## GENERAL NOTES:

- 1. The scope of work for this project consists of rehabilitation of Uma'uma Steam bridge along Hawaii Belt Road, including bridge widening, new concrete piers, approach roads, earthwork, guardrails, signs, and striping, erosion control BMPs, and traffic control; and removal of the ACROW Bridge and the detour road.
- 2. The Contractor's attention is directed to the following sections of the Standard Specifications: Subsection 107.06 Contractor Duty Regarding Public Convenience; Subsection 104.11 Utilities and Services; and Section 645 Work Zone Traffic Control.
- 3. 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.
- 4. 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.
- 5. The Contractor shall verify the presence of existing overhead and underground utilities which may conflict with construction activities and shall coordinate with the utility company for temporary relocation, as necessary.
- 6. All existing utilities, whether or not shown on the plans, shall be protected at all times by the Contractor during construction unless specified on the plans to be abandoned. All existing utility/light poles, overhead utilities and guy poles/wires shall remain in place and operational. The Contractor shall be held liable for any damages incurred to the existing utilities as a result of his operations. All damaged portions shall be replaced in accordance with the standards and specifications of the affected utility company at no cost to the State. No delays or extensions of contract time will be allowed as a result of these required repairs.
- 7. Existing drainage system shall be kept functional at all times during construction.
- 8. Existing facilities and/or pavement to remain which has been damaged by the Contractor shall be restored to its original condition.
- 9. All graded areas and all grassed areas damaged by construction activities shall be planted in accordance with Specifications Section 641 Hydro-Mulch Seeding.
- 10. The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting paving operations.
- 11. All Asphalt Concrete materials from cold planing, reconstruction and roadway excavation operations shall become the property of the Contractor.
- 12. Smooth riding connections shall be constructed at all limits of 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.
- 13. The Contractor shall remove and dispose of all existing raised pavement markers and traffic tapes prior to the overlaying of Asphalt Concrete.

- 14. All workers within the State right-of-way who are exposed to either vehicles using the roadway or to construction equipment shall wear high-visibility safety apparel that meets the Performance Class 2 or 3 requirements of ANSI/ISEA 107-2004. "Workers" is defined as people on foot whose duties place them within the State right-of-way, such as, but not limited to construction and maintenance forces, equipment operators, survey crews, utility crews, responders to incidents (e.g., EMT and firemen), and law enforcement personnel directing traffic, investigating accidents, handling lane closures and obstructed roadways.
- 15. No section of incomplete guardrail, footing, and/or excavation shall be left unshielded at the end of the work day.
- 16. 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.
- 17. Should historic remains such as artifacts, burials, concentrations of shail or charcoal be encountered during construction activities, work shall cease immediately in the immediate vicinity of the find. The Contractor shall immediately notify the Planning Department (808) 961-8288 and State Historic Preservation Division at (808) 933-7650, which will assess the significance of the find and recommend the appropriate mitigation measures, if necessary.

### **GRADING NOTES:**

- All grading work shall conform to Chapter 10 of the Hawaii County Code and the Geotechnical Report by Geolabs, Inc., "Geotechnical Report Value Engineering Cost Proposal Rehabilitation of Umauma Stream Bridge, F.A. Project No. BR-019-2(61), North Hilo, Island of Hawaii, Hawaii" dated August 26, 2014.
- 2. The Contractor, at his expense, shall keep the project and surrounding areas free from dust nuisances. The work shall be in conformance with the Air Pollution Control Rules of the State Department of Health, HAR 11-60. 1, fugitive dust.

- 3. The Contractor shall remove all silt and debris deposited in drainage facilities, roadways, and other areas resulting from his work. The costs incurred for any necessary remedial action by the Department of Public Works shall be payable by the Contractor.
- 4. All grading operations shall be performed in conformance with applicable Provisions of the Hawai'i Administrative Rules, Title II, Chapter 55, Water Pollution Control Rules of the State Department of Public Works, County of Hawai'i.
- 5. The Contractor shall sod or plant all slopes and exposed areas immediately after the grading work has been completed. Grassing shall be in accordance with the Standard Specifications for Public Works Construction, dated September 1986, as applicable to the County of Hawaii. Payment shall be incidental to the various items of the proposal.
- 6. Fills on slopes steeper than 5:1 shall be keyed.
- 7. The Contractor shall inform the Department of Public Works of the location of the disposal and/or borrow site(s) required for this project when an application for a grading permit is made. The disposal and/or borrow site(s) must also fulfill the requirements of the Grading Ordinance.
- 8. No grading work shall be done on Saturdays, Sundays, holidays, and furlough days anytime without prior approval from the Department of Public Works. Grading work on normal working days shall be between the hours of 8:00 a.m. to 4:30 p.m.
- 9. Fills shalls be compacted to 95 percent (95%) of maximum density per ASTM D1557 test.

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-019-2(61)	2013	.O. <i>3</i>	117

# GRADING NOTES (continued):

- 10. The Contractor shall remove all vegetation before placing fills on natural ground surface.
- 11. No material and/or equipment shall be stockpiled or otherwise stored within the highway right-of-way, except at locations designated in writing and approved by the District Engineer.

### ABBREVIATIONS:

### LEGEND:

<u> </u>	<u> </u>	<u>LLOLIID.</u>	
AC BMP C Elev. EP ep ES	Asphalt Concrete Baseline Best Management Practices Chord Elevation New Edge of Pavement Existing Edge of Pavement New Edge of Shoulder	A 140	New Guardrail  GRP A  Monument  Existing Major/Minor Contour  New Major Contour
es Fuist	Existing Edge of Shoulder	142	New Minor Contour
Exist. GDI	Existing Grated Drop Inlet	000088888	Inertial Barrier System
GRP HBR	Grouted Rubble Paving Hawaii Belt Road		Portable Concrete Barrier
HMA	Hot Mix Asphalt		
Inv.	Invert		
Lc	Length of Curve		
Lt.	Left of ₽		

PC Point of Curvature

PCC Point of Compound Curvature

PT Point of Tangency

Matchline

on center

Offset

O.C.

0/5

PCB Portable Concrete Barrier
PGL Profile Grade Line

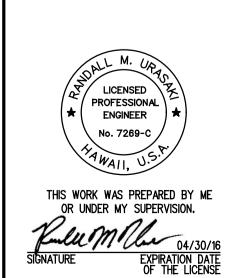
R Radius

RCP Reinforced Concrete Pipe

Rt. Right of B
R/W Right-of-Way
Sta. Station along B
T Tangent

Fence

TRPF Temporary Rockfall Protection



DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES, LEGEND

# ABBREVIATIONS
HAWAII BELT ROAD

Rehabilitation of Umauma Stream Bridge
FAP NO. BR-019-2(61)

Scale: None Date: July 15, 2014

SHEET No. N-2 OF 4 SHEETS

N-2 OF 4 SH