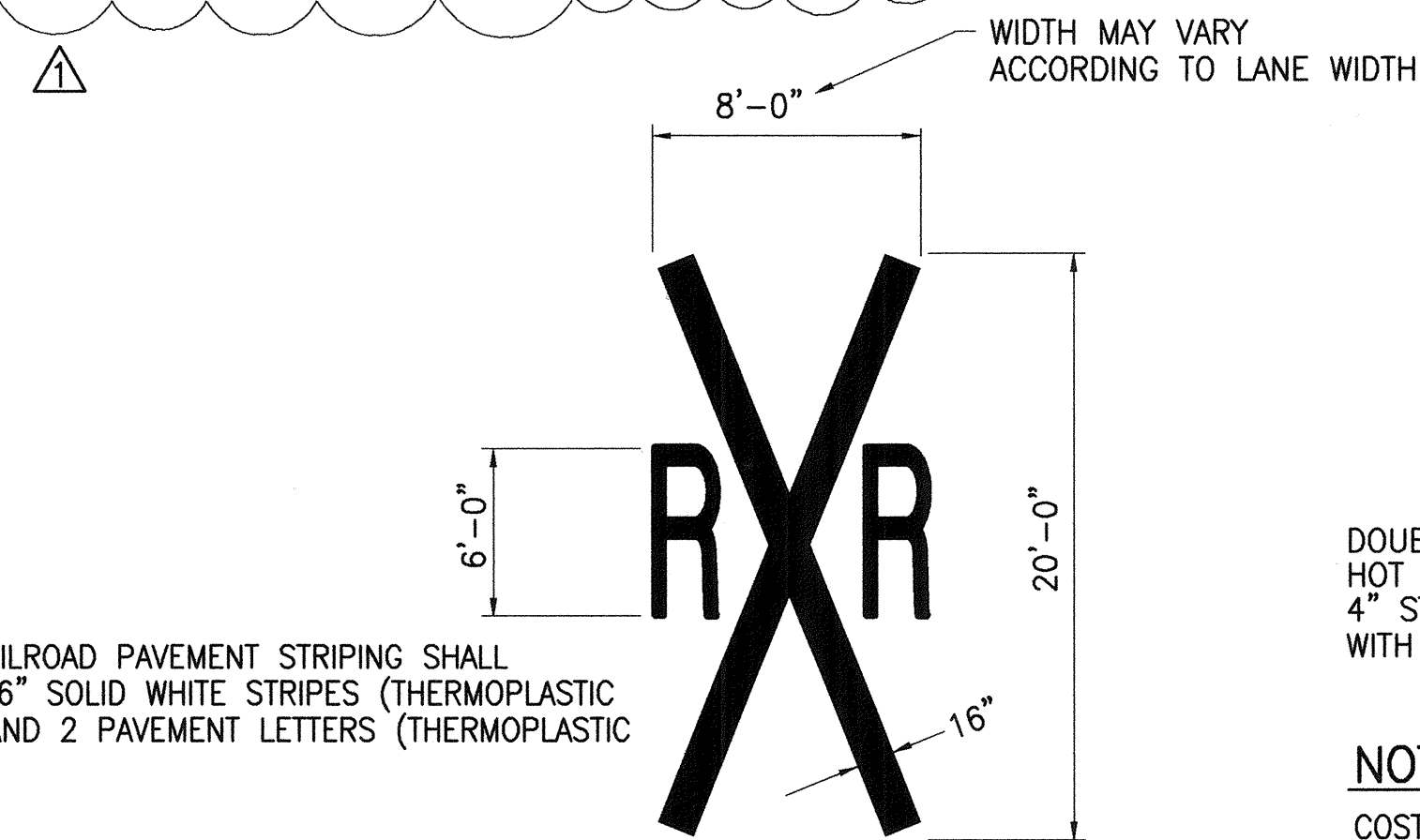
