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DEPARTMENT OF TRANSPORTATION SERVICES NOTES:

- A PERMIT SHALL BE OBTAINED FROM THE DEPARTMENT OF TRANSPORTATION SERVICES AND DEPARTMENT OF TRANSPORTATION, HIGHWAYS DIVISION, BEFORE WORK ON ANY PORTION OF A PUBLIC STREET OR HIGHWAY MAY BEGIN.
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION", SEPTEMBER 1986. OF THE DEPARTMENT OF PUBLIC WORKS, CITY AND COUNTY OF HONOLULU, EXCEPT AS MODIFIED HEREIN OR IN THE SPECIAL PROVISIONS.
- THE LOCATIONS OF ALL TRAFFIC SIGNAL FACILITIES SHOWN ON THE DRAWINGS ARE APPROXIMATE. EXACT LOCATIONS SHALL BE VERIFIED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL NOTIFY ALL AFFECTED UTILITY COMPANIES AND GOVERNMENT AGENCIES OF THEIR INTENT TO BEGIN CONSTRUCTION ON ANY INTERSECTION OR STREET AT LEAST TWO (2) WEEKS PRIOR TO THE START OF SUCH CONSTRUCTION.
- 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).
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO THE EXISTING 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.
- 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.
- 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 STREET AND HIGHWAYS, PART IV TRAFFIC CONTROLS FOR STREET AND HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS".
- WORK ON ANY STREET, MAY BE PERFORMED ONLY BETWEEN THE HOURS OF 8:30AM TO 3:30PM, MONDAY THROUGH FRIDAY, UNLESS OTHERWISE PERMITTED BY THE DEPARTMENT OF TRANSPORTATION SERVICES. DURING WORKING HOURS, ALL TRENCHES SHALL BE COVERED WITH A SAFE NON-SKID BRIDGING MATERIAL AND ALL LANES SHALL BE OPEN TO TRAFFIC.
- WHERE APPLICABLE, 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 OR BIKE LANES EXIST, THEY SHALL BE MAINTAINED IN PASSABLE CONDITION OR OTHER FACILITIES FOR PEDESTRIANS AND BICYCLES SHALL BE PROVIDED. PASSAGE BETWEEN WALKWAYS AT INTERSECTIONS SHALL LIKEWISE BE PROVIDED.
- SPECIAL ATTENTION IS CALLED TO PRIVATE AND PUBLIC RIGHTS-OF-WAY. DRIVEWAYS SHALL BE KEPT OPEN UNLESS THE OWNERS OF THE PROPERTY USING THESE RIGHT-OF-WAY ARE OTHERWISE PROVIDED FOR SATISFACTORILY. DURING THE CONSTRUCTION OF DRIVEWAYS AND DRIVEWAY RAMPS, SATISFACTORY ACCESS SHALL BE PROVIDED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL REFERENCE TO THE 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, POSTS 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 MARKINGS.
- 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.
- THE CONTRACTOR SHALL NOTIFY THE TRAFFIC SIGNALS AND TECHNOLOGY DIVISION, DEPARTMENT OF TRANSPORTATION SERVICES, FIVE (5) WORKING DAYS PRIOR TO THE COMMENCING WORK ON THE TRAFFIC SIGNAL SYSTEM (PHONE: 523-4599)
- THE CONTRACTOR SHALL CONTACT THE DEPARTMENT OF TRANSPORTATION SERVICES, PARKING METER SECTION AT 523-4314 AT LEAST TWO (2) WORKING DAYS PRIOR TO ANY PARKING METER WORK.
- CONTRACTOR SHALL NOTIFY DTS, ED SNIFFEN OR LOWELL TOM AT 845-4576 TWO (2) WEEKS PRIOR TO CONSTRUCTION, INFORMING THEM OF THE LOCATION, SCOPE OF WORK, PROPOSED CLOSURE OF ANY STREET OR TRAFFIC LANES, AND THE NEED TO RELOCATE ANY BUS STOP.

GENERAL CONSTRUCTION NOTES:

- THE LOCATION OF OVERHEAD AND UNDERGROUND FACILITIES SHOWN ON THE PLANS ARE FROM EXISTING RECORDS WITH VARYING DEGREES OF ACCURACY, AND ARE FOR INFORMATION ONLY, AND ARE NOT GUARANTEED TO BE LOCATED 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 ANY EQUIPMENT UNDER ANY OVERHEAD LINES.
- THE CONTRACTOR SHALL COMPLY WITH THE DIRECTIVES OF THE STATE OF HAWAII OCCUPATIONAL SAFETY AND HEALTH LAW (DOSH).
- WHEN TRENCH EXCAVATION IS ADJACENT TO EXISTING STRUCTURES OR FACILITIES, THE CONTRACTOR IS 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.
- PEDESTRIAN WALKWAYS SHALL BE MAINTAINED IN PASSABLE CONDITION OR OTHER FACILITIES FOR PEDESTRIANS SHALL BE PROVIDED. PASSAGE BETWEEN WALKWAYS AT INTERSECTIONS SHALL ALSO BE PROVIDED.
- THE CONTRACTOR SHALL VERIFY WITH THE RESPECTIVE UTILITY COMPANIES AND GOVERNMENT AGENCIES, THE LOCATION OF ALL ELECTRICAL, TELEPHONE, TRAFFIC SIGNAL, STREET LIGHT, GAS, WATER, SEWER, DRAIN, AND OTHER LINES CROSSING THE EXCAVATION PATH OR IN THE EXCAVATION AREA. DRAIN, AND OTHER LINES CROSSING THE EXCAVATION PATH OR IN THE EXCAVATION AREA.
- THE CONTRACTOR SHALL NOTIFY ALL AFFECTED UTILITY COMPANIES AND GOVERNMENT AGENCIES OF THEIR INTENT TO BEGIN CONSTRUCTION ON ANY INTERSECTION OR STREET AT LEAST TWO (2) WEEKS PRIOR TO THE START OF SUCH CONSTRUCTION.
- WHERE NECESSARY, RECONSTRUCTION OF SIDEWALK, GUTTER, AND DRIVEWAY SHALL CONFORM TO THE STANDARD DETAILS OF THE GOVERNMENTAL AGENCY HAVING JURISDICTION OVER THE WORK. NEW WORK SHALL BE IN CONFORMANCE WITH CURRENT ADA REQUIREMENTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL SILT AND DEBRIS RESULTING FROM HIS WORK, AND DEPOSITED IN DRAINAGE FACILITIES, ROADWAYS AND OTHER AREAS. THE COST FOR ANY NECESSARY REMEDIAL ACTION BY THE OAHU DISTRICT ENGINEER, SHALL BE PAYABLE BY THE CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING, AND NO WATER USED IN CONSTRUCTION SHALL BE DEPOSITED ON THE SITE, WORK AREA, OR EXISTING SEWER SYSTEM.
- THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT 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.

