CONSTRUCTION NOTES

(JUNE 19, 2003 REV)

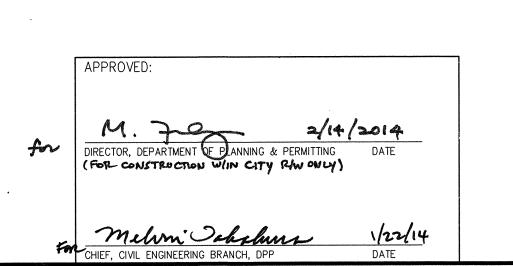
- 1. ALL APPLICABLE CONSTRUCTION WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATION FOR PUBLIC WORKS CONSTRUCTION, SEPTEMBER 1986 AND THE STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION, SEPTEMBER 1984, AS AMENDED, OF THE DEPARTMENTS OF PUBLIC WORKS, CITY AND COUNTY OF HONOLULU, AND THE COUNTIES OF KAUAI, MAUI AND HAWAII.
- 2. 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 EXCERCISE PROPER CARE IN EXCAVATING IN THE AREA. WHENEVER 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.
- 3. NO CONTRACTOR SHALL PERFORM ANY CONSTRUCTION OPERATION SO AS TO CAUSE FALLING ROCKS, SOIL OR DEBRIS IN ANY FORM, TO FALL, SLIDE OR FLOW ONTO/INTO EXISTING CITY DRAINAGE SYSTEMS OR ADJOINING PROPERTIES, STREETS OR NATURAL WATERCOURSES. SHOULD SUCH VIOLATIONS OCCUR, THE CONTRACTOR MAY BE CITED AND THE CONTRACTOR SHALL MAKE ALL REMEDIAL ACTIONS NECESSARY.
- 4. 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, TITLE 11, CHAPTER 54, "WATER QUALITY STANDARDS" AND TITLE 11, CHAPTER 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.
- 5. THE CONTRACTOR SHALL NOTIFY THE CIVIL ENGINEERING BRANCH, DEPARTMENT OF PLANNING AND PERMITTING, AT 768-8084 TO ARRANGE FOR INSPECTIONAL SERVICES AND SUBMIT TWO (2) SETS OF APPROVED CONSTRUCTION PLANS SEVEN (7) DAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION WORK.

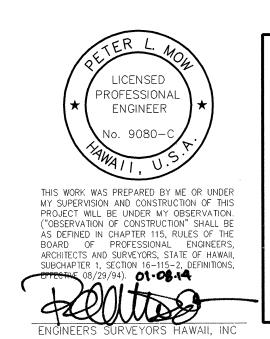
- 6. <u>CONFINED SPACE</u>
 FOR ENTRY BY CITY PERSONNEL, INCLUDING INSPECTORS, INTO A PERMIT REQUIRED CONFINED SPACE, AS DEFINED IN CFR PART 1910.146 (b), THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING:
 - I. ALL SAFETY EQUIPMENT REQUIRED BY THE CONFINED SPACE REGULATIONS APPLICABLE TO ALL PARTIES OTHER THAN THE CONSTRUCTION INDUSTRY, INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:
 - A. FULL BODY HARNESS FOR UP TO TWO (2) PERSONNEL.
 - B. LIFELINE AND ASSOCIATED CLIPS.
 - C. INGRESS/EGRESS AND FALL PROTECTION EQUIPMENT.
 - D. TWO-WAY RADIOS (WALKIE-TALKIES) IF OUT OF LINE-OF-SIGHT.
 - E. EMERGENCY (ESCAPE) RESPIRATOR (10 MINUTE DURATION).
 - F. CELLULAR TELEPHONETO CALL FOR EMERGENCY ASSISTANCE.
 - G. CONTINUOUS GAS DETECTOR (CALIBRATED) TO MEASURE OXYGEN, HYDROGEN SULFIDE, CARBON MONOXIDE AND FLAMMABLES (CAPABLE OF MONITORING AT A DISTANCE AT LEAST 20-FEET AWAY).
 - H. PERSONAL MULTI-GAS DETECTOR TO BE CARRIED BY INSPECTOR.
 - II. CONTINUOUS FORCED AIR VENTILATION ADEQUATE TO PROVIDE SAFE ENTRY CONDITIONS.
 - III. ONE ATTENDENT/RESCUE PERSONNEL TOP-SIDE (TWO, IF CONDITIONS WARRANT IT).
- 7. PURSUANT TO CHAPTER 6E, HRS, IN THE EVENT ANY HUMAN ARTIFACTS OR HUMAN REMAINS ARE UNCOVERED DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL IMMEDIATELY SUSPEND WORK AND NOTIFY THE HONOLULU POLICE DEPARTMENT AND THE STATE OF HAWAII, DEPARTMENT OF LAND AND NATURAL RESOURCES, HISTORIC PRESERVATION DIVISION (692–8015). IN ADDITION, FOR NON-CITY PROJECTS, THE CONTRACTOR SHALL INFORM THE CIVIL ENGINEERING BRANCH, DEPARTMENT OF PLANNING AND PERMITTING (768–8084); AND FOR CITY PROJECTS, NOTIFY THE RESPONSIBLE CITY AGENCY.
- 8. FOR PROJECTS ABUTTING THE STATE HIGHWAYS' RIGHT-OF-WAY, THE OWNER OR HIS AUTHORIZED REPRESENTATIVE, SHALL NOTIFY THE STATE OF HAWAII, DEPARTMENT OF TRANSPORTATION, HIGHWAYS DIVISION, OAHU DISTRICT, DRAINAGE DISHARGE UNIT, AT 831-6793 FOR AN ASSESSMENT OF THE STATE HIGHWAYS PERMIT REQUIREMENTS.

