119	1D 17	Drainage Profiles: Drainlines A, B & D
120	1D 18	Drainage Profiles: Drainlines C, E, F, G & H
ADD. 121	1D 19	Drainage Profiles: Drainlines IA, IB, J, K & L
ADD. 122	1D 20	Drainage Profiles: Drainlines M, N, O & P
123	1D 21	Drainage Details: Lined Drainage Ditch Details
124	1D 22	Drainage Details: Drainage Ditch Transitions
125	1D 23	Drainage Details: Drainage Ditch Transitions
126	1D 24	Drainage Details: Drainage Ditch Transitions
127	1D 25	Drainage Details: Drainage Ditch Transitions
ADD. 127S-1	1D 25A	Drainage Details: Drainage Ditch Transitions
128	1D 26	Drainage Details: Type A Grated Drop Inlet
ADD. 128S-1	1D 26A	Drainage Details: Type D Grated Drop Inlet
129	1D 27	Drainage Details: Type B Grated Drop Inlet
C.O. 130S-1	130	Drainage Details: Type C GDI, Concrete Protection
131	1D 29	Drainage Details: Type A Outlet Structure
132	1D 30	Drainage Details: Type B & C Outlet Structures
133	1D 31	Drainage Details: Type B Outlet Structure
134	1D 32	Drainage Details
135	1D 33	Drainage Summary
136	1D 34	Drainage Summary
137	1D 35	Drainage Summary
138	1D 36	Drainage Summary
139	1D 37	Drainage Summary
140	1D 38	Drainage Summary
ADD. 141	1D 39	Drainage Summary
ADD. 142	1D 40	Drainage Summary
ADD. 143	1D 41	Drainage Summary
ADD. 144	1D 42	Drainage Summary
145	1D 43	Underdrain: H-1 Sta. 121+00 to Sta. 133+00
146	1D 44	Underdrain: H-1 Sta. 133+00 to Sta. 145+00
147	1D 45	Underdrain: H-1 Sta. 145+00 to Sta. 157+00
148	1D 46	Underdrain: H-1 Sta. 157+00 to Sta. 166+00
149	1D 47	Underdrain: H-1 Sta. 166+00 to Sta. 177+00
150	1D 48	Underdrain: H-1 Sta. 177+00 to Sta. 187+00
151	1D 49	Underdrain: H-1 Sta. 187+00 to Sta. 198+00
152	1D 50	Underdrain: H-1 Sta. 198+00 to Sta. 209+00
153	1D 51	Underdrain Details
154	1D 52	Underdrain Details
155	1D 53	Underdrain Details
156	1D 54	Underdrain Summary

5/2/97	Revised and Added Sheet Numbers and Titles
4/21/97	Revised and Added Sheet Numbers and Titles
Date	Revision



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OR UNDER MY SUPERVISION.  
*Randall M. Urasak*

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
LIST OF PLANS - 1	
H-3 FINISH (UNIT II) FAIP NO. I-H3-1(75), UNIT II LEEWARD SECTION	
SCALE: NONE	DATE: JANUARY 1997

SHEET NO. G5 OF 18 SHEETS

ADD. 5

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
DESIGNED BY	
CHECKED BY	
ORIGINAL PLAN	No.

CAD by L. Fujimori, 55-55



SURVEY PLOTTED BY: DATE:
ORIGINAL PLAN:
DRAWN BY:
TRACED BY:
DESIGNED BY:
CHECKED BY:
No.

CAD by L. Fujimori, 5/5/95

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SHEET	SHEET NO.	TITLE
157	1R 1	Erosion Control: H-1 Sta. 121+00 to Sta. 133+00
158	1R 2	Erosion Control: H-1 Sta. 133+00 to Sta. 145+00
159	1R 3	Erosion Control: H-1 Sta. 145+00 to Sta. 157+00
160	1R 4	Erosion Control: H-1 Sta. 157+00 to Sta. 166+00
161	1R 5	Erosion Control: H-1 Sta. 166+00 to Sta. 177+00
162	1R 6	Erosion Control: H-1 Sta. 177+00 to Sta. 187+00
163	1R 7	Erosion Control: H-1 Sta. 187+00 to Sta. 198+00
164	1R 8	Erosion Control: H-1 Sta. 198+00 to Sta. 209+00
165	1R 9	Erosion Control: Moanalua Freeway and Ramp M
166	1R 10	Erosion Control: Ramp M

C.O.167	1U 1	Utilities: Location Map
C.O.168	1U 2	Utilities: Location Map
C.O.ADD. 169	1U 3	Utilities: Location Map
C.O.170	1U 4	Utilities: Location Map
ADD. 171	1U 5	Utilities: Electric and Telephone
ADD. 172	1U 6	Utilities: Electric (Deleted)
C.O. ADD. 173	1U 7	Utilities: Electric, and Telephone & Cable T.V.
C.O. ADD. 173S-1	1U 7A	Utilities: Cable Television
C.O. ADD. 173S-2	1U 7B	Utilities: Telephone & Cable Television
C.O.173S-3	1U 7C	Utilities: Telephone & Cable Television
C.O.ADD. 174	1U 8	Utilities: Waterline 'A' Utilities: Olopana St.
C.O.ADD. 175	1U 9	Utilities: Waterlines 'B', 'C' & 'D' - 1
C.O.ADD. 176	1U 10	Utilities: Waterlines 'B', 'C' & 'D' - 2
C.O. ADD. 177	1U 11	Utilities: Waterline 'E' Telephone Utilities: Water Laterals 'EA', 'EB', & 'EC'.
C.O. ADD. 178	1U 11A	Utilities: Waterline 'F'
C.O. ADD. 179	1U 13	Utilities: Waterline 'G'
C.O.ADD. 180	1U 14	Utilities: Sewer and Water Plan
C.O.ADD. 181	1U 15	Utilities: Sewer and Water Plan
C.O. ADD. 181S-1	1U 15A	Utilities: Sewer and Water Plans
C.O. ADD. 182	1U 16	Utilities: Electric Profiles
C.O. ADD. 183	1U 17	Utilities: Electric Profiles
C.O. ADD. 183S-1	1U 17A	Utilities: Cable Television Profiles
C.O. ADD. 183S-2	1U 17B	Utilities: Telephone Profiles
C.O. ADD. 183S-3	1U 17C	Utilities: Telephone Profile
C.O. 184	1U 18	Utilities: Sewer Profile
C.O. ADD. 185	1U 19	Utilities: Waterline 'A' Profile
C.O. ADD. 186	1U 20	Utilities: Waterline 'B' Profile
C.O. ADD. 187	1U 21	Utilities: Waterline 'C' Profile
C.O. ADD. 187S-1	1U 21A	Utilities: Waterline 'J' Profile
C.O. ADD. 188	1U 22	Utilities: Waterline 'D' Profile
C.O. ADD. 189	1U 23	Utilities: Waterline 'E' Profile Telephone
C.O. ADD. 189S-1	1U 23A	Utilities: Water Laterals 'EA' & 'EB' Profile
C.O. ADD. 190	1U 24	Utilities: Waterline 'F' Profile
C.O. ADD. 191	1U 25	Utilities: Waterline 'G' Profile
C.O. ADD. 192	1U 26	Utilities: Waterline 'H' Profile
ADD. 193	1U 27	Utilities: Waterline Profiles
C.O. ADD. 193S-1	1U 27A	Utilities: Water System Details - 1
C.O. ADD. 193S-2	1U 27B	Utilities: Water System Details - 2
C.O. ADD. 193S-3	1U 27C	Utilities: Water System Details - 3
C.O. 193S-4	1U 27D	Utilities: Water System Details - 4
C.O. ADD. 193S-5	1U 27E	Utilities: Water System Details - 5
C.O. 193S-6	1U 27F	Utilities: Water System Details - 6
C.O. ADD. 194	1U 28	Utilities: Miscellaneous Details
C.O. ADD. 195	1U 29	Utilities: Electric Manhole and Handhole Envelopes & Detail
C.O. ADD. 195S-1	1U 29A	Utilities: Telephone Manhole and Handhole Envelopes

ADD. 196	1P 1	Signing & Striping Notes and Legend
C.O. 197	1P 2	Construction Zone: Interstate Route H-1: Ph. A
C.O. 198	1P 3	Construction Zone: Interstate Route H-1: Ph. A
C.O. 199	1P 4	Construction Zone: Interstate Route H-1: Ph. A
C.O. 200	1P 5	Construction Zone: Interstate Route H-1: Ph. A
C.O. 201	1P 6	Construction Zone: Interstate Route H-1: Ph. A
C.O. 202	1P 7	Construction Zone: Interstate Route H-1: Ph. A
C.O. ADD. 203	1P 8	Construction Zone: Interstate Route H-1: Ph. A
C.O. 204	1P 9	Construction Zone: Interstate Route H-1: Ph. A
C.O. 205	1P 10	Construction Zone: Interstate Route H-1: Ph. A

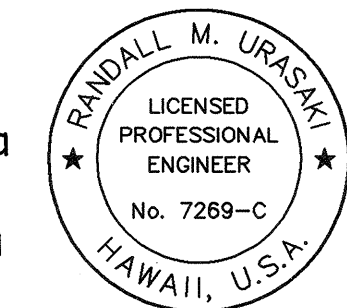
SHEET	SHEET NO.	TITLE
C.O. 205S-1	IP 10A	Construction Zone: Interstate Route H-1: Ph. A
206	1P 11	Construction Zone: Interstate Route H-1: Ph. B
207	1P 12	Construction Zone: Interstate Route H-1: Ph. B
208	1P 13	Construction Zone: Interstate Route H-1: Ph. B
209	1P 14	Construction Zone: Interstate Route H-1: Ph. B
210	1P 15	Construction Zone: Interstate Route H-1: Ph. B
211	1P 16	Construction Zone: Interstate Route H-1: Ph. B
212	1P 17	Construction Zone: Interstate Route H-1: Ph. B
213	1P 18	Construction Zone: Interstate Route H-1: Ph. B
214	1P 19	Construction Zone: Interstate Route H-1: Ph. B
215	1P 20	Construction Zone: Interstate Route H-1: Ph. C1
216	1P 21	Construction Zone: Interstate Route H-1: Ph. C1
217	1P 22	Construction Zone: Interstate Route H-1: Ph. C1
218	1P 23	Construction Zone: Interstate Route H-1: Ph. C1
219	1P 24	Construction Zone: Interstate Route H-1: Ph. C1
220	1P 25	Construction Zone: Interstate Route H-1: Ph. C1
221	1P 26	Construction Zone: Interstate Route H-1: Ph. C1
222	1P 27	Construction Zone: Interstate Route H-1: Ph. C1
223	1P 28	Construction Zone: Interstate Route H-1: Ph. C1
224	1P 29	Construction Zone: Interstate Route H-1: Ph. C2
225	1P 30	Construction Zone: Interstate Route H-1: Ph. C2
226	1P 31	Construction Zone: Interstate Route H-1: Ph. C2
227	1P 32	Construction Zone: Interstate Route H-1: Ph. C2
228	1P 33	Construction Zone: Interstate Route H-1: Ph. C3
229	1P 34	Construction Zone: Interstate Route H-1: Ph. C3
230	1P 35	Construction Zone: Interstate Route H-1: Ph. C3
231	1P 36	Construction Zone: Interstate Route H-1: Ph. C4
232	1P 37	Construction Zone: Interstate Route H-1: Ph. C4
233	1P 38	Construction Zone: Interstate Route H-1: Ph. C4
234	1P 39	Construction Zone: Interstate Route H-1: Ph. C5
235	1P 40	Construction Zone: Interstate Route H-1: Ph. C5
236	1P 41	Construction Zone: Interstate Route H-1: Ph. C5
237	1P 42	Construction Zone: Interstate Route H-1: Ph. C5
238	1P 43	Construction Zone: Interstate Route H-1: Ph. C5
239	1P 44	Construction Zone: Interstate Route H-1: Ph. C5
240	1P 45	Construction Zone: Interstate Route H-1: Ph. C5
241	1P 46	Construction Zone: Interstate Route H-1: Ph. C6
242	1P 47	Construction Zone: Interstate Route H-1: Ph. C6
243	1P 48	Construction Zone: Interstate Route H-1: Ph. C6
244	1P 49	Construction Zone: Interstate Route H-1: Ph. C6
245	1P 50	Construction Zone: Interstate Route H-1: Ph. C6
246	1P 51	Construction Zone: Interstate Route H-1: Ph. C7
247	1P 52	Construction Zone: Interstate Route H-1: Ph. C7
248	1P 53	Construction Zone: Interstate Route H-1: Ph. C7
249	1P 54	Construction Zone: Interstate Route H-1: Ph. C7
250	1P 55	Construction Zone: Interstate Route H-1: Ph. C7
251	1P 56	Construction Zone: Interstate Route H-1: Ph. C7
252	1P 57	Construction Zone: Interstate Route H-1: Ph. C7
253	1P 58	Construction Zone: Interstate Route H-1: Ph. C8
ADD. 254	1P 59	Construction Zone: Interstate Route H-1: Ph. C8
ADD. 255	1P 60	Construction Zone: Interstate Route H-1: Ph. C8
ADD. 256	1P 61	Construction Zone: Interstate Route H-1: Ph. C8
257	1P 62	Construction Zone: Interstate Route H-1: Ph. C8
ADD. 257S-1	1P 62A	Construction Zone: Interstate Route H-3: Ph. 1
ADD. 257S-2	1P 62B	Construction Zone: Interstate Route H-3: Ph. 1
ADD. 257S-3	1P 62C	Construction Zone: Interstate Route H-3: Ph. 1
ADD. 257S-4	1P 62D	Construction Zone: Interstate Route H-3: Ph. 1
C.O. ADD. 257S-5	1P 62E	Construction Zone: Interstate Route H-3: Ph. 1
ADD. 257S-6	1P 62F	Construction Zone: Interstate Route H-3: Ph. 2
ADD. 257S-7	1P 62G	Construction Zone: Moanalua Frwy & Ramp M: Ph. 2
C.O. 258	1P 63	Construction Zone: Aiea Heights Drive - Phase A
C.O. 259	1P 64	Construction Zone: Aiea Heights Drive - Phase B
C.O. 260	1P 65	Construction Zone: Aiea Heights Drive - Phase C
C.O. 261	1P 66	Signing & Pavement Marking: H-1 Sta. 122+00 to Sta. 133+00
C.O. 262	1P 67	Signing & Pavement Marking: H-1 Sta. 133+00 to Sta. 145+00
C.O. 263	1P 68	Signing & Pavement Marking: H-1 Sta. 145+00 to Sta. 157+00
C.O. 264	1P 69	Signing & Pavement Marking: H-1 Sta. 157+00 to Sta. 166+00

C.O. 257S-8	IP 62H	Construction Zone: Moanalua Frwy. & Ramp M: Ph. 1
C.O. 257S-9	IP 62I	Construction Zone: Moanalua Frwy. & Ramp M: Ph. 1

SHEET	SHEET NO.	TITLE
C.O. 265	1P 70	Signing & Pavement Marking: H-1 Sta. 166+00 to Sta. 177+00
C.O. 266	1P 71	Signing & Pavement Marking: H-1 Sta. 177+00 to Sta. 187+00
C.O. 267	1P 72	Signing & Pavement Marking: H-1 Sta. 187+00 to Sta. 198+00
C.O. 268	1P 73	Signing & Pavement Marking: H-1 Sta. 198+00 to Sta. 209+00
C.O. 269	1P 74	Signing & Pavement Marking: H-1 Sta. 209+00 to Sta. 219+00
270	1P 75	Signing & Pavement Marking: H-1 Sta. 219+00 to Sta. 230+00
ADD. 270S-1	1P 75A	Signing & Pavement Markings: Interstate Route H-3
ADD. 270S-2	1P 75B	Signing & Pavement Markings: Interstate Route H-3
ADD. 270S-3	1P 75C	Signing & Pavement Markings: Interstate Route H-3
ADD. 270S-4	1P 75D	Signing & Pavement Markings: Interstate Route H-3
ADD. 270S-5	1P 75E	Signing & Pavement Markings: Interstate Route H-3
ADD. 270S-6	1P 75F	Signing & Pavement Markings: Moanalua Freeway & Ramp M
ADD. 270S-7	1P 75G	Signing & Pavement Markings: Moanalua Freeway
ADD. 270S-8	1P 75H	Signing & Pavement Marking: Aiea Hts. Dr. & Olopana St.
ADD. 271	1P 76	Signing & Pavement Markings Details
272	1F 1	Traffic Control Plan Notes and Legend
273	1F 2	Traffic Control Plan: Interstate Route H-1: Ph. B1
274	1F 3	Traffic Control Plan: Interstate Route H-1: Ph. B1
275	1F 4	Traffic Control Plan: Interstate Route H-1: Ph. B1
276	1F 5	Traffic Control Plan: Interstate Route H-1: Ph. B1
277	1F 6	Traffic Control Plan: Interstate Route H-1: Ph. B2
278	1F 7	Traffic Control Plan: Interstate Route H-1: Ph. B2
279	1F 8	Traffic Control Plan: Interstate Route H-1: Ph. B2
280	1F 9	Traffic Control Plan: Interstate Route H-1: Ph. B2
281	1F 10	Traffic Control Plan: Interstate Route H-1: Ph. B3
282	1F 11	Traffic Control Plan: Interstate Route H-1: Ph. B3
283	1F 12	Traffic Control Plan: Interstate Route H-1: Ph. B3
284	1F 13	Traffic Control Plan: Interstate Route H-1: Ph. B3
285	1F 14	Traffic Control Plan: Interstate Route H-1: Ph. B3
ADD. 286	1L 1	Landscape: Planting Plan
287	1L 2	Landscape: Planting Plan
C.O. ADD. 288	1L 3	Landscape: Planting Plan
ADD. 289	1L 4	Landscape: Planting Plan
ADD. 290	1L 5	Landscape: Planting Plan
C.O. ADD. 291	1L 6	Landscape: Planting Plan
ADD. 292	1L 7	Landscape: Planting Plan
ADD. 292S-1	1L 7A	Landscape: Planting Plan
ADD. 293	1L 8	Plant Details, List and Notes
ADD. 294R	1S 1	Bridge General Notes
ADD. 295	1S 2	Bridge Quantities & Location Map
C.O. 296	1S 3	Aiea Heights Drive: Grade Separation Lengthening: General Plan and Long. Section
ADD. 297R	1S 4	Aiea Heights Drive: Grade Separation Lengthening: Spot Elevations
C.O. ADD. 298	1S 5	Aiea Heights Drive: Grade Separation Lengthening: Bents #1 and #2 Details - 1
C.O. 299	1S 6	Aiea Heights Drive: Grade Separation Lengthening: Bents #1 and #2 Details - 2
C.O. 300	1S 7	Aiea Heights Drive: Grade Separation Lengthening: Bents #1 and #2 Details - 3
C.O. ADD. 301	1S 8	Aiea Heights Drive: Grade Separation Lengthening: Framing Plan

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75), UNIT II	1997	6	1102

C.O. 269S-1 IP 74A  
Signing & Pavement  
Marking: Ramp D



THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION.  
*Randall M. Urasaki*

5/2/97	Revised and Added Sheet Numbers and Titles
4/21/97	Revised and Added Sheet Numbers and Titles
Date	Revision
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION  LIST OF PLANS - 2  H-3 FINISH (UNIT II) FAIP NO. I-H3-1(75), UNIT II LEEWARD SECTION SCALE: NONE DATE: JANUARY 1997 SHEET NO. G6 OF 18 SHEETS	

ADD. 6



DATE

ORIGINAL SURVEY PLOTTED BY

PLAN

DESIGNED BY

NOTED BY

NO.

DATE

TRACED BY

DESIGNED BY

NOTED BY

NO.

