STANDARD PLANS SUMMARY

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(234)	2000	2	557

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~~	~~r11/03/89~~
~~TE-69~~	~~Wheelchair Ramps~~	~~r11/03/89~~

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

DATE	REVISION
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
Vic. of Punchbowl Off Ramp to Kapiolani IC
F.A.I Project No. IM-H1-1(234)

NO SCALE Date: June 1, 1999

SHEET NO. T2 OF 5 SHEETS

PM: BST
OPER: SHA,CDK,*FAI
REVISED: 05/12/99

DATE: 6/20/98
SCALE: 1 = 1
FILE: 9815-63

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(234)	2000	3	557

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 0.05 inches of rainfall, or greater.

(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) Discharge into receiving waters (streams, rivers, ocean channels drainage systems, etc.) from dewatering and/or hydrotesting activities require NPDES Permit(s) from the Department fo Health (DOH). If the Contractor options to discharge dewatering and/or hydrotesting effluent into receiving waters, the Contractor shall submit to the Engineer four (4) sets of Best Management Practices (BMP's) and four (4) copies of the Quality of Discharge Test Results. The plans and test results shall be submitted no later than thirty (30) calender days after the award of the contract.

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

(3) Progress payment will not be authorized until receipt of the BMP's and the Quality of Discharge Test Results.

(4) Any citation (fine) received by the State for non-compliance of the NPDES Permit requirements shall be deducted from the progress payment.

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

(a) Storm water discharge into State waters due to construction activities of five (5) acres or more, will require an NPDES 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.

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

(a) Discharges into State waters due to dewatering and/or hydrotesting 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 the contract.

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

PM: BST
OPER: SHA,CDK,*FAI
REVISED: 05/03/99

DATE: 6/20/98
SCALE: 1 = 1
FILE: 9815-03

ORIGINAL PLAN
NOTEBOOK No.

SURVEY PLOTTED BY DATE
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY

BENJAMIN S. TANAKA
LICENSED PROFESSIONAL ENGINEER
No. 2055-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Benjamin S. Tanaka

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

NPDES GENERAL NOTES

INTERSTATE ROUTE H-1 RESURFACING
Vic. of Punchbowl Off Ramp to Kapiolani IC
F.A.I Project No. IM-H1-1(234)

No Scale Date: June 1, 1999

SHEET NO. T3 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(234)	2000	4	557

GENERAL NOTES

1. The scope of work for this project consists of repairing and rehabilitating the existing pavement by Cold Planing, reconstructing weakened pavement and asphaltic concrete paving; adjusting manholes; providing bridge rail and median barrier upgrades; removing and installing guardrails; guardrail end treatments; providing highway lighting improvements; providing ADA – related improvements; providing drainage improvements, and installing signs, pavement markings, and other incidentals.

2. The Contractor is reminded of the requirements of the 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 Devices.

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 areas to be filled with leveling course, reconstructed and cold planed 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 commencement of any work.

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, thermoplastic line markings, traffic tapes and epoxy adhesives 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, connecting approaches, side streets and driveways as shown on the plans and/or as directed by the Engineer.

11. Existing drainage systems shall 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 side streets at all times.

13. The Contractor shall clean and remove any accumulation of aggregates and debris along the roadside within 10 feet of the edge of pavement. This work shall be considered incidental to the various contract items.

14. 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.

15. Base Course shall be either Plant Mix Asphalt Concrete Base Course, Recycled Plant Mix Asphalt Concrete Base Course or Plant Mix Glassphalt Concrete Base Course. Selection will be based on the least expensive base course alternative.

16. All existing joints and all cracks 1/8" or greater in P.C.C. Pavement shall be cleaned and sealed with an A.C. crack sealer as shown on Note 6, Sheet SD–31. This work shall be considered incidental to Asphalt Concrete Pavement, Mix No. IV and will not be paid for separately.

17. For ADA General Notes, refer to Sheet CR1, General Notes and Curb Ramp Notes.

COLD PLANING NOTES

1. All saw cutting work shall be considered incidental to Cold Planing and will not be paid for separately.

2. The exact locations and limits or areas to be cold planed will be determined in the field by the Engineer.

3. Prior to cold planing over an existing structure, the Contractor shall determine the actual depth of the existing asphalt concrete pavement. The Contractor shall take several cross section measurements throughout the structure. If the thickness of the existing pavement is less than the proposed resurfacing thickness, the Contractor shall remove the existing pavement to the level of the structure and resurface to the original thickness. This work shall be considered incidental to cold planing and will not be paid for separately.

4. In cold planing the pavement over an existing structure, the Contractor shall exercise care not to damage any portion of the structure, especially the slab, joints, drain pipes or reinforcement. Any damage to the structure during the cold planing operations shall be repaired by the Contractor at no cost to the State. Repair work shall be as directed by the Engineer, The Contractor shall verify the existing pavement thickness by hand digging at various locations. This work shall be considered incidental to cold planing and will not be paid for separately.

5. 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 along the lane line for longitudinal drop–off, as accepted by the Engineer. This work shall be considered incidental to Cold Planing. All transition tapers shall be removed prior to resuming the paving operations.

6. Cold Planing equipment shall not be used in removing existing A.C. Pavement over concrete gutter unless otherwise indicated. This work shall be incidental to Cold Planing.

