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

CONSTRUCTION NOTES

1. THE PROJECT IS ON KALANIANA'OLE HIGHWAY FROM LAUKAHI STREET TO THE VICINITY OF WEST HIND DRIVE. THE SCOPE OF WORK FOR THIS PROJECT CONSISTS OF: INSTALLING WATER MAINS AND APPURTENANCES INCLUDING BUT NOT LIMITED TO: CONNECTIONS TO EXISTING MAINS; CUTTING AND PLUGGING OF MAINS TO BE ABANDONED; RECONNECTION FOR EXISTING SERVICE LATERALS; INSTALLATION OF NEW FIRE HYDRANTS; AND ASSOCIATED ROADWAY REPAIRS REQUIRED TO PERFORM THE WORK.
2. THE CONTRACTOR SHALL PERFORM APPLICABLE CONSTRUCTION WORK ALL IN ACCORDANCE WITH THE STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION DATED SEPTEMBER 1984 AS AMENDED, THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION DATED SEPTEMBER 1986 OF THE DEPARTMENT OF PUBLIC WORKS, CITY AND COUNTY OF HONOLULU, AND THE REVISED ORDINANCES OF HONOLULU, 1990, AS AMENDED.
3. THE UNDERGROUND PIPES, CABLES OR DUCT LINES 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.
4. PRIOR TO THE START OF EXCAVATION, THE CONTRACTOR SHALL NOTIFY ALL APPLICABLE AGENCIES AND HAVE THEM LOCATE THEIR RESPECTIVE UTILITY LINES IN THE PROJECT AREA PRIOR TO EXCAVATING. THE CONTRACTOR SHALL BE HELD RESPONSIBLE AND SHALL PAY FOR ALL DAMAGES TO AND MAINTENANCE AND PROTECTION OF EXISTING UTILITIES AND STRUCTURES.
5. TOPOGRAPHIC SURVEY WAS CONDUCTED BY COMMUNITY PLANNING INC. ON FEBRUARY 14, 2000. BENCH MARKS USED WERE BASED ON THE FOLLOWING CONTROLS: AZIMUTHS AND ELEVATIONS REFERENCED TO "KAL-1", ELEV=11.41, AT THE INTERSECTION OF KALANIANA'OLE HIGHWAY AND WAIHOLO STREET ON SHEET 4 AND "KAL-7", ELEV=7.44, AT THE INTERSECTION OF KALANIANA'OLE HIGHWAY AND WEST HIND DRIVE ON SHEET 14.
6. THE CONTRACTOR SHALL NOTIFY THE CIVIL ENGINEERING BRANCH, D.P.P. AT 523-4881 TO ARRANGE FOR INSPECTION SERVICES AND SUBMIT THREE (3) SETS OF APPROVED CONSTRUCTION PLANS SEVEN (7) DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION WORK.
7. VERIFY AND CHECK ALL DIMENSIONS AND DETAILS SHOWN ON THE DRAWINGS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCY SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION.
8. THE LOCATION AND DEPTH OF EXISTING UTILITIES WHETHER OR NOT SHOWN ON THE PLANS SHALL BE VERIFIED BY THE CONTRACTOR. EXERCISE PROPER CARE WHEN EXCAVATING IN THE AREA AND PROTECT EXISTING UTILITIES AT ALL TIMES DURING CONSTRUCTION. ANY DAMAGE TO THEM SHALL BE REPAIRED AND PAID FOR BY THE CONTRACTOR.
9. DURING NON-WORKING HOURS, THE TRENCHES ON ALL STREETS SHALL BE COVERED WITH NON-SKID STEEL PLATES AND ALL LANES MAINTAINED OPEN FOR TRAFFIC.
