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ELECTRIC SUBSTRUCTURES INSTALLATION GUIDE INFORMATION

SUBSTRUCTURES VOLUME HOLDERS:

The following information contains Liberty Utilities' Electric Substructures Installation Guide. The standards contained in the Substructures Volume are based on current engineering practice and design. Safety, ease of installation, routine operations and economy were all factors that were taken into consideration during their development. They represent Liberty Utilities' approved general methods for electric service installations for commercial and residential customers.

This book and files are periodically updated to provide fundamental designs that sensibly reduce costs without significant compromise to reliability, operability and no compromise to safety. The volume contains the requirements, specifications, and detail drawings necessary for a contractor/ developer / owner to install the proper underground electric facilities to establish a cost effective system.

Liberty Utilities makes frequent, small, but significant, changes that we hope makes working with Liberty Utilities much easier. Contact your local office to ensure you have the latest version.

With LU serving such a vast area, exceptions to the requirements contained in this Substructures Volume may be appropriate. They must be approved by the appropriate local LU Inspector.

Development of new standards, and revisions or corrections to existing standards are encouraged. Inquiries and proposals can be made by contacting:

Liberty Utilities
Regional Standards
933 Eloise Avenue
South Lake Tahoe, CA 96150

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ELECTRIC INSTALLATION GUIDE

PURPOSE:

This installation guide was prepared for the use of our customers as a safeguard for the installation of electric facilities. The information is presented by Liberty Utilities in our effort to supply uniform, satisfactory and safe service to our customers. It is necessary that the construction of new or remodeled installations conform to the provisions of city, and county ordinances, rules on file with or issued by the California Public Utilities Commission, and applicable rules of the state of California. In areas where there are no ordinances governing electric installations, structures and wiring should meet the latest requirements of the GO 95/128 and applicable California regulations.

Electric service will be established only after electric service entrance facilities are satisfactorily installed. Local or State ordinances require that permits and final inspection be obtained before LU can establish service.

APPLICATION FOR SERVICE:

It is important that the local LU office be provided as early as possible with accurate load information and date when the customer will require service so that all necessary arrangements for the service may be completed. Requests for service to commercial and industrial customers normally require additional lead time for engineering and planning. A lead time of at least 60 days is normally necessary for engineering and planning. Installations requiring special equipment / material may require six months or longer lead time.

For commercial, industrial, and apartment applications, the request for service should include one hard copy and one reproducible copy of the plot plan. The plot plan shall show preferred service and meter locations, and single line diagram of the electrical layout. Application for service must be obtained from the local LU office in which the service location is requested.

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When conditions are encountered during construction that require changes in the service arrangements, LU shall be consulted so that satisfactory alternative arrangements may be made.

Complete information on requirements for the extension of electric distribution facilities in the event such facilities are not presently available may be obtained upon request.

COMMERCIAL AND INDUSTRIAL SERVICE INFORMATION:

Prior to the manufacture of proposed Commercial/Industrial switchboards over 200 amps, two copies of the proposed switchboard drawings shall be submitted to LU for review and approval at the following address:

**Liberty Utilities
Electric Metering Department
P.O. Box 107
Tahoe Vista, CA 96148**

Refer to Section 8.0 of this Volume for specific details.

SERVICE CONNECTIONS AND SEALING:

Only authorized LU employees shall make the connection or disconnection of the LU electric service to the building or structure. **Seals placed by LU on meters and associated service equipment shall not be broken or tampered with.** Call LU if it is necessary to have the service disconnected or the meter removed because of remodeling or alterations.

CHANGE IN REQUIREMENTS:

The information contained in this package is subject to revision due to changes in governmental codes and ordinances or changes in LU standards. LU does not assume responsibility for keeping this package current. A Liberty Utility Design Administrator shall be consulted in the case of doubt on the applicability of any item.

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ATTENTION: CONTRACTORS, DEVELOPERS, HOMEOWNERS & ENGINEERS STOP!! "CALL BEFORE YOU DIG" !!

**Before you start any excavation work call Underground Service Alert,
(U.S.A.)**

You may want to start a large trenching job, dig a post hole, or a swimming pool, but do you want to cut off electricity, telephone, water, gas, TV, or other important underground facilities in the process? That could happen if you start digging before checking the location of underground facilities with U. S. A.

To avoid this costly inconvenience, or the possibility of a severe accident, call U.S.A., the toll-free notification center, at least 2 working days before you dig. When you call U.S.A. at 811 or 800-624-2444, you will reach a coordination center for all participating members. All the participating members that have facilities in your work area will be notified of where you intend to dig.

