## GENERAL NOTES

- The scope of work for this project consists of resurfacing existing pavement with a 2" Hot Mix Asphalt (HMA) pavement overlay; reconstructing weakened pavement areas; cold planing; adjusting water valves, manhole covers, survey monuments; installation of pavement marking and striping; installation of reflector markers on existing guardrails; replacing traffic signs; updating guardrail terminal ends and repairing damaged guardrails; cleaning of existing culverts and drainage structures; and all incidental work.
- The Contractor's attention is directed to Subsection 107.13 -Public Convenience and Safety: Section 645 - Traffic Control and Subsection 104.04 Maintenance of Traffic.
- 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.
- All holes, depressions, and wheel ruts and leveling areas as shown on the plans shall be filled and compacted with Asphalt Concrete Pavement, Mix No. V leveling course prior to resurfacing. The exact locations and limits or areas to be filled with leveling course, reconstructed, cold planed and crack sealed shall be determined in the field by the Engineer. All loop detectors that are disturbed by reconstruction or cold planing shall be replaced and considered incidental to the various traffic signal system items.
  - Prior to resurfacing, the existing surface shall be cleaned as described in Section 310 of the Standard Specifications and as amended. Additionally, all cracks and joints must be sealed as descibed in Section 401 of the Special Provisions. Payment shall be considered incidental to Item No. 401.1000 - Hot Mix Asphalt (HMA) Pavement, Mix No. IV.
  - The Contractor shall notify the State in writing, two (2) weeks prior to starting paving operations.
- 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 Hot Mix Asphalt (HMA) Pavement and will not be paid for separately.
- Reflector markers (RM-2) with steel posts shall be installed behind guardrails at the start and end of guardrail systems and at culvert ends. Reflector markers (RM-2) with flexible post shall be installed at culvert ends unprotected by guardrails. Type II object markers shall be installed on utility poles and trees within State right of way.
- Unless directed by the Engineer, connections shall be cold planed at all limits of resurfacing including the beginning and end of project, connecting approaches, side streets and driveways.
- Dressing shoulder, shall consist of clearing, grubbing, grading, reshaping and compacting the unpaved shoulders with suitable excavated material as shown on the plans and/or as directed by the Engineer. Shoulder areas without guardrails shall be dressed at 6:1 slope (max.) unless shown on plans or directed by the Engineer.
  - Existing drainage system will be functional at all times during construction. The Contractor is to furnish materials, equipment, labor, tools and incidentals necessary to accomplish maintenance of flow, the cost of which shall be considered incidental to the various contract items.

- The Contractor shall provide for safe access to and from all existing driveways and streets at all times.
- 14. All saw cutting of existing pavement shall not be measured or paid for separately, but shall be considered incidental to various contract
- Unless directed or approved by the Engineer, staggered paving resulting in longitudinal dropoff will not be permitted. In case of emergency, transition wedge with 10:1 slope shall be constructed along the longitudinal joint. Furthermore, temporary markings consisting of double, 4-inch yellow reflective tape with Type "D" markers at 20' o.c. shall be installed. Prior to resuming paving, the transition wedge shall be removed by saw cutting. Furnishing, paving and removing the transition wedge will not be paid for separately but will be considered incidental to Hot Mix Asphalt (HMA) Pavement.
- 16. At the end of each paving day, transverse joint must be constructed to provide a smooth riding connection. Transition wedge shall be constructed at 10:1 slope or flatter. Prior to resuming paving, the transition wedge shall be removed by saw cutting. Furnishing, paving and removing the transition wedge will not be paid for separately but will be considered incidental to Hot Mix Asphalt (HMA) Pavement.
- 17. Resetting or adjusting of existing guardrail heights shall include adjustment of terminal sections including foundations, etc. to required height.
- Smooth riding connections shall be constructed at all limits of resurfacing including the beginning and end of project, connecting approaches and side streets as shown on the plans and/or as directed by the Engineer.
- In cold planing the pavement over the structure, the Contractor shall exercise care not to damage any portion of the structure, specially the structure deck, joints, drain pipes or reinforcement. Any damage to the structure during the cold planing operation 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.
- 20. Contractor shall adjust pipe casings of existing centerline survey monument whether shown or not on the plans, in accordance with Standard Plan D-07 or any other method as directed by the Engineer to suit field condition. Contractor to verify existing conditions prior to construction. Adjustment of centerline monument will be paid for at the Contract Unit Price regardless of method used. Contractor shall clean existing monuments to expose survey pins.
- 21. Along Honoapiilani Highway construction work may be done at night and on weekends. See Special Provisions Section 645 (Work Zone Traffic Control).
- 22. If nighttime construction occurs then the following measures, as required by the U.S. Fish and Wildlife Service, must be implemented:
  - a. No nighttime construction will occur during the seabird fledging period, September 15 through December 15.
  - b. All lighting should be shielded and directed toward the ground.
  - c. All construction personnel will be required to attend seabird awareness training program prior to the initiation of construction.
  - d. A pet carrier will be on site at all times to temporarily hold any downed seabird recovered in the general project area. In the case that a downed seabird is found, it will be retrieved and placed in the pet carrier in a shady area until Hawaii Division of Forestry and Wildlife (DOFAW, 808-984-8100) or National Park personnel retrieve the bird.

FED. ROAD	STATE	FED. AID	FISCAL	SHEET	TOTAL
DIST. NO.		PROJ. NO.	YEAR	NO.	SHEETS
HAWAII	HAW.	STP-0900(073)	2010	ADD.3	38

e. Contact the U.S. Fish and Wildlife Service or DOFAW personnel immediately upon the recovery of any downed seabird.

Leveling Course Areas

## LEGEND

Reconstruction Areas Cold Planing Areas

Resurfacing Limits

Existing Guy Pole

Existing Joint Pole

Existing Power Pole Existing Drain Line

Existing Electrical Line

Existing Sewer Line Existing Force Main

Existing Sewer Manhole Air Valve

Adjusted Sewer Manhole Air Valve

Existing Telephone Line Adjusted Water Valve

Adjusted Water MH Frame/Cover

Adjusted Water MH Frame/Cover

Existing Fire Hydrant

Adjusted Storm Drain Manhole

Existing Telephone Pullbox Existing Storm Drain Catch Basin

—w—12— Existing 12" Water Line

—w—16— Existing 16" Water Line

Existing Fiber Optic Manhole

6-9-11 | Revised General Notes No. 5, 9, \$ 11.

Adjusted Cable TV Pull Box

6-9-11 Added Leveling Course Areas symbol to Legend.

DATE REVISION STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION GENERAL NOTES \$ LEGEND

KULA HIGHWAY RESURFACING Haakakai Bridge towards Old Lower Kula Rd. and HONOAPIILANI HIGHWAY RESURFACING

Kapoli St. to Kaheawa Wind Farm Access Rd. Federal-Aid Project No. STP-0900(073)

> Date: July, 2009 SHEET No. 1 OF 1 SHEETS