10. THE CONTRACTOR SHALL PROVIDE ACCESS TO AND FROM DRIVEWAYS AND PUBLIC STREETS AT ALL TIMES EXCEPT AS NOTED ON THE PLANS.
11. WHEN TRENCH EXCAVATION IS ADJACENT TO OR UNDER EXISTING STRUCTURES OR FACILITIES THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SHEETING AND BRACING THE EXCAVATION AND STABILIZING THE EXISTING GROUND TO RENDER IT SAFE AND SECURE FROM POSSIBLE SLIDES, CAVE-INS AND SETTLEMENT AND FOR PROPERLY SUPPORTING EXISTING STRUCTURES AND FACILITIES WITH BEAMS, STRUTS OR UNDERPINNING TO FULLY PROTECT IT FROM DAMAGE.
12. BACKFILL UNDER EXISTING STRUCTURES OR FACILITIES SHALL BE SANDY OR GRANULAR MATERIAL COMPLETELY PLACED AS SOON AS THE PIPE IS LAID AND TESTED. THE BACKFILL MATERIAL SHALL BE RAMMED WITH PROPER TOOLS UNTIL COMPACTED FROM 90% TO 95% OF ITS MAXIMUM DENSITY.
13. ALL WORK CALLED FOR ON THE PLANS AND NOT ITEMIZED IN THE PROPOSAL AND ALL WORK NOT CALLED FOR BUT REQUIRED FOR THE CONSTRUCTION OF THIS PROJECT, SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACTOR'S BID PRICE.
14. THE CONTRACTOR SHALL RESTORE TO THEIR ORIGINAL OR BETTER CONDITION ALL IMPROVEMENTS DAMAGED AS A RESULT OF THE CONSTRUCTION, INCLUDING PAVEMENTS, EMBANKMENT, CURBS, SIGNS, LANDSCAPING, STRUCTURES, UTILITIES, WALLS, FENCES, ETC. UNLESS PROVIDED FOR SPECIFICALLY IN THE PROPOSAL, DEMOLITION AND RESTORATION OF EXISTING ITEMS SHALL BE INCIDENTAL AND INCLUDED WITHIN THE CONTRACTOR'S BID PRICE.
15. RESTORATION OF PAVEMENT SHALL BE DONE WITH EQUIVALENT OR BETTER QUALITY MATERIALS. THE CONTRACTOR SHALL MATCH THE EXISTING THICKNESSES OR USE THE FOLLOWING MINIMUM THICKNESSES, WHICHEVER IS GREATER: 12" MIN. SUBBASE COURSE, 8" MIN. BASE COURSE, 4" MIN. ASPHALTIC CONCRETE AND/OR 8" MIN. PORTLAND CEMENT CONCRETE PAVEMENT.
16. PAYMENT FOR RESTORATION OF DRIVEWAYS, CURBS AND GUTTERS WILL NOT BE MADE DIRECTLY BUT SHALL BE INCLUDED IN THE CONTRACTOR'S BID PRICE IN THE VARIOUS ITEMS OF THE BID.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMANCE WITH THE APPLICABLE PROVISIONS OF THE WATER QUALITY AND WATER POLLUTION CONTROL STANDARDS CONTAINED IN HAWAII ADMINISTRATIVE RULES, CHAPTER 11-54, "WATER QUALITY STANDARDS" AND CHAPTER 11-55 "WATER POLLUTION CONTROL", AS WELL AS CHAPTER 14 OF THE REVISED ORDINANCES OF HONOLULU, AS AMENDED. BEST MANAGEMENT PRACTICES SHALL BE EMPLOYED AT ALL TIMES DURING CONSTRUCTION.
18. AT THE END OF EACH DAY'S WORK, THE CONTRACTOR SHALL REMOVE ALL EQUIPMENT AND OTHER OBSTRUCTIONS TO PERMIT FREE AND SAFE PASSAGE OF PUBLIC TRAFFIC.
19. SMOOTH RIDING CONDITIONS SHALL BE CONSTRUCTED AT ALL LIMITS AFFECTED BY THE PROJECT.

