

**HECO NOTES:**

1. **Location of HECO Facilities**  
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 verify in the field the locations of the facilities and shall exercise proper care in excavating and working in the area. The Contractor shall be responsible for any damages to HECO'S facilities whether shown or not shown on the plans.
2. **Compliance with Hawaii Occupational Safety and Health Laws**  
The Contractor shall comply with the State of Hawaii's Occupational Safety and Health laws and regulations, including without limitation, those related to working on or near exposed or energized electrical lines and equipment.
3. **Excavation Clearance**  
The Contractor shall obtain an excavation clearance from HECO'S The Planning and Design Section of the Customer Installations Department (543-5654) located at 820 Ward Avenue, 4th floor, a minimum of ten (10) working days prior to starting construction.
4. **Caution!!! Electrical Hazard!!!**  
Existing HECO overhead and underground lines are energized and will remain energized during construction unless prior special arrangements have been made with HECO. Only HECO personnel are to handle these energized lines and erect temporary guards to protect these lines from damage. The Contractor shall work cautiously at all times to avoid accidents and damage to existing HECO facilities, which can result in electrocution.
5. **Overhead Lines**  
State law requires that a worker and the longest object he or she may contact cannot come closer than a minimum radial clearance of 10 feet when working close to or under any overhead lines rated 50kV and below. For each additional 1kV above 50kV, an additional 0.4 inch shall be added to the 10-foot clearance requirement. The preceding information on line clearance requirements is provided as a convenience, and it is the Contractor's responsibility to be informed of and comply with any revisions or amendments to the law.

Should the Contractor anticipate that his work will result in the need to encroach within the minimum required clearance at any time, the Contractor shall notify HECO at least four (4) weeks prior to the planned encroachment so that, if feasible, the necessary protections (e.g. relocate, de-energize, or blanket HECO lines) can be put in place. HECO's cost of safeguarding its lines will be charged to the Contractor.

Contact HECO's Customer Installations Department at 543-7846 for assistance in identifying and safeguarding overhead power lines.

6. **Underground Lines**  
The Contractor shall exercise extreme caution whenever construction crosses or is in close proximity of underground lines. HECO's existing electrical cables are energized and will remain energized during construction. Only HECO personnel are to break into existing HECO facilities, handle these cables, and erect temporary guards to protect these cables from damage. The cost of HECO's assistance in providing proper support and protection of its underground lines will be charged to the Contractor. For assistance/coordination in providing proper support and protection of these lines, the Contractor shall call HECO'S customer installations department at 543-7846 a minimum of ten (10) working days in advance.  
  
Special precautions are required when excavating near HECO's 138kV underground lines (See HECO Instructions to Consultants/Contractor's on "Excavation near HECO's Underground 138kV Lines" for detailed requirements).  
  
For verification of underground lines, the Contractor shall call the Hawaii One Call Center at 866-423-7287 minimum of five (5) working days in advance.
7. **Underground Fuel Pipelines**  
The Contractor shall exercise extreme caution whenever construction crosses or is in close proximity of HECO's underground fuel oil pipelines. Special precautions are required when excavating near HECO's underground fuel oil pipelines (see HECO's specific fuel pipeline Guidelines" to consultants/contractors on excavation near HECO's underground fuel pipelines for detailed requirements).

8. **Excavations**  
When trench excavation is adjacent to or beneath HECO's existing structures or facilities, the Contractor is responsible for:
  - a) Arranging for HECO standby personnel to observe work at Contractor's cost.
  - b) Sheet piling, bracing or otherwise supporting the excavation and stabilizing the existing ground to render it safe and secure and to prevent possible slides, cave-ins, and settlement.
  - c) Properly supporting existing structures or facilities with beams, struts, or under-pinnings, or other necessary methods to fully protect it from damage.
  - d) Backfilling with proper backfill material including special thermal backfill where existing (refer to Engineering Department for thermal backfill specifications).
9. **Relocation of HECO Facilities**  
Any work required to relocate or modify HECO facilities shall be done by HECO, or by the Contractor under HECO's supervision. The Contractor shall be responsible for all coordination, and shall provide necessary support for HECO's work, which may include, but not be limited to, excavation and backfill, permits and traffic control, barricading, and restoration of pavement, sidewalks, and other facilities.  
  