CAD by L. Fujimori, 55-55

Last Saved: J:\H3RP\RFU2\MISC\INDEX3.dwg 05/04/97 at 16:30

SHEET	SHEET NO.	TITLE
C.O. 302	1S 9	Aiea Heights Drive: Grade Separation Lengthening: Deck Reinforcing Plan - 1
303	1S 10	Aiea Heights Drive: Grade Separation Lengthening: Deck Reinforcing Plan - 2
C.O. 304	1S 11	Aiea Heights Drive: Grade Separation Lengthening: Deck Reinforcing Plan - 3
C.O. ADD. 305	1S 12	Aiea Heights Drive: Grade Separation Lengthening: Typical Sections
306	1S 13	Aiea Heights Drive: Grade Separation Lengthening: Dapped End Beam Details - 1
C.O. ADD. 307	1S 14	Aiea Heights Drive: Grade Separation Lengthening: Dapped End Beam Details - 2
C.O. ADD. 308	1S 15	Aiea Heights Drive: Grade Separation Lengthening: Dapped End Beam Details - 3
ADD. 309	1S 16	Aiea Heights Drive: Grade Separation Lengthening: Deck Expansion Joints - 1
C.O. ADD. 310	1S 17	Aiea Heights Drive: Grade Separation Lengthening: Deck Expansion Joints - 2
C.O. ADD. 311	1S 18	Aiea Heights Drive: Grade Separation Lengthening: Deck Expansion Joints - 3
C.O. ADD. 312	1S 19	Aiea Heights Drive: Grade Separation Lengthening: Deck Expansion Joints - 4
ADD. 313	1S 20	Aiea Heights Drive: Grade Separation Lengthening: Railing & Sidewalk - 1
ADD. 314	1S 21	Aiea Heights Drive: Grade Separation Lengthening: Railing & Sidewalk - 2
315	1S 22	Aiea Heights Drive: Grade Separation Lengthening: Three-Rail Metal Railing - 1
316	1S 23	Aiea Heights Drive: Grade Separation Lengthening: Three-Rail Metal Railing - 2
ADD. 317R	1S 24	Aiea Heights Drive: Grade Separation Lengthening: Three-Rail Metal Railing - 3
318	1S 25	Aiea Heights Drive: Grade Separation Lengthening: Concrete End Post Details
C.O. ADD. 319	1S 26	Aiea Heights Drive: Grade Separation Lengthening: Wingwall Retrofit - 1
ADD. 320	1S 27	Aiea Heights Drive: Grade Separation Lengthening: Wingwall Retrofit - 2
ADD. 321	1S 28	Aiea Heights Drive: Grade Separation Lengthening: Wingwall Retrofit - 3
ADD. 322	1S 29	Aiea Heights Drive: Grade Separation Lengthening: Wingwall Retrofit - 4
ADD. 323	1S 30	Aiea Heights Drive: Grade Separation Lengthening: Wingwall Retrofit - 5
ADD. 324	1S 31	Aiea Heights Drive: Grade Separation Lengthening: Miscellaneous Details - 1
ADD. 325R	1S 32	Aiea Heights Drive: Grade Separation Lengthening: Miscellaneous Details - 2
ADD. 326	1S 33	Aiea Heights Drive: Grade Separation Lengthening: Miscellaneous Details - 3
ADD. 327	1S 34	Aiea Heights Drive: Grade Separation Lengthening: Miscellaneous Details - 4
328	1S 35	Aiea Heights Drive: Grade Separation Lengthening: Miscellaneous Details - 5
ADD. 329	1S 36	Aiea Heights Drive: Grade Separation Lengthening: Miscellaneous Details - 6
C.O. ADD. 329S-1	1S 36A	Aiea Heights Drive: Grade Separation Lengthening: Miscellaneous Details - 7
ADD. 330	1S 37	Aiea Heights Drive: Grade Separation Lengthening: Drilled Shaft Details
ADD. 331	1S 38	Aiea Stream Crossing: Plan & Elevation - 1
ADD. 332	1S 39	Aiea Stream Crossing: Plan & Elevation - 2
C.O. 333R	1S 40	Aiea Stream Crossing: Prestressed Plank Details
ADD. 334R	1S 41	Aiea Stream Crossing: Miscellaneous Details
335	1S 42	Aiea Stream Crossing: Drilled Shaft Details
336		FOR REFERENCE ONLY : Contract FAIP NO. I-H1-1(64):12: Aiea Heights Drive Grade Separation
337		FOR REFERENCE ONLY : Contract FAIP NO. I-H1-1(64):12: Aiea Heights Drive Grade Separation
338		FOR REFERENCE ONLY : Contract FAIP NO. I-H1-1(64):12: Aiea Heights Drive Grade Separation
339		FOR REFERENCE ONLY : Contract FAIP NO. I-H1-1(64):12: Aiea Heights Drive Grade Separation
340		FOR REFERENCE ONLY : Contract FAIP NO. I-H1-1(64):12: Aiea Heights Drive Grade Separation
341		FOR REFERENCE ONLY : Contract FAIP NO. I-H1-1(64):12: Aiea Heights Drive Grade Separation
342		FOR REFERENCE ONLY : Contract FAIP NO. I-H1-1(64):12: Aiea Heights Drive Grade Separation
343	1W 1	Retaining Walls Location Map
ADD. 344	1W 2	Retaining Walls General Notes
ADD. 345	1W 3	Retaining Walls Quantities - 1
ADD. 346	1W 4	Retaining Walls Quantities - 2
347	1W 5	Retaining Wall No. 2: Plan & Elevation
ADD. 348	1W 6	Retaining Wall No. 3: Plan & Elevation
ADD. 349	1W 7	Retaining Wall No. 4: Plan & Elevation
ADD. 350	1W 8	Retaining Wall No. 5: Plan & Elevation - 1
ADD. 351	1W 9	Retaining Wall No. 5: Plan & Elevation - 2
ADD. 352	1W 10	Retaining Wall No. 6: Plan & Elevation
ADD. 353	1W 11	Retaining Wall No. 7: Plan & Elevation - 1
ADD. 354	1W 12	Retaining Wall No. 7: Plan & Elevation - 2
ADD. 355	1W 13	Retaining Wall No. 7: Plan & Elevation - 3
ADD. 356	1W 14	Retaining Wall No. 7: Plan & Elevation - 4
ADD. 357	1W 15	Retaining Wall No. 8: Plan & Elevation - 1
ADD. 358	1W 16	Retaining Wall No. 8: Plan & Elevation - 2
ADD. 359	1W 17	Retaining Wall No. 8: Plan & Elevation - 3
ADD. 360	1W 18	Retaining Wall No. 9: Plan & Elevation
ADD. 361	1W 19	Retaining Wall No. 10: Plan & Elevation
ADD. 362	1W 20	Retaining Wall No. 11: Plan & Elevation
C.O. ADD. 363	1W 21	Retaining Wall No. 12: Plan & Elevation - 1
C.O. ADD. 364	1W 22	Retaining Wall No. 12: Plan & Elevation - 2
ADD. 365	1W 23	Retaining Wall No. 13: Plan & Elevation - 1

C.O. 363S-I IW 21A Retaining Wall No.12: Top of Sound Barrier Transition

C.O. ADD. 364S-IW 22A Retaining Wall No. 12 at 10.5' Culvert: Plan and Sections

C.O. 364S-2 IW 22B Retaining Wall No.12: Exist. Pole Guy Anchor Details

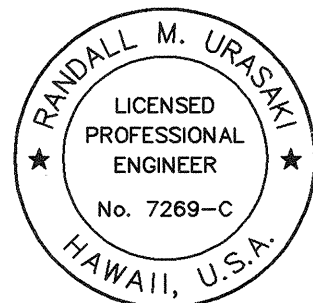
SHEET	SHEET NO.	TITLE
C.O. ADD. 366	1W 24	Retaining Wall No. 13: Plan & Elevation - 2
ADD. 367	1W 25	Retaining Wall No. 14: Plan & Elevation - 1
ADD. 368	1W 26	Retaining Wall No. 14: Plan & Elevation - 2
ADD. 369	1W 27	Retaining Wall No. 15: Plan & Elevation
C.O. ADD. 370	1W 28	Retaining Wall No. 16: Plan & Elevation - 1
ADD. 371	1W 29	Retaining Wall No. 16: Plan & Elevation - 2
ADD. 372	1W 30	Retaining Wall No. 16: Plan & Elevation - 3
ADD. 373	1W 31	Retaining Wall No. 16: Plan & Elevation - 4
ADD. 374	1W 32	Retaining Wall No. 16: Plan & Elevation - 5
ADD. 375	1W 33	Wall Type C1, C2, & C4: Typical Sections
ADD. 376	1W 34	Wall Type C2 & C4: Typical Sections
C.O. ADD. 377	1W 35	Wall Type C3 & F3: Typical Sections
ADD. 378	1W 36	Wall Type C1, C2, C3, C4 & F3: Miscellaneous - 1
ADD. 379	1W 37	Wall Type C1, C2, C3, C4 & F3: Miscellaneous - 2
C.O. ADD. 380	1W 38	Wall Type C1, C2, C3, C4 & F3: Miscellaneous - 3
C.O. ADD. 381	1W 39	Wall Type C1, C2, C3, C4 & F3: Miscellaneous - 4
ADD. 382	1W 40	Retaining Wall Nos. 4 & 10: Notes & Details
ADD. 383	1W 41	Retaining Wall Nos. 6 & 8: Typical Section & Details
C.O. ADD. 384	1W 42	Retaining Wall Nos. 14 & 15: Typical Sections
C.O. ADD. 385	1W 43	Retaining Wall Nos. 14 & 15: Miscellaneous - 1
C.O. ADD. 386	1W 44	Retaining Wall Nos. 14 & 15: Miscellaneous - 2
387	1W 45	Retaining Wall Nos. 14 & 15: Miscellaneous - 3
ADD. 388	1W 46	Retaining Wall Nos. 14 & 15: Miscellaneous - 4
ADD. 389	1W 47	Retaining Wall Nos. 14 & 15: Miscellaneous - 5
C.O. ADD. 390	1W 48	Retaining Wall Nos. 14 & 15: Miscellaneous - 6
C.O. ADD. 391	1W 49	Retaining Wall Nos. 14 & 15: Miscellaneous - 7
ADD. 392	1W 50	Retaining Wall Nos. 14 & 15: Miscellaneous - 8
ADD. 393	1W 51	Retaining Wall Nos. 14 & 15: Miscellaneous - 9
ADD. 394	1W 52	Retaining Wall Nos. 14 & 15: Drilled Shaft Details
ADD. 395	1W 53	Retaining Wall Nos. 14 & 15: Instrumentation Plan - 1
ADD. 396	1W 54	Retaining Wall Nos. 14 & 15: Instrumentation Plan - 2
ADD. 397	1W 55	Retaining Wall Nos. 14 & 15: Instrumentation Plan - 3
ADD. 398	1W 56	Retaining Wall Nos. 14 & 15: Instrumentation Details
399	1W 57	Retaining Wall No. 16: Transition to End Post
ADD. 399S-1	1W 57A	Random Pattern of Reveal - 1
ADD. 399S-2	1W 57B	Random Pattern of Reveal - 2
C.O. ADD. 399S-3	1W 57C	Sound Barrier Details - 1
ADD. 399S-4	1W 57D	Sound Barrier Details - 2
ADD. 399S-5	1W 57E	Golf Fence Supports - 1 (Deleted)
ADD. 399S-6	1W 57F	Golf Fence Supports - 2 (Deleted)
ADD. 399S-7	1W 57G	Golf Fence Supports - 3 (Deleted)
400		FOR REFERENCE ONLY: Contract FAIP NO. I-H1-1(64):12: Kaonohi Street Grade Separation
401		FOR REFERENCE ONLY: Contract FAIP NO. I-H1-1(64):12: Aiea Heights Drive Retaining Wall
402		FOR REFERENCE ONLY: Contract FAIP NO. I-H1-1(64):12: Aiea Heights Drive Retaining Wall
403		FOR REFERENCE ONLY: Contract FAIP NO. I-H1-1(64):12: Aiea Heights Drive Retaining Wall
404		FOR REFERENCE ONLY: Contract FAIP NO. I-H1-1(64):12: Aiea Heights Drive Retaining Wall
405		FOR REFERENCE ONLY: Contract FAIP NO. I-H1-1(64):12: Kaamilo Street Grade Separation
406	1H 1	Boring Location Plan
407	1H 2	Boring Location Plan
408	1H 3	Boring Location Plan
409	1H 4	Boring Location Plan
410	1H 5	Boring Location Plan
411	1H 6	Boring Location Plan
412	1H 7	Boring Location Plan
413	1H 8	Boring Location Plan
414	1H 9	Boring Log Legend
415	1H 10	Boring Logs
416	1H 11	Boring Logs
417	1H 12	Boring Logs
418	1H 13	Boring Logs
419	1H 14	Boring Logs
420	1H 15	Boring Logs
421	1H 16	Boring Logs
422	1H 17	Boring Logs

369S-I IW 27A Drilled Shaft As-Built Elevations

C.O. 393S-I IW51A Retaining Wall Nos.14&15: Miscellaneous -10

C.O. 399S-8 IW 57H Retaining Wall No.16: Light Pole Ped. on Soundbarrier.

SHEET	SHEET NO.	TITLE
423	1H 18	Boring Logs
424	1H 19	Boring Logs
425	1H 20	Boring Logs
426	1Z 1	Existing Conditions: Aerial Survey: Interstate Route H-1 - 1
427	1Z 2	Existing Conditions: Aerial Survey: Interstate Route H-1 - 2
428	1Z 3	Existing Conditions: Aerial Survey: Interstate Route H-1 - 3
429	1Z 4	Existing Conditions: Aerial Survey: Interstate Route H-1 - 4
430	1Z 5	Existing Conditions: Aerial Survey: Interstate Route H-1 - 5
431	1Z 6	Existing Conditions: Aerial Survey: Interstate Route H-1 - 6
432	1Z 7	Existing Conditions: Aerial Survey: Interstate Route H-1 - 7
433	1Z 8	Existing Conditions: Aerial Survey: Interstate Route H-1 - 8
434	1Z 9	Existing Conditions: Aerial Survey: Interstate Route H-1 - 9
435	1Z 10	Existing Conditions: Ground Survey: H-1, Ramp D & Ramp EW - 1
436	1Z 11	Existing Conditions: Ground Survey: H-1, Ramp D & Ramp EW - 2
437	1Z 12	Existing Conditions: Ground Survey: H-1, Ramp D & Ramp EW - 3
438	1Z 13	Existing Conditions: Ground Survey: H-1, Ramp D & Ramp EW - 4



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

*Randall M. Urasak*

5/2/97	Revised and Added Sheet Numbers and Titles
4/21/97	Revised and Added Sheet Numbers and Titles
Date	Revision
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
LIST OF PLANS - 3	
H-3 FINISH (UNIT II) FAIP NO. I-H3-1(75), UNIT II LEEWARD SECTION	
SCALE: NONE	DATE: JANUARY 1997
SHEET NO. G7 OF 18 SHEETS	

ADD. 7



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75), UNIT II	1997	8	1102

<u>SHEET</u>	<u>SHEET NO.</u>	<u>TITLE</u>
439	1Z 14	Existing Conditions: Ground Survey: H-1, Ramp D & Ramp EW - 5
440	1Z 15	Existing Conditions: Ground Survey: H-1, Ramp D & Ramp EW - 6
441	1Z 16	Existing Conditions: Ground Survey: H-1, Ramp D & Ramp EW - 7
442	1Z 17	Existing Conditions: Ground Survey: Kaanohi Street
443	1Z 18	Existing Conditions: Ground Survey: Kaamilo Street - 1
444	1Z 19	Existing Conditions: Ground Survey: Kaamilo Street - 2
445	1Z 20	Existing Conditions: Ground Survey: Aiea Hts. Dr./Olopana St. - 1
446	1Z 21	Existing Conditions: Ground Survey: Aiea Hts. Dr./Olopana St. - 2
447	1Z 22	Existing Conditions: Ground Survey: Aiea Hts. Dr./Olopana St. - 3
448	1Z 23	Existing Conditions: Ground Survey: Aiea Hts. Dr./Olopana St. - 4
449	1Z 24	Existing Conditions: Ground Survey: Aiea Hts. Dr./Olopana St. - 5
450	1Z 25	Existing Conditions: Ground Survey: Aiea Hts. Dr./Olopana St. - 6
451	1Z 26	Existing Conditions: Ground Survey: Aiea Hts. Dr./Olopana St. - 7
452	1Z 27	Existing Conditions: Miscellaneous Ground Survey: Heleconia Pl.
453	1Z 28	Existing Conditions: Miscellaneous Ground Survey: Anounou Pl. & Kulina St.
454	1X 1	Cross Sections: Interstate Route H-1
455	1X 2	Cross Sections: Interstate Route H-1
456	1X 3	Cross Sections: Interstate Route H-1
457	1X 4	Cross Sections: Interstate Route H-1
458	1X 5	Cross Sections: Interstate Route H-1
459	1X 6	Cross Sections: Interstate Route H-1
460	1X 7	Cross Sections: Interstate Route H-1
461	1X 8	Cross Sections: Interstate Route H-1
462	1X 9	Cross Sections: Interstate Route H-1
463	1X 10	Cross Sections: Interstate Route H-1
ADD. 464	1X 11	Cross Sections: Interstate Route H-1
ADD. 465	1X 12	Cross Sections: Interstate Route H-1
466	1X 13	Cross Sections: Interstate Route H-1
467	1X 14	Cross Sections: Interstate Route H-1
468	1X 15	Cross Sections: Interstate Route H-1
469	1X 16	Cross Sections: Interstate Route H-1
470	1X 17	Cross Sections: Interstate Route H-1
471	1X 18	Cross Sections: Interstate Route H-1
472	1X 19	Cross Sections: Interstate Route H-1
ADD. 473	1X 20	Cross Sections: Interstate Route H-1
ADD. 474	1X 21	Cross Sections: Interstate Route H-1
ADD. 475	1X 22	Cross Sections: Interstate Route H-1
ADD. 476	1X 23	Cross Sections: Interstate Route H-1
ADD. 477	1X 24	Cross Sections: Interstate Route H-1
478	1X 25	Cross Sections: Interstate Route H-1
479	1X 26	Cross Sections: Interstate Route H-1
480	1X 27	Cross Sections: Interstate Route H-1
481	1X 28	Cross Sections: Interstate Route H-1
482	1X 29	Cross Sections: Interstate Route H-1
483	1X 30	Cross Sections: Interstate Route H-1
484	1X 31	Cross Sections: Interstate Route H-1
485	1X 32	Cross Sections: Interstate Route H-1
486	1X 33	Cross Sections: Interstate Route H-1
487	1X 34	Cross Sections: Interstate Route H-1
488	1X 35	Cross Sections: Interstate Route H-1
489	1X 36	Cross Sections: Interstate Route H-1
490	1X 37	Cross Sections: Interstate Route H-1
491	1X 38	Cross Sections: Interstate Route H-1
492	1X 39	Cross Sections: Interstate Route H-1
493	1X 40	Cross Sections: Ramp F and Ramp M
ADD. 494	1X 41	Cross Sections: Olopana Street
ADD. 494S-1	1X 41A	Cross Sections: Olopana Street

<u>SHEET</u>	<u>SHEET NO.</u>	<u>TITLE</u>
<b><u>VOLUME 2</u></b>		
495		Title Sheet – Volume 2 of 2
<b><u>2. MOANALUA FREEWAY</u></b>		
496	2G 1	Location Map
ADD. 497	2T 1	Typical Section: Moanalua Freeway
498	2T 2	Typical Section: Moanalua Freeway
ADD. 499	2T 3	Typical Section: Ulune Extension & Ramp N
500	2A 1	Alignment: Sta. 187+00 to Sta. 196+00
501	2A 2	Alignment: Sta. 196+00 to Sta. 207+00
502	2A 3	Alignment: Sta. 207+00 to Sta. 217+00
503	2A 4	Alignment: Sta. 217+00 to 228+00
504	2A 5	Ramp N: Profile & Superelevation Diagram
505	2A 6	Ramp N: Profile & Superelevation Diagram
506	2A 7	Ulune Extension: Profile & Superelevation Diagram
507	2A 8	Ulune Extension: Profile & Superelevation Diagram
508	2A 9	Spot Elevations: Ramp N & Ulune Ext.
C.O. 509	2A 10	Spot Elevations: Ramp N & Ulune Ext.
C.O. 510	2A 11	Spot Elevations: Ramp N & Ulune Ext.
511	2A 12	Spot Elevations: Ramp N & Ulune Ext.
512	2C 1	Roadway Construction Notes, Legend & Abbreviations
ADD. 513	2C 2	Roadway Construction: Ramp N & Ulune Ext.
ADD. 514	2C 3	Roadway Construction: Ramp N & Ulune Ext.
ADD. 515	2C 4	Roadway Construction: Ramp N & Ulune Ext.
ADD. 515S-1	2C 4A	Roadway Construction Details
516	2C 5	Roadway Construction: Ramp M
ADD. 517	2C 6	Roadway Construction Details
ADD. 517S-1	2C 6A	Roadway Construction Details
518	2C 7	SRT-350: Slotted Rail Terminal
519	2C 8	Roadway Construction Details
520	2C 9	Roadway Construction Details
521	2D 1	Drainage & Grading Notes, Legend and Abbreviations
522	2D 2	Drainage & Grading: Sta. 187+00 to Sta. 196+00
523	2D 3	Drainage & Grading: Sta. 196+00 to Sta. 207+00
524	2D 4	Drainage & Grading: Sta. 207+00 to Sta. 217+00
525	2D 5	Underdrain: Sta. 187+00 to Sta. 196+00
ADD. 526	2D 6	Underdrain: Sta. 196+00 to Sta. 207+00
527	2D 7	Underdrain: Sta. 207+00 to Sta. 217+00
528	2D 8	Underdrain Detail
529	2D 9	Underdrain Detail
ADD. 530	2D 10	Underdrain Summary
531	2R 1	Erosion Control: Sta. 187+00 to Sta. 196+00
532	2R 2	Erosion Control: Sta. 196+00 to Sta. 207+00
533	2R 3	Erosion Control: Sta. 207+00 to Sta. 217+00
534	2P 1	Signing & Pavement Marking Notes & Legend
535	2P 2	Signing & Pavement Marking: Sta. 187+00 to Sta. 196+00
C.O. 536	2P 3	Signing & Pavement Marking: Sta. 196+00 to Sta. 207+00
C.O. 537	2P 4	Signing & Pavement Marking: Sta. 207+00 to Sta. 217+00
538	2F 1	Traffic Control Plans Notes & Legend
539	2F 2	Traffic Control Plans: Ramp N & Ulune Extension
540	2F 3	Traffic Control Plans: Ramp N & Ulune Extension
ADD. 541	2F 4	Traffic Control Plans: Ramp N & Ulune Extension
ADD. 542	2F 5	Traffic Control Plans: Ramp N & Ulune Extension

