



MONTANA

New Service Guide

NorthWestern[®]
Energy
Delivering a Bright Future

New construction centers

If you're building a new home or performing any construction that requires a change to your existing electric or gas service, it's important you contact one of NorthWestern Energy's Construction Centers. Our helpful staff will work with you to initiate any construction project and will be available from 8 a.m. to 5 p.m. to answer questions. Please use the list below to contact the office nearest you.

Contacts

Contact us one of these three ways:

- Apply online at www.NorthWesternEnergy.com/Construction
- Call **1-83-FOR-BUILD** (1-833-672-8453), press or say 3, and zip code of where your project is located and your call be automatically be directed to an agent that can assist.
- Visit a **walk-in location** listed below:

Billings area

1944 Monad
Billings, MT 59102

Bozeman/Livingston area

121 East Griffin Drive
Bozeman, MT 59771

Butte area

400 Oxford St.
Butte, MT 59701

Great Falls area

1501 North River Road
Black Eagle, MT 59414

Havre area

164 - 21st Avenue W.
Havre, MT 59501

Helena area

1313 N. Last Chance Gulch
Helena, MT 59604

Kalispell area

890 N. Meridian Rd.
Kalispell, MT 59904

Lewistown area

1944 Monad
Billings, MT 59102

Missoula area

1903 S. Russell St.
Missoula, MT 59806

Customer contact center

Once your service is installed, NorthWestern Energy Customer Contact Center's friendly representatives can take care of your requests and answer any questions you might have about your account. Please give us a call, and we will be happy to assist you with most service-related requests, including:

- Connecting or disconnecting your service
- Reporting any problems with your service
- Updating account information
- Bill related inquiries
- Payment options
- Budget billing information
- Group billing
- Property owner/manager agreements
- Credit related inquiries

Customer Contact Center

Phone: (888) 467-2669

Electric and Gas Emergencies

Phone: (888) 467-2669

The Customer Contact Center is professionally staffed Monday through Friday during the hours of 7 a.m. through 6 p.m.

For Electric and Gas Emergencies, this number is staffed 24 hours a day, 7 days a week.

Contents

Customer Service Contacts	
New Construction Guidelines.....	2
Step 1 - Service Request.....	2
Step 2 - Estimate Preparation	2
Step 3 - Site Preparation	2-3
New Electric Construction Guidelines.....	4
Charges for Electric Service.....	4
Inspections and Permits.....	4
Electric Metering Standards.....	4-5
Temporary Electric Service	6-7
Permanent Residential Service.....	8
Work on Existing Utilities	9
New Natural Gas Construction Guidelines.....	10
Charges for Natural Gas Service.....	10
Inspection and Permits	10
Gas Metering Standards.....	10
Customer Buried Piping.....	11
Basic Guidelines for Appliance Installation.....	11-12
Mobile Homes.....	12
Guidelines for Customer Trenching	13
General.....	13
Electric.....	13
Gas	14
Backfilling.....	14
Trench Dimensions, Burial Depths, and Clearance.....	15
Guidelines for Electrical Equipment Clearances	16
Guidelines for Tree Planting.....	16
Rules of Thumb for Tree Planting.....	16
Rules of Thumb for Planting Shrubs and Bushes	16
Please Be Safe	17
Trimming Existing Trees.....	17
Call Before You Dig?	17
Want More Information?	17
New Service Checklist	18
Construction Application	19

New construction guidelines

At NorthWestern Energy, we're committed to providing you with the fastest, most convenient service possible when installing your new electric or gas service. We understand that new construction and major renovation projects require considerable up-front planning to ensure jobs run smoothly. Part of that planning includes coordinating with us so your new service can be connected in a timely manner.

We ask that you work with us through the construction process by following our electric and gas guidelines. These guidelines begin with a short overview explaining the steps required to efficiently move your service request from initiation to completion. Following this overview are separate electric and natural gas sections that provide you more detailed information on our guidelines and related governmental requirements.

 **Please review this brochure in its entirety.**

If you have additional questions after reading these guidelines, please call your local New Construction department (see inside front cover). These guidelines, and any updates, can be found on our Web site at www.northwesternenergy.com.

Step 1 - Service Request

To initiate your request for an electric or gas service, please review and complete the Construction Application form found on the last page in this guide. We require this information to initiate your request for service and to begin planning for installation. Your new service location must have a legal address. Contact your city or county surveyors or planning office to obtain a new address. Note, you are responsible for contacting and arranging for the installation of other utilities such as phone or cable TV.

For more expedient processing, Construction Applications should be submitted online at www.northwesternenergy.com. Alternatively, the hard copy application attached to the last page of the guide can be completed and returned by mail, fax, or in person at one of NorthWestern Energy's Customer Service Centers locations. The Customer Service Center locations and contact information are listed on the inside of the front cover of the guide. Once we have received the information requested on the application, we'll enter your information into our system, and your request will progress to step two.

Step 2 - Estimate Preparation

After receiving your application, we will prepare a cost estimate. If the construction site is not located near electric or gas distribution lines, the estimate will include the cost to extend distribution lines to your site. A NorthWestern Energy representative may need to meet with you on-site to gather additional information about your requirements. Once the estimate is complete, we will notify you of any costs you'll be required to pay. For an explanation of standard charges, please refer to "Charges for Utility Services" sections starting on pages 4 and 10. A discount for installing electric and gas services in the

same trench is also available.

Your first cost estimate is provided free of charge. Any requests for additional estimates within one year on the same project will incur a re-estimating fee. If you proceed with the project, any re-estimating fees paid will be credited against any applicable project costs.



A signed customer agreement and any costs paid in full must be received before NorthWestern Energy can proceed with the project. Also, in order to create your customer account, we will need to process personal information prior to activating your service. This information is only required if you proceed with construction and can be provided in person, or by contacting the appropriate Construction Desk.

Step 3 - Site Preparation

Before we can install service to your building, you're responsible for preparing the site as follows:

- Clear trees, brush, dirt piles, building materials, and other obstructions from the right-of-way and service/trench route.
- If necessary, obtain right-of-way easements. Notarized signatures on right-of-way agreements are required. We'll be happy to provide you with the necessary forms.
- According to state law, you must obtain an electrical permit if requesting an electric service. This permit will be either a state or local permit, depending on your local regulations. Please contact your New Construction department to see if additional permits or inspections are required in your area.
- The service route across your property must be backfilled and compacted within six inches of its final grade (ground level). Note: Excessive settlement due to lack of proper compacting could cause damage to utility service lines.
- Identify your property pins and mark property boundary with stakes or flags.
- The building's foundation must be completed or the site must show evidence of construction in progress.
- For electric services, the meter base or meter pedestal must be installed, and in many areas, inspected by the appropriate government agency. On multi-plexes with multi-socket (ganged) meter bases, individual sockets and outside and inside panels must be tagged with durable metal placards indicating the apartment or unit number served by the meter. Electric and gas meters shall be located on a building wall as close as possible to corner closest to the existing NorthWestern Energy utility services unless otherwise approved by NorthWestern Energy.
- Your gas or electric meters must be protected from snow and ice falling from a roof, drain water, or other causes of damage. Supplemental protection may be required if the

New construction guidelines (cont.)

location selected does not offer adequate protection.

- Electric and gas meters cannot be installed under or inside of any decks or porches.
- If the service route will cross under concrete, 3-inch PVC, Schedule 40 conduit for the service will be required. (You can save considerable expense by having the conduit installed before the concrete is poured.)
- Identify existing driveways, septic systems, drain fields, sprinkler systems, and other underground facilities that may impact our service route.
- Identify any future building plans such as decks, patios, landscaping, or fencing that might interfere with the location of your electric or gas installation.

If requesting service for a commercial project, a detailed site plan is required, including electric and gas load information.

Physically locate and mark on your site any underground facilities you own prior to service installation. (NorthWestern Energy is not responsible for damage to any unmarked facilities.)

After the foundation is backfilled and the service route is to grade (final ground level), please call your local project supervisor or New Construction department to schedule installation of service.

