

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	NH-0300(175)	2021	7	73

TRAFFIC NOTES FOR WORK ON  
CITY AND COUNTY STREETS

- A permit shall be obtained from the Department of Transportation Services before work on any portion of a public street or highway may begin. Construction traffic control plans approved by the Department of Transportation Services and/or the Department of Planning and Permitting must be approved when applying for the permit.
- The Contractor shall provide, install and maintain all necessary signs and other protective facilities, which shall conform with the "Hawaii Administration Rules Governing the Use of Traffic Control Devices at Work Sites On or Adjacent to Public Streets and Highways" adopted by the Director of Transportation, and the current U.S. Federal Highway Administration's "Manual on Uniform Traffic Control Devices for Streets and Highways, Part VI - Traffic Controls for Street and Highway Construction and Maintenance Operations."
- Work on any City street area may be performed only between the hours of 8:30 A.M. to 3:30 P.M., Monday through Friday, unless otherwise permitted by the Department of Transportation Services.
- During working hours, the Contractor shall provide for through traffic. During non-working hours, all trenches shall be covered with safe non-skid bridging material and all lanes shall be open to traffic.
- As required by the Department of Transportation Services, the Contractor shall provide off-duty police officers to control the flow of traffic.
- Where pedestrian walkways exist, they shall be maintained in passable condition or other facilities for pedestrians shall be provided. Passage between walkways at intersections shall likewise be provided.
- Driveways shall be kept open unless the owners of the property using these rights-of-way are otherwise provided for satisfactorily.
- The Contractor shall reference to the approval of the Department of Transportation Services and the Department of Planning and Permitting, all existing traffic signs, posts and pavement markings prior to the commencement of construction. The Contractor shall replace or repair all traffic signs, posts and pavement markings disturbed by his activities.
- The Contractor shall notify the Department of Planning and Permitting at 768-8084 one (1) week prior to any work to be done on signs, posts and pavement markings.
- No equipment shall be stored within street rights-of-way except at locations designated win writing and approved by the Department of Transportation Services.
- The department of Design and Construction shall ensure that the Contractor installs the construction traffic control devices in accordance with the MUTCD and the Hawaii Administration Rules as specified in the traffic note #2.

FISH AND WILDLIFE NOTES

- Minimize impacts to seabirds.
  - Fully shield all outdoor lights so the bulb can only be seen from below bulb height and only use when necessary.
  - Install automatic motion sensor switches and timer controls on all outdoor lights or turn off lights when human activity is not occurring in the lighted area.
  - Avoid nighttime construction during the seabird fledging period, September 15 through December 15.
- Minimize the impacts to Hawaiian hoary bat.
  - Do not disturb, remove, or trim woody plants greater than 15 feet tall during the bat birthing and pup rearing season, June 1 through September 15.
  - Do not use barbed wire for fencing.

HAWAIIAN ELECTRIC COMPANY 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. wherever connections of new utilities to existing utilities and utility crossings are shown, the Contractor shall expose the existing lines at the proposed connections and crossings to verify the depths prior to excavation for the new lines. 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 PERMIT

The Contractor shall obtain an excavation clearance from Hawaiian Electric's 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 (OSHA 1910.269(k)(2b)) requires that a worker and the longest object he or she may contact cannot come closer than a specified minimum radial clearance when working close to or under any overhead lines. It is the contractor's responsibility to be informed of and comply with any revisions or amendments to the law.

At any time should the Contractor anticipate that his work will result in the need to encroach within the minimum required clearance as stated in the law, the Contractor shall notify HECO at least three (3) weeks prior to the planned encroachment so that, if feasible, the necessary protections (e.g. relocate or de-energize HECO lines) can be investigated. HECO may also be able to blanket its distribution (12kv and below) lines to provide a visual aid in preventing accidental contact. HECO's cost of safeguarding or identifying 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. POLE BRACING

Contractor shall not excavate within 10 feet from HECO's utility poles or any anchor system supporting the utility pole. If the Contractor must excavate closer than 10 feet from a utility pole or its anchor system, Contractor will be responsible for protecting, supporting, securing and taking all precautions to prevent damage to or leaning of existing poles. Before commencing such excavation, Contractor must submit its bracing calculations and drawings, prepared and stamped by a licensed structural engineer, to HECO's Customer Installations Department (543-7846) for review. HECO requires a minimum of ten (10) working days to conduct the review of the Contractor's submittal. Contractor shall be responsible for the design, installation, and removal of the temporary pole bracing system, as well as all costs incurred by HECO to review Contractor's drawings and to repair or straighten poles impacted by Contractor's activities, including response and restoration costs incurred by HECO arising out of or related to outages caused by Contractor's failure to meet the foregoing requirements. HECO's review and approval of any Contractor submittals including its work procedure shall not relieve Contractor from any liability resulting from Contractor's excavation near or around HECO's utility poles.

