

Policy on Electric Distribution Construction

Section 1 – Drawing Requirements

A pre-construction meeting is required prior to the beginning of any part of the project including rough grading. Within two weeks following this meeting, the project engineer shall provide a plan showing all grading and utilities including water, sanitary, storm sewer, gas, electric, phone and cable tv facilities. The plan shall also include project landscaping. The plan will then be reviewed by the project engineer, the Chaska Electric Department and the Chaska Engineering Department to ensure that there are no conflicts prior to approval of the plan.

Section 2 – Installation Requirements

- A. Underground electric distribution facilities will not be installed until the following work is completed:
 - a. All water, sanitary, storm sewer, curb and blacktop have been installed.
 - b. Boulevard or other designated utility corridors have been graded with +/- 0.2 feet of final grade.
 - c. Project engineer has provided construction staking in the field with cut and fill elevation to final grade. Staking is required at each lot corner and at the back side of the utility corridor where property lines intersect for proposed transformer and pedestal locations.
 - d. Removal of all construction materials, vehicles, storage, and equipment from within the utility corridor (25' from back of curb).
 - e. Chaska Electric Department and Engineering have reviewed and approved all utility plans for private utility installation.
 - f. Gas lines, sidewalk grading, and installation shall not be completed prior to installation of electric, phone and cable tv facilities.
 - g. **All must be complete prior to trenching crews arrive on site.**

- B. Commercial/Industrial
 - a. Chaska Electric Department requires copper conductors in transformers.
 - b. The contractor is responsible for the concrete transformer pad (see J. for specs) and any secondary copper wiring, including making the secondary transformer connections.
 - c. Chaska Electric will provide the electric meter, meter socket, CT's and VT's.
 - d. The contractor shall furnish and install the CT cabinet.
 - e. There should be 10 feet of clearance on all sides of the transformer. This includes 10 feet clearance of all windows and doors.
 - f. Metering shall be placed on the exterior of the building.
 - g. All work shall be provided in accordance with the National Electric Code.

Section 3 – Installation Types & Associated Cost

- A. New Services
 - a. Electric distribution equipment (transformers, pedestals, primary lines, secondary lines to pedestals, etc.) will be installed from existing equipment to property lines for new services with 40% of the cost being charged to the property owner/developer. For underground services lines, all secondary lines from the transformer or pedestal will be the responsibility of the owner/developer.
 - b. For commercial/industrial customers, the primary cable will be extended to the transformer from the property line. The cost will be 40% of the materials, equipment and labor if an easement is provided for the utilities. If no easement is provided the primary line cost will be 100%. The transformer will still be billed at 40%. The owner is required to provide a concrete pad for the transformer (see J. for specs).
 - c. A metering cabinet, CT cabinet or switchgear will also be required if the service is over 400A. Chaska Electric Department will provide CT's (if required) for the metering. The meter socket will be supplied

by the Chaska Electric Department if it is a 3-phase service and requires reactive metering (services over 100 kW)

- d. A licensed electrician will be required to install all secondary wiring, bypass meter socket, PVC expansion fittings on underground runs (NEC 342.44(B)) and ground rod. All secondary wiring must be copper.
- e. A valid electrician inspection certificate must be presented to City Hall before any new service is energized. The billing information for the account must also be provided before any new service work is completed.
- f. All work shall be provided in accordance with the National Electric Code.
- g. A new meter charge will apply (see rate schedule for updated cost). Chaska Electric will install the meter and energize the service when it is complete.

B. Temporary Service

- a. A temporary electric service may be installed from existing or new facilities upon prior approval. Any construction done by the Chaska Electric Department, relating to the temporary service, and which will not become part of the permanent service will be billed at 100% for labor, equipment and material costs for installation. The costs for removal will be included in the billing for the installation. A licensed electrician will be required to install all secondary wiring to the temporary meter. Chaska Electric will make the connections to the distribution system.
- b. A valid electric inspection certificate must be presented to City Hall before any temporary service is energized. The billing information for the account must also be provided before the temporary service is energized. A new meter charge will apply but this can be applied to a New Service if the same meter is used.