<u>SHEET</u>	<u>SHEET NO.</u>	<u>TITLE</u>
543	2F 6	Traffic Control Plans: Ramp N & Ulune Extension
544	2F 7	Traffic Control Plans: Ramp N & Ulune Extension
ADD. 545	2F 8	Traffic Control Plans: Ramp N & Ulune Extension
ADD. 546	2F 9	Traffic Control Plans: Ramp N & Ulune Extension
547	2F 10	Traffic Control Plans: Ramp N & Ulune Extension
548	2F 11	Traffic Control Plans: Ramp N & Ulune Extension
ADD. 549	2F 12	Traffic Control Plans: Ramp N & Ulune Extension
550	2F 13	Traffic Control Plans: Ramp N & Ulune Extension
551	2L 1	Landscape: Planting Plan
552	2L 2	Landscape: Planting Plan
553	2L 3	Landscape: Planting Plan
ADD. 554	2W 1	Retaining Walls General Notes & Quantities
C.O. ADD. 555	2W 2	Retaining Wall No. 1: Plan & Elevation - 1
ADD. 556	2W 3	Retaining Wall No. 1: Plan & Elevation - 2
ADD. 557	2W 4	Retaining Wall Type F2: Typical Section
ADD. 558	2W 5	Retaining Wall No. 1: Miscellaneous - 1
559	2W 6	Retaining Wall No. 1: Miscellaneous - 2
ADD. 560	2W 7	Retaining Wall No. 1: Miscellaneous - 3
561	2W 8	Retaining Wall No. 1: Transition to End Post
562	2H 1	Boring Location Plan
563	2H 2	Boring Log Legend
564	2H 3	Boring Logs
565	2Z 1	Existing Conditions: Aerial Survey: Moanalua Freeway - 1
566	2Z 2	Existing Conditions: Aerial Survey: Moanalua Freeway - 2
567	2Z 3	Existing Conditions: Aerial Survey: Moanalua Freeway - 3
568	2Z 4	Existing Conditions: Ground Survey: Moanalua Freeway - 1
569	2Z 5	Existing Conditions: Ground Survey: Moanalua Freeway - 2
570	2Z 6	Existing Conditions: Ground Survey: Moanalua Freeway - 3
571	2Z 7	Existing Conditions: Ground Survey: Moanalua Freeway - 4
C.O. 572	2Z 8	Existing Conditions: Ground Survey: Moanalua Freeway - 5
C.O. 573	2Z 9	Existing Conditions: Ground Survey: Moanalua Freeway - 6
574	2X 1	Cross Sections: Moanalua Freeway
575	2X 2	Cross Sections: Moanalua Freeway
576	2X 3	Cross Sections: Moanalua Freeway
ADD. 577	2X 4	Cross Sections: Moanalua Freeway
ADD. 578	2X 5	Cross Sections: Moanalua Freeway
579	2X 6	Cross Sections: Moanalua Freeway
580	2X 7	Cross Sections: Moanalua Freeway
581	2X 8	Cross Sections: Moanalua Freeway
582	2X 9	Cross Sections: Moanalua Freeway
583	2X 10	Cross Sections: Moanalua Freeway
584	2X 11	Cross Sections: Moanalua Freeway
ADD. 585	2X 12	Cross Sections: Ulune Extension
ADD. 586	2X 13	Cross Sections: Ulune Extension & Ramp N

5/2/97	Revised and Added Sheet Numbers and Titles
4/21/97	Revised Sheet Numbers and Titles
Date	Revision

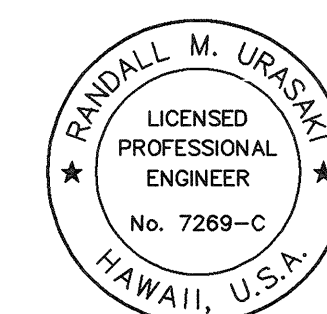
STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

LIST OF PLANS – 4

H-3 FINISH (UNIT II)  
 FAIP NO. I-H3-1(75), UNIT II  
LEEWARD SECTION

SCALE: NONE                      DATE: JANUARY 1997

SHEET NO. 68 OF 18 SHEETS



THIS WORK WAS PREPARED BY M  
OR UNDER MY SUPERVISION.



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75), UNIT II	1997	9	1102

SHEET SHEET NO. TITLE

3. HALAWA INTERCHANGE

587	3G 1	Location Map
588	3T 1	Typical Sections: Interstate Route H-3
C.O. 589	3T 2	Typical Sections: Ramp ES & Ramp EW
C.O. 590	3T 3	Typical Sections: Ramps WE/P and Ramp EW Gore
591	3T 4	Gore Area Details: Interstate Route H-3
592	3A 1	Alignment: Moanalua Freeway
593	3A 2	Alignment: Moanalua Freeway
594	3A 3	Alignment: Moanalua Freeway
595	3A 4	Alignment: Interstate Route H-1
596	3A 5	Alignment: Interstate Route H-1
597	3A 6	Alignment: Interstate Route H-1
598	3A 7	Alignment: Interstate Route H-1
599	3A 8	Alignment: Interstate Route H-1
600	3A 9	Alignment: Interstate Route H-1
601	3A 10	Alignment: Interstate Route H-3
602	3A 11	Alignment: Interstate Route H-3
603	3A 12	Alignment: Ramp ES
604	3A 13	Alignment: Ramp ES
605	3A 14	Alignment: Ramp ES
606	3A 15	Alignment: Ramp EW
C.O. 607	3A 16	Alignment: Ramp EW
608	3A 17	Alignment: Ramp M
609	3A 18	Alignment: Ramp O
610	3A 19	Alignment: Ramp P
611	3A 20	Alignment: Ramp WE
612	3A 21	Alignment: Ramp WE
613	3A 22	Alignment: Ramp WE
614	3A 23	Alignment: Ramp WE
615	3A 24	Alignment: Ramp WE
616	3A 25	Profile & S.E. Diagram: Interstate Route H-3
617	3A 26	Profile & S.E. Diagram: Interstate Route H-3
618	3A 27	Ramp Terminal Details: Interstate Route H-3
619	3A 28	Spot Elevations: Ramp ES
C.O. 620	3A 29	Spot Elevations: Ramp EW (Deleted).
C.O. 621	3A 30	Spot Elevations: Ramp EW
C.O. 621S-I	3A 30A	Spot Elevations: Ramp D
622	3C 1	Roadway Construction General Notes & Legend
623	3C 2	Roadway Construction: Interstate Route H-1, NLV
624	3C 3	Roadway Construction: Interstate Route H-1, NLV
625	3C 4	Roadway Construction: Interstate Route H-1, S#8
ADD. 626	3C 5	Roadway Construction: Interstate Route H-3
627	3C 6	Roadway Construction: Interstate Route H-3
628	3C 7	Roadway Construction: Kahuapaani Street, S#10
629	3C 8	Roadway Construction: Kahuapaani Street, S#11
630	3C 9	Roadway Construction: Kaimakani Street, S#1
631	3C 10	Roadway Construction: Moanalua Freeway, S#2
632	3C 11	Roadway Construction: Ramp B
633	3C 12	Roadway Construction: Ramp C
634	3C 13	Roadway Construction: Ramp ES
C.O. 635	3C 14	Roadway Construction: Ramp EW
C.O. 636	3C 15	Roadway Construction: Ramp EW
637	3C 16	Roadway Construction: Ramp G
638	3C 17	Roadway Construction: Ramp M
639	3C 18	Roadway Construction: Ramp M
640	3C 19	Roadway Construction: Ramp O
641	3C 20	Roadway Construction: Ramp P

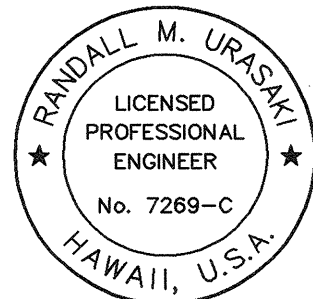
SHEET SHEET NO. TITLE

642	3C 21	Roadway Construction: Ramp SE
643	3C 22	Roadway Construction: Ramp WE
644	3C 23	Roadway Construction: Ramp WE & Ramp P
ADD. 644S-1	3C 23A	Roadway Construction Details
645	3C 24	SRT-350: Slotted Rail Terminal
646	3C 25	Roadway Construction Details
647	3C 26	Roadway Construction Details
648	3C 27	Roadway Construction Details
649	3C 28	Roadway Construction Details
650	3C 29	Roadway Construction: Underdrain Details
651	3P 1	Signing & Pavement Markings Notes & Legend
652	3P 2	Construction Zone-1A: Interstate Route H-1, NLV
653	3P 3	Construction Zone-1B: Interstate Route H-1, NLV
654	3P 4	Construction Zone-2A: Interstate Route H-1, NLV
655	3P 5	Construction Zone-2B: Interstate Route H-1, NLV
656	3P 6	Construction Zone-2C: Interstate Route H-1, NLV
657	3P 7	Construction Zone-2D: Interstate Route H-1, NLV
658	3P 8	Construction Zone-1A: Interstate Route H-1, S#8
659	3P 9	Construction Zone-1B: Interstate Route H-1, S#8
660	3P 10	Construction Zone-1C: Interstate Route H-1, S#8
661	3P 11	Construction Zone-1A: Moanalua Freeway, S#2
662	3P 12	Construction Zone-1B: Moanalua Freeway, S#2
663	3P 13	Construction Zone-1C: Moanalua Freeway, S#2
664	3P 14	Construction Zone-1A: Ramp EW
665	3P 15	Construction Zone-1B: Ramp EW
C.O. 666	3P 16	Construction Zone-1C: Ramp EW
667	3P 17	Construction Zone-1A: Ramp WE, H-3
668	3P 18	Construction Zone-1B: Ramp WE, H-3
669	3P 19	Construction Zone-1A: Ramp WE, S#12
670	3P 20	Construction Zone-1B: Ramp WE, S#12
671	3P 21	Construction Zone-2A: Ramp WE, S#12
672	3P 22	Construction Zone-2B: Ramp WE, S#12
673	3P 23	Signing & Pavement Markings: Interstate Route H-1, NLV
674	3P 24	Signing & Pavement Markings: Interstate Route H-1, NLV
675	3P 25	Signing & Pavement Markings: Interstate Route H-1, NLV
676	3P 26	Signing & Pavement Markings: Interstate Route H-1, NLV
677	3P 27	Signing & Pavement Markings: Interstate Route H-1, S#8
678	3P 28	Signing & Pavement Markings: Interstate Route H-3
C.O. 679	3P 29	Signing & Pavement Markings: Moanalua Freeway
C.O. 680	3P 30	Signing & Pavement Markings: Moanalua Freeway
681	3P 31	Signing & Pavement Markings: Moanalua Freeway, S#2
682	3P 32	Signing & Pavement Markings: Ramp ES
C.O. 683	3P 33	Signing & Pavement Markings: Ramp EW
C.O. 684	3P 34	Signing & Pavement Markings: Ramp EW
C.O. 685	3P 35	Signing & Pavement Markings: Ramp EW
686	3P 36	Signing & Pavement Markings: Ramp M
687	3P 37	Signing & Pavement Markings: Ramp O
688	3P 38	Signing & Pavement Markings: Ramp WE, S#12
689	3P 39	Signing & Pavement Markings: Ramp WE, S#12
690	3F 1	Traffic Control Plan Notes and Legend
691	3F 2	Traffic Control Plan-1A: Interstate Route H-1, NLV
692	3F 3	Traffic Control Plan-1B: Interstate Route H-1, NLV
693	3F 4	Traffic Control Plan-2A: Interstate Route H-1, NLV
694	3F 5	Traffic Control Plan-2B: Interstate Route H-1, NLV
695	3F 6	Traffic Control Plan-2C: Interstate Route H-1, NLV
696	3F 7	Traffic Control Plan-2D: Interstate Route H-1, NLV
697	3F 8	Traffic Control Plan-1A: Interstate Route H-1, S#8
698	3F 9	Traffic Control Plan-1B: Interstate Route H-1, S#8
699	3F 10	Traffic Control Plan-1C: Interstate Route H-1, S#8

SHEET SHEET NO. TITLE

700	3F 11	Traffic Control Plan: Interstate Route H-1, S#2
701	3F 12	Traffic Control Plan-1A: Moanalua Freeway, S#2
702	3F 13	Traffic Control Plan-1B: Moanalua Freeway, S#2
703	3F 14	Traffic Control Plan-1C: Moanalua Freeway, S#2
704	3F 15	Traffic Control Plan-1A: Ramp WE, H-3
705	3F 16	Traffic Control Plan-1B: Ramp WE, H-3
706	3F 17	Traffic Control Plan-1C: Ramp WE, H-3
707	3F 18	Traffic Control Plan-1D: Ramp WE, H-3
708	3F 19	Traffic Control Plan-1A: Ramp WE, S#12
709	3F 20	Traffic Control Plan-1B: Ramp WE, S#12
710	3F 21	Traffic Control Plan-1C: Ramp WE, S#12
711	3F 22	Traffic Control Plan-2A: Ramp WE, S#12
712	3F 23	Traffic Control Plan-2B: Ramp WE, S#12
713	3F 24	Traffic Control Plan-2C: Ramp WE, S#12
714	3S 1	Bridge Seismic Retrofit Location Plan
ADD. 715	3S 2	Bridge Seismic Retrofit Notes & Estimated Quantities
716	3S 3	Structure No. 1: Plan & Elevation
ADD. 717	3S 4	Structure No. 2: Plan & Sections
ADD. 718	3S 5	Structure No. 2: West Abutment
ADD. 719	3S 6	Structure No. 2: East Abutment
720	3S 7	Structure No. 3: Partial Plan & Details
721	3S 8	Structure No. 4: Plan & Details
722	3S 9	Structure No. 6: Plan, Elevation & Details
723	3S 10	Structure No. 8: Plan & Elevations
724	3S 11	Structure No. 10: Plan and Section
725	3S 12	Structure No. 11: Plan
726	3S 13	Structure No. 12: Plan and Sections
727	3S 14	North Leg Viaduct: Partial Plan - 1
728	3S 15	North Leg Viaduct: Partial Plan - 2
729	3S 16	North Leg Viaduct: Partial Plan - 3
730	3S 17	North Leg Viaduct: Partial Plan - 4 & Sections
731	3S 18	Bridge Seismic Retrofit: Restrainer Details -1
732	3S 19	Bridge Seismic Retrofit: Restrainer Details -2
733	3S 20	Typical Upgrade Details For Shaped Parapet & End Post
734	3S 21	Typical Upgrade Details For Vertical Parapet & End Post
735	3S 22	Typical Railing Details For Three-Rail Metal Railings - 1
736	3S 23	Typical Post Details For Three-Rail Metal Railings - 2
737	3S 24	Typical Railing Joint Details: Three-Rail Metal Railings - 3
ADD. 738	3S 25	Creep Block Details & Locations - 1
ADD. 739	3S 26	Creep Block Details & Locations - 2
740	3S 27	Creep Block Details & Locations - 3
C.O. 741	3S 28	Creep Block Details & Locations - 4
742	3S 29	Creep Block Details & Locations - 5
743	3S 30	Creep Block Details & Locations - 6
744	3S 31	Creep Block Details & Locations - 7

5/2/97	Revised and Added Sheet Numbers and Titles
4/21/97	Revised Sheet Numbers and Titles
Date	Revision
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
LIST OF PLANS - 5	
H-3 FINISH (UNIT II) FAIP NO. I-H3-1(75), UNIT II LEEWARD SECTION	
SCALE: NONE	DATE: JANUARY 1997
SHEET NO. G9 OF 18 SHEETS	



THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION.  
*Randall M. Urasaki*

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

CAD by L. Fujimori, 55-55



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75), UNIT II	1997	10	1102

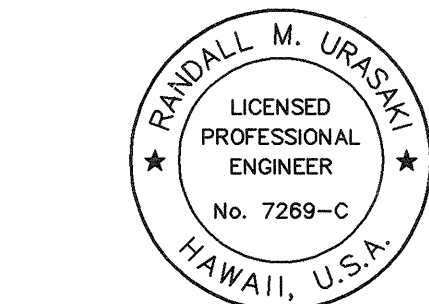
SHEET	SHEET NO.	TITLE	SHEET	SHEET NO.	TITLE
745		FOR REFERENCE ONLY: Contract FAIP NO. I-H1-1(77):13: Structure No. 1	799	4C 4	Roadway Construction: Gutter and Guardrail
746		FOR REFERENCE ONLY: Contract FAIP NO. I-H1-1(88):13: Structure No. 2	800	4C 5	Roadway Construction: Gutter and Guardrail Details
747		FOR REFERENCE ONLY: Contract FAIP NO. I-H1-1(91):13: Structure No. 3	801	4C 6	Roadway Construction: Gutter and Guardrail Details
748		FOR REFERENCE ONLY: Contract FAIP NO. I-H1-1(89):13: Structure No. 4	ADD. 802	4C 7	Roadway Construction: Emergency Escape Ramp Plan
749		FOR REFERENCE ONLY: Contract FAIP NO. I-H1-1(91):13: Structure No. 6	803	4C 8	Roadway Construction: Emergency Escape Ramp Profile
750		FOR REFERENCE ONLY: Contract FAIP NO. I-H1-1(91):13: Structure No. 8	804	4C 9	Roadway Construction: Emergency Escape Ramp Sections
751		FOR REFERENCE ONLY: Contract FAIP NO. I-H1-1(87):13: Structure No. 10	805	4C 10	Roadway Construction: Emergency Escape Ramp Details
752		FOR REFERENCE ONLY: Contract FAIP NO. I-H1-1(90):13: Structure No. 11	ADD. 806	4C 11	Roadway Construction: Emergency Escape Ramp Details
753		FOR REFERENCE ONLY: Contract FAIP NO. I-H1-1(91):13: Structure No. 12	807	4C 12	Roadway Construction: Miscellaneous Details
754		FOR REFERENCE ONLY: Contract FAIP NO. I-H1-1(104):13: North Leg Viaduct	ADD. 808	4C 13	Roadway Construction: Miscellaneous Details
755		FOR REFERENCE ONLY: Contract FAIP NO. I-H1-1(104):13: North Leg Viaduct	809	4C 14	North Halawa Valley Highway, Unit II: Rubrail Details
756		FOR REFERENCE ONLY: Contract FAIP NO. I-H1-1(104):13: North Leg Viaduct	810	4C 15	North Halawa Valley Highway, Unit II: Guardrail w/Rubrail Plan - Part I
757		FOR REFERENCE ONLY: Contract FAIP NO. I-H1-1(104):13: North Leg Viaduct	811	4C 16	North Halawa Valley Highway, Unit II: Guardrail w/Rubrail Plan - Part II
758		FOR REFERENCE ONLY: Contract FAIP NO. I-H1-1(104):13: North Leg Viaduct	812	4C 17	North Halawa Valley Highway, Unit II: Guardrail w/Rubrail Plan - Part III
759	3Z 1	Existing Conditions: Ground Survey: Interstate Route H-1 - 1	813	4C 18	North Halawa Valley Highway, Unit II: Guardrail w/Rubrail Plan - Part IV
760	3Z 2	Existing Conditions: Ground Survey: Interstate Route H-1 - 2	814	4C 19	North Halawa Valley Highway, Unit II: Guardrail w/Rubrail Plan - Part V
761	3Z 3	Existing Conditions: Ground Survey: Interstate Route H-1 - 3	815	4C 20	North Halawa Valley Highway, Unit II: Guardrail w/Rubrail Plan - Part VI
762	3Z 4	Existing Conditions: Ground Survey: Interstate Route H-1 - 4	816	4C 21	Roadway Construction: Emergency Crossover
763	3Z 5	Existing Conditions: Ground Survey: Ramp ES	ADD. 817	4C 22	Roadway Construction: Weigh-in-Motion Station
764	3X 1	Halawa Interchange: Cross Sections: Interstate Route H-3	818	4P 1	Signing & Pavement Markings: Makai Quarry Viaduct: BL Sta. 333+27.85 to Sta. 343+00
765	3X 2	Halawa Interchange: Cross Sections: Interstate Route H-3	819	4P 2	Signing & Pavement Markings: Makai Quarry Viaduct: BL Sta. 343+00 to Sta. 355+00
766	3X 3	Halawa Interchange: Cross Sections: Interstate Route H-3	820	4P 3	Signing & Pavement Markings: Makai Quarry Viaduct: BL Sta. 355+00 to Sta. 376+00
767	3X 4	Halawa Interchange: Cross Sections: Interstate Route H-3	C.O. 821	4E 1	Highway Lighting: Emergency Escape Ramp
768	3X 5	Halawa Interchange: Cross Sections: Interstate Route H-3 and Ramp O	C.O. 822	4E 2	Highway Lighting: Lighting Plans
C.O. 769	3X 6	Halawa Interchange: Cross Sections: Ramp EW	C.O. 823	4E 3	Highway Lighting: Relocation Details
C.O. 770	3X 7	Halawa Interchange: Cross Sections: Ramp EW	C.O. 823S-1	4E 3A	Roadway Construction: Emergency Phone Relocation Details
C.O. 771	3X 8	Halawa Interchange: Cross Sections: Ramp EW	824	4S 1	Barrier & Guardrail Modifications: Concrete Barrier No. 1
C.O. 772	3X 9	Halawa Interchange: Cross Sections: Ramp EW	825	4S 2	Barrier & Guardrail Modifications: Concrete Barrier No. 1
C.O. 773	3X 10	Halawa Interchange: Cross Sections: Ramp EW	826	4S 3	Barrier & Guardrail Modifications: Concrete Barrier No. 2
C.O. 774	3X 11	Halawa Interchange: Cross Sections: Ramp EW	827	4S 4	Barrier & Guardrail Connections: Concrete Barrier Nos. 1 & 2
C.O. 775	3X 12	Halawa Interchange: Cross Sections: Ramp EW	828	4S 5	Barrier & Guardrail Modifications: End Post Modification No. 3
C.O. 776	3X 13	Halawa Interchange: Cross Sections: Ramp ES	829	4S 6	Barrier & Guardrail Modifications: End Post Modification No. 4
		C.O. 775S-1 3X I2A Halawa Interchange: Cross Sections: Ramp D	830	4S 7	Barrier & Guardrail Modifications: End Post Modification No. 4
		C.O. 775S-2 3X I2B Halawa Interchange: Cross Sections: Ramp D	831	4S 8	Location Map: Bridge Name Applications - 1
			832	4S 9	Location Map: Bridge Name Applications - 2
			833	4S 10	Location Map: Bridge Name Applications - 3

