

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-HI-1(222)	1997	2	104

GENERAL NOTES

1. The Scope of Work for this Project Consists of Widening the Existing Roadway; Resurfacing; Landscaping; Highway Lighting System; Traffic Signal System; Drainage Improvements; Signing; Guardrails, and Pavement Markings.
2. The Contractor Is Reminded of the Requirements of Subsection 108.01 - Subletting of Contract, Which Requires Him to Perform Work Amounting to Not less than 50 Percent of the Total Contract Cost less Deductible Items. Non-Compliance with this Subsection May Be Grounds for Rejection of Bid.
3. The Contractor's Attention Is Directed to the Following Sections of the Special Provisions: Subsection 107.13 - Public Convenience and Safety; Subsection 107.21 - Contractor's Responsibility for Utility Property and Services; and Section 645 - Traffic Control.
4. At the End of Each Day's Work, the Contractor Shall Remove All Equipment and Other Obstructions to Permit Free and Safe Passage of Public Traffic.
5. The Existence and Location of Underground Utilities, Manholes, Monuments and Structures as Shown on the Plans are from the Latest Available Data but the Accuracy Is Not Guaranteed. The Encountering of Other Obstacles During the Course of Work Is Possible. The Contractor Shall Be Held Liable for Any Damages Incurred to the Existing Facilities and/or Improvements as a Result of His Operations.
6. The Exact Pavement Locations and Limits or Areas to be Resurfaced or Reconstructed Shall be Determined in the Field by the Engineer.
7. The Contractor Shall Notify In Writing, the Oahu Transit Services, Inc. Roads Supervision Office, 811 Middle St. Hon., HI 96819 (Ph.*:848-4571) Seven (7) Days Prior to Any Paving Operations.
8. The Contractor Shall Notify the Engineer In Writing, Two (2) Weeks Prior to Starting Paving Operations.
9. The Contractor Shall Remove and Dispose of All Existing Raised Pavement Markers Prior to the Overlaying of Asphalt Concrete. This Work Shall Be Considered Incidental to Asphalt Concrete Pavement, Mix No. IV and Will Not Be Paid for Separately.
10. Smooth Riding Connections Shall be Constructed at All Limits Of Resurfacing, Including the Beginning and End of Project, Connection Approaches, Side Streets and Driveways as Shown on the Plans and/or as Directed by the Engineer.

11. Existing Drainage System Will Be Functional at All Times During Construction. The Contractor Is to Furnish Materials, Equipment, Labor, Tools and Incidentals Necessary to Maintain Flow. This Work Shall Be Considered Incidental to Various Contract Items.
12. The Contractor Shall Provide for Access to and from All Existing Streets at All Times.
13. All Saw Cutting Work Shall Be Considered Incidental to Asphalt Concrete Pavement, Mix No. IV and Will Not Be Paid for Separately.
14. Prime Coat/Tack Coat Shall Be Incidental to Asphalt Concrete Pavement, Mix No. IV and Will Not Be Paid for Separately.
15. Contractor's Attention Is Directed to Section 401.03 of the Special Provisions. All Longitudinal and Transverse Tapers Within the Traveled Way Shall Be Removed Prior to Commencing and Continuing of Paving Operations.
16. The Contractor Shall not do Operations Involving Traffic Lane Closures or Slowdown of Traffic During the Following Peak Hours :
Morning Peak Hours - 6:30 A.M. to 8:30 A.M.
Afternoon Peak Hours - 3:00 P.M. to 6:00 P.M.
17. The Contractor may use figures 1 through 7 in Section 645 of the Special Provisions, if necessary, in addition to the Traffic Control Plans on Plan Sheet Numbers F-1 through F-8.

ESTIMATED EARTHWORK QUANTITIES

Excavation	36,700 C.Y.
Embankment	9,300 C.Y.
Area to be Graded	7.9 Ac.

Note: Estimated Earthwork Quantities are for Permit Purposes Only.

