# STANDARD PLANS SUMMARY

FED. ROAD	STATE	FED. AID	FISCAL	SHEET	TOTAL
DIST. NO.		PROJ. NO.	YEAR	NO.	SHEETS
HAWAII	HAW.	STP-7500(1)	1996	2	23

TITLE	DATE
Notes and Miscellaneous Details	07/01/86
Typical Structure Excavation and Backfills Pay Limits	07/01/86
Concrete Box Girder	07/01/86
Concrete Box Girder	07/01/86
Concrete Box Girder	07/01/86
Prestressed Concrete Piles	r07/16/90
Prestressed Concrete Piles	r07/16/90
Chain Link Fence With Toprail	r03/06/87
Chain Link Fence Without Toprail	r07/26/90
Wire Fence With Metal Posts	07/01/86
Typical Details of Curbs and/or Gutters	07/01/86
1	Notes and Miscellaneous Details  Typical Structure Excavation and Backfill Pay Limits  Concrete Box Girder  Concrete Box Girder  Concrete Box Girder  Concrete Box Girder  Prestressed Concrete Piles  Prestressed Concrete Piles  Chain Link Fence With Toprail  Chain Link Fence Without Toprail  Wire Fence With Metal Posts

D-04 Typical Details of Curbs and/or Gutters  D-05 Typical Details of Reinforced Concrete Drop Driveway  D-06 Centerline and Reference Survey Monument  D-07 Street Survey Monument  D-08 Landscaping Shrub and Tree Planting  D-09 Field Office	r07/26/90 07/01/86 07/01/86 07/01/86 07/01/86
D-04	07/01/86 07/01/86 07/01/86 07/01/86
D-05 Typical Details of Reinforced Concrete Drop Driveway D-06 Centerline and Reference Survey Monument D-07 Street Survey Monument D-08 Landscaping Shrub and Tree Planting D-09 Field Office	07/01/86 07/01/86 07/01/86
D-06 Centerline and Reference Survey Monument  D-07 Street Survey Monument  D-08 Landscaping Shrub and Tree Planting  D-09 Field Office	07/01/86 07/01/86
D-07 Street Survey Monument  D-08 Landscaping Shrub and Tree Planting  D-09 Field Office	07/01/86
D-08 Landscaping Shrub and Tree Planting D-09 Field Office	
D-09 Field Office	A
	07/01/86
D 10 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

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

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)	r09/01/8
TE-63	Guardrail Type 4 (Rigid Barrier)	r09/01/8
TE-64	Portable Concrete Barrier	r11/03/89
TE-65	Guardrail Type 4. Miscellaneous	r09/01/8
TE-66	Barricades	07/01/86
TE-67	Delineation & Pavement Markings at Bridges	07/01/8
TE-68	Wheelchair Ramps	r11/03/89
TE-69	Wheelchair Ramps	r11/03/89

#### NOTE:

| 02/15/91 | REVISED STANDARD PLANS H-19

07/26/90 REVISED STANDARD PLANS D-02.

10/16/90 REVISED STANDARD PLANS H-16,H-17, H-22 & H-23.

07/16/90 REVISED STANDARD PLANS B-12.B-13.

05/09/90 REVISED STANDARD PLANS TE-30.TE-31. & TE-32.

11/03/89 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

09/01/87 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,

03/06/87 REVISED STANDARD PLANS D-01, TE-09, TE-40, TE-50, TE-51, TE-57, TE-59, TE-61, TE-63 & TE-64.

REVISION

TE-65 & TE-69.

DATE

STANDARD PLANS APPLICABLE TO THIS PROJECT ARE INDICATED BY A " • "

NEXT TO THE STANDARD PLAN NO.

