



**MUNICIPAL LIGHT & POWER
&
CHUGACH ELECTRIC ASSOCIATION
ELECTRIC SERVICE REQUIREMENTS
EXCERPT**

2015

TEMPORARY FACILITIES

**2015 EDITION
Effective August 3, 2015**

This is an EXCERPT; the complete book is available on the utility websites:

www.mlandp.com under the "New Construction" tab

*www.chugachelectric.com under the Customer Service tab
"For Your Home" or "For Your Business"*

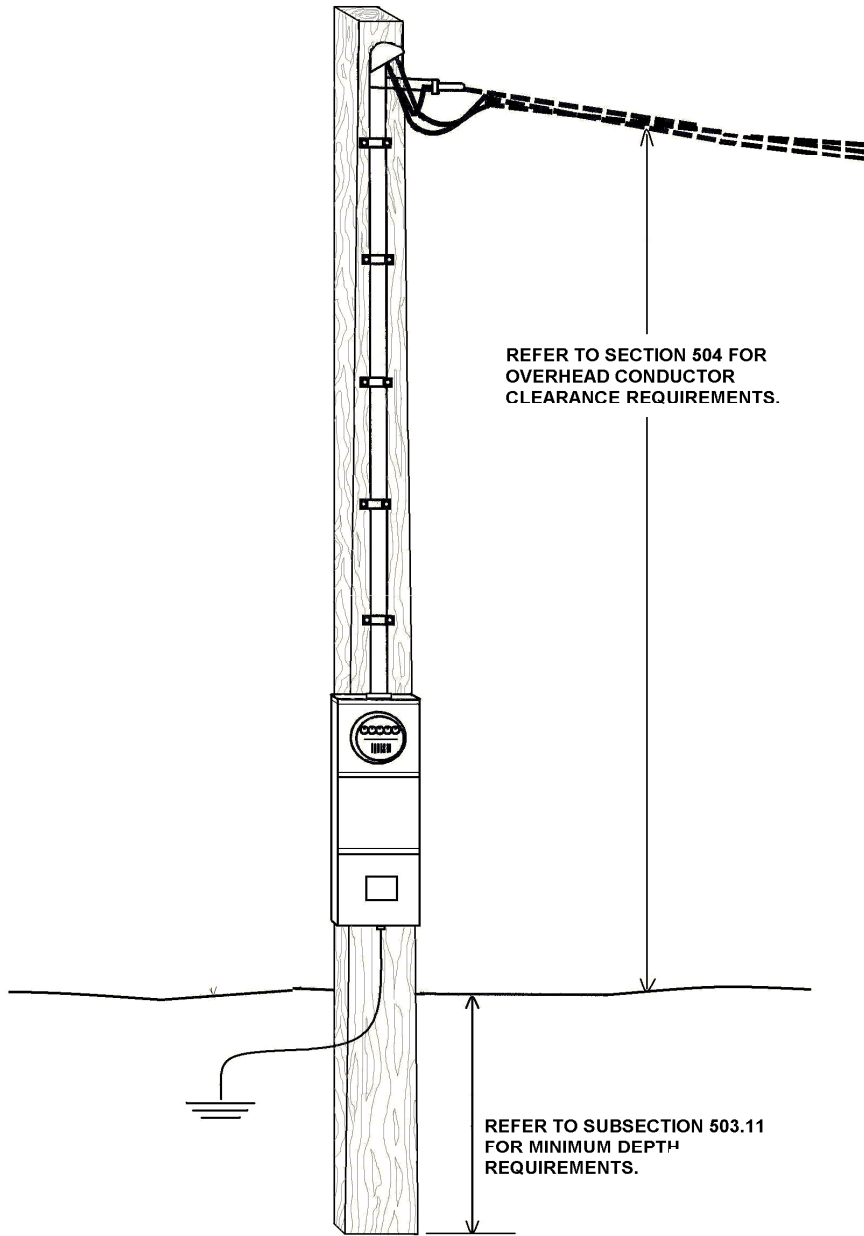
206 Electric Service Extensions to Temporary Facilities

- 206.1 The Utility will extend temporary service to the customer's service entrance equipment at a location designated by the Utility provided that the Utility facilities are of proper capacity to serve the customer's needs. ML&P customers **shall make** arrangements to pay ML&P for installation and removal costs including material, labor, equipment, and indirect overhead costs, less salvage value of materials returned to stock, prior to construction by ML&P.
- 206.2 If an application for temporary underground service is received after the first day of September and before the following year, frozen ground may necessitate that the underground service be installed either by steam thawing or temporarily above ground. The customer **shall pay** all related costs. When underground service is installed temporarily above ground, it shall be installed in corflo or electrical nonmetallic tubing. Only secondary service conductors (less than 600 volts) may be temporarily installed above ground (all services 480V line-line or greater require thawing and trenching unless the temporary corflo protected service is located within a fenced, controlled access area or the conductor is placed in HDPE conduit). The Utility will not install corflo/conduit above ground across roadways, driveways, or other locations subject to vehicle or equipment traffic.
- 206.3 The customer will receive temporary underground secondary service where the Utility facilities are underground. Where the Utility's facilities are overhead, the customer may receive either temporary overhead or underground service subject to the Underground Ordinance, Title 21 of the Anchorage Municipal Code.