4. NORTH HALAWA VALLEY

777	4A 1	Interstate Route H-3: Alignment, Fencing & Survey Monuments
778	4A 2	Interstate Route H-3: Alignment, Fencing & Survey Monuments
779	4A 3	Interstate Route H-3: Alignment, Fencing & Survey Monuments
780	4A 4	Interstate Route H-3: Alignment, Fencing & Survey Monuments
781	4A 5	Interstate Route H-3: Alignment, Fencing & Survey Monuments
782	4A 6	Interstate Route H-3: Alignment, Fencing & Survey Monuments
783	4A 7	Interstate Route H-3: Alignment, Fencing & Survey Monuments
784	4A 8	Interstate Route H-3: Alignment, Fencing & Survey Monuments
785	4A 9	Interstate Route H-3: Alignment, Fencing & Survey Monuments
786	4A 10	Interstate Route H-3: Alignment, Fencing & Survey Monuments
787	4A 11	Interstate Route H-3: Alignment, Fencing & Survey Monuments
788	4A 12	Interstate Route H-3: Alignment, Fencing & Survey Monuments
789	4A 13	Interstate Route H-3: Alignment, Fencing & Survey Monuments
790	4A 14	Interstate Route H-3: Alignment, Fencing & Survey Monuments
791	4A 15	Interstate Route H-3: Alignment, Fencing & Survey Monuments
792	4A 16	Interstate Route H-3: Alignment, Fencing & Survey Monuments
793	4A 17	Interstate Route H-3: Alignment, Fencing & Survey Monuments
794	4A 18	Interstate Route H-3: Alignment, Fencing & Survey Monuments
795	4A 19	Interstate Route H-3: Alignment, Fencing & Survey Monuments
796	4C 1	Roadway Construction: Barrier & Guardrail Conn. Details
797	4C 2	Roadway Construction: Drainage Swale Construction
798	4C 3	Roadway Construction: Endpost Connection Details

5. WINDWARD

834	5C 1	Roadway Construction: Kaneohe Interchange
835	5C 2	Roadway Construction: Concrete Wall Transition Plans and Sections
836	5C 3	Roadway Construction: Metal Guardrail Connection to Concrete Wall Transition Detail
C.O. 837	5C 4	Roadway Construction: VMS @ Kahekili Hwy
838	5D 1	Drainage: 54" SRSP Drain at Relocated Likelike Highway
839	5D 2	Drainage: 54" RCP Drain at Sta. 338+27
ADD. 839S-1	5L 1	Landscape: Planting Plan
ADD. 839S-2	5F 1	Windward: Traffic Control Plan: Notes & Legend
ADD. 839S-3	5F 2	Windward: Traffic Control Plan - 1: VMS @ Kahekili Highway
ADD. 839S-4	5F 3	Windward: Traffic Control Plan - 2: VMS @ Kahekili Highway
ADD. 839S-5	5F 4	Windward: Traffic Control Plan - 3: VMS @ Kahekili Highway
ADD. 839S-6	5F 5	Windward: Traffic Control Plan - 4: VMS @ Kahekili Highway
840	5S 1	Location Map: Bridge Name Applications - 1
841	5S 2	Location Map: Bridge Name Applications - 2
842	5S 3	Existing Support Structures: Post Modifications
C.O. 842S-1	5S 3A	Existing Support Structures: Post Modifications
843	5W 1	Segmental - Retaining Wall: Handhole Location - Plan
ADD. 844	5W 2	Segmental - Retaining Wall: Handhole Location - Details
ADD. 844S-1	5P 1	Signing Plan: Interstate Route H-3: Haiku Approach



THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION.  
*Randall M. Urasak*

C.O. 822S-1	4E2A	Roadway Construction: Highway Lighting Relocation Plans
C.O. 822S-2	4E2B	Roadway Construction: Highway Light Relocation Plan
C.O. 822S-3	4E2C	Roadway Construction: Highway Lighting Relocation Work
C.O. 822S-4	4E2D	Roadway Construction: Highway Light Relocation Plans

C.O. 837S-1	5C4A	Roadway Construction: Glare Screen
C.O. 837S-2	5C4B	Roadway Construction: Glare Screen
C.O. 837S-3	5C4C	Roadway Construction: Glare Screen
C.O. 837S-4	5C4D	Roadway Construction: Glare Screen
C.O. 837S-5	5C4E	Roadway Construction: Windward Highway
C.O. 837S-6	5C4F	Roadway Construction: Windward Highway
C.O. 837S-7	5C4G	Roadway Construction: Details
C.O. 837S-8	5C4H	Roadway Construction: Details
C.O. 837S-9	5C4I	Roadway Construction: Details
C.O. 837S-10	5C4J	Roadway Construction: Details
C.O. 837S-11	5C4K	Roadway Construction: Details

5/2/97	Revised and Added Sheet Numbers and Titles
4/21/97	Revised and Added Sheet Numbers and Titles
Date	Revision
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
LIST OF PLANS - 6	
H-3 FINISH (UNIT II) FAIP NO. I-H3-1(75), UNIT II LEEWARD SECTION	
SCALE: NONE	DATE: JANUARY 1997
SHEET NO. G10 OF 18 SHEETS	

ADD. 10

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

CAD by L. Fujimori, 55-55



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75), UNIT II	1997	11	1102

SHEET SHEET NO. TITLE

6. DESTINATION SIGNS

845	6G 1	Notes & Location Map
846	6G 2	Location Map: H-1 West
C.O. 847	6G 3	Location Map: Halawa Interchange
C.O. 848	6G 4	Location Map: Moanalua Freeway
849	6G 5	Location Map: Quarry Viaduct
850	6G 6	Location Map: Halekou Interchange
851	6P 1	Signs Layouts: H-1 West
852	6P 2	Sign Details: H-1 West
853	6P 3	Sign Details: H-1 West
854	6P 4	Sign Details: H-1 West
855	6P 5	Signs Layouts: Halawa Interchange
856	6P 6	Signs Layouts: Halawa Interchange
ADD. 856S-1	6P 6A	Roadway Construction: CMS 44
857	6P 7	Sign Details: Halawa Interchange
858	6P 8	Sign Details: Halawa Interchange
859	6P 9	Sign Details: Halawa Interchange
860	6P 10	Sign Details: Halawa Interchange
861	6P 11	Sign Details: Halawa Interchange
C.O. 862	6P 12	Signs Layouts: Moanalua Freeway
ADD. 862S-1	6P 12A	Roadway Construction: Sign Structure E-58L & E-58R
ADD. 862S-2	6P 12B	Roadway Construction Details: Sign Structure E-58L & E-58R
863	6P 13	Sign Details: Moanalua Freeway
C.O. 864	6P 14	Sign Details: Moanalua Freeway
865	6P 15	Sign Layouts: Makai Quarry Viaduct
866	6P 16	Sign Details: Makai Quarry Viaduct
867	6P 17	Sign Details: Makai Quarry Viaduct
868	6P 18	Sign Layouts & Details: Quarry Via. & Halekou I/C
869	6P 19	Sign Details: Miscellaneous
870	6P 20	Sign Details & Sign Layout: Miscellaneous
871	6V 1	Sign Structures General Notes
872	6V 2	Sign Structures: Cantilever Type
C.O. ADD. 873	6V 3	Sign Structures: Overhead type
C.O. ADD. 874	6V 4	Sign Structures: Connection Details - 1
875	6V 5	Sign Structures: Connection Details - 2
ADD. 876	6V 6	Sign Structures: Foundation Details
877	6V 7	Sign Structures: VMS 37 Foundation
ADD. 877S-1	6V 7A	Sign Structures: Foundation Details
C.O. ADD. 878	6V 8	Sign Structures: Sign Mounting Details - 1
C.O. 879	6V 9	Sign Structures: Sign Mounting Details - 2
C.O. 880	6V 10	Sign Structures: Sign Mounting Details - 3
ADD. 881	6V 11	Sign Structures: Sign Mounting Details - 4
ADD. 882	6V 12	Sign Structures: Sign Mounting Details - 5
883	6V 13	Sign Structures: Sign Mounting Details - 6
ADD. 884	6V 14	Sign Structures: Sign Mounting Details - 7
C.O. 884S-1	6V 14A	Sign Structures: Sign Mounting Details - 8
885	6H 1	Boring Location Plan
886	6H 2	Boring Location Plan
887	6H 3	Boring Location Plan
888	6H 4	Boring Location Plan
889	6H 5	Boring Location Plan
890	6H 6	Boring Log Legend
891	6H 7	Boring Logs
892	6H 8	Boring Logs

7. (or SY) SYSTEMS

893	SY 1	Systems Legend, Abbreviations & Notes
894	SY 2	Systems Legend, Abbreviations & Notes
895	SY 3	Utility Agency, Abbreviations & Notes

SHEET SHEET NO. TITLE

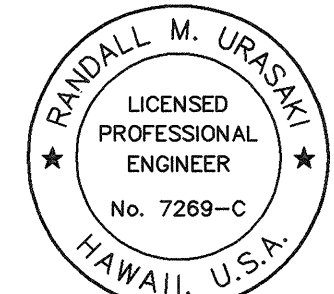
896	SY 4	Utility Agency, Abbreviations & Notes
C.O. ADD. 897	SY 5	Systems Construction Notes
898	SY 6	Key Plan - 1
ADD. 899	SY 7	Key Plan - 2
ADD. 900	SY 8	Key Plan - 3
ADD. 901	SY 9	Key Plan - 4
ADD. 902	SY 10	Traffic Control System: Systems Block Diagram - 1
ADD. 903	SY 11	Traffic Control System: Systems Block Diagram - 2
ADD. 904	SY 12	Traffic Control System: Systems Block Diagram - 3
ADD. 905	SY 13	Traffic Control System: Systems Block Diagram - 4
C.O. ADD. 906	SY 14	Systems: Equipment Summary - 1
ADD. 907	SY 15	Systems: Equipment Summary - 2
ADD. 908	SY 16	Conduit & Cable Schedule - 1
ADD. 909	SY 17	Conduit & Cable Schedule - 2
ADD. 910	SY 18	Conduit & Cable Schedule - 3
ADD. 911	SY 19	Conduit & Cable Schedule - 4
912	SY 20	H-1 Freeway: H-1 BL Sta. 125+00 to 137+00
913	SY 21	H-1 Freeway: H-1 BL Sta. 137+00 to 149+00
914	SY 22	H-1 Freeway: H-1 BL Sta. 149+00 to 160+00
915	SY 23	H-1 Freeway: H-1 BL Sta. 160+00 to 171+00
916	SY 24	H-1 Freeway: H-1 BL Sta. 171+00 to 182+00
917	SY 25	H-1 Freeway: H-1 BL Sta. 182+00 to 193+00
918	SY 26	H-1 Freeway: H-1 BL Sta. 193+00 to Ramp EW Sta. 113+00
919	SY 27	H-1 Freeway: Ramp EW Sta. 113+00 to 123+00
920	SY 28	Halawa Interchange: Ramp EW Sta. 123+00 to 134+00
921	SY 29	Halawa Interchange: Ramp EW Sta. 134+00 to 144+00
C.O. 922	SY 30	Halawa Interchange: H-1 BL Sta. 219+75 to 227+00
ADD. 923	SY 31	Halawa Interchange: MF BL Sta. 163+00 to 173+00
924	SY 32	Halawa Interchange: Ramp EW Sta. 144+00 to MF BL Sta. 252+33.06
925	SY 33	Halawa Interchange: Ramp SE sta. 231+00 to 241+00
926	SY 34	Halawa Interchange: H-1 South to H-1 BL Sta. 227+00
927	SY 35	Halawa Interchange: H-3 BL Sta. 252+33.06 to 262+00
928	SY 36	Halawa Interchange: H-3 BL Sta. 262+00 to 336+00
929	SY 37	Halawa Interchange: MF BL Sta. 173+00 to 184+00
ADD. 930	SY 38	Halawa Interchange: H-3 BL Sta. 336+00 to MF BL Sta. 197+00
931	SY 39	Moanalua Freeway: MF BL Sta. 197+00 to 207+00
932	SY 40	Moanalua Freeway: MF BL Sta. 207+00 to 214+00
933	SY 41	H-3 Freeway - Halawa: H3 BL Sta. 344+00 to 374+00
ADD. 934	SY 42	H-3 Freeway - Halawa: H3 BL Sta. 374+00 to 428+00
ADD. 935	SY 43	Systems Detail: H-3 Freeway - Halawa: Emergency Crossover - 1
ADD. 936	SY 44	H-3 Freeway - Halawa: H-3 BL Sta. 428+00 to 472+00
ADD. 937	SY 45	H-3 Freeway - Halawa: H-3 BL Sta. 472+00 to 525+45
ADD. 938	SY 46	H-3 Freeway - Halawa: H-3 BL Sta. 525+45 to 593+50
ADD. 939	SY 47	System Detail: Loop Detector: H-3 Sta. 525-528
940	SY 48	H-3 Freeway - Halawa: H-3 BL Sta. 593+50 to 597+70
ADD. 941	SY 49	H-3 Freeway - Halawa: H-3 BL Sta. 597+70 to 603+00
ADD. 942	SY 50	H-3 Freeway - Halawa: H-3 BL Sta. 602+40 to 606+20
943	SY 51	H-3 Freeway - Haiku: H-3 BL Sta. 324+50 to 407+50
ADD. 944	SY 52	H-3 Freeway - Haiku: H-3 BL Sta. 497+00 to 525+25
ADD. 945	SY 53	H-3 Freeway - Haiku: CMS Installation - 1
ADD. 946	SY 54	System Details: CMS 29, 30 & 31 Elevations
ADD. 947	SY 55	System Details: CMS 39, 40, 41, 42, 43 & 44 Elevations
C.O. 948	SY 56	Systems Plan: VMS 33
C.O. 949	SY 57	Systems Plan: VMS 34
ADD. 950	SY 58	Systems Plan: VMS 35
C.O. ADD. 951	SY 59	VMS 36 & CMS 35 Plan & Details
ADD. 952	SY 60	Systems Plan: VMS 37
ADD. 953	SY 61	Systems Plan: VMS 38
954	SY 62	Systems Plan: VMS 39
C.O. 954S-I	SY 62A	Systems Plan: VMS 39: Civil Plan

C.O. 948S-I SY56A Systems Plan: VMS 33: Civil Plan  
C.O. 949S-I SY57A Systems Plan: VMS 34: Civil Plan  
C.O. 949S-2 SY57B Systems Details: VMS 33 & 34: Sign Manufacturing Details  
C.O. 951S-I SY59A Systems Plan: VMS 36: Civil Plan  
C.O. 951S-2 SY59B Systems Detail: VMS 36: Sign Manufacturing Details

SHEET SHEET NO. TITLE

ADD. 955	SY 63	Systems Plan: VMS 40 - Plan
ADD. 956	SY 64	Systems Plan: VMS 40 - Detail
ADD. 957	SY 65	Systems Plan: VMS 41
ADD. 958	SY 66	Systems Plan: VMS 42
ADD. 959	SY 67	Systems Plan: VMS 43
ADD. 960	SY 68	Systems Detail: CMS 34
ADD. 961	SY 69	Systems Detail: CMS 36
ADD. 962	SY 70	Systems Detail: CMS 37
C.O. ADD. 963	SY 71	System Details: Camera Installation and Pole Details - 1
ADD. 964	SY 72	System Details: Camera Installation and Pole Details - 2
ADD. 965	SY 73	System Details: Camera Controller Cabinet and Foundation Details
ADD. 966	SY 74	System Details: Vehicle Detection Station Details - 1
967	SY 75	System Details: Vehicle Detection Station Details - 2
968	SY 76	Systems Details: Traffic Controller Cabinet and Foundation Details
969	SY 77	Systems Details: Emergency Crossover: Special Foundation Details
970	SY 78	Systems Details: Closed Circuit TV: Special Foundation Details
971	SY 79	System Details: Emergency Crossover: Halawa Detail - 1
ADD. 972	SY 80	System Details: Emergency Crossover: Halawa Detail - 1
973	SY 81	System Details: Emergency Crossover: Haiku Detail
ADD. 974	SY 82	System Details: Emergency Telephone Installation Detail
ADD. 975	SY 83	System Details: Controller Cabinet Mounting Detail
ADD. 976	SY 84	System Details: Miscellaneous Cabinet & Foundations
ADD. 977	SY 85	System Details: CMS Miscellaneous Details
ADD. 977S-1	SY 86	Systems Plan: System Crossing: Location Map
ADD. 977S-2	SY 87	Systems Plan: Halawa Interchange: 'SYS1' & 'SYS5' Plan
ADD. 977S-3	SY 88	Systems Plan: Halawa Interchange: 'SYS2A', 'SYS2B', 'SYS2C', 'SYS3'
ADD. 977S-4	SY 89	Systems Plan: Halawa Interchange: 'SYS4A', 'SYS4B', 'SYS4C' Plan
ADD. 977S-5	SY 90	Systems Plan: Halawa Interchange: 'SYS6' Plan
ADD. 977S-6	SY 91	Systems Plan: Halawa Interchange: 'SYS7' & 'SYS8' Plan
ADD. 977S-7	SY 92	Systems Detail: Halawa Interchange: 'SYS9' Plan
ADD. 977S-8	SY 93	Systems Plan: Halawa Interchange: TC-A
ADD. 977S-9	SY 94	Systems Plan: Halawa Interchange TC-D
ADD. 977S-10	SY 95	Systems Plan: Halawa Approach: Weigh-In-Motion Station
ADD. 977S-11	SY 96	Systems Plan: Haiku Approach: Data Collection Station
ADD. 977S-12	SY 97	Systems Detail: Halawa Interchange: 'SYS1' & 'SYS2A' Profile
ADD. 977S-13	SY 97A	Systems Detail: Halawa Interchange: 'SYS2B', 'SYS2C' & 'SYS3' Profile
ADD. 977S-14	SY 97B	Systems Detail: Halawa Interchange: 'SYS4A', 'SYS4B' & 'SYS5' Profile
ADD. 977S-15	SY 97C	Systems Detail: Halawa Interchange: 'SYS4C', 'SYS7' & 'SYS8' Profile
ADD. 977S-16	SY 97D	Systems Detail: Halawa Interchange: 'SYS6' & 'SYS9' Profile
ADD. 977S-17	SY 97E	Systems Detail: Interstate Route H-1: Structure-Mounted Pullbox
ADD. 977S-18	SY 97F	Systems Detail: Halawa Interchange: Structure-Mounted Pullbox
ADD. 977S-19	SY 97G	Systems Detail: Traffic Bearing Pullbox
ADD. 977S-20	SY 97H	Systems Detail: Halawa Interchange: Miscellaneous Details - 1
ADD. 977S-21	SY 97I	Systems Detail: Halawa Interchange: Miscellaneous Details - 2
ADD. 977S-22	SY 97J	Systems Detail: Halawa Approach: Weigh-In-Motion Station
ADD. 977S-23	SY 97K	Systems Detail: Haiku Approach: Data Collection Station
ADD. 977S-24	SY 97L	Systems Detail: Duct Sections

5/2/97	Revised and Added Sheet Numbers and Titles
4/21/97	Revised and Added Sheet Numbers and Titles
Date	Revision



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

*Randall M. Urasaki*

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
LIST OF PLANS - 7	
H-3 FINISH (UNIT II) FAIP NO. I-H3-1(75), UNIT II LEEWARD SECTION	
SCALE: NONE	DATE: JANUARY 1997
SHEET NO. G11 OF 18 SHEETS	

ADD. 11

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
DESIGNED BY	
CHECKED BY	
No.	