⚠ Calling at this time is very important, because your service installation cannot be scheduled until you or your contractor have notified us that your construction site is ready.



New electric construction guidelines

The following guidelines are intended to provide a general overview of the requirements for a new electric service. Because each construction project is different, we encourage you to call us with any questions or concerns you may have regarding your project. Please contact the New Construction department in the division located nearest you, and we'll be happy to help.

Charges for Electric Service

To all customers requesting a new electric service, NorthWestern Energy will provide an electric line extension from the distribution electric line and transformer installation free of charge to the customer, to the extent that the cost of the line extension does not exceed the costs allowance, as defined in Montana Public Service Commission Electric Tariff, Rule #6-1. Any request for a new electric service includes a transformer and installation if required, and the free installation of a standard overhead service not exceeding 150 feet in length, or a standard underground service in normal trenching conditions, not exceeding 100 feet in length. If your service is longer than the lengths mentioned above, you will be charged for the construction cost of the additional footage. We will also provide a meter free of charge. You are required to furnish all right-of-ways necessary to install the electric distribution line extension and service.

The standard underground line extension and service does not include additional construction work such as boring under roads or streets, trenching in frozen or rocky ground, restoring asphalt or concrete surfaces, and any other unusual construction obstacles. You will be charged for additional construction work that is not included in the standard line extension and service. If this additional work is required after the initial payment has been made, the additional charges must be paid prior to the meter being set.

Should you be responsible for paying construction costs for distribution lines, a line extension allowance will be credited against the construction costs, excluding charges for frozen ground excavation and landscape restoration. For residential customers, that allowance is \$500.00. For commercial and irrigation customers, that allowance is based on your annual projected consumption multiplied by \$.04/kWh. If any construction costs remain after the allowance is applied, you will be responsible for paying the balance before your service can be installed.

Any payments for costs related to the installation of the service are non-refundable. Payments for costs related to the installation of electric distribution lines may be paid as an advance. For single family residential electric customers advance payments, or a portion of them, may be refunded within a ten-year period, or five years for all other electric customers, if any additional customers tap the distribution line to which you contributed an advance payment, as described in the Montana Public Service Commission Electric Tariff, Rule #6-2.

In addition to costs associated with installation, you are responsible for any private roadway, landscape, or vegetation restoration after the service is installed. In underground installations, we will restore the service route to existing grade (ground level).

Inspections and Permits

According to Montana law, you must obtain and provide our New Construction office a copy of an electrical permit for all projects involving electrical wiring. Contact your local government or New Construction department to determine who issues permits in your area. Many local governments also require inspection of customer wiring before NorthWestern Energy can energize your service.

All new or remodeled installations must conform to applicable provisions of the National Electric Code (NEC), National Electrical Safety Code (NESC), State of Montana rules and regulations, city and county ordinances and codes, and rules on file with or issued by the Montana Public Service Commission.

Electric Metering Standards

NorthWestern Energy reserves the right to specify the location of our meters. All meters are to be located outdoors on the corner of the building closest to the transformer serving your property. On new construction, electric meter locations must be within 10 feet of the gas meter if NorthWestern Energy will be providing both electric and gas service. Please consult with the New Construction department regarding location of meters for service conversions.

Electric meters must have a minimum working space of 30 inches wide across the front of the meter base and a 36 inch clear zone in front of the meter. The electric meter height must be a minimum of five feet above the finished grade but no more than 6 feet, and located a minimum of 6 inches from the edge of the building. Mobile home pedestals must be a minimum of 42 inches above the finished grade and located within 30 feet of the home. Please see the "Meter Set Location" diagram shown on page 5 for an illustration of these requirements.

On all new or remodeled multiple-occupancy buildings, each building or premise must be individually metered. Any exceptions require the approval of NorthWestern Energy prior to the start of construction. Each building or premise must have its address and unit numbers permanently attached to the unit doors, the meter bases, and the individual apartment/unit breaker boxes prior to the installation of the meters. Permanent meter bases must be properly secured to the building.

New electric construction guidelines (cont.)

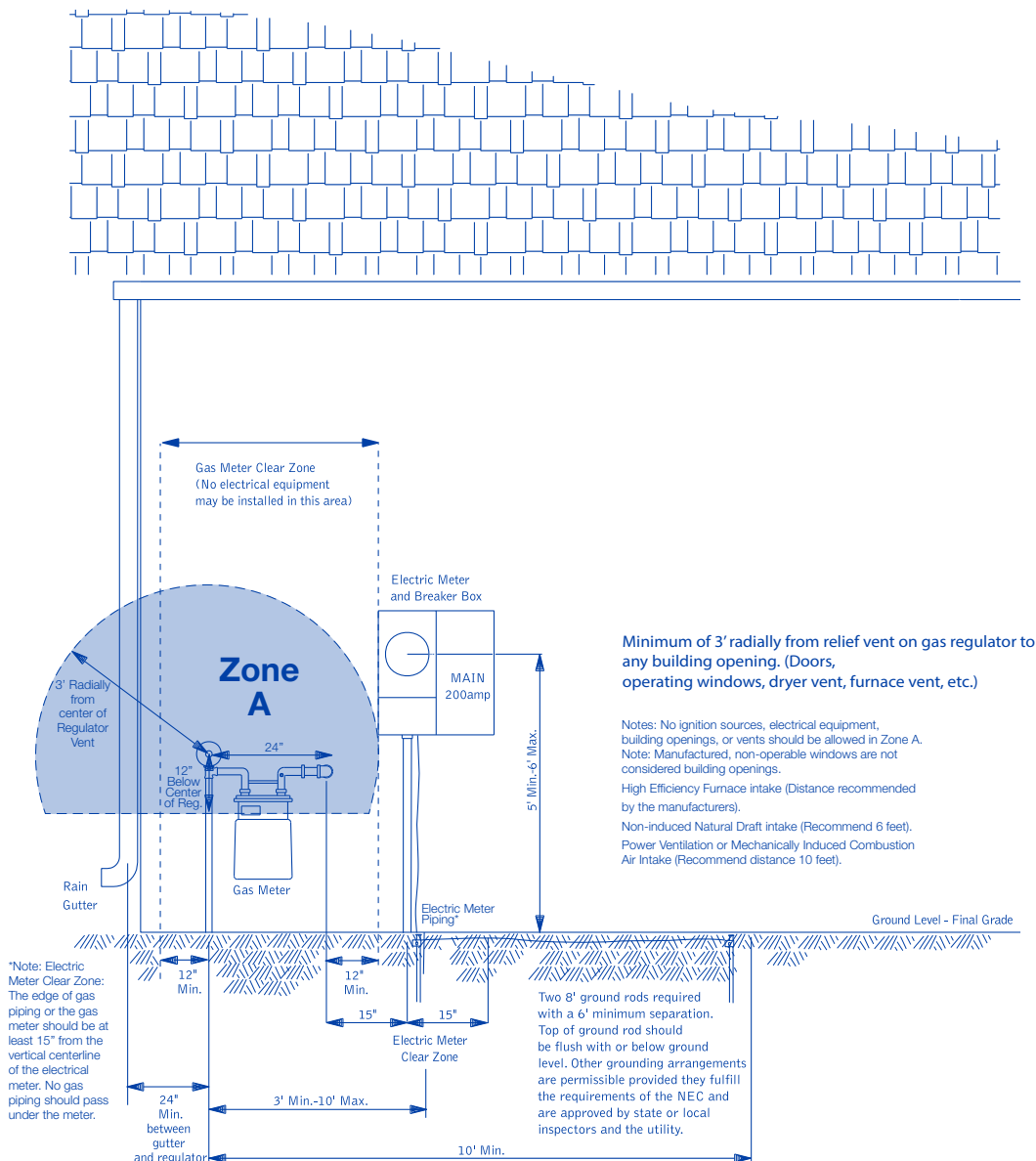
⚠ All residential meter bases must be bus bar type and have meter sockets rated a minimum of 200 amps for underground service or 100 amps for overhead service, and include a main disconnect circuit breaker outside.

Meter base lugs must be able to accept a minimum of 4/0 aluminum wire. All meter bases must be approved by NorthWestern Energy. Your local electrical supply companies can provide you with approved meter bases.