(D-07 • )

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# STANDARD PLANS SUMMARY

KUNIA ROAD RESURFACING

Kunia Gate to Wilikina Drive

Federal Aid Proj. No. STP-7500(1)

SHEET No. 1 OF 1 SHEETS

#### GENERAL NOTES

- The scope of work for this project consists of reconstructing weakened pavement area, resurfacing; raising or replacing existing curb and gutters; and installing guardrails, signs and pavement markings and safety improvements.
- 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.
- 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 or 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 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 All holes, depressions and wheel ruts shall be filled and compacted with Asphalt Concrete Pavement, Mix No. IV prior to resurfacing. This work will be paid for under Asphalt Concrete Pavement, Mix No. IV.
- 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, sidewalk and bus turnout shall consist of clearing, grubbing, grading, reshaping and compacting the unpaved shoulders with suitable 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. Removal and Disposal of existing concrete curb shall be measured and paid for under Subsections 609.04 Method of Measurement and 609.05 Basis of Payment under the Item 609.9000 Removal and Disposal of Existing Concrete Curbing.

## 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 shall be determined in the field by the Engineer.
- 3. Prior to cold planing over an existing concrete pavement, the Contractor shall determine the actual depth of the existing asphalt concrete pavement. The Contractor shall take several cross section measurements throughout the concrete pavement. 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 concrete pavement and resurface to the original thickness. This work shall be considered incidental to cold planing, and will not be paid for separately.
- In cold planing the pavement over the concrete pavement, the Contractor shall exercise care not to damage any portion of the concrete pavement, especially the slab, joints, drain pipes or reinforcement. Any damage to the concrete pavement during the cold planing operations shall be repaired by the Contractor at his own expense. 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. Exposure of existing aggregate base is expected when cold planing deeper than 4-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. This word shall be considered incidental to the new Base Course, and will not be paid for separately.
- 6. 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 12:1 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.
- 7. Remove all existing geotechnical fabric under roadway surface before resurfacing.
  The existing geotechnical fabric is located approximately 2½ inches below existing roadway finish elevation.
- 8. Cold plane 3.5" throughout roadway at & Sta. 7+84 and transition to 3.5" cold planing at median and 7.5" cold planing at edge of pavement curb at & Sta. 13+00+.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-7500(1)	1996	3	23

## <u>LEGEND</u>

Reconstruction Areas

	Leveling Areas
	Cold Planing Areas
	Cold Planing with Leveling Course
	Resurfacing Limits
ues	Existing Underground Electric Secondary Line
t	Existing Telephone Line
$\circ t_{P}$	Existing Telephone Pole
V	Existing Telephone Pullbox
	Existing Signal Corps Line
w12	Existing 12" Water Line
—акту—ш—12—	Existing 12" Army Water Line
hw	Existing Hot Water Line
$\square_{wvb}$	Existing Water Valve Box
$\circ_{wv}$	Existing Water Valve
<i>&gt;12</i>	Existing 12" Sewer Line
—army—s—12—	Existing 12" Army Sewer Line
° smh	Existing Sewer Manhole
d24	Existing 24" Drain Line
—army—fm—24—	Existing 24" Army Force Main
•	Existing Grated Drop Inlet
$\Box$ $di$	Existing Drop Inlet
o_cb	Existing Catch Basin
ac	Existing Army Cable
tp	Existing Trans Pac Cable
jtc	Existing Joint Trunking Cable
	Existing Standard Lighting Underground Conduit
-slpb	Existing Street Lighting System Pullbox
Ŷ	Existing Street Light Standard
ts	Existing Traffic Signal Line
□ topb	Existing Traffic Signal Pullbox
	Existing Loop Detectors
	Existing Single Metal Guardrail
©⊄ mon.	Existing Centerline Monument

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

## GENERAL NOTES AND LEGEND

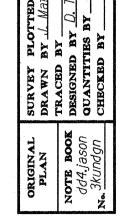
KUNIA ROAD RESURFACING

Kunia Gate to Wilikina Drive

Federal Aid Proj. No. STP-7500(1)

Date: Feb., 1996

SHEET No. 1 OF 1 SHEETS



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