- FED.ROAD
DIST.NO.STATEPROJ. NO.FISCAL
YEARSHEET
NO.TOTAL
SHEETSOAHUHAW.99C-01-132014741
- 9. THE STATE OF HAWAII, DEPT. OF TRANSPORTATION, HIGHWAYS DIVISION SHALL BE RESPONSIBLE FOR THE MAINTENANCE, REPAIR, REMOVAL AND ANY ASSOCIATED COSTS OF THE ABANDONED UTILITY LINES, SERVICE LATERALS, UTILITY BOXES, MANHOLES, VAULTS, ETC. SHOWN ON THESE CONSTRUCTION PLANS TITLED: "TRAFFIC OPERATIONAL IMPROVEMENTS AT VARIOUS LOCATIONS, VICINITY OF KAMEHAMEHA HIGHWAY AND LUMIAINA STREET". ALL CLAIMS RESULTING FROM THE ABANDONED UTILITIES SHALL REMAIN THE LIABILITY OF THE STATE OF HAWAII, DEPT. OF TRANSPORTATION, HIGHWAYS DIVISION.
- 10. FOR BENCH MARK, SEE SHEET 15.

EROSION CONTROL/BEST MANAGEMENT PRACTICES THAT ARE REQUIRED BUT NOT LIMITED TO THE ITEMS LISTED BELOW

- 1. EROSION CONTROL MEASURES TO BE INSTALLED PRIOR TO START OF PROJECT AND MAINTAINED UNTIL COMPLETION OF PROJECT.
- 2. CONTRACTOR TO PERIODICALLY INSPECT CATCH BASIN FILTERS ESPECIALLY DURING HEAVY RAINFALL. CONTRACTOR SHALL ALSO ENSURE DRAINAGE THROUGH FILTER MATERIAL IS MAINTAINED.
- 3. GOOD HOUSEKEEPING SHALL BE UTILIZED TO ENSURE PROTECTION OF THE ROADWAYS FROM MUD, DIRT AND DEBRIS.
- 4. THE CONTRACTOR SHALL ENSURE THAT ALL TIRES OF CONSTRUCTION VEHICLES ARE SUFFICIENTLY CLEANED OFF SO THAT DIRT OR DEBRIS IS NOT TRACKED OFF THE CONSTRUCTION SITE. WASHING OFF TIRES WITH WATER WILL NOT BE ACCEPTABLE UNLESS RUNOFF IS CONTAINED AND DOES NOT ENTER THE PUBLIC STORM DRAIN SYSTEM OR ONTO THE PUBLIC RIGHT—OF—WAY.
- 5. AT THE COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL INSPECT ALL CATCH BASINS, DRAIN INLETS AND DRAIN MANHOLES SURROUNDING THE PROJECT SITE. ANY ACCUMULATED SEDIMENT AND DEBRIS FOUND IN THE STORM DRAIN STRUCTURES SHALL BE REMOVED. PLEASE NOTE THAT FLUSHING INTO THE DRAIN STRUCTURES IS PROHIBITED.
- 6. SEE ADDITIONAL EROSION CONTROL AND WATER POLLUTION NOTES, AND BMP DETAILS ON SHEETS 15 AND 16.





STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
CONSTRUCTION NOTES
(FOR WORK WITHIN THE CITY ROW)

TRAFFIC OPERATIONAL IMPROVEMENTS

AT VARIOUS LOCATIONS

Vicinity of Kamehameha Highway and

<u>Lumiaina Street</u>

<u>Project No. 99C-01-13</u>

le: As Noted Date: Jan 2014

SHEET No. 1 OF 4 SHEETS

NOTE BOOK

NO. ______

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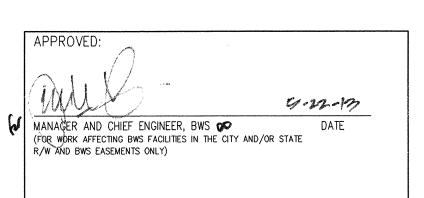
PUBLIC HEALTH, SAFETY AND CONVENIENCE NOTES

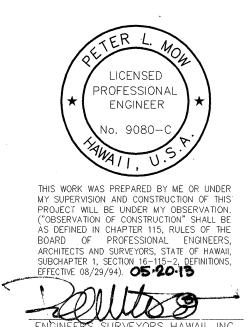
- 1. THE CONTRACTOR SHALL OBSERVE AND COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS REQUIRED FOR THE PROTECTION OF PUBLIC HEALTH, SAFETY AND ENVIRONMENTAL QUALITY.
- 2. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AREA AND SURROUNDING AREA FREE FROM RUBBISH, DUST, NOISE, EROSION, ETC. THE WORK SHALL BE DONE IN CONFORMANCE WITH THE AIR AND WATER POLLUTION CONTROL STANDARDS AND REGULATIONS OF THE STATE OF HAWAII, DEPARTMENT OF HEALTH.
- 3. 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.
- 4. THE CONTRACTOR'S ATTENTION IS DIRECTED TO CHAPTER 44B PUBLIC HEALTH REGULATIONS, DEPARTMENT OF HEALTH, STATE OF HAWAII, "COMMUNITY NOISE CONTROL FOR OAHU". IN WHICH MAXIMUM ALLOWABLE NOISE LEVELS HAVE BEN 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 44B AND BECOME FAMILIAR WITH THE NOISE LEVEL RESTRICTIONS AND THE PROCEDURES FOR OBTAINING A PERMIT FOR CONSTRUCTION ACTIVITIES.
- 5. FIRE PROTECTION EQUIPMENT AND SYSTEMS SHALL BE INSTALLED AND MAINTAINED IN BUILDINGS UNDER CONSTRUCTION, IN ACCORDANCE WITH ARTICAL 87, SEC. 10.310, AS AMENDED, AND FIRE SAFETY DURING CONSTRUCTION SHALL BE IN ACCORDANCE WITH ARTICLE 87, 1988 OF THE UNIFORM FIRE CODE.
- 6. THE CONSTRACTOR SHALL PROVIDE ACCESSIBLE TEMPORARY PEDESTRIAN PASSAGEWAYS. ALL ACCESSIBLE ROUTES SHALL COMPLY WITH AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG), SECTION 206 -ACCESSIBLE ROUTES.

