

# Subdivision Line Extension Procedures

## I. REQUIREMENTS & RESTRICTIONS

- a. The Applicant/Developer shall be responsible for coordinating service needs with a Rappahannock Electric Cooperative (REC) representative prior to project initiation.
- b. The Applicant/Developer shall complete and submit a service request and approved plans, along with a load information sheet for REC to provide a design and cost estimate. The Applicant/Developer shall provide adequate time, normally 60 days, for REC to review plans and conduct a site visit. Within 60 days, REC upon receipt of an approved plat, will provide a design and specifications of any required distribution facilities to serve the subdivision along with an estimate. Additional time for an engineering system study may be required based on electrical demand or energy requirements.
- c. Applicant/Developer shall sign and/or facilitate signatures from the legal landowners of all necessary right-of-way easements.
- d. Applicant/Developer shall locate and mark all necessary property lines and corners so REC can be assured of construction being within the REC right of way.
- e. For all purposes, REC's standard method for power line extensions will follow best engineering practices for construction.
- f. CIAC and credits for subdivision line extensions shall be based upon REC's current board policy which is reviewed annually. Cost estimates shall be valid for 6 months as of the date of the invoice. A detailed breakdown of cost shall accompany the invoice for the Applicant/Developer to review. Prior to construction of facilities, REC requires all agreements and cost be executed and paid. Construction installation times vary according to work volume, material availability and weather.
- g. REC shall determine if a conduit system is necessary, and it shall be the Applicant/ Developer's responsibility to furnish and install the primary backbone conduit system to the REC's specifications. Service conduit systems may be required based upon site conditions.
- h. The Applicant/Developer shall provide necessary survey locations to ensure REC of proper placement of the conduit system. The conduit installation shall be installed based on an approved engineering design by both parties.

## II. REC CONDUIT INSTALLATION REQUIREMENTS:

- a. The Applicant/Developer shall be responsible for the installation of the enclosed conduit systems or crossings as per REC specifications.
- b. Primary conduit shall be installed thirty-six (36) inches below finish grade to top of conduit.
- c. Service conduit shall be installed thirty (30) inches below finish grade to top of conduit.
- d. All joints shall be glued, and end caps provided. Tape is not acceptable. Conduit shall be stubbed twelve-eighteen (12 to 18) inches above finished grade. Conduits shall be aligned symmetrically to avoid clearance issues with equipment. Equipment specifications shall be provided by REC for placement.
- e. REC will provide ditch tape, and the Applicant/Developer will install it approximately one (1) foot above the conduit. Appropriate marking signs shall be provided by REC and installed by the Applicant/Developer.
- f. Mule Tape (1250 lb.) shall be installed in all conduits and conduits shall be kept clear of debris.
- g. There shall be no more than a total of 4 bends (Maximum 360-degree total) per run of conduit (this includes the 90-degree bends at REC facilities). All conduit bends shall have long sweeps (no hard bends). All turns shall be a minimum of ten (10) feet apart.
- h. The REC Engineering Designer along with Applicant/Developer's engineering personnel shall coordinate to avoid conflict with other facilities, which shall include placement of REC's transformers, cabinets, metering and associated equipment to meet NESC, NEC and REC clearance requirements.
- i. The Applicant/Developer shall be responsible for coordinating with the REC representative to inspect the conduit and pad installation as needed.



## III. CONDUIT SIZE AND TYPE AS SPECIFIED BY REC

- a. Single phase primary conduit shall be a minimum of three (3) inches or larger.
- b. Three phase primary conduit shall be a minimum of four (4) inches or larger.
- c. Service conduit will be sized according to the number of conductors required based on conductor fill.
- d. Schedule 80 PVC (gray) for above grade applications and Schedule 40 PVC (gray) is acceptable below grade. Conduit bends shall be long sweep 90-degree bends and shall not exceed more than 360-degrees between equipment.
- e. Applicant/Developer shall coordinate with REC to inspect the conduit system prior to backfilling. Adequate time shall be provided to schedule the visit. Backfill shall be done with appropriate lifts to ensure compaction. Bedding material may be required depending upon soil conditions.
- f. All conduit and compacted areas shall be the responsibility of the Applicant/Developer until REC has installed its facilities. Applicant/Developer shall be responsible for backfilling settled areas up to 1 year after installation.
- g. Standard conduit and pad mounted equipment set back, or clearances shall be maintained as follows:
  - i. Gas lines shall maintain a minimum of three (3) feet of separation when paralleling REC enclosed conduit/cable systems.
  - ii. Underground facilities installed parallel with REC Underground facilities shall maintain a minimum of twelve (12) inches separation. Clearance separation may be reduced if agreed upon by both parties.
  - iii. There shall be a minimum of twelve (12) inches separation from REC conduit/cable systems for all perpendicular underground crossings. Clearance separation may be reduced if agreed upon by both parties.
  - iv. Primary conduit/cable and above ground REC facilities (pad mount transformers, cabinets, etc.) shall be a minimum of ten (10) feet from any building. Exceptions may be made on a case-by-case basis per the REC Engineering Design Supervisor.
  - v. All Underground facilities shall be required to maintain a minimum of three (3) feet separation from REC above ground facilities.



## IV. REC INSTALLED ABOVE GROUND FACILITIES SHALL MAINTAIN CLEARANCES AS FOLLOWS:

- a. Set-back from sidewalks shall be three (3) feet. Exceptions will be made on a case-by-case basis.
- b. Set-back from septic lines, manholes, and water lines shall be five (5) feet.
- c. Clearance from drainfields or wells shall be ten (10) feet.
- d. Minimum clearance between above ground REC facilities and a fire hydrant should be ten (10) feet. Where conditions do not permit the ten (10) foot minimum clearance, the separation may be reduced if agreed upon by local fire authority and REC. In no case shall the separation be less than three (3) feet.
- e. Set-back from storm drains, which are installed less than ten (10) feet below grade, shall be five (5) feet. Facilities installed deeper than ten (10) feet below grade will require additional clearance per REC Engineering Department.
- f. The clearance for all pad-mounted equipment shall be a minimum of five (5) feet on the back and sides and ten (10) feet in front for maintenance. This includes shrubs, decorative fencing, screening walls, etc.
- g. There should be three (3) inches of separation between primary and service conduits in a single-phase pad mount transformer and twelve (12) inches separation between primary and service conduits in a three-phase Pad mount transformer.
- h. All transformer pad sites need to be to grade, level and compact with a gravel base.
- i. Single phase pad sites should be prepped to six (6) feet by six (6) feet area.
- j. Three phase pad sites should be prepped to ten (10) feet by ten (10) feet area.
- k. There is no separation required between conduits in cabinets, Vacuum Fault Interrupters or Primary Meters.