HAWAIIAN ELECTRIC COMPANY NOTES

- 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 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.
- The Contractor shall comply with the State of Hawaii's Occupational Safety and Health Law (DOSH).
- The Contractor shall obtain an excavation permit from HECO's Technical Division (543-5654) located at 820 Ward Avenue, 4th floor, two weeks prior to starting construction. Please refer to our request number at that time.
- For verification of underground lines or for assistance in supporting and protecting these lines, the Contractor shall call HECO's Underground Division at 543-7871 a minimum of 72 hours in advance.
- When trench excavation is adjacent to or beneath our existing strucutres or facilities, the Contractor is responsible for:
 - a) Sheeting and bracing the excavation to prevent slides, cave-ins, and settlements.
 - b) Protecting existing structures or facilities with beams, struts, or under-pinings.
- For pole bracing instructions, the Contractor shall call the HECO District Superintendent at Ward 543-7745 a minimum of 72 hours in advance.
- Any work required to relocate HECO facilities shall be done by HECO and the Contractor shall be responsible for all coordination, and for possible costs if applicable.
- Should it become necessary to temporarily relocate any of HECO facilities to enable the Contractor to perform his work in a safe and expeditious manner in fulfilling his contract obligations, these temporary relocations will be done by HECO, or by the Contractor under HECO's supervision, with all costs borne by the Contractor.
- Any unforeseen conflict that would result in the redesign or relocation (either temporary or permanent) of HECO's electrical facilities may be cause for lengthy delays. To avoid such delays, the Contractor must notify HECO of the conflict a minimum of 30 days prior to the start of construction.
- Any damage to HECO's facilities will be reported immediately to HECO's Trouble Dispatcher at 548-7961.
- All HECO overhead and underground facilities shall be protected at all times by the Contractor during construction. Costs for damages to HECO facilities shall be borne by the Contractor. This repair work shall be done by HECO, or by the Contractor under HECO's supervision.
- The Contractor shall indemnify, defend and hold harmless HECO from and against all losses, damages, claims and actions, including but not limited to reasonable attorney's fees and costs based upon or arising out of damage to property or injuries to persons, or other tortious acts caused or contributed to by Contractor or anyone acting under its direction or control or on its behalf; provided Contractor's indemnity shall not be applicable to any liability based upon the sole negligence of HECO.
- Contractor shall use caution when working in close proximity of ductline. HECO required minimum clearance of 1' 6" from the surface of sidewalk to top of ductline.

BOARD OF WATER SUPPLY NOTES (ADDITIONAL)

- Unless otherwise specified, all materials and construction of water system facilitities and appurtenances shall be in accordance with the City and County of Honolulu Board of Water Supply's "WATER SYSTEM STANDARDS", VOLUMÉ 1, DATED 1985, THE "APPROVED MATERIAL LIST AND STANDARD DETAILS FOR WATER SYSTEM CONSTRUCTION", VOLUME 2, DATED 1985, 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 systems, such as lines, grades, fittings, drainage, etc., and other features of improvements shall not be the responsibility of the Board of Water Supply. Compliance with the Amrican Disability Act (ADA) requirements, shall not be the responsibility of the Board of Water Supply.
- 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 of 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 not assume that where no utilities are shown, that none exist.
- Re-approval shall be required if this project is not under construction within a period of two years.
- The Contractor shall notify BWS Planning and Engineering Division, Construction Section in writing and submit four (4) sets of approved construction plans one week prior to commencing work on the water system.
- The Contractor shall verify all existing service lateral locations whether shown or not shown on plans prior to commencing with any of the work and shall not assume that where no services are shown, none exist.
- The Contractor shall adjust all manhole frames/valve boxes within the resurfaced area. Prior to resurfacing, BWS will initially locate all water manholes/valve boxes that will require adjustments. The Contractor shall then be responsible for "referencing" these manholes/valve boxes to facilitate the adjustments. The cost for adjustments shall be made at their respective unit prices in the Bid based on the actual number adjusted. Cost for referencing shall be incidental and shall not be paid directly. Any additional request to BWS to again locate the manholes/ valve boxes shall be done at the expense of the Contractor. (BWS) will charge and bill the Contractor for all cost said additional work.)
- 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 Confractor at no cost to the Board.
- Prior to any excavating, the Contractor shall verify in the field the location of existing water mains and appurtenances.
- Two-way blue reflective hydrant markers Type DB shall be installed at all fire hydrant locations.
- Maintain 3'-0" minimum cover for all existing waterlines (18" minimum for service laterals) from new finish grade. The contractor shall probe the waterline and service laterals and submit the probing data to BWS Construction Section. Any adjustments to the existing water system to meet the minimum cover and the requirements of the BWS standards, whether shown on plans or not, shall be done by the Contractor at no cost to BWS.
- The Contractor shall adjust all manhole frames/valve boxes within the resurfaced area prior to resurfacing. The Contractor shall be responsible for "referencing" these manholes/valve boxes to facilitate the adjustments.

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- The Contractor shall have existing water mains toned before construction of work in vicinity of water mains, call the investigation section at 527-5296 for toning servicés. Guardrail post locations are to be kept to a minimum clear distance of 18 inches to any 2-1/2 inch waterlines and meter boxes. No post driving will be allowed when post is to be installed closer than 3 feet from water main. Excavated areas shall be restored to their original conditions.
- 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 measure necessary to protect water lines, such as constructing special reaction blocks (with Board of Water Supply approval) and/or modifying his construction methods.
- The Board of Water Supply shall not be responsible for the damage, repair and replacement of the new guardrail systems and any other improvements installed over or in close proximity to the existing water mains due to mainbreaks.

APPROVED:

Michael Fake CHIEF, PLANNING & ENGINEERING DIVISION BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

UTILITY NOTES

KALANIANAOLE HIGHWAY RESURFACING Ainakoa Avenue to West Hind Drive Federal-Aid Project No. NH-072-1(47)

Date: Aug., 1999

SHEET No. 1 OF 1 SHEETS