WATER NOTES

- 1. UNLESS OTHERWISE SPECIFIED, ALL MATERIALS AND CONSTRUCTION OF WATER SYSTEM FACILITIES AND APPURTENANCES SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, DATED 1994, AS AMENDED, OF THE HAWAII HIGHWAYS DIVISION, DEPARTMENT OF TRANSPORTATION AND 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 EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES AND STRUCTURES AS SHOWN ON THE PLANS ARE FROM THE LATEST AVAILABLE DATA BUT IS NOT GUARANTEED AS OR THE ENCOUNTERING OF OTHER TO THE ACCURACY OBSTACLES DURING THE COURSE OF 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.
- 3. RE-APPROVAL SHALL BE REQUIRED IF THIS PROJECT IS NOT UNDER CONSTRUCTION WITHIN A PERIOD OF TWO (2) YEARS.
- 4. THE CONTRACTOR SHALL NOTIFY BWS CAPITAL PROJECTS DIVISION, CONSTRUCTION SECTION, IN WRITING, ONE (1) WEEK PRIOR TO COMMENCING WORK ON THE WATER SYSTEM.
- 5. THE CONTRACTOR SHALL VERIFY ALL EXISTING SERVICE LATERAL LOCATIONS WHETHER SHOWN ON THE PLANS 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 EXIST.
- 6. THE CONTRACTOR SHALL ADJUST ALL MANHOLE FRAMES / VALVE BOXES / METER BOXES WITHIN THE RESURFACED AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR "REFERENCING" THESE MANHOLES/VALVE BOXES/METER BOXES TO FACILITATE THE ADJUSTMENTS.
- 7. ANY ADJUSTMENT 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 OF WATER SUPPLY.
- 8. PRIOR TO ANY EXCAVATING, THE CONTRACTOR SHALL VERIFY IN THE FIELD THE LOCATION OF EXISTING WATER MAINS AND APPURTENANCES.

- 9. AT THE ELECTRICAL/SIGNAL DUCTLINE WATER CROSSINGS, ADJUST ALL ELECTRICAL/SIGNAL DUCTLINE ELEVATIONS TO MAINTAIN 6" VERTICAL CLEAR SEPARATION FROM ALL WATERLINES (12" CLEAR FOR ALL ELECTRICAL/SIGNAL DUCTLINE STRUCTURES LARGER THAN 16") AT NO COST TO THE BOARD OF WATER SUPPLY.
- 10. MAINTAIN 3'-0" (MINIMUM) HORIZONTAL CLEAR SEPARATION BETWEEN ALL WATERLINE SYSTEMS AND NEAREST ELECTRICAL / SIGNAL DUCTLINES PARALLELING THE WATER SYSTEM AT NO COST TO THE BOARD OF WATER SUPPLY.
- 11. MAINTAIN 3'-0" (MINIMUM) HORIZONTAL CLEAR SEPARATION BETWEEN STREET LIGHT/TRAFFIC SIGNAL STANDARDS (INCLUDING ANY MODULAR UNITS) AND THE NEAREST WATER SYSTEM. THE CONTRACTOR SHALL FIELD VERIFY FOR ANY CONFLICTS AT EACH STREET LIGHT/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.
- 12. MAINTAIN 3'-0" (MINIMUM) COVER FOR ALL EXISTING WATERLINES FROM NEW FINISH GRADE. THE CONTRACTOR SHALL PROBE THE WATERLINE AND SERVICE LATERALS AND SUBMIT THE PROBING DATA TO THE BWS CAPITAL PROJECTS DIVISION, CONSTRUCTION SECTION. ANY ADJUSTMENTS TO THE EXISTING WATER SYSTEM TO MEET THE MINIMUM COVER AND THE REQUIREMENTS OF THE BWS STANDARDS, WHETHER SHOWN ON THE PLANS OR NOT, SHALL BE DONE AT NO COST TO THE BOARD OF WATER SUPPLY.
- 13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL WATER LINES DURING CONSTRUCTION. THE CONTRACTOR SHALL BE ESPECIALLY CAREFULL 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 BWS APPROVAL) AND/OR MODIFYING HIS CONSTRUCTION METHOD.
- 14. TWO-WAY BLUE REFLECTIVE HYDRANT MARKERS, TYPE DB SHALL BE INSTALLED AT ALL FIRE HYDRANT LOCATIONS.





STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION CONSTRUCTION NOTES (FOR WORK WITHIN THE CITY ROW) TRAFFIC OPERATIONAL IMPROVEMENTS

AT VARIOUS LOCATIONS Vicinity of Kamehameha Highway and <u>Lumiaina Street</u>

Project No. 99C-01-13 Date: May 2013 Scale: As Noted SHEET No. 2 OF 4 SHEETS

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FISCAL SHEET TOTAL YEAR NO. SHEETS

FED.ROAD STATE

PROJ. NO.