7. 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 Installation Department at 543-7846 a minimum of ten (10) working days in advance.

Special precautions are required when excavating near HECO's 138kv or 46kv underground lines (see HECO instructions to consultants/contractors 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.

8. 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 "guidlines" to consultants/contractors on excavation near HECO's underground fuel pipelines for detailed requirements).

ORIGINAL PLAN	DATE	SURVEY PLOTTED BY
		DRAWN BY
		DESIGNED BY
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NOTE BOOK	No.	QUANTITIES BY

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STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

CONSTRUCTION NOTES

FREEWAY MANAGEMENT SYSTEM  
Phase 3A  
Federal Aid Project No. NH-0300(175)

Scale: As Shown      Date: October 15, 2021

HAWAIIAN ELECTRIC COMPANY NOTES (CONT'D)

9. 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. Sheeting, 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 settlements.
- 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).

The Contractor shall notify the construction manager of HECO of any heat sources (power cable duct bank, steamline, etc.) encountered that are not properly identified on the drawing.

10. 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, staking of pole/anchor locations identifying right of way and property lines, 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.

11. CONFLICTS

Any redesign or relocation of HECO's facilities not shown on the plans may be cause 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.

12. 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 line 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 Security Command Center at 543-7685 (a 24-hour number) so HECO personnel can

MINIMUM SEPARATION CLEARANCES TO EXISTING UNDERGROUND DUCTLINES VERTICAL (CROSSINGS)				
UTILITY BEING INSTALLED	EXIST. DIRECT BURIED CABLE	EXIST. DIRECT BURIED IN CONDUIT (NO CONC. ENCASEMENT)	EXIST. 3" CONC. ENCASEMENT	APPLICABLE NOTES:
HECO DB CONDUITS	6"	3"	0"	
HECO 3" ENCASEMENT	0"	0"	0"	
TELEPHONE/CATV DB	12"		6"	
TELEPHONE/CATV DB DUCTS	12"	12"	6"	
TELEPHONE/CATV 3" ENCASEMENT	0"	0"	0"	5
TRAFFIC SIGNAL	12"	12"	6"	
WATER DB	6"	6"	6"	2
WATER SERVICE LATERALS	6"	6"	6"	
WATER (CONCRETE JACKETED)	6"	6"	6"	2
GAS DB	12"	12"	12"	
GAS (CONCRETE JACKETED)	12"	12"	12"	
SEWER DB	24"	24"	24"	1
SEWER (CONCRETE JACKETED)	24"	24"	24"	1
DRAIN	12"	12"	12"	
FUEL PIPELINES	48"	48"	48"	3
NOTES: 1. 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 24", JACKET SEWER LINE WITH PLAIN CONCRETE. 2. 12" VERTICAL CLEARANCE FOR PIPE DIAMETERS GREATER THAN 16". 3. ELECTRICAL CONDUIT CROSSINGS OF FUEL LINES SHOULD BE KEPT 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 24", THE FUEL LINE MUST BE ENCASED WITH 6" OF CONCRETE. 4. 5 FEET CLEAR TO WATER MAINS 16" AND LARGER. 5. FOR SITUATIONS WITH 0" MINIMUM SEPARATION, A 6" SEPARATION IS RECOMMENDED. 6. CLEARANCES MEASURED FROM OUTER EDGES OR DIAMETERS OF UTILITIES.				

secure the damaged section and report any oil spills to the proper authorities. All costs associated with the damage, repair, and oil spill cleanup shall be borne by the Contractor.

13. 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 two (2) months in advance to arrange for HECO stand-by personnel.

14. INDEMNITY

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 tortuous 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.

