FED. ROAD	STATE	HIGHWAY	FISCAL	SHEET	TOTAL
DIST. NO.		PROJ. NO.	YEAR	NO.	SHEETS
HAWAII	HAW.	460A-02-06	2010	2	16

GENERAL NOTES

This project consists of Slope Stability Improvements for the downslope side of a highway embankment across Kamakahi Gulch which include (1) Drainage Improvements using shoulder ditches subdrain and storm drain pipes, (2) Crack sealing with pavement reinforcement and new AC surfacing and (3) Slope regrading.

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.

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 - Work Zone Traffic Control.

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. Other obstacles may be encountered during the course of work. The Contractor shall be held liable for any damages incurred to the existing facilities and/or improvements as a result of his operations.

The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting construction.

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.

Existing drainage will be maintained 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.

Earth swale shall be graded to drain. This work shall be considered incidental to the various contract items.

All saw cutting work shall be considered incidental to roadway excavation.

All construction signs shall be left in place until all construction items have been completed. Contractor shall obtain prior approval from the Engineer to remove construction signs.

All work to remove temporary facilities by the Contractor shall be considered incidental to the various contract items.

Complete control of access to properties adjacent to the Highway Right-of-Way shall be maintained throughout the construction period. The Contractor shall have the temporary fences installed and approved by the Engineer prior to removal of the existing fences. Furthermore, the Contractor shall have the permanent fences installed and approved by the Engineer prior to removal of the temporary fences.

The Contractor shall have existing utility lines toned prior to installing quardrails in the vicinity of the utility lines. If the proposed guardrail posts are within 3 feet of the utility lines, the Contractor shall excavate and expose the utility line to determine alignment and depth. The Contractor shall install guardrails in these areas by acceptable methods other than driving, such as hand digging to prevent damages with the existing lines.

Revegetation for temporary mulching and permanent restoration shall consist of Primrose Willow, Job's Tears and California Grass. The areas of exposed ground shall be immediately hydromulched with the revegetation material to prevent erosion.

UTILITY NOTES - RESPONSIBILITY OF STATE'S CONTRACTOR

Pole and line locations for relocated MECO and other utilities shown on the plans are approximate. Overhead lines and poles shall be placed outside of the roadway clear zone limits. Coordination to insure that the locations do not conflict with the project improvements is the responsibility of the Contractor.

ABBREVIATIONS

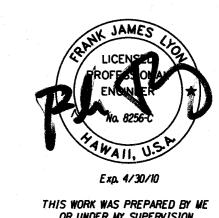
@	At
AC, A.C.	Asphaltic Concrete
A.C.B	Asphalt Concrete Base
ASB	Asphaltic Subbase
Approx	Approximate
BB	Bottom Bank
B	Baseline
BM	Benchmark
CF	Cubic feet
<u>¢</u>	Centerline
CL	Class
c/	Clear
CLF	Chain Link Fence
CMP	Corrugated Metal Pipe
Conc	Concrete
Cont	Continuos
CRM	Concrete Rubble Masonry
Det	Detail
Dia, Ø	Diameter
DOT	Department of Transportation
Ea	Each
Elev., EL.	Elevation
Emb	Embankment
EP	Electrical pole
ERD	Edge of Road

EW	Each way
Exist	Existing
F.G.	Finish Grade
Fin	Finish
FT	Feet
G	Ground
Horiz	Horizontal
Inv	Invert
LF	Linear Feet
LT	Left
Max	Maximum
MECO	Maui Electrical Company
Mon	Monument
Min	Minimum
O.C.	On Center
0.D.	Outside Diameter
Pav't.,Pvmt	Pavement
%	Percent
P	Property line, Plate
Prop	Proposed
Rd .	Road
Reinf	Reinforcement
ROW, R/W	Right of Way
RT	Right
S	Slope
SDMH	Storm Drain Manhole
SF	Square feet
Shldr	Shoulder
Sht	Sheet
SS	Side slope
Sta	Station
Std	Standard
Тур	Typical
TB	Top Bank
USGS	US Geological Survey
UTPB	Untreated Permeable Base
Vert	Vertical

<u>LEGEND</u>

°ep Existing Electrical Pole —d—60— Existing 60" CMP Drain Line _24" HDPE New 24" HDPE Drain Line Existing Traffic Sign with 1 Post - - - Existing Single Metal Guardrail Existing Fence Finish Grade New Drainage Inlet (DI)

New Drainage Manhole (DMH)



STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

GENERAL NOTES ABBREV., LEGEND

MAUNALOA HIGHWAY Slope Stabilization at Milepost 13 Highway Project No. 460A-02-06

Scale: AS NOTED

Date: JAN 2010

