GENERAL NOTES

- 1. ALL CONSTRUCTION WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION, SEPTEMBER, 1984, AS AMENDED AND STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SEPTEMBER, 1986, OF THE DEPARTMENT OF PUBLIC WORKS, CITY AND COUNTY OF HONOLULU.
- 2. ALL EXISTING UTILITIES TO REMAIN IN USE, WHETHER OR NOT SHOWN ON THE PLANS, SHALL BE PROTECTED AT ALL TIMES BY THE CONTRACTOR DURING CONSTRUCTION UNLESS SPECIFIED ON THE PLANS TO BE ABANDONED. ANY DAMAGES TO EXISTING UTILITIES SHALL BE REPAIRED AND PAID FOR BY THE CONTRACTOR.
- 3. STREET LIGHTS SHALL BE INSTALLED IN ACCORDANCE WITH ORDINANCE NO. 1638, AS AMENDED BY ORDINANCES 1770, 3035, 2875 AND 3357.
- 4. UTILITIES SHALL BE INSTALLED PURSUANT TO THE PROVISIONS OF ORDINANCE NOS., 2875 AND 3375 (UNDERGROUND UTILITIES).
- 5. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION SECTION, DIVISION OF ENGINEERING, DEPARTMENT OF PUBLIC WORKS AT 527-6311 TO ARRANGE FOR INSPECTIONAL SERVICES AND SUBMIT THREE (3) SETS OF APPROVED CONSTRUCTION PLANS SEVEN (7) DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION WORK
- 6. 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 EXCAVATION 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 CONNECTION TO VERIFY THEIR LOCATIONS AND DEPTHS PRIOR TO EXCAVATION FOR NEW
- 7. STREET NAME SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARDS OF THE DEPARTMENT OF TRANSPORTATION SERVICES. IN LIEU OF THE STANDARD EMBOSSED SIGNS. REFLECTORIZED STREET NAME SIGNS AND SIGN BRACKETS IDENTICAL TO THAT PRESENTLY USED BY THE DEPARTMENT OF TRANSPORTATION SERVICES MAY BE INSTALLED. THE EXACT LOCATION SHALL BE DETERMINED BY THE DIRECTOR.
- 8. THE CONTRACTOR SHALL REFERENCE ALL EXISTING TRAFFIC CONTROL PAVEMENT MARKINGS AND SIGNS THAT WILL BE AFFECTED BY HIS ACTIVITIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION TO THE SATISFACTION OF THE TRAFFIC ENGINEER.
- 9. THE CONTRACTOR SHALL RESTORE ALL TRAFFIC CONTROLS DISTURBED BY HIS ACTIVITIES AND HE SHALL NOTIFY THE DEPARTMENT OF TRANSPORTATION SERVICES AT 523-4281 ONE WEEK PRIOR TO PERFORMING ANY STRIPING WORK.
- 10. CONSTRUCTION ACTIVITIES WILL NOT BE PERMITTED IN CITY STREETS DURING WEEKENDS AND HOLIDAYS WITHOUT PRIOR APPROVAL FROM THE DIRECTOR, DEPARTMENT OF TRANSPORTATION SERVICES:
- 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMITY WITH THE APPLICABLE PROVISIONS OF CHAPTER 54, WATER QUALITY STANDARDS, AND CHAPTER 55, WATER POLLUTION CONTROL, OF TITLE 11, ADMINISTRATIVE RULES OF THE STATE DEPARTMENT OF
- 12. 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.
- 13. NO CONTRACTOR SHALL PERFORM ANY GRADING OPERATION SO AS TO CAUSE FALLING ROCKS, SOIL OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW ONTO ADJOINING PROPERTIES, STREETS OR NATURAL WATERCOURSES. SHOULD SUCH VIOLATIONS OCCUR, THE COSTS INCURRED FOR ANY REMEDIAL ACTION BY THE CIVIL ENGINEER SHALL BE PAYABLE BY THE CONTRACTOR.
- 14. VERIFY AND CHECK ALL DIVIENSIONS 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.
- 15. THE CONTRACTOR SHILL NOTIFY ALL UTILITIES AND AGENCIES AND OBTAIN EXCAVATION CLEARANCE FOR ANY EXCAVATION WORK A MINIMUM OF 72 HOURS PRIOR TO START OF ANY EXCAVATION WORK AND HAVE THEM LOCATE THEIR RESPECTIVE LINES AFFECTED. THE CONTRACTOR SHALL BE HELD RESPONSIBLE AND SHALL PAY FOR ALL DAMAGES TO AND FOR THE MAINTENANCE AND PROTECTION OF EXISTING UTILITIES AND STRUCTURES.
- 16. ALL ABANDONED PIPE OPENINGS SHALL BE PLUGGED WITH CONCRETE TO A DEPTH OF ONE AND ONE-HALF TIMES THE DIAMETER OF THE PIPE.
- 17. THE CONTRACTOR SHALL RESTORE TO THEIR ORIGINAL CONDITION OR BETTER ALL IMPROVEMENTS DAMAGED AS A RESULT OF THE CONSTRUCTION, INCLUDING PAVEMENTS, EMBANKMENTS, CURBS, SIGNS, LANDSCAPING, STRUCTURES, UTILITIES, WALLS, FENCES, ETC. UNLESS PROVIDED FOR SPECIFICALLY IN THE PROPOSAL.
- 18. THE CONTRACTOR SHALL OBSERVE AND COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS IN DISPOSING OF WATER FROM THE WATER MAIN FOLLOWING TESTING, DISINFECTION,
- 19. THE CONTRACTOR'S ATTENTION IS DIRECTED TO CHAPTER 44-B, 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 THE CHAPTER 44-B AND BECOME FAMILIAR WITH THE NOISE LEVEL RESTRICTIONS AND THE PROCEDURES FOR OBTAINING A PERMIT FOR CONSTRUCTION ACTIVITIES.
- 20. IN THE EVENT THAT ANY CHANGES IN ALIGNMENT OR GRADE FOR THE PROPOSED UTILITIES ARE REQUIRED DUE TO UNFORESEEN CONFLICT WITH OTHER UNDERGROUND UTILITIES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REQUIRED CHANGES WHICH ARE TO BE PRESENTED TO THE ENGINEER FOR APPROVAL: OTHERWISE, HE WILL BE RESPONSIBLE FOR ANY COST INVOLVED IN CONSTRUCTION ACTIVITIES EXPENDED.

