

GENERAL NOTES

1. The scope of work for this project consists of installing a new traffic signal system, striping and signing.
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. 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. Locations of existing underground structures and utilities such as pipelines, conduits, cables, etc., manholes, monuments, and structures shown on plans are approximate only. It is not the intent of these plans to show the exact location of all underground utilities and structures. It is the responsibility of the Contractor to verify the locations of all existing utilities with the respective owners. Existing utilities damaged by the Contractor shall be repaired by the Contractor at his own cost.
6. Contractor shall provide for access to and from all existing side streets and driveways at all times.
7. Maintenance of traffic through the construction area shall be in accordance with Part VI, "Standards and Guidelines for Traffic Controls for Street and Highway Construction, Maintenance, Utility and Incident Management Operations", of the "Manual On Uniform Traffic Control Devices For Streets And Highways", Federal Highway Administration (1988 Edition), to include all Revisions and Errata Sheets to Part VI and as specified in the special provisions. The Contractor shall furnish and maintain adequate barricades, blinkers, construction signs, etc., for the safety of the motoring public. This work shall be considered incidental to various contract items.
8. Smooth riding connections shall be constructed at all limits of construction as shown on the plans and/or as directed by the Engineer.
9. All saw cutting work shall be considered incidental to various contract items.
10. Existing drainage system will be functional at all times during construction. Contractor is to furnish materials, equipment, labor, tools and incidentals necessary to accomplish maintenance of flow, the cost of which shall be considered incidental to the various contract items.
11. The Contractor shall adjust flush to finish grade all pullbox, and handhole frames & covers, including those not shown on the plans, if there is a change in grade due to construction of the project. If the proposal does not show a contract item, the Engineer will consider them incidental to the various contract item.
12. All necessary permits for work within the jurisdiction of the County of Hawaii shall be obtained by the Contractor at his own cost.
13. Dressing of shoulder, 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.

HAWAIIAN TELEPHONE GENERAL NOTES

1. The location of GTE Hawaiian Telephone Company's existing facilities are approximate only. The Contractor shall exercise extreme caution and shall maintain proper clearances whenever construction crosses or is in close proximity of GTE Hawaiian Telephone Company facilities. The Contractor shall verify their locations and shall be liable for any damages to GTE Hawaiian Telephone Company facilities. Any damages shall be reported immediately to GTE Hawaiian Telephone Company's Repair Section at #611 (24 hours) or the Excavation Permit Section at 933-6411 (normal working hours, Monday through Friday, except holidays).
2. For underground cable locating and marking, five working days advance notice is required. Three working days advance notice is required for any inspection by a designated representative.
3. The Contractor shall take necessary precaution not to damage any existing cables or conduits. Any work involving existing GTE Hawaiian Telephone Company cables or conduits, shall be done in the presence of a GTE Hawaiian Tel inspector or designated representative.
4. The Contractor shall obtain an excavation permit and toning request from GTE Hawaiian Telephone Company's Excavation Permit Section at 933-6411, two weeks prior to start of construction. Hours of business are 7:00 a.m. to 10:30 a.m. and 11:30 a.m. to 3:00 p.m., Monday through Friday, except holidays.
5. The Contractor shall notify GTE Hawaiian Telephone Company's inspector or designated representative 72 hours prior to excavation, bracing, or backfilling of GTE Hawaiian Telephone Company's structures or facilities.
6. When excavation is adjacent to or beneath GTE Hawaiian Telephone Company's existing structures or facilities, the Contractor shall:
  - a. Sheet and/or brace the excavation to prevent slides, cave-ins, or settlements to ensure no movement to GTE Hawaiian Telephone Company's structures or facilities.
  - b. Protect existing structures and/or facilities with beams, struts, or underpinning while excavating beneath them to ensure no movement to GTE Hawaiian Telephone Company's structures or facilities.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	130A-01-99	2000	3	18

ORIGINAL PLAN	DATE
DESIGNED BY	3/11/99
DRAWN BY	
CHECKED BY	
NOTED BY	
QUANTITIES BY	
REVISIONS	

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**GENERAL NOTES**  
KEAAU-PAHOA ROAD  
Installation of Traffic Signals at  
Pahoa-Kapoho Road  
Project No. 130A-01-99  
Not To Scale  
Date: April, 2000  
SHEET No. 1 OF 2 SHEETS

ELECTRICAL NOTES:

1. Hawaii Electric Light Co. shall assist the contractor in Power Source connection.
2. The Contractor shall make all electrical connections to controller, provide breaker, ground and 2" PVC conduit, Schedule 80.
3. Contractor shall provide HELCO one week advance notice for any work done by HELCO.
4. A utility company standby man is required to be at the site at the time any non-utility company personnel will be breaking into or entering any facilities that contain energized utility company equipment or cables.
5. The installation of the meter pedestal for underground service will not be paid for separately but shall be considered incidental to the Meter Socket and Breaker.