All residential and non-residential metering must meet the following standards:

- 200 amp minimum meter socket rating with a bus bar type meter base. Exceptions require approval by NorthWestern Energy.
- Services between 0-200 amps typically utilize self-contained metering.
- 400 amp (320 amp continuous) self-contained meter installations are also available. A bus bar and main disconnect circuit breaker outside is also required.
- Services greater than 400 amps (320 amps continuous) typically utilize current transformer (CT) metering.

Meter Set Location - Gas and Electric



New electric construction guidelines (cont.)

Temporary Electric Service

Where feasible, NorthWestern Energy offers several temporary service options for new construction sites for a fee, contact your New Construction department for current prices. If you require temporary construction power within a few days, we recommend one of the following:

Express Temporary (Residential only) — In underground distribution areas, we will provide an express temporary service at the padmount transformer or secondary can. The fee covers the installation of GFI breakers, plug-ins, and up to four months of electric service. This is a flat rate, non-metered service providing both 120v and 240v power. Upon installation of permanent service, the express temporary service will be removed.

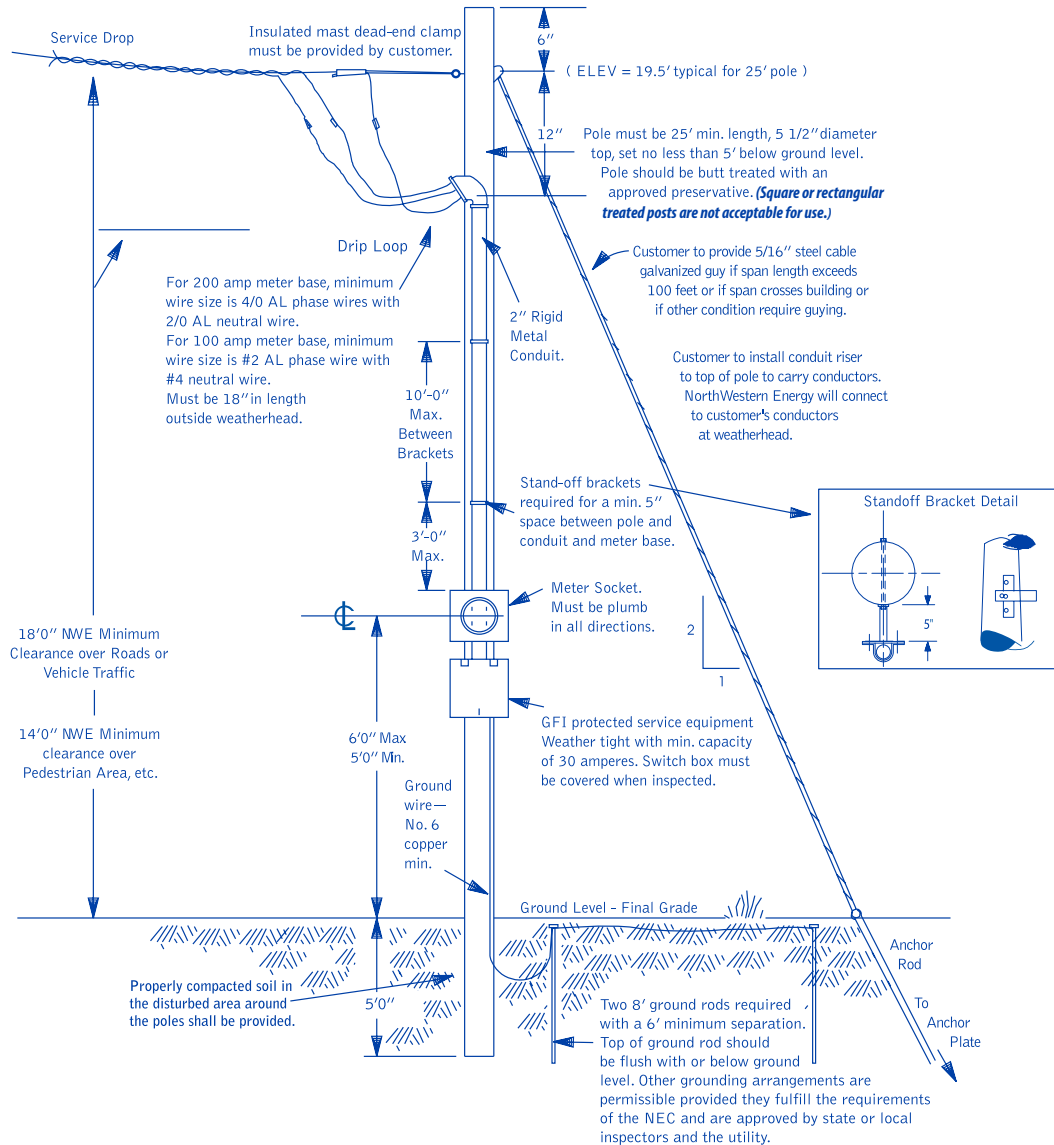
Any modification to the express temporary by the customer is prohibited and will be subject to fines and removal.

Standard Temporary — In overhead or underground distribution areas, NorthWestern Energy can connect a metered temporary service.

In overhead distribution areas, if you install an approved temporary service pole and associated hardware within 100 feet of an overhead transformer, we can install a meter and connect service. (The diagram on page 6 provides a description of, and requirements for, the temporary service pole and associated hardware.) A NorthWestern Energy Representative must approve the assembly, compaction and installation of the pole.

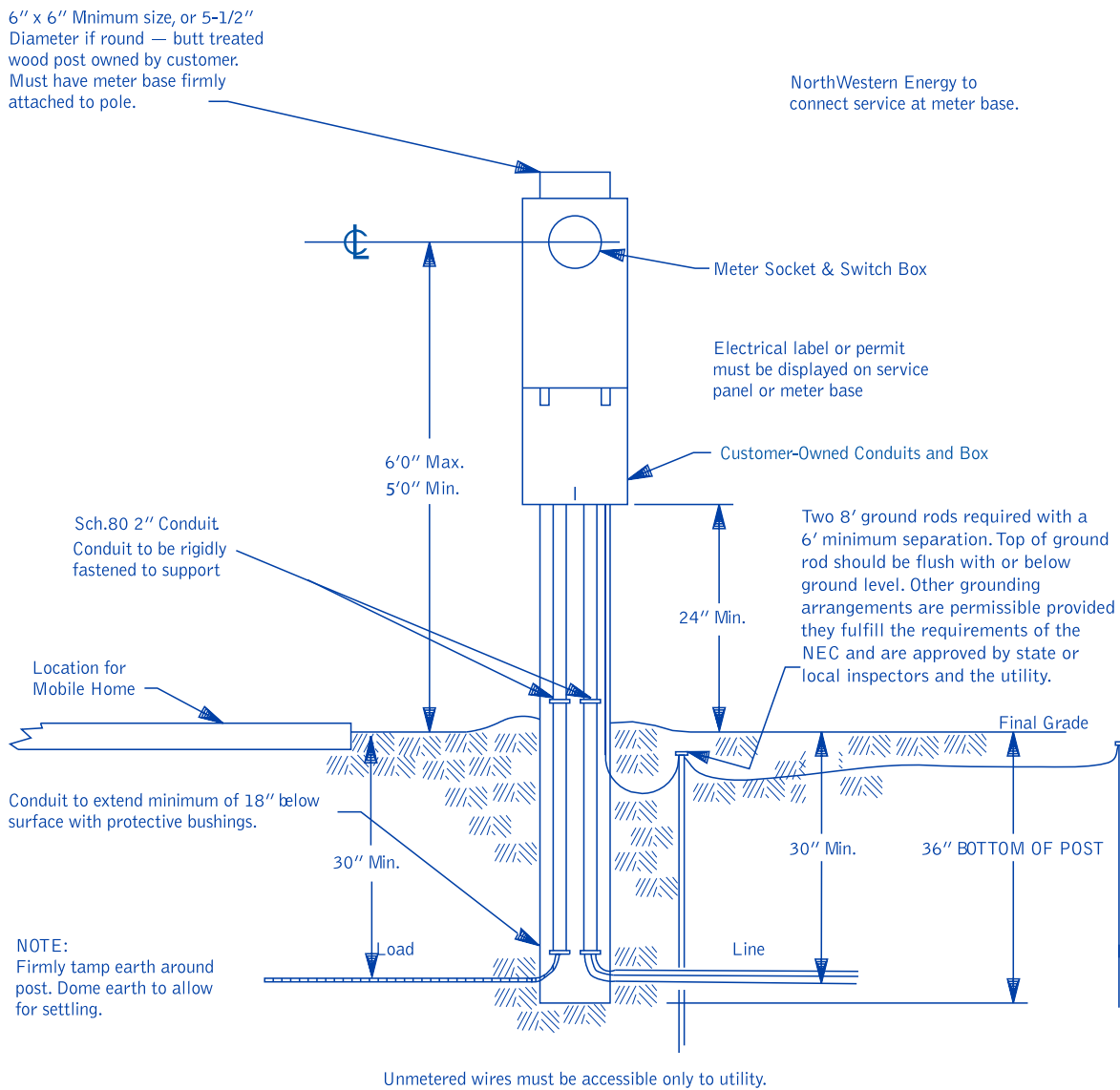
In underground distribution areas, if you install a temporary meter pedestal within five feet of a padmount ground transformer or secondary can, we can install a meter and connect service. The diagram above provides a description of, and requirements for, the temporary meter pedestal. If metered temporary installation is required when ground is frozen, it will be the requesters responsibility to thaw the ground.

