## TRAFFIC SIGNAL NOTES

- The locations of the Traffic Signal Standards, Traffic Signal Standards w/Mast Arms, 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.
- 2. All splicing shall be done in the pullboxes.
- 3. Furnishing and installing the conduit stubouts (pullboxes to edge of pavement) will not be paid for separately but shall be considered incidental to the various contract items.
- 4. A solid #8 bare copper wire shall be pulled with the traffic signal control cable for equipment ground. Cost shall be incidental to the installation of the control cable.
- 5. All Traffic signal controller equipment shall be completely wired in the cabinet and shall control the traffic signals as called for in the plans.
- 6. The loop amplifier units furnished for this project shall be capable of operating the loop detector configurations shown on the plans. Cost for the loop amplifier shall be incidental to the installation of the loop detector.
- 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 to the State. All repairs shall be done as soon as possible.
- 8. 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.
- 9. Locations of traffic markings and markers (lane lines, Stop lines, crosswalk, etc.) shown on the plans shall be verified with the Engineer prior to the installation of the traffic signal system.
- 10. All Conduits between pullboxes and Traffic Signal Standards shall not be paid for separately but considered incidental to the various contract items.
- 11. All Signal-Drop Cables (Type 5 Cable) from the various Types Traffic Signal Head on the traffic signal standards and mast arms to the pullboxes shall not be paid for separately but considered incidental to the Traffic Signal Head.
- 12. After installing the cables in the conduits, the Contractor shall duct seal all conduits with an Engineer's approved product. The cost for duct sealing the conduits shall not be paid for separately but considered incidental to the various contract items.

## TRAFFIC SIGNAL LEGEND

New Meter Pedestal

New Traffic Signal Master Controller

New Traffic Signal Controller

Existing Traffic Signal Controller New Traffic Signal Conduits ♥ Cables

Existing Traffic Signal Conduits (New Cables to be installed)

New 12" RYG Traffic Signal Head New 12" RY↑ Traffic Signal Head

New 12" RY← Traffic Signal Head

New 12" RY← Traffic Signal Head (Programmed Visibility)

New 12" RYG  $\leftarrow$  Fiber Optic Traffic

New Type I Traffic Signal Standard w/Traffic Signal Head as specified on plan

> New Type II Traffic Signal Standard w/Mast Arm and Traffic Signal Heads (length of mast arm \ distance between signal heads as specified on plan)

Exist. Traffic Signal Standard & Signal Head

New Pedestrain Signal Head Exist. Pedestrain Signal Head

New Type B Pullbox w/Modified Cover (Hwy. Lighting)

Existing Type B Pullbox w/Modified Cover (Hwy. Lighting)

New Type B Pullbox (Traffic Signal)

New Type B Pullbox w/Modified Cover (Traffic Signal)

New Type C Pullbox (Trafic Signal)

New Type D Pullbox (Traffic Signal)

Existing Traffic Signal Pullbox

Existing Type C Pullbox (Traffic Signal) Existing Type D Pullbox (Traffic Signal)

New Loop Detectors

Opticom Receiver

New Pipe Guard

## FISCAL YEAR FED. ROAD DIST. NO. HAW. 3400B-01-98 1998 8

## HIGHWAY LIGHTING NOTES

- 1. The Highway Lighting Luminaires, cables, fuses, ballasts and any miscellaneous materials required by Maui Electric Company (MECO) for the Type III Traffic Signal Standard shall meet MECO standard. The Contractor shall submit shop drawings of the various materials to Mr. Ray Okazaki, MECO, phone no. (808) 871-2340 for approval.
- 2. The Contractor shall contact the MECO Dispatch Office two-weeks prior to the start of construction for assistance in locating existing MECO underground cables.
- 3. The Contractor shall contact MECO two-weeks in advance for all inspection work concerning the installaion of conduits, cables, highway lighting work and risers.
- 4. After removing the existing highway lighting cables, mast arm and luminaire from the existing pole #E18A, the Contractor shall deliver the equipment to a location designated by MECO or dispose of the equipment according to MECO.

**DEPARTMENT OF TRANSPORTATION** 

TRAFFIC SIGNAL LEGEND AND NOTES

WAIEHU BEACH ROAD

Installation of Traffic Signals at Eha Street

Project No. 3400B-01-98

Not to Scale Date: Oct., 1997

> OF 1 SHEET No. 1

SHEETS