All costs associated with any relocation or modification (either temporary or permanent) for the convenience of the Contractor, or to enable the Contractor to perform his work in a safe and expeditious manner in fulfilling his contract obligations shall be borne by the Contractor.
10. **Conflicts**  
Any redesign or relocation of HECO's facilities not shown on the plans may be because for lengthy delays. The Contractor acknowledges that HECO is not responsible for any delay or damage that may arise as a result of any conflicts discovered or identified with respect to the location or construction of HECO's electrical facilities in the field, regardless of whether the Contractor has met the requested minimum advance notices. In order to minimize any delay or impact arising from such conflicts, HECO should be notified immediately upon discovery or identification of such conflict.
11. **Damage to HECO facilities**  
The Contractor shall be responsible for the protection of all HECO surface and subsurface utilities and shall be responsible for any damages to HECO's facilities as a result of his operations. The Contractor shall immediately report such damages or any hazardous conditions related to HECO's trouble dispatcher at 548-7961. Repair work shall be done by HECO or by the Contractor under HECO's supervision. Costs for damages to HECO's facilities shall be borne by the Contractor.  
  
In case of damage or suspected damage to HECO's fuel pipeline, the Contractor shall immediately notify HECO's Honolulu Power Plant shift supervisor at 533-2102 (A 24 hour number) so HECO personnel can secure the damaged section and report any oil spills to the proper authorities. In case of damage or suspected damage to the Wai'au or Kahe fuel pipelines, the Contractor shall also notify chevron at 682-2227. All costs associated with the damage, repair, and oil spill cleanup shall be borne by the contractor.
12. **HECO Stand-By Personnel**  
The Contractor may request HECO to provide an inspector to stand-by during construction near HECO's facilities. The cost of such inspection will be charged to the Contractor.  
  
The Contractor shall call the HECO's customer installations department at 543-7846. A minimum of 5 working days in advance to arrange for HECO stand-by personnel.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	92A-01-11M	2011	6	42

**OCEANIC CABLE NOTES:**

1. The locations of Oceanic Cable existing facilities are approximate only. The Contractor shall exercise extreme caution and shall maintain proper clearances whenever construction crosses or is in close proximity to Oceanic Cable facilities. The Contractor shall verify their locations and shall be liable for any damages to Oceanic Cable facilities. Any damages shall be reported immediately to Oceanic Cable Repair Dispatch Department at 625-8437 or 625-8666.
2. The Contractor shall obtain an excavation permit clearance from Oceanic Cable Engineering Section located at 200 Akamainui Street, Mililani Technology Park. (Phone: 625-8443)
3. Prior to the excavation, the Contractor shall request Oceanic Cable to locate existing ductlines. For any field assistance or verification of Oceanic Cable facilities, the Contractor shall call the Technical Operations Center at 625-8378 a minimum of five (5) working days in advance.
4. The Contractor shall take necessary precautions not to damage existing cables, ducts or facilities. Any work involving existing cables, ducts or penetrations into any structure that contain Oceanic Cable facilities shall be done in the presence of the Oceanic Cable inspector or its representative.

**JOINT TRUNKING SYSTEM (JTS) :**

1. Typical depth of JTS cabling is between 18" - 48"
2. Cable is a typically direct buried cable with portions of the cable in conduit near the maintenance hole connections.
3. Conduit composition may contain asbestos and may require additional precautions to repair (if damaged) or relocation of pathway.
4. Cable is typically tape armored wrapped and paperwrapped.
5. Any cable damaged shall be repaired by a telecommunication contractor familiar with the cable composition/type. Testing to ensure continuity is required.
6. Upon excavation, should the project exposed unidentified communication cable, please contact 30th Signal Battalion, ATTN: Dale Hironaka (808) 656-3514
7. Any JTS cable (if it conflicts with installed facility) may be required to be relocated if other utilities cannot work around the JTS current elevation.
8. Any cut paperwrapped cable should be protected from the elements (i.e. water) and wrapped with a material which will repel moisture/water to prevent additional damage to the cablings. Contact 30th Signal Battalion immediately.
9. Advise the contractor to submit an excavation permit with the Department of the Army prior to commencement of work. Contact Mr. Marion Robinson, (808) 656-1765 or budd.robinson@us.army.mil

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

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**UTILITY NOTES**  
**NIMITZ HWY. MEDIAN IMPROVEMENTS**  
**Sand Island Access Road**  
**to Vicinity of Alakawa Street**  
**Project No. 92A-01-11M**  
Date: March, 2011

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### BOARD OF WATER SUPPLY NOTES:

1. 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.
2. The Contractor shall notify the Board of Water Supply, Capital Projects Division, Construction Section in writing one week prior to commencing work on the water system.
3. The Contractor shall be responsible for the protection of all 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 necessary to protect the water lines, such as constructing special reaction blocks (with BWS approval) and/or modifying their construction methods.
4. 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 and shall pay for all damages to existing utilities. The Contractor shall not assume that where no utilities are shown, that none exist.
5. The Contractor shall verify all existing service lateral locations, whether or not shown on the plans, prior to commencing with any of the work and shall not assume that, where no services are shown, none exists.
6. Prior to any excavation, the Contractor shall verify in the field the location of existing water mains and appurtenances.
7. 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.
8. 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 Capital Projects Division, Construction Section. Any adjustments to the existing water plans or not, shall be done by the Contractor at no cost to BWS.

