

GENERAL NOTES

1. The scope of work for this project consists of improvements to the intersection of Route 11 and the Hawaii Volcanoes National Park Main Entrance. Improvements consist of the installation of a drainage swale and drywell with grated inlet and the installation of a highway lighting system.
2. 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.
3. 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 - 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 paving operations.
7. Dressing of shoulder, sidewalk and bus turnout 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 swale 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 the Contract items.
11. The Contractor shall have a Hawaii Volcanoes National Park Staff member attend all preconstruction meetings to insure that the Contractor maintains a minimal impact to Park activities. The Contractor shall adjust their operations to meet the concerns of Park personnel.
12. The Contractor shall coordinate all construction activities with any and all ongoing Park entrance projects as well as day to day activities of the Park.
13. The Contractor shall provide for access to and from all existing side streets and the park's main entrance at all times. Pedestrian and bicycle traffic shall be accommodated by the Contractor at all times.

STREET LIGHT NOTES

1. All work shall conform to the latest National Electrical Code.
2. Shop drawings shall be submitted by the Contractor for approval by County Traffic Division.
3. Acceptable street light materials:
- Luminaires:
With PE receptacle and 120-220 volt HPF ballast.
- 1) American electric SRX-55, SP2 90, SP2 135 & SP2 180 polycarbonate semi-cutoff lens.
- 2) ALR SST PV, Full "ON". The Contractor shall inscribe the month and year of installation of photocells and lamps. All PE's shall have the North index facing North.
- Aluminum Poles:
Internally mounted vibration damper, minimum 0.188 wall thickness. Must be approved by FHWA to be in compliance with August 1985 amended and adopted AASHTO specifications. 10 to 12 inch base bolt circle. Arm length shall be per plans.
- 1) Lexington 2708-45806T-4, 2208-45806T-4
- 2) HAPCO: 21-305X, 21-307X, 21-585X, 21-588HHD, 7389-001, 73892-002, 73892-003
- Transformer Bases:
Aluminum with 15 inch base bolt circle. Must be approved by FHWA to be in compliance with August 1985 amended and adopted AASHTO breakaway specifications.
- 1) Lexington 08R-1315B-17
- 2) Akron Foundry TBI-17
4. A scaled drawing of street light locations (prefer on one sheet) and details of fixture mounting, luminaire type, arm length, identification tags (and circuits, foundation, base, and pole if underground) shall be submitted to the County Traffic Division by the Contractor after plan approval and before construction begins.
5. All street light identification tag numbering for metal poles shall start with "1" and continue numerically for each street in the subdivision. All streetlight I.D. tag numbering for wooden poles shall be in accordance with HELCO's numbering system.
6. The Contractor shall provide all necessary secondary circuit extensions to the nearest HELCO secondary.
7. If the streetlights are installed before HELCO installs their secondary, the Contractor is responsible for coordination and informing HELCO of street light locations and pole contacts.
8. Contractor shall apply for and obtain service connection from Helco. This process includes but is not limited to: requesting Helco open a formal request for service for the street lights, providing Helco and the State with load calculations, specified electrical engineering data and information, all distances and locations of the pull boxes as well as paying Helco directly for any and all costs to energize the street lights. The Contractor's cost of the service connection shall be considered incidental to Item 662.0100, "Highway Lighting System."
9. Grounding:
- 1) All underground wiring streetlights shall be grounded to provide a minimum 25 OHMS to ground.

- 2) All overhead wiring street light fixtures shall be bonded to the neutral wire. All bonded street light fixtures shall have 2"x2" reflectorized green sticker placed at the base of wire opening on aluminum arm, signifying that streetlights are bonded.
10. When streetlights are installed on roadways under State jurisdiction, the developer shall submit plans to the State DOT for approval.
11. Two weeks notice must be given for initial and subsequent re-inspections Pursuant to section 2-5 of the Hawaii County Code, The Contractor shall pay for all cost associated with overtime inspections. The Contractor shall arrange and assume costs to energize streetlights for a minimum of 6 hours for final inspection for underground systems. After inspection and approval from Traffic Division, the Contractor shall remove all fuses and deliver them to Traffic Division.
12. All materials shall be warranted for a minimum of one year from the date of dedication to County.
13. No changes will be allowed without prior approval from County Traffic Division.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	FLH-011-2(34)	2001	3	13

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
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QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
GENERAL NOTES
VOLCANO ROAD
INTERSECTION IMPROVEMENTS FOR
THE HVNP MAIN ENTRANCE
FED. AID PROJECT NO. FLH-011-2(34)
Scale: None Date: Nov., 1999
SHEET No. 1 OF 1 SHEETS