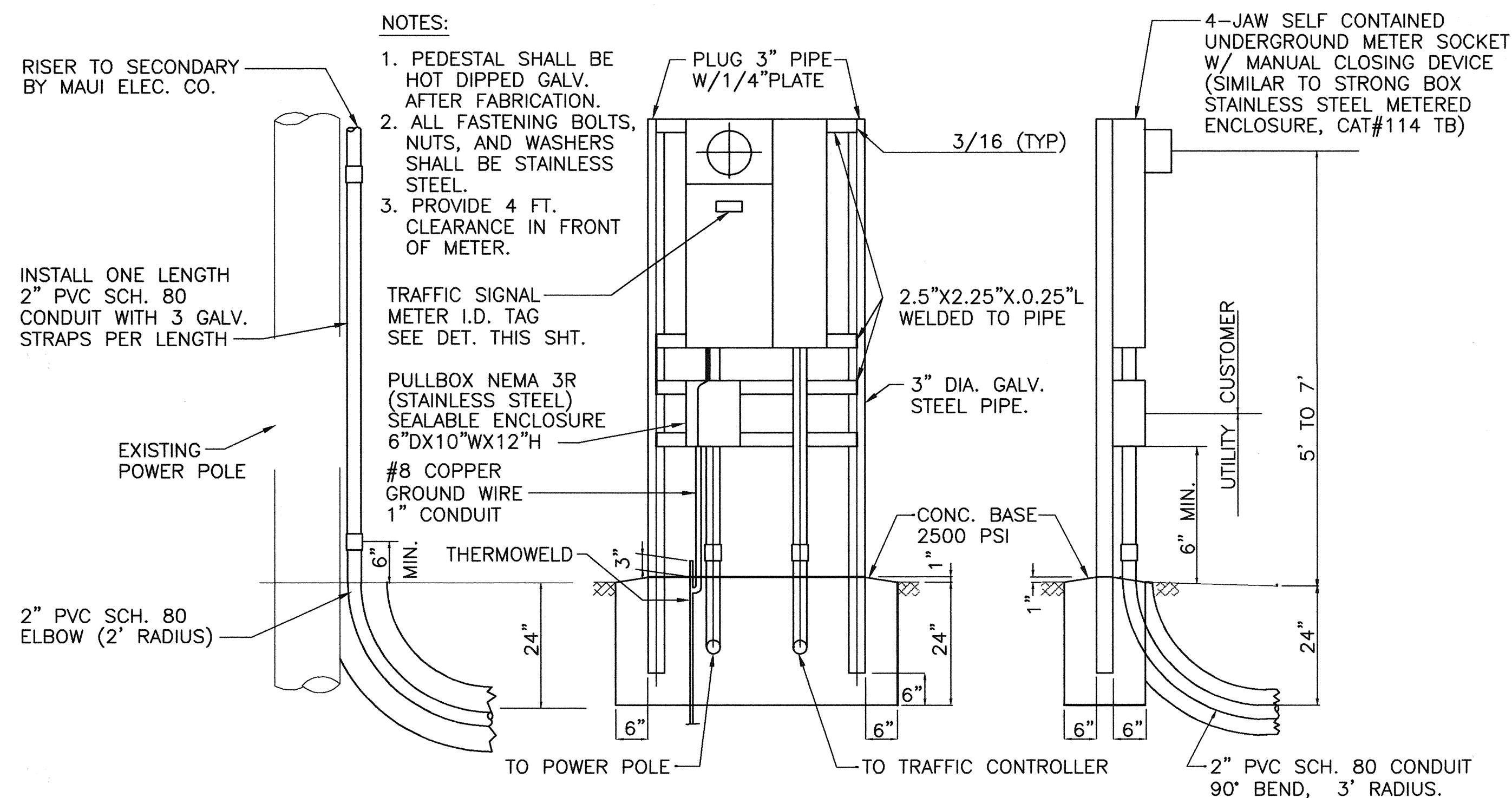