HAW. 99C-01-13 2014 8 41

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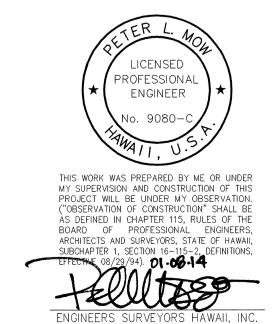
SEWER NOTES

- 1. ALL SEWER CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY'S STANDARD SPECIFICATIONS. SEPTEMBER 1986, THE DEPARTMENT OF PUBLIC WORKS STANDARD DETAILS, SEPTEMBER 1984, CURRENT CITY PRACTICES AND REVISED ORDINANCES OF HONOLULU, 1990, AS AMENDED, AND THE DESIGN STANDARDS OF WASTEWTER MANAGEMENT, VOLUME 1, JULY 1993.
- 2. 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 SEWERLINES, IN THE PRESENCE OF A WASTEWATER INSPECTOR AND EXCERCISE PROPER CARE IN EXCAVATING THE AREA. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL PAY FOR ALL DAMAGED UTILITIES.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING CONTINUOUS SEWER SERVICE TO ALL AFFECTED AREAS DURING CONSTRUCTION.
- 4. 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.
- 5. AT THE ELECTRICAL / SIGNAL DUCTLINE SEWER CROSSINGS, ADJUST ALL ELECTRICAL / SIGNAL DUCTLINE ELEVATIONS TO MAINTAIN 24" VERTICAL CLEAR SEPARATION FROM ALL SEWER LINES, EXCEPT WHEN DUCTLINE IS WITHIN AN ABANDONED WATERLINE, AT NO COST TO THE
- 6. MAINTAIN 3'-0" MIN. HORIZONTAL CLEAR SEPARATION BETWEEN ALL SEWER LINE SYSTEMS AND THE NEAREST ELECTRICAL / SIGNAL DUCTLINES AND PULLBOXES / HANDHOLES / MANHOLES PARALLELING THE SEWER SYSTEM, AT NO COST TO THE CITY.
- 7. MAINTAIN 5'-0" MIN. HORIZONTAL CLEAR SEPARATION BETWEEN STREET LIGHT / TRAFFIC SIGNAL STANDARD (INCLUDING MODULAR UNITS) AND THE NEAREST SEWER SYSTEM. THE CONTRACTOR SHALL FIELD VERIFY FOR ANY CONFLICTS AT EACH STREET LIGHT / 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 CITY.

- 8. FOR TRENCHLESS INSTALLATION WORK (MICRO-TUNNELING, DIRECTIONAL DRILLING, PIPE RAMMING / JACKING) OF NEW UTILITIES SUCH AS ELECTRICAL DUCT LINES, FIBER OPTIC DUCT LINES, ETC. CROSSING OR PARALLELING EXISTING SEWER MAINS AND LATERALS, PROVIDE 3 FEET HORIZONATAL AND VERTICAL CLEARANCES TO EXISTING MAINS AND LATERALS. 5 FEET MINIMUM CLEARANCE TO EXISTING SEWER FORCE MAINS. THE PRIVATE UTILITY OWNER OR THE CONTRACTOR SHALL MAKE ADJUSTMENTS TO MEET THE MINIMUM CLEARANCES SHOULD THE UTILITY LINE BE INSTALLED CLOSER TO THE EXISTING MAINS AND LATERALS, AT NO COST TO THE CITY.
- 9. ADUSTMENT TO EXISTING UTILITY NOTE: ADJUST ALL UTILITY VALVE BOX FRAMES AND COVERS, WATER METER BOXES. MANHOLE FRAMES AND COVERS, STREET MONUMENTS COVERS, ETC., TO NEW FINISH GRADE. COORDINATE WITH PRIVATE COMPANIES AND CITY AGENCIES FOR WORK ON EACH RESPECTIVE UTILITY.
- 10. FOR SEWER MANHOLE (SMH) ADJUSTMENTS UPWARD LESS THAN 3", SEE STANDARD DETAIL S-25. FOR SMH ADJUSTMENTS UPWARD GREATER THAN 3" OR FOR ANY ADJUSTMENTS DOWNWARD, RECONSTRUCT SMH TOP FROM BELOW THE CONE SECTION.
- 11. CONFINED SPACE: FOR ENTRY BY CITY PERSONNEL, INCLUDING INSEPECTORS, INTO A PERMIT REQUIRED CONFINED SPACE AS DEFINED IN 29 CFR PART 1910.146(B), THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING:
 - I. 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:
 - A. FULL BODY HARNESS FOR UP TO TWO PERSONNEL;
 - B. LIFELINE AND ASSOCIATED CLIPS;
 - C. INGRESS/EGRESS AND FALL PROTECTION EQUIPMENT;
 - D. TWO-WAY RADIOS (WALKIE-TALKIES) IF OUT OF LINE-OF-SIGHT;
 - E. EMERGENCY (ESCAPE) RESPIRATOR (10 MIN. DURATION);
 - F. CELLULAR TELEPHONE TO CALL FOR EMERGENCY ASSISTANCE;
 - G. CONTINUOUS GAS DETECTOR (CALIBRATED) TO MEASURE OXYGEN, HYDROGEN SULFIDE, CARBON MONOXIDE AND FLAMMABLES (CAPABLE OF MONITORING AT A DISTANCE AT LEAST 20-FEET AWAY);
 - H. PERSONAL MULTI-GAS DETECTOR TO BE CARRIED BY INSPECTOR.
 - II. CONTINUOUS FORCED AIR VENTILATION ADEQUATE TO PROVIDE SAFE ENTRY CONDITIONS.
 - III. ONE ATTENDANT/RESCUE PERSONNEL TOPSIDE (TWO, IF CONDITIONS WARRANT IT).

