LEGEND

12" RYG STANDARD TRAFFIC SIGNAL HEAD. TYPE I TRAFFIC SIGNAL STANDARD. TYPE II MAST ARM TRAFFIC SIGNAL STANDARD. WITH 25' MAST ARM AND 12' BETWEEN SIGNAL 25' 112' HEADS ON MAST ARM. TYPE A PULLBOX. TYPE B PULLBOX. TYPE BM PULLBOX CONTROLLER CABINET. LOOP DETECTOR. PREFORMED LOOP DETECTOR. TRAFFIC SIGNAL CONDUITS PAVEMENT MARKING PP O POWER POLE GP GUY POLE **ANCHOR**

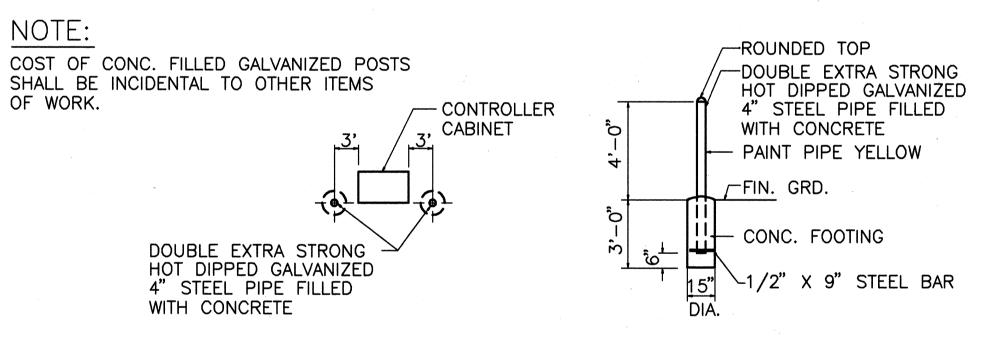
TRAFFIC SIGNAL NOTES

- 1. ALL TRAFFIC SIGNAL CONTROLLER EQUIPMENT SHALL BE COMPLETELY WIRED IN THE CABINET AND SHALL CONTROL THE TRAFFIC SIGNALS AS CALLED FOR IN THE PLANS.
- 2. SIGNAL INDICATIONS DURING CLEARANCE INTERVAL:
 - A. IF A SIGNAL IS G OR <G AND WILL REMAIN G OR G DURING THE NEXT PHASE, IT SHALL BE G OR <G DURING THE CLEARANCE INTERVAL.
 - B. IF A SIGNAL IS G OR \leftarrow G— AND WILL BECOME R OR EXTINGUISHED DURING THE NEXT PHASE, IT SHALL BE Y OR \leftarrow Y— DURING THE CLEARANCE INTERVAL.
 - C. IF A SIGNAL IS R AND WILL REMAIN R OR BECOMES G DURING THE NEXT PHASE, IT SHALL REMAIN R DURING THE CLEARANCE INTERVAL.
- 3. THE LOOP AMPLIFIER UNITS FURNISHED FOR THIS PROJECT SHALL BE CAPABLE OF OPERATING THE LOOP DETECTOR CONFIGURATIONS SHOWN ON THE PLANS.
- 4. 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.
- 5. CONDUITS AND PULLBOX LOCATIONS AS SHOWN ON THE PLANS ARE SCHEMATIC. THEY MAY BE MODIFIED BY THE CONTRACTOR WITH THE APPROVAL OF THE ENGINEER.
- 6. ALL WORK FOR THE INSTALLATION OR MODIFICATION OF THE TRAFFIC SIGNAL SYSTEM SHALL CONFORM TO THE LATEST REVISIONS OF THE "HAWAII STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 1985" AND THE "STANDARD PLANS" OF THE DEPARTMENT OF TRANSPORTATION, HIGHWAYS DIVISION AND AS SHOWN ON THESE DRAWINGS.
- 7. SHOULD ANY DEFECT BE ENCOUNTERED DURING THE WARRANTY PERIOD, THE MANUFACTURER WILL BE NOTIFIED AND HE SHALL PROMPTLY CORRECT SUCH DEFECT. SERVICE CALL (BY FACTORY QUALIFIED REPRESENTATIVE) DURING THE WARRANTY PERIOD FOR REPAIRS OR OTHER MAINTENANCE SHALL BE ANSWERED WITHIN 24 HOURS AND SHALL BE DONE AT NO EXPENSE WHATSOEVER TO THE STATE. ALL REPAIRS SHALL BE DONE AS SOON AS POSSIBLE.

FED. ROAD
DIST. NO.STATEPROJ. NO.FISCAL
YEARSHEET
NO.TOTAL
SHEETSHAWAIIHAW.37B-01-94199535

CONSTRUCTION NOTES

- 1. 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 UNDER—GROUND UTILITIES AND STRUCTURES. IT IS THE RESPONSIBILITY OF THE CONTRAC—TOR 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.
- 2. 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.
- 4. THE LOCATIONS OF THE NEW TRAFFIC SIGNAL STANDARDS, TARFFIC 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 CONSTRUCTON AND INSTALLATION.
- 5. 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.
- 6. 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.
- 7. MAINTENANCE OF TRAFFIC THROUGH THE CONSTRUCTION AREA SHALL BE IN ACCORD—DANCE WITH PART VI OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", FEDERAL HIGHWAY ADMINISTRATION (1988) AND AS SPECI—FIED IN THE SPECIAL PROVISIONS. THE CONTRACTOR SHALL FURNISH AND MAINTAIN ADEQUATE BARRICADES, BLINKERS, CONSTRUCTION SIGNS, ETC., FOR THE SAFETY OF THE MOTORING PUBLIC.
- 8. ALL LANES SHALL BE OPENED TO TRAFFIC DURING THE MORNING PEAK HOURS FROM 6:00 AM TO 8:00 AM AND DURING THE AFTERNOON PEAK HOURS FROM 4:00 PM TO 6:00 PM AND DURING OFF—WORK HOURS. ONLY ONE LANE OF TRAFFIC SHALL BE CLOSED AT ANY OTHER TIME.
- 9. EXISTING STOP SIGN SHALL BE REMOVED AFTER THE TRAFFIC SIGNAL BECOMES OPERATIONAL.



PLAN

TYP. ELEVATION

PIPE GUARD DETAIL

NOT TO SCALE



STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

TRAFFIC SIGNAL
LEGEND, NOTES AND DETAILS

HALEAKALA HIGHWAY
TRAFFIC SIGNALS AT
NORTH FIREBREAK ROAD
PROJECT NO. 37B-01-94

SCALE: AS SHOWN

DATE: APRIL 1994