PUBLIC HEALTH, SAFETY AND CONVENIENCE NOTES

1. THE CONTRACTOR SHALL OBSERVE AND COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS REQUIRED FOR THE PROTECTION OF PUBLIC HEALTH, SAFETY AND ENVIRONMENTAL QUALITY.
2. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AREA AND SURROUNDING AREA FREE FROM DUST NUISANCE. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION CONTROL STANDARDS AND REGULATIONS OF THE STATE DEPARTMENT OF HEALTH.
3. NO CONTRACTOR SHALL PERFORM ANY TRENCHING OPERATION SO AS TO CAUSE FALLING ROCKS, SOIL OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW ONTO ADJOINING PROPERTIES, STREETS OR NATURAL WATER COURSES. SHOULD SUCH VIOLATIONS OCCUR, THE CONTRACTOR SHALL IMMEDIATELY MAKE ALL REMEDIAL ACTIONS NECESSARY.
4. THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, MARKERS, CONES, AND OTHER PROTECTIVE FACILITIES, AND SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION, CONVENIENCE AND SAFETY OF THE PUBLIC.
5. THE CONTRACTOR'S ATTENTION IS DIRECTED TO TITLE II, ADMINISTRATIVE RULES, CHAPTER 43 PUBLIC HEALTH REGULATIONS DEPARTMENT OF HEALTH, STATE OF HAWAII "COMMUNITY NOISE CONTROL FOR OAHU" IN WHICH MAXIMUM ALLOWABLE NOISE LEVELS HAVE BEEN SET. IF THE CONSTRUCTION ACTIVITIES FOR THIS PROJECT WILL EXCEED THE ALLOWABLE NOISE LEVELS, THE CONTRACTOR WILL BE REQUIRED TO OBTAIN A PERMIT FROM THE DIRECTOR OF THE DEPARTMENT OF PUBLIC HEALTH. THE CONTRACTOR SHALL OBTAIN A COPY OF CHAPTER 43 AND BECOME FAMILIAR WITH THE NOISE LEVEL RESTRICTIONS AND THE PROCEDURES FOR OBTAINING A PERMIT FOR CONSTRUCTION ACTIVITIES.

CONSTRUCTION NOTES FOR GAS FACILITIES

1. THE CONTRACTOR IS ALERTED TO THE PRESENCE OF GAS PIPELINES BELONGING TO THE GAS COMPANY WITHIN THE PROJECT LIMITS. THE CONTRACTOR SHALL BE EXTREMELY CAREFUL WHEN WORKING NEAR THESE GAS PIPELINES.
2. WRITTEN CLEARANCE MUST BE OBTAINED FROM THE GAS COMPANY AT LEAST FIVE WORKING DAYS BEFORE STARTING EXCAVATION NEAR THESE GAS PIPELINES.

SINCE GAS LINE LOCATIONS ON FIELD MAPS ARE APPROXIMATE, THE CONTRACTOR, AFTER OBTAINING WRITTEN CLEARANCE, SHALL CALL THE GAS COMPANY AT LEAST FIVE WORKING DAYS BEFORE STARTING EXCAVATION TO ARRANGE FOR THE FIELD LOCATIONS OF THE EXISTING GAS PIPELINES. THE TELEPHONE NUMBER IS 594-5575 DURING BUSINESS HOURS, AND 526-0066 AFTER BUSINESS HOURS.
3. THE CONTRACTOR SHALL EXCAVATE AND BACKFILL AROUND GAS PIPELINES IN THE PRESENCE OF A GAS COMPANY REPRESENTATIVE. ALL BACKFILL WITHIN SIX INCHES OF ANY GAS PIPELINE SHALL BE SELECT CUSHION MATERIAL APPROVED BY THE GAS COMPANY.
4. FOR RELOCATION OF ANY GAS PIPELINE, THE CONTRACTOR SHALL NOTIFY THE GAS COMPANY FIVE WORKING DAYS BEFORE STARTING WORK. THE CONTRACTOR SHALL PROVIDE THE NECESSARY EXCAVATION AND BACKFILL, OBTAIN TRAFFIC PERMITS, AND RESTORE ANY PAVEMENT, SIDEWALKS, AND OTHER FACILITIES. ANY RELOCATION OF GAS FACILITIES SHALL BE DONE BY THE GAS COMPANY AND PAID FOR BY THE CONTRACTOR.
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. REPAIR WORK ON SUCH DAMAGE SHALL BE DONE BY THE GAS COMPANY, AND PAID FOR 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 THE GAS COMPANY.
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.