CAD by L. Fujimori, 55-55



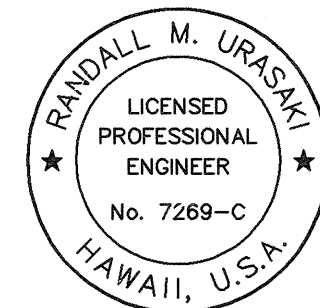
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75), UNIT II	1997	12	1102

SHEET	SHEET NO.	TITLE
978	SY 98	CMS Support Structures Summary & Notes
979	SY 99	CMS Support Structures: CMS 31 & 40 to 42 Details
980	SY 100	CMS Support Structures: CMS 29 & 30 Details - 1
981	SY 101	CMS Support Structures: CMS 29 & 30 Details - 2
982	SY 102	CMS Support Structures: CMS 29 & 30 Details - 3
983	SY 103	VMS Support Structures Summary & Notes
984		FOR REFERENCE ONLY: Contract FAIP NO. I-H3-1(65): General Notes 984S-I FOR REFERENCE ONLY: Contract FAIP No. I-H3-1(65):
985		FOR REFERENCE ONLY: Contract FAIP NO. I-H3-1(65): Details for CMS 31, 38 to 40 Details for CMS 34 to 37
986		FOR REFERENCE ONLY: Contract FAIP NO. I-H3-1(65): Details for CMS 41 to 43 and VMS 42
987		FOR REFERENCE ONLY: Contract FAIP NO. I-H3-1(65): Details for VMS 38
988		FOR REFERENCE ONLY: Contract FAIP NO. I-H3-1(65): Details for VMS 41
989		FOR REFERENCE ONLY: Contract FAIP NO. I-H3-1(65): Details for VMS 33 to 37, 39, 40, 43, 44, CMS 29 and CMS 30
990		FOR REFERENCE ONLY: Contract FAIP NO. I-H3-1(65): Box Truss Connection Details - 1
991		FOR REFERENCE ONLY: Contract FAIP NO. I-H3-1(65): Box Truss Connection Details - 2
992		FOR REFERENCE ONLY: Contract FAIP NO. I-H3-1(65): Box Truss Walkway Details - 1
993		FOR REFERENCE ONLY: Contract FAIP NO. I-H3-1(65): Box Truss Walkway Details - 2
994		FOR REFERENCE ONLY: Contract FAIP NO. I-H3-1(65): Box Truss Support Post Details
995		FOR REFERENCE ONLY: Contract FAIP NO. I-H3-1(65): Miscellaneous Details - 1
996		FOR REFERENCE ONLY: Contract FAIP NO. I-H3-1(65): Miscellaneous Details - 2
997		FOR REFERENCE ONLY: Contract FAIP NO. I-H3-1(65): Miscellaneous Details - 3
998	7H 1	Systems Boring Location Plan
999	7H 2	Systems Boring Location Plan
1000	7H 3	Systems Boring Log Legend
1001	7H 4	Systems Boring Logs
1002		FOR REFERENCE ONLY: Contract FAIP NO. I-H3-1(88):13: Boring Location Plan
1003		FOR REFERENCE ONLY: Contract FAIP NO. I-H3-1(88):13: Boring Location Plan
1004		FOR REFERENCE ONLY: Contract FAIP NO. I-H3-1(88):13: Boring Location Plan
1005		FOR REFERENCE ONLY: Contract FAIP NO. I-H3-1(88):13: Boring Logs
1006		FOR REFERENCE ONLY: Contract FAIP NO. I-H3-1(88):13: Boring Logs
1007		FOR REFERENCE ONLY: Contract FAIP NO. I-H3-1(88):13: Boring Logs
1008		FOR REFERENCE ONLY: Contract FAIP NO. I-H3-1(88):13: Boring Logs
1009		FOR REFERENCE ONLY: Contract FAIP NO. I-H3-1(88):13: Boring Logs
1010		FOR REFERENCE ONLY: Contract FAIP NO. I-H1-1(7):13: Boring Location Plan
1011		FOR REFERENCE ONLY: Contract FAIP NO. I-H1-1(7):13: Boring Logs
1012		FOR REFERENCE ONLY: Contract FAIP NO. I-H1-1(7):13: Boring Logs
ADD. 1012S-1		FOR REFERENCE ONLY: Geometrics Plan: Sta. 333+27.85 to Sta. 343+00
ADD. 1012S-2		FOR REFERENCE ONLY: Geometrics Plan: Sta. 343+00 to 355+00
ADD. 1012S-3		FOR REFERENCE ONLY: Log of Borings
ADD. 1012S-4		FOR REFERENCE ONLY: Geometrics Plan: Sta. 374+25 to Sta. 386+00
ADD. 1012S-5		FOR REFERENCE ONLY: Log of Borings
ADD. 1012S-6		FOR REFERENCE ONLY: Log of Borings
ADD. 1012S-7		FOR REFERENCE ONLY: Log of Borings
ADD. 1012S-8		FOR REFERENCE ONLY: Boring Location Plan
ADD. 1012S-9		FOR REFERENCE ONLY: Boring Logs
ADD. 1012S-10		FOR REFERENCE ONLY: Boring Logs
ADD. 1012S-11		FOR REFERENCE ONLY: Boring Logs

8. ELECTRICAL

ADD. 1013	8E 1	Electrical Symbols, Abbreviations & Notes
1014	8E 2	Location Plan Leeward Section
1015	8E 3	Location Plan Windward Section
1016	8E 4	Temporary Lighting & Demolition Plan: H-1 Freeway (Part A)
1017	8E 5	Temporary Lighting & Demolition Plan: H-1 Freeway (Part B)
1018	8E 6	Temporary Lighting & Demolition Plan: H-1 Freeway (Part C)
1019	8E 7	Temporary Lighting & Demolition Plan: H-1 Freeway (Part D)
1020	8E 8	Temporary Lighting & Demolition Plan: H-1 Freeway (Part E)
1021	8E 9	Temporary Lighting & Demolition Plan: H-1 Freeway (Part F)

SHEET	SHEET NO.	TITLE
1022	8E 10	Temporary Lighting & Demolition Plan: H-1 Freeway (Part G)
1023	8E 11	Temporary Lighting & Demolition Plan: H-1 Freeway (Part H)
1024	8E 12	Temporary Lighting & Demolition Plan: H-1 Freeway (Part I)
1025	8E 13	New Lighting Plan: H-1 Freeway (Part A)
1026	8E 14	New Lighting Plan: H-1 Freeway (Part B)
ADD. 1027	8E 15	New Lighting Plan: H-1 Freeway (Part C)
1028	8E 16	New Lighting Plan: H-1 Freeway (Part D)
1029	8E 17	New Lighting Plan: H-1 Freeway (Part E)
ADD. 1030	8E 18	New Lighting Plan: H-1 Freeway (Part F)
ADD. 1031	8E 19	New Lighting Plan: H-1 Freeway (Part G)
1032	8E 20	New Lighting Plan: H-1 Freeway (Part H)
ADD. 1033	8E 21	New Lighting Plan: H-1 Freeway (Part I)
1034	8E 22	Lighting Plan: Ramp EW
1035	8E 23	Lighting Plan: Moanalua Freeway (Part A)
ADD. 1036	8E 24	Lighting Plan: Moanalua Freeway (Part B)
1037	8E 25	Lighting Plan: Moanalua Freeway (Part C)
ADD. 1038	8E 26	Lighting Plan: Ramp "WE" (Part A)
1039	8E 27	Lighting Plan: Ramp "WE" (Part B)
1040	8E 28	Lighting Plan: Ramp "WE" (Part C)
1041	8E 29	Lighting Plan: H-1 Freeway (Part J)
1042	8E 30	Lighting Plan: Moanalua Freeway & Ulune Extension
1043	8E 31	Lighting Plan: Interstate Route H-3 (Part A)
ADD. 1044	8E 32	Lighting Plan: Interstate Route H-3 (Part B)
1045	8E 33	Lighting Plan: Interstate Route H-3 (Part C)
1046	8E 34	Lighting Plan: Interstate Route H-3 (Part D)
1047	8E 35	Lighting Plan: Interstate Route H-3 (Part E)
1048	8E 36	Lighting Demolition Plan: Ramp N & Ulune Extension (Ramp A)
1049	8E 37	Lighting Demolition Plan: Ramp N & Ulune Extension (Ramp B)
1050	8E 38	New Lighting Plan: Ramp N & Ulune Extension (Ramp A)
1051	8E 39	New Lighting Plan: Ramp N & Ulune Extension (Ramp B)
1052	8E 40	Lighting Plan: Moanalua Freeway (Part D)
1053	8E 41	Lighting Plan: Moanalua Freeway (Part E)
1054	8E 42	Lighting Plan: Moanalua Freeway (Part F)
1055	8E 43	Lighting Plan: Moanalua Freeway (Part G)
1056	8E 44	Lighting Plan: Moanalua Freeway (Part H)
1057	8E 45	Lighting Plan: Halekou Interchange (Part A)
1058	8E 46	Lighting Plan: Halekou Interchange (Part B)
1059	8E 47	Lighting Plan: Halekou Interchange (Part C)
1060	8E 48	One-Line Diagram (Temporary Work): Kaamilo Substation
1061	8E 49	One-Line Diagram (Demolition Work): Kaamilo Substation
1062	8E 50	One-Line Diagram (New Work): Kaamilo Substation
1063	8E 51	One-Line Diagram: (Red Hill Substation)
1064	8E 52	One-Line Diagram: Halawa Substation (Part A)
ADD. 1065	8E 53	One-Line Diagram: Halawa Substation (Part B)
1066	8E 54	One-Line Diagram (Demolition Work): Halekou Interchange
1067	8E 55	One-Line Diagram (New Work): Halekou Interchange
1068	8E 56	One-Line Diagram: (Traffic Management System) - Part A
1069	8E 57	One-Line Diagram: (Traffic Management System) - Part B
ADD. 1069S-1	8E 58	Traffic Control System: Detailed Electrical Plans
ADD. 1069S-2	8E 59	Traffic Control System: Detailed Electrical Plans
1070	8E 60	Traffic Control Equipment: Enclosure "A" Detail
1071	8E 61	Traffic Control Equipment: Enclosure "B" Detail
1072	8E 62	Kaamilo Substation Details: Electrical Plan
1073	8E 63	Lighting Control Center Detail
ADD. 1074	8E 64	Duct Section Details
1075	8E 65	Miscellaneous Details
1076	8E 66	Miscellaneous Details
1077	8E 67	Typical Light Standard Details
ADD. 1078	8E 68	Typical Light Standard Details
1079	8E 69	Typical Light Standard Details



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*Randall M. Urasaki*

5/2/97	Revised and Added Sheet Numbers and Titles
4/21/97	Revised and Added Sheet Numbers and Titles

Date	Revision
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
LIST OF PLANS - 8	
H-3 FINISH (UNIT II) FAIP NO. I-H3-1(75), UNIT II LEEWARD SECTION	
SCALE: NONE	DATE: JANUARY 1997
SHEET NO. G12 OF 18 SHEETS	

ADD. 12

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

CAD by L. Fujimori, 55-55



ORIGINAL PLAN

SURVEY PLOTTED BY

DATE

DESIGNED BY

NOTED BY

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No.

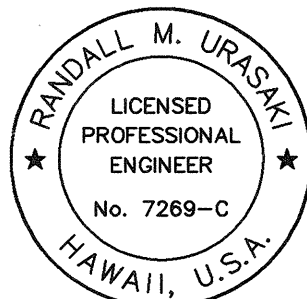
CAD by J. Minura, 55-52

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SHEET	SHEET NO.	TITLE
1080	8E 70	Typical Light Standard Details @ Concrete Parapet
1081	8E 71	Temporary Light Standard Detail
ADD. 1081S-1	8E 71A	Typical Light Standard Details @ Sound Barrier Wall
1082	8E 72	Detail Electrical Plan: Parapet Mounted Luminaire
ADD. 1083	8E 73	Parapet Mounted Luminaire Detail
1084	8E 74	Sign Luminaire Detail
1085	8E 75	Mounting Detail: New Junction Box @ Message Sign Post
ADD. 1085S-1	8E 75A	Highway Lighting Pole Tag Detail
1086	8E 76	Detail Electrical Plan: Message Sign FMS E-68L,E-68R and E-74R
1087	8E 77	Detail Electrical Plan: Message Sign FMS E-64L, E-64R, E-8L, E-8C & E-8R
1088	8E 78	Detail Electrical Plan: Message Sign FMS E-50L & E-50R
1089	8E 79	Detail Electrical Plan: Message Sign FMS E-33L, E-33C & E-33R
1090	8E 80	Detail Electrical Plan: Message Sign FMS E-2L, E-2C, E-2R, E-6L, E-6C & E-6R
1091	8E 81	Detail Electrical Plan: Message Sign CMS 44, FMS E-15L, E-15C, & CMS 42
1092	8E 82	Detail Electrical Plan: Message Sign FMS E-54L, CMS 39, FMS E-56L & CMS 43
1093	8E 83	Detail Electrical Plan: Message Sign FMS E-17L, E-17C, E-17R and FMS E-58L & E-58R
1094	8E 84	Detail Electrical Plan: Message Sign FMS E-30L & E-30R and CMS 40, FMS E-40C & E-40R
ADD. 1095	8E 85	Detail Electrical Plan: Message Sign FMS E-37L, E-37C, E-37R, CMS 41 & FMS E-41R
1096	8E 86	Detail Electrical Plan: Message Sign FMS E-39L, E-39R, E-52L & E-52R
1097	8E 87	Detail Electrical Plan: Message Sign FMS E-27L, E-27C, E-27R, E-62L & E-62R
1098	8E 88	Detail Electrical Plan: Message Sign FMS E-63L, E-63R, E-60L, E-60C, E-60R & E-64
1099	8E 89	Detail Electrical Plan: Message Sign CMS 29 and CMS 30 & FMS E-76R
1100	8E 90	Detail Electrical Plan: Message Sign CMS 31
1101	8E 91	Temporary Section @ Exist Bridge Structure for Temporary Highway Lighting along H-1 Freeway
1102	8E 92	Panel Schedules
ADD. 1102S-1	8H1	Interstate Route H-3: Haiku Approach: Roadway Lighting
ADD. 1102S-2	8H2	Interstate Route H-3: Haiku Approach: Pole Mounting Details - 1
ADD. 1102S-3	8H3	Interstate Route H-3: Haiku Approach: Pole Mounting Details - 2
ADD. 1102S-4		FOR REFERENCE ONLY: Contract FAIP No. I-H3-1(66): Electrical Legend - 1
ADD. 1102S-5		FOR REFERENCE ONLY: Contract FAIP No. I-H3-1(66): Electrical Legend - 2
ADD. 1102S-6		FOR REFERENCE ONLY: Contract FAIP No. I-H3-1(66): One Line Diagram and Panel Schedule
ADD. 1102S-7		FOR REFERENCE ONLY: Contract FAIP No. I-H3-1(66): Power & Lighting Wiring - 2
ADD. 1102S-8		FOR REFERENCE ONLY: Contract FAIP No. I-H3-1(66): Power & Lighting Wiring - 3
ADD. 1102S-9		FOR REFERENCE ONLY: Contract FAIP No. I-H3-1(66): Viaduct Power & Lighting Wiring -1
ADD. 1102S-10		FOR REFERENCE ONLY: Contract FAIP No. I-H3-1(66): Viaduct Power & Lighting Wiring -2
ADD. 1102S-11		FOR REFERENCE ONLY: Contract FAIP No. I-H3-1(66): Viaduct Power & Lighting Wiring -3
ADD. 1102S-12		FOR REFERENCE ONLY: Contract FAIP No. I-H3-1(66): Viaduct Power & Lighting Wiring -4
ADD. 1102S-13		FOR REFERENCE ONLY: Contract FAIP No. I-H3-1(66): Viaduct Power & Lighting Wiring -5
ADD. 1102S-14		FOR REFERENCE ONLY: Contract FAIP No. I-H3-1(66): Viaduct Power & Lighting Wiring -6
ADD. 1102S-15		FOR REFERENCE ONLY: Contract FAIP No. I-H3-1(66): Viaduct Power & Lighting Wiring -7
ADD. 1102S-16		FOR REFERENCE ONLY: Contract FAIP No. I-H3-1(66): Viaduct Power & Lighting Wiring -8
ADD. 1102S-17		FOR REFERENCE ONLY: Contract FAIP No. I-H3-1(66): Viaduct Power & Lighting Wiring -9
ADD. 1102S-18		FOR REFERENCE ONLY: Contract FAIP No. I-H3-1(66): Viaduct Power & Lighting Wiring -10
ADD. 1102S-19		FOR REFERENCE ONLY: Contract FAIP No. I-H3-1(66): Viaduct Power & Lighting Wiring -11
ADD. 1102S-20		FOR REFERENCE ONLY: Contract FAIP No. I-H3-1(66): Viaduct Power & Lighting Wiring -12
C.O. I102S-21		Interstate Route H-3 Windward Hwy: Electrical Plan
C.O. I102S-22		FOR REFERENCE ONLY: Contract FAIP No. I-H3-I(72): Street Light Standard Details
C.O. I102S-23		FOR REFERENCE ONLY: Contract FAIP No. I-H3-I(72): Street Light Standard from Edge of Shoulder Details
C.O. I102S-24		FOR REFERENCE ONLY: Contract FAIP No. I-H3-I(72): Partial Street Light Distribution Online Diagram (H-3)
C.O. I102S-25		FOR REFERENCE ONLY: Contract FAIP No. I-H3-I(72): Partial Street Light Distribution Online Diagram (H-3)
C.O. I102S-26		Interstate Route H-3 Windward: Electrical Plan
C.O. I102S-27		FOR REFERENCE ONLY: Contract FAIP No. I-H3-I(72): Plan Section XIII: Electrical Plan
C.O. I102S-28		FOR REFERENCE ONLY: Contract FAIP No. I-H3-I(72): Traffic Signal Plan: Likelike & Kahekili Hwy.
C.O. I102S-29		FOR REFERENCE ONLY: Contract FAIP No. I-H3-I(72): Typical Handhole Group Details
C.O. I102S-30		FOR REFERENCE ONLY: Contract FAIP No. I-H3-I(72): Handhole and Manhole Group
C.O. I102S-31		FOR REFERENCE ONLY: Contract FAIP No. I-H3-I(72): Handhole Groups

ADD. I085S-2	8E 75B	Highway Light Pole -Location Map
ADD. I085S-3	8E 75C	Light Pole Identification Plan - Interstate Route H-1
ADD. I085S-4	8E 75D	Light Pole Identification Plan - Interstate Route H-1
ADD. I085S-5	8E 75E	Light Pole Identification Plan - Halawa Interchange
ADD. I085S-6	8E 75F	Light Pole Identification Plan - Halawa Interchange
ADD. I085S-7	8E 75G	Light Pole Identification Plan - Halawa Interchange
ADD. I085S-8	8E 75H	Light Pole Identification Plan - Halawa Interchange
ADD. I085S-9	8E 75I	Light Pole Identification Plan - Interstate Route H-3
ADD. I085S-10	8E 75J	Light Pole Identification Plan - Interstate Route H-3
ADD. I085S-11	8E 75K	Light Pole Identification Plan - Interstate Route H-3
ADD. I085S-12	8E 75L	Light Pole Identification Plan - Interstate Route H-3
ADD. I085S-13	8E 75M	Light Pole Identification Plan - Interstate Route H-3
ADD. I085S-14	8E 75N	Light Pole Identification Plan - Interstate Route H-3
ADD. I085S-15	8E 75O	Light Pole Identification Plan - Interstate Route H-3
ADD. I085S-16	8E 75P	Light Pole Identification Plan - Interstate Route H-3
ADD. I085S-17	8E 75Q	Light Pole Identification Plan - Kaneohe Interchange
ADD. I085S-18	8E 75R	Light Pole Identification Plan - Kaneohe Interchange
ADD. I085S-19	8E 75S	Light Pole Identification Plan - Kaneohe Interchange
ADD. I085S-20	8E 75T	Light Pole Identification Plan - Halekou Interchange
ADD. I085S-21	8E 75U	Highway Lighting Substation Equipment Plans
ADD. I085S-22	8E 75V	Highway Lighting Substation Equipment Plans
ADD. I085S-23	8E 75W	Highway Lighting Substation Equipment Plans
ADD. I085S-24	8E 75X	Light Pole Tag Schedule
ADD. I085S-25	8E 75Y	Light Pole Tag Schedule
ADD. I085S-26	8E 75Z	Light Pole Tag Schedule