MINIMUM SEPARATION CLEARANCES TO EXISTING UNDERGROUND DUCTLINES HORIZONTAL (PARALLEL)				
UTILITY BEING INSTALLED	EXIST. DIRECT BURIED CABLE	EXIST. DIRECT BURIED IN CONDUIT (NO CONC. ENCASEMENT)	EXIST. 3" CONC. ENCASEMENT	APPLICABLE NOTES:
HECO DB CONDUITS	12"	3"	0"	
HECO 3" ENCASEMENT	0"	0"	0"	
TELEPHONE/CATV DB	12"	12"	6"	
TELEPHONE/CATV DB DUCTS	12"	12"	6"	
TELEPHONE/CATV 3" ENCASEMENT	0"	0"	0"	5
TRAFFIC SIGNAL	12"	12"	12"	
WATER DB	36"	36"	36"	1, 4
WATER SERVICE LATERALS	12"	12"	12"	
WATER (CONCRETE JACKETED)	36"	36"	36"	1, 4
GAS DB	12"	12"	12"	1
GAS (CONCRETE JACKETED)	12"	12"	12"	1
SEWER DB	36"	36"	36"	1, 2
SEWER (CONCRETE JACKETED)	36"	36"	36"	1, 2
DRAIN	12"	12"	12"	1
FUEL PIPELINES	48"	48"	48"	3
NOTES: 1. WHERE SPACE IS AVAILABLE, PARALLEL CLEARANCE TO OTHER UTILITIES, OR FOREIGN STRUCTURES OTHER THAN COMMUNICATION OR TRAFFIC SIGNAL SHALL BE 36". 2. 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. 3. ELECTRICAL CONDUIT CROSSINGS OF FUEL LINES SHOULD BE KEPT 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. 4. 5 FEET CLEAR TO WATER MAINS 16" AND LARGER. 5. FOR SITUATIONS WITH 0" MINIMUM SEPARATION, A 6" SEPARATION IS RECOMMENDED. 6. CLEARANCES MEASURED FROM OUTER EDGES OR DIAMETERS OF UTILITIES.				

15. CLEARANCES

The clearances shown on this sheet shall be maintained between HECO's ductline and all adjacent structures (charted and uncharted) in the trench.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
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STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

CONSTRUCTION NOTES

FREEWAY MANAGEMENT SYSTEM  
Phase 3A  
Federal Aid Project No. NH-0300(175)

Scale: As Shown      Date: October 15, 2021

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
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CATV 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 Contractor shall take necessary precaution not to damage existing cables or ducts. Any work involving existing cables or ducts shall be done in the presence of the Oceanic Cable/Time Warner inspector or his representative.
- The Contractor shall notify the Oceanic Cable/Time Warner inspector 48 hours prior to the start of pullbox adjustments.
- Contractor shall provide all materials and furnish all labor and equipment necessary to re-adjust the pullbox height.
- The location of CATV facilities shown on plans are from existing records with varying degrees of accuracy as to its actual fixed location. The Contractor shall use extreme caution when working in close proximity of CATV facilities.
- The Contractor shall obtain excavation permit clearance from Oceanic Cable/Time Warner's Engineering Section located at 200 Akamainui St., Mililani Tech Park
- Any work required to relocate CATV facilities shall be done by Oceanic Cable/Time Warner and the Contractor shall be responsible for all coordination requirements and associated costs.
- Any damage to Oceanic Cable/Time Warner's facilities shall be reported to OCI's Repair Dispatch Department at 625-8282 or 625-8666.
- At no time shall cement mortar, wood, or any other material be used between precast sections. Leveling or raising of boxes to grade must be done by brickwork section using cement mortar. The permanent installation of wooden wedges to accomplish this purpose will not be accepted.
- Trenching to be by hand digging near and across existing utility lines.
- For underground cable locating and parking, five (5) working days advance notice is required. Three (3) working days advance notice is required for any inspection by a designated representative. Contractor shall take necessary precaution not to damage any existing cables or ducts. Oceanic Cable/Time Warner's 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 Oceanic Cable/Time Warner's facilities.

WATER 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" dated 2002, the "Water System External Corrosion Control Standards," volume 3, dated 1991, and all subsequent amendments and additions.
- The Contractor shall notify the City and County of Honolulu Board of Water Supply 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 plans are from the latest available data but are 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.
- Re-approval shall be required if this project is not under construction within a period of two (2) years.
- 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 as constructing special reaction blocks (with the Board of Water Supply approval) and/or modifying his construction method.
- 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 project limits. The Contractor shall be responsible for "referencing" these manholes/valve boxes/meter boxes to facilitate the adjustments.
- At the electrical/signal ductline water crossings, adjust all electrical/signal ductline elevations to maintain 12" vertical clear separation from all waterlines at no cost to the Board of Water Supply.