503 Overhead Temporary Construction Service

- 503.1 All applicable requirements and specifications from other sections of this book apply to these installation guidelines and specifications.
- 503.2 Temporary service is used for the construction of a permanent service and is allowable for up to one (1) year. When temporary service is required for more than one (1) year, the customer must obtain written approval from the Utility's Engineering Division prior to the one (1) year expiration date. If temporary service is required for any purpose other than the construction of a new or upgraded permanent service, the temporary service entrance equipment shall comply with the pertinent requirements for permanent service.
- 503.3 **Maximum Length:** The maximum length of a service drop attached to a customer temporary service post is typically fifty (50) feet but may vary depending on the slope or grade of the land, intervening trees or structures, the size of the conductors used, and the height and strength of the customer's service drop support equipment. Consult with the Utility's Engineering Division for specific details regarding overhead service conductor length. The minimum length of service is ten (10) feet (do not place the post in the path of the permanent service). Within the Chugach service area the customer installed pole requires guying where the span length is seventy-five (75) feet or greater.
- 503.4 **Service Drop Termination Location:** In order to minimize the strain on the temporary service post, it shall be located as near to the Utility's serving pole as practical.
- 503.5 The entire overhead service drop shall be free of obstruction from antennas, structures, poles, masts, trees, and vents.
- 503.6 The customer shall provide a single, un-spliced post with a minimum diameter of five and one-half (5-1/2) inches (6 x 6 dimensional lumber size). The post material shall be rated for ground contact (factory pressure treated preservative).

503 Overhead Temporary Construction Service



THIS IS A TYPICAL DIAGRAM; IT IS NOT TO SCALE.

503 Overhead Temporary Construction Service

- 503.7 The customer shall supply a post of sufficient length for the Utility to maintain minimum overhead service conductor clearance requirements.
- 503.8 The customer shall furnish and install the service riser (service mast) and extend it to a height sufficient for the Utility to maintain minimum overhead service conductor clearances.
- 503.9 The utility service drop point of attachment on the customer's service riser shall be located in such a manner and extended to a height sufficient for the Utility to maintain compliance with the NESC rules for vertical clearance of wires, conductors, and cables above ground, roadway, rail, or water surfaces.
- 503.10 Minimum overhead service conductor clearance requirements shall be based on Section 504.
- 503.11 The customer shall construct a self-supporting installation. The 6 x 6 post shall be buried to a minimum depth of sixty (60) inches (for a post up to 30 feet), backfilled and compacted sufficiently to insure that the post remains level and plumb after service conductors have been attached. The length of the post shall be sufficient for the Utility to maintain minimum overhead service conductor clearance requirements. The customer shall obtain approval from the Utility's Engineering Division for proper post height.
- 503.12 The service riser shall be rigid metal conduit only and shall have a minimum inside diameter of two (2) inches. Conduit straps attaching the service riser to the post shall be spaced at least every eighteen (18) inches.
- 503.13 The service riser conduit shall extend to no less than twelve (12) inches below the top of the post. The service riser conduit shall not extend above the top of the post. Within the Chugach service area the weatherhead can extend to a maximum of twelve (12) inches above the top of the post.
- 503.14 Meter panels used for the purpose of temporary construction service shall be exempt from the safety socket and test-block bypass requirement on single-phase and network services; a meter panel meeting the requirements of Section 601 may be provided.
- 503.15 Temporary construction service requiring three-phase power shall not be exempt from the safety socket and test-block bypass requirement; a meter panel with the safety socket feature and factory installed test-block/bypass facilities meeting the requirements of Section 602 shall be provided.
- 503.16 **The preferred mounting height for single position temporary overhead post-mounted meter panels is sixty-five (65) inches.** The maximum mounting height for single position temporary overhead post-mounted meter panels is seventy-two (72) inches. The minimum mounting height for single position temporary overhead post-mounted meter panels is sixty (60) inches. Mounting height is measured from the centerline of the meter socket opening to the finished grade or standing surface immediately in front of the meter.
- 503.17 The customer's neutral wire shall be identified at the weatherhead as either the white or gray wire.
- 503.18 The customer shall provide one of the following types of overhead conductor attachment devices:
- a) Thimble eye bolt. Within the Chugach service area a 5/8-inch eyebolt with 2" x 4" square washers installed through the structural stud is required for all gable or wall mount service risers. All hardware shall be hot-dipped galvanized steel.
 - b) Insulated secondary wire holder (house knob), lag screw type. Not approved for the Chugach service area.
 - c) Insulated secondary wire holder (house knob), pipe clamp type. Not approved for Chugach service area. Chugach will provide and install the clamp type service deadend when the conduit riser is extended twelve (12) inches above the top of the post.

