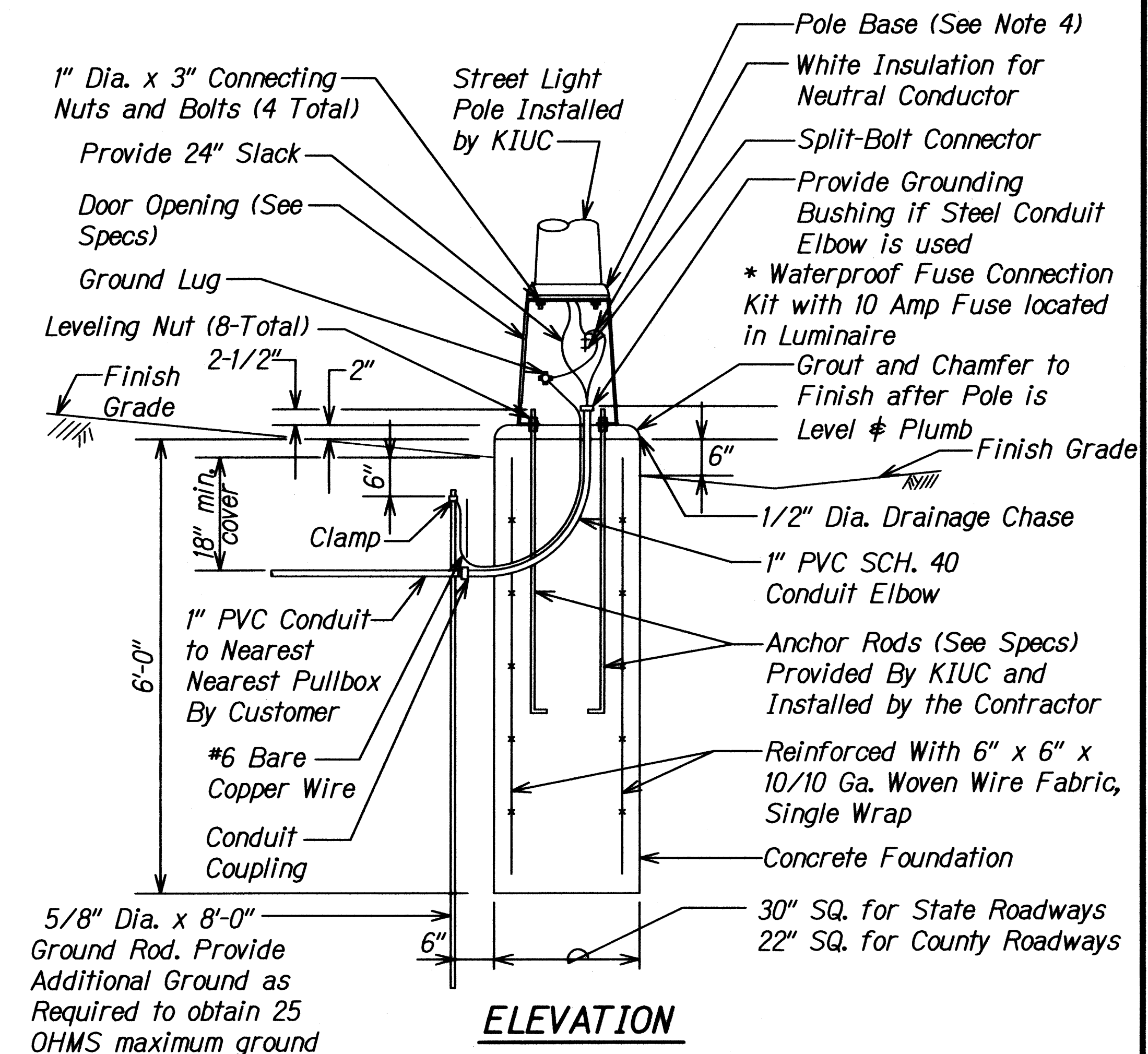


KIUC UNDERGROUND CONSTRUCTION NOTES AND REQUIREMENTS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HSIP-056-1(54)	2010	21	48