- Maintain 3'-0" min. horizontal clear separation between all waterline systems and nearest electrical/signal ductlines paralleling the water system at no cost of to the Board of Water Supply.
- Maintain a 3'-0" horizontal clear separation between street light/traffic signal, standards (including any modular units) and the nearest water system. Contractor shall field verify for any conflicts at each street/traffic signal standard location. Where conflicts occur, the Contractor shall coordinate with the project engineer to revise the street light/traffic signal standard to provide the required clearances at no cost to the Board of Water Supply.
- Trenchless Installation Work:
  - For trenchless utility work (micro-tunneling, directional drilling, pipe ramming/jacking of new utilities such as electrical duct lines, sewer lines, or drain lines) crossing or paralleling existing waterlines, provide 3' minimum horizontal and vertical clearance to existing waterlines. The utility owner or contractor shall make adjustments to meet the minimum clearances should the utility be installed closer to the existing waterlines, at no cost to BWS. The contractor shall submit plans of the new utility lines after inspection of the project.
- 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.

HAWAIIAN TELCOM NOTES

- The Contractor shall procure and pay for all licenses and permits and shall give all notices necessary and incidental to the due and lawful prosecution of the work.
- The Contractor shall obtain an excavation permit and toning request from Hawaiian Telecom's Excavation Permit Section, located at 1177 Bishop Street, two weeks prior to the start of construction. Hours of business are 8:00 AM. to 11:00 AM. and 12:00 AM. to 3:00 PM. Monday through Friday, except holidays.

- Prior to the excavation of the ductline, the Contractor shall request Hawaiian Telecom to locate existing ductline wherever required. For underground cable locating and marking, five (5) working days advance notice is required. Three (3) working days advance notice is required for any inspection by a designated representative.
- 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 contains 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 January 2007 and all subsequent amendments and additions, and all other pertinent standards for telephone construction. The Contractor shall familiarize his personnel by obtaining applicable specifications.

ORIGINAL PLAN	SURVEY PLOTTED BY _____	DATE _____
	DRAWN BY _____	" " " "
	TRACED BY _____	" " " "
	DESIGNED BY _____	" " " "
NOTE BOOK	QUANTITIES BY _____	
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STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

CONSTRUCTION NOTES

FREEWAY MANAGEMENT SYSTEM  
Phase 3A  
Federal Aid Project No. NH-0300(175)

Scale: As Shown      Date: October 15, 2021

SHEET No. G-8 OF 10 SHEETS

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HAWAIIAN TELCOM NOTES (CONT'D)

8.

When excavation is adjacent to or beneath Hawaiian Telcom'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 Hawaiian Telcom'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 Hawaiian Telcom's structures or facilities.
9.

The Contractor shall brace all poles or light standards near the new ductline, manhole, or handhole during his operations.
10.

The Contractor shall saw-cut A.C. pavement and concrete gutter wherever new manholes, handholes, or ductlines are to be placed and shall restore to existing condition or better.
11.

The Contractor shall comply with the policy adopted by the Department of Design and Construction, City and County of Honolulu, concerning the replacement of concrete sidewalks after excavation work.
12.

The underground pipes, cables, or ductlines known to exist by the Engineer from his search of records are indicated on the plans. The Contractor shall verify the locations and depths of the facilities and exercise proper care in excavating in the area. Wherever connections of new utilities to existing utilities are shown on the plans, the Contractor shall expose the existing lines at the proposed connections to verify their locations and depths prior to excavation for the new lines.
13.

Wherever connections to existing utilities are shown on the plans, the contractor shall expose the existing lines prior to excavation of the main trenches to verify their locations and depths.
14.

The Contractor, at his own expense, shall keep the project and surrounding area free from dust nuisance. The cost for supplementary measures, which will be required by the City and County, shall be borne by the Contractor.
15.

The Contractor shall pump all manholes dry during final inspection.
16.

The Contractor shall notify Hawaiian Telcom inspector 24 hours prior to the pouring of concrete or backfilling.
17.

When connecting to manhole walls, all existing reinforcing bars shall be left intact. Ducts shall be adjusted in the field in order to clear reinforcing.
18.

The Contractor shall be responsible for laying out all required lines and grades and shall preserve all bench marks and working points necessary to lay out the work correctly. The new ductline shall be adjusted by the Contractor to suit the existing conditions and the details as described in the plans.
19.