C.O. I102S-2A 8H2A Interstate Route H-3: Pole Mounting Details -1



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*Randall M. Urasaki*

4/21/97	Revised and Added Sheet Numbers and Titles
Date	Revision
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
LIST OF PLANS - 9	
H-3 FINISH (UNIT II) FAIP NO. I-H3-1(75), UNIT II LEEWARD SECTION	
SCALE: NONE	DATE: JANUARY 1997
SHEET NO. G13 OF 18 SHEETS	

ADD. 13



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

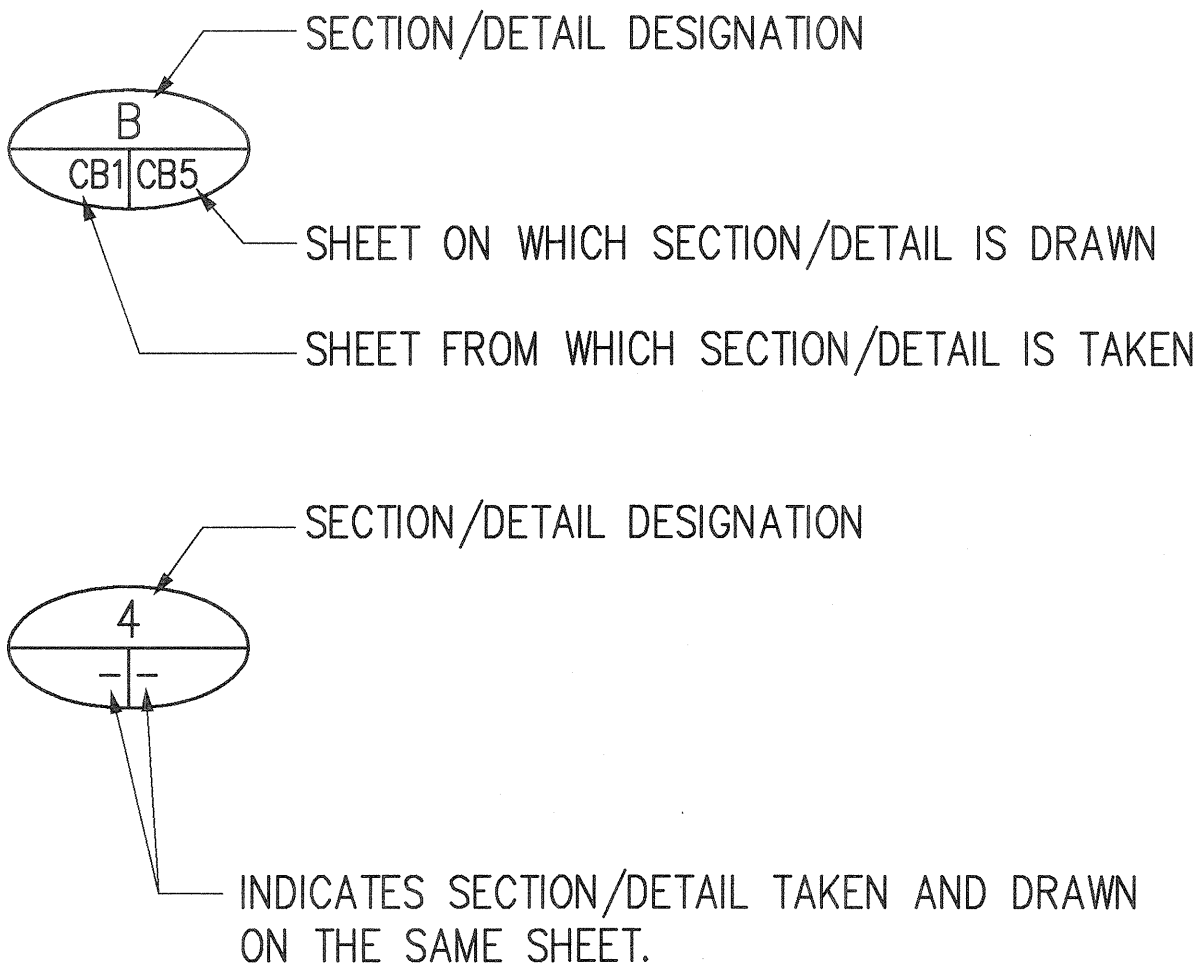
CAD by J. Mmura, 55-52

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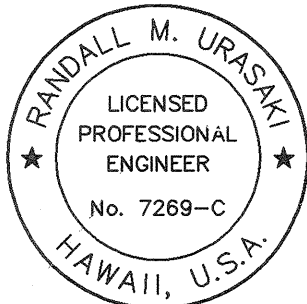
ABBREVIATIONS

AC, A.C.	ASPHALT CONCRETE	INV.	INVERT
APPROX.	APPROXIMATE	LBS.	POUNDS
B	BASELINE	LT.	LEFT
C	CENTERLINE	MAX.	MAXIMUM
C	CUT	MIN.	MINIMUM
C.Y.	CUBIC YARD	N	NORTH
CMP	CORRUGATED METAL PIPE	N.I.C., NIC	NOT IN CONTRACT
COMM.	COMMUNICATION	N.T.S., NTS	NOT TO SCALE
CONC.	CONCRETE	NO., #	NUMBER
CONT.	CONTINUOUS		
CRM	CEMENT RUBBLE MASONRY	O.B., OB	OUTBOUND
DET.	DETAIL	O.C., OC	ON CENTER
DIA, Ø	DIAMETER	O/S	OFFSET
E	EAST	PVC	POLYVINYL CHLORIDE
E.P., EP	EDGE OF PAVEMENT	PVM'T, PAVT.	PAVEMENT
ELEC.	ELECTRICAL	R	RADIUS
ELEV., EL.	ELEVATION	R/W, R.O.W.	RIGHT OF WAY
EMB.	EMBANKMENT	RCP	REINFORCED CONCRETE PIPE
EXC.	EXCAVATION	REF.	REFERENCE
EXIST.	EXISTING	REINF.	REINFORCED, REINFORCING
F	FILL	RT.	RIGHT
FAIP	FEDERAL AID INTERSTATE PROJECT	S.F., SF	SQUARE FEET
FHWA	FEDERAL HIGHWAY ADMINISTRATION	SDMH	STORM DRAIN MANHOLE
FT.	FOOT, FEET	SHT.	SHEET
GDI	GRATED DROP INLET	STA.	STATION
GR.	GRADE	STATE, DOT	STATE OF HAWAII, DEPARTMENT OF TRANSPORTATION
GRP	GROUTED RUBBLE PAVING	STD.	STANDARD
HECO	HAWAIIAN ELECTRIC COMPANY	TYP.	TYPICAL
HORIZ.	HORIZONTAL	VERT.	VERTICAL
I.B., IB	INBOUND	WWF	WELDED WIRE FABRIC

LEGEND



NOTE:  
THE ABBREVIATIONS AND LEGEND ON THIS PLAN APPLY  
TO ALL PLANS, UNLESS NOTED OTHERWISE.



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OR UNDER MY SUPERVISION.  
*Randall M. Urasaki*

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**GENERAL ABBREVIATIONS  
AND LEGEND**  
  
H-3 FINISH (UNIT II)  
FAIP NO. I-H3-1(75), UNIT II  
LEEWARD SECTION  
SCALE: NONE  
DATE: JANUARY 1997  
SHEET NO. G14 OF 18 SHEETS



## GRADING NOTES

- All grading work shall be done in accordance with Chapter 23, Grading, Soil Erosion and Sediment Control of the Revised Ordinances of Honolulu, 1978, as amended (Ordinance Nos. 81-13 and 90-71).
- No Contractor shall perform any grading operation so as to cause falling rocks, soil or debris in any form to fall, slide or flow onto adjoining properties, streets or natural watercourses. Should such violations occur, the costs incurred for any remedial action by the Chief Engineer shall be payable by the Contractor.
- The Contractor, at his own expense, shall keep the project area and surrounding area free from dust and other nuisance. The work shall be in conformance with the air pollution standards and regulations of the State Department of Health.
- All slopes and exposed areas shall be hydro-mulch seeded as soon as final grades have been established in accordance with the Specification & Grading Plan. Planting shall not be delayed until all grading work has been completed. Grading to final grade shall be continuous, and any area within which work has been interrupted or delayed shall be planted.
- Fills on slopes steeper than 5:1 shall be benched.
- No grading work shall be done on Saturdays, Sundays and Holidays at any time without prior written notice to the Chief Engineer or District Engineer, State of Hawaii.
- The limits of the area to be graded shall be flagged by the Contractor before the commencement of the grading work.
- The City shall be informed of the location of the borrow/disposal site for the project when the application for a grading permit is made. The borrow/disposal site must also fulfill the requirements of the grading ordinance.
- All grading operations shall be performed in conformance with the applicable provisions of Chapter 54, Water Quality Standards, and Chapter 55, Water Pollution Control, of Title 11, Administrative Rules of the State Department of Health.
- Temporary Erosion Control Plan and procedures shall be submitted by the Contractor for approval prior to the start of actual grading operations.
- Silt fence shall be installed along the edges of open channels & ditches in order to filter sediment from runoff, before water enters the channel.
- Temporary erosion controls shall not be removed before permanent erosion controls are in-place and established.
- The underground pipes, cables or ductlines known to exist by the Engineer from his search of records are indicated on the plans. The Contractor shall verify the locations and depths of the facilities and exercise proper care in excavating in the area. Wherever connections of new utilities are shown on the plans, the Contractor shall expose the existing lines at the proposed connections to verify their locations and depths prior to excavation for the new lines.
- Adequate provisions shall be made to prevent surface waters from damaging the cut face of an excavation or the sloped surfaces of a fill. Furthermore, adequate provisions shall be made to prevent sediment-laden runoff from leaving the site.
- Where applicable and feasible the measure to control erosion and other pollutants shall be in place before any earth moving phase of the grading is initiated.
- If the grading work involves contaminated soil, then all grading work shall be done in conformance with applicable State and Federal requirements.
- Non-compliance to any of the above requirements shall mean immediate suspension of all work, and remedial work should commence immediately. All costs incurred shall be billed to the permittee. Furthermore, violators shall be subjected to administrative, civil and/or criminal penalties.
- For Bench Mark, see Sheet 1Z26.

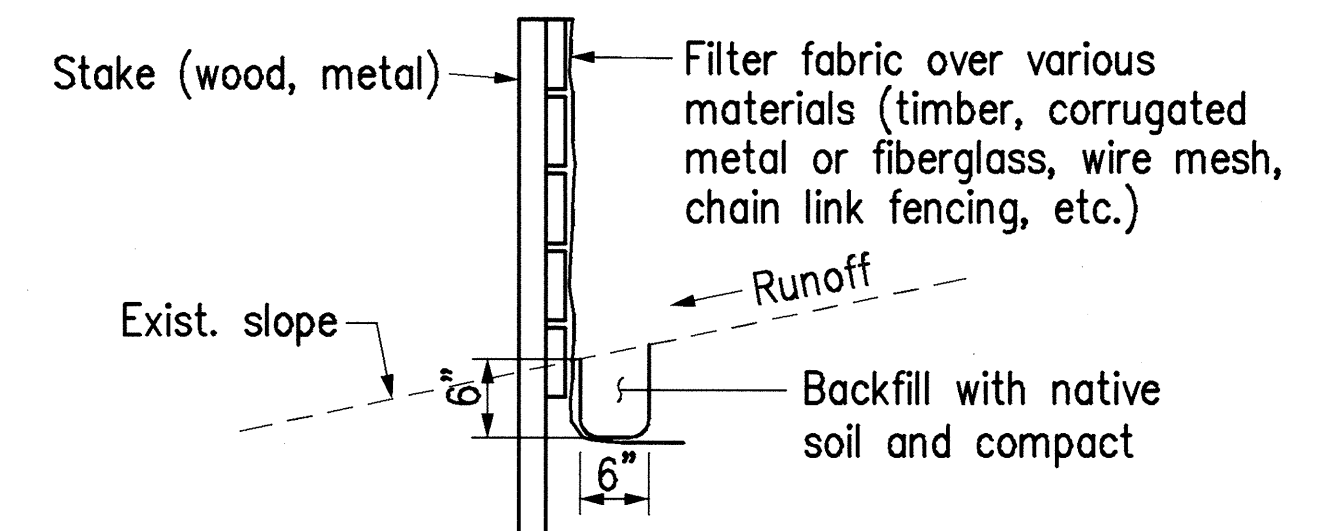
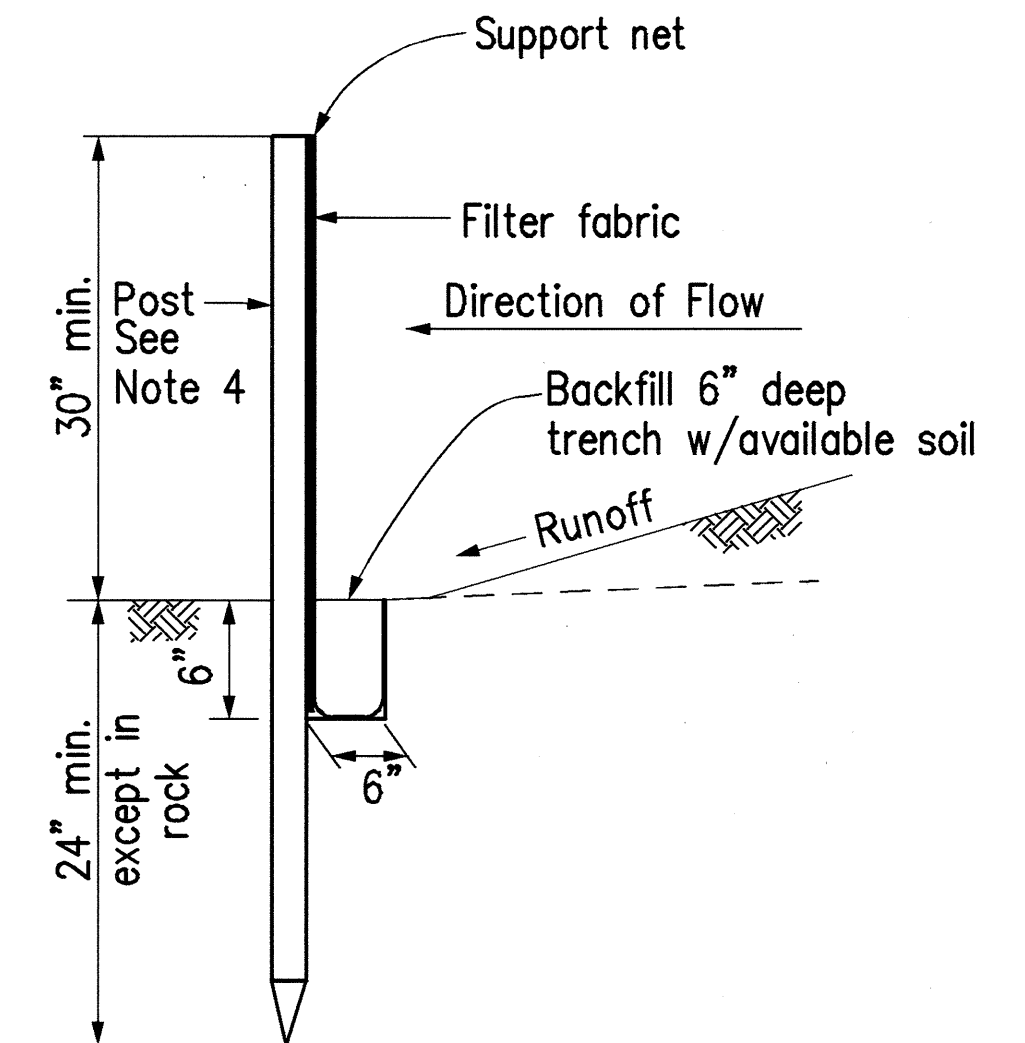
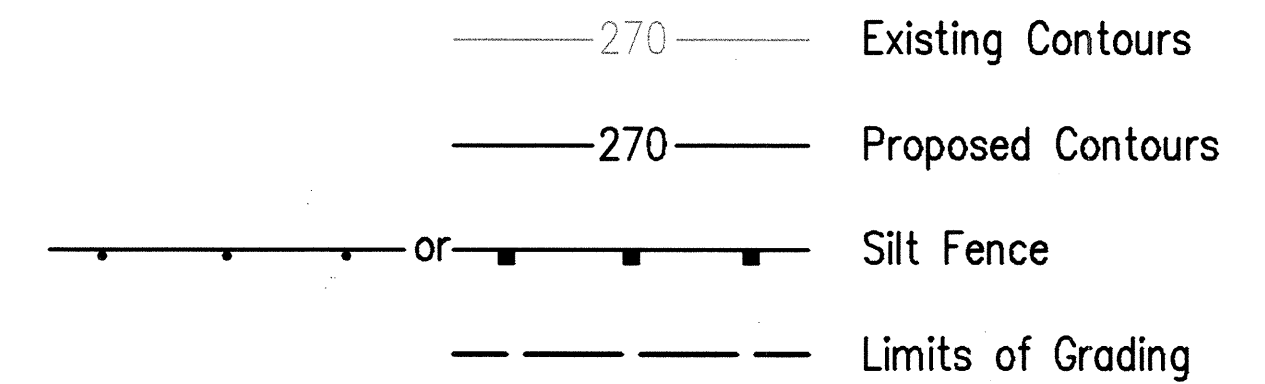
## NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL NOTES

- (A) Erosion and Sediment Control Inspection and Maintenance Practices.
- The Contractor shall inspect the erosion and sediment control measures at least once a week or after 0.5 inches of rainfall.
  - The Contractor shall maintain the erosion and sediment control measures according to the contract. If a repair is necessary, the Contractor shall initiate the repairs within twenty-four (24) hours after the inspection such as:
    - When sediment build-up reaches one-third ( $1/3$ ) the height of the silt fence, the Contractor shall remove and dispose of the sediment build-up from the silt fence.
    - When the depth of the sediment basin reaches ten percent (10%) of the design capacity, the Contractor shall remove and dispose of the sediment build-up.
    - When tears are found on the silt fence, the Contractor shall replace the fabric.
    - The Contractor shall check to see if the fabric is securely attached to the fence posts and to see that the fence posts are firmly in the ground.
    - The Contractor shall inspect the diversion dike and repair the breaches.
    - The Contractor shall inspect temporary and permanent seeding and planting for bare spots, washouts, and healthy growth.
  - The Contractor shall have its personnel make a maintenance inspection report promptly after each inspection. The Contractor shall select a minimum of three (3) personnel who will be responsible for inspection, maintenance, repair activities, and filling out the inspection and maintenance report. Personnel selected for the inspection and maintenance responsibilities will receive training from the Contractor. The Contractor shall train these personnel in the inspection and maintenance practices necessary for keeping the erosion and sediment used onsite according to the contract.
- (B) Submittal Requirements:
- Construction activities of five (5) acres or more.
    - Storm water discharges into State waters due to construction activities of Five (5) acres or more, will require an NPDES permit from the Department of Health (DOH). The Contractor shall submit to the Engineer four (4) sets of Site-Specific Best Management Plans (BMP). The Plans shall be submitted no later than thirty (30) calendar days after the award of Contract.
    - No construction activities will be authorized until the Contractor's Site-Specific BMP has been approved by the Highways Division.
  - Construction activities dewatering and/or hydrotesting water.
    - Discharges into State waters due to dewatering and/or hydrotesting activities will require NPDES Permit(s) from DOH. If the Contractor options to discharge dewatering and/or hydrotesting effluent into State waters, the Contractor shall submit to the Engineer four (4) sets of Site-Specific Dewatering and /or Hydrotesting BMP, and four (4) copies of the Quality of Discharge Test results. The Plans and test results shall be submitted no later than thirty (30) calendar days after the award of Contract.
    - No dewatering and/or hydrotesting activities will be authorized until the receipt of the NPDES Permit(s) from DOH.

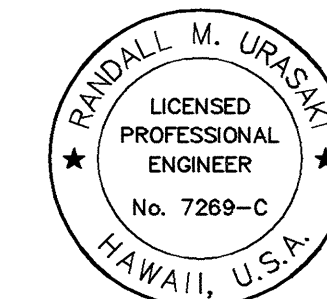
## SILT FENCE NOTES

- Filter fabric shall be of the type specified and installed in combination with a support net of polyester netting or approved equal. The filter fabric shall be a minimum of 36 inches wide and the support net a minimum of 30 inches.
- If silt fence is obtained from manufacturer as a package (i.e. fabric attached to post) the manufacturers installation instructions shall be adhered to.
- Posts shall be metal where possible, cross section of post will be substantial enough to support a loaded silt fence without bending. Post spacing shall be 4 feet to 8 feet, depending on post size.
- Some manufacturers only supply silt fence with wooden post. During installation, measures should be taken to prevent damage to post.

### LEGEND



**SILT FENCE DETAIL**  
Not to Scale



THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION.

