

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-061-1(27)	1992	3	18

LEGEND

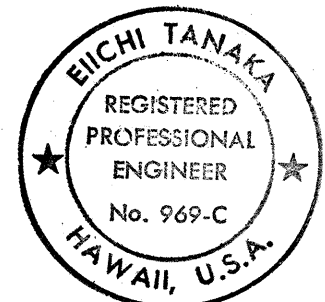
	EXISTING 12" RYG STANDARD TRAFFIC SIGNAL HEAD.
	EXISTING 12" RY↑ TRAFFIC SIGNAL HEAD.
	EXISTING PROGRAMMABLE VISIBILITY HEAD.
	EXISTING STANDARD TRAFFIC AND PEDESTRIAN SIGNAL HEADS MOUNTED ON TYPE I SIGNAL STANDARD, HEIGHT = 10'
	EXISTING TRAFFIC SIGNAL HEADS MOUNTED ON TYPE II SIGNAL STANDARD, ARM SPREAD SHOWN IS 30' AND DISTANCE BETWEEN SIGNAL HEADS IS 12'
	EXISTING TRAFFIC SIGNAL TO BE REMOVED.
	NEW 12" RYG STANDARD TRAFFIC SIGNAL HEAD.
	NEW 12" RY↑ TRAFFIC SIGNAL HEAD.
	NEW PROGRAMMABLE VISIBILITY TRAFFIC SIGNAL HEAD.
	NEW TYPE I TRAFFIC SIGNAL STANDARD.
	NEW TYPE II MAST ARM TRAFFIC SIGNAL STANDARD.
	EXISTING TYPE A PULLBOX.
	NEW TYPE A PULLBOX.
	NEW TYPE B PULLBOX.
	NEW TYPE B PULLBOX WITH MODIFIED COVER.
	NEW CONTROLLER CABINET.
	EXISTING CONTROLLER CABINET.
	NEW LOOP DETECTOR, SERIES-PARALLEL CONNECTED.
	NEW LOOP DETECTOR, SERIES CONNECTED.
	EXISTING TRAFFIC SIGNAL CONDUIT TO BE ABANDONED.
	EXISTING STRIPING AND MARKERS TO BE REMOVED.
	EXISTING PAVEMENT ARROW TO REMAIN.
	NEW PAVEMENT ARROW.
	EXISTING CROSSWALK MARKINGS TO REMAIN.
	EXISTING MARKING TO REMAIN.
	NEW STRIPING
	EXISTING UTILITY LINES AND SIZES AS INDICATED.
	W = WATER
	SCC = SIGNAL CORP CABLE.
	TS = TRAFFIC SIGNAL
	SL = STREET LIGHT
	PP ○ POWER POLE
	GP GUY POLE
	GA ANCHOR
	WV ○ WATER VALVE
	WMH ○ WATER MANHOLE
	EXISTING GUARD RAIL.
	EXISTING CURB TO REMAIN.
	EXISTING CURB TO BE REMOVED.
	NEW CURB.
	RELOCATED GUARDRAIL.
	EXIST. PAV'T TO BE RESURFACED
	PAV'T TO BE RECONSTRUCTED
	NEW PAVEMENT

TRAFFIC SIGNAL NOTES

- ALL TRAFFIC SIGNAL CONTROLLER EQUIPMENT SHALL BE COMPLETELY WIRED IN THE CABINET AND SHALL CONTROL THE TRAFFIC SIGNALS AS CALLED FOR IN THE PLANS.
- SIGNAL INDICATIONS DURING CLEARANCE INTERVAL:
 - IF A SIGNAL IS G OR AND WILL REMAIN G OR DURING THE NEXT PHASE, IT SHALL BE G OR DURING THE CLEARANCE INTERVAL.
 - IF A SIGNAL IS G OR AND WILL BECOME R OR EXTINGUISHED DURING THE NEXT PHASE, IT SHALL BE Y OR DURING THE CLEARANCE INTERVAL.
 - IF A SIGNAL IS R AND WILL REMAIN R OR BECOMES G DURING THE NEXT PHASE, IT SHALL REMAIN R DURING THE CLEARANCE INTERVAL.
- THE LOOP AMPLIFIER UNITS FURNISHED FOR THIS PROJECT SHALL BE CAPABLE OF OPERATING THE LOOP DETECTOR CONFIGURATIONS SHOWN ON THE PLANS.
- A SOLID #8 BARE COPPER WIRE SHALL BE PULLED WITH THE TRAFFIC CONTROL CABLE FOR EQUIPMENT GROUND. COST SHALL BE INCIDENTAL TO THE INSTALLATION OF THE CONTROL CABLE.
- THE CONTRACTOR SHALL KEEP THE EXISTING TRAFFIC SIGNALS AND LOCAL INTERSECTION CONTROLLER IN OPERATION UNTIL SUCH TIME AS THE NEW CONTROLLER AND COMMUNICATION SYSTEM ARE PLACED IN OPERATION. THE LOCAL INTERSECTION SHALL NOT BE PLACED OUT OF OPERATION WITHOUT THE PERMISSION OF THE ENGINEER.
- CONDUITS AND CABINET LOCATIONS AS SHOWN ON THE PLANS ARE SCHEMATIC. THEY MAY BE MODIFIED BY THE CONTRACTOR WITH THE APPROVAL OF THE ENGINEER.
- WHEN THE NEW LOCAL CONTROLLER IS IN SATISFACTORY OPERATION, THE CONTRACTOR SHALL REMOVE THE EXISTING CONTROLLER, CABINET AND FOUNDATION.
- THE CONTRACTOR SHALL SPLICE ALL SIGNAL CONDUCTORS IN PULLBOX. NO SPLICES SHALL BE PERMITTED IN DETECTOR LEAD-IN CABLE.
- THE CONTRACTOR SHALL INSTALL NEW CONTROLLER AND CABINET IN THE INDICATED LOCATION. THE NEW CABINETS ARE TO BE INSTALLED A MINIMUM OF 3 FEET (WHERE POSSIBLE) FROM THE OLD CABINET LOCATIONS.
- NO SPLICES SHALL BE PERMITTED IN THE COMMUNICATIONS CABLE EXCEPT AT THE CONTROLLER CABINETS AS INDICATED ON THE PLANS.
- COST FOR EXTRA CABLE LENGTHS REQUIRED FROM EXISTING PULLBOX TO NEW CABINET LOCATION SHALL BE CONSIDERED INCIDENTAL TO OTHER ITEMS OF WORK.
- 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 TRAFFIC SIGNALS SHALL BE KEPT OPERATIONAL DURING CONSTRUCTION. ANY RELOCATION REQUIRED SHALL BE APPROVED BY THE ELECTRICAL AND MAINTENANCE SERVICES DIVISION, DEPARTMENT OF TRANSPORTATION SERVICES, AND PAID FOR BY THE CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO EXISTING TRAFFIC SIGNAL 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.