SEWER NOTES

1. ALL SEWER CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY'S STANDARD SPECIFICATIONS, SEPT. 1986, THE DEPARTMENT OF PUBLIC WORKS STANDARD DETAILS, SEPT. 1984, CURRENT CITY PRACTICES AND REVISED ORDINANCES OF HONOLULU, 1990 AS AMENDED, AND THE DESIGN STANDARDS OF THE DEPT. OF WASTEWATER MANAGEMENT VOL. 1, JULY 1993.
2. THE CONTRACTOR SHALL NOTIFY THE INSPECTION SECTION, WASTEWATER BRANCH, DDC, AT 527-5842 OR 523-4345 TO ARRANGE FOR INSPECTION SERVICES AND SUBMIT FOUR (4) SETS OF APPROVED CONSTRUCTION PLANS SEVEN (7) DAYS PRIOR TO COMMENCEMENT OF SEWER WORK. THE CONTRACTOR SHALL PAY FOR ALL INSPECTION COSTS.
3. 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 PAY FOR ALL DAMAGED UTILITIES.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING CONTINUOUS SEWER SERVICE TO ALL AFFECTED AREAS DURING CONSTRUCTION.
5. 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.
6. CONFINED SPACE

FOR ENTRY BY CITY PERSONNEL, INCLUDING INSPECTORS, INTO A PERMIT REQUIRED CONFINED SPACE AS DEFINED IN 29 CFR PART 1910.146(b), THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING:

A. ALL SAFETY EQUIPMENT REQUIRED BY THE CONFINED SPACE REGULATIONS APPLICABLE TO ALL PARTIES OTHER THAN THE CONSTRUCTION INDUSTRY, TO INCLUDE, BUT NOT LIMITED TO, THE FOLLOWING:

1. FULL BODY HARNESS FOR UP TO TWO PERSONNEL.
2. LIFELINE AND ASSOCIATED CLIPS.
3. INGRESS/EGRESS AND FALL PROTECTION EQUIPMENT.
4. TWO-WAY RADIOS (WALKIE-TALKIES) IF OUT OF LINE-OF-SIGHT.
5. EMERGENCY (ESCAPE) RESPIRATOR (10 MINUTE DURATION).
6. CELLULAR TELEPHONE TO CALL FOR EMERGENCY ASSISTANCE.
7. CONTINUOUS GAS DETECTOR (CALIBRATED) TO MEASURE OXYGEN, HYDROGEN SULFIDE, CARBON MONOXIDE AND FLAMMABLES (CAPABLE OF MONITORING AT A DISTANCE AT LEAST 20 FEET AWAY).
8. PERSONAL MULTI-GAS DETECTOR TO BE CARRIED BY INSPECTOR.

B. CONTINUOUS FORCED AIR VENTILATION ADEQUATE TO PROVIDE SAFE ENTRY CONDITIONS.

C. ONE ATTENDANT/RESCUE PERSONNEL TOPSIDE (TWO; IF CONDITIONS WARRANT IT).

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 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.

FINAL CONSTRUCTION DOCUMENTS WERE COMPLETED PRIOR TO RECEIVING REVIEW COMMENTS VERIFYING THE LOCATION OF EXISTING HECO FACILITIES. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY WITH HECO, THE LOCATION OF HECO'S FACILITIES WHETHER OR NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE ALL NEW CONSTRUCTION WORK WITH EXISTING HECO FACILITIES AND SHALL IMMEDIATELY NOTIFY THE ENGINEER SHOULD ANY DISCREPANCIES BE DISCOVERED. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING HECO FACILITIES AND SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED TO HECO FACILITIES AS A RESULT OF HIS/HER CONSTRUCTION.
2. COMPLIANCE WITH DOSH
THE CONTRACTOR SHALL COMPLY WITH THE STATE OF HAWAII'S OCCUPATIONAL SAFETY AND HEALTH LAW (DOSH).
3. EXCAVATION PERMIT
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. PLEASE REFER TO OUR REQUEST NUMBER AT THAT TIME.