*R. M. Urasak*

1/12/98	Revised Silt Fence Detail and Approval lines.
Date	Revision
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
<b>GRADING NOTES EROSION AND SEDIMENT CONTROL MEASURES</b>	
H-3 FINISH (UNIT II) FAIP NO. I-H3-1(75), UNIT II LEEWARD SECTION	
SCALE: AS SHOWN	DATE: JANUARY 1999
SHEET NO. G15 OF 18 SHEETS	

C.O. 15

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ORIGINAL PLAN	
NOTE BOOK	
No.	



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75), UNIT II	1999	16	1102

ABBREVIATIONS:

<i>abn</i> , ABN	Abandoned
<i>B</i>	Baseline
B.V.	Bottom vertical
BWS	Board of Water Supply
<i>cb</i> , CB	Catch basin
<i>cc</i> , CC	Communications cable
<i>C</i>	Centerline
cl.	Class
clr.	Clear
CMU	Concrete masonry unit
conc.	Concrete
CRM	Cement rubble masonry
<i>ct</i> , CT	Cable television
<i>d</i> , D	Drainline
DI	Ductile iron
DIA., $\phi$	Diameter
<i>e</i> , E	Electric
EHH	Electric handhole
Elev.	Elevation
EMH	Electric manhole
EP	Electric pole
EPB	Electric pullbox
FA	Fire alarm
FH	Fire hydrant
FLR.	Floor
<i>g</i> , G	Gas
G.L.	Gas line
GMH	Gas manhole
GV	Gate valve
HECO	Hawaiian Electric Company
HH	Handhole
Ht.	Height
HTCO	Hawaiian Telephone Company
MH	Manhole
M/N	Water meter number
O.C.	On center
PB	Pullbox
PCC	Portland cement concrete
PVI	Point of intersection of vertical curve
RC	Reinforced concrete
R/W	Right-Of-Way
<i>s</i> , S	Sewer
SDMH	Storm drain manhole
<i>sl</i> , SL	Street lighting
SLP	Street light pole
SMH	Sewer manhole
S/N	Water service number
Sta.	Station
<i>t</i> , T	Telephone
T & B	Top & bottom
<i>tbur</i> , TBUR	Buried telephone cable
THH	Telephone handhole
TMH	Telephone manhole
<i>ts</i> , TS	Traffic signal
TSP	Traffic signal pole
T.V.	Top vertical
V.C.	Vertical curve
<i>w</i> , W	Water
W.L.	Water line
WM	Water meter
WMH	Water manhole
WP	Working pressure
2W x 5H	2 wide x 5 high

LEGEND:

EXISTING	PROPOSED	
		Facilities to be: removed, demolished, abandoned, or relocated when new lines are in service
		Facilities abandoned in place
		Right-Of-Way line, property line
		Right-Of-Way line, property line
		Right-Of-Way line, property line
		No record of utility line elevation available
		Utility pole, Street Light Pole
		Utility line on Profiles (water)
		Drain line (direction of flow)
		Water line (6" dia.)
		Sewer line (8" dia.)
		Gas line (4" dia.)
		Electric line
		Telephone line
		Cable television line
		Manhole (body & cover)
		Pullbox or water meter box
		Gate valve, Bends
		Fire hydrant
		Reinforced concrete jacket
		Trenchless Sleeve
		Limits of Grading

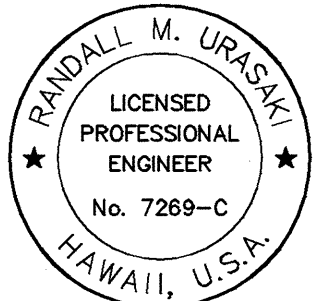
GENERAL NOTES:

- The Contractor shall verify the presence of existing aerial utilities which may conflict with construction activities and shall coordinate with the utility company for temporary relocation, as necessary.
- The underground pipes, cables or ductlines known to exist by the Engineer from his search of records are indicated on the plans. The Contractor shall verify the location and depth of the facilities and exercise proper care in excavating the area.  
  
When the existing utility is in conflict with the proposed utility, the Contractor shall notify the Engineer. The Engineer will determine if relocation is necessary.  
  
Whenever connection of new utilities to existing utilities are shown on the plans, the Contractor shall expose the existing lines to verify their locations and depths prior to excavation for the new lines.  
  
All existing utilities whether or not shown on plan, shall be protected at all times during construction unless otherwise noted, and any damage to them shall be repaired and paid for by the Contractor. Personal injury resulting from contact with the existing utilities shall be the Contractor's responsibility.
- When excavating near walls, fences, utility poles, traffic signal poles, and other improvements, the Contractor shall protect, support, secure and take all other precautions to prevent damaging these improvements.
- MATERIALS:  
A. All reinforcing steel shall be ASTM designation A615 Grade 40, unless noted.  
B. All concrete shall be Class B, unless otherwise noted.
- Utility structures are referenced by station and offset to the centerline of the structure body, unless otherwise noted on plan.
- Surfaces of existing concrete against which concrete is to be placed shall be thoroughly cleaned of surface laitance and other material foreign to concrete.
- The spacing between ducts of different sizes shall be in accordance with the spacing requirements of the larger duct. For spacing requirements between different utility systems, see "Title-VI Public Utilities Commission, Rules for Construction of Underground Electric and Communication Systems, General Order No. 10".
- Topsoil within work area shall be removed, stockpiled, and reused for restoration of landscaping (payment incidental to various contract items).
- Where utility service connections penetrate existing walls, restore wall to satisfaction of the Engineer. Payment for restoration of wall shall be considered incidental to various contract items.
- Existing pullboxes, handholes, and manholes which are below finish grade shall be covered with steel plates (with skid resistant surface) until the existing facilities are removed or demolished in accordance with Section 202 of the Specifications (Payment for steel-plating shall be considered incidental to various contract items).
- Steel plates for covering trenches shall have skid resistant surface.

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CAD by J. Minura, 95-52

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OR UNDER MY SUPERVISION.

*R. Urasak*

11/26/97	Added Limits of Grading and Right-of-Way line to Legend.
Date	Revision
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION <b>UTILITY</b> <b>ABBREVIATIONS, LEGEND &amp;</b> <b>NOTES</b> H-3 FINISH (UNIT II) FAIP NO. I-H3-1(75), UNIT II LEEWARD SECTION SCALE: NONE DATE: JANUARY 1999 SHEET NO. G16 OF 18 SHEETS	



WATER NOTES:

- Unless otherwise specified, all material and construction of water system facilities and appurtenances shall be in accordance with the HAWAII STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND PUBLIC WORKS CONSTRUCTION, dated 1994, as amended, of the Hawaii Department of Transportation, Highways Division, the City and County of Honolulu Board of Water Supply's "WATER SYSTEM STANDARDS" VOLUME 1, DATED 1985, THE "APPROVED MATERIAL LIST AND STANDARD DETAILS FOR WATER SYSTEM CONSTRUCTION" VOLUME 2, DATED 1985, THE "WATER SYSTEM EXTERNAL CORROSION CONTROL STANDARDS" VOLUME 3, DATED 1991, and all subsequent amendments and additions.
- All plans approved by the Board of Water Supply are based solely on the adequacy of the water supply. All other features of the water system, such as lines, grades, fittings, etc., and drainage and other features of improvements shall not be the responsibility of the Board of Water Supply.
- The Contractor shall notify the BWS Planning and Engineering Division, Construction Section in writing and submit four sets of approved construction plans, one week prior to commencing work on the water system.
- The existence and location of underground utilities and structures as shown on the plans are from the latest available data but is not guaranteed as to the accuracy or the encountering of other obstacles during the course of the work. The Contractor shall be responsible and shall pay for all damages to existing utilities. The Contractor shall not assume that where no utilities are shown, that none exist.
- The Contractor shall be responsible for the protection of all water lines during construction. The Contractor shall be especially careful when excavating behind water lines, tees and bends wherever there is a possibility of water line movement due to removal of the supporting earth beyond the existing reaction blocks. The Contractor shall take whatever measure he deems necessary to protect the water lines, such as constructing special reaction blocks (with BWS approval) and/or modifying his construction methods.
- Prior to installation, the Contractor shall submit for approval by Board of Water Supply, the manufacturer's certification that all cast iron (gray or ductile) fittings for the project conform in all respects to the "Water Systems Standards", dated 1985.
- Test pressure shall be 150 psi.
- The Contractor shall cut and plug all existing unused laterals at the main whether or not shown on the plans. The damaged area shall be repaired to an equal or better condition than the immediate area. All work shall be done at the expense of the Contractor.
- Relocation of water meters shall be performed under the supervision of BWS personnel.
- All fire hydrants to be removed shall be cleaned and returned to the BWS baseyard as directed by the Engineer.
- Polygon shape for mechanical joint glands as described in AWWA Standard C111 shall be "straight-sided" or an approved equal on a job to job basis.
- Re-approval shall be required if this project is not under construction within a period of two years.
- The Contractor shall chlorinate the entire inside surface of each pipe and fitting with disinfection solution of 5 ounces of Sodium Hyperchlorite mixed with 10 gallons of water. (For Connection Only).

- The Contractor shall verify all existing service laterals & locations, whether or not shown on the plans, prior to commencing with any of the work and shall not assume that, where no services are shown none exist.
- At the electrical/signal ductline water crossings, adjust all electrical/signal ductline elevations to maintain 6" vertical clearance from all water lines (12" clear for all electrical/signal ductline structures larger than 16") at no cost to BWS.
- Maintain 3'-0" min. horizontal clear separation between all waterline systems and nearest electrical/signal ductlines paralleling the water system at no cost to BWS.
- Maintain 3'-0" min. horizontal clearance between street light/traffic signal, standards (including any modular units) and the nearest water system. Contractor shall field verify for any conflicts at each street light/traffic standard location. Where conflicts occur, the Contractor shall coordinate with the Project Engineer to revise the street light/traffic signal standard to provide the required clearances at no cost to the BWS.
- All waterline construction requiring shutdown connectors shall be scheduled for normal working hours and maximum downtime shall be six (6) hours.
- Prior to any excavating, the Contractor shall verify in the field the location of existing water mains and appurtenances.
- The Contractor/Developer shall obtain a NPDES permit prior to chlorination and/or dewatering. A copy of the permit shall be submitted to the Board of Water Supply, Planning and Engineering Division, Construction Section.
- Pipe cushion shall be of high resistivity material. The Contractor shall submit a soil certification that high resistant cushion material has a resistivity greater than 5,000 OHM-CM. Remainder of the backfill material shall be as specified in Volume 1 of the Water System Standards. Pipe cushion and backfill material shall contain no hazardous substances above regulatory action levels including but not limited to lead, asbestos, mercury, chromium, cadmium, zinc, strontium, and polychlorinated biphenyls (PCB).
- Cleaning shall be by the use of "pigs" introduced into the pipeline and run completely through all installed pipelines and all branch lines for fire hydrants. "Pigging" of service laterals is not required. Bare foam "pigs" shall be used to swab piping clean as each length of the pipeline is installed. Each "pig" shall consist of a cylindrical piece of polyurethane foam with a density of 3-7 pounds per cubic foot and a vinyl-coated nose. Outside diameter of the "pig" shall be equal to 1-1/4 to 1-1/2 times the inside diameter of the pipe being installed. The length of the "pig" shall be 1-1/2 to 2 times its diameter. Prior to use, the "pig" shall be submerged in a chlorine solution of 1 oz. of 5% chlorine bleach in 5 gallons of water. "Pigging" of the pipeline shall be considered incidental to the installation of the new pipeline.
- All ductline iron pipe, fittings, and valves shall be wrapped with two layers of 8 mil. polyethylene wrap, except when encased by concrete jacket.
- Two-way blue reflective hydrant markers Type DB shall be installed at all new fire hydrant installations. Contractor shall verify the exact locations of hydrant markers with the nearest Honolulu Fire Department Battalion Chief.
- Any adjustments to the existing water system required during construction to meet requirements of BWS Standards, whether shown on the plans or not, shall be done by the Contractor at no cost to the Board.

- All valves to be abandoned shall be removed, cleaned and returned to BWS. Demolish all valve boxes to be abandoned. Salvage, clean and return to BWS all abandoned manhole Cast Iron Frames and Covers.
- For GRP Seal Details, see Sht. No. 1U27A.
- For Trenchless Sleeve Details, see Sht. No. 1U27C.
- For Retaining Wall Details, see Structural Shts.
- The Contractor shall have existing water mains toned before construction of work in vicinity of water mains, call the investigation section at 527-5296 for toning services. Guardrail post locations are to be kept to a minimum clear distance of 18 inches to any 2-1/2 inch water lines and meter boxes. No post driving will be allowed when post is to be installed closer than 3 feet from water main. Excavated areas shall be restored to their original conditions.
- The Contractor shall follow the following new chlorination and water sampling procedures:
  - The following chlorination and water sample collection procedure shall apply to all water pipeline projects:

Step 1: Chlorinate main per Water System Standards. Leave chlorinated water in main overnight. Chlorine concentration shall be a minimum of 50 parts per million (ppm).

Step 2: Test chlorinated water left in main for chlorine content. If chlorine content is less that 25 ppm, repeat Step 1. If chlorine content is greater than 25 ppm, go to Step 3.

Step 3: Flush main of all chlorine. Take bacteriological sample. Stop flushing and hold water in main for three (3) hours. After three (3) hours, take bacteriological sample of water being held. Indicate on the sample bottle label the amount of chlorine residual detected at the time of sampling as follows:

++ high residual CL2 (greater than 0.1 ppm)  
+ trace residual CL2 (0.05 to 0.1 ppm)  
- no residual CL2 (less than 0.05 ppm)

Leave water in main overnight.

Step 4: Take bacteriological sample of water left overnight. Flush main to have a minimum of one change over. Stop flushing and hold water in main for three (3) hours. After three (3) hours, take bacteriological sample of water being held. Indicate on the sample bottle label the amount of chlorine residual detected at the time of sampling. Leave water in main overnight.

Step 5: Repeat Step 4.
  - Three (3) consecutive water pipeline bacteriological samples collected 24 hours apart must be within the following guidelines: contain zero total and fecal coliform, and less than 200 colony forming units (CFU) of total bacteria when there is no residual chlorine.
  - Chlorination, flushing, sampling and testing will be extended should unsatisfactory results be encountered. Any sample that shows positive coliform presence or total bacteria greater than 200 CFU is unsatisfactory.
  - Water samples that show the presence of atypical colonies, debris or results inconsistent with existing water are subject to reconfirmation. BWS reserves the right to request and test additional water samples in the interest of safeguarding public health and safety.
- For Connection Schedule, see Sht. No. 1U27E.

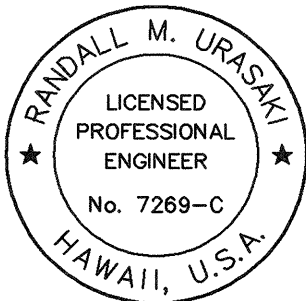
GAS NOTES:

- Prior written clearance must be obtained from GASCO, Inc., at least seven (7) calendar days before starting excavation near gas lines.

Since gas line locations on plans are approximate, the Contractor after obtaining a written clearance, shall call GASCO, Inc., a minimum of 48 hours before starting excavation. To arrange for field location of existing gas lines, call 547-3575 during business hours, or 526-0066 after hours.
- For relocation of any gas pipeline, the Contractor shall notify GASCO, Inc., five (5) working days before starting work. The Contractor shall provide the necessary excavation and backfill, arrange for traffic permits, and restore pavement, sidewalks, or other facilities. Any relocation of gas facilities shall be done by GASCO, Inc.
- The Contractor shall notify GASCO, Inc. immediately after any damage has been caused to existing gas pipelines, coatings or cathodic protection devices. Repair work on such damage shall be done by GASCO, Inc. and paid for by the Contractor.
- Minimum vertical or horizontal clearance between gas pipelines and other pipelines, conduits, or ductlines shall be 12 inches. Adequate support and protection for gas pipelines exposed in the trench shall be provided by the Contractor and approved by GASCO, Inc.
- The GASCO, Inc. gas pipelines in the project area are plastic coated and cathodically protected. The Contractor shall be extremely careful when working near these gas pipelines.
- The Contractor shall work in an expeditious manner in order to keep uncovered gas pipelines exposed for as short a period of time as possible.

*[Signature]* 2/2/98  
Chief, Planning & Engineering, BWS Date

1/12/98	Revised Water Note 3. Added Water Note 32.
9/19/97	Deleted sewer notes. Revised sheet title, Water Notes 3 & 22; added Water Notes 30 & 31.
5/2/97	Revised Sheet
Date	Revision
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION <b>UTILITY NOTES</b> <b>WATER &amp; GAS</b>  H-3 FINISH (UNIT II) FAIP NO. I-H3-1(75), UNIT II LEEWARD SECTION SCALE: NONE DATE: JANUARY 1997 SHEET NO. G17 OF 18 SHEETS	



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*[Signature]*



SEWER NOTES:

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75), UNIT II	1997	C.O. 17S-1	1102

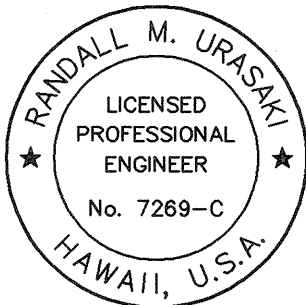
- All sewer construction shall be performed in accordance with the City's Standard Specifications, Sept. 1986, the Department of Public Works Standard Details, Sept. 1984, current city practices and Revised Ordinances of Honolulu, 1990 as amended, and the Design Standards of the Department of Wastewater Management Vol. 1, July 1993.
- In the event that any change in alignment or grade for the proposed sewers are required due to unforeseen conflict with other utilities, the engineer in charge or the maker of the plans shall be responsible for the required changes which are to be presented to the Department of Wastewater Management for approval.
- The Contractor shall notify the Construction Section, Department of Wastewater Management at 527-5820 or 523-4345 to arrange for inspection services and submit four sets of approved construction plans seven days prior to commencement of sewer work. The Contractor shall pay for all inspection costs.
- Crushed rock cradle is permitted where soil is stable. In areas of unstable soil, the maker of the plans and the construction engineer will determine the pipe support required.
- The underground pipes, cables or ductlines known to exist by the Engineer from his research of records are indicated on the plans. The Contractor shall verify the location and depth of the facilities and exercise proper care in excavating the area. The Contractor shall be responsible and shall pay for all damaged utilities.
- The Contractor shall be responsible for maintaining continuous sewer service to all affected areas during construction.
- The Consulting Engineer shall submit to the Department of Wastewater Management mylar "as-built" tracings of the construction plans as actually constructed, showing all changes from the original plans.
- The Contractor shall be responsible for any sewage spills caused during construction. The Contractor shall notify the State Department of Health and utilize appropriate sampling and analyzing procedures. The Contractor shall be responsible for all public notification and press releases.
- The Contractor shall install "Rainstopper" manhole inserts in all sewer manholes with Type "SA" frame and cover.
- S4C pipe cradle seals shall be installed 10 feet from all sewer manholes to prevent soil migration. See Detail on Sht. 1U18.
- Confined Space

For entry by city personnel, including inspectors, into a permit required confined space as defined in 29 CFR Part 1910.146(b), the Contractor shall be responsible for providing:

- All safety equipment required by the confined space regulations applicable to all parties other than the construction industry, to include, but not limited to, the following:
  - Full body harnesses for up to two personnel.
  - Lifeline and associated clips.
  - Ingress/egress and fall protection equipment.
  - Two-way radios (walkie-talkies) if out of line-of-sight.
  - Emergency (escape) respirator (10 minute duration).
  - Cellular telephone to call for emergency assistance.
  - Continuous gas detector (calibrated) to measure oxygen, hydrogen sulfide, carbon monoxide and flammables (capable of monitoring at a distance of at least 20-feet away).
  - Personal multi-gas detector to be carried by inspector.
- Continuous forced air ventilation adequate to provide safe entry conditions.
- One attendant/rescue personnel topside (two, if conditions warrant it).

- When connecting to a live sewer line, the Contractor shall notify the Department of Health, Clean Water Branch in writing of the impending connection to a live sewer line. The Contractor shall abide by all conditions that the Department of Health sets forth to mitigate any wastewater spill that may occur. Copies of all correspondences with the Department of Health shall be submitted to the Department of Wastewater Management prior to the actual connection.

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Approved: *R. M. Urasani* 11/10/97  
Chief, Div. of Planning & Service Control, WWM Date  
(For Sewer Work within Public R/W only) *W. O. M.*

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OR UNDER MY SUPERVISION.  
*R. M. Urasani*

9/19/97	Added Sheet & Revised Sewer Notes.
Date	Revision
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION <b>UTILITY NOTES</b> <b>SEWER</b>  H-3 FINISH (UNIT II) FAIP NO. I-H3-1(75), UNIT II LEEWARD SECTION SCALE: AS SHOWN DATE: JANUARY 1997 SHEET NO. G17A OF 18 SHEETS	

C.O. 17S-1



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75), UNIT II	1997	18	1102

HECO NOTES:

- SURVEY PLOTTED BY

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- Barricading of HECO facilities, if required, shall be done by the Contractor. Breaking into existing HECO facilities shall be done by HECO.
- All completed ductlines shall be mandrel tested by the Contractor in the presence of the utility company's Inspector using the utility company's standard practice.
- The Contractor shall install a ½" polyolefin pull line in all completed HECO ductlines after mandrel testing is complete.
- The Contractor shall furnish its construction schedule 45 working days prior to starting any HECO work.
- The Contractor shall install schedule 40 PVC conduit for all HECO ductline. No split ducts will be allowed. No notching of HECO boxes will be allowed.