Overhead Temporary or Permanent Service Pole Installation



New electric construction guidelines (cont.)

Underground Temporary or Permanent Post-Mount Installation



Early Permanent - If your schedule allows more time between your service request and installation deadline, you may want to consider an early permanent service. It generally takes several weeks to install, but it will save you the expense of having a temporary service installed and later removed.

The early permanent option only is available for underground service. It requires the completion of your foundation, and allows an underground service to be installed prior to construction or completion of your building. The meter pedestal (for mobile homes) or meter base must be installed at its final location and comply with the electric meter specifications outlined in the

previous section. The meter base must be mounted on posts or 2" x 12" solid boards attached to the building's foundation. For a diagram of the mounting requirements, please see the "Underground Service Installation" diagram on page 8.

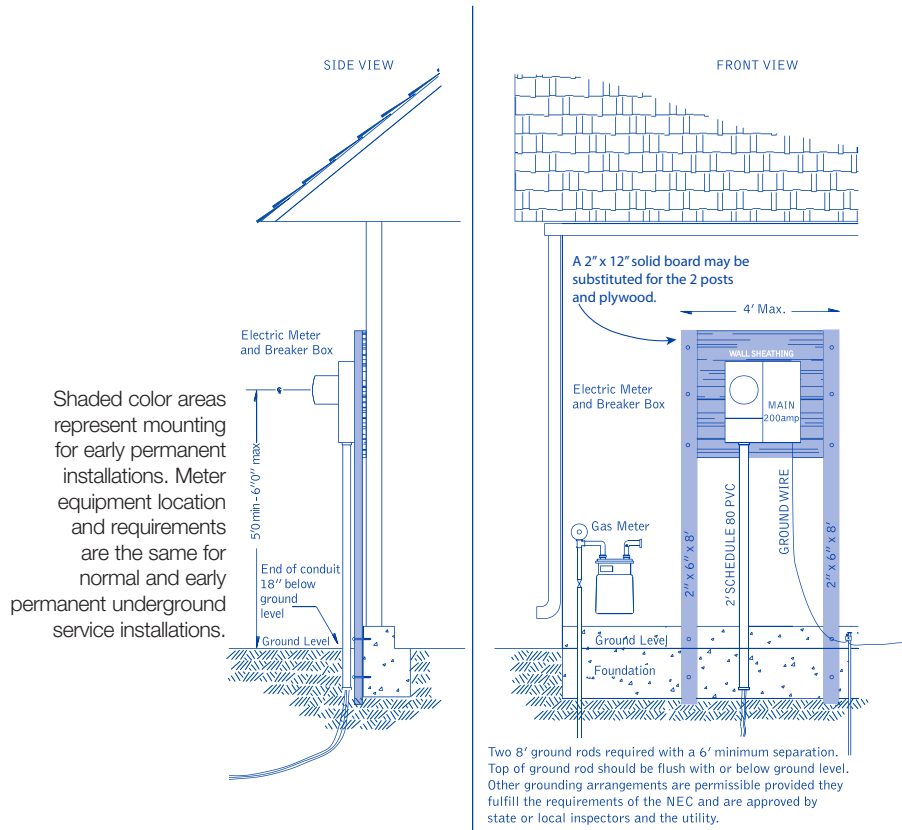
Regardless of which temporary service option you choose, please be safe. Montana law requires you to locate all utilities on your dig site before you begin digging for your temporary service pole or meter pedestal. You can have utilities located free of charge by calling the National 811 "Call Before You Dig" number. You must call at least two working days before you plan to dig.

New electric construction guidelines (cont.)

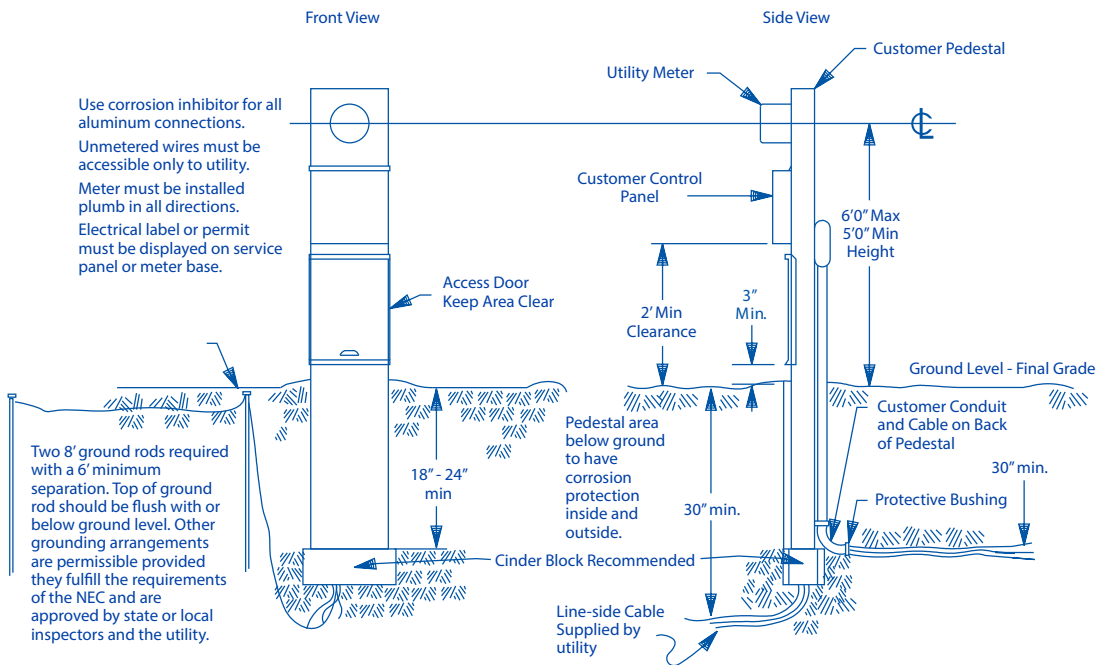
Permanent Residential Services

To aid in preparing for the installation of your electric service, this section provides specifications on the three most common service types for residential services. If you require more detailed specifications, or information on other service types, please contact the New Construction department.