1. LOCATIONS OF EXISTING UNDERGROUND STRUCTURES AND UTILITIES SUCH AS PIPE-LINES, CONDUITS, CABLES, ETC., SHOWN ON PLANS ARE APPROXIMATE ONLY. IT IS NOT THE INTENT OF THESE PLANS TO SHOW THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY 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.
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.
3. 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 CONTRACTOR SHALL TONE AND LOCATE EXISTING UTILITIES ALONG DUCTLINE PRIOR TO EXCAVATION.
5. 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.
6. 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.
7. 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.
8. 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) AS AMENDED 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.
9. AT THE END OF EACH DAY'S WORK, THE CONTRACTOR SHALL REMOVE ALL EQUIPMENT AND OTHER OBSTRUCTIONS TO PERMIT FREE AND SAFE PASSAGE OF PUBLIC TRAFFIC.
10. ONCE EACH NEW TRAFFIC SIGNAL SYSTEM IS OPERATIONAL, THE CONTRACTOR SHALL REMOVE THE EXISTING METER PEDESTAL. THE CONTRACTOR SHALL RETURN THE EXISTING METER TO MAUI ELECTRIC COMPANY.

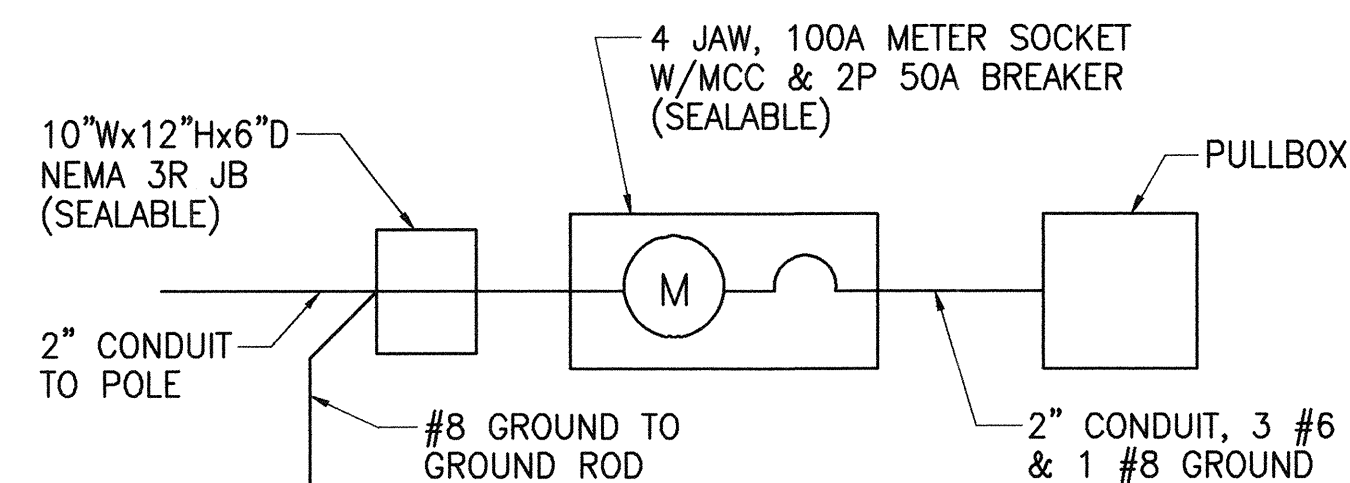
1. THE CONTRACTOR/UTILITY COMPANY SHALL CONTACT THE DEPARTMENT OF WATER SUPPLY AT PHONE #243-7340 ONE (1) WEEK PRIOR TO COMMENCEMENT OF WORK.
2. THE CONTRACTOR/UTILITY COMPANY SHALL BE RESPONSIBLE TO VERIFY THE EXACT DEPTH AND LOCATION OF EXISTING WATERLINES IN THE PROJECT AREA PRIOR TO COMMENCEMENT OF WORK AND SHALL MEET THE DEPARTMENT OF WATER SUPPLY PERSONNEL OUT IN THE FIELD TO HELP LOCATE THE EXISTING WATERLINES IN THE PROJECT AREA IF NECESSARY.
3. MAINTAIN A MINIMUM OF THREE (3) FEET CLEAR HORIZONTAL SEPARATION BETWEEN EXISTING WATERLINES AND INSTALLED UTILITIES.
4. MAINTAIN A MINIMUM OF SIX (6) INCHES CLEAR VERTICAL SEPARATION BETWEEN EXISTING WATERLINES AND INSTALLED UTILITIES AT ALL CROSSINGS.
5. ANY INSTALLED UTILITY CROSSING AN EXISTING WATERLINE SHALL BE CONCRETE JACKETED A MINIMUM OF FIVE (5) FEET ON BOTH SIDES OF THE CROSSING.