Minimum concrete strength shall be: For ductline 2500 PSI at 28 days For manhole 3000PSI at 28 days or as specified in design notes.

20.

Due to changes in grade shall have a minimum radius of 25 feet. All 90 degree c-bends at a pole or at the building floor slab penetration, shall have a bend radius of ten times the diameter of the duct or greater.
21.

After ductline has been completed, a mandrel with a square front not less than 12" long and having a diameter of 1/4" less than the inside diameter of the duct, shall be pulled through each duct after which a brush with stiff bristles shall be pulled through to make certain that no particles of earth, sand, or gravel have been left inside. Ducts shall be completely dry and clean.
22.

All ducts and conduits shall have an 1800# polyester mule-tape (neptco, wpl800p, Hawaiian Telcom material code no. 571154) installed throughout its entire length. All ducts shall be capped to prevent entry of foreign material during construction and at the completion of installation.

CONTRACTOR'S RESPONSIBILITY FOR EXISTING UTILITY LINES, PIPES AND SERVICES

1.

The Contractor shall contact Hawaii One Call Center to have respective utility companies and agencies mark where their underground utilities are located. The Contractor shall comply with all requirements of Hawaii One Call Law. The Contractor shall be liable for any damages if Hawaii One Call requirements are not strictly adhered to. In accordance with Hawaii State Law Section 269E-7, the Hawaii One Call Center (HOCC) shall provide an inquiry identification number for each location request provided by the Contractor. The inquiry identification number and utility marks shall remain valid for not more than twenty-eight (28) calendar days from the date of issuance and after that date shall require the Contractor to submit a new request for HOCC revalidation. The Contractor shall provide all inquiry identification numbers for each location request to the Engineer.
2.

The Contractor shall notify the Hawaii One Call Center (HOCC) at 1-866-423-7287 for excavation or drilling at least five (5) working days, but not more than twenty-eight (28) calendar days prior to commencing excavation or drilling work, in accordance with Hawaii Revised Statutes Chapter 269e. The Contractor shall provide the HOCC, a description of the site, that includes the county and address or description of where the excavation or drilling will take place, including but not limited to the nearest intersecting street, side street, or other tie-in measurements as needed. The Contractor shall not begin excavation or drilling operations without prior clearances from the HOCC.

3.

Information regarding the site of the work given on the drawings or specifications has been obtained by the Engineer and is believed to be reasonably correct; however, it is the responsibility of the Contractor to verify all such information. The Contractor shall tone the area to be excavated to ascertain the location of uncharted utilities.
4.

Any utilities that the Contractor encounters during the progress of the work, such as telephone ducts, electric ducts, water lines, sewer lines, electric lines and drainage pipes, whether shown or not on the contract plans, shall not be disturbed or damaged unless otherwise instructed in the plans and specifications.
5.

In the event the utilities are damaged or disturbed by the Contractor, the Contractor shall be held liable for the damaged or disturbed utilities.
6.

The Contractor shall repair the damaged or disturbed utilities to the existing condition at no cost to the owner. Any damage claims due to the disruption of service caused by the utilities being damaged shall be paid by the Contractor, who shall save harmless the owner and on account of such damages.
7.

In the event utilities which were not shown on the plans and specifications are damaged or disturbed by the Contractor, the Contractor shall be held liable. The Contractor shall contact all utility companies and expose all utility lines prior to any excavation and/or installation of lines.

CONSTRUCTION NOTES FOR GAS FACILITIES

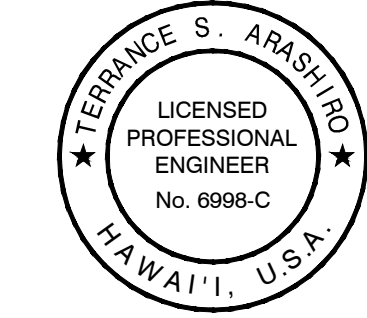
1.

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 Hawaii One Call Center a minimum of five (5) working days before starting excavation to arrange for field location of the existing gas pipelines. The telephone number is 1-866-423-7287.
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 pipeline shall be select cushion material approved by the Gas Company.



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION AS DEFINED IN H.A.R. TITLE 16, CHAPTER 115, RULES OF THE BOARD OF PROFESSIONAL ENGINEERS, ARCHITECTS AND SURVEYORS, STATE OF HAWAII

APR 30, 2024  
LIC. EXP. DATE

5.