GENERAL ELECTRICAL NOTES:

- ELECTRICAL WORK SHALL BE NEW UNLESS INDICATED OTHERWISE.
- EXISTING ELECTRICAL EQUIPMENT SHALL REMAIN, UNLESS INDICATED OTHERWISE.
- THE LOCATION OF EXISTING UNDERGROUND UTILITIES SHOWN ON PLANS ARE FROM EXISTING RECORDS AND ARE APPROXIMATIONS ONLY. CONTRACTOR SHALL EXERCISE CAUTION WHEN CONSTRUCTION CROSSES OR IS IN THE PROXIMITY OF EXISTING UNDERGROUND UTILITIES. DAMAGES TO THE CITY'S AND UTILITY COMPANIES' EXISTING FACILITIES SHALL BE REPORTED BY THE REPRESENTATIVE AGENCY AND COMPANY, AND SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CITY.
- CONTRACTOR SHALL ENSURE THAT DUCTLINES AND PULLBOXES ARE INSTALLED WITHIN THE STATE RIGHT-OF-WAY. ANY FACILITIES ENCRDACHING UPON PROPERTY OUTSIDE THE HIGHWAY RIGHT-OF-WAY SHALL BE RELOCATED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CITY.
- COSTS FOR REPAIR AND RESTORATION OF EXISTING HIGHWAY IMPROVEMENTS, AND POTHOLES SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

CONSTRUCTION NOTES:

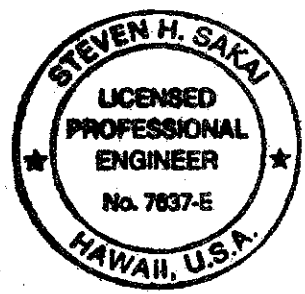
- ALL APPLICABLE CONSTRUCTION WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SEPTEMBER 1986 AND STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION, SEPTEMBER 1984, AS AMENDED, OF THE DEPARTMENT OF THE DEPARTMENT OF PUBLIC WORKS, CITY AND COUNTY OF HONOLULU, AND COUNTIES OF KAUAI, MAUI, AND HAWAII.
- 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 THE AREA. WHEREVER CONNECTIONS TO NEW UTILITIES ARE SHOWN ON THE PLANS, THE CONTRACTOR SHALL EXPOSE THE EXISTING LINES AT THE PROPOSED CONNECTIONS TO VERIFY THE LOCATIONS AND DEPTHS PRIOR TO EXCAVATION FOR THE NEW LINES
- NO CONTRACTOR SHALL PERFORM ANY CONSTRUCTION OPERATION SO AS TO CAUSE FALLING ROCKS, SOIL OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW INTO EXISTING CITY DRAINAGE SYSTEMS, OR ADJOINING PROPERTIES, STREETS OF NATURAL WATERCOURSES. SHOULD SUCH VIOLATIONS OCCUR, THE CONTRACTOR MAY BE CITED AND THE CONTRACTOR SHALL IMMEDIATELY MAKE ALL REMEDIAL ACTIONS NECESSARY.
- 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.
- THE CONTRACTOR SHALL NOTIFY THE CIVIL ENGINEERING BRANCH, DEPARTMENT OF PLANNING AND PERMITTING, AT 523-4881 TO ARRANGE FOR INSPECTIONAL SERVICES AND SUBMIT FOUR (4) SETS OF APPROVED CONSTRUCTION PLANS SEVEN (7) DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION WORK.
- 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:
 - 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:
 - FULL BODY HARNESS FOR UP TO TWO PERSONNEL.
 - LIFELINE AND ASSOCIATED CLIPS.
 - INGRESS/EGRESS AND FALL PROTECTION EQUIPMENT.
 - TWO-WAY RADIOS (WALKIE-TALKIES) IF OUT OF LINE-OF-SIGHT.
 - EMERGENCY (ESCAPE) REPIRATOR (10 MINUTE DURATION).
 - CELLULAR TELEPHONE TO CALL FOR EMERGENCY ASSISTANCE.
 - CONTINUOUS GAS DETECTOR (CALIBRATED) TO MEASURE OXYGEN, HYDROGEN SULFIDE, CARBON MONOXIDE AND FLAMMABLES (CAPABLE OF MONITORING AT A DISTANCE AT LEAST 20- FEET AWAY)
 - PERSONAL MULTI-GAS DETECTOR TO BE CARRIED BY INSPECTOR.
 - CONTINUOUS FORCED AIR VENTILATION ADEQUATE TO PROVIDE SAFE ENTRY CONDITIONS.
 - ONE ATTENDANT/RESCUE PERSONNEL TOPSIDE (TWO IF CONDITIONS WARRANT IT).
- PURSUANT TO CHAPTER 6E, HRS, IN THE EVENT ANY ARTIFACTS OR HUMAN REMAINS ARE UNCOVERED DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL IMMEDIATELY SUSPEND WORK AND NOTIFY THE HONOLULU POLICE DEPARTMENT, THE STATE DEPARTMENT OF LAND AND NATURAL RESOURCES, HISTORIC PRESERVATIONS DIVISION (692-8015). IN ADDITION, FOR NON-CITY PROJECTS, THE CONTRACTOR SHALL INFORM THE CIVIL ENGINEERINGT BRANCH, DEPARTMENT OF PLANNING AND PERMITTING (523-4881), AND FOR CITY PROJECTS, NOTIFY THE RESPONSIBLE CITY AGENCY.
- FOR PROJECTS ABUTTING STATE HIGHWAYS' RIGHT-OF-WAY, THE OWNER OR HIS AUTHORIZED REPRESENTATIVE SHALL NOTIFY THE STATE DEPARTMENT OF TRANSPORTATION, HIGHWAYS DIVISION, OAHU DISTRICT, DRAINAGE DISCHARGE UNIT AT 831-6793 FOR AN ASSESSMENT OF STATE HIGHWAYS PERMIT REQUIREMENTS.

GENERAL NOTES:

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION". SEPTEMBER, '86, "HAWAII STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND PUBLIC WORKS CONSTRUCTION", SEPTEMBER 1984, AS AMENDED, OF THE DEPARTMENT OF PUBLIC WORKS, CITY AND COUNTY OF HONOLULU, EXCEPT AS MODIFIED HEREIN OR IN THE SPECIAL PROVISIONS.
- THE CONTRACTOR SHALL VERIFY WITH THE RESPECTIVE UTILITY COMPANIES AND GOVERNMENT AGENCIES, THE LOCATIONS OF ALL ELECTRIC, TELEPHONE, TRAFFIC SIGNAL, STREET LIGHT, GAS, WATER, SEWER, DRAIN AND OTHER LINES CROSSING THE EXCAVATION PATH OR IN EXCAVATION AREAS.
- THE LOCATIONS OF ALL NEW CCTV EQUIPMENT CABINETS ON THE DRAWINGS ARE APPROXIMATE. EXACT LOCATION WILL BE DETERMINED IN THE FIELD BY THE ENGINEER. THE LOCATIONS OF CCTV EQUIPMENT CABINETS, PULLBOXES AND COUDUTS SHALL BE STAKED OUT BY THE CONTRACTOR AND APPROVED BY THE ENGINEER PRIOR TO ANY EXCAVATION.
- ALL STRUCTURES, PAVEMENTS, UTILITIES, LANDSCAPING AND OTHER TOPOGRAPHICAL FEATURES SHOWN ON THE INTERSECTION CCTV PLANS ARE EXISTING AND ARE TO REMAIN UNLESS NOTED OR INDICATED OTHERWISE.
- THE CONTRACTOR SHALL NOTIFY ALL AFFECTED UTILITY COMPANIES AND GOVERNMENT AGENCIES OF THEIR INTENT TO BEGIN CONSTRUCTION ON ANY INTERSECTION OR STREET, AT LEAS TWO (2) WEEKS PRIOR TO THE START OF SUCH CONSTRUCTION.
- THE CONTRACTOR MAY CLOSE ONLY ONE LANE OF TRAFFIC AT A TIME, FOR ANY REASON. DURING THE PEAK TRAFFIC PERIODS FROM 6:30 TO 8:30AM AND FROM 3:30 TO 5:30PM, MONDAY THROUGH FRIDAY, ALL LANES SHALL BE KEPT OPEN AND MAINTAINED AT ALL TIMES.
- ALL CABLES SHALL BE INSTALLED IN CONDUITS, AND TRAFFIC SIGNAL STANDARD SHAFTS AND MAST ARMS, IN GROUPS OF ONE OR MORE CABLES AS SPECIFIED ON THE PLANS.
- ANY EXISTING IMPROVEMENTS WITHIN THE CITY AND COUNTY OF HONOLULU R.O.W. AND THE STATE OF HIGHWAY R.O.W. WHICH ARE TO REMAIN IN THE FINISHED WORK, BUT WHICH ARE DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED TO THEIR ORIGINAL CONDITIONS BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CITY.
- OVERHEAD LINES CROSSING STATE HIGHWAYS SHALL HAVE A MINIMUM OF 17 FEET VERTICAL CLEARANCE FROM THE TRAVELWAY.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0001 (30)	2007	6	89

REVISION	DATE	BRIEF	BY	APPROVED
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 <p>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION</p> <p><i>Steven H. Sakai</i></p> <p>LIC. EXPIRATION: 4/30/08</p>	<p>DEPARTMENT OF TRANSPORTATION SERVICES CITY AND COUNTY OF HONOLULU FEDERAL AID NO. STP-0001(30) COMPUTERIZED TRAFFIC CONTROL SYSTEM PHASE 9</p> <p>CONSTRUCTION NOTES</p> <table><tr><td>ENGINEER</td><td>GTN</td><td>DATE</td><td>MARCH 2007</td></tr><tr><td>DRAFTSMAN</td><td>SS</td><td>SCALE</td><td>AS NOTED</td></tr><tr><td>CHK. BY</td><td></td><td>REF.</td><td></td></tr><tr><td>APPROVED:</td><td></td><td>APPROVED:</td><td></td></tr><tr><td>DIRECTOR</td><td></td><td>DIVISION ENGINEER</td><td></td></tr></table>	ENGINEER	GTN	DATE	MARCH 2007	DRAFTSMAN	SS	SCALE	AS NOTED	CHK. BY		REF.		APPROVED:		APPROVED:		DIRECTOR		DIVISION ENGINEER	
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DIRECTOR		DIVISION ENGINEER																			

FILE	PROJECT	PLANS	NO.
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CITY & COUNTRY DDC WASTEWATER DIVISION SEWER SYSTEM NOTES:

- 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 VOLUME 1, JULY 1993.
- THE CONTRACTOR SHALL NOTIFY THE INSPECTION SECTION, WASTEWATER BRANCH, DDC, AT 527-5855 OR 523-4345 TO ARRANGE FOR INSPECTION SERVICES AND SUBMIT FOUR SETS OF APPROVED CONSTRUCTION PLANS SEVEN DAYS PRIOR TO COMMENCEMENT OF SEWER WORK. THE CONTRACTOR SHALL PAY FOR ALL INSPECTION COSTS.
- THE UNDERGROUND PIPES, CABLES, OR DUCTLINES KNOWN TO EXIST BY THE ENGINEER FROM HIS RESEARCH OF RECORDS ARE INDICATED ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF THE FACILITIES, INCLUDING AND AFFECTING SEWER LINES, IN THE PRESENCE OF THE WASTEWATER INSPECTOR AND EXERCISE PROPER CARE IN EXCAVATING THE AREA. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL PAY FOR ALL DAMAGED UTILITIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING CONTINUOUS SEWER SERVICE TO ALL AFFECTED AREAS DURING CONSTRUCTION.
- 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 NOTIFICATION AND PRESS RELEASES.
- MAINTAIN 3'-0" MINIMUM HORIZONTAL CLEAR SEPARATION BETWEEN ALL SEWER SYSTEMS AND THE NEAREST ELECTRICAL DUCTLINES, PULLBOXES, AND HANDHOLES PARALLELING THE SEWER SYSTEM.
- AT THE ELECTRICAL/TRAFFIC SIGNAL DUCTLINE SEWER CROSSINGS, ADJUST ALL ELECTRICAL/TRAFFIC SIGNAL DUCTLINE ELEVATIONS TO MAINTAIN 24" VERTICAL CLEAR SEPARATION FROM ALL SEWER LINES.

CATV CONSTRUCTION NOTES:

- THE LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY THEIR LOCATIONS AND SHALL BE RESPONSIBLE FOR ANY DAMAGES TO THESE UTILITIES AS A RESULT OF HIS OPERATIONS. ADJUSTMENTS TO THE NEW DUCTLINE ALIGNMENT, IF REQUIRED SHALL BE MADE TO PROVIDE THE REQUIRED CLEARANCES.
- THE UTILITIES SHOWN ARE BASED ON EXISTING RECORDS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND DEPTHS OF THE FACILITIES AND EXERCISE PROPER CARE IN EXCAVATING IN THESE AREAS.
- PRIOR TO THE EXCAVATION OF THE DUCTLINE, THE CONTRACTOR SHALL REQUEST THAT OCEANIC CABLEVISION LOCATE THEIR EXISTING FACILITIES WHENEVER REQUIRED.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGING ANY EXISTING CABLES OR DUCTS. ANY WORK INVOLVING EXISTING CABLES OR DUCTS SHALL BE DONE IN THE PRESENCE OF OCEANIC CABLEVISION'S INSPECTOR OR REPRESENTATIVE.
- THE CONTRACTOR SHALL NOTIFY OCEANIC CABLEVISION'S INSPECTOR 48 HOURS PRIOR TO THE START OF WORK ON CATV INFRASTRUCTURE, POURING OF CONCRETE OR BACKFILLING. OCEANIC'S INSPECTOR CAN BE REACHED AT 625-6378.
- UNDERGROUND UTILITIES SHOWN ARE FOR INFORMATION ONLY. NO GUARANTEE IS MADE REGARDING ACCURACY OR COMPLETENESS. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY OF CATV FACILITIES.
- THE CONTRACTOR SHALL OBTAIN EXCAVATION PERMIT CLEARANCE FROM OCEANIC'S ENGINEERING SECTION, LOCATED AT 200 AKAMAIHUI STREET, MILILANI TECH PARK.
- FOR ANY FIELD ASSISTANCE FOR VERIFICATION OF CATV FACILITIES, THE CONTRACTOR SHALL CALL THE TECHNICAL OPERATION CENTER AT 625-8378.
- ANY WORK TO RELOCATE CATV FACILITIES SHALL BE DONE BY OCEANIC CABLEVISION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REQUIRED COORDINATION AND ASSOCIATED COSTS.
- ANY DAMAGE TO OCEANIC'S FACILITIES SHALL BE REPORTED TO OCEANIC'S REPAIR DISPATCH DEPARTMENT AT 625-8437 OR 625-8666.
- 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. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS NOT TO DAMAGE ANY EXISTING CABLES OR DUCTS. OCEANIC'S INSPECTOR OR DESIGNATED REPRESENTATIVE IS REQUIRED TO BE AT ANY JOB SITE WHENEVER THERE WILL BE A BREAKAGE INTO OR ENTRY INTO ANY STRUCTURE THAT CONTAINS OCEANIC'S FACILITIES.

