

CONCRETE ELECTRICAL SERVICE BOX INSTALLATION

REVISION: Updated Tables, Added Steel Bolt-down Cover, Added Mow Strip, Updated Brooks ESB-7 Lid to 3" Thick, Relocated Product Dimensions & Spec. Details to UGS-009

CHECKED BY (ENGINEERING): SJ DATE: 02/12/15

CHECKED BY (FIELD): DM

PREPARED BY: SJR

APPROVED BY: *Shen-Mejia*

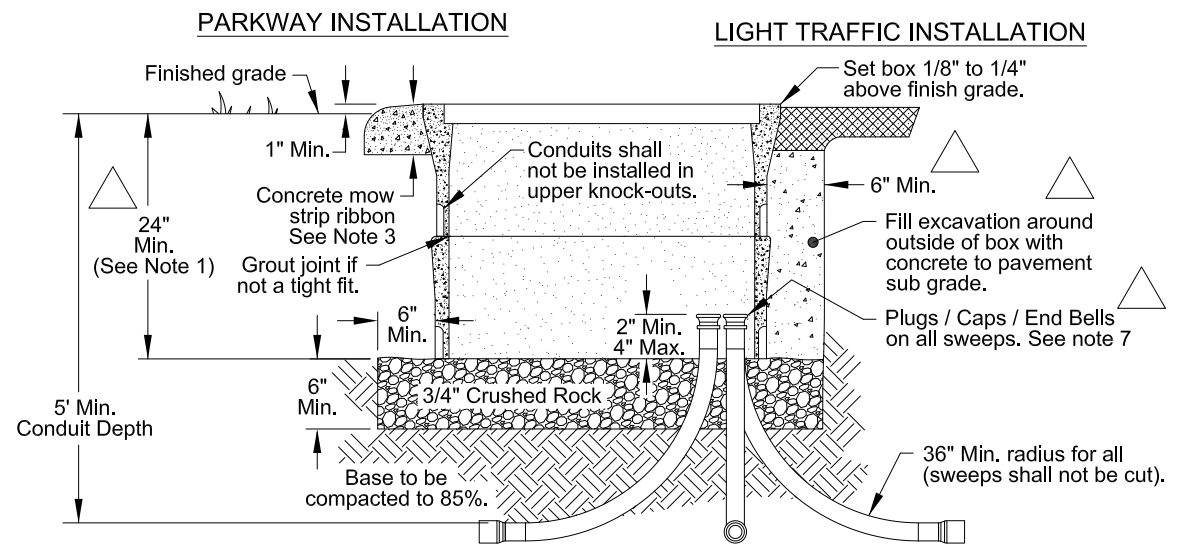
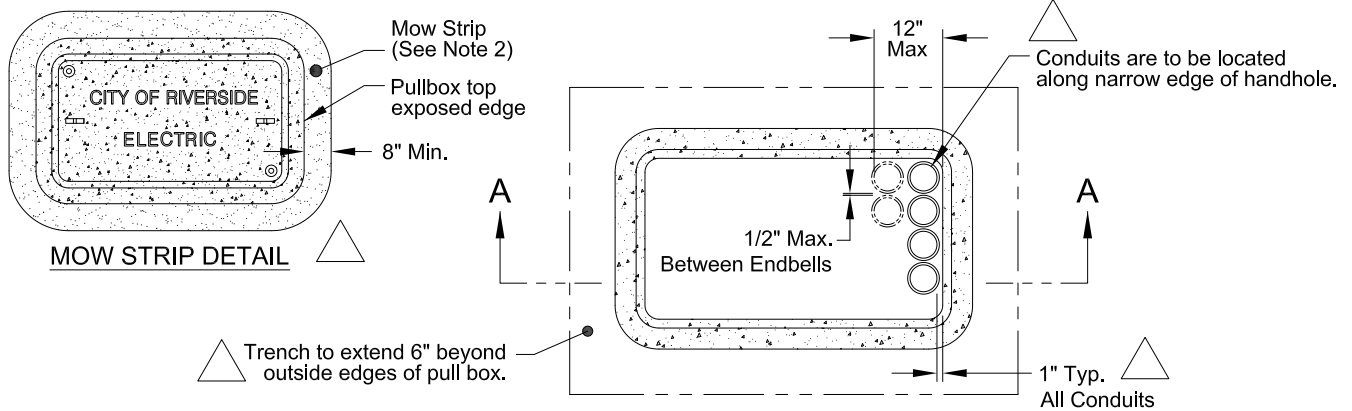
SECONDARY DISTRIBUTION PLANNING

Secondary structures typically include 17" x 30" (ESB-6) and 2' x 3' (ESB-7) Electric Service Boxes (ESB's). ESB-6 is adequate when.....

- a. No more than six ways of 1/0 or smaller secondary cable is needed.
- b. No more than four ways of 4/0 secondary cable is needed.
- c. No more than two ways of 350 kCM Al. backbone is cabled is needed.

If 500 kCM Al. is needed, or more than six ways from the secondary structure, then the 2' x 3' (ESB-7) pull box shall be required. Similar to primary cable, secondary cable shall generally have less than 270 degrees of bends in the conduit runs, and shall not exceed guidelines for pull tension and sidewall pressure. Service runs generally shall be limited to 100 feet or less. When within 5 feet of a vehicular traffic way (or if near "rolled" curbs,) ESB's and PB's may be designed with barrier or wall protection, or be designed and specified as incidental traffic rated per RPU's UGS-009. Services shall not be sized larger than the termination provisions specified in the City of Riverside Electric Utility Service Entrance Requirements Committee (EUSERC) standards.

To prevent service box from lifting (unearthing) while pulling cable 500 kCM or larger a 2' x 3' primary pull box (PB-1 or PB-2) can be used (or required by RPU inspector); See UGS-007 for enclosure details and ordering information.



Section Cut Detail A-A

Notes:

1. RPU Requires a Min. 24" Box Height; typically two top sections or top section and extension can be used to accommodate 24" Min. See UGS-009 for Approved Manufacture Pull Box part No. & Service Box Dimensions.
2. See UGS-100 & UGS-100.1 for RPU approved conduit material & general specifications for conduit installations.
3. For Parkway installation top of pull box to be 1" above finish grade. The grade shall be a straight line from the top of the back face of curb to the near edge of sidewalk. At the discretion of Inspector or Field Superintendent, installation of an 8" wide by 6" deep concrete "Mow Strip" may be required (poured in place after setting of pull box; top surface to have draft for water to flow away from center of structure) to protect structure form landscape equipment damage.
4. For Sidewalk installation top of pull box to be set 1/8" to 1/4" above finish grade.
5. Cover to be marked "CITY OF RIVERSIDE ELECTRIC" as shown above, See UGS-050 for details.
6. Top surface of all covers (Parkway / Superimposed steel for incidental traffic) shall have RPU approved anti-slip surface finish.
7. Conduit plugs/ caps shall be installed on all sweeps after installation. Prior to cable pulling cap / plugs to be removed and replaced with conduit end bells.