Underground Service Installation

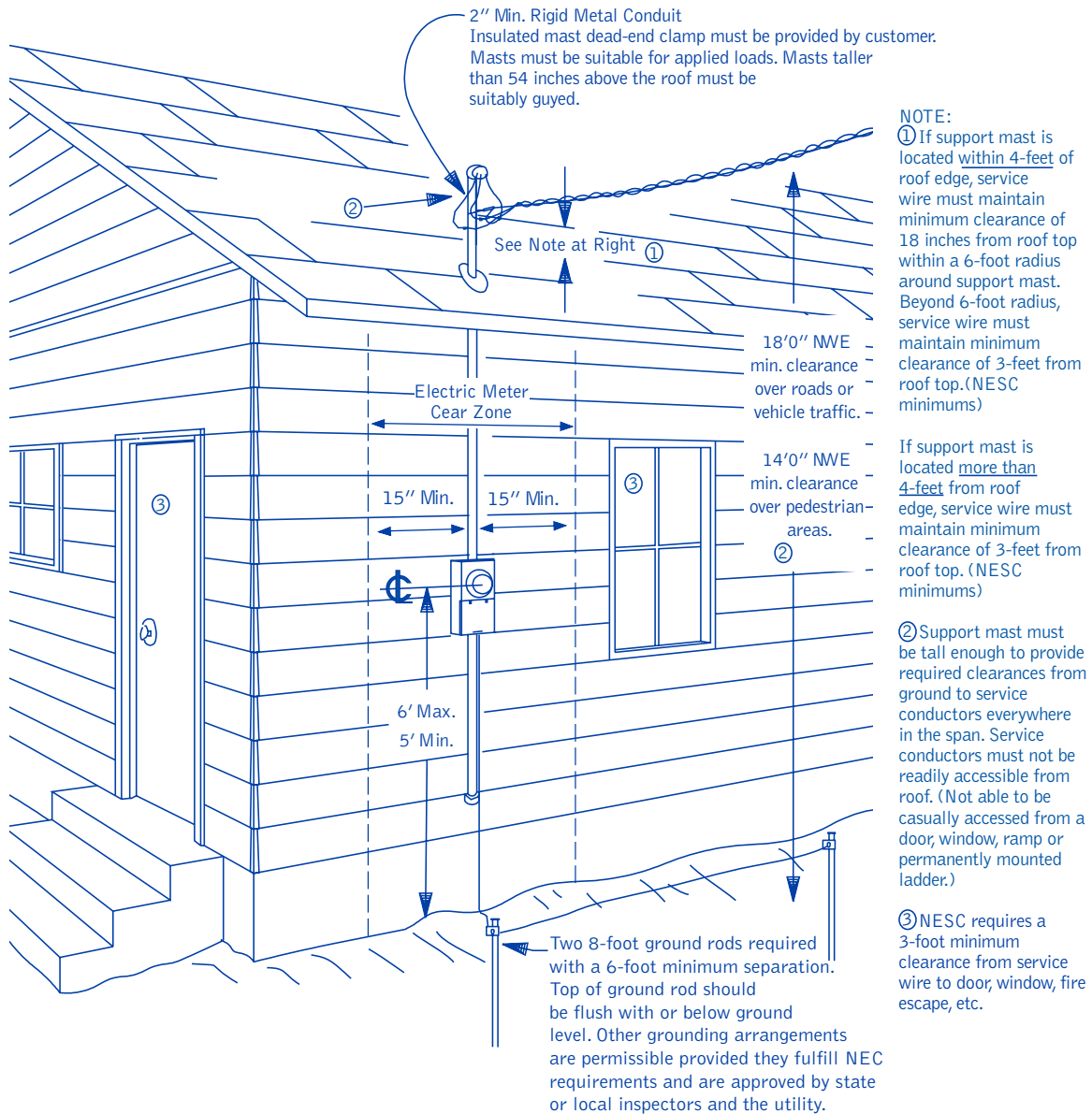


Underground Service - Pedestal Installation



New electric construction guidelines (cont.)

Overhead Service Installation



Work on Existing Utilities

There is a charge for conversion of a residential overhead service to an underground service. This charge does not include additional construction work such as boring under roads or streets, trenching in frozen or rocky ground, restoring asphalt or concrete surfaces, or any other unusual construction obstacles. The charge will be based on the estimated project cost.

If you require relocation work to accommodate new construction on your property, the relocation charge will be based on the estimated project cost. You are responsible for any landscape or vegetation restoration.

New natural gas construction guidelines

Natural Gas Construction Guidelines

These guidelines are intended to provide a general overview of the requirements for a new gas service. Because each construction project is different, we encourage you to call us with any questions or concerns you may have regarding your project. Please contact the New Construction department in the division located nearest you, and we'll be happy to help.

Charges for Natural Gas Service

To all customers requesting a new gas service, NorthWestern Energy will provide a natural gas line extension of the distribution main pipeline free of charge to the customer, to the extent that the cost of the line extension does not exceed the allowances, as defined in Montana Public Service Commission Gas Tariff, Rule #6-1. We will provide a meter free of charge, but you will be responsible for the cost of the service line connecting your meter to the distribution main pipeline. You are required to furnish all right-of-ways necessary to install the gas distribution line extension and service.

The standard gas extension and service does not include additional construction work such as boring under roads or streets, trenching in frozen or rocky ground, restoring asphalt or concrete surfaces, and any other unusual construction obstacles. You will be charged for additional construction work that is not included in the standard installation. If this additional work is required after payment has been made, the additional charges must be paid prior to the meter being set.

Please contact your local New Construction department to request a cost estimate for your gas service.

Any payments for costs related to the installation of the service are non-refundable. Payments for costs related to the installation of gas distribution lines may be paid as an advance. Advance payments, or a portion of them, may be refunded within a five-year period, if any additional customers tap the distribution line to which you contributed an advance payment, as described in the Montana Public Service Commission Gas Tariff, Rule #6-2.

In addition to costs associated with the service installation, you're responsible for any private roadway, landscape or vegetation restoration after the service has been installed. We will restore the service route to existing grade (ground level).

Inspection and Permits

All natural gas piping systems must be pressure tested prior to use. The contractor or property owner is responsible for establishing the pressure test. The standard test requires

the system be subjected to 10-20 pounds of air pressure, depending on local requirements (displayed on a 30-psi gauge) for at least 15 minutes. This test must be witnessed by a local inspector or a NorthWestern Energy representative. During the test, be sure to disconnect all appliances and cap all shut-off valves to each appliance.

When a meter bar is provided with the natural gas riser, your contractor must connect the gas piping directly to the meter bar. The system can then be pressure tested through the 1/4 inch tap on the meter bar. The meter bar must be level after piping is connected.

You may be required to obtain a permit to have your appliances and piping inspected before NorthWestern Energy can set a meter and turn on gas. Please contact your local New Construction department for information about permits and inspections required in your area. All commercial customers require a state or local permit and inspection.

After testing, permits, and inspections have been completed, contact us for installation of the gas meter.

Gas Metering Standards

NorthWestern Energy reserves the right to specify the location of our meters. All meters are to be located outside. On new construction, gas meter locations must be within 10 feet of the electric meter if we will be providing both electric and gas service. Please consult with the New Construction department regarding location of meters for service conversions. NorthWestern Energy requires a minimum 4 foot clear zone in front of the gas meter. **Please see the "Meter Set Location" diagram on page 5 for an illustration of these requirements.** Be sure the meter and associated equipment are suitably protected from falling ice, snow, or water.



New natural gas construction guidelines (cont.)

On all new or remodeled multiple-occupancy buildings, each building or premise must be individually metered. Any exceptions require the approval of NorthWestern Energy prior to the start of construction. Where multiple meters are to be installed, the piping for each unit or premise must have its address and unit numbers permanently attached to the piping at the meter location prior to installation of the meters.

Customer Buried Piping

NorthWestern Energy does not maintain any of the customer's piping, which is downstream of the meter. It is the customer's responsibility to inspect and maintain this piping, including buried lines. If buried piping is not maintained, it may be subject to the potential hazards of corrosion and leaks. If this piping is metallic, it should be periodically inspected for corrosion and promptly repaired if any unsafe condition is discovered. When excavating near buried gas piping, the piping should be located in advance, and the excavation should be done by hand. You may contact Northwestern Energy for advice or assistance with your maintenance.