FED.ROAD DIST.NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	99C-01-13	2014	9	41

- 12. IF THE CONTRACTOR ENCOUNTERS FLOW MONITORING DEVICES SUCH AS A SPECIAL SEWER MANHOLE COVER EMBEDDED WITH SOLAR PANELS, NOTIFY THE CITY AND COUNTY OF HONOLULU, ENV-CSM, AT 768-7272 TO COORDINATE TEMPORARY REMOVAL.
- 13. THE CONTRACTOR SHALL MAINTAIN VISIBILITY AND MAINTENANCE ACCESS TO LIVE SEWER MANHOLE LOCATIONS AT ALL TIMES, INCLUDING DURING NON-WORK HOURS AND PAVING OPERATIONS.
- 14. THE CONTRACTOR SHALL USE A MANHOLE DEBRIS CATCHING DEVICE WHEN PERFORMING MANHOLE ADJUSTMENT WORK AND REMOVE ANY CONSTRUCTION DEBRIS THAT HAS FALLEN INTO THE MANHOLE. DISPOSAL OF CONSTRUCTION DEBRIS IN THE SEWER SYSTEM IS STRICTLY PROHIBITED.

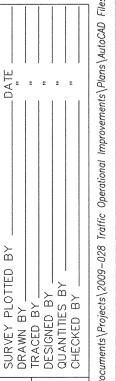


STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION CONSTRUCTION NOTES (FOR WORK WITHIN THE CITY ROW) TRAFFIC OPERATIONAL IMPROVEMENTS

AT VARIOUS LOCATIONS Vicinity of Kamehameha Highway and

<u>Lumiaina Street</u> Project No. 99C-01-13 Date: Jan 2014

SHEET No. 3 OF 4 SHEETS



TRAFFIC NOTES

- 1. 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 & PERMITTING MUST BE PROVIDED WHEN APPLYING FOR THE PERMIT.
- 2. 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."
- 3. 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.
- 4. DURING WORKING HOURS, THE CONTRACTOR SHALL PROVIDE FOR THROUGH TRAFFIC DURING NON-WORKING HOURS, ALL TRENCHES SHALL BE COVERED WITH A SAFE NON-SKID BRIDGING MATERIAL AND ALL LANES SHALL BE OPEN TO TRAFFIC.
- 5. AS REQUIRED BY THE DEPARTMENT OF TRANSPORTATION SERVICES, THE CONTRACTOR SHALL PROVIDE OFF-DUTY POLICE OFFICERS TO CONTROL THE FLOW OF TRAFFIC.
- 6. 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.
- 7. DRIVEWAYS SHALL BE KEPT OPEN UNLESS THE OWNERS OF THE PROPERTY USING THESE RIGHTS-OF-WAY ARE OTHERWISE PROVIDED FOR
- 8. 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 PAVEMENTS MARKINGS DISTURBED BY HIS ACTIVITIES.
- 9. 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.
- 10. NO EQUIPMENT SHALL BE STORED WITHIN STREET RIGHTS-OF-WAY EXCEPT AT LOCATIONS DESIGNATED IN WRITING AND APPROVED BY THE DEPARTMENT OF TRANSPORTATION SERVICES.
- 11. THE STATE OF HAWAII, DEPT. OF TRANSPORTATION, HIGHWAYS DIVISION SHALL ENSURE THAT THE CONTRACTOR INSTALLS THE CONSTRUCTION TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE MUTCD AND THE HAWAII ADMINISTRATION RULES AS SPECIFIED IN TRAFFIC NOTE #2.