NOT TO SCALE

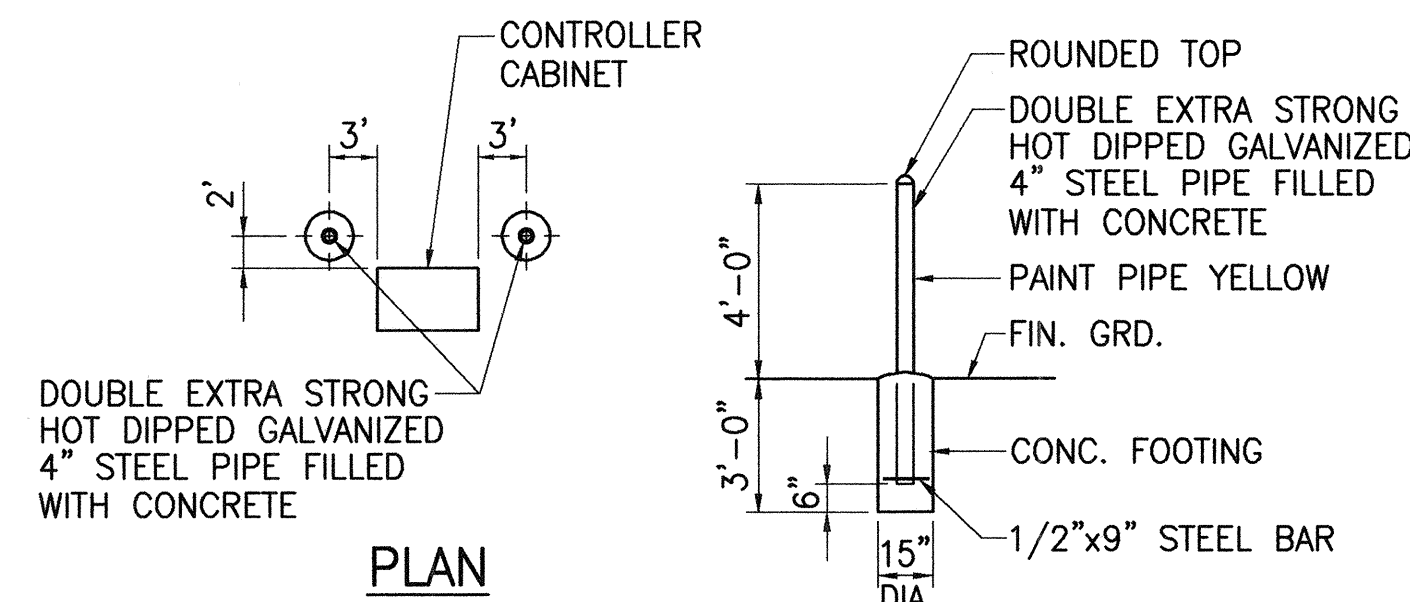


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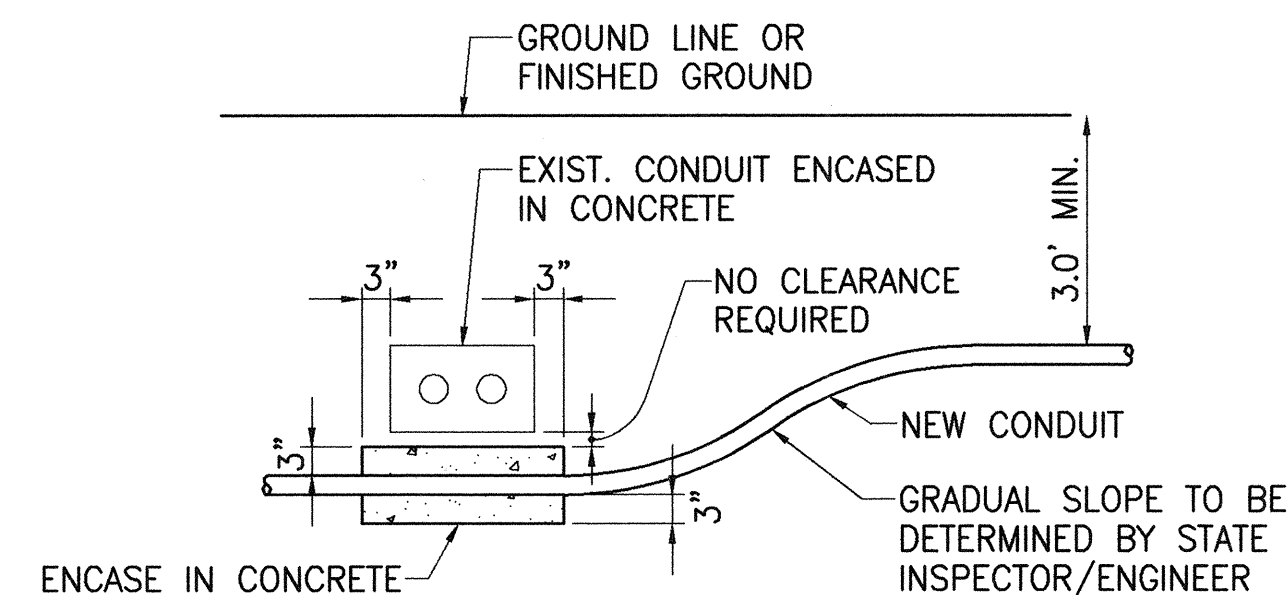
NOT TO SCALE

1. SERVICE VOLTAGE: 1 PHASE  
3 WIRE 120/240 V