Basic Guidelines for Appliance Installation

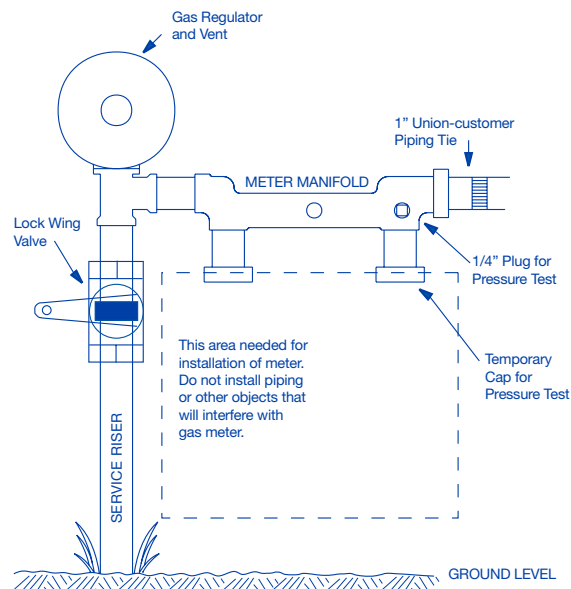
Because of the number of different configurations possible under state and national codes, the following sections on Piping, Venting, and Combustion Air provide only general requirements. For detailed and complete appliance installation information, please refer to the documentation that came with your appliances as well as the International Fuel Gas Code. If you have additional questions, please contact a local plumbing and heating contractor. You also may contact your local New Construction department and ask to speak with the gas supervisor.

Gas Piping

Piping must be black iron or approved corrugated stainless steel tubing. For public safety, all pipe must be properly installed and supported. The size of the pipe chosen should accommodate the total gas load. Exterior piping must be a minimum 1 inch diameter pipe (NWE requirement) to the first building attachment. All above-ground pipe installed outside must be a minimum of six inches above grade.

Each appliance must have its own dripleg, American Gas Association approved shut-off valve and union. This union must be placed between the shut-off valve and appliance. The shut-off valve must be readily accessible and should be as near to the appliance as possible (no more than 36 inches away).

Meter Bar Installation



Venting

Here are some general venting guidelines:

- Standard open-combustion gas appliances shall be vented with double-wall type B venting.
- Venting must maintain proper clearance from all combustibles. Type B vents require 1-inch clearance. Type C vents require six inches of clearance.
- Appliances may be vented into masonry chimneys if they meet code requirements.
- Wood or oil appliances cannot be vented in the same vent as natural gas appliances.
- Most open-combustion gas appliance vent connectors require a minimum 1/4-inch rise per foot. Vent systems must be properly secured with a listed vent cap installed.
- Because high-efficiency appliances require special venting, please refer to the manufacturer's instructions that came with the appliance.

Combustion Air

All open-combustion appliances require air for safe operation. Combustion air normally should be brought into the appliance location from outside the building. Please consult the manufacturer's installation instructions or the International Fuel Gas Code for combustion air requirements.

New natural gas construction guidelines (cont.)

Other Considerations

Please verify that all your appliance installations meet applicable codes regarding fire walls, fire stops, and ductwork. Other codes that pertain to the location and accessibility of your gas appliances include:

- Central heating equipment and water heaters cannot be installed in a bedroom or bathroom, or in any room accessed from a bedroom or bathroom.
- The bottom of a gas appliance located in a garage must be kept at least 18 inches above a garage floor.
- The control side of an appliance must have at least 30 inches of clear space.
- A dedicated electrical circuit, with a fused switch located on or adjacent to the appliance, is required for central heating equipment.
- Appropriate clearances from combustibles must be maintained as defined by manufacturer's instructions or applicable codes.

Mobile Homes

For reasons of public safety, we encourage you to have the mobile home on site before our gas service will be installed. The mobile home must be properly elevated on concrete blocks before gas will be turned on.

All gas appliances must be approved for mobile home use. If gas appliances are being converted from propane to natural gas, all pilot and burner orifices of proper size for natural gas combustion must be supplied and installed by the customer. A pressure test also is required at this time, as described in the Inspections and Permits section on page 10.

The customer must provide a kink-proof flexible connector from the mobile home piping to the meter, not exceeding 36 inches in length. The minimum diameter of the pipe stubbed out from a mobile home is 3/4 inch.

This section is intended to give you a general overview of the appropriate guidelines for digging and backfilling trenches associated with the installation of electric, gas and communications utilities.



**Know what's below.
Tap, Click, or Call
811 Before you dig.**

Guidelines for customer trenching

General

- Customers requesting underground installation, a re-route, or conversion of natural gas and/or electric distribution facilities must contact the New Construction department in the Division in which the work is to be performed. A NorthWestern Energy project supervisor will work with the customer to design, specify, and schedule each project.
- The customer, or customer's contractor can provide excavations for the installation of natural gas and electric distribution facilities, however, utility requirements and Federal regulations can limit the activity. Please work closely with your company representative if you are considering customer provided trenching.
- NorthWestern Energy will provide credit towards the cost of providing service to the customer who provides the excavation and backfill for natural gas and/or electric distribution systems or services. The amount of trench credit is dependent upon digging conditions, but generally will be \$1/ft. for clay, sands, gravel, and moderately rocky soils.
- The excavation route will be determined and staked by the NorthWestern Energy project supervisor. Changes in routing must be approved by the project supervisor prior to excavation.
- The customer is responsible for securing all necessary excavation permits including, but not limited to Soil Conservation, Corps of Engineers, City, County, and State Department of Transportation, and public and private easements. Permits and easements will be assigned to NorthWestern Energy.
- The customer is responsible for obtaining locations for all existing underground facilities and accepts the responsibility for any and all damages associated with the excavation and backfill.
- NorthWestern Energy natural gas and electric facilities may be installed in the same trench; however, a minimum of 12 inches of vertical or horizontal separation must be maintained.
- NorthWestern Energy has joint-use agreements with many telecommunication companies, and phone or cable TV conductors usually are allowed in the same trench. Other facilities (such as water and sewer lines) are not allowed in the trench without permission from NorthWestern Energy. The customer is responsible for scheduling joint-use installations.
- The customer is responsible for determining finished grade and providing excavations that assure the facilities will be installed at the proper depth after finished grade is established.
- For backhoe excavations, spoils must be placed on one side of the trench, minimum 2 feet away from trench to allow for access to install the cables and/or pipe, and will meet or exceed all OSHA requirements.

- The NorthWestern Energy project supervisor will inspect the excavation prior to installation of facilities and must be notified at least 4 days in advance of the open ditch.
- The customer is responsible for providing suitable bedding for the installed facilities. The bottom of the trench shall have a smooth grade and be free of rocks, stones or gravel in excess of 1 inch. If this is not possible, a 2 inch thick bed of sand or clean soil shall be placed in the bottom of the trench. Backfill must not contain any sharp or foreign objects, including frozen chunks of ground. Additionally, backfill within 4 inches of any pipe or cable must be free of materials which could damage the pipe or cable. Backfill must be adequately compacted. Backfill within 6 inches of cables or other utilities must be hand compacted; otherwise mechanical compaction is allowed.
- The customer is responsible for surface restoration and trench compaction, including roadbeds, as required by the landowner, responsible engineer, or government agency.
- The excavation must be backfilled (if energized or pressurized) or barricaded upon completion of the installation of NorthWestern Energy facilities. (See special requirements in the gas section for backfilling pressure gas lines).

Electric

- Excavations for electric facilities operating at 600 volts or less (services) must be dug to provide a minimum of 24 inches cover and a maximum of 30 inches cover below final finished grade.
- Excavations for electric facilities operating at voltages greater than 600 volts (primary) must be dug to provide a minimum of 30 inches cover and a maximum of 48 inches cover below final finished grade.
- Excavations for services must terminate at the service location and 5 feet from the source pole, transformer, existing conduit stub, or secondary terminal box.
- Excavations for services and primary must follow the routing as approved and/or staked by the NorthWestern Energy project supervisor.
- At the request of the NorthWestern Energy project supervisor, the commercial customer will provide a conduit system in the trench to accommodate the conductor(s). The supervisor will specify the type and size of conduits to be installed. All conduits must be either gray or red. Conduit runs must be continuous, and a maximum of four 90 degree turns are allowed. Any elbow must have a minimum radius of 24 inches.

