## TRAFFIC SIGNAL LEGEND New Traffic Signal Controller CExisting Traffic Signal Controller New Traffic Signal Conduits & Cables New 12" RYG Traffic Signal Head New 12" RY Traffic Signal Head New 12" RY← Traffic Signal Head $\longrightarrow$ New 12" RYG $\leftarrow$ Fiber Optic Traffic Signal Head New Type III Traffic Signal Standard (Mast Arm Length, Highway Lighting Bracket Arm Length Signal Heads with Spacing as specified). New Type I Traffic Signal Standard (Height-10') Signal Heads as specified New Pedestrain Signal Head New Type B Pullbox w/Modified Cover New Type B Pullbox Existing Type B Pullbox $\boxtimes$ New Type A Pullbox New Type B Pullbox (Street Lighting) New Loop Detectors $\otimes \rightarrow$ New Opticom Receiver LEGEND Existing Power Pole — t — Existing Telephone Line Existing Telephone Pole $\Box_{tpb}$ Existing Telephone Pullbox —— Ac — Existing Signal Corps Line —w—24— Existing 24" Water Line ---d--24--- Existing 24" Drain Line oadmh Existing Storm Drain Manhole Existing Grated Drop Inlet Existing Catch Basin Existing Single Metal Guardrail Existing Double Metal Guardrail

Existing Fence

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## TRAFFIC SIGNAL NOTES

- 1. 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 Contractor shall install one meter socket and 50 amp, breaker as shown on the plans in accordance with HECO requirements. The Meter shall be mounted on the existing power pole between 5 feet and 6 feet above ground. For Details, see Plan Sht. No. 6. Meter socket shall be 4-prong, complete with a manual circuit closing device.
- 7. 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.
- 8. 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.
- 9. 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.
- 10. 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.
- 11. The Contractor shall notify the Traffic Signal Branch, Department of Transportation Services, City & County of Honolulu, (phone no. 527-5007) two weeks prior to commencing any work on the traffic signal system.
- 12. The Department of Transportation Services, City & County of Honolulu, will assist the Engineer in construction inspection for the traffic signal system. The Contractor shall notify the Electrical and Maintenence Services Division, Department of Transportation Services, three (3) working days prior to commencing work on the traffic signal system (phone no. 527-5007).
- 13. Installation of the Opticom Receiver shall conform in accordance with the Standard Details of the Department of Transportation Services, City & County of Honolulu, Electrical and Maintenance Services Division, and all subsequent amendments and additions.
- 14. The concrete jacket for the Conduit By-Pass Details shown on Plan Sht. No. 6 shall not be paid for separately but considered incidental to the various contract items. The Engineer shall determine if a concrete jacket is required.
- 15. In all cases, the Hawaiian Telephone Line Conduit on Plan Sht No. \_7\_ must maintain a minimum of 12 inches separation from any power conduit/cable. If this cannot be achieved, the Hawaiian Telephone Conduit shall be encased in a 3" thick concrete jacket. The concrete jacket shall not be paid for separately but considered incidental to the various contract items.

FISCAL SHEET TOTAL YEAR NO. SHEETS FED. ROAD DIST. NO. FED. AID PROJ. NO. HAW. STP-065-1(4) 1995 5

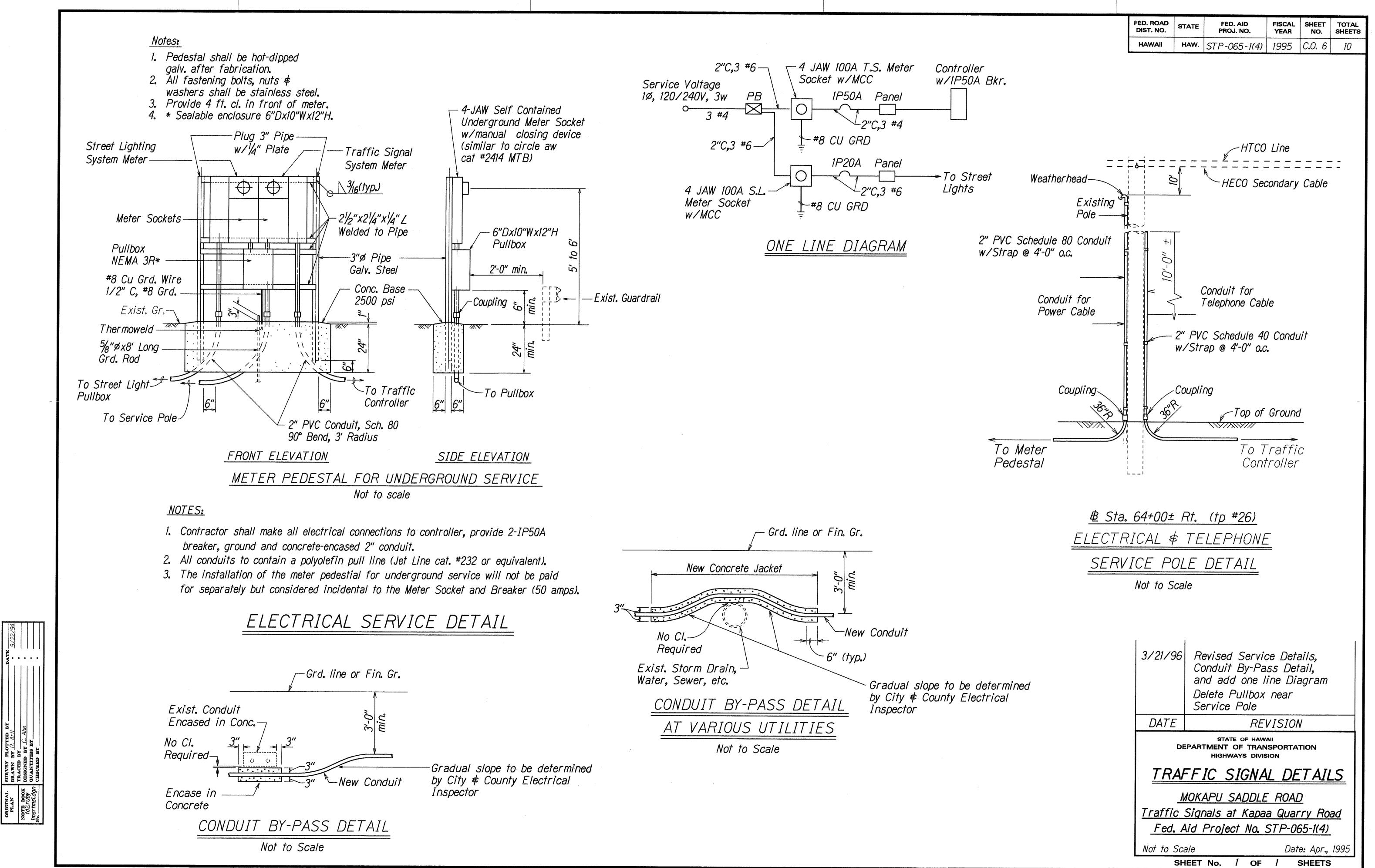
16. All work relating to Hawaiian Telephone shall be done in accordance with HTCO's underground specifications, dated May 1992.

> DEPARTMENT OF TRANSPORTATION TRAFFIC SIGNAL LEGEND & NOTES MOKAPU SADDLE ROAD Traffic Signals at Kapaa Quarry Road

Fed. Aid Project No. STP-065-1(4) Date: Apr., 1995

Not to Scale

OF I SHEETS SHEET No. 1



C.O. 6