### HDOT SURVEY MONUMENTS

1. Protect existing survey monuments.
1. If there is a conflict with proposed improvements, the Engineer shall determine if adjusting and/or reconstructing the survey monument is required and work performed shall be paid via Special Provisions Section 613 Force Account.

### HAWAIIAN TELCOM GENERAL CONSTRUCTION AND DESIGN NOTES:

1. The Contractor shall obtain an excavation permit and toning request from Hawaiian Telcom's Excavation Permit Section, located at 1177 Bishop Street, two weeks prior to the start of construction. Hours for drop off/pick up are 8:00 a.m. to 11:00 a.m. and 1:00 p.m. to 3:00 p.m. Monday through Friday, except holidays.

### THE GAS COMPANY NOTES:

1. The Gas Company 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. Written clearances must be obtained from The Gas Company, Maps and Records department, 515 Kamakee Street, at least five (5) working days prior to starting excavation near these gas pipelines.
3. Since gas line locations on field maps are approximate, the Contractor, after obtaining written clearance, shall call USA North a minimum of two (2) working days before starting excavation to arrange for field location of the existing gas pipelines. The telephone number is 1-800-227-2600.
4. The Contractor shall excavate and backfill around gas pipelines in the presence of a representative of The Gas Company. All backfill within six inches of any gas pipelines shall be select cushion material approved by The Gas Company.
5. The Contractor shall notify The Gas Company immediately after any damage has been caused to existing gas pipelines, coatings, or its cathodic protection devices. The telephone number is 535-5933, 24 hours a day. The Contractor shall be liable for any damage to The Gas Company facilities. Repair work on such damage shall be done by The Gas Company with payment for this work to be borne by the Contractor.
6. Minimum vertical and horizontal clearance between the gas pipeline and other pipelines, conduits, duct-lines, 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 The Gas Company.
7. The Contractor shall work in an expeditious manner in order to keep the uncovered gas pipelines exposed for a short a period of time as possible.

### SEWER NOTES:

1. The underground pipes, cables, or ductlines known to exist by the Engineer from his research of records are indicated on the plans. The Contractor shall verify the location and depth of the facilities, including and affecting sewer lines, in the presence of the Wastewater Inspector and exercise proper care in excavating the area. The Contractor shall be responsible and shall pay for all damaged utilities.
2. The Contractor shall be responsible for the protection of all sewer lines and maintaining continuous sewer service to all affected areas during construction.
3. The Contractor shall be responsible for any sewage spills caused during construction. The Contractor shall notify the State Department of Health and utilize appropriate sampling and analyzing procedures. The Contractor shall be responsible for all public notifications and press releases.

### TRAFFIC SIGNAL AND TECHNOLOGY DIVISION NOTES:

1. The Contractor shall notify the City of County of Honolulu Traffic Signal and Technology Division, Department of Transportation Services, three (3) working days prior to commencing work on the traffic signal system (phone: 768-8388 or 768-8387).
2. The traffic signal system shall be kept operational during construction. Any relocation required shall be approved by the Traffic Signal and Technology Division, Department of Transportation Services, and paid for by the Contractor.
3. If a traffic signal interconnect cable is damaged, the Contractor shall install a new direct burial cable the complete length of median to run from pullbox to pullbox. No splicing at break will be accepted. If line is broken, immediately call City and County Traffic Signal at 768-8387.
4. Contractor to tone all traffic signal interconnect cables at their own expense. Contractor to contact City & County of Honolulu Traffic Signal & Technology Division to confirm toning locations and abandoned/live lines. Provide locations of live and abandoned lines on the As-Built drawings. All locations shall be clearly marked at 100 ft. intervals.
5. There is a traffic camera fiber optic line is between Sand Island Access Road to Waiakamilo Road. If line is broken, fiber optic line shall be replaced completely between camera utility boxes.
6. Adjust all traffic signal pull boxes to finish grade.
7. Replace all damaged and missing traffic signal pull box metal covers.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTED BY	DRAWN BY	
DESIGNED BY	CHECKED BY	
DATE		

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
<b>UTILITY NOTES</b>
<b>NIMITZ HWY. MEDIAN IMPROVEMENTS</b>
<b>Sand Island Access Road</b>
<b>to Vicinity of Alakawa Street</b>
<b>Project No. 92A-01-11M</b>
Date: March 2011
SHEET No. 2 OF 2 SHEETS