LEGEND

EOH	Existing Electrical Overhead Line	S ₁₂	Existing 12" Sewer
UP	Existing Utility Pole	SMH	Existing Sewer Manhole
EMH	Existing Electrical Manhole	G ₆	Existing 6" Gas Line
T	Existing Telephone Line	GV	Existing Gas Valve Box
TP	Existing Telephone Pole	MON	Existing Monument
HTCO, MH	Existing Telephone Manhole	D ₂₄	Existing 24" Drain Line
SC	Existing Signal Corps Line	24" Drain	New 24" Drain Line
TV	Existing TV Cable	SDMH	Existing Storm Drain Manhole
W ₁₂	Existing 12" Water Line	DMH	New Storm Drain Manhole
WMH	Existing Water Manhole	G _I	Existing Grated Drop Inlet
AV	Existing Water Air Valve	G _I	New Grated Drop Inlet
WV	Existing Water Valve Box	CB	Existing Catch Basin
WM	Existing Water Meter	CB	New Catch Basin
		SL	Existing Traffic Sign
		S.L. BOX	Existing Street Light Box
		SL	Existing Highway Lighting Standard

AS-BUILT LEGEND

Metal Guardrail	As-Built Text
Metal Guardrail	Text Changes
Geometric Changes	Geometric Changes



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Kay Muranaka

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION NOTES

INTERSTATE ROUTE H-1
Makakilo Interchange Improvements
to Westbound Off-Ramp and
Eastbound On-Ramps

Scale: None Date: May 9, 1997
SHEET No. T-2 OF 3 SHEETS

MAKAKILO STANDARD PLANS.DGN

STANDARD PLANS SUMMARY

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-HI-1 (222)	1997	3	104

STANDARD PLAN 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

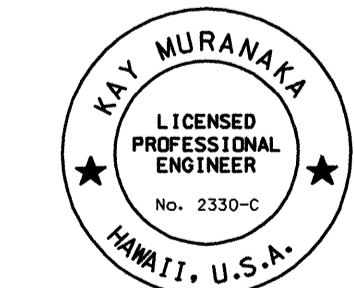
D-01	Chain Link Fence With Toprail	r03/06/87
D-02	Chain Link Fence Without Toprail	r07/26/90
D-03	Wire Fence With Metal Posts	07/01/86
D-04 ●	Typical Details of Curbs and/or Gutters	07/01/86
D-05	Typical Details of Reinforced Concrete Drop Driveway	07/01/86
D-06	Centerline and Reference Survey Monument	07/01/86
D-07	Street Survey Monument	07/01/86
D-08 ●	Landscaping Shrub 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 61616 Grated Drop Inlet	07/01/86
H-13 ●	61214, 61614 & 61616 Steel Frames and Grates	07/01/86
H-14	61214B Steel Frame and Grates	07/01/86
H-15	61614B Steel Frame and Grates	07/01/86
H-16	Concrete and Cement Rubble Masonry Structures	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	Hot Shaped Coupling Band	r10/16/90

STANDARD PLAN 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 Signal System, Miscellaneous Details	r11/03/89
TE-39 ●	Traffic Signal 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 PLAN 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 at Obstruction	r09/01/87
TE-54	Beam Type Guardrail with Rubrail at 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 at Bridges	07/01/86
TE-68	Wheelchair Ramps	r04/24/95
TE-69	Wheelchair Ramps	r04/24/95

DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
DESIGNED BY	_____
CHECKED BY	_____
NOTE BOOK	_____
NO.	_____



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION
Kay Muranaka

04/24/95	REVISED TE-68 & TE-69
07/18/94	REVISED TE-68 & TE-69
02/15/91	REVISED H-19
10/16/90	REVISED H-16, H-17, H-22 & H-23
07/26/90	REVISED D-02
07/16/90	REVISED B-12, B-13
05/09/90	REVISED TE-30, TE-31 & TE-32
11/03/89	REVISED 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
09/01/87	REVISED 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
03/06/87	REVISED D-01, TE-09, TE-40, TE-50, TE-51, TE-57, TE-59, TE-61, TE-63 & TE-64
DATE	REVISION

NOTE:
STANDARD PLANS APPLICABLE TO THIS PROJECT ARE INDICATED BY A " ● " NEXT TO THE STANDARD PLAN NO. (FOR EXAMPLE: D-07 ●)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD PLANS SUMMARY

INTERSTATE ROUTE H-1
Makakilo Interchange Improvements
to Westbound Off-Ramp and
Eastbound On-Ramps

Scale: None Date: May 9, 1997

SHEET No. T-3 OF 3 SHEETS