SIGNS & MARKINGS NOTES

- 1. ALL TRAFFIC SIGN AND PAVEMENT MARKING INSTALLATIONS SHALL BE DONE 14. LOCATION OF "STOP" SIGN: IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS," 2009, AS AMENDED, THE LATEST SPECIFICATIONS FROM THE TRAFFIC REVIEW BRANCH, DEPARTMENT OF PLANNING AND PERMITTING AND AS SHOWN ON THE PLANS.
- 2. THE CONTRACTOR SHALL NOTIFY THE CIVIL ENGINEERING BRANCH, DEPARTMENT OF PLANNING AND PERMITTING, AT 768-8084 TO ARRANGE FOR INSPECTIONAL SERVICES AND SUBMIT FOUR (4) SETS OF APPROVED CONSTRUCTION PLANS SEVEN (7) DAYS PRIOR TO COMMENCEMENT OF WORK.
- 3. CONTRACTOR SHALL SUBMIT MATERIAL BROCHURES FOR ALL SIGNS AND PAINT MATERIALS TO THE CIVIL ENGINEERING BRANCH, DEPARTMENT OF PLANNING AND PERMITTING.
- 4. THE SIGNING AND/OR STRIPING CONTRACTOR SHALL KEEP ONE (1) SET OF APPROVED PLANS AT THE PROJECT SITE AT ALL TIMES DURING CONSTRUCTION WORK.
- 5. CONTRACTOR SHALL PAINT TEMPORARY GUIDELINES AND OUTLINE OF ARROWS, LEGENDS, AND CROSSWALKS WITH A TWO (2) INCH WIDE BRUSHED LINE ON THE DAY THE ROADWAY IS OPENED TO TRAFFIC. THESE MARKINGS MUST BE APPROVED BY THE INSPECTOR FROM THE CIVIL ENGINEERING BRANCH, DEPARTMENT OF PLANNING AND PERMITTING.
- 6. CONTRACTOR SHALL NOTIFY THE CIVIL ENGINEERING BRANCH, DEPARTMENT OF PLANNING AND PERMITTING AT 768-8084, THREE (3) DAYS IN ADVANCE OF FINAL INSPECTION.
- 7. CONTRACTOR SHALL MEET WITH THE INSPECTOR FROM THE CIVIL ENGINEERING BRANCH, DEPARTMENT OF PLANNING AND PERMITTING DURING THE FINAL INSPECTION.
- 8. WITHIN TEN (10) DAYS FOLLOWING NOTIFICATION OF AWARD OF CONTRACT, THE CONTRACTOR SHALL SUBMIT TO THE PERMITTING AND INSPECTION SECTION, CIVIL ENGINEERING BRANCH, DPP (768-8084) FOR APPROVAL, A LIST OF ANY SIGNING AND PAVEMENT MARKING MATERIAL, WHICH HE PROPOSES TO INSTALL. THE LIST SHALL BE COMPLETE AS TO THE NAME OF MANUFACTURER, CATALOG NUMBER, AND SHALL BE SUPPLEMENTED WITH MATERIAL BROCHURES.
- 9. UPON FINAL INSPECTION OF THE PROJECT, THE CONTRACTOR SHALL SUBMIT A LETTER OF CERTIFICATION FOR ALL TRAFFIC SIGNING AND PAVEMENT MARKING MATERIALS INSTALLED.
- 10. SIGNS SHALL BE ATTACHED TO BRACKETS WITH 5/16" ZINC PLATED STEEL BOLTS, NUTS AND WASHERS. SIGNS 48" WIDE OR LARGER THAN 10 SQUARE FEET IN AREA SHALL BE MOUNTED ON TWO - 2" GALVANIZED PIPE POST. THE SIGN SHALL BE INSTALLED WITH AT LEAST (1) ONE FOOT CLEARANCE FROM THE SIGN EDGE TO THE CURB FACE.
- 11. ALL TRAFFIC SIGNS SHALL BE REFLECTORIZED.
- 12. RAISED PAVEMENT MARKERS SHALL BE INSTALLED IN ACCORDANCE WITH THE DEPARTMENT OF PLANNING AND PERMITTING STANDARDS.
- 13. PAVEMENT WORD AND SYMBOL MARKINGS SHALL BE IN ACCORDANCE WITH THE DEPARTMENT OF PLANNING AND PERMITTING STANDARDS.

A. INSTALL "STOP" SIGN AT CURB TANGENT POINT.

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- - B. INSTALL "STOP" SIGN ON METAL STREET LIGHT STANDARD IF A
 - C. INSTALL "STOP" SIGN IN FRONT OF UTILITY POLE IF A POLE IS LOCATED WITHIN 10 FEET OF CURB RETURN.

STANDARD IS LOCATED WITHIN 10 FEET OF CURB RETURN.

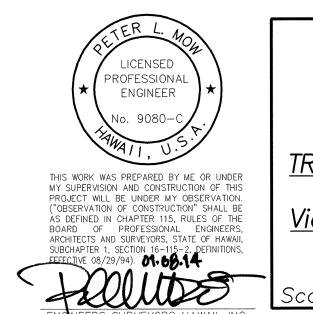
15. THE CONTRACTOR SHALL USE THERMOPLASTIC MATERIAL, APPROVED BY THE CIVIL ENGINEERING BRANCH, DEPARTMENT OF PLANNING AND PERMITTING, FOR ALL CROSSWALKS, STOP BARS, PAVEMENT ARROWS, CENTER LINES, LINE LINES, ARC LINES, CHANNELIZED TRAFFIC ISLANDS, AND LEGENDS.

TRAFFIC SIGNAL AND TECHNOLOGY DIVISION NOTES

- 1. THE CONTRACTOR SHALL NOTIFY THE TRAFFIC SIGNAL AND TECHNOLOGY DIVISION, DEPARTMENT OF TRANSPORTATION SERVICES AT 768-8421, THREE (3) WORKING DAYS PRIOR TO COMMENCING WORK ON THE TRAFFIC SIGNAL SYSTEM.
- 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. 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.

PUBLIC TRANSIT DIVISION (OTS) NOTES

THIS PROJECT WILL AFFECT BUS ROUTES, BUS STOPS AND PARA-TRANSIT OPERATIONS, THEREFORE, THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF TRANSPORTATION SERVICES, PUBLIC TRANSIT DIVISION AT 768-8396 AND OAHU TRANSIT SERVICES, INC. (BUS OPERATIONS: 848-4578 OR 848-6016 AND PARA-TRANSIT OPERATIONS: 454-5041 OR 454-5020) OF THE SCOPE OF WORK, LOCATION, PROPOSED CLOSURE OF ANY STREET, TRAFFIC LANE, SIDEWALK OR BUS STOP AND DURATION OF PROJECT, AT LEAST TWO WEEKS PRIOR TO CONSTRUCTION.



STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION CONSTRUCTION NOTES (FOR WORK WITHIN THE CITY ROW)

TRAFFIC OPERATIONAL IMPROVEMENTS AT VARIOUS LOCATIONS Vicinity of Kamehameha Highway and <u>Lumiaina Street</u>

Project No. 99C-01-13 Date: Jan 2014

SHEET No.

attanha 1/29/14

APPROVED:

10

OF 4 SHEETS

HAWAIIAN ELECTRIC COMPANY (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 PERMIT

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 CE006149, AT THAT TIME.

4. 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 PRECEEDING 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.

REFER TO SECTION X OF HECO'S ELECTRIC SERVICE INSTALLATION MANUAL FOR ADDITIONAL GUIDELINES WHEN WORKING AROUND HECO'S FACILITIES. A COPY MAY BE OBTAINED FORM HECO'S CUSTOMER INSTALLATIONS DEPARTMENT.