BOARD OF WATER SUPPLY (BWS) 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", DATED 2002, THE "WATER SYSTEM EXTERNAL CORROSION CONTROL STANDARDS", VOLUME 3, DATED 1991, AND ALL SUBSEQUENT AMENDMENTS AND ADDITIONS.
- ALL PLANS APPROVED BY THE BOARD OF WATER SUPPLY ARE BASED SOLELY ON 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.
- THE CONTRACTOR SHALL NOTIFY BWS CAPITAL PROJECTS DIVISION, CONSTRUCTION SECTION IN WRITING, ONE WEEK PRIOR TO COMMENCING WORK ON THE WATER SYSTEM.
- THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES AND STRUCTURES AS SHOWN ON THE PLANS ARE FROM THE LATEST AVAILABLE DATA, BUT IS NOT GUARANTEED AS TO THE ACCURACY OF ENCOUNTERING OF OTHER OBSTACLES DURING THE COURSE OF THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE AND PAY FOR ALL DAMAGES TO EXISTING UTILITIES. THE CONTRACTOR SHALL NOT ASSUME THAT WHERE NO UTILITIES ARE SHOWN, THAT NONE EXIST.
- RE-APPROVAL SHALL BE REQUIRED, IF THIS PROJECT IS NOT UNDER CONSTRUCTION WITHIN A PERIOD OF TWO YEARS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL WATER LINES DURING CONSTRUCTION. THE CONTRACTOR SHALL BE ESPECIALLY CAREFUL WHEN EXCAVATING BEHIND WATER LINES, TEES, AND BENDS WHEREVER THERE IS A POSSIBILITY OF WATER LINE MOVEMENT DUE TO THE REMOVAL OF 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.
- PRIOR TO ANY EXCAVATING, THE CONTRACTOR SHALL VERIFY IN THE FIELD THE LOCATION OF EXISTING WATER MAINS AND APPURTENANCES.
- 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.
- 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.

ELECTRICAL AND MAINTENANCE SERVICES DIVISION NOTES:

- THE CONTRACTOR SHALL NOTIFY THE JOINT POLE COMMITTEE TWO (2) WEEKS IN ADVANCE OF ANY RELOCATION OF UTILITY POLE(S) THAT MAY BE NECESSARY.
- THE CONTRACTOR SHALL NOTIFY THE ELECTRICAL AND MAINTENANCE SERVICES DIVISION, DEPARTMENT OF TRANSPORTATION SERVICES, THREE (3) WORKING DAYS PRIOR TO COMMENCING WORK ON THE TRAFFIC SIGNAL SYSTEM. PHONE: 527-5007
- THE EXISTING STREET LIGHTING, TRAFFIC SIGNAL, AND FIBER OPTIC SYSTEMS SHALL BE KEPT OPERATIONAL DURING CONSTRUCTION. ANY RELOCATION OR REQUIRED CHANGE OVER SHALL BE APPROVED BY THE ELECTRICAL AND MAINTENANCE SERVICES DIVISION, DEPARTMENT OF TRANSPORTATION SERVICES, AND PERFORMED AND PAID FOR BY THE CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO THE EXISTING STREET LIGHTING, TRAFFIC SIGNAL, AND FIBER OPTIC FACILITIES, INCLUDING THE TRAFFIC SIGNAL INTERCONNECT SYSTEM, AND 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.

COMMISSION ON PERSONS WITH DISABILITIES:

- THE CONTRACTOR SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT GUIDELINES.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THERE IS A MINIMUM OF 36 INCHES OF UNDESTRUCTED SIDEWALK SPACE. IF THE CONTRACTOR IS UNABLE TO PROVIDE THE MINIMUM SIDEWALK SPACE, HE SHOULD CONTACT THE PROJECT ENGINEER IMMEDIATELY.
- MAINTENANCE OF ACCESSIBLE ROUTES AND PARKING AREAS DURING CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT, ACCESSIBILITY GUIDELINES.

HAWAIIAN ELECTRIC COMPANY (HECO) NOTES:

- THE LOCATION OF 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, WHEN THE EXCAVATION AND CONSTRUCTION CROSSES OF IS IN CLOSE PROXIMITY OF UNDERGROUND LINES AND SHALL MAINTAIN ADEQUATE CLEARANCE WHEN OPERATING EQUIPMENT WITHIN OR UNDER ANY OVERHEAD LINES.
- THE CONTRACTOR SHALL COMPLY WITH THE STATE OF HAWAII'S OCCUPATIONAL SAFETY AND HEALTH LAW (OSH).
- THE CONTRACTOR SHALL OBTAIN AN EXCAVATION PERMIT FROM HECO'S MAPPING AND RECORDS DIVISION LOCATED AT 820 WARD AVENUE, FOURTH FLOOR, TWO WEEKS PRIOR TO STARTING CONSTRUCTION. REFER TO HECO'S SERVICE REQUEST NUMBER AT THAT TIME.
- 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.
- WHEN TRENCH EXCAVATION IS ADJACENT TO OR BENEATH HECO'S EXISTING STRUCTURES OR FACILITIES, THE CONTRACTOR IS RESPONSIBLE FOR:
 - SHEETING AND BRACING THE EXCAVATION TO PREVENT SLIDES, CAVE-INS, AND SETTLEMENTS.
 - PROTECTING EXISTING STRUCTURES OR FACILITIES WITH BEAMS, STRUTS, OR UNDERPINNINGS.
- FOR POLE BRACING INSTRUCTIONS, THE CONTRACTOR SHALL CALL THE HECO DISTRICT SUPERINTENDANT A MINIMUM OF 72 HOURS IN ADVANCE.
- ANY WORK REQUIRED TO RELOCATE HECO FACILITIES SHALL BE DONE BY HECO. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION, AND FOR ANY APPLICABLE COSTS.
- SHOULD IT BECOME NECESSARY TO TEMPORARILY RELOCATE ANY OF HECO'S 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 THE CONTRACTOR UNDER HECO'S SUPERVISION, WITH ALL COSTS BORNE BY THE CONTRACTOR.
- ANY UNFORSEEN 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.
- ANY DAMAGE TO HECO'S FACILITIES SHALL BE REPORTED IMMEDIATELY TO HECO'S TROUBLE DISPATCHER AT 543-7874.
- 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.
- THE CONTRACTOR SHALL INDEMNIFY, DEFEND AND HOLD BLAMELESS, 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 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 UPON THE SOLE NEGLIGENCE OF HECO.