GRADING NOTES

- 1. ALL GRADING WORK SHALL BE DONE IN ACCORDANCE WITH CHAPTER 14, ARTICLES 13, 14, 15 AND 15, AS RELATED TO GRADING, SOIL EROSION AND SEDIMENT CONTROL, OF THE REVISED ORDINANCES OF HONOLULU, 1990, AS AMENDED, AND SOILS REPORT BY WALTER LUM ASSOCIATES, INC. DATED APRIL 15, 1986, AS APPLICABLE.
- 2. NO CONTRACTOR SHALL PERFORM ANY GRADING OPERATION SO AS TO CAUSE FALLING ROCKS, SOIL OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW ONTO ADJOINING PROPERTIES, STREETS OR NATURAL WATERCOURSES. SHOULD SUCH VIOLATIONS OCCUR, THE COSTS INCURRED FOR ANY REMEDIAL ACTION BY THE CIVIL ENGINEER SHALL BE PAYABLE BY THE CONTRACTOR.
- 3. 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 CONTAINED IN CHAPTER 11-80, "AIR POLLUTION CONTROL".
- 4. 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 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.
- 5. ADEQUATE PROVISIONS SHALL BE WADE TO PREVENT SURFACE WATERS FROM DAMAGING THE CUT FACE OF AN EXCAVATION OR THE SLOPED SURFACES OF A FILL. FURTHERMORE, ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SEDIMENT—LADEN RUNOFF FROM LEAVING THE SITE.
- 6. ALL SLOPES AND EXPOSED AREAS SHALL BE SODDED OR PLANTED AS SOON AS FINAL GRADES HAVE BEEN ESTABLISHED. PLANTING SHALL NOT BE DELAYED UNTIL ALL GRADING WORK HAS BEEN COMPLETED. GRADING TO FINAL GRADE SHALL BE CONTINUOUS, AND ANY AREA WITHIN WHICH WORK HAS BEEN INTERRUPTED OR DELAYED SHALL BE PLANTED.
- 7. FILLS ON SLOPES STEEPER THAN 5:1 SHALL BE KEYED.
- 8. THE CITY SHALL BE INFORMED OF THE LOCATION OF THE BORROW/DISPOSAL SITE FOR THE PROJECT WHEN THE APPLICATION FOR A GRADING PERMIT IS MADE. THE BORROW/DISPOSAL SITE MUST ALSO FULFILL THE REQUIREMENTS OF THE GRADING
- 9. NO GRADING WORK SHALL BE DONE ON SATURDAYS, SUNDAYS AND HOLIDAYS AT ANY TIME WITHOUT PRIOR NOTICE TO THE CHIEF ENGINEER, PROVIDED SUCH GRADING WORK IS ALSO IN CONFORMANCE WITH HAWAII ADMINISTRATIVE RULES, CHAPTER 11-43. COMMUNITY NOISE CONTROL FOR OAHU.
- 10. THE LIMITS OF THE AREA TO BE GRADED SHALL BE FLAGGED BEFORE THE COMMENCEMENT OF THE GRADING WORK
- 11. ALL GRADING OPERATIONS SHALL BE PERFORMED IN CONFORMANCE WITH THE APPLICABLE PROVISIONS OF THE WATER POLLUTION CONTROL AND WATER QUALITY STANDARDS CONTAINED IN HAWAII ADMINISTRATIVE RULES, CHAPTER 11-55. "WATER POLLUTION CONTROL" AND CHAPTER 11-54, "WATER QUALITY STANDARDS" AND IF APPLICABLE, THE NPDES PERMIT FOR THE PROJECT.
- 12. WHERE APPLICABLE AND FEASIBLE THE MEASURES TO CONTROL EROSION AND OTHER POLLUTANTS SHALL BE IN PLACE BEFORE ANY EARTH MOVING PHASE OF THE GRADING IS INITIATED.
- 13. TEMPORARY EROSION CONTROLS SHALL NOT BE REMOVED BEFORE PERMANENT EROSION CONTROLS ARE IN PLACE AND ESTABLISHED.
- 14. TEMPORARY EROSION CONTROL PROCEDURES SHALL BE SUBMITTED FOR APPROVAL PRIOR TO APPLICATION FOR GRADING PERMIT.
- 15. IF THE GRADING WORK INVOLVES CONTAMINATED SOIL. THE ALL GRADING WORK SHALL BE DONE IN CONFORMANCE WITH APPLICABLE STATE AND FEDERAL
- 16. NON-COMPLIANCE TO ANY OF THE ABOVE REQUIREMENTS SHALL MEAN IMMEDIATE SUSPENSION OF ALL WORK, AND REMEDIAL WORK SHOULD COMMENCE IMMEDIATELY. ALL COSTS INCURRED SHALL BE BILLED TO THE PERMITTEE. FURTHERMORE, VIOLATORS SHALL BE SUBJECTED TO ADMINISTRATIVE, CIVIL AND/OR CRIMINAL PENALTIES.
- 17. FOR BENCH MARK, SEE SHEET 4.