2. LOAD DATA: CONNECTED -5KVA  
ESTIMATED DEMAND-2KVA
3. SERVICE CONDUCTORS: 3-#6 CU

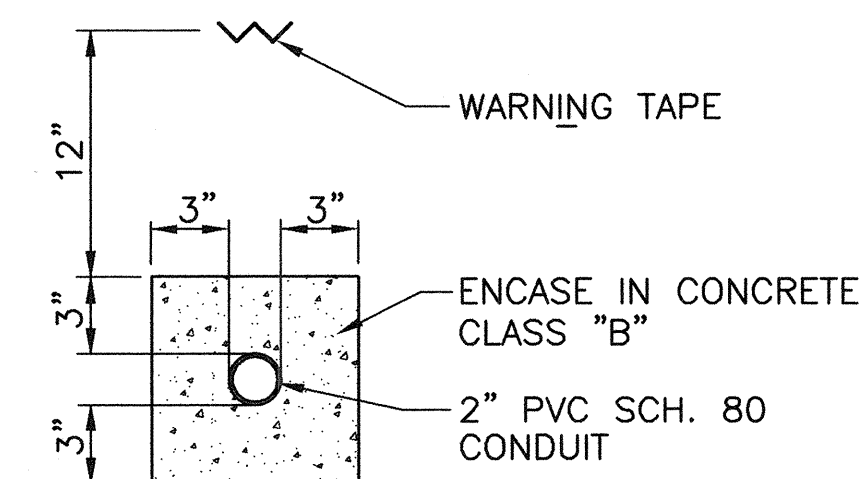


COST OF CONC. FILLED GALVANIZED  
POSTS SHALL BE INCIDENTAL TO  
OTHER ITEMS OF WORK.