For relocation of any gas pipeline, the Contractor shall notify the Gas Company five (5) working days before starting work. The telephone number is 594-5574. The Contractor shall provide the necessary excavation and backfill, obtain traffic permits, and restore pavement, sidewalks, and other facilities. Any relocation of gas facilities shall be done by the Gas Company and paid for by the Contractor.
6.

The Contractor shall notify the Gas Company mmediately 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.
7.

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 the Gas company.
8.

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.

PUBLIC HEALTH, SAFETY AND CONVENIENCE

1.

The Contractor shall observe and comply with all Federal, State and Local laws required for the protection of public health and safety and environmental quality.
2.

The Contractor, at his own expense, shall keep the project and its surrounding areas free from dust nuisance. The work shall be in conformance with the Air Pollution Standards and Regulations of the State Department of Health.
3.

The Contractor shall be responsible for the cleaning and removal of all silt and debris generated by his work and deposited and accumulated within downstream waterways, ditches and drain pipes and on public and private roadways. The Contractor agrees to reimburse the State or City and County of Honolulu, the costs expended in performance of the above work if required for public health and safety, or made necessary by non-performance by the Contractor.
4.

The Contractor shall submit a noise pollution control plan when applying for a construction permit.

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

CONSTRUCTION NOTES

FREEWAY MANAGEMENT SYSTEM

Phase 3A

Federal Aid Project No. NH-0300(175)

Scale: As Shown      Date: October 15, 2021

SHEET No. G-9 OF 10 SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	TRACED BY	
	DESIGNED BY	
	QUANTITIES BY	
	CHECKED BY	
No.		

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DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	NH-0300(175)	2021	11	73

GENERAL NOTES FOR  
TRAFFIC CONTROL PLANS

1.

Traffic control plans shown in the Contract Documents are minimum requirements and do not constitute a complete traffic control plan. The Contractor shall provide any traffic control plan (not shown in the plans) that is needed to accomplish the work based on contractor's means and methods considering site conditions and construction sequence in accordance with the Contract Documents including applicable Manual Uniform Traffic Control Devices (MUTCD) requirements. All lane closures and traffic pattern changes (detours) not shown on the plan shall be submitted to the Engineer for approval in accordance with Specifications Section 645 - Work Zone Traffic Control. For restrictions on lane closures, detours, construction work during peak hours, and other requirements regarding maintaining vehicular and pedestrian traffic, see Section 107.06 - Contractor Duty Regarding Public Convenience, and Section 645 - Work Zone Traffic Control. All traffic control related costs shall be included in the various lump sum traffic control pay items and shall not be paid for separately.
2.

The Contractor shall make minor adjustments at intersections, driveways, bridges, structures, etc., to fit field conditions.
3.

Cones or delineators shall be extended to a point where they are visible to approaching traffic.
4.

Traffic control devices shall be installed such that the sign or device farthest from the work area is placed first. The others shall then be placed progressively toward the work area.
5.

Regulatory and warning signs within the construction zone that are in conflict with the traffic control plans shall be removed or covered.
6.

The Contractor shall install a flashing arrow signal as shown on the traffic control plans.
7.

All traffic lanes shall be a minimum of 10 feet wide.
8.

All construction warning signs shall be promptly removed or covered whenever the message is applicable or not in use.
9.

The backs of all signs used for traffic control shall be appropriately covered to preclude the display of inapplicable sign messages (i.e., when signs have messages on both faces.
10.

Submit requests for detours, ramp, and lane closures in accordance with Hawaii Standard Specification Subsection 645.03(F). Refer to minimum timeframes required for implementation.

11.

Lane closure shall be limited only to the extent of accomplishing each day's work. As soon as each day's work is completed, the contractor shall remove all traffic control devices no longer needed to permit free and safe passage of public traffic. Removal shall be in the reverse order of installation. Existing faded or obliterated pavement markings that are necessary for safe traffic flow in the construction area shall be replaced with temporary or permanent markings before opening the roadway to public traffic each day.
12.

Flaggers and/or police officers shall be in sight of each other or in direct communication at all times.
13.

Permanent pavement markings and traffic signs shall be replaced upon completion of each phase of work.
14.

Cones and delineators shall be spaced at a maximum distance of 20 feet apart. A minimum of six channelizing devices shall be used for each taper length.
15.