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 THE DEPARTMENT OF WASTEWATER MANAGEMENT VOL. 1, JULY 1993.
- 2. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION SECTION, DEPARTMENT OF WASTEWATER MANAGEMENT AT 527-5820 OR 523-4345 TO ARRANGE FOR INSPECTION SERVICES AND SUBMIT FOUR SETS OF APPROVED CONSTRUCTION PLANS SEVEN DAYS PRIOR TO COMMENCEMENT OF
- 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 AND EXERCISE PROPER CARE IN EXCAVATING
- 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 PRODEDURES.

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 STANDARDS" VOLUME 1, DATED 1985. THE "APPROVED MATERIAL LIST AND STANDARD DETAILS FOR WATER SYSTEM. CONSTRUCTION", VOLUME 2, DATED 1985, THE "WATER SYSTEM EXTERNAL CORROSION CONTROL STANDARDS", VOLUME 3, DATED 1991, AND ALL SUBSEQUENT AMENDMENTS AND
- 2. THE CONTRACTOR SHALL NOTIFY BWS PLANNING AND ENGINEERING DIVISION, CONSTRUCTION SECTION ONE WEEK PRIOR TO COMMENCING WORK IN THE WATER SYSTEM.
- 3. ALL PLANS APPROVED BY THE BOARD OF WATER SUPPLY ARE BASED SOLELY FOR THE ADEQUACY OF THE WATER SUPPLY. ALL OTHER FEATURES OF THE WATER SYSTEM, SUCH AS LINES, GRADES, FITTINGS, DRAINAGE, ETC., AND OTHER FEATURES OF IMPROVEMENTS SHALL NOT BE THE RESPONSIBILITY OF THE BOARD OF WATER SUPPLY.
- 4. TEST PRESSURE SHALL BE 150 PSI.
- 5. AFTER INSTALLATION OF TAPPING SLEEVE AND VALVE PRIOR TO ACTUAL TAPPING OPERATIONS, THE ASSEMBLY SHALL BE TESTED AT 150 PSI ON BOTH SIDES OF THE VALVE.
- 6. 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.
- 7. MAINTAIN 3'-0" MIN. HORIZONTAL CLEAR SEPARATION BETWEEN ALL WATERLINE SYSTEMS AND NEAREST ELECTRICAL/SIGNAL DUCTUMES PARALLELING THE WATER SYSTEM AT NO COST TO THE BOARD OF WATER SUPPLY.
- 8. MAINTAIN 3'-0" MIN. 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 LIGHT/TRAFFIC SIGNAL STANDARD LOCATION. WHERE CONFLICTS OCCUR, 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.
- 9. ALL WATERLINE CONSTRUCTION REQUIRING SHUTDOWN SHALL BE SCHEDULED FOR NORMAL WORKING HOURS AND MAXIMUM DOWNTIME SHALL BE (6) HOURS.
- 10. MECHANICAL JOINT CLANDS SHALL BE "STRAIGHT-SIDED" AND POLYGON IN SHAPE AS DESCRIBED IN AWWA CTTT AND SHALL BE APPLICABLE TO BOTH CAST IRON AND DUCTILE IRON GLANDS-OR-AND APPROVED EQUAL ON A JOB TO JOB BASIS.
- 11. THE CONTRACTOR SHALL CHLORINATE THE ENTIRE INSIDE SURFACE OF EACH PIPE AND FITTING WITH DISINFECTION SOLUTION OF 5 OUNCES OF SODIUM HYPOCHLORITE MIXED WITH 10 GALLONS OF WATER (FOR CONNECTION ONLY).
- 12. CONTRACTOR SHALL CUT AND PLUG ALL EXISTING UNUSED LATERALS AT THE MAIN WHETHER OR NOT SHOWN ON THE PLANS. METER AND VALVE BOXES TO BE OR ALREADY ABANDONED SHALL BE DEMOLISHED OR REMOVED AND PROPERLY DISPOSED OF. THE DAMAGED AREA SHALL BE REPAIRED TO AN EQUAL OR BETTER CONDITION THAN THE IMMEDIATE AREA. ALL WORK SHALL BE DONE AT THE EXPENSE OF THE CONTRACTOR.
- 13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL WATER LINES DURING CONSTRUCTION. THE CONTRACTOR SHALL BE ESPECIALLY CAREFUL WHEN EXCAVATING BEHIND WATER LINES, TEES AND BENDS WHEREVER THERE IS A POSSIBILITY OF WATER LINE MOVEMENT DUE TO THE REMOVAL OF THE SUPPORTING EARTH BEYOND THE EXISTING REACTION BLOCKS. THE CONTRACTOR SHALL TAKE WHATEVER MEASURE NECESSARY TO PROTECT THE WATER LINES, SUCH AS CONSTRUCTING SPECIAL REACTION BLOCKS (WITH BWS APPROVAL) AND/OR MODIFYING HIS CONSTRUCTION METHOD.
- 14. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES AND STRUCTURES AS SHOWN ON THE PLANS ARE FROM THE LATEST AVAILABLE DATA BUT IS NOT GUARANTEED AS TO THE ACCURACY OR THE ENCOUNTERING OF OTHER OBSTACLES DURING THE COURSE OF THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL PAY FOR ALL THE DAMAGES TO EXISTING UTILITIES.
- 15. PRIOR TO INSTALLATION, THE CONTRACTOR SHALL SUBMIT FOR APPROVAL BY BOARD OF WATER SUPPLY. THE MANUFACTURER'S CERTIFICATION THAT ALL CAST IRON (GRAY OR DUCTILE) FITTINGS FOR THE PROJECT CONFORM IN ALL RESPECTS TO THE WATER SYSTEM STANDARDS, DATED 1985.
- 16. POLYGON SHAPE FOR MECHANICAL JOINT GLANDS AS DESCRIBED IN ANWA STANDARD C111 SHALL BE "STRAIGHT-SIDED" OR AN APPROVED EQUAL ON A JOB TO JOB BASIS.
- 17. RE-APPROVAL SHALL BE REQUIRED IF THIS PROJECT IS NOT UNDER CONSTRUCTION WITHIN A PERIOD OF TWO YEARS.
- 18. PIPE ALTERNATIVES:
- A DUCTILE IRON PIPES SHALL BE CLASS 52, WRAPPED WITH POLYETHYLENE.
- B. POLYVINYL CHLORIDE (PVC) PIPES SHALL BE CLASS 150. ALL VALVES METALLIC FITTINGS SHALL BE SUPPLIED WITH A FUSION BONDED EPOXY COATING. NO BENDING OF POLYVINYL CHLORIDE PIPES WILL BE PERMITTED. THE INSTALLATION OF PVC PIPE, ACCORDING TO THE PLANS AND SPECIFICATIONS AS BID ON BY THE CONTRACTOR, MAY REQUIRE ADDITIONAL DESIGN WORK, ADDITIONAL FITTINGS AND SPECIAL COUPLINGS, NOT SPECIFIED IN THE PLANS AND SPECIFICATIONS. PAYMENT FOR ADDITIONAL DESIGN WORK, ADDITIONAL FITTINGS AND SPECIAL COUPLINGS SHALL BE CONSIDERED INCIDENTAL TO THE UNIT PRICE BID IN THE PROPOSAL FOR PVC PIPE. ANY ADDITIONAL DESIGN WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. COPPER TONING WIRE SHALL BE INSTALLED ALONG THE ENTIRE LENGTH OF THE PIPELINE AND ALL NON-METALLIC LATERALS.
- ALL POLYVINYL CHLORIDE (PVC) PIPE DEFLECTIONS SHALL BE ACCOMPLISHED ONLY THE USE OF SPECIAL PVC DEFLECTION COUPLINGS. DEFLECTION AROUND CURVES SHALL BE ACCOMPLISHED ONLY BY USE OF PVC DEFLECTION COUPLINGS.
- THE CONTRACTOR SHALL OBTAIN A N.P.D.E.S. PERMIT PRIOR TO CHLORINATION AND/OR DEWATERING. A COPY OF THE PERMIT SHALL BE SUBMITTED TO THE BOARD OF WATER SUPPLY, PLANNING AND ENGINEERING DIVISION, CONSTRUCTION SECTION
- 20. SOIL RESISTIVITY FOR THE SITE HAS A CORROSION RATING OF I THROUGH 3 AS REPORTED BY PSC. ALL REQUIRED ELECTRICAL ISOLATION PROCEDURES AND CORROSION CONTROL REQUIREMENTS SHALL APPLY.