Guidelines for customer trenching (cont.)

Gas

- Excavations for natural gas services must be dug to provide a minimum of 18 inches cover and a maximum of 30 inches cover below final finished grade.
- Excavations for natural gas mains must be dug to provide a minimum of 30 inches cover and a maximum of 36 inches cover below final finished grade.
- For plastic pipe installations, the customer must furnish bedding for the pipe made up of rounded material less than 1/2 inch diameter, or sand.
- Excavations for natural gas services must terminate at the meter location and 5 feet from the source main or existing stub.
- Excavations for natural gas services and mains must follow the routing as approved and/or staked by the NorthWestern Energy project supervisor.

Special Requirements for Gas Installations

On natural gas installations, exposing a gas main with the purpose of performing operations or maintenance, installing a gas line for replacement, or backfilling an existing gas line or new gas line that has been pressurized is a covered task under the Department of Transportation (DOT) Operator Qualification requirements. These above-listed tasks are required to be monitored by an individual who has been qualified for these tasks under the guidelines set forth by the DOT. NorthWestern Energy gas personnel have been certified for the above-listed tasks.

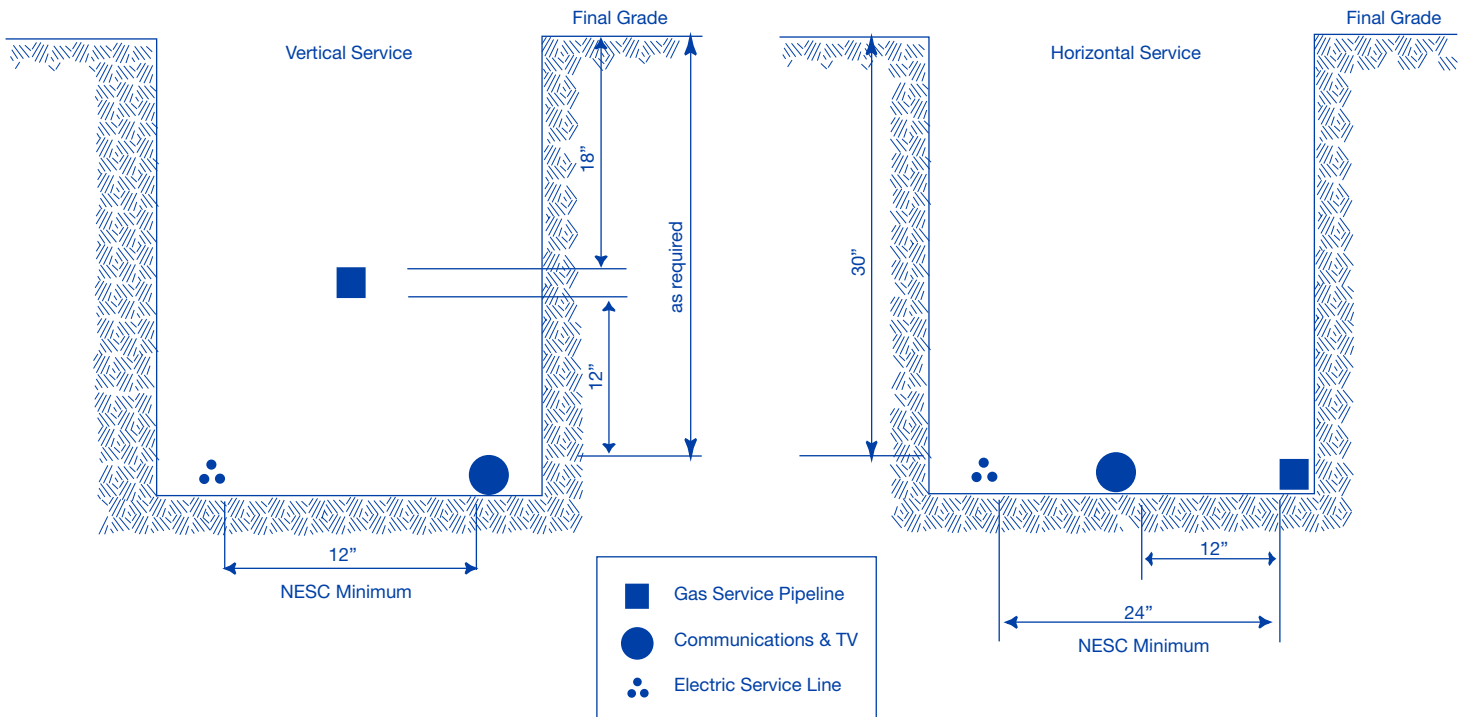
Backfilling

- If the customer is present while our gas personnel are installing the gas service, we will monitor the backfilling of the gas line for the customer.
- If the customer cannot be present, NorthWestern Energy can backfill the trench for the customer; however, the trenching credits will be reduced by 50%.
- If the customer cannot be available during the installation and the customer does not want NorthWestern Energy to backfill the trench, we can make an additional site visit at the customer's expense to tap the main and pressurize the gas line. NorthWestern Energy project supervisor will determine the additional costs associated with the additional site visit.
- NorthWestern Energy will allow other qualified personnel to monitor the backfilling of the trench; however, the qualified person must submit to us their Operator Qualification certification along with certification date and who certified the individual prior to construction. The certification must come from an industry-recognized program that is acceptable to NorthWestern Energy.



Guidelines for customer trenching (cont.)

Trench Excavation - Deliberate Separation of Utilities (Services Only)



Trench Dimensions, Burial Depths, and Clearances:

Normally, the trench width will vary between 12 and 14 inches, while trench depth will vary from 30 to 48 inches. The following minimum burial (cover) depths apply in all cases, unless local jurisdictions require greater depths:

- Gas Main Pipeline and Appurtenances: 30" (DOT 192.327(b))
- Gas Service Pipeline and Appurtenances: 18" (DOT 192.361(a))
- Electric Primary Cable (601 to 50,000V): 30" (NESC Table 352-1)
- Electric Secondary Cable (0 to 600V): 24" (NESC Table 352-1)
- Communications Cable: 24" (NESC Table 354C)

Required Separation Clearances between utilities are as follows:

- Any Gas to Any Electric: 12" (NESC 354A2)
- Any Gas to Any Communications: 12" (NESC 354A2)
- Any Electric to Other Electric or Communications: 12" (NorthWestern Energy)

Exception: If NESC Rule 353C & 354 "Random Lay" requirements are met, then no deliberate separation is required.

These burial depths and clearances apply surface-to-surface between pipes, cables, etc., and all associated appurtenances. All depths are from final grade.

⚠ Note that to meet the minimum cover requirements, the trench must be deeper than the minimums specified to accommodate the diameter of the wire or pipe at the bottom of the trench.

Guidelines for electrical equipment clearances

It is important to consider placement of obstructions around pad mounted transformers, poles and any other electrical equipment. NorthWestern Energy has specific guidelines and requirements for clearances around our poles and electrical equipment.

In order to provide safe working space for maintenance, repair and replacement of equipment the following clearances between fences, shrubs, structures, and other obstructions and the utility's electrical equipment are necessary and strictly enforced. If any obstructions are in violation of these clearances they will be removed or corrected at the property owner's expense.

Please keep fences, shrubs, structures and other obstructions

10 feet away from the doors and any combustible walls or surfaces and 4 feet away from the other sides of electrical equipment.

Obstructions will cause delay when restoring service and may be damaged or removed during service restoration or maintenance. Please contact your NorthWestern Energy Project Supervisor for more information.

By following these simple clearance requirements you can protect your property from being damaged or removed and it will help to ensure reliable electric service and quick restoration of power.

Guidelines for tree planting

NorthWestern Energy is particularly interested in where and how trees are planted because a large percentage of all power outages are tree related. Outages can occur when branches contact power lines, tree limbs sever power lines, or when uprooted trees pull down lines and poles.

