Tips on how to prepare your job site for underground electric service

Residential customer-provided trench projects

Below is a checklist of important construction requirements, as well as the most common causes of project delays. For a comprehensive list of all construction requirements, please visit PSE.com/CustomerConstruction. All of the following must be completed before the construction crew can begin work.

Your Project Manager or PSE representative will visit the site for an initial readiness inspection a minimum of five work days prior to the scheduled date of construction. Should the site not be 100% construction-ready upon initial inspection, you’ll have the rest of the day to correct any issues prior to re-inspection the following day. Upon re-inspection, should the site not be 100% ready, the job maybe pulled from the schedule. Once the corrections have been made, please notify your Project Manager. Once the site is deemed ready for construction, the job will be rescheduled to the next available date. For additional information on how to ensure your site is ready, please refer to the attached Residential Service Handbook and appropriate service requirement forms (form 3061 for joint trench and form 6080 for electric-only trench).

Trenching, conduit - and backfilling requirements:

* See chapter 2 in Electric Service Handbook for more details on underground service installation requirements
* See chapter 4 in Electric Service Handbook for more details on underground primary installation requirements

- All trench excavation, conduit installation and backfill related to installing your underground electric cable is your responsibility and must meet PSE design and jurisdictional requirements.
- Prior to backfilling a joint trench, it must to be inspected for proper horizontal and vertical clearances from other utilities.
- Trenching and conduit placement can take place any time before the five-work-day readiness inspection.
- All conduit must be electrical grade, Schedule 40 (or Sch.80 due to poor soil conditions), gray in color, and sized per PSE design.
- Conduit end-bells must be installed on both ends of all conduit runs, this provides a smooth, rounded pulling-surface, preventing damage to cable sheathe or insulation.
- Service conduit shall contain no more than a total of 180 ° in bends and none less than 24 inches in radius.
- Primary conduit shall contain no more than a total of 180 ° in bends and none less than 36 inches in radius.
- For direct-buried cable – cable not installed in conduit – proper bedding and shading material must be within hand-shoveling distance to the work pit
  - Required backfill material: ¾ yard sand: washed, clean, and free of debris or rocks larger than ¼”
- 3/8 - inch poly pull rope is required for services that are 60 feet or more and for all primary line extensions.
- Conduit must be stopped 4 feet from utility poles and 2 feet from transformer vaults.
- If trenching to a utility pole, the face of the utility pole must be exposed from grade level to bottom of the work pit.
- Work pit dimensions:
  - 48”x48”x28” at service panel or stubout
  - 48”x48”x40” at utility pole, vault, or handhole (per PSE design)

Common causes that could delay your installation:

- Meter panel isn’t installed on the front third of the building in reference to the drivable access.
- Meter panel is located in a fenced or walled in area, or an area that is subject to being fenced or walled in (e.g. patios, decks, porches, breezeways, backyards, and carports).
- Center of meter panel isn’t between 4 and 6 feet above finished grade (5 feet is preferred).
- Meter panel location doesn’t meet PSE’s clearance requirements.
- Labor & Industries permit documentation and approved/signed sticker isn’t visible, legible and/or posted on meter base.
- Job site doesn’t have drivable access (paved or rocked drive path per PSE specifications) and/or has objects on-site that obstruct access.
- Trench and/or work pit(s) aren’t ready (e.g. - water, construction debris, and/or sloughed spoils haven’t been removed.
- Site isn’t at final grade or acceptable subgrade in the area of construction.
- Front property line and lot corners aren’t surveyed and staked.

For detailed construction requirements go to PSE.com/CustomerConstruction

Updated - 5/31/2017