C. Second Service

- a. If a second service is required for a residential customer, a second meter socket must be installed, and all secondary wiring is the responsibility of the owner. A new meter charge will apply.
- b. If a second service is required for a commercial/industrial customer, the cost of all materials, equipment and labor including 100% of the cost of the second transformer will be charged to the owner. A licensed electrician will be required to install all secondary wiring including the meter socket (and metering cabinet if required.) A new meter charge will apply, and Chaska Electric will install the meter.

D. Transformer Change/Upgrade

- a. If a transformer change is required for a commercial/industrial customer, the customer will pay 40% of the cost difference between the new transformer and the transformer that is being replaced. The customer will also be responsible for 100% of labor and equipment costs. Any changes to the secondary wiring and the transformer pad (see J. for specs) will be the responsibility of the customer.

E. Primary Metering

- a. Customers may choose primary metering if they have a combined load of 2,000kVA or greater. All switches, transformers, primary cables, secondary cables and metering cabinets will be owned by the customer. The customer will pay for all material, equipment and labor at the time of installation. The Chaska Electric Department will provide the meter socket and CTs for metering. Any ongoing maintenance will also be billed to the customer 100%.

F. New Development Road Crossings

- a. The developer or owner and their contractor are responsible for the installation of all conduit crossings for electric facilities where electric lines are to be installed within public streets. Conduit crossing locations shall be coordinated in the field with the electric department.

- i. Conduits are to be installed after the street sub-grade is accepted and should be installed at a depth of five feet below the final grade and below the roadway fabric, granular burrow and gravel base improvements.
- ii. Conduit crossing material shall be 4" schedule 40 unless otherwise directed by the Chaska Electric Department. A marker post shall be installed at both ends to mark each conduit crossing. Marker posts shall identify quantity of pipe, sizes of pipe and which utilities the pipe is for.
- iii. Conduit crossings not installed with street subgrade operations shall be installed via trenchless operations at the developer or owner's expense.

G. Street Lighting

- a. New streetlights in developments are 100% the cost of the developer. Changes to existing streetlights will be paid for by the Chaska Electric Department. Streets will be lit at intersections and intervals not to exceed 300 feet. Streets in industrial parks will only be lit at driveway entrances and intersections.
- b. All street lighting facilities located within the public right of way shall be reviewed and approved by the Chaska Electric Department. The Chaska Electric Department will coordinate with the developer or owner for lighting needs based on development layout. It is the intent of the department to maintain standard lighting facilities within the city.

H. Frost Conditions

- a. The developer or owner shall be subject to an additional frost charge for all trenching work done between October 15th and April 15th should frost conditions exist or when a freeze-thaw cycle is occurring. The current frost charge is \$3 per trench foot.

I. Completion of Install

- a. Work will be invoiced after construction of the facilities and shall be paid within 30 days upon receipt of the invoice. Our customer will be invoiced, not the contractor.
- b. The developer or owner shall be responsible for all costs associated with damage, relocation and field adjustments following the installation of electric facilities.
 - i. The developer is responsible for collecting damages from sub-contractors if damage happens during construction.

J. Transformer Pad

- a. A pad spec will be provided upon request.
- b. The customer shall provide a level, obstruction free, compacted area, which is to final grade, for the installation of the pad and transformer. Oil filled equipment must be level to keep the live parts under oil. If any corner of the tank has settled to be lower than two (2) inches from any other corner, the installation must be reset to a level position. In areas near buildings where earth has been disturbed, the customer shall provide firm soil conditions under pad area to prevent settling of the pad. Native soils can be used if the required compactions can be obtained (at least 2000 pounds/square foot compaction). In cases where the adequacy of the base may be doubtful, Chaska Electric Department may require a "Certificate of Adequacy" from a qualified testing laboratory.
- c. The Property shall be to final grade (± 6 inches) except at the equipment location, which shall be to exact final grade. The property must be level and clear for ten (10) feet to allow for operation and maintenance of the pad mounted equipment. Property pins shall be in place with the structure staked or the founding in, prior to installation of the pad-mounted equipment and splice boxes.
- d. The Chaska Electric Department shall be consulted well in advance of any proposed project.

- e. If, in the judgment of the Chaska Electric Department, the selected location for the installation of the pad-mounted equipment is not adequately protected from traffic, or when directed by the Public Authority, the customer shall furnish and install either a fence guardrail or guard posts to protect the pad-mounted equipment installation at the customer's expense.

End of Section.