5. POLE BRACING

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QUANTITIES BY
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A MINIMUM CLEARANCE OF 10 FEET MUST BE MAINTAINED WHEN EXCAVATING AROUND UTILITY POLES AND/OR THEIR ANCHOR SYSTEM TO PREVENT WEAKENING OR POLE SUPPORT FAILURE. SHOULD WORK REQUIRE EXCAVATING WITHIN 10 FEET OF A POLE AND/OR ITS ANCHOR SYSTEM, THE CONTRACTOR SHALL PROTECT, SUPPORT, SECURE, AND TAKE ALL OTHER PRECAUTIONS TO PREVENT DAMAGE TO OR LEANING OF THESE POLES. THE CONTRACTOR IS RESPONSIBLE FOR ALL ASSOCIATED COSTS TO BRACE, REPAIR, OR STRAIGHTEN POLES. ALL MEANS OF STRUCTURAL SUPPORT FOR THE POLE PROPOSED BY THE CONTRACTOR SHALL FIRST BE REVIEWED BY HECO BEFORE IMPLEMENTATION. FOR POLE BRACING INSTRUCTIONS, THE CONTRACTOR SHALL CALL THE HECO CONSTRUCTION AND MAINTENANCE DEPT., CUSTOMER & SYSTEM SUPERINTENDENT AT 543-4223 A MINIMUM OF TWO (2) WEEKS IN ADVANCE.

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 IN THE AREA ARE ENERGIZED AND WILL REMAIN ENERGIZED DURING CONSTRUCTION. ONLY HECO PERSONNEL ARE TO 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. THE CONTRACTOR SHALL EXERCISE DUE CARE AND PRECAUTIONS TO AVOID DISTURBING ANY ENERGIZED CABLES AND TEMPORARY GUARDS AND SHALL WORK CAUTIOUSLY AT ALL TIMES TO AVOID ACCIDENTS.

FOR VERIFICATION OF UNDERGROUND LINES OR FOR ASSISTANCE IN PROVIDING PROPER SUPPORT AND PROTECTION OF THESE LINES, THE CONTRACTOR SHALL CALL HECO'S CONSTRUCTION & MAINTENANCE DEPT., CUSTOMER & SYSTEM SUPERINTENDENT AT 543-4223, A MINIMUM OF TWO (2) WEEKS IN ADVANCE.

7. EXCAVATIONS

WHEN TRENCH EXCAVATION IS ADJACENT TO OR BENEATH HECO'S EXISTING STRUCTURES 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-PINNINGS.
- c) BACKFILLING WITH PROPER BACKFILL MATERIAL INCLUDING SPECIAL THERMAL BACKFILL WHERE EXISTING (REFER TO ENGINEERING DEPARTMENT FOR THERMAL BACKFILL SPECIFICATIONS).

8. 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, AND RESTORATION OF PAVEMENT, SIDEWALKS, AND OTHER FACILITIES.

9. CONFLICTS

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, THE CONTRACTOR SHALL NOTIFY HECO IMMEDIATELY UPON DISCOVERY OR IDENTIFICATION OF SUCH CONFLICT.

10. <u>DAMAGE TO HECO FACILITIES</u>

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 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.

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11. <u>HECO STAND-BY PERSONNEL</u>

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 CONSTRUCTION AND MAINTENANCE DEPT., CUSTOMER & SYSTEM SUPERINTENDENT AT 543-4223 A MINIMUM OF FIVE (5) WORKING DAYS IN ADVANCE TO ARRANGE FOR HECO STAND-BY PERSONNEL.

12. <u>INDEMNITY</u>

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.

> LICENSED PROFESSIONAL ENGINEER o. 9080-0 THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. AS DEFINED IN CHAPTER 115, RULES OF THE BOARD OF PROFESSIONAL ENGINEERS

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

UTILITY NOTES

TRAFFIC OPERATIONAL IMPROVEMENTS AT VARIOUS LOCATIONS Vicinity of Kamehameha Highway and

<u>Lumiaina Street</u> Project No. 99C-01-13

Date: Jan 2014 As Noted SHEET No. OF 3 SHEETS

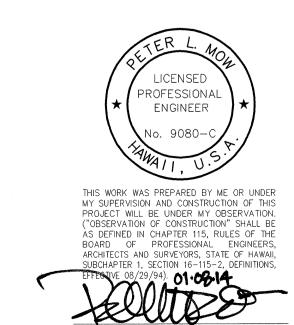
BOARD OF PROFESSIONAL ENGINEERS,
ARCHITECTS AND SURVEYORS, STATE OF HAWAII,
SUBCHAPTER 1, SECTION 16-115-2, DEFINITIONS,
EFFECTIVE 08/29/94).

HAWAIIAN TELCOM GENERAL CONSTRUCTION/DESIGN NOTES (JANUARY 2007)