HECO STANDARD DRAWING LIST:

The following HECO Standard Drawings are applicable to this plan set:

DRAWING TITLE	HECO STANDARD DRAWING NO.
Handhole Type 611(6'-0"x11'-0") Underground Standards	18844
Miscellaneous details Handholes & Manholes Underground Standards	16688
Typical duct construction Installation details Underground details	30-1030
Plastic Ducts Installation details Underground Structures	30-1035
Handhole Type 35V Underground Standards	18841

HTCO NOTES:

- The Contractor shall give HTCO, in writing, at least 30 calendar days advance notice of intent to commence work on the telephone system.
- Existing telephone facilities shown on these plans are approximate only. The Contractor shall verify their actual locations and shall make adjustments to the proposed facility as directed by the Engineer.
- For field location of HTCO facilities, contact HTCO's outside plant engineering section, a minimum of 72 hours in advance prior to start of excavation.
- HTCO will coordinate its work with the Contractor in such a manner as to expedite construction.
- Stake-out of new ducts shall be done by the Contractor, and verified by HTCO.
- The Contractor shall exercise extreme caution when the excavation and construction crosses or is in close proximity to underground telephone and signal cable facilities and maintain adequate clearance for his equipment while working close to and/or under the overhead facilities. Any damage to the existing underground facilities shall be paid for by the Contractor.
- The Contractor shall provide supports for cables where required and take any precaution necessary to prevent damage to existing cables. Any work involving existing cables or ducts shall be done in the presence of the HTCO inspector or his representative. Payment shall be considered incidental to various contract items.
- All telephone ducts shall be encased in concrete jacket unless otherwise specified. All ducts shall be inspected and approved by HTCO before concrete placement. Advance notice of at least 24 hours shall be given before placing concrete.

HTCO STANDARD DRAWING LIST:

The following HTCO Standard Drawings are applicable to this plan set:

DRAWING TITLE	HTCO STANDARD DRAWING NO.
Standard duct formations Manhole details	34028

CABLE TELEVISION NOTES:

- Use standard electrical duct spacing for cable television ducts entering or exiting handholes and manholes. See HECO Standard Drawing Number 30-1030.
- All cable television pullbox covers to be imprinted with "CATV" in lieu of "HT" specified in HTCO Standard Drawing Number 34056.

ELECTRICAL AND MAINTENANCE SERVICES DIVISION NOTES:

- The Contractor shall notify the joint pole committee two (2) weeks in advance of any relocation of utility pole that may be necessary.

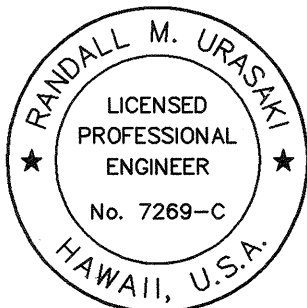
DRAWING REVIEW

Reviewed for HECO's Facilities Only

Date 11/3/99 By J.K. [Signature]  
per [Signature] [Signature]

Engineering Department  
Hawaiian Electric Company, Inc.

HECO's review of these drawings shall in no way relieve the Customer, its Consultant, its Contractor or anyone acting on the Customer's behalf from the responsibility for engineering, design, materials and any other liability associated with this project.



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OR UNDER MY SUPERVISION.

[Signature]

5/2/97	Revised HECO Notes 1, 3, 5 & 10. Added HECO Notes 12-18. Added HECO signature block.
Date	Revision
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION <b>UTILITY NOTES</b> <b>CABLE TELEVISION, ELECTRIC</b> <b>&amp; TELEPHONE</b> H-3 FINISH (UNIT II) FAIP NO. I-H3-1(75), UNIT II LEEWARD SECTION SCALE: NONE DATE: JANUARY 1997 SHEET NO. G18 OF 18 SHEETS	



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75), UNIT II	1997	C.O. 18S-1	1102

CONSTRUCTION NOTES:

1. All construction work shall be done in accordance with the STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, Sept. 1986, and STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION, Sept. 1984, as amended, of the Department of Public Works, City and County of Honolulu and the Counties of Kauai, Maui, and Hawaii.
2. The underground pipes, cables or ductlines known to exist by the Engineer from his search of records are indicated on the plans. The Contractor shall verify the locations and depths of the facilities and exercise proper care in excavating the area. Wherever connections of new utilities to existing utilities are shown on the plans, the Contractor shall expose the existing lines at the proposed connections to verify their locations and depths prior to excavation for the new lines.
3. No Contractor shall perform any trenching operation so as to cause falling rocks, soil or debris in any form to fall, slide or flow onto adjoining properties, streets or natural watercourses. Should such violations occur, the costs incurred for any remedial action by the Chief Engineer shall be payable by the Contractor.
4. The Contractor shall be responsible for conformance with the applicable provisions of Chapter 54, Water Quality Standards, and Chapter 55, Water Pollution Control, of Title 11, Administrative Rules of the State Department of Health.
5. The Contractor shall notify the Construction Section, Division of Engineering, Department of Public Works at 523-4883 to arrange for inspectional services and submit three (3) sets of approved construction plans seven (7) days prior to commencement of construction work.
6. The Contractor shall notify the private property owners and their lessees prior to removal of their landscaping and shall dispose landscaping unless otherwise requested to be salvaged. Payment for such work shall be considered incidental to various contract items.

H.P.T.A. NOTE

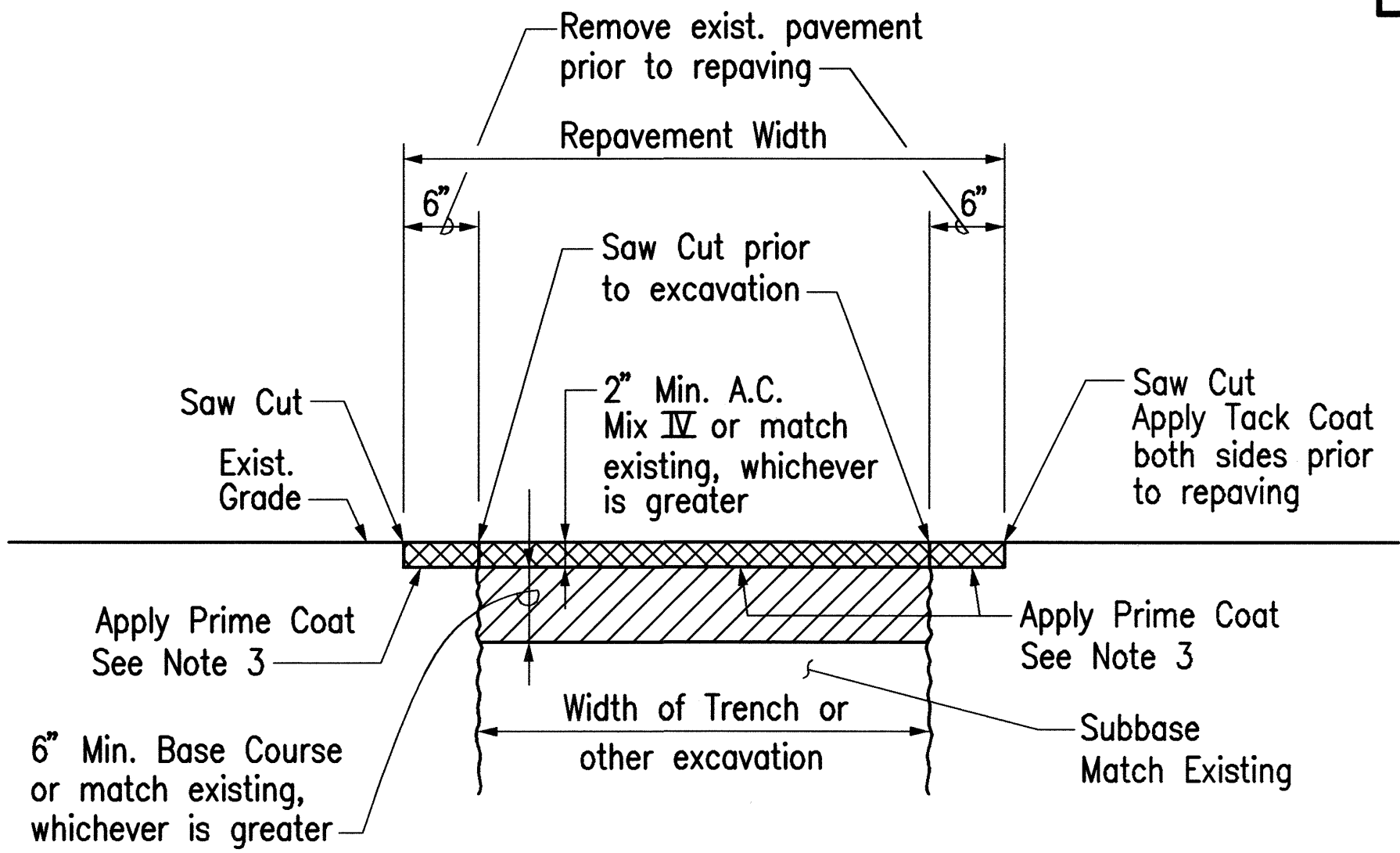
The Contractor shall notify Oahu Transit Services, Inc. (OTS), Ed Sniffen (848-4571) or Lowell Tom (848-4578), two weeks prior to construction, informing them of location, scope of work, proposed closure of any street or traffic lanes, and the need to relocate any bus stop.

PUBLIC HEALTH, SAFETY, AND CONVENIENCE

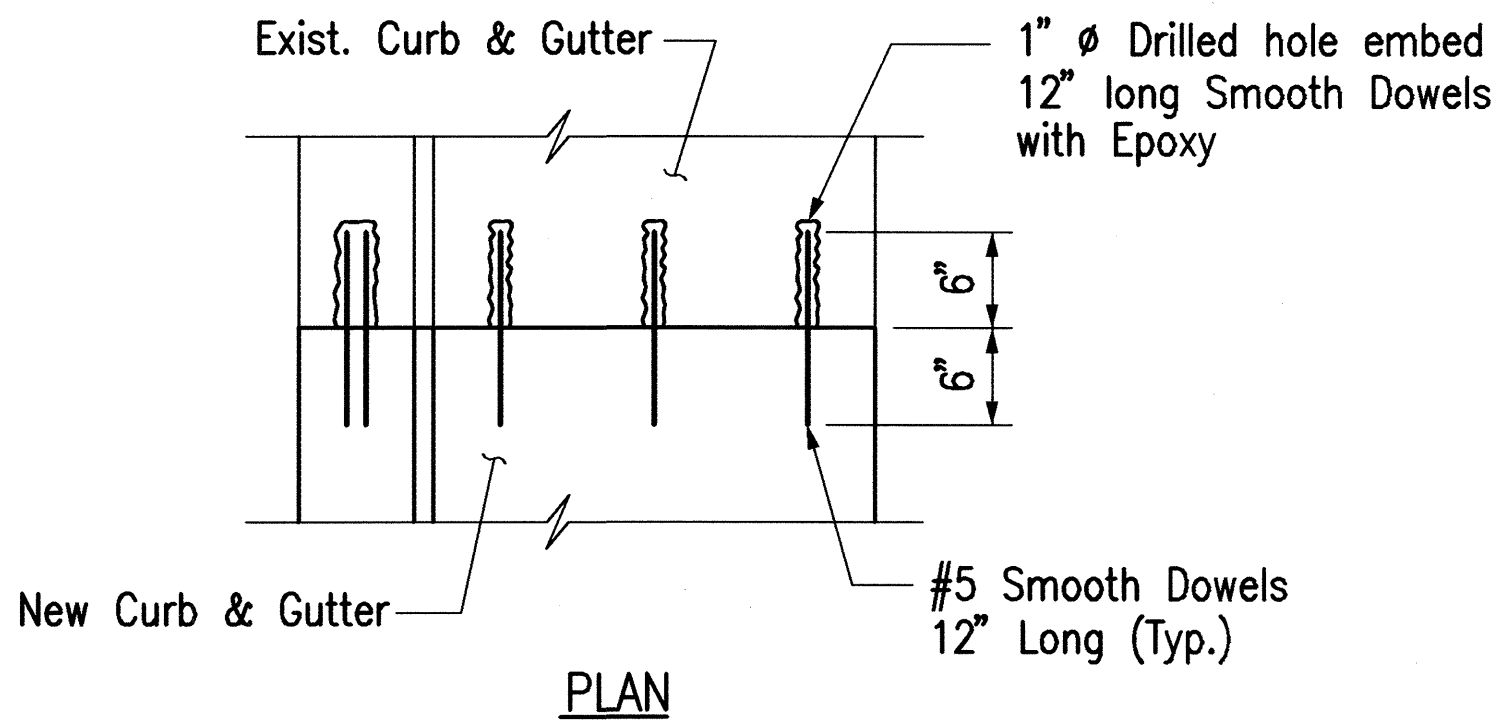
1. The Contractor shall observe and comply with all federal, state and local laws required for the protection of public health and safety and environmental quality.
2. The Contractor at his own expense, shall keep the project and its surrounding areas free from dust nuisance. The work shall be in conformance with the Air Pollution Standards and Regulations of the State Department of Health. The city shall require supplementary measures as necessary.
3. The Contractor shall provide, install and maintain all necessary signs, lights, flares, barricades, markers, cones, and other protective facilities and shall take all necessary precautions for the protection, convenience, and safety of the public.

TRAFFIC NOTES:

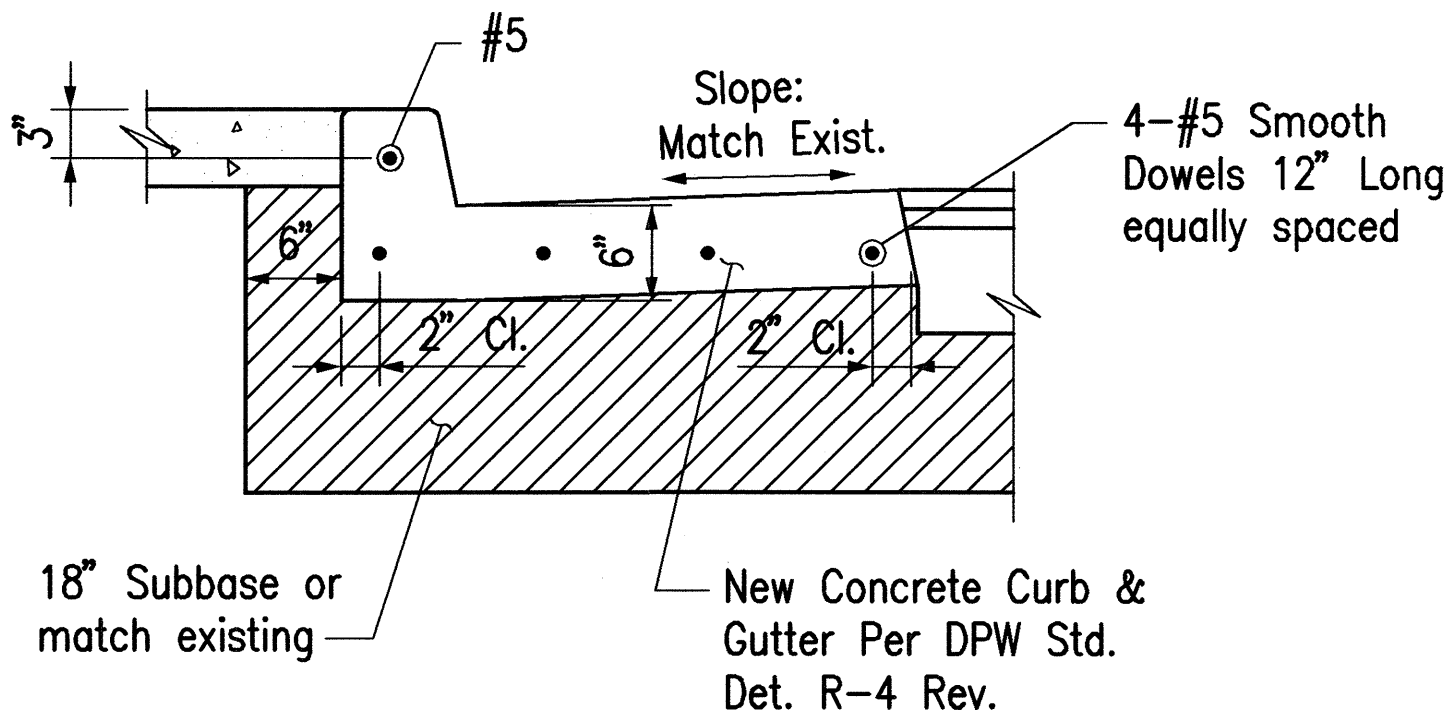
1. A permit shall be obtained from the Department of Transportation Services before work on any portion of a public street or highway may begin. Construction traffic control plans approved by the DTS must be provided when applying for the permit.
2. The Contractor shall provide, install and maintain all necessary signs and other protective facilities, which shall conform with HAWAII ADMINISTRATION RULES GOVERNING THE USE OF TRAFFIC CONTROL DEVICES AT WORK SITES ON OR ADJACENT TO PUBLIC STREETS AND HIGHWAYS adopted by the Director of Transportation, and the current U.S. Federal Highways Administration's "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, PART VI - TRAFFIC CONTROLS FOR STREET AND HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS".
3. Work on any city street area may be performed only between the hours of 8:30 a.m. to 3:30 p.m., Monday through Friday; unless otherwise permitted by the Department of Transportation Services.
4. During working hours, the Contractor shall provide two lanes for through traffic. On streets too narrow to make this practicable, the Contractor may work in one half the roadway, keeping the other half open to traffic and alternating the flow of traffic. During non-working hours, all trenches shall be covered with a safe non-skid bridging material and all lanes shall be open to traffic.
5. As required by the Department of Transportation Service, the Contractor shall provide off-duty police officers to control the flow of traffic.
6. Driveways shall be kept open unless the owners of the property using these rights-of-way are otherwise provided for satisfactorily.
7. Where pedestrian walkways exist, they shall be maintained in passable condition or other facilities for pedestrians shall be provided. Passage between walkways at intersections shall likewise be provided.
8. The Contractor shall reference, to the approval of the Department of Transportation Service, all existing traffic signs, posts and pavement markings prior to the commencement of construction. The Contractor shall replace or repair all traffic signs, posts, and pavement markings disturbed by his activities. The Contractor shall notify the Department of Transportation Services at 523-4029 one (1) week prior to any any work to be done on signs, posts and pavement markings.
9. BWS shall ensure that the Contractor installs the construction traffic control devices in accordance with the MUTCD and HAWAII ADMINISTRATION RULES as specified in Traffic Note 2.
10. No material and/or equipment shall be stockpiled or otherwise stored within street rights-of-way except at locations designated in writing and approved by Department of Transportation Services.
11. Existing street lighting, and traffic signal facilities shall be maintained in operating condition throughout the construction project. Any relocation required shall be approved by the Electrical and Maintenance Division, Department of Transportation Services and paid for by the Contractor.
12. The Contractor shall notify the Department of Transportation Services, Traffic Signal Section, at 523-4961 one week prior to any excavation for street lighting or traffic signal facilities.
13. The Contractor shall notify OTS, Ed Sniffen or Trask Huddy at 848-4571, two weeks prior to construction, informing them of the location, scope of work, proposed closure of any street or traffic lanes, and the need to relocate any bus stop.



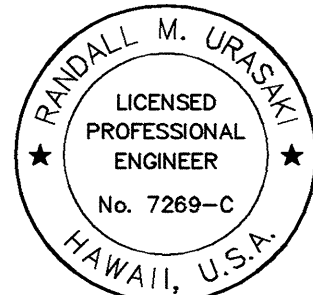
TRENCH RESTORATION DETAIL  
(For Construction within City Right-of-Way)  
Scale: 1" = 1'-0"



PLAN



CURB & GUTTER RESTORATION DETAIL  
(For Construction within City Right-of-Way)  
Scale: 1" = 1'-0"



THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION.

*[Signature]*

NOTES:

1. Detail not applicable where pavement will be reconstructed. Contractor shall restore pavement, as necessary, for maintenance of traffic, pedestrians, etc.
2. Payment for restoration of existing pavement will be considered incidental to various contract items.
3. For road grades 0% to 7.99% and prime coat is not available, none required. If prime coat is available, use prime coat.

1/12/98	Revised Trench Restoration Detail and added Note 3.
12/23/97	Added Trench Restoration Detail and Curb & Gutter Restoration Detail.
11/26/97	Added Sheet.

Date	Revision
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
GENERAL NOTES	
H-3 FINISH (UNIT II) FAIP NO. I-H3-1(75), UNIT II LEEWARD SECTION	
SCALE: AS SHOWN	DATE: NOVEMBER 1997
SHEET NO. G18A OF 18 SHEETS	

C.O. 18S-1

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

CAD by J. Minura, 55-52