CONSTRUCTION NOTES

- LOCATIONS OF EXISTING UNDERGROUND STRUCTURES AND UTILITIES SUCH AS PIPE-LINES, CONDUITS, CABLES, ETC., SHOWN ON PLANS ARE APPROXIMATE ONLY. IT IS NOT THE INTENT OF THESE PLANS TO SHOW THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES WITH THE RESPECTIVE OWNERS. EXISTING UTILITIES DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN COST.
- THE CONTRACTOR SHALL VERIFY AND CHECK ALL DIMENSIONS AND DETAILS SHOWN ON THE DRAWINGS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCY SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION.
- THE CONTRACTOR SHALL NOTIFY ALL AGENCIES TO VERIFY THE ACTUAL LOCATION OF ALL UTILITIES IN THE PROJECT AREA PRIOR TO EXCAVATING. THE CONTRACTOR SHALL COORDINATE ALL WORK.
- THE CONTRACTOR SHALL TONE AND LOCATE EXISTING UTILITIES ALONG DUCTLINE PRIOR TO EXCAVATION.
- THE LOCATIONS OF THE NEW TRAFFIC SIGNAL STANDARDS, TRAFFIC SIGNAL STANDARDS WITH MAST-ARM, PEDESTRIAN PUSH BUTTONS, TRAFFIC CONTROLLER, PULLBOXES, CONDUITS AND LOOP DETECTORS SHALL BE STAKED OUT IN THE FIELD BY THE CONTRACTOR AND APPROVAL OF THE LOCATIONS SHALL BE OBTAINED FROM THE ENGINEER PRIOR TO CONSTRUCTION AND INSTALLATION.
- ALL TRAFFIC SIGNAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS," FEDERAL HIGHWAY ADMINISTRATION (1988) AND AMENDMENTS.
- LOCATIONS OF NEW PAV'T. STRIPING, MARKERS, AND MARKINGS (PAVEMENT ARROW, STOP LINES, CROSSWALK, ETC.) SHOWN ON THE PLANS SHALL BE VERIFIED WITH THE ENGINEER PRIOR TO THE INSTALLATION OF THE TRAFFIC SIGNAL SYSTEM.
- MAINTENANCE OF TRAFFIC THROUGH THE CONSTRUCTION AREA SHALL BE IN ACCORDANCE WITH PART VI OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", FEDERAL HIGHWAY ADMINISTRATION (1988) AND AS SPECIFIED IN THE SPECIAL PROVISIONS. THE CONTRACTOR SHALL FURNISH AND MAINTAIN ADEQUATE BARRICADES, BLINKERS, CONSTRUCTION SIGNS, ETC., FOR THE SAFETY OF THE MOTORING PUBLIC.
- REMOVAL OF EXISTING SIGNS SHALL ALSO INCLUDE THE REMOVAL OF POSTS AND FOUNDATIONS UNLESS OTHERWISE NOTED. COSTS FOR REMOVAL AND TEMPORARY INSTALLATION OF SIGNS, POSTS AND FOUNDATIONS SHALL BE CONSIDERED INCIDENTAL TO OTHER ITEMS OF WORK.



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION
Eichi Tanaka
Signature

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
LEGEND, NOTES AND DETAILS	
PALI HIGHWAY INTERSECTION IMPROVEMENTS AT KAMEHAMEHA HIGHWAY	
F.A PROJECT NO. STP-061-1(27)	
SCALE: AS SHOWN	DATE: MAY 1992
SHEET NO. 1 OF 1 SHEETS	