- 1. 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.
- 2. 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 OF BUSINESS ARE: 8:00 A.M. TO 11:00 A.M. AND 12:00 P.M. TO 3:00 P.M., MONDAY THROUGH FRIDAY, EXCEPT HOLIDAYS.
- 3. PRIOR TO THE EXCAVATION OF THE DUCT LINE, THE CONTRACTOR SHALL REQUEST HAWAIIAN TELCOM TO LOCATE EXISTING DUCT LINES 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.
- 4. 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, ADJUSTMENT TO THE NEW DUCTLINE ALIGNMENT, IF REQUIRED, SHALL BE MADE TO PROVIDE THE REQUIRED CLEARANCES.
- 5. 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 CONTAIN HAWAIIAN TELCOM FACILITIES. TEMPORARY CABLE AND DUCT SUPPORTS SHALL BE PROVIDED WHEREVER NECESSARY.
- 6. 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.
- 7. ALL APPLICABLE CONSTRUCTION WORK SHALL BE DONE IN ACCORDANCE WITH THE "HAWAIIAN TELCOM STANDARD SPECIFICATIONS FOR PLACING TELEPHONE SYSTEMS", DATED JANUARY 2007, ALL SUBSEQUENT AMENDMENTS AND ADDITIONS AND ALL PERTINENT STANDARDS FOR TELEPHONE CONSTRUCTION. CONTRACTOR SHALL FAMILIARIZE HIS PERSONNEL BY OBTAINING APPLICABLE SPECIFICATIONS.
- 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 PLANNING AND PERMITTING, CITY AND COUNTY OF HONOLULU, CONCERNING THE REPLACEMENT OF CONCRETE SIDEWALKS AFTER EXCAVATION WORK.
- 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 LOCATION 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 CIY 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.
- 9. THE MINIMUM CONCRETE STRENGTH SHALL BE:
 FOR DUCTLINE: 2,500 PSI AT 28 DAYS
 FOR MANHOLE: 3,000 PSI AT 28 DAYS OR AS SPECIFIED IN DESIGN
 NOTES
- 20. BENDS IN THE DUCT ALIGNMENT, 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.

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- 21. AFTER DUCTLINE HAS BEEN COMPLETED, A MANDREL WITH A SQUARE FRONT NOT LESS THAN 12" LONG AND HAVING A DIAMETER OF ¼" 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, WP1800P, 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.



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

UTILITY NOTES

TRAFFIC OPERATIONAL IMPROVEMENTS

AT VARIOUS LOCATIONS

Vicinity of Kamehameha Highway and

<u>Lumiaina Street</u>

<u>Project No. 99C-01-13</u>

As Noted Date: Ja

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SHEET No. 2 OF 3 SHEETS

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OKIGINAL PLAN NOTE BOOK

HAWAII GAS NOTES (REVISED: 02/14/2006)

- 1. HAWAI'IGAS 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 HAWAI'IGAS, 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 811 OR 1-866-423-7287.
- 4. THE CONTRACTOR SHALL EXCAVATE AND BACKFILL AROUND GAS PIPELINES IN THE PRESENCE OF A REPRESENTATIVE OF HAWAI'IGAS. ALL BACKFILL WITHIN SIX INCHES OF ANY GAS PIPELINE SHALL BE SELECT CUSHION MATERIAL APPROVED BY HAWAI'IGAS.
- 5. FOR RELOCATION OF ANY GAS PIPELINE, THE CONTRACTOR SHALL NOTIFY HAWAI'IGAS 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 HAWAI'IGAS AND PAID FOR BY THE CONTRACTOR.
- 6. THE CONTRACTOR SHALL NOTIFY HAWAI'IGAS 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 HAWAI'IGAS FACILITIES. REPAIR WORK ON SUCH DAMAGE SHALL BE DONE BY HAWAI'IGAS WITH PAYMENT FOR THIS WORK TO BE BORNE BY THE CONTRACTOR.
- 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 HAWAI'IGAS.
- 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.

OCEANIC TIME-WARNER CABLE NOTES

- 1. THE LOCATION OF OCEANIC'S UNDERGROUND AND AERIAL 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 FACILITIES AND SHALL MAINTAIN ADEQUATE CLEARANCE WHEN OPERATING EQUIPTMENT CLOSE TO AND/OR UNDER ANY OVERHEAD LINES.
- 2. THE CONTRACTOR SHALL BE LIABLE FOR ALL DAMAGES TO EXISTING OCEANIC UNDERGROUND AND AERIAL FACILITIES.
- 3. THE CONTRACTOR MUST OBTAIN AN EXCAVATION PERMIT CLEARANCE FROM OCEANIC'S ENGINEERING SECTION LOCATED AT 200 AKAMAINUI ST., MILILANI TECH PARK (PH: 625-8457 OR 623-8345), A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO START OF EXCAVATION.
- 4. FOR ANY FIELD ASSISTANCE OR VERIFICATION OF CATV FACILITIES, THE CONTRACTOR SHALL CALL THE TECHNICAL OPERATIONS CENTER AT 839-0442 OR 545-0942.
- 5. ANY WORK REQUIRED TO RELOCATE CATV FACILITIES SHALL BE DONE BY OCEANIC TIME WARNER CABLE AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR FOR ALL COORDINATION REQUIREMENTS AND ASSOCIATED APPLICABLE COSTS.
- 6. ANY DAMAGE TO OCEANIC'S FACILITIES SHALL BE REPORTED IMMEDIATELY TO TO OCI'S REPAIR DISPATCH DEPARTMENT AT 625-8437 OR 625-8666.
- 7. OCEANIC TIME WARNER CABLE HAS EXISTING UNDERGROUND FACILITIES IN THE VICINITY OF THE PROJECT. OCEANIC RECOMMENDS THAT THE CONTRACTOR TONE TO LOCATE THE EXISTING UNDERGROUND LINES PRIOR TO THE START OF CONSTRUCTION.

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LICENSED PROFESSIONAL ENGINEER THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. AS DEFINED IN CHAPTER 115, RULES OF THE BOARD OF PROFESSIONAL ENGINEERS ARCHITECTS AND SURVEYORS, STATE OF HAWA

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

UTILITY NOTES

TRAFFIC OPERATIONAL IMPROVEMENTS AT VARIOUS LOCATIONS Vicinity of Kamehameha Highway and

<u>Lumiaina Street</u> <u>Project No. 99C-01-13</u>

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