FED. ROAD	STATE	FEDERAL — AID	FISCAL	SHEET	TOTAL
DIST. NO.		PROJ. NO.	YEAR	NO.	SHEETS
HAWAII	HAW.	BR-0270(18)	2006	3	31

## GENERAL NOTES

- 1. The project is along Akoni Pule Highway at approximate station 126+50 and continues towards Pololu Valley at approximate station 168+50. Improvements include relocating of overhead power poles and seismic retrofit to Aamakao and Walaohia Bridges.
- 2. Construction and restoration of all existing highway facilities within the State's Right-of-Way shall be done in accordance with all applicable sections of the current Standard Specifications for Road, Bridge and Public Works Construction, and the Specifications for installation of miscellaneous improvements within State Highways, of the State Highways Division.
- 3. Work may be performed only between the hours of 8:30 a.m. and 3:00 p.m., Monday through Friday, except holidays, unless otherwise permitted by the District Engineer.

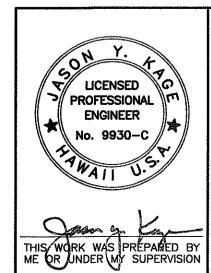
See Sht 15 - Traffic Control Notes for Road and Lane Closures

4. The Contractor shall provide, install, and maintain all necessary signs, lights, flares, barricades, markers, cones and other protective facilities, and shall take all necessary precautions for the protection, convenience, and safety of public traffic. All such protective facilities and precautions to be taken shall conform with the "Administrative Rules of Hawaii Governing the Use of Traffic Control Devices at Work Sites on or Adjacent to Public Streets and Highways", adopted by the director of transportation, and the current U.S. Federal Highways Administration "Manual on Uniform Traffic Control Devices for Streets and Highways, Part 6 — Temporary Traffic Control".

If lane closures are required during construction, a traffic control plan shall be submitted and must be approved by the Engineer prior to the start of work.

- 5. The minimum pavement structure shall consist of: a. Residential Driveways
  - (1) 2" Asphalt Concrete (Mix IV) and 6" Aggregate Base Course, or 2" Asphalt Concrete and 2-1/2" Asphalt Concrete Base Course or Asphalt Concrete.
  - (2) 4" class "A" concrete reinforced within 6"x 6" w2.9 x w2.9 wire mesh on 12" Aggregate Subbase, if deemed necessary by the Engineer.
  - b. Commercial driveways, sideroads, and utility installations on minor highways
  - (1) 2-1/2" Asphalt Concrete (Mix IV), 8" Aggregate Base Course and 12" Subbase, or 2-1/2" Asphalt Concrete and 8" Asphalt Concrete Base Course or Asphalt Concrete.
  - (2) 6" of class "A" concrete reinforced with 6" x 6" w2.9 x w2.9 wire mesh on 12" Aggregate Aubbase, if deemed necessary by the Engineer.
  - c. Channelized intersections and utility installations on major highways 4" Asphalt Concrete (Mix IV), 8" Aggregate Base Course and 12" Aggregate Subbase, or 4" Asphalt Concrete and 8" Asphalt Concrete Base Course or Asphalt Concrete, or match existing pavement structure, whichever is greater.
- 6. The Contractor shall provide an adequate and safe non-skid bridging material, including shoring, over trenches in pavement areas. The bridging shall be able to support all types of vehicular traffic.
- 7. Smooth riding connections shall be constructed at all times 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.

- 8. The Contractor shall exercise care to minimize damages to existing highway improvements. All damages shall be repaired by the Contractor, at his expense, to the satisfaction of the District Engineer.
- 9. All regulatory, guide, and construction signs and barricades shall have a high-intensity reflective background.
- 10. Driveways shall be kept open unless the owners of the properties using these rights-of-way are otherwise provided for satisfactorily.
- 11. Where pedestrian walkways exist they shall be maintained in a safe and passable condition, or other facilities for pedestrians shall be provided. Passages between walkways at intersections shall likewise be provided. All provided at no additional cost.
- 12. The Contractor shall reference, to the satisfaction of the District Engineer, all existing traffic signs, posts, and pavement markings prior to the commencement of construction. The contractor shall replace or repair all traffic signs, posts, and pavement markings disturbed by his activities, at his expense, unless directed otherwise by the District Engineer or his Representative.
- 13. The Contractor shall exercise care when performing work in or adjacent to the State Highway Right-of-Way. Damages to the existing facilities shall be immediately reported to the respective utility companies, and/or city or state agencies. The repair work shall be done at the Contractor's expense.
- 14. The Contractor will make every effort to minimize the use and the duration of use of steel plates. All steel plates shall have a non-skid surface. The State may require the backfilling and patches of trenches due to the excessive usage of steel plates. Shop drawings stamped by a Structural Engineer showing the proposed use of steel plates within the traveled way shall be submitted for approval. The cost incurred for preparation of the shop drawings shall be absorbed by the Contractor.
- 15. Clearing and grubbing shall be kept to a minimum other than at the designated Contractors baseyard. Only plants and objects that interfere with work shall be removed, unless otherwise indicated and subject to approval of the Engineer. Contractor shall submit a plan showing areas to be cleared, indicating the types and extent of vegetation and objects that will be removed.
- 16. Access to work areas under the bridges shall be limited to foot traffic and manually powered equipment. Repair work shall not be permitted of the roadway, unless otherwise indicated or approved. Unless indicated, all land areas outside the Highway Right-of-Way are privately owned. Access through, and storage and work in privately owned lands, outside of construction easements, shall be arranged by the Contractors with the Property Owners.
- 17. The Contractor's attention is directed to the following sections of the Special Provisions : Subsection 107.13 public convenience and safety; Subsection 107.17 - Pollution Control, Protection of Archaelogical, Historical, and Burial Sites, and Threatened and Endangered Species; Subsection 107.21 -Contractor's responsibility for utility property and services; and Section 645 - Work Zone Traffic Control.
- 18. 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.



