

GENERAL INFORMATION FOR SERVICE CONVERSION FROM OVERHEAD TO UNDERGROUND

1. **Persons authorized to perform the work:**

C-10, Electrical Contractor (Specialty)

A, Engineering Contractor

B, General Building Contractor (Two or more trades-electrical, plaster, wood carpentry frame work.

Owner/builder—For the purpose of these specific requirements, a customer installing their own wiring and equipment will be considered the contractor.

2. **Request pre-inspection** with the City Inspector and Edison Service Planner.

3. **Drawing:** It is suggested that you or your contractor provide a line drawing showing all boxes, conduit, conductor sizes and service rating and breaker sizes for your project which can be reviewed by the Building Department prior to commencement of work.

4. **Obtain electrical permit** from the Building Department (underground checklist approval required with permit application to obtain permit).

5. **Determine method of connection:** (See exhibits attached for clarification)

- Keep existing service and connect underground conduit from point of connection and sweep inside of exterior wall into service side of panel (Example A) **or**;
- Install new meter, main breaker, and distribution combination panel for underground service **or**;
- Install meter adapter onto the exterior of existing service (connect at meter socket in Example C)
- Keep existing service and connect surface mounted pull box/conduits weatherproof enclosed gutter (connected on service mast on roof in Example D)

1. **Request required inspections:**

1. Underground trenching/conduit installation
2. Rough service release
3. Final inspection after overhead riser mast is cut and capped or removed.

All meter installation shall comply with the rules and regulations of the City of Newport Beach along with all applicable governing laws and ordinances and the electrical service requirements of Southern California Edison.

If any questions arise concerning these requirements, please contact the Building Department at (949) 644-3268 or the local SCE Service Planning Office at (714) 895-0188.

Page Two

General Notes/ Specification per National Electrical Code and S.C.E. Standards

Dig Alert—The State of California Government Code 4126 mandates that anyone doing excavation work shall call at least two working days prior to commencement of any excavation. Please call (800) 227-2600.

Newport Beach Municipal Codes:

1. Exposed PVC conduit shall be minimum schedule 80. Nonmetallic conduit installed on the exterior in runs greater than 25 feet require expansion fittings per **NEC 300-5 & 347-9.**
2. Grounding electrode and water bonding to be checked and upgraded if necessary. Sized per **NEC T-250-94 & T-250-95.**
3. All conduits, fittings and boxes sized per wire capacity of **NEC 370-16** (Appendix C).
4. Maintain proper clearance for working spaces at new services and pull boxes. Min. width of 30" x 36" depth x 78" in height per **NEC 110-16.**
5. Service equipment exposed to the weather shall be raintight. **NEC 370-15.**
6. For each and every meter, the contractor shall furnish and install a switch, or other approved disconnecting means with over-current protection. (NEC allows up to a maximum of six switches or disconnects before a main breaker is required) **NEC 230-42; 230-71; 230-79.**
7. All meter fittings shall be mounted on a substantial support in a true vertical position.

NEC 110-12

8. All equipment, devices and components shall be listed (recognized testing laboratory). **NEC 100.**

Southern California Edison Requirements: ESR-3 Installation Guidelines

1. Underground service conduit to be min. 3" / may be reduced to 2 ½" for existing 100 amp services (Edison user drawing no. 344)

Page Three

2. Pull boxes min size: 8" x 16" x 24" with a means of sealing consisting of two drilled stud and wing nut assemblies on opposite sides of cover (Edison user drawing no. 344).
3. Where a self-contained "A" base meter is in place, and the meter is relocated on the same building or an increase in load requires the installation of larger service conductors or a larger raceway, a new meter panel or switchboard shall be installed.
4. Maintain required meter clearances and working spaces. (Fig. 5-4 workspace).

Under/serviceconversion.doc