"No Parking" signs shall be posted within any work area and for the buffer and taper areas approaching the work area. Contractor shall notify and coordinate restricted parking with roadway owner.
16.

See Section 645 of the Special Provisions for allowable closure times and other requirements.
17.

Driveways shall be kept open unless the owners of the property using the right-of-way are otherwise provided for satisfactorily. Further, the contractor shall control traffic going in and out of driveways.
18.

Buffer and taper areas on approach to any work area shall be kept clear of vehicles and equipment.
19.

A high level warning device (flag tree) shall be installed on approach to all work areas.
20.

Traffic control plans shall be approved for work on any city street area requiring 24 hour closure.
21.

All traffic control devices shall meet NCHRP 350 Standards.
22.

Steel plates are only allowed for non-work hour protection where posted speed limit is 35 mph or less. For speed limits greater than 35 mph, the Contractor shall use temporary barriers and layout in State Standard Plans TE-42 and TE-43 or accepted equal. The cost shall be incidental to the various contract items.
23.

If the traffic control plan or any traffic control device is not installed per plan, specification, or is deemed unsafe, the Engineer reserves the right to shut down the work at no additional cost/time or withhold payment.
24.

Contractor to coordinate lane closures and work with adjacent projects.

SOLID WASTE CONTRUCTION NOTES

1.

All material generated by the project and taken off-site shall be considered solid waste. The Contractor shall dispose of all removed material at an approved Department of Health waste management facility. Provide a copy of all the disposal receipts from the facility permitted by the Department of Health to receive solid waste tothe Engineer by the last day of the month. Provide documentation from any intermediary facility where solid waste is handled or processed, haul tags, or any documentation as requested by the Engineer. If the Contractor elects to reclassify material as inert fill, DOH HEER testing guidance shall be followed. No material generated from this project shall be classified as inert fill material for reuse without testing, obtaining required approvals/permits, providing disposal locations/quantities, and obtaining prior written approval from the Engineer. Failure to comply with these requirements will result in fines/liquidated damages in accordance with Special Provisions Section 209 and HDOT's Enforcement Response Plan.
2.

Any material brought to the City and County landfills will be subjected to the instituted tipping fee system, with no exceptions or exemptions.

EP	Edge Pavement
ETW	Edge Travel Way
FH	Fire Hydrant
FOC	Fiber Optic Cable
FT	Feet
GA	Guy Anchor
GE	Gigabit Ethernet
GFE	Government Furnished Equipment
GV	Gate Valve
HELCO	Hawaiian Electric Light Co.
HECO	Hawaiian Electric Co.
HT/HTCO	Hawaiian Telcom
IRR	Irrigation
LAT	Lateral
LP	Light Pole
MH	Manhole
MON	Monument
MIN	Minimum
NIC	Not In Contract
PAV'T	Pavement
P	Property Line
PL	Place
PP	Power Pole
RD.	Road
ROW	Right-Of-Way
SDMH	Storm Drain Manhole
SFP	Small Form Factor Pluggable
SHT.	Sheet
ST.	Street
STA.	Station
STD	Standard
SW	Switch (ethernet)
S/W	Sidewalk
TBOX	Telephone Box
TCP	Traffic Control Plan
TMH	Telephone Manhole
TRANS	Transformer
TYP.	Typical
UP	Utility Pole
VMS	Variable Message Sign
WM	Water Meter
WV	Water Valve

ABBREVIATIONS

ABUT	Abutment
Ø	Approximate
φ	And
@	At
AC	Asphalt Concrete
BL	Baseline
BMP	Best Management Practices
CATV	Cable Television
CB	Catch Basin
CCTV	Closed Circuit Television
CL	Centerline
CLR.	Clear
CONC	Concrete
CONT	Continuation or Continuous
DET.	Detail
D.I.	Drain Inlet
D/L	Drain Line
DMS	Dynamic Message Sign
DMH	Drain Manhole
DWY. OR D/W	Driveway
EA	Each
EHH	Electric Handhole
ELEC.	Electric
ELEV.	or EL Elevation
EX.	or EXIST. Existing



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

CONSTRUCTION NOTES

FREEWAY MANAGEMENT SYSTEM  
Phase 3A  
Federal Aid Project No. NH-0300(175)

Scale: As Shown      Date: October 15, 2021

SHEET No. G-10 OF 10 SHEETS

ORIGINAL PLAN	DATE
NOTED BY	
DESIGNED BY	
CHECKED BY	
NO.	

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