04/30/08 PIRATION DATE OF THE LICENS

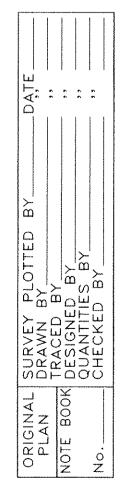
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

## CONSTRUCTION NOTES - 1

AKONI PULE HIGHWAY, SEISMIC RETROFIT OF WALAOHIA AND AAMAKAO BRIDGES FAIP No. BR-0270(18)

Scale: NONE

Date: May 2006 SHEET No. 1 OF 2 SHEETS



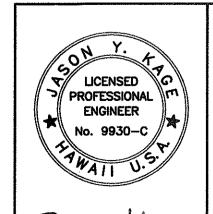
## GENERAL NOTES CONTINUED

- 19. 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.
- 20. 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.
- 21. The Contractor shall provide for access to and from all existing side streets at all times.
- 22. All saw cutting work shall be considered incidental to excavation for reconstruction of weakened pavement areas.
- 23. 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 Engineer. If use of location is approved by the Engineer, the contractor shall obtain a permit to use the property within the Highway Right-of-Way from the State Right-of-Way Branch at telephone No. *692–7332.*
- 24. The Contractor is reminded of the requirements of Subsection 108.01-Subletting of contract, which requires him to perform work to not less than 30 percent of the total contract cost less deductible items. Noncompliance with this Subsection maybe grounds for rejection of bid.
- 25. The Contractor shall be solely responsible for the protection of adjacent properties, utilities and existing structures from damages due to construction. Repairing any damage shall be the Contractor's own expense, to the satisfaction of the Engineer.

## <u>LEGEND</u>

	Reconstruction Areas	% AV	Adjusted Water Air Valve
	Leveling Areas	°AV	New Water Air Valve
	Cold Planing Areas	0 W V	Existing Water Valve Box  Adjusted Water Valve Box
		<sup>®</sup> WV	
	Resurfacing Limits	□ WM	Existing Water Meter  Adjusted Water Meter
	Existing Electrical Line	™ WM	
	New Electrical Line Existing Joint Pole	- <del>\</del> fh	Existing Fire Hydrant
31	Existing Power Pole	S12	Existing Sewer Line
1 1	Existing Electric Manhole	° smh	Existing Sewer Manhole
∞ EMH	Adjusted Elec. MH Frame/Cover		Adjusted Sewer MH Frame/Cover
° EMH	New Electric Manhole	<u> </u>	Existing 6" Gas Line
_	Existing Telephone Line		New 6" Gas Line
	New Telephone Line	$^{\circ}gv$	Existing Gas Valve Box
	Existing Telephone Pole Existing Telephone Manhole	$^{\circ}GV$	Adjusted Gas Valve Box
	Adjusted Tele. MH Frame/Cover	°gmh	Existing Gas Manhole
° TMH	New Telephone Manhole	∞ GMH	Adjusted Gas MH Frame/Cover
SC	Existing Signal Corps Line	⊚ mon.	Existing Monument
	New Signal Corps Line		Adjusted Monument
	Existing TV Cable	— d—24—	Existing 24" Drain Line
	New TV Cable Existing 12" Water Line	ocamb	Existing Storm Drain Manhole
	New 12" Water Line		Adjusted Storm Drain MH Frame/Cover
	Existing Water Manhole		
∞ WMH	Adjusted Water MH Frame/Cover	9	Existing Grated Drop Inlet
	New Water Manhole		Existing Catch Basin
°av	Existing Water Air Valve	þ	Existing Sign
			Existing Highway Lighting Standard
		$\circ$	Existing Pole





XPIRATION DATE OF THE LICENSI

-x x x x New Chainlink Fence

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

<u>CONSTRUCTION NOTES - 2</u>

FED. ROAD STATE FEDERAL - AID FISCAL SHEET TOTAL PROJ. NO. YEAR NO. SHEETS

HAWAII HAW. BR-0270(18) 2006 4

& LEGEND

AKONI PULE HIGHWAY, SEISMIC RETROFIT OF WALAOHIA AND AAMAKAO BRIDGES FAIP No. BR-0270(18) THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Scale: NONE

Date: May 2006 SHEET No. 2 OF 2 SHEETS