DEPARTMENT OF WATER SUPPLY NOTES:

1. All work shall be done according to the Water System Standards, State of Hawaii, Volumes 1 and 2, dated 1985, as amended.
2. The Contractor shall inform the D.W.S. Engineer 72 hours prior to the beginning of any waterline work and one week prior to any connection, chlorination, shut-off or relocation.
3. All work and material furnished by the D.W.S. shall be paid for by the Contractor.
4. All existing waterline, waterline appurtenances and other utility locations shown on the plans are obtained from latest reliable sources. The Contractor shall be responsible to verify the exact location of all utilities in the field and shall bear all costs for damages done unto them during the contract period.
5. All hook-ups to existing waterlines shall be done by the Department of Water Supply. The Contractor shall provide all excavation, backfill, road repair, traffic control, etc.
6. Where water shut-off of more than 3-hours becomes necessary, the Contractor, at his own cost, shall provide a temporary bypass line, size of which shall be determined by the D.W.S. Engineer. The D.W.S. Engineer, also reserves the right to require bypass lines, regardless of the water shut-off period, if it is deemed necessary.
7. Minimum horizontal clearance between waterlines and other utilities shall be 8-feet for road right-of-ways of 50 feet or less, minimum vertical clearance between waterline and other utilities shall be 12-inches provided the other utility is concrete jacketed and 18-inches if no concrete jackets are used. In all applicable instances the waterlines shall be at a grade higher than other utilities. Minimum horizontal clearance between waterline and other utilities shall be 10-feet for road right-of-ways of more than 50-feet.
8. All fittings (Class 250) and all gate valves (Class 200) shall be ductile iron, with mechanical joints unless otherwise specified. Butterfly valves shall be class 250 with epoxycoated interior unless otherwise specified.
9. The waterline shall be tested at a minimum of 225 p.s.i. or one and a half times the static pressure at the low point, under D.W.S. supervision just prior to paving the roadways.
10. The Contractor shall be responsible for the chlorination of the water system and shall bear all cost. The persons engaged to do the chlorination work must have the appropriate license to perform the work in the state of Hawaii.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	130A-01-99	2000	4	18

LEGEND

—e— Existing Electrical Line	—4-12— Existing Sewer Line
—E— New Electrical Line	—S-12— New 12" Sewer Line
°jp Existing Joint Pole	°dmh Existing Sewer Manhole
°pp Existing Power Pole	°SMH Adjusted Sewer MH Frame/Cover
°emh Existing Electric Manhole	°SMH New Sewer Manhole
°EMH Adjusted Elec. MH Frame/Cover	—g-6— Existing 6" Gas Line
°EMH New Electric Manhole	—G-6— New 6" Gas Line
—t(w)— Existing Underground Telephone Line	°gv Existing Gas Valve Box
—t(o)— Existing Overhead Telephone Line	°GV Adjusted Gas Valve Box
—T— New Telephone Line	°GV New Gas Valve Box
°tp Existing Telephone Pole	°gmh Existing Gas Manhole
°tmh Existing Telephone Manhole	°GMH Adjusted Gas MH Frame/Cover
°TMH Adjusted Tele. MH Frame/Cover	°GMH New Gas Manhole
°TMH New Telephone Manhole	°mon. Existing Monument
—4c— Existing Signal Corps Line	°MON. Adjusted Monument
—SC— New Signal Corps Line	°MON. New Monument
—tv— Existing TV Cable	---d--24--- Existing 24" Drain Line
—TV— New TV Cable	24" RCP New 24 " RCP Drain Line
—w-12— Existing 12" Water Line	°admh Existing Storm Drain Manhole
—W-12— New 12" Water Line	°SDMH Adjusted Storm Drain MH Frame/Cover
°wmh Existing Water Manhole	°SDMH New Storm Drain Manhole
°WMH Adjusted Water MH Frame/Cover	°gdi Existing Grated Drop Inlet
°WMH New Water Manhole	cb Existing Catch Basin
°av Existing Water Air Valve	p Existing Traffic Sign
°AV Adjusted Water Air Valve	Existing Highway Lighting Standard
°AV New Water Air Valve	Existing Transformer Box
°wrv Existing Water Valve Box	Existing Tree to be Trimmed of Lowest Branches
°WV Adjusted Water Valve Box	
°WV New Water Valve Box	
°wm Existing Water Meter	
°WM Adjusted Water Meter	
°WM New Water Meter	
°fh Existing Fire Hydrant	
°FH New Fire Hydrant	
°FH Adjusted Fire Hydrant	

ORIGINAL PLAN	DATE
SURVEY PLATTED BY	
DRAWN BY M. Takahashi	
DESIGNED BY Richard Kana	
CHECKED BY	
NOTED BY	
DATE 3/16/02	

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

GENERAL NOTES & LEGEND

KEAAU-PAHOA ROAD

Installation of Traffic Signals at

Pahoa-Kapoho Road

Project No. 130A-01-99

Date: April, 2000

SHEET No. 2 OF 2 SHEETS