HAWAIIAN TELECOM (HTEL) NOTES:

- THE LOCATION OF HAWAIIAN TELECOM'S EXISTING FACILITIES ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION, AND SHALL MAINTAIN PROPER CLEARANCES WHENEVER CONSTRUCTION CROSSES OR IS IN CLOSE PROXIMITY TO HAWAIIAN TELECOM'S FACILITIES. THE CONTRACTOR SHALL VERIFY THEIR LOCATIONS, AND SHALL BE LIABLE FOR ALL DAMAGES TO HAWAIIAN TELCOM FACILITIES. ANY DAMAGES SHALL BE REPORTED IMMEDIATELY TO HAWAIIAN TELECOM'S REPAIR SECTION AT 840-1444 DURING NORMAL WORK DAY HOURS, MONDAY THRU FRIDAY, EXCEPT HOLIDAYS.
- 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 EXISTING CABLES OR DUCTS. ANY WORK INVOLVING EXISTING HAWAIIAN TELECOM CABLES OR DUCTS SHALL BE DONE IN THE PRESENCE OF A HAWAIIAN TELECOM INSPECTOR OR DESIGNATED REPRESENTATIVE.
- THE CONTRACTOR SHALL OBTAIN AN EXCAVATION PERMIT AND TONING REQUEST FROM HAWAIIAN TELECOM'S EXCAVATION PERMIT SECTION, LOCATED AT 3239 UALENA STREET, THIRD FLOOR, TWO WEEKS PRIOR TO THE START OF CONSTRUCTION. HOURS OF BUSINESS ARE 7:00AM TO 10:45AM AND 11:30AM TO 2:45PM, MONDAY THRU FRIDAY EXCEPT HOLIDAYS.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0001 (30)	2007	7	89

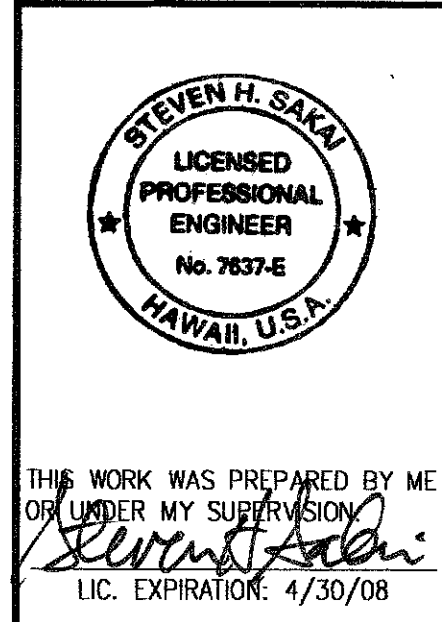
- THE CONTRACTOR SHALL NOTIFY HAWAIIAN TELCOM'S INSPECTOR OR DESIGNATED REPRESENTATIVE 72 HOURS PRIOR TO EXCAVATION, BRACING OR BACKFILLING OF HAWAIIAN TELECOM STRUCTURES OR FACILITIES. MINIMUM OF 72 HOURS IN ADVANCE.
- WHEN TRENCH EXCAVATION IS ADJACENT TO, OR BENEATH HAWAIIAN TELCOM'S EXISTING STRUCTURES OR FACILITIES, THE CONTRACTOR SHALL:
 - SHEET AND/OR BRACE THE EXCAVATION TO PREVENT SLIDES, CAVE-INS, OR SETTLEMENTS TO ENSURE NO MOVEMENT TO HAWAIIAN TELECOM'S STRUCTURES OR FACILITIES.
 - PROTECT EXISTING STRUCTURES AND/OR FACILITIES WITH BEAMS, STRUTS, OR UNDERPINNING WHILE EXCAVATING BENEATH THEM TO ENSURE NO MOVEMENT TO HAWAIIAN TELECOM'S STRUCTURE OR FACILITIES.
- SHOULD IT BECOME NECESSARY TO RELOCATE ANY HAWAIIAN TELCOM FACILITIES, THE WORK SHALL BE DONE BY HAWAIIAN TELCOM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION AND COSTS ASSOCIATED WITH THE RELOCATION.
- SHOULD FIELD CONDITIONS AND CONSTRUCTION PROCEDURES REQUIRE THAT UTILITIES BE BRACED, THE CONTRACTOR SHALL CONTACT THE FOLLOWING PERSON FOR POLE BRACING INSTRUCTIONS A MINIMUM OF 72 HOURS IN ADVANCE OF ACTUAL REQUIRED BRACING: CALVIN CHOY - HAWAIIAN TELECOM AREA CONSTRUCTION SUPERVISOR, AT 840-5822.

DLNR STATE HISTORIC PRESERVATION DIVISION NOTES:

A QUALIFIED ARCHEOLOGICAL MONITOR SHALL BE PRESENT DURING ALL GROUND-ALTERING ACTIVITIES CONDUCTED AT THE FOLLOWING INTERSECTIONS, KAMEHAMEHA HIGHWAY AND WOKULELE DRIVE, HAKU ROAD AND ALALOA STREET, AND KAMEHAMEHA HIGHWAY AND HALAULANI STREET IN ORDER TO DOCUMENT ANY HISTORIC PROPERTIES WHICH MAY BE ENCOUNTERED DURING THE PROPOSED UNDERTAKING AND TO PROVIDE MITIGATION MEASURES AS NECESSARY. AN ACCEPTABLE ARCHEOLOGICAL MONITORING PLAN WILL NEED TO BE SUBMITTED TO THE STATE HISTORIC PRESERVATION DIVISION FOR REVIEW, PRIOR TO THE COMMENCEMENT OF ANY GROUND-ALTERING ACTIVITIES. AN ARCHEOLOGICAL MONITORING PLAN MUST CONTAIN THE FOLLOWING NINE SPECIFICATIONS:

- THE KINDS OF REMAINS THAT ARE ANTICIPATED AND WHERE IN THE CONSTRUCTION AREA THE REMAINS ARE LIKELY TO BE FOUND.
- HOW THE REMAINS AND DEPOSITS WILL BE DOCUMENTED.
- HOW THE EXPECTED TYPES OF REMAINS WILL BE TREATED.
- THE ARCHEOLOGIST CONDUCTING THE MONITORING HAS THE AUTHORITY TO HALT THE CONSTRUCTION IN THE IMMEDIATE AREA OF THE FIND, IN ORDER TO CARRY OUT THE PLAN.
- A COORDINATION MEETING BETWEEN THE ARCHEOLOGIST AND CONSTRUCTION CREW SHALL BE SCHEDULED SO THAT THE CONSTRUCTION TEAM IS AWARE OF THE PLAN.
- WHAT LABORATORY WORK WILL BE DONE ON REMAINS THAT ARE COLLECTED.
- A SCHEDULE OF REPORT PREPARATION.
- DETAILS CONCERNING THE ARCHIVING OF ANY COLLECTIONS THAT ARE MADE.
- AN ACCEPTABLE REPORT DOCUMENTING THE FINDINGS OF THE MONITORING ACTIVITIES SHALL BE SUBMITTED TO STATE HISTORIC PRESERVATION DIVISION FOR REVIEW FOLLOWING THE COMPLETION OF THE PROPOSED UNDERTAKING.