Maux

8/22/94

CHIEF, DIVISION OF PLANNING & SERVICE CONTROL, DWYM (FOR SEWER WORK WITHIN CITY JURISDICTION ONLY)

SURVEY NOTES

- 1. ORIGIN OF AZIMUTHS AND COORDINATES IS GOVERNMENT TRIANGULATION STATION
- 2 HORIZONTAL CONTROLS ARE FROM STATE SURVEY TRIANGULATION STATION BRASS DISKS "SS1-1" TO SS1-1A":
- 3. VERTICAL CONTROLS ARE BASED ON MEAN SEA LEVEL DATUM AND CARRIED FROM BENCH MARK STREET MONUMENT AT CENTER OF EXISTING HAMMER HEAD 9+26.52 CENTERLINE ALA KAWA STREET. ELEVATION = 4.49
- 4. HORIZONTAL AND VERTICAL CONTROLS AS NOTED ON PLANS MUST FIRST BE VERIFIED ON THE GROUND PRIOR TO THE USE AND ADOPTION OF SUCH CONTROLS BY THE CONTRACTOR

STATE DEPARTMENT OF HEALTH (DOH) NOTES

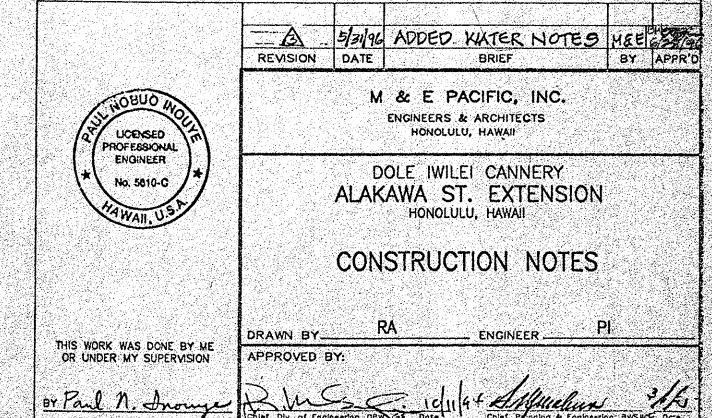
- 1. CONTRACTOR SHALL CONTAIN AND PREVENT WATER USED FOR HYDROTESTING FROM ENTERING STATE WATERS AS RUNOFF.
- 2. CONTRACTOR SHALL CONTAIN AND PREVENT WATER FROM POSSIBLE DEWATERING
- OPERATIONS FROM ENTERING STATE WATERS AS RUNOFF.

3. IF CONTRACTOR CANNOT MEET ONE OR BOTH OF THE ABOVE CONDITIONS, CONTRACTOR

SHALL FILE FOR A "NOTICE OF INTENT" (NOI) FORM WITH THE STATE DEPARTMENT OF HEALTH.

