



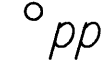
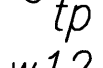
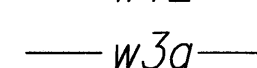
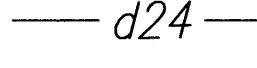
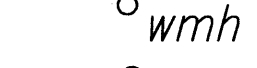




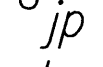
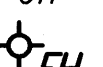
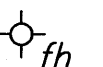
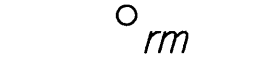
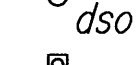
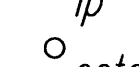
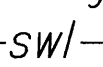
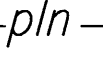
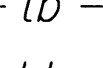
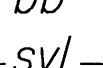
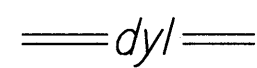
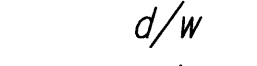
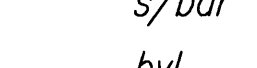
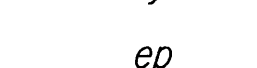


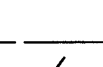
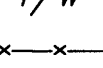










GENERAL NOTES:

1. The Scope of Work for this project consists of improvements to the Intersection of Route 11 and Kulani Road. Improvements consist of roadway widening to provide a traffic signal with left turn pockets; concrete channels and box culverts; guardrails; waterline relocation; and replacing driveway culverts. Improvements to Kulani Road consist of roadway widening to provide left turn pockets; concrete box culvert; and obtaining a 10-foot wide property acquisition on South Kulani Road.
2. The Contractor is reminded of the requirements of Subsection 105.16 - Subletting of Contract, which requires him to perform work amounting to not less than 30 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 Standard Specifications and Special Provisions: Subsection 104.11 - Utilities and Services; Section 107 - Legal Relations and Responsibility to Public; and Section 645 - Work Zone 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 Contractor shall notify the Engineer in writing, two (2) weeks prior to starting any paving operations.
7. Dressing of shoulders 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.
8. 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.
9. Earth swales shall be graded to drain. This work shall be considered incidental to the various contract items.
10. All saw cutting work shall be considered incidental to contract items.
11. The Contractor shall provide for access to and from all existing driveways at all times. The Contractor shall coordinate with Homeowner if driveway closure is required.
12. The Contractor shall remove and dispose of all existing raised pavement markers and preformed pavement marking tape prior to the overlaying of Asphalt Concrete pavement. The work shall be incidental to Asphalt Concrete Pavement.

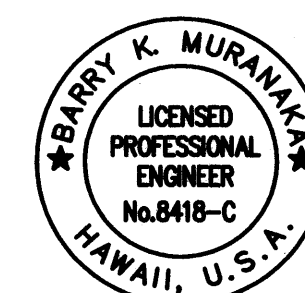
13. All holes, depressions and wheel ruts shall be filled and compacted with Asphalt Concrete Pavement, Mix No. V prior to resurfacing. This work shall be incidental to Asphalt Concrete Pavement.
14. Smooth riding connections shall be constructed at all limits of the project, including the beginning and end of project, connecting approaches, side streets and driveways as shown on the plans and/or as directed by the Engineer.
15. All guardrail spacer blocks shall be recycled plastic blockouts or polyethylene offset blocks approved by DOT.
16. The Contractor shall clean and remove any accumulation of aggregates along the roadside within 15 feet of the edge of pavement. This work shall be considered incidental to the various contract items.
17. Demolishing, removing and disposing of existing drainage structures shall be considered incidental to the various contract items.
18. All necessary permits shall be obtained by the Contractor at his own cost.
19. The Contractor shall comply with the State of Hawaii's Occupational Safety and Health Law (DOSH).
20. All lanes shall be opened to traffic during the morning peak hours from 6:30 a.m. to 8:30 a.m., during the afternoon peak hours from 3:30 p.m. to 6:00 p.m. and off work hours or as directed by the Engineer. Only one lane of highway shall be closed during work hours.
21. Unprotected pavement dropoffs greater than 2" shall not be allowed during non-working hours, except where approved by the Engineer in writing.
22. Contractor shall maintain at least one paved shoulder free and clear of debris for pedestrian and bicycle traffic at the end of each work day.
23. Material from cold planing operations shall remain the property of the State and all excess shall be stock piled within 2 miles of the project limits as directed by the Engineer.
24. To minimize potential impacts to the Hawaiian Hoary Bats, woody vegetation taller than 15 feet high shall not be cleared between May 15 and August 15.
25. If brush clearing activities occur between April 1 and August 15 (peak Hawaiian Hawk breeding season), area shall be surveyed by a qualified biologist for nesting hawks, prior to commencement of brush or tree clearing. No activity will be permitted within 1,320 feet of an active Hawaiian Hawk nest. Cost for Biologist shall be incidental to various contract items.
26. In the event that historical resources, including human skeletal remains, cultural materials, lava tubes, and lava blisters/bubbles are discovered during construction activities, the contractor shall cease work in the immediate vicinity of the find, protect it from additional disturbances, and call the State Historical Preservation Division, Hawaii Island Section at (808) 933-7653.