REVISION	DATE	BRIEF	BY	APPROVED
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THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
Steven H. Sakai
LIC. EXPIRATION: 4/30/08

DEPARTMENT OF TRANSPORTATION SERVICES
CITY AND COUNTY OF HONOLULU
FEDERAL AID NO. STP-0001(30)
COMPUTERIZED TRAFFIC CONTROL SYSTEM
PHASE 9

CONSTRUCTION NOTES

ENGINEER: GTN DATE: MARCH 2007
DRAFTSMAN: SS SCALE: AS NOTED
CHK. BY: REF.
APPROVED: APPROVED:
DIVISION ENGINEER

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NOTES FOR CONSTRUCTION WITHIN STATE RIGHT-OF-WAY:

1. CONTRACTOR SHALL OBTAIN A PERMIT TO PERFORM WORK UPON STATE HIGHWAYS FROM THE OAHU DISTRICT ENGINEER, STATE HIGHWAYS, AT 727 KAKOI STREET PRIOR TO COMMENCEMENT OF WORK WITHIN THE STATE'S HIGHWAY RIGHT-OF-WAY.
2. CONSTRUCTION AND RESTORATION OF ALL EXISTING HIGHWAY FACILITIES WITHIN THE STATE'S RIGHT-OF-WAY, INCLUDING THE LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC, SHALL BE DONE IN ACCORDANCE WITH THE CURRENT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND PUBLIC WORKS CONSTRUCTION, AND THE SPECIFICATIONS FOR INSTALLATION OF MISCELLANEOUS IMPROVEMENTS WITHIN STATE HIGHWAYS, OF THE STATE HIGHWAYS DIVISION.
3. WORK MAY BE PERFORMED ONLY BETWEEN THE HOURS OF 8:30AM AND 3:00PM, MONDAY THROUGH FRIDAY, EXCEPT HOLIDAYS, UNLESS OTHERWISE PERMITTED BY THE DISTRICT ENGINEER.
- DURING WORK HOURS, ONLY ONE LANE OF TRAFFIC SHALL BE CLOSED, UNLESS OTHERWISE APPROVED IN WRITING BY THE DISTRICT ENGINEER.
- AT CERTAIN LOCATIONS, "NO LANE CLOSURE" WILL BE ALLOWED DURING THE "BACK TO SCHOOL JAM", THANKSGIVING WEEKEND, CHRISTMAS/NEW YEAR PERIOD AND AT OTHER TIMES AS DIRECTED BY THE HIGHWAYS DIVISION.
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 PUBLIC TRAFFIC. ALL SUCH PROTECTIVE FACILITIES AND PRECAUTIONS TO BE TAKEN SHALL CONFORM WITH THE "ADMINISTRATIVE RULES OF HAWAII 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 MUTCD - MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, PART VI - TEMPORARY TRAFFIC CONTROL.
- LANE CLOSURES SHALL CONFORM TO THE TRAFFIC CONTROL PLAN INCORPORATED INTO THESE CONSTRUCTION PLANS AND MUST BE APPROVED BY THE DIVISION PRIOR TO THE ISSUANCE OF THE PERMIT.
5. THE MINIMUM PAVEMENT STRUCTURE SHALL CONSIST OF:
- A. RESIDENTIAL DRIVEWAYS, ON MINOR HIGHWAYS
- (1) 2 1/2" ASPHALT CONCRETE (MIX IV), 6" AGGREGATE BASE COURSE AND 12" SUBBASE, OR 2 1/2" ASPHALT CONCRETE AND 6" GLASSPHALT CONCRETE BASE COURSE.
- (2) 6" OF CLASS "A" CONCRETE, REINFORCED WITH 6" X 6" - W2.9 X W2.9 WIRE MESH ON 12" AGGREGATE SUBBASE, IF DEEMED NECESSARY BY THE ENGINEER.
- B. COMMERCIAL DRIVEWAYS, AND SIDEROADS ON MINOR HIGHWAYS
- (1) 2 1/2" ASPHALT CONCRETE (MIX IV), 6" GLASSPHALT CONCRETE BASE COURSE AND 12" SUBBASE, OR 4" ASPHALT CONCRETE (MIX IV) AND 8" GLASSPHALT CONCRETE BASE COURSE.
- (2) 8" OF CLASS "A" CONCRETE, REINFORCED WITH 6" X 6" - W2.9 X W2.9 WIRE MESH ON 12" AGGREGATE SUBBASE, IF DEEMED NECESSARY BY THE ENGINEER.
- C. CHANNELIZED INTERSECTIONS ON MAJOR HIGHWAYS.
- 4" ASPHALT CONCRETE (MIX IV), 8" GLASSPHALT CONCRETE BASE COURSE AND 12" AGGREGATE SUBBASE, OR 4" ASPHALT CONCRETE (MIX IV) AND 12" GLASSPHALT CONCRETE BASE COURSE.
6. NO MATERIAL AND/OR EQUIPMENT SHALL BE STOCKPILED OR OTHERWISE STORED WITHIN THE HIGHWAY RIGHT-OF-WAY, EXCEPT AT LOCATIONS DESIGNATED IN WRITING AND APPROVED BY THE DISTRICT ENGINEER.
7. COMPACTION TESTS SHALL BE TAKEN IN ACCORDANCE WITH THE SPECIFICATIONS FOR INSTALLATION OF MISCELLANEOUS IMPROVEMENTS WITH STATE HIGHWAYS, AS FOLLOWS:
- A. SUBBASE: ONE (1) COMPACTION TEST PER LIFT PER 200 LINEAL FEET OF ROADWAY.
- B. BASE COURSE: ONE (1) COMPACTION TEST PER LIFT PER 200 LINEAL FEET OF ROADWAY.
- C. ONE (1) COMPACTION TEST PER LIFT PER 300 LINEAL FEET OF TRENCH.
- D. A COPY OF THE TEST RESULTS SHALL BE SUBMITTED TO THE DISTRICT ENGINEER.
8. THE CONTRACTOR SHALL TAKE A PROFILE ALONG THE CENTERLINE OF THE PROPOSED UTILITY TRENCH BEFORE BOTH COMMENCING TRENCH EXCAVATION WORK AND AFTER TRENCH HAS BEEN REPAVED. PROFILES SHALL BE SUBMITTED TO THE DISTRICT ENGINEER AND SHALL BE USED TO VERIFY THAT THE ROADWAY SURFACE HAS BEEN RESTORED TO ITS ORIGINAL CONDITION OR SMOOTHER.
9. THE DISTANCE FROM THE PAVED SURFACE TO THE TESTING EDGE OF A TEN-FOOT LONG STRAIGHT EDGE BETWEEN TWO POINTS SHALL NOT EXCEED 3/16 INCH.
10. THE CONTRACTOR SHALL PROVIDE AN ADEQUATE AND SAFE NON-SKID BRIDGING MATERIAL, INCLUDING SHORING OVER TRENCHES IN PAVEMENT AREAS. THE BRIDGING SHALL BE ABLE TO SUPPORT ALL TYPES OF VEHICULAR TRAFFIC.