WATER NOTES (CONT.)

- 21. NUTS AND BOLTS FOR FLANGE CONNECTIONS WITHIN METER BOXES SHALL BE BRONZE OR STAINLESS STEEL EXCEPT COUPLING ADAPTERS WHERE "COR-TEN" (U.S. STEEL) OR "MAYARI" (BETHLEHEM STEEL) MAY BE USED. FLANGE CONNECTIONS OUTSIDE OF METER BOX MAY USE "COR-TEN" OR "MAYARI" TYPE NUTS AND BOLTS.
- 22. THE INSTALLATION, CHLORINATION AND TESTING OF THE WATER MAIN AND FACILITIES AFTER THE METER SHALL NOT BE THE RESPONSIBILITY OF THE BOARD OF WATER SUPPLY.
- 23. ADD ONE FOOT TO ALL DIMENSION "C" OF BWS STANDARD DETECTOR CHECK METER DETAIL NO. 62 (REV. 11/6/89).
- 24. ALL WATERLINE CONSTRUCTION REQUIRING SHUTDOWN SHALL BE SCHEDULED FOR AFTER WORKING HOURS AND MAXIMUM DOWNTIME SHALL BE SIX (6) HOURS.



NOTES FOR CONSTRUCTION WITHIN STATE RIGHT-OF-WAY

- 1. THE CONTRACTOR SHALL OBTAIN A CONSTRUCTION PERMIT FROM THE STATE'S HIGHWAY DISTRICT ENGINEER AT 727 KAKOI STREET PRIOR TO COMMENCEMENT OF WORK WITHIN STATE HIGHWAY RIGHT-OF-WAY.
- 2. CONSTRUCTION AND RESTORATION OF ALL EXISTING HIGHWAY FACILITIES WITHIN STATE RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE SECTIONS OF THE CURRENT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND PUBLIC WORKS CONSTRUCTION AND THE SPECIFICATION FOR INSTALLATION OF MISCELLANEOUS IMPROVEMENTS WITHIN STATE HIGHWAYS, OF THE STATE HIGHWAYS DIVISION.
- 3. ALL LANES SHALL BE OPENED TO TRAFFIC DURING THE MORNING PEAK HOURS FROM 5:30 A.M. TO 8:30 A.M. AND DURING THE AFTERNOON PEAK HOURS FROM 3:00 P.M. TO 6:00 P.M. AND DURING OFFWORK HOURS. ONLY ONE LANE OF TRAFFIC SHALL BE CLOSED AT ANY OTHER
- 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 PROTECTIONS AND FOR THE CONVENIENCE AND SAFETY OF PUBLIC TRAFFIC. ALL SUCH PROTECTIVE FACILITIES AND PRECAUTIONS TO BI TAKEN SHALL CONFORM WITH THE "ADMINISTRATIVE RULES OF HAWAII GOVERNING THE USE OF TRAFFIC CONTROL DEVICES AT SITES ON OR ADJACENT TO PUBLIC STREETS AND HIGHWAYS" ADOPTED BY THE DIRECTOR OF TRANSPORTATION, AND THE CURRENT U.S. FEDERAL HIGHWAY ADMINISTRATION "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, PART VI - TRAFFIC CONTROL FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS". IF LANE CLOSURES ARE REQUIRED DURING CONSTRUCTION, A TRAFFIC CONTROL PLAN SHALL BE INCORPORATED INTO THE CONSTRUCTION PLANS AND MUST BE APPROVED BY THE DIVISION PRIOR TO THE ISSUANCE OF THE PERMIT.
- 5. THE MINIMUM PAVEMENT STRUCTURE SHALL CONSIST OF:
- 4" ASPHALT CONCRETE MIX IV, 8" AGGREGATE BASE COURSE AND 12" AGGREGATE SUBBASE OR 4" ASPHALT CONCRETE AND 8" ASPHALT CONCRETE BASE OR ASPHALT CONCRETE, OR MATCH EXISTING PAVEMENT STRUCTURE, WHICHEVER IS GREATER.
- 6. NO MATERIAL AND/OR EQUIPMENT SHALL BE STOCKPILED OR OTHERWISE STORED WITHIN HIGHWAY RIGHTS-OF-WAY EXCEPT AT LOCATIONS DESIGNATED IN WRITING AND APPROVED BY THE DISTRICT ENGINEER.
- COMPACTION TESTS SHALL BE TAKEN IN ACCORDANCE WITH THE SPECIFICATIONS FOR INSTALLATION OF MISCELLANEOUS IMPROVEMENTS WITHIN STATE HIGHWAYS, AS FOLLOWS:
- A. SUBBASE: ONE COMPACTION TEST FOR EACH 200 LINEAR FEET OF TRENCH.
- B. BASE COURSE: ONE COMPACTION TEST FOR EACH 200 LINEAR FEET OF TRENCH.
- TEST RESULTS MUST BE SUBMITTED TO THE DISTRICT ENGINEER.
- 8. PRIOR TO COMMENCING TRENCH EXCAVATION WORK, THE CONTRACTOR SHALL TAKE A PROFILE ALONG THE NEW CENTERLINE OF UTILITY TRENCH AND THAT SUCH INFORMATION SHALL BE USED IN THE VERIFICATION OF RESTORING THE ROADWAY TO ITS ORIGINAL CONDITION. A COPY OF THE PROFILE SHALL BE SUBMITTED TO THE DISTRICT ENGINEER.
- 9. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ADEQUATE, SAFE, NONSKID BRIDGING MATERIAL OVER THE TRENCH, INCLUDING SHORING, WHEN TRENCHING IN PAVEMENT AREAS TO HANDLE ALL TYPES OF VEHICULAR TRAFFIC.
- 10. NO TRENCH SHALL BE OPENED MORE THAN 150 FEET IN ADVANCE OF THE INSTALLED AND TESTED PIPE AND/OR DUCTLINE.
- 11. LONGITUDINAL DRAINAGE ALONG THE HIGHWAY SHALL BE MAINTAINED.
- 12. PAVEMENT STRIPING SHALL BE DONE BY THE CONTRACTOR
- 13. APPROVAL OF PERMIT CONSTRUCTION PLANS SHALL BE VALID FOR A PERIOD OF ONE YEAR THEREOF FROM THE DATE OF NOTIFICATION OF APPROVAL TO THE APPLICANT. IN THE EVENT CONSTRUCTION DOES NOT COMMENCE WITH THIS ONE-YEAR PERIOD, THE APPLICANT WILL BE REQUIRED TO RESUBMIT HIS CONSTRUCTION PLANS FOR DIVISION'S REVIEW AND APPROVAL.
- 14. ALL REGULATORY, GUIDE AND CONSTRUCTION SIGNS AND BARRICADES SHALL BE OF HIGH INTENSITY REFLECTIVE SHEETING.
- 15. CONTRACTOR SHALL INFORM THE STATE PERMIT OFFICE (831-6712) AT LEAST TWO (2) DAYS PRIOR TO CLOSING ANY LANES.
- 16. DRIVEWAY SHALL BE KEPT OPEN UNLESS THE OWNERS OF THE PROPERTY USING THESE RIGHTS-OF-WAYS ARE OTHERWISE PROVIDED FOR SATISFACTORILY.
- 17. 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.
- 18. THE CONTRACTOR SHALL REFERENCE TO THE SATISFACTION OF THE DISTRICT ENGINEER. 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, UNLESS DIRECTED OTHERWISE BY THE DISTRICT ENGINEER OR HIS REPRESENTATIVE.
- 19. THE CONTRACTOR SHALL EXERCISE CARE WHEN EXCAVATING IN THIS AREA. DAMAGES TO THE EXISTING FACILITIES SHALL BE IMMEDIATELY REPORTED TO THE RESPECTIVE UTILITY COMPANIES, CITY OR STATE AGENCY. THE REPAIR WORK SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.
- 20. THE CONTRACTOR SHALL NOTIFY THE HIGHWAY LIGHTING AND TRAFFIC SIGNAL SUPERVISOR, SDOT, THREE (3) WORKING DAYS PRIOR TO COMMENCING WORK IN THIS AREA (834-4581).

