

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-Q-06-15M	2015	7	71

BOARD OF WATER SUPPLY NOTES

- Unless otherwise specified, all materials and construction of water system facilities and appurtenances shall be in accordance with the City and County of Honolulu, Board of Water Supply's "Water System Standards", dated 2002, the "Water System External Corrosion Control Standards", Volume 3, dated 1991, and all subsequent amendments and additions.
- All plans approved by the Board of Water Supply are based solely on the adequacy of the water supply. All other features of the water system, such as lines, grades, fittings, drainage, etc., and other features of improvements shall not be the responsibility of the Board of Water Supply.
- The Contractor shall notify the BWS Capital Projects Division, Construction Section in writing one week prior to commencing work on the water system.
- The existence and location of underground utilities and structures as shown on the plan are from the latest available data but is not guaranteed as to the accuracy of encountering of other obstacles during the course of the work. The Contractor shall be responsible and pay for all damages to existing utilities. The Contractor shall not assume that where no utilities are shown, that none exist.
- The Contractor shall be responsible for the protection of all water lines during construction. The Contractor shall be especially careful when excavating behind water lines, tees, and bends wherever there is a possibility of water line movement due to the removal of the supporting earth beyond the existing reaction blocks. The Contractor shall take whatever measures necessary to protect the water lines, such constructing special reaction blocks (with BWS approval) and/or modifying his construction method.
- Any adjustments to the existing water system required during construction to meet requirements of BWS standards, whether shown on the plans or not, shall be done by the Contractor at no cost to the Board of Water Supply.
- Prior to any excavating, the Contractor shall verify in the field the location of existing water mains and appurtenances.
- The Contractor shall adjust all manhole frames/valve boxes/meter boxes within the work area. The Contractor shall be responsible for "referencing" these manholes/valve boxes/meter boxes to facilitate the adjustments.

PUBLIC TRANSIT DIVISION, DTS NOTE

This project will affect bus routes, bus stops, and para-transit operations, therefore, the Contractor shall notify the Department of Transportation Services, Public Transit Division at 768-8396 and Oahu Transit Services, Inc. (Bus Operations: 848-4578 or 848-6016 and Para-transit Operations: 454-5041 or 454-5020) of the scope of work, location, proposed closure of any street, traffic lane, sidewalk, or bus stop and duration of project at least two weeks prior to construction.

HAWAIIAN TELCOM TELEPHONE GENERAL NOTES

- The Contractor shall procure and pay for all licenses and permits and shall give all notices necessary and incident to the due and lawful prosecution of the work.
- The locations of existing utilities are approximate only. The Contractor shall exercise extreme caution and shall maintain proper clearances whenever construction crosses or is in close proximity of Hawaiian Telcom facilities. The Contractor shall verify their locations and shall be liable for any damages to Hawaiian Telcom facilities. Any damages shall be reported immediately to Hawaiian Telcom's Repair Section at #611 (24 hours) or to the Excavation Permit Section at 546-7746 (normal working hours, Monday through Friday, except holidays). As a result of his operations, adjustments to the new ductline alignment, if required, shall be made to provide the required clearances.
- The Contractor shall take necessary precaution not to damage existing cables or ducts. A Hawaiian Telcom inspector or designated representative is required to be at any job site whenever there will be a breakage into or entry into any structure that contain Hawaiian Telcom facilities. Temporary cable and duct supports shall be provided wherever necessary.
- The Contractor shall notify Hawaiian Telcom's inspector or designated representative a minimum of 72 hours prior to excavation, bracing, or backfilling of Hawaiian Telcom's structures or facilities.
- All applicable construction work shall be done in accordance with the "Hawaiian Telcom Standard Specifications for placing underground telephone systems" dated March 1999, all subsequent amendments and additions, and all other pertinent standards for telephone construction. Contractor shall familiarize his personnel by obtaining applicable specifications.
- When excavation is adjacent to or beneath Hawaiian Telcom's existing structures or facilities, the Contractor shall:
 - sheet and/or brace the excavation to prevent slides, cave-ins, or settlements to ensure no movement to Hawaiian Telcom's structures or facilities.
 - protect existing structures and/or facilities with beams, struts, or underpinning while excavating beneath them to ensure no movement to Hawaiian Telcom's structures or facilities.