11. UNLESS OTHERWISE NOTED, NO TRENCH SHALL BE OPENED MORE THAN 300 FEET IN ADVANCE OF INSTALLED AND TESTED PIPELINE AND/OR DUCTLINE.
12. EXISTING DRAINAGE SYSTEMS SHALL BE FUNCTIONAL AT ALL TIMES.
13. THE CONTRACTOR SHALL EXERCISE CARE TO MINIMIZE DAMAGES TO EXISTING HIGHWAY IMPROVEMENTS. ALL DAMAGES SHALL BE REPAIRED BY THE CONTRACTOR, AT HIS EXPENSE, TO THE SATISFACTION OF THE DISTRICT ENGINEER.
14. APPROVAL OF PERMIT CONSTRUCTION PLANS SHALL BE VALID FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF NOTIFICATION OF APPROVAL TO THE APPLICANT. IN THE EVENT CONSTRUCTION DOES NOT COMMENCE WITHIN THIS ONE-YEAR PERIOD, THE APPLICANT WILL BE REQUIRED TO RESUBMIT THE CONSTRUCTION PLANS FOR THE DIVISION'S REVIEW AND RE-APPROVAL.
15. ALL REGULATORY, GUIDE, AND CONSTRUCTION SIGNS AND BARRICADES SHALL HAVE A HIGH-INTENSITY REFLECTIVE BACKGROUND.
16. THE CONTRACTOR SHALL INFORM THE STATE HIGHWAYS' PERMIT OFFICE (831-6712) AT LEAST TWO (2) DAYS PRIOR TO CLOSING ANY LANES.
17. DRIVEWAYS SHALL BE KEPT OPEN UNLESS THE OWNERS OF THE PROPERTIES USING THESE RIGHTS-OF-WAY ARE OTHERWISE PROVIDED FOR SATISFACTORILY.
18. WHERE PEDESTRIAN WALKWAYS EXIST THEY SHALL BE MAINTAINED IN A SAFE AND PASSABLE CONDITION, OR OTHER FACILITIES FOR PEDESTRIANS SHALL BE PROVIDED. PASSAGES BETWEEN WALKWAYS AT INTERSECTIONS SHALL LIKEWISE BE PROVIDED. ALL WALKWAYS SHALL CONFORM TO ADA REQUIREMENTS.
19. 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, AT HIS EXPENSE, UNLESS DIRECTED BY THE DISTRICT ENGINEER OR HIS REPRESENTATIVE.
20. THE CONTRACTOR SHALL EXERCISE CARE WHEN PERFORMING WORK IN OR ADJACENT TO THE STATE HIGHWAY RIGHT-OF-WAY. DAMAGES TO THE EXISTING FACILITIES SHALL BE IMMEDIATELY REPORTED TO THE RESPECTIVE UTILITY COMPANIES, AND/OR CITY OR STATE AGENCIES. THE REPAIR WORK SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.
21. THE CONTRACTOR SHALL NOTIFY THE STATE HIGHWAYS' HIGHWAY LIGHTING SUPERVISOR (837-8056), THREE (3) WORKING DAYS PRIOR TO COMMENCING WORK.
22. THE CONTRACTOR SHALL NOTIFY THE CITY DEAPRTMENT OF TRANSPORTATION SERVICES, TRAFFIC SIGNAL ENGINEER (523-4589), THREE (3) DAYS PRIOR TO ANY SIGNALIZED INTERSECTION WORK.
23. TRAFFIC SIGNALS SHALL BE KEPT OPERATIONAL DURING CONSTRUCTION. TEMPORARY OPERATIONAL MICROWAVE OR OTHER APPROVED DETECTION DEVICES SHALL BE INSTALLED THREE (3) WORKING DAYS PRIOR TO ANY SIGNALIZED INTERSECTION EXCAVATION WORK. ALL WORK SHALL BE DONE IN ACCORDANCE TO THE REQUIREMENTS OF THE DEPARTMENT OF TRANSPORTATION SERVICES, CITY AND COUNTY OF HONOLULU AND PAID FOR BY THE CONTRACTOR.
24. THE CONTRACTOR SHALL NOTIFY OAHU TRANSIT SERVICES, INC. (OTS), ED SNIFFEN AT 848-4571, OR LOWELL TOM AT 848-1578, TWO WEEKS PRIOR TO COMMENCING ANY WORK. THE CONTRACTOR SHALL INFORM OTS OF THE LOCATION AND SCOPE OF WORK, PROPOSED CLOSURE OF ANY STREET OR TRAFFIC LANES, AND THE NEED TO RELOCATE ANY BUS STOP.
25. THE PERMIT TO PERFORM WORK UPON STATE HIGHWAYS MAY BE REVOKED BECAUSE OF DEFAULT IN ANY OF THE FOLLOWING, BUT NOT LIMITED TO, CONDITIONS:
- A. WORK PERFORMED BEFORE OR AFTER PERMITTED HOURS.
- B. FAILURE TO MAINTAIN ROADWAY SURFACES IN A SMOOTH AND SAFE CONDITION.
- C. FAILURE TO CLEAN UP CONSTRUCTION DEBRIS GENERATED FROM PROJECT WORK.
- D. FAILURE TO PROVIDE PROPER TRAFFIC CONTROL.
- E. FAILURE TO REPLACE DAMAGED PAVEMENT MARKINGS AND SIGNS.
26. THE CONTRACTOR SHALL NOTIFY THE STATE HIGHWAYS PERMIT OFFICE (831-6712) AT LEAST TWO DAYS PRIOR TO PERFORMING ANY TRENCH RESTORATION WORK. THIS WORK SHALL INCLUDE ANY BACKFILLING AND COMPACTING OF TRENCH MATERIAL; ANY PLACING AND COMPACTING OF BASE COURSE MATERIAL; AND ANY PAVING OPERATIONS. ANY TRENCH RESTORATION WORK PERFORMED BY THE CONTRACTOR THAT IS NOT WITNESSED BY A STATE REPRESENTATIVE WILL BE REQUIRED TO BE REMOVED AND RESTORED WITH A STATE REPRESENTATIVE PRESENT. ALL RESTORATION WORK WILL BE AT THE CONTRACTOR'S EXPENSE.
27. TEMPORARY COLD MIX TRENCH PATCHES WILL BE PERMITTED IN ANY GIVEN AREA FOR A MAXIMUM DURATION OF TWO WEEKS, AND SHALL BE A MINIMUM OF 2 INCHES THICK. ALL TEMPORARY PATCHES SHALL BE PLACED OVER PROPERLY PLACED AND COMPACTED BACKFILL AND BASE COURSE LAYERS. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TEMPORARY PATCHES AND TO MAKE REPAIRS TO UNSATISFACTORY PATCHES WITHIN 24 HOURS.