The service conductor attachment device shall be installed within eighteen (18) inches of the service riser weatherhead. The overhead service conductor attachment device shall be located at a height sufficient for the Utility to maintain minimum service conductor clearances.

- 503.19 Overhead temporary construction service installations attached to posts shall meet the applicable grounding and bonding requirements of Section 304. At least one ground rod shall be installed on temporary construction service installations. The ground rod shall be placed no more than seventy-two (72) inches from the service disconnect device.

505 Underground Temporary Construction Service

- 505.1 All applicable requirements and specifications from other sections of this book apply to these installation guidelines and specifications.
- 505.2 Temporary service is used for the construction of a permanent service and is allowable for up to one (1) year. When temporary service is required for more than one (1) year, the customer must obtain written approval from the Utility's Engineering Division prior to the one (1) year expiration date. If temporary service is required for any purpose other than the construction of a new or upgraded permanent service, the temporary service entrance equipment shall comply with the pertinent requirements for permanent service.
- 505.3 Prior to installing temporary service equipment, the customer shall obtain approval from the Utility's Engineering Division for the precise location of the temporary service platform and meter socket. Under most circumstances, the customer-owned service platform shall be located within ten (10) feet of the Utility underground service facilities.
- 505.4 Meter panels used for the purpose of temporary construction service shall be exempt from the safety socket and test-block bypass requirement on single-phase and network services; a meter panel meeting the requirements of Section 601 may be provided.
- 505.5 Temporary construction service requiring three-phase power shall not be exempt from the safety socket and test-block bypass requirement; a meter panel with the safety socket feature and factory installed test-block/bypass facilities meeting the requirements of Section 602 shall be provided.
- 505.6 The customer shall provide a temporary service platform constructed of 2 x 6 dimensional lumber. The platform shall have a minimum length and width of three (3) feet. The upright post for mounting the meter socket shall have as a minimum, a 2 x 10 plank extending up from the platform base at least forty-eight (48) inches. The upright plank shall be of sufficient width to provide backing for the entire meter socket assembly. The upright plank shall be braced on two (2) sides with dimensional lumber, pipe, or conduit.
- 505.7 **The preferred mounting height for post-mounted meter panels is fifty (50) inches.** The maximum mounting height for post-mounted meter panels is sixty-five (65) inches. The minimum mounting height for post-mounted meter panels is forty-two (42) inches. Mounting height is measured from the centerline of the meter socket opening to the finished grade or standing surface immediately in front of the meter.
- 505.8 The service riser conduit shall be liquidtight flexible metal conduit with an inside diameter of two (2) inches, a maximum length of nine (9) feet, and shall include a bushing or ferrule on the open end.
- 505.9 Underground service riser conduits shall extend at least to the edge of the platform where the Utility will connect to it with corflo duct or electrical nonmetallic tubing. The Utility requires a twenty (20) foot coil of #2 AWG Aluminum Type USE or THHN jacketed conductor connected to the line side lugs of the meter main (200A maximum). The Utility will place the conductor in corflo and connect to the power source. All services 480V line-line or greater require thawing and trenching unless the temporary corflo protected service is located within a fenced, controlled access area or the conductor is placed in HDPE conduit. The Utility will not install corflo across roadways, driveways, or other locations, including easements, subject to vehicles or equipment traffic.
- 505.10 Underground temporary construction service installations shall meet the applicable grounding and bonding requirements of Section 304. At least one ground rod shall be installed on temporary service installations. The ground rod shall be placed no more than seventy-two (72) inches from the service disconnecting device. Within the Chugach service area a twenty (20) foot coil of #6 AWG bare solid copper grounding wire connected to the meter main is required (Chugach will connect to the ground rod at the power source when fed from underground equipment; for overhead sources the customer will install the ground rod).
- 505.11 For underground temporary construction services with load requirements above 200 amps, CT rated temporary services are permissible. Contact the Utility's Meter Shop for details.

SECTION 500 - INSTALLATION GUIDELINES & SPECIFICATIONS

505 Underground Temporary Construction Service