NOT TO SCALE



NOT TO SCALE



NOT TO SCALE

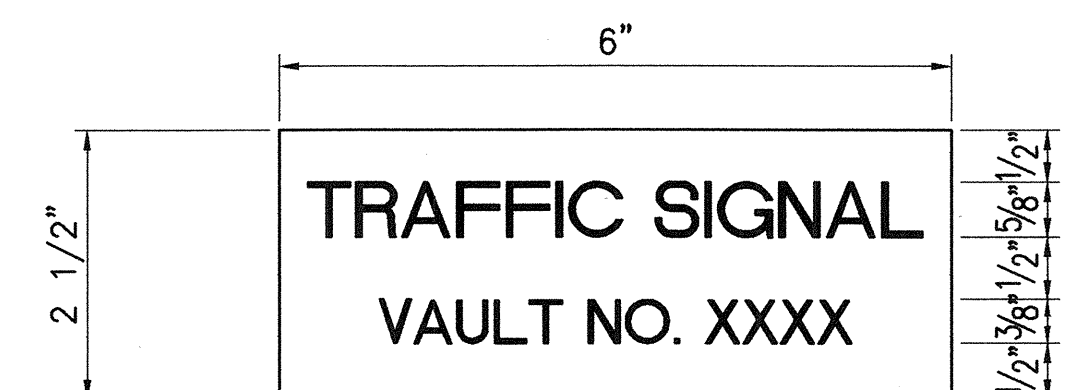
1. MAUI ELECTRIC CO. SHALL FURNISH AND INSTALL CABLE BETWEEN SECONDARY AND METER SOCKET.
2. CONTRACTOR SHALL MAKE ALL ELECTRICAL CONNECTIONS TO CONTROLLER, PROVIDE BREAKER, GROUND AND CONCRETE-ENCASED 2" PVC SCH. 80 CONDUIT.
3. ALL CONDUITS TO CONTAIN A POLYOLEFIN PULL LINE (JET LINE CAT. #232 OR EQUIVALENT).
4. CONTRACTOR SHALL PROVIDE MAUI ELECTRIC CO. ONE WEEK ADVANCE NOTICE FOR ANY WORK TO BE DONE BY MAUI ELECTRIC CO.

Diagram illustrating the installation of a ground rod on a wooden pole. The diagram shows a cross-section of the pole and the ground. A 2" PVC, SCH. 80 conduit riser is attached to the pole using 1 hole galvanized malleable iron straps. The conduit extends down to the ground level (Finish Grade). A 5/8" x 8'-0" ground rod is inserted into the conduit, passing through the ground. The ground rod is secured with a grounding bushing. A TSPB (Temporary Splicing Point) is shown where the ground rod meets the conduit. A ground wire is also shown connected to the ground rod. The total height of the pole is approximately 27'-6".

Labels in the diagram include:


- APPROX. 27'-6"
- EXIST. WOOD POLE
- 2" PVC, SCH. 80 CONDUIT RISER
- 1 HOLE GALVANIZED MALLEABLE IRON STRAPS SECURELY MOUNTED INTO WOODEN POLE WITH WOOD SCREWS.
- FINISH GRADE
- TSPB
- GROUND WIRE
- 5/8" x 8'-0" GROUND ROD
- GROUNDING BUSHING

NOT TO SCALE



1. USE 3-PLY LAMINATED FLEXIBLE PLASTIC, BLACK-WHITE-BLACK THICKNESS: BLACK CAP SHEET - 0.010", WHITE BASE SHEET - 0.052", BLACK BASE SHEET - 0.010".
2. ATTACH TO METER BOX USING SCOTCH 3M BRAND VERY HIGH BOND (VHB) DOUBLE COATED ACRYLIC FOAM TAPE OR EQUIVALENT.
3. LETTERS/NUMBERS SHALL BE 1/16" STROKE, (WHITE IN COLOR).
4. LETTERS/NUMBERS SHALL BE INSCRIBED BY CUTTING THROUGH "BLACK CAP SHEET" TO EXPOSE WHITE LETTERS/NUMBERS.

NOT TO SCALE



THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION

Shardul S. Kawaligade  
Signature

HONOAPIILANI HIGHWAY  
TRAFFIC SIGNAL MODERNIZATION,  
KAANAPALI TOWARDS LAHAINA  
FED. AID PROJECT NO. NH-STP-030-1(27)

DATE: MAY 1999

**SHEET No. 1 OF 1 SHEETS**