7. Special Requirements at Existing Freeway Overpasses – Prior to cold planing, the Contractor shall take several measurements of the vertical clearances with any existing freeway overpass structure, including measurements at the freeway shoulder, and determine the location where the vertical clearance is at its minimum. All vertical clearance measurements and determinations shall be submitted to the Engineer for future reference. Upon completion of the cold planing and resurfacing operations, the new freeway finished grades shall be checked by the Contractor for vertical clearances with the overpass structure at the same locations, as previously measured. The new vertical clearance measurements shall not be less than the existing vertical clearance measurements. No exceptions will be allowed. If in case of any violation to the above requirement, the Contractor shall remedy the situation to the satisfaction and approval of the Engineer. This work, as described, shall be considered incidental to cold planing, and will not be paid for separately.

P/M: BST
OPER: FAI;*BTY
REVISED: 08/05/99

DATE: 02/23/99
SCALE: 1 = 1
FILE: 9815–62

SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE

ORIGINAL PLAN
NOTEBOOK
No.

BENJAMIN S. TANAKA
LICENSED PROFESSIONAL ENGINEER
No. 2055–C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Benjamin S. Tanaka

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES, LEGEND AND ABBREVIATIONS

INTERSTATE ROUTE H–1 RESURFACING
Vic. of Punchbowl Off Ramp to Kapiolani IC
F.A.I. Project No. IM–H1–1(234)

Scale: No Scale Date: June 1, 1999

SHEET NO. T4 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H1-1(234)	2000	5	557

LEGEND

	Pavement Weakened Areas
	PCC Pavement Weakened Areas
	PCC Pavement Repair
	Bridge Approach Reconstruction
	Reconstructed Pavement Areas
	Resurfacing Limits
—e—	Existing Electrical Line
—E—	New Electrical Line
○jp	Existing Joint Pole
○pp	Existing Power Pole
○emh	Existing Electric Manhole
●emh	Adjusted Elec. MH Frame/Cover
○EMH	New Electric Manhole
—t—	Existing Telephone Line
—T—	New Telephone Line
○tp	Existing Telephone Pole
○tmh	Existing Telephone Manhole
●tmh	Adjusted Tele. MH Frame/Cover
○TMH	New Telephone Manhole
—sc—	Existing Signal Corps Line
—SC—	New Signal Corps Line
○scmh	Existing Signal Corps Manhole
●scmh	Adjusted Signal Corps MH Frame/Cover
—tv—	Existing TV Cable
—TV—	New TV Cable
—w12"—	Existing Water Line (Size as Indicated)
— W12"—	New Water Line (Size as Indicated)
○wmh	Existing Water Manhole
●wmh	Adjusted Water MH Frame/Cover
○WMH	New Water Manhole
○av	Existing Water Air Valve
●av	Adjusted Water Air Valve
○AV	New Water Air Valve
○wv	Existing Water Valve Box
●wv	Adjusted Water Valve Box
○WV	New Water Valve Box
▭wm	Existing Water Meter
▬wm	Adjusted Water Meter
▭WV	New Water Meter
⊸fh	Existing Fire Hydrant
⊸FH	New Fire Hydrant
⊠	Existing Water Manhole/Valves to be Removed
—s12"—	Existing Sewer Line (Size as Indicated)
— S12"—	New Sewer Line (Size as Indicated)
○smh	Existing Sewer Manhole
●smh	Adjusted Sewer MH Frame/Cover
○SMH	New Sewer Manhole
—g6"—	Existing Gas Line (Size as Indicated)
—G6"—	New Gas Line (Size as Indicated)
○gv	Existing Gas Valve Box
●gv	Adjusted Gas Valve Box
○GV	New Gas Valve Box
○gmh	Existing Gas Manhole
●gmh	Adjusted Gas MH Frame/Cover
○GMH	New Gas Manhole
◎mon.	Existing Monument
◉mon.	Adjusted Monument
◎mon.	New Monument
—d24"—	Existing Drain Line (Size as Indicated)
24" RCP	New Drain Line (Size as Indicated)
○sdmh	Existing Storm Drain Manhole
●sdmh	Adjusted Storm Drain MH Frame/Cover
○SDMH	New Storm Drain Manhole
⊟gdi	Existing Grated Drop Inlet
cb	Existing Catch Basin
⊧	Existing Traffic Sign
⊧	New Traffic Sign
	Existing Highway Lighting Standard
	New Highway Lighting Standard

ABBREVIATION

A.C., a.c.	Asphalt Concrete
℄	Baseline
e.p.	Existing edge of pavement
e.s.	Existing edge of shoulder
E.P.	New Edge of Pavement
E.S.	New Edge of Shoulder
S.E.	Super Elevation
P.C.	Point of Curvature
P.C.C.	Point of Compound Curve (for Alignment)
P.C.C.	Portland Cement Concrete
P.I.	Point on Intersection
P.O.C.	Point on Curvature
P.T.	Point of Tangency
R	Radius
S.C.	Spiral Curve
I.B., i.b.	Inbound
O.B., o.b.	Outbound

PM: BST
OPER: SHA,*FAI
REVISED: 05/03/99

DATE: 03/19/99
SCALE: 1 = 1
FILE: 9815-180

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

BENJAMIN S. TANAKA ★ LICENSED PROFESSIONAL ENGINEER No.2055-C ★ HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Benjamin S. Tanaka

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES, LEGEND AND ABBREVIATIONS

INTERSTATE ROUTE H-1 RESURFACING
Vic. of Punchbowl Off Ramp to Kapiolani IC
F.A.I. Project No. IM-H1-1(234)

Scale: No Scale Date: June 1, 1999

SHEET NO. T5 OF 5 SHEETS