LREC Underground Trench Requirements

All trench work or digging is the responsibility of the consumer. The following are LREC's requirements for excavation for the installation of underground electrical facilities:

Minimum Depth:

- Cables Energized above 600 volts shall have a trench depth of 48 inches below final grade. Variances may be allowed on a case by case basis. Cable depths between 24 and 36 inches will require 6 inches of red dyed concrete to be placed above the conduit and top bedding material
- Cables Energized at or below 600 volts shall have a trench depth of 36 inches below final grade. Variances may be allowed on a case by case basis.

Ditch Dimensions: Ditches that are more than 36 inches in width may require additional fine material to be used to backfill at pull-box, pad or sleeve locations.

Ditch Preparation:

- Where rocks or other jagged materials are present:
 - o Ditches shall be bedded with a minimum of 6 inches of sand or equivalent fine screened material.
 - o 6 inches of sand or equivalent fine screened material shall be placed above the conduit before backfilling of the ditch.
- At road crossings:
 - 12 inch steel sleeves shall be used for three- or four-conduit installations
 - o 8 inch steel sleeves shall be used for two-conduit installations
 - 4 inch steel sleeves shall be used for single-conduit installations
- At driveway crossings:
 - o 12 inch rigid PVC sleeves shall be used for three- or four-conduit installations
 - o 8 inch rigid PVC sleeves shall be used for two-conduit installations
 - o 4 inch rigid PVC sleeves shall be used for single-conduit installations

Separation Between Utilities Of Different Ownership: There shall always be not less than 24 inches of separation in any direction between LREC owned equipment and other underground utilities now or in the future. Variances may be allowed on a case by case basis. Separation of less than 24 inches may require some form of permanent physical barrier to be installed such as concrete. The physical barrier must consist of a non-metallic, non-biodegradable material of sufficient size and thickness to prevent intentional or accidental contact between the utilities.

Backfill And Site Finish:

- LREC will install caution tape when the ditch has been filled to 50% of the cut depth.
- At a minimum, ditch lines shall be brought back to final grade with a 6 inch mound for settling.

 At the customer's option and cost the ditch may be finished via mechanical compaction (tamping) to original grade and resurfaced with material such as grass, gravel, concrete or asphalt.

Ditch Inspection:

- LREC will inspect all excavation the day before construction is to begin to ensure it meets all initial requirements. Inspection must be performed before any bedding material is installed in the ditch.
- LREC will provide one free ditch inspection per cable run, i.e. from one termination point to the next. Subsequent inspection of the same ditch will incur a trip charge.

Additional Charges:

- If the ditch is not excavated in the designated location as marked or as described in the
 easement centerline description, a \$75 trip fee will be assessed for the cost of reengineering the job and re-filing the corrected easements. If the cost of the job will be
 increased by the relocation of the ditch an adjusted invoice will be provided by LREC.
 The customer's electricity will not be turned on until the modified easement has been
 signed and payment for the additional costs have been received by LREC.
- LREC will waive the inspection trip fee for the first inspection of each ditch. Subsequent inspections shall result in a \$75 trip charge per inspection of the same ditch. This fee will either be invoiced to the excavator and/or general contractor, or will be reduced from the final invoice that LREC pays to the excavator.
- LREC will charge a crew arrives on job site and the contractors' equipment and or the operator is delayed and not available.....\$180.00 per hour until equipment and or operator arrive.
- Crew arrives on job site and job is rescheduled due to lack of equipment or operator..... travel and restocking rate of \$540.00 (180.00 @ 3 hours)

Backhoe and operator must be present and ready when we arrive at the scheduled time. Please contact LREC, Engineering Department, to schedule time for digging of ditch. (918) 772-2526

I,requirements and agree to abide by them.		ave	read	and	understand	these
Signature			 Date	<u>.</u>		 .
Printed Name of LRFC Witness	Signature of LRFC witne					