LEGEND

	Reconstruction Areas
	Transitional Cold Planing Areas
	Resurfacing Limits
	Backfill Areas
	Existing Power Pole
	Existing Telephone Pole
	Existing 12" Water Line
	Existing 3" Water Line, Abandoned
	Existing 24" Drain Line
	Existing Water Manhole
	Adjusted Water Manhole
	Existing Water Meter
	Adjusted Water Meter
	Water Valve Box Adjustment
	Adjusted Water Valve Box
	Existing Joint Pole
	Existing Electrical Overhead Line
	Adjusted Fire Hydrant
	Existing Fire Hydrant
	Existing Reflector Marker
	Existing Down Spout Outlet
	Existing Light Pole
	Existing Clean Out To Grade
	Single White Line
	Passing Lane
	Top of Bank
	Bottom of Bank
	Single Yellow Line
	Double Yellow Line
	Existing Drive Way
	Existing Stop Bar
	Existing Broken Yellow Line
	Existing Edge of Pavement
	Existing Monument
	Existing Traffic Sign
	Existing Right-of-Way Line
	Existing Fence
	Headwall
	Reflector Marker

ABBREVIATIONS:

Aband.	Abandoned
ac	Asphalt Concrete
BL	Base Line
bb	Bottom of Bank
Conc.	Concrete
COTG	Cleanout to Grade
CRM	Concrete Rubble Masonry
d/w	Drive Way
DI	Drain Inlet
DL	Drainline
Emb.	Embankment
ep	Existing Edge of Pavement
Ep	Edge of Pavement
es	Existing Edge of Shoulder
ES	Edge of Shoulder
et	Existing Edge of Travel Way
ET	Edge of Travel Way
Exist.	Existing
Exc.	Excavation
F.A.P.	Federal Aid Project
FHWA	Federal Highway Administration
GRP	Grouted Rubble Paving
LF	Linear Feet
Lt.	Left
Mon.	Monument
No.	Number
o.c.	On Center
o/s	Offset
oh	Overhead
PC	Point of Curvature
PP	Power Pole
PT	Point of Tangency
PL	Property Line
rm	Reflector Marker
RPM	Raised Pavement Marker
R/W, r/w	Right-of-way
Rt.	Right
Shts.	Sheets
SOH	State of Hawaii
Sta.	Station
tb	Top of Bank
Thk.	Thick
TMK	Tax Map Key
Typ.	Typical
bldg	Building
w	Water



LICENSE EXPIRES 4/30/12

THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION

[Signature]

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES AND LEGEND

Volcano Road Intersection and
Drainage Improvements
Federal-Aid Project No. HS-STP-011-2(38)

Scale: None Date: November 2010

SHEET No. 1 OF 1 SHEETS