STANDARD PLANS SUMMARY

FED. ROAD DIST. NO.	STATE	F.A.I. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(221)	1996	2	36

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	Hat 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	r07/18/94
TE-69	Wheelchair Ramps	r07/18/94

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

DATE	REVISION
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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD PLANS SUMMARY

INTERSTATE ROUTE H-1 RESURFACING
Salt Lake Blvd. to Valkenburgh St.
F.A.I. Proj. No. IM-H1-1(221)

Date: May,1996

SHEET No. 1 OF 1 SHEETS

ORIGINAL PLAN
NOTE BOOK No. dd3.lynne fih1dspsl.dgn
SURVEY PLOTTED BY ______ DATE
DRAWN BY L. Mitsuyoshi 5/28/96
TRACED BY
DESIGNED BY L. Pascua
QUANTITIES BY
CHECKED BY

FED. ROAD DIST. NO.	STATE	F.A.I. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-HI-1(221)	1996	3	36

GENERAL NOTES

1. The scope of work for this project consists of cold planing, resurfacing, constructing drainage structures, adjusting manholes, installing new and resetting existing guardrails, replacing signs and reflector markers, and installing 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 locations and limits of cold planing, pavement restoration, and slope restoration 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. V and will not be paid for separately.
10. All holes, depressions and wheel ruts shall be filled and compacted with Asphalt Concrete Pavement, Mix No. V prior to resurfacing. This work will be paid for under Asphalt Concrete Pavement, Mix No. V.
11. Smooth riding connections shall be constructed at all limits of resurfacing, including the beginning and end of project, connecting approaches, side streets and driveways as shown on the plans and/or as directed by the Engineer.
12. Dressing of shoulder shall consist of clearing, grubbing, grading, reshaping and compacting the unpaved areas adjacent to the shoulders/gutters with suitable excavated material as shown on the plans and/or as directed by the Engineer. This work shall be considered incidental to the various contract items.
13. 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.
14. Earth swale shall be graded to drain. This work shall be considered incidental to the various contract items.
15. The Contractor shall provide for access to and from all existing side streets at all times.
16. The Contractor shall obtain approval for construction within the energy corridor from the State Department of Transportation, Harbors Division, Property Management, 79 S. Nimitz Highway, Honolulu, Hawaii 96813.
17. Construction of median barrier upgrade shall be done in three phases: ℄ Sta. 23+27± to ℄ Sta. 36+78±, ℄ Sta. 51+19± to ℄ Sta. 65+40±, and ℄ Sta. 66+50± to ℄ Sta. 97+60±. Median barrier upgrade shall be completed prior to a.c. paving operations in each area in order to preserve new a.c. pavement.
18. The Contractor shall notify Jim Gammon of the Fleet Industrial Supply Center (ph. #471-2390, pager #641-8284) five (5) working days prior to excavation near Navy aviation fuel lines.

COLD PLANING NOTES

1. All saw cutting work shall be considered incidental to Cold Planing and will not be paid for separately.
2. Exposure of existing aggregate base is possible when cold planing deeper than 5¾ inches. The Contractor shall pave over exposed existing aggregate base with the new Base Course at the end of each day. Contractor shall compact the existing aggregate base in accordance with Section 304 - Aggregate Base Course and apply Prime Coat in accordance with Section 408 - Prime Coat, prior to laying the New Base Course unless otherwise noted. This work shall be considered incidental to the new Base Course, and will not be paid for separately.
3. The vertical pavement drop-off shall not exceed 3-inches. If a vertical pavement drop-off exists at the end of each day's cold planing and paving, the Contractor shall provide a wedge with a 48:1 minimum transition taper for transverse drop-off and no steeper than 6:1 for longitudinal drop-off, as approved by the Engineer. This work shall be considered incidental to Cold Planing.
4. The Contractor shall lower manholes prior to Cold Planing, backfill with hot mix and re-adjust after final paving. Covering of lowered manholes shall be considered incidental to Manhole Adjustments.