HAWAIIAN ELECTRIC COMPANY NOTES (CONT.)

4. UNDERGROUND LINES
FOR VERIFICATION OF UNDERGROUND LINES OR FOR ASSISTANCE IN SUPPORTING AND PROTECTING THESE LINES, THE CONTRACTOR SHALL CALL HECO'S UNDERGROUND DIVISION AT 543-7345 A MINIMUM OF 72 HOURS IN ADVANCE OF ANY UNDERGROUND WORK.
 5. EXCAVATIONS
WHEN TRENCH EXCAVATION IS ADJACENT TO OR BENEATH OUR EXISTING STRUCTURES OR FACILITIES, THE CONTRACTOR IS RESPONSIBLE FOR:
A. SHEETING AND BRACING THE EXCAVATION TO PREVENT SLIDES, CAVE-INS, AND SETTLEMENT.
B. PROTECTING EXISTING STRUCTURES OR FACILITIES WITH BEAMS, STRUTS, OR UNDER-PINNINGS.
 6. POLE BRACING
FOR POLE BRACING INSTRUCTIONS, THE CONTRACTOR SHALL CALL THE HECO DISTRICT SUPERINTENDENT AT (KOOLAU/261-6084, WAIU/543-4223, WARD/543-7745) A MINIMUM OF 72 HOURS IN ADVANCE.
 7. RELOCATION OF HECO FACILITIES
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.
 8. TEMPORARY RELOCATION OF HECO FACILITIES
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.
 9. UNFORESEEN CONFLICTS
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.
 10. DAMAGE TO HECO FACILITIES
ANY DAMAGE TO HECO'S FACILITIES WILL BE REPORTED IMMEDIATELY TO HECO'S TROUBLE DISPATCHER AT PH. 543-7874.
 11. LIABILITY FOR DAMAGES TO HECO FACILITIES
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.
 12. INDEMNITY
THE CONTRACTOR SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS HECO FROM AND AGAINST ALL LOSSES, DAMAGES, CLAIMS AND ACTIONS, ALL EXPENSES INCIDENTAL TO SUCH LOSSES, DAMAGES, CLAIMS OR ACTION, BASED UPON OR ARISING OUT OF DAMAGE TO PROPERTY OR INJURIES TO PERSONS, OR OTHER TORTUOUS ACTS CAUSED OR CONTRIBUTED TO BY THE CONTRACTOR OR ANYONE ACTING UNDER ITS DIRECTION OR CONTROL OR ON ITS BEHALF; PROVIDED CONTRACTOR'S INDEMNITY SHALL NOT BE APPLICABLE TO ANY LIABILITY UPON THE SOLE NEGLIGENCE OF HECO.
- HAWAIIAN TELEPHONE COMPANY NOTES
1. THE LOCATION OF HAWAIIAN TELEPHONE'S (HTCO) EXISTING FACILITIES ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION, WHENEVER CONSTRUCTION CROSSES OR IS IN CLOSE PROXIMITY TO HTCO'S FACILITIES, AND SHALL MAINTAIN PROPER CLEARANCES. THE CONTRACTOR SHALL VERIFY THEIR LOCATIONS AND SHALL BE LIABLE FOR ANY DAMAGES TO HTCO'S FACILITIES. ANY DAMAGES SHALL BE REPORTED IMMEDIATELY TO HTCO'S REPAIR SECTION AT 611 (24 HOURS) OR 832-6888 DURING NORMAL WORK DAY HOURS, MONDAY THRU FRIDAY.
 2. FOR UNDERGROUND CABLE LOCATING AND MARKING, FIVE WORKING DAYS ADVANCE NOTICE IS REQUIRED. THREE WORKING DAYS ADVANCE NOTICE IS REQUIRED FOR ANY INSPECTION BY A DESIGNATED REPRESENTATIVE. THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS NOT TO DAMAGE ANY EXISTING CABLES OR DUCTS.
 3. THE CONTRACTOR SHALL OBTAIN AN EXCAVATION PERMIT AND TONING REQUEST FROM HTCO'S RECORD SECTION LOCATED AT 3239 UALENA STREET, 3RD FLOOR, TWO WEEKS PRIOR TO THE START OF CONSTRUCTION. HOURS OF BUSINESS ARE 7:00 A.M. TO 10:30 A.M. AND 11:30 A.M. TO 3:00 P.M., MONDAY THRU FRIDAY, EXCEPT HOLIDAYS.
 4. ANY WORK INVOLVING EXISTING DUCTS OR CABLES SHALL BE DONE IN THE PRESENCE OF A HTCO INSPECTOR OR DESIGNATED REPRESENTATIVE.
 5. WHEN EXCAVATION IS ADJACENT TO OR BENEATH HTCO'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 HTCO'S STRUCTURES OR FACILITIES.