U.S.A. may be new to you so here is how it works!! Outline your proposed excavation area in white paint. If you are planning to dig in the State of California, call 811 or 800-624-2444, between the hours of 6AM to 7PM (Pacific Standard Time), Monday through Friday (excluding holidays), 2 working days before you plan to dig. A trained operator will answer your call and ask the information on page 8 of 8. You will next be given a ticket number so if you ever have any occasion to call U.S.A. or other utilities about this particular excavation you can refer to the ticket number for ease of identification.

PLEASE REMEMBER, YOUR LOCATION REQUEST IS GOOD FOR 14 DAYS ONLY.

Your excavation information will be transmitted to the participating organizations that may have underground facilities at that location. Each participating organization will, in accordance with their location policy, provide information about or locate and identify the location of its facilities by staking and or marking the horizontal paths on the surface in uniformity with the U.S.A. color code. These color codes have been adopted for use by all U.S.A. members.

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U.S.A. Color Codes

<u>COLOR</u>	<u>FACILITY</u>
RED	ELECTRIC STREET LIGHTING TRAFFIC SIGNALS
YELLOW	GAS OIL STEAM CHEMICAL
ORANGE	COMMUNICATION/CATV
BLUE	WATER
GREEN	SEWER STORM DRAIN
PURPLE	RECLAIMED WATER
PINK	TEMP. SURVEY MARKINGS
WHITE	PROPOSED EXCAVATION

Please try to preserve your location marks as long as possible to avoid remarks within the 14 day period.

After you call U.S.A., you should contact directly any non-participating underground organizations that serve your area. As in the past, U.S.A. does not provide location service for engineering design work. Please refer these requests to the individual agencies involved.

Emergencies during normal working hours of the center will be processed as promptly as possible. Emergencies after center closing hours should be called directly to the organizations whose facilities are involved. *If you experience a life threatening situation please call 911 or the local fire department.*

U.S.A. saves you time and money, reduces damages to underground facilities, promotes safety on your jobs, and helps you comply with the State of California occupational Safety and Health Standards for the construction industry.



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**"CALL BEFORE YOU DIG"
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Due to the tremendous success of the U.S.A. program, which began in 1975, U.S.A. has been able to progressively expand throughout Central and Northern California, and the entire States of Nevada and Hawaii.

If the U.S.A. program is to be totally successful, one call must reach all underground operators. This is where you come in!!!

EXCAVATORS:

If you are an excavator working in the States of California, call 800-624-2444, two (2) working days before you dig and let U.S.A. contact all participating members. This will save you valuable lost production time.

Remember, "**CALL BEFORE YOU DIG**" is the law. Let's all join together and help the U.S.A. make our communities a safer place to live and work in!!!

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USA NORTH 811 TICKET FORM



Whether you enter your ticket online or over the phone, here is the list of questions you will be required to answer.

Business Phone: _____ Fax: _____ Email Address: _____

Your Name: _____ Your Company Name (if applicable): _____

Type (Contractor, Homeowner, or USA North Member): _____

Company Address (include City/State/Zip Code): _____

What County is your work being done in: _____

Will any of your excavation work include Night Work or Weekend Work: _____

Start Date & Time (2 working day notice required): _____ Working For: _____

As required has your excavation site been pre-marked: _____

Pre-mark method used (What did you use to mark the site): _____

Do you have a permit for your work (if yes who issued that permit & what is the permit #): _____

Foreman Name: _____ Foreman Cell: _____

Does your excavation include Boring, if so what type: _____

What is the type/nature of work (augering, drilling, grading, trenching, ripping, etc and the reason why you are doing the work): _____

Will Explosives be used at the work site: _____ Do you intend to use vacuum equipment instead of hand digging to determine the exact location of our member's underground facilities: _____

Digsite Place (City or Community name): _____

Where is your work taking place (Address, intersection, side of street, etc. Every location must have a street and cross street. Without an address the location must include side of street & the distance and direction from the cross street. If your work covers an area make sure to include the distances and directions for that as well. More information is available in the USA North Excavation Manual for your state): _____

Will the excavation enter into the street or sidewalk Area: _____

The following information will be provided by USA North after you have completed your ticket:

Ticket#: _____ Date: _____ Expiration Date: _____ Update Date: _____

Tickets can be entered online 24/7 at www.usanorth811.org

- To enter **single address digging work**, click on the Single Address Ticket Entry Homeowners/Excavators button on our home page.
- To enter **all other types of digging work**, click on the E-Ticket Training Videos link and then follow the instructions.

Call 811 to submit your digging work over the phone

- 6 a.m. – 7 p.m. Mon-Fri excluding observed holidays (a list of observed holidays can be found at www.usanorth811.org)



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"CALL BEFORE YOU DIG" UNDERGROUND SERVICE ALERT

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