28. THE CONTRACTOR WILL MAKE EVERY EFFORT TO MINIMIZE THE USE AND DURATION OF USE OF STEEL PLATES. ALL STEEL PLATES SHALL HAVE A NON-SKID SURFACE. THE STATE MAY REQUIRE THE BACKFILLING AND PATCHES OF TRENCHES DUE TO THE EXCESSIVE USAGE OF STEEL PLATES.
29. PLASTIC MARKING TAPE. PROVIDE PLASTIC MARKING TAPE THAT IS ACID AND ALKALI RESISTANT POLYETHYLENE FILM 6 INCHES WIDE WITH MINIMUM THICKNESS OF 0.004 INCH. PROVIDE TAPE WITH MINIMUM STRENGTH OF 1750 PSI LENGTHWISE AND 1500 PSI CROSSWISE. MANUFACTURE TAPE WITH INTEGRAL WIRES, FOIL BACKING OR OTHER MEANS TO ENABLE DETECTION BY A METAL DETECTOR WHEN THE TAPE IS BURIED UP TO 3 FEET DEEP. MANUFACTURE TAPE SPECIFICALLY FOR MARKING AND LOCATING UNDERGROUND UTILITIES. PROVIDE THE METALLIC CORE OF THE TAPE ENCASED IN A PROTECTIVE JACKET OR PROVIDED WITH OTHER MEANS TO PROTECT IT FROM CORROSION. CONFORM TO THE FOLLOWING TAPE COLOR AND BEAR A CONTINUOUS PRINTED INSCRIPTION DESCRIBING THE SPECIFIC UTILITY.
- RED: ELECTRIC
YELLOW: GAS, OIL, DANGEROUS MATERIALS
ORANGE: TELEPHONE, TELEGRAPH, TELEVISION, POLICE AND FIRE COMMUNICATIONS
BLUE: WATER SYSTEMS
GREEN: SEWER SYSTEMS
30. THE CONTRACTOR SHALL PROVIDE THE DISTRICT ENGINEER WITH AS-BUILT PLANS UPON COMPLETION OF THE WORK DONE IN THE STATE-RIGHT-OF-WAY. THIS SHALL BE DONE PRIOR TO THE DEPARTMENT'S RELEASE OF THE PERFORMANCE BOND.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) REQUIREMENTS FOR PERMIT PROJECTS WITHIN THE STATE RIGHT OF WAY

1. THE CONTRACTOR SHALL OBTAIN AND COMPLY WITH THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) REQUIREMENTS FOR OAHU DISTRICT PERMIT PROJECTS. THIS IS AVAILABLE AT THE OAHU DISTRICT OFFICE AT 727 KAKOI STREET (PH. 831-6793). DUE TO POTENTIAL COST IMPACTS, THE CONTRACTOR NEEDS TO BE AWARE OF THESE REQUIREMENTS.
2. THE CONTRACTOR SHALL COMPLETE AND SUBMIT A CONTRACTOR'S CERTIFICATION OF NPDES COMPLIANCE, INCLUDING COMPLETION OF THE BEST MANAGEMENT PRACTICE (BMP) CHECKLIST AND SUBMIT A WRITTEN BMP PLAN AND DRAWINGS, PRIOR TO ISSUANCE OF THE PERMIT TO PERFORM WORK UPON STATE HIGHWAYS.
3. THE CONTRACTOR SHALL FOLLOW THE GUIDELINES IN THE CITY AND COUNTY OF HONOLULU'S "BEST MANAGEMENT PRACTICES MANUAL FOR CONSTRUCTION SITES IN HONOLULU", IN DEVELOPING, INSTALLING AND MAINTAINING THE BEST MANAGEMENT PRACTICES (BMPs) FOR THE PROJECT.
4. THE CONTRACTOR SHALL FOLLOW THE GUIDELINES IN THE CITY AND COUNTY OF HONOLULU'S "RULES FOR SOIL EROSION STANDARDS AND GUIDELINES" FOR THE PROJECT.

EROSION CONTROL/BMP NOTES:

1. MEASURES TO CONTROL EROSION AND OTHER POLLUTANTS SHALL BE IN PLACE BEFORE ANY CONSTRUCTION WORK IS INITIATED. THESE MEASURES SHALL BE PROPERLY CONSTRUCTED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
2. ALL CONTROL MEASURES SHALL BE CHECKED AND REPAIRED AS NECESSARY.
3. CONSTRUCT TEMPORARY SILT FENCE AS SHOWN ON PLANS.
4. ALL STORM DRAIN INLETS THAT MAY RECEIVE RUNOFF AS A RESULT OF THE CONSTRUCTION WORK SHALL USE AN INLET FILTER DEVICE. INLET FILTERS SHALL REMAIN UNTIL COMPLETION OF CONSTRUCTION WORK. CONTRACTOR SHALL PERIODICALLY INSPECT INLET FILTERS, ESPECIALLY DURING HEAVY RAINFALL, TO ENSURE DRAINAGE THROUGH MATERIAL IS MAINTAINED.
5. AT THE END OF THE GRADING OPERATION, EXISTING STORM DRAIN INLETS SURROUNDING THE PROJECT SITE SHALL BE INSPECTED AND ANY ACCUMULATED SEDIMENT AND DEBRIS FOUND IN THE STORM DRAIN INLETS SHALL BE REMOVED. FLUSHING INTO THE STORM DRAINS IS PROHIBITED.
6. GOOD HOUSEKEEPING SHALL BE UTILIZED TO ENSURE PROTECTION OF ROADWAYS FROM MUD, DIRT, AND DEBRIS.
7. 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 THE RUNOFF IS CONTAINED AND DOES NOT ENTER THE STORM DRAIN SYSTEM OR ONTO THE STATE'S ROW.
8. THE CONTRACTOR SHALL ENSURE THAT EXISTING ROADWAYS USED TO ACCESS THE PROJECT ARE CLEANED OF ALL DEBRIS, TRASH, DIRT, MUD, ETC., THROUGHOUT THE WORK DAY.
9. THE FINAL LIFT OF EACH DAY'S WORK SHALL BE COMPACTED TO PREVENT EROSION OF FILL MATERIAL.
10. ANY DIRT OR GRASSED AREA DISTURBED SHALL BE RESTORED BY SEEDED HYDROMULCH. CONTRACTOR TO ENSURE GRASS IS FULLY ESTABLISHED.

STATE HIGHWAYS DIVISION NOTES:

1. THE CONTRACTOR SHALL NOTIFY THE STATE HIGHWAYS DIVISION, HIGHWAY LIGHTING AND TRAFFIC SIGNAL SECTION THREE (3) WORKING DAYS PRIOR TO COMMENCING WORK. (PHONE 843-4561)

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0001 (30)	2007	8	89

Provide Details of BMP's

"Permanent BMP Checklist and Project Record" must be submitted

REVISION	DATE	BRIEF	BY	APPROVED	
<div><div><div><div><div><div></div><div>STEVEN H. SAKAI</div></div><div><div></div><div>LICENSED PROFESSIONAL ENGINEER</div></div><div><div></div><div>No. 7637-E</div></div><div><div></div><div>HAWAII, U.S.A.</div></div></div></div><div>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION <i>Steven H. Sakai</i> LIC. EXPIRATION: 4/30/08</div></div><div>DEPARTMENT OF TRANSPORTATION SERVICES CITY AND COUNTY OF HONOLULU FEDERAL AID NO. STP-0001(30) COMPUTERIZED TRAFFIC CONTROL SYSTEM PHASE 9 CONSTRUCTION NOTES ENGINEER: GTN DATE: MARCH 2007 DRAFTSMAN: SS SCALE: AS NOTED APPROVED: REF: DIRECTOR: DIVISION ENGINEER</div></div>					

FILE	PROJECT	PLANS	REV.