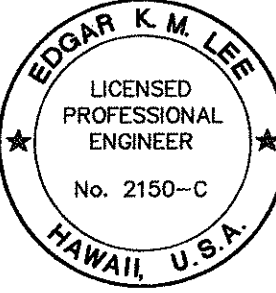
B. PROTECT EXISTING STRUCTURES OR FACILITIES WITH BEAMS, STRUTS OR UNDERPINNING WHILE EXCAVATING BENEATH THEM TO ENSURE NO MOVEMENT.
 6. THE CONTRACTOR SHALL NOTIFY HTCO'S INSPECTOR OR DESIGNATED REPRESENTATIVE 72 HOURS PRIOR TO EXCAVATION, BRACING OR BACKFILLING OF HTCO'S STRUCTURES OF FACILITIES.
 7. SHOULD IT BECOME NECESSARY TO RELOCATE ANY HTCO FACILITIES, THE WORK SHALL BE DONE BY HTCO. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION AND COSTS ASSOCIATED WITH THE RELOCATION.

APPROVED:

Michael J. Lee
CHIEF, PLANNING AND ENGINEERING DIVISION,
BOARD OF WATER SUPPLY,
CITY AND COUNTY OF HONOLULU
6/14/2000
DATE

M. J. Lee
CHIEF, CIVIL ENGINEERING BRANCH, D.P.P. WWT
6/7/00
DATE

Dennis M. N. Williams
CHIEF, WASTEWATER BRANCH, D.P.P.
CITY AND COUNTY OF HONOLULU
5/30/00
DATE

ENGINEERING DESIGN GROUP
1525 YOUNG STREET
HONOLULU, HAWAII 96826

Edgar K.M. Lee
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	00-19B	2000	C086S-2	89

TRAFFIC SIGNALS AND TECHNOLOGY DIVISION NOTES

1. THE CONTRACTOR SHALL NOTIFY THE TRAFFIC CONTROL BRANCH, DEPARTMENT OF TRANSPORTATION SERVICES, THREE (3) WORKING DAYS PRIOR TO COMMENCING WORK ON THE TRAFFIC SIGNAL SYSTEM (PHONE: 523-4589).
2. THE TRAFFIC SIGNAL SYSTEM SHALL BE KEPT OPERATIONAL DURING CONSTRUCTION. ANY RELOCATION REQUIRED SHALL BE APPROVED BY THE TRAFFIC CONTROL BRANCH, DEPARTMENT OF TRANSPORTATION SERVICES, AND PAID FOR BY THE CONTRACTOR.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO THE EXISTING TRAFFIC SIGNAL FACILITIES, INCLUDING THE TRAFFIC SIGNAL INTERCONNECT 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.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO THE EXISTING TRAFFIC SIGNAL 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.

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES

KALANIANA'OLE HIGHWAY
16-INCH WATER MAIN
LAUKAHI STREET TO WEST HIND DRIVE
JOB 00-19B

Scale: As Shown Date: May 2000

SHEET No. 2 OF 19 SHEETS

C086S-2