MECHANICAL/ELECTRICAL DIVISION NOTES

- The Contractor shall notify the Joint Pole Committee two (2) weeks in advance of any relocation of utility pole(s) that may be necessary.
- The Contractor shall notify the Mechanical/Electrical Division, Department of Design and Construction, three (3) working days prior to commencing work on the street lighting system. (Phone: 768-8431)
- The street lighting system shall be kept operational during construction. Any relocation required shall be approved by the Mechanical/Electrical Division, Department of Design and Construction, and paid for by the Contractor.
- The locations of the existing underground street light facilities shown on the plans are from existing plans and are approximate only. The Contractor shall exercise caution when construction crosses or is in close proximity to the existing street light facilities. The Contractor shall be responsible for any damages to facilities shall be repaired by the Contractor at his cost in accordance with the requirements of the City and County of Honolulu.
- The Contractor shall be responsible for any damages to the City's existing communications fiber optic cable system. Any and all damages to these facilities shall be repaired by the contractor at his cost in accordance with the requirements of the City and County of Honolulu.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	DESIGNED BY	
	CHECKED BY	

06-NOTES-UTILITY-2015-04/30/15 3:48 PM

JASON H. LAD

LICENSED PROFESSIONAL ENGINEER

NO. 9360-C

HAWAII USA

4/30/15

EXP. DATE

This work was prepared by me or under my supervision and construction of this project will be under my observation.

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

UTILITY NOTES

CENTRAL OAHU BEST MANAGEMENT PRACTICES

ERODED SLOPE REPAIRS, PHASE 2

Project No. HWY-Q-06-15M

Scale: None

Date: May 2015

SHEET No. N-03 OF 11

SHEETS

HECO NOTES (CON'T.)

- The Contractor shall call the HECO's Customer Installations Department at 543-7846 a minimum of five (5) working days in advance to arrange for HECO stand-by personnel.*

15. The following clearances shall be maintained between HECO's ductline and all adjacent structures (charted and uncharted) in the trench:

15. (Continued)

Notes for Horizontal (Parallel) Clearance Table:



- A. *Where space is available, parallel clearance to other utilities, or foreign structures other than communication or traffic signal shall be 36".*
- B. *If 36" clearance cannot be met:*
 - *If clearance is less than 12", jacket sewer line with reinforced concrete (per HECO's Std. 30-1030) for a distance of 5' plus pipe diameter.*
 - *If clearance is between 12" and 36", jacket sewer line with plain concrete.*
- C. *Electrical conduit crossings of fuel lines should be kept to a minimum of 48" clear below fuel line for the full easement width. If the 48" clearance cannot be met but there is a minimum of 24", the fuel line must be encased with 6" of concrete.*
- D. *5 feet clear to water mains 16" and larger.*
- E. *For situations with 0" minimum separation, a 6" separation is recommended.*
- F. *Clearances measured from outer edges or diameters of utilities.*

15. (Continued)

Notes for Vertical (Crossing) Clearance Table:

- A. If clearance cannot be met:
 - If clearance is less than 12", jacket sewer line with reinforced concrete (per HECO's Std. 30-1030) for a distance of 5' plus pipe diameter.
 - If clearance is between 12" and 24", jacket sewer line with plain concrete.
- C. 12" vertical clearance for pipe diameters greater than 16".
- D. Electrical conduit crossings of fuel lines should be kept to a minimum of 48" clear below fuel line for the full easement width. If the 48" clearance cannot be met but there is a minimum of 24", the fuel line must be encased with 6" of concrete.
- E. 5 feet clear to water mains 16" and larger.
- F. For situations with 0" minimum separation, a 6" separation is recommended.
- G. Clearances measured from outer edges or diameters of utilities.

The Contractor shall notify the Construction Manager & HECO of any heat sources (power cable duct bank, streamline, etc.) encountered that are not properly identified on the drawing.

	<p>STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION</p> <p><u>UTILITY NOTES</u></p> <p><u>CENTRAL OAHU BEST MANAGEMENT PRACTICES</u> <u>ERODED SLOPE REPAIRS, PHASE 2</u> <u>Project No. HWY-0-06-15M</u></p> <p>Scale: None Date: May 2015</p>
<p>4/30/16</p> <p>EXP. DATE</p> <p></p> <p><small>This work was prepared by me or under my supervision and construction of this project will be under my observation.</small></p>	<p>SHEET No. <i>N-05</i> OF <i>11</i> SHEETS</p>