

BOARD OF WATER (BWS) NOTES


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	63A-01-88	1990	15	17

1. Unless otherwise specified, all materials and construction of water system facilities and appurtenances shall be in accordance with the City & County of Honolulu Board of Water Supply's "Water System Standards," Volume 1, Dated 1985 and the "Approved Material List and Standard Details for Water System Construction", Volume 2, Dated 1985, and all Subsequent Amendments and Additions.
2. Prior to excavating for roadway, new drain, sewer, and other utility lines, the Contractor shall verify in the field the location of existing water mains and appurtenances.

Where the installation of new drain, sewer and other utility lines are to cross over or under existing water mains, the Contractor shall expose the existing water mains prior to trenching. Excavation around water mains shall be done by hand.
3. The Contractor shall notify the Board of Water Supply in writing one week prior to commencing work on the water system.
4. 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 etc., and drainage and other features of improvements shall not be the responsibility of the Board of Water Supply.
5. The existence and location of underground utilities and structures as shown on the plans are from the latest available data but is not guaranteed as to the accuracy or the encountering of other obstacles during the course of the work. The Contractor shall be responsible and shall pay for all damages to existing utilities.

The Contractor shall verify all existing service lateral locations, whether or not shown on the plans, prior to commencing with any work and shall not assume that, where no services are shown none exists.
6. Wherever connections to existing mains are shown on the plans, the contractor shall expose the existing mains prior to excavation of the main trench. The remaining excavation for the connection to the existing mains shall be excavated when the contractor is ready to make the connection.
7. Existing utilities crossing the water main are to remain in service and in place. If relocated for the contractor's convenience, interruption of service shall be for a minimum period of time and shall be done at the contractor's expense and only with the approval of the BWS.
8. Test pressure shall be prevailing line pressure, joints left exposed for 24 hours.
9. Contractor to cut & plug all unused laterals at the main whether or not shown on the plans. Meter and Valve boxes to be or already abandoned shall be demolished or removed and properly disposed of. The damaged area shall be repaired to an equal or better condition than the immediate area. All work shall be done at the expense of the contractor.
10. After installation of tapping sleeve and valve, prior to actual tapping operations, the assembly shall be tested at 150 p.s.i. on both sides of the valves.

11. The Contractor shall be responsible for the protection of water lines during construction. The Contractor shall be especially careful when excavating behind water line tees and bends wherever there is a possibility of water line movement due to removal of the supporting earth beyond the existing reaction blocks. The Contractor shall take whatever measure he deems necessary to protect the water lines, such as constructing special reaction blocks (with BWS approval) and/or modifying his construction methods.
12. Prior to installation, the contractor shall submit for approval by Board of Water Supply, the manufacturer's certification that all cast iron (gray or ductile) fittings for the project conform in all respects to the Water System Standards, dated 1985.
13. Reapproval shall be required if this project is not under construction within a period of two years.
14. All waterline connections shall be done during normal working hours with a maximum down time of 6 hours.

APPROVED:   
CHIEF, PLANNING & ENGINEERING, BWS      2/26/90  
DATE

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
<b><u>BWS NOTES</u></b>
<b><u>KALIHI STREET IMPROVEMENTS</u></b> <b><u>Dillingham Blvd. To North King St.</u></b> <b><u>PROJECT NO. 63A-01-88</u></b>
Date: June 1989
SHEET No. 1 OF 2 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	63A-01-88	1990	16	17

GAS COMPANY (GASCO) NOTES

1. The Gasco, Inc. gas pipelines in the project area are plastic coated and cathodically protected. The Contractor shall be extremely careful when working near these gas pipelines.
2. Prior written clearance must be obtained from Gasco, Inc. Maps and Records, 515 Kamakee Street at least five working days before starting excavation near these gas pipelines.
3. Since gasline locations on field maps are approximate, the Contractor, after obtaining written clearance, shall call Gasco, Inc. a minimum of 48 hours before starting excavation to arrange for field location of the existing gas pipelines. The telephone number is 547-3575 during business hours, and 526-0066 after hours.
4. For relocation of any gas pipeline, the Contractor shall notify Gasco, Inc. five working days before starting work. The Contractor shall provide the necessary excavation and backfill, arrange for traffic permits and restore pavement, sidewalks, or other facilities. Any relocation of gas facilities shall be performed by Gasco, Inc.
5. The Contractor shall notify Gasco, Inc. immediately after any damage has been caused to existing gas pipelines, coatings, or cathodic protection devices. The Contractor shall be liable for any damages to Gasco, Inc. facilities. Repair work on such damage shall be done by Gasco, Inc., with payment for this work borne by the Contractor.
6. Minimum vertical and horizontal clearance between the gas pipelines and other pipelines, conduits, ductlines, or other facilities shall be 12 inches. Adequate support and protection for gas pipelines exposed in the trench shall be provided by the Contractor and approved by Gasco, Inc.
7. The Contractor shall work in an expeditious manner in order to keep the uncovered gas pipelines exposed for as short a period of time as possible.
8. The Contractor shall excavate and backfill around the pipeline in the presence of a Gasco, Inc. representative. All backfill within 6 inches of the pipeline shall be select cushion material approved by Gasco, Inc.

HAWAIIAN ELECTRIC (HECO) NOTES

1. The location of HECO's overhead and underground facilities shown on the plans are from existing records with varying degrees of accuracy and are not guaranteed as shown. The facilities shall be protected at all times by the Contractor.  
  
The Contractor shall exercise extreme caution whenever construction crosses or is in close proximity of underground lines and shall maintain adequate clearance when operating equipment within or under any overhead lines.
2. The Contractor shall comply with the State of Hawaii's Occupational Safety and Health Law (DOSH).
3. The Contractor shall obtain an excavation permit from HECO's Mapping and Records Division located at 820 Ward Avenue, 4th floor, two weeks prior to starting construction.
4. For verification of underground lines or for assistance in supporting and protecting these lines, the Contractor shall call HECO's Underground Division (telephone 543-7395) a minimum of 72 hours in advance.
5. When trench excavation is adjacent to or beneath our existing structures or facilities, the Contractor is responsible for:  
a) Shoring and bracing the excavation to prevent slides, cave-ins and settlements  
b) Protecting existing structures or facilities with beams, struts, or underpinning.
6. Temporary relocation of HECO facilities will be done by HECO or by the Contractor under HECO's supervision, with all costs borne by the Contractor.
7. Costs for damages to HECO facilities may be borne by the Contractor. This repair work shall be done by HECO, or by the Contractor under HECO's supervision.
8. For pole bracing instructions, the Contractor shall call the HECO District Construction Superintendent at Ward Avenue (telephone 543-7050), a minimum of 72 hours in advance.
9. Damages to HECO's facilities shall immediately be reported to HECO's Trouble Dispatcher (telephone 543-7874).

DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
ORIGINAL PLAN	

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
<b>GASCO &amp; HECO NOTES</b>
<b>KALIHI STREET IMPROVEMENTS</b> <b>Dillingham Blvd. To North King St.</b> <b>PROJECT NO. 63A-01-88</b>
Date: June 1989
SHEET No. 2 OF 2 SHEETS