TRAFFIC NOTES FOR WORK ON CITY & COUNTY STREET

- A PERMIT SHALL BE OBTAINED FROM THE DEPARTMENT OF TRANSPORTATION SERVICES BEFORE WORK ON ANY PORTION OF A PUBLIC STREET OR HIGHWAY MAY BEGIN.
- 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 TWO LANES FOR THROUGH TRAFFIC. ON STREETS TOO NARROW TO MAKE THIS PRACTICABLE, THE CONTRACTOR MAY WORK ON ONE-HALF OF THE ROADWAY, KEEPING THE OTHER HALF OPEN TO TRAFFIC AND ALTERNATING THE FLOW OF TRAFFIC.
- 5. DURING NON-WORKING HOURS, ALL TRENCHES SHALL BE COVERED WITH A SAFE NON-SKID BRIDGING MATERIAL AND ALL LANES SHALL BE OPENED TO TRAFFIC.
- 6. 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 OF OTHER FACILITIES FOR PEDESTRIANS SHALL BE PROVIDED. PASSAGE BETWEEN WALKWAYS AT INTERSECTIONS SHALL LIKEWISE BE PROVIDED.
- 8. DRIVEWAYS SHALL BE KEPT OPEN UNLESS THE OWNERS OF THE PROPERTY USING THESE RIGHTS-OF-WAY ARE OTHERWISE PROVIDED FOR SATISFACTORILY
- 9. THE CONTRACTOR SHALL REFERENCE, THE TO APPROVAL OF THE DEPARTMENT OF TRANSPORTATION SERVICES, ALL EXISTING TRAFFIC SIGNS, POSTS AND PAVEMENT MARKINGS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNS, POST, AND PAVEMENT MARKINGS DISTURBED BY HIS ACTIVITIES. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF TRANSPORTATION SERVICES AT 523— 4029 ONE (1) WEEK PRIOR TO ANY WORK TO BE DONE ON SIGNS, POSTS AND PAVEMENT
- 10. NO MATERIAL AND/OR EQUIPMENT SHALL BE STOCKPILED OR OTHERWISE STORED WITHIN STREET RIGHTS-OF-WAY EXCEPT AT LOCATIONS DESIGNATED IN WRITING AND APPROVED BY DEPARTMENT OF TRANSPORTATION SERVICES.
- 11. THE CONTRACTOR SHALL NOTIFY OTS, ED SNIFFEN OR TRASK HUDDY (848-4571), TWO WEEKS PRIOR TO CONSTRUCTION, INFORMING THEM OF LOCATION, SCOPE OF WORK, PROPOSED CLOSURE OF ANY STREET OF TRAFFIC LANES, AND THE NEED TO RELOCATE ANY BUS STOP.
- 12. THE DOLE IWILEI CANNERY SHALL ENSURE THAT THE CONTRACTOR WILL INSTALL THE CONSTRUCTION TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE MUTCH AND HAWAII RULES AND REGULATIONS AS SPECIFIED IN TRAFFIC NOTE NO. 2.