LEGEND

- Slope Restoration Areas
- Pavement Settlement Areas
- Cold Planing Areas
- Resurfacing Limits
- —e— Existing Electrical Line
- ○pp Existing Power Pole
- ○emh Existing Electric Manhole
- —ht— Existing Hawaiian Tel Line
- □htpb Existing Hawaiian Tel Pullbox
- ○htmh Existing Hawaiian Tel Manhole
- —acc— Existing Army Communications Cable
- ◉NPWMH Adjusted Non-Potable Water MH Frame/Cover
- —npw—20— Existing 20" Non-Potable Water Line
- —w—30— Existing 30" Water Line
- ○wmh Existing Water Manhole
- ⊹fh Existing Fire Hydrant
- ○NAVwv Existing Navy Water Valve
- ○NAVwmh Existing Navy Water Manhole
- —NAVw—12— Existing 12" Navy Water Line
- Existing Guard Rail
- Existing Right-of-Way
- —×— Existing Fence
- —s—12— Existing Sewer Line
- ○smh Existing Sewer Manhole
- ○NAVsmh Existing Navy Sewer Manhole
- ○gmh Existing Gas Manhole
- —g—6— Existing 6" Gas Line
- —d—24— Existing 24" Drain Line
- —ud—6— Existing 6" Underdrain
- ○sdmh Existing Storm Drain Manhole
- □di Existing Drop Inlet
- cb Existing Catch Basin
- Existing Highway Lighting Standard
- —hlc— Existing Highway Lighting Conduit
- bm▽ Existing Bench Mark
- —tsc— Existing Traffic Signal Conduit
- □tspb Existing Traffic Signal Pullbox
- ○tsp Existing Traffic Signal Pole
- Existing Loop Detectors

ORIGINAL PLAN

SURVEY PLOTTED BY _____ DATE 6/14/96
DRAWN BY J. Miyagishi, M. Howells
TRACED BY _____
DESIGNED BY J. Pascua
QUANTITIES BY _____
CHECKED BY _____
NOTE BOOK dd3/nme
N. Hildebrandt

DATE	REVISION
6/14/96	Revised Notes 6 & 12, Added Notes 17 & 18, and Added "Slope Restoration Area" to Legend.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES AND LEGEND

INTERSTATE ROUTE H-1 RESURFACING
Salt Lake Blvd. to Valkenburgh St.
F.A.I. Proj. No. IM-HI-1(221)

Scale: As Shown Date: May, 1996

SHEET No. 1 OF 1 SHEETS

ADD. 3

FED. ROAD DIST. NO.	STATE	F.A.I. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(221)	1996	4	36

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL NOTES

(A) Erosion and Sediment Control Inspection and Maintenance Practices.

(1) The Contractor shall inspect the erosion and sediment control measures at least once a week or after 0.5 inches of rainfall.

(2) 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:

(a) 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.

(b) 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.

(c) When tears are found on the silt fence, the Contractor shall replace the fabric.

(d) 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.

(e) The Contractor shall inspect the diversion dike and repair the breaches.

(f) The Contractor shall inspect temporary and permanent seeding and planting for bare spots, washouts, and healthy growth.

(3) 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:

(1) Construction activities of five (5) acres or more.

(a) 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.

(b) No construction activities will be authorized until the Contractor's Site-Specific BMP has been approved by the Highways Division.

(2) Construction activities dewatering and/or hydrotesting water.

(a) 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.

(b) No dewatering and/or hydrotesting activities will be authorized until the receipt of the NPDES Permit(s) from DOH.

ORIGINAL PLAN
NOTE BOOK dd3.lynne
No. npdes.dgn
SURVEY PLOTTED BY ____ DATE 3/3/95
DRAWN BY A. Nomura
TRACED BY
DESIGNED BY C. Matsuda, L. Fujikami
QUANTITIES BY
CHECKED BY

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

NPDES GENERAL NOTES

INTERSTATE ROUTE H-1 RESURFACING
Salt Lake Blvd. to Valkenburgh St.
F.A.I. Proj. No. IM-H1-1(221)

Date: May, 1996

SHEET No. 1 OF 1 SHEETS