1. These notes are intended to be used in place of the Service Installation Manual, please refer to Service Installation Manual for all service issues.
2. Contractor shall contact Kauai Island Utility Cooperative's ("KIUC") Construction Coordinator/Inspector prior to start of work on KE facilities and for scheduling site inspections. [Westside: 246-2323; Eastside: 246-4343]
3. Contractor shall contact KIUC's Distribution Planning Coordinator @ 246-2373 for design approvals, standard detail drawings, and any items not addressed in these notes or drawings.
4. All contractors entering KIUC facilities must be approved by KIUC and must have proper licensing and insurance coverage. Contact KIUC Legal Coordinator @ 246-4369 for details.
5. All trenches and pullboxes must be inspected by KIUC prior to backfilling and concrete-encasing operations. For detailed trenching and backfilling requirements refer to KIUC's Service Installation Manual.
6. The Contractor shall provide a Poly-Line 200 lb. test line or equivalent as a pulling wire in all 1", 2", 3" & 4" conduits. In 5" and 6" conduits, the contractor shall install NEPTCO WPI800 muletape as a pulling line.
7. All conduits, pullboxes, handholes, & manholes shall be cleaned and free from objectionable materials. Conduit ends shall be adequately covered until the conductor is installed by the electric company. (Cover's shall be Carlon Plug with Pull Tab series P258 equivalent or better)
8. For all conduit other than services, refer to conduit schedule on drawings.
9. For all services where the conductor is 110 or less, the distance from KIUC's handhole and Customer's meter is less than 125 feet, and not crossing any driveways or roads the conduit shall be 2 inch Schedule 40 PVC. For services greater than 125 feet, contact KIUC planner for field verification and underground service requirements. Any deviations will require KIUC written approval.
10. Primary and Secondary conduits for new line extensions shall be Schedule 40 PVC. (Carlon P#C Duct Type DB equivalent or better.) Under driveways and roadways, the conduits shall be encased in a minimum of 3 inch concrete jacket extending 12" outside the edge of pavement.
11. Schedule 80 PVC conduit may be substituted for the concrete encased Schedule 40 PVC for service conduit only crossing under unpaved private driveways & roadways from KIUC pole/handhole to customer's meter. If concrete driveway will be built over service conduit immediately after conduit is installed, than Schedule 40 PVC may be used provided that it meets with Rule No. 21.
12. All primary and secondary conduits which are crossing state or county roadways shall be Schedule 40 PVC encased in a minimum 3 inch concrete jacket, which shall extend a minimum of 12 inches outside of the edge of pavement.

13. *Electrical supply ducts, when installed near communication cables, shall be separated from communication duct systems and buried communication cables or conductors by not less than 3 inches of concrete or 12 inches of earth when paralleling or crossing.*
14. *Chairs shall be installed and spaced at a maximum of 5 feet separation when concrete encasing conduits.*
15. *All conduits shall enter boxes at 90 degree angle, perpendicular and flush to the wall with bell ends to prevent cable damage.*
16. *90 degree conduit bends shall be factory made with a minimum radius of 3 feet in trench*
17. *Conduit bends exceeding 90 degrees will not be accepted.*
18. *A 36 inch minimum horizontal clearance shall be maintained when running KIUC conduits parallel to water & sewer lines. If clearance is less than 36 inches, KIUC conduit shall be concrete encased.*
19. *No foreign pullboxes, handholes, manholes, concrete slabs/boxes, structures, etc. are to be installed over KIUC facilities with the exception of HTCO, CATV or waterline conduit crossings. Such crossing must be approved by KIUC's Service Assurance Department and KIUC conduit to be concrete encased. Concrete encasement must be minimum of 3 inch encasement and extend a minimum of 1 foot beyond crossing conduit or pipe.*
20. *Yellow marker tape to be placed 1 foot above electrical conduits in the trench during backfilling. (E-Z CODE WBT 6 inch wide 4 Mill polyethylene Protect-A-Line Warning Tape NA-0708 "ELECTRIC LINE" in yellow, equivalent or better)*
21. *Unless otherwise noted, the top of all conduits shall be at a depth of 24 inches.*
22. *All handholes, pullboxes, and manholes shall be Walker Industries type or approved equal. Contact KIUC prior to ordering underground boxes for vendor approval. Customer to submit manufacturer's shop drawings if substituting from Walker Industries type.*
23. *Typically, the top of all electrical utility boxes shall be 1 inch above finish grade, single phase transformer pads shall be 2 inches above finish grade, and three phase transformer pads shall be 4 inches above finish grade unless otherwise noted. (Special conditions may apply to sidewalks, roadways, etc. see specific location notation)*
24. *At no time shall cement mortar, wood or any other material be used between pre-cast sections of KIUC pullboxes, handholes, or manholes. The permanent installation of wooden wedges to level or raise the pre-cast sections shall not be permitted.*
25. *A minimum of 6 inches of #3 crushed rock backfill shall be placed loosely beneath the bottom section of handholes and pullboxes. Crushed rock or other foreign materials are not to be placed inside handholes and pullboxes.*



STREET LIGHT UNDERGROUND PEDESTAL
Not to Scale

NOTES:

- 1) Concrete foundation to be 6" away from curbing. This applies to streets with curb and gutter construction.
- 2) Concrete Foundation: 3000 psi (28-Days Compressive Strength).
- 3) Anchor Rods: To be supplied by KIUC and installed by the Contractor.
- 4) Pole Base: To be provided by KIUC and installed by the Contractor.
- 5) Foundation: To be constructed by the Contractor.
- 6) Pole, Luminaire, and Bracket arm supplied and installed by KIUC.
- 7) All other materials shall be provided by the Contractor unless indicated otherwise.