CONSTRUCTION NOTES FOR GAS FACILITIES

- THE GASCO, INC. 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. PRIOR WRITTEN CLEARANCE MUST BE OBTAINED FROM GASCO, INC. AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING EXCAVATION NEAR THESE GAS LINES. SINCE GAS LINE LOCATIONS ON FIELD MAPS ARE APPROXIMATE, THE CONTRACTOR, AFTER OBTAINING WRITTEN CLEARANCE, SHALL CALL GASCO, INC., A MINIMUM OF 48 HOURS BEFORE STARTING EXCAVATION TO ARRANGE FOR FIELD LOCATION OF EXISTING GAS LINES. THE TELEPHONE NUMBER IS 547-3575 DURING BUSINESS HOURS, AND 526-0066 AFTER HOURS.
- 3. FOR RELOCATION OF ANY GAS PIPELINE, THE CONTRACTOR SHALL NOTIFY GASCO, INC. FIVE (5) WORKING DAYS BEFORE STARTING WORK. THE CONTRACTOR SHALL PROVIDE THE NECESSARY EXCAVATION AND BACKFILL. ARRANGE FOR TRAFFIC PERMITS, AND RESTORE SIDEWALK, PAVEMENT, OR OTHER FACILITIES. ANY RELOCATION OF GAS FACILITIES SHALL BE DONE BY GASCO, INC. AND PAID FOR BY THE CONTRACTOR.
- 4. THE CONTRACTOR SHALL NOTIFY GASCO, INC. IMMEDIATELY AFTER ANY DAMAGE HAS BEEN CAUSED TO EXISTING GAS PIPELINES. THEIR COATINGS OR THEIR CATHODIC PROTECTION DEVICES. REPAIR WORK ON THIS DAMAGE SHALL BE DONE BY GASCO, INC. WITH PAYMENT FOR THIS WORK TO BE BORNE BY THE CONTRACTOR.
- 5. MINIMUM VERTICAL OR HORIZONTAL CLEARANCE BETWEEN GAS PIPELINES AND OTHER PIPELINES, CONDUITS, OR DUCTLINES SHALL BE 12 INCHES. ADEQUATE SUPPORT AND PROTECTION FOR GAS PIPELINES EXPOSED IN THE TRENCH SHALL BE PROVIDED AND APPROVED
- 6. THE CONTRACTOR SHALL WORK IN EXPEDITIOUS MANNER IN ORDER TO KEEP UNCOVERED GAS PIPELINES EXPOSED FOR AS SHORT A PERIOD OF TIME AS POSSIBLE.

HAWAIIAN ELECTRIC COMPANY (HECO) NOTES

- 1. 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.
- 2.. THE CONTRACTOR SHALL COMPLY WITH THE STATE OF HAWAII'S OCCUPATIONAL SAFETY AND HEALTH LAW (DOSH)
- 3. THE CONTRACTOR SHALL OBTAIN AN EXCAVATION PERMIT FROM HECO'S MAPPING AND RECORDS DIVISION LOCATED AT 820 WARD AVENUE, 4TH FLOOR, TWO (2) WEEKS PRIOR TO STARTING CONSTRUCTION.
- 4. 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.
- 5. 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
- B) PROTECTING EXISTING STRUCTURES OR FACILITIES WITH BEAMS, STRUTS, OR UNDER-
- 6. FOR POLE BRACING INSTRUCTIONS, THE CONTRACTOR SHALL CALL THE HECO DISTRICT CONSTRUCTION SUPERINTENDENT AT WARD, PHONE 543-7050 A MINIMUM OF 72 HOURS IN
- ANY WORK REQUIRED TO RELOCATED HECO FACILITIES SHALL BE DONE BY HECO AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL THE COORDINATION, AND FOR COSTS IF APPLICABLE.
- 8. SHOULD IT BECOME NECESSARY TO TEMPORARILY RELOCATE ANY 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 BEING BORNE BY THE CONTRACTOR.
- 9. ANY DAMAGE TO HECO'S FACILITIES WILL BE REPORTED IMMEDIATELY TO HECO'S TROUBLE DISPATCHER AT PHONE 543-7874.
- 10. ALL HECO OVERHEAD AND UNDERGROUND FACILITIES SHOWN ON THESE PLANS OR WHOSE APPROXIMATE LOCATIONS WITHIN THE PROJECT BOUNDARIES HAVE BEEN MADE KNOWN BY ANY REASONABLE MEANS AT ANY TIME TO THE CONTRACTOR SHALL BE PROTECTED AT ALL TIMES BY THE CONTRACTOR DURING CONSTRUCTION. THIS REPAIR WORK SHALL BE DONE BY HECO, OR BY THE CONTRACTOR UNDER HECO'S SUPERVISION.

HAWAIIAN TELEPHONE COMPANY (HTCO) NOTES

- THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN THE EXCAVATION AND CONSTRUCTION CROSSES OR IS CLOSE TO EXISTING UNDERGROUND TELEPHONE AND SIGNAL CABLE FACILITIES AND MAINTAIN ADEQUATE CLEARANCE FOR HIS EQUIPMENT WHILE WORKING CLOSE TO AND/OR UNDER THE OVERHEAD FACILITIES. ANY DAMAGE TO THE EXISTING UNDERGROUND OR OVERHEAD FACILITIES SHALL BE REPAIRED BY HTCO AND PAID FOR BY THE CONTRACTOR.
- 2. SHOULD IT BECOME NECESSARY. ANY WORK REQUIRED TO RELOCATE UNDERGROUND OR OVERHEAD FACILITIES SHALL BE DONE BY HTCO AND PAID FOR BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION.
- 3. CONTRACTOR SHALL OBTAIN EXCAVATION PERMIT FROM HTCO RECORDS SECTION AT 3239 UALENA STREET AT LEAST 2 WEEKS PRIOR TO START OF CONSTRUCTION.
- 4. CONTRACTOR SHALL CONTACT HTCO INSPECTOR AT 834-6382 A MINIMUM OF 72 HOURS PRIOR TO START OF WORK.
- SHOULD FIELD CONDITIONS AND CONSTRUCTION PROCEDURES REQUIRE THAT UTILITY POLES BE BRACED, THE CONTRACTOR SHALL CONTACT HTCO INSPECTOR FOR POLE BRACING INSTRUCTIONS AT LEAST 72 HOURS IN ADVANCE.
- CONTRACTOR SHALL REPORT ANY DAMAGES OF HTCO FACILITIES TO HTCO CABLE DISPATCH CENTER. TELEPHONE 546-5963.

ELECTRICAL & MAINTENANCE SERVICES DIVISION NOTES

- 1. THE CONTRACTOR SHALL NOTIFY THE JOINT POLE COMMITTEE TWO (2) WEEKS IN ADVANCE OF ANY RELOCATION OF UTILITY POLE(S) THAT MAY BE NECESSARY.
- 2. THE CONTRACTOR SHALL NOTIFY THE ELECTRICAL & MAINTENANCE SERVICES DIVISION. DEPARTMENT OF TRANSPORTATION SERVICES. THREE (3) WORKING DAYS PRIOR TO COMMENCING WORK ON THE STREET LIGHTING SYSTEM (PHONE 527-5002).
- 3. THE CONTRACTOR SHALL NOTIFY THE ELECTRICAL & MAINTENANCE SERVICES DIVISION. DEPARTMENT OF TRANSPORTATION SERVICES, THREE (3) WORKING DAYS PRIOR TO COMMENCING WORK ON THE TRAFFIC SIGNAL SYSTEM (PHONE 527-5007)
- 4. THE STREET LIGHTING AND TRAFFIC SIGNALS SHALL BE KEPT OPERATIONAL DURING CONSTRUCTION. ANY RELOCATION OR CHANGE OVER REQUIRED SHALL BE APPROVED BY THE ELECTRICAL AND MAINTENANCE SERVICES DIVISION, DEPARTMENT OF TRANSPORTATION SERVICES, AND PERFORMED AND PAID FOR BY THE CONTRACTOR.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO EXISTING INTERCONNECT SYSTEM, AND ANY DAMAGES TO THESE FACILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS COST IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY AND COUNTY OF

APPROVED

CHIEF, TRAFFIC ENGINEERING DIVISION, DTS (FOR CONSTRUCTION WITHIN CITY R/W ONLY)

STREET TREE NOTES

- 1. THE CONTRACTOR SHALL NOTIFY THE BEAUTIFICATION ADMINISTRATOR DEPARTMENT OF PARKS AND RECREATION, PHONE 971-7151 AT LEAST SEVEN (7) DAYS PRIOR TO PRE-MAINTENANCE AND FINAL INSPECTIONS.
- 2. MAINTENANCE OF STREET TREES SHALL BE FOR SIXTY (60) CALENDAR DAYS OR UNTIL PROJECT IS COMPLETED, WHICHEVER IS LONGER.
- 3. THE STANDARD CITY AND COUNTY OF HONOLULU, DEPARTMENT OF PARKS AND RECREATION SPECIFICATIONS FOR STREET TREE PLANTING AND LANDSCAPING SHALL BE MADE PART OF CONSTRUCTION DOCUMENTS.

NOTES FOR TRAFFIC CONTROL PLAN

- 1. THE CONTRACTOR SHALL MAKE MINOR ADJUSTMENTS AT INTERSECTIONS. DRIVEWAYS. BRIDGES, STRUCTURES, ETC. TO FIT FIELD CONDITIONS.
- 2. CONES OR DELINEATORS SHALL BE EXTENDED TO A POINT WHERE THERE ARE VISIBLE TO APPROACHING TRAFFIC.
- 3. TRAFFIC CONTROL DEVICES SHALL BE INSTALLED SUCH THAT THE SIGN OR DEVICE FARTHEST FROM THE WORK AREA SHALL BE PLACED FIRST. THE OTHERS SHALL THEN BE PLACED PROGRESSIVELY TOWARD THE WORK AREA.
- 4. REGULATORY AND WARNING SIGNS WITHIN THE CONSTRUCTION ZONE THAT ARE IN CONFLICT WITH THE TRAFFIC CONTROL PLANS SHALL BE REMOVED OR COVERED. ALL SIGNS SHALL BE RESTORED UPON COMPLETION OF THE WORK.
- 5. FLAGGERS AND/OR POLICE OFFICER SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES.
- 6. WHEN REQUIRED BY THE ISSUING OFFICE, 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 NOT 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. AT THE END OF EACH DAY'S WORK OR AS SOON AS THE 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
- 11. REPLACE PERMANENT PAVEMENT MARKINGS AND TRAFFIC SIGNS UPON COMPLETION OF EACH PHASE OF WORK.
- 12. THE CONTRACTOR SHALL MAINTAIN EXISTING PEDESTRIAN FACILITIES WITHIN OR AROUND THE WORK AREA.

LICENSED PROFESSIONAL ENGINEER

BY Paul N. Hnornge

REVISION DATE

M & E PACIFIC, INC. ENGINEERS & ARCHITECTS

HONOLULU, HAWAII DOLE IWILE! CANNERY ALAKAWA ST. EXTENSION

BRIEF

BY APPR'I

CONSTRUCTION NOTES

HONOLULU, HAWAII

DRAWN BY THIS WORK WAS DONE BY ME APPROVED BY: OR UNDER MY SUPERVISION

ENGINEER _

SHEET 3 OF 30 SHEETS

RECORD DRAWINGS