Furthermore, tree branches growing into power lines can be extremely dangerous. The amateur tree trimmer, or a child, can be electrocuted when a branch touches a power line and runs to ground across the branch and down the tree trunk.

Utilities (and their customers) pay millions of dollars every year to have trees trimmed to avoid the danger of limbs growing into power lines. By following these simple guidelines for tree planting, you can protect your tree from unnecessary trimming and help to ensure reliable electric service.

Rules of Thumb for Tree Planting

Trees whose mature height does not exceed 15 feet fit comfortably under electric lines, and are not likely to need trimming for public safety and electric reliability reasons. The following list offers more specific guidelines for tree planting.

- Trees with mature heights of no more than 15 feet can be planted under power lines.
- Trees with mature heights of between 15 to 60 feet should be planted at least 15 to 20 feet from power lines.
- Trees with mature heights greater than 60 feet should be planted at least 35 feet from power lines.

These guidelines are for planting near distribution power lines. If your home will have an overhead electric service, you should avoid planting any tree within 10 feet of the expected service route.

Rules of Thumb for Planting Shrubs, Bushes and Equipment Clearances

Although most shrubs and bushes do not grow tall enough to impact overhead power lines, they do require special planning and care when planted around the padmount transformer boxes used for underground power lines.

In order to perform maintenance and service, our crews need to have a clear access path to the transformer and adequate workspace in front of the transformer. Choose plants that are easily maintained and suitable for the site. The transformer has to be accessible for service at all times, so avoid planting foliage with thorns, such as caragana, barberry, buckthorn, or native hawthorn. Also, ground covers don't stand up to foot traffic, so please don't use them either. Your local nursery should be able to help you select appropriate plants.

Be careful of over planting, and be sure to allow sufficient growing room for the plants you do select. Vines and crawling plants are unwise choices because we need a minimum distance of one foot between the outside branch of the plant and the transformer. Once your plants become established, keep them pruned to allow at least one foot between the end branch of the mature plant and the transformer.

Also, a clearance zone of at least 10 feet is required in front of the transformer door (the side with the padlock), and at least four feet on all other sides. That distance is needed so our service people can work safely with the live electrical wires in the box. Please keep this zone free of firewood or other stored materials and avoid planting any shrubs or bushes within this zone. Also please avoid building fences, decks, or other structures within the clearance zone.

A clearance of ten feet minimum is required between the transformer and any combustible wall.

Guidelines for tree planting (cont.)



Please Be Safe!

Before you dig to plant trees, bushes, shrubs, or gardens, please make certain you know the location of underground power, gas, and other utility lines. The law requires it, and you really don't want to tangle with utility lines anyway. Call for existing underground utility locations at least two working days prior to digging. Utilities can be located free of charge by calling the National 811 "Call Before You Dig" number.

Trimming Existing Trees

If your construction site already has trees growing, check to make sure these trees are not in the way of new utility lines being installed for your service. For information on how to trim or remove trees in anticipation of new utility lines, please contact your local arboriculturist. Tree trimming or removal costs for new construction are your responsibility.

We are always concerned for our customer's safety. If you have trees with live power lines running through them, please contact NorthWestern Energy Customer Care Center at (888) 467-2669. We'll check them out to see if they need to be trimmed.

Call Before You Dig?

Not only is it the law, it's good common sense to be safety smart. Calling before you dig can save lives and prevents losses. The National 811 "Call Before You Dig" number arranges free locates of major underground utilities: electric, natural gas, and telephone — all with just one call.

Want More Information?

Because of the impact trees have on power lines, we suggest you work closely with local nurseries and garden shops in your area. These businesses can offer you additional advice for choosing and locating plants in respect to power lines.

If you would like more information on this topic, we publish an extensive guide describing a variety of tree species that grow in Montana. You may request a copy by calling our Resource Center at (800) 440-2497, or e-mail a request to safety@northwesternenergy.com.



**Know what's below.
Tap, Click, or Call
811 Before you dig.**

New service checklist

- Have you read the New Service Guide book?
- Do you have or have you obtained a legal address? (Page 2)
- Have you submitted your application online at NorthWesternEnergy.com? Alternatively, you can mail or fax your completed application forms to your nearest New Construction Department (inside cover).
- Have you applied for an electrical permit? (Page 4)
- Do you need a temporary service? (Pages 6 and 7)
 - Regular temporary.
 - Express temporary (underground residential use only).
- If a price for your service has been quoted, have you submitted payment and the signed Customer Agreement to our office? This must be done before the job can be scheduled. The signed Customer Agreement must be submitted even if there are no charges. If your project only involves an overhead service, and there are no charges, a signed customer agreement is not required.
- Is site preparation and grading complete per our requirements? (Pages 2 and 3) These activities must be completed before utility facilities are installed.
- Have you contacted the New Construction Desk (inside front cover) to provide information in order to create a customer account? This must be done prior to activation of your service.
- Are all customer-owned buried facilities (sprinkler lines, septic systems, satellite dish cables, etc.) clearly marked? If not, NorthWestern Energy will not be responsible for damages. (Page 3).
- Have you made arrangements for installation of other utilities (phone, cable TV, etc.)?
- On locations with multi-socket (ganged) electrical meter bases, have individual meter sockets been tagged with placards indicating where the electricity will be used? (for example: Apartment or Unit number, address, etc)? (Pages 3 and 5) Has gas piping been similarly tagged at the location where multiple gas meters will be installed? (Page 11)
- If you are a new gas customer, has your gas piping system been pressure tested? Have necessary permits and inspections been completed? (Pages 10 -11).

Questions? Please call your nearest New Construction Department (inside front cover).

Construction Application

Service Requested

- | | | |
|---------------------|-----------------------------------|--------------------------------------|
| Residential (new): | <input type="checkbox"/> Electric | <input type="checkbox"/> Natural Gas |
| Commercial (new): | <input type="checkbox"/> Electric | <input type="checkbox"/> Natural Gas |
| Subdivision (new): | <input type="checkbox"/> Electric | <input type="checkbox"/> Natural Gas |
| Utility Relocation: | <input type="checkbox"/> Electric | <input type="checkbox"/> Natural Gas |
| Service Removal: | <input type="checkbox"/> Electric | <input type="checkbox"/> Natural Gas |
| Service Conversion: | <input type="checkbox"/> | |
| Lighting: | <input type="checkbox"/> | |
| Irrigation: | <input type="checkbox"/> | |
| Temporary Electric: | <input type="checkbox"/> | |

(May not be available in all areas)



**Know what's below.
Call before you dig.**

Customer Information

Customer/Company Name (Billing Name): _____

Primary Contact Number: _____ Secondary Contact Number: _____

Mailing Address: _____ City: _____ State: _____ Zip: _____

Service Address: _____ City: _____ State: _____ Zip: _____

(City or County new address assignment may be necessary)

Did you have a previous service with NorthWestern Energy at another address? Yes No

If Yes, Address: _____

Email Address: _____

New Service Information

Building Information: Square Footage: _____ ft²

Residential: House Mobile Home Garage Multiplex Housing (# of units _____)

Commercial: Office Retail Restaurant Other (Describe _____)

Subdivision: Residential (# of Lots _____) Commercial (# of Lots _____)

Residential Load Information:

Voltage: 120/240 Other: _____ Panel Size: _____ (Amps)

Primary Heat Source: Electric Natural Gas Other: _____

Natural Gas Load: _____ btu/hr (total load of all natural gas appliances)

Commercial/Irrigation Load Information:

Panel Size: _____ (Amps) H.P. _____ (irrigation)

Voltage: 1Φ 120/240 240/480 (MT ONLY)

3Φ 120/208 120/240 240/480 (MT ONLY) 277/480

Natural Gas Load: _____ btu/hr (total load of all natural gas appliances)

Please Note: Customer load sheets and design information is typically required for commercial electric and natural gas service installations. Load sheets may be provided by NorthWestern Energy.

Completed By: _____ Date: _____



Visit us
online

*Shonna W.,
Customer Care Supervisor
20 years of service*



You're busy – let us help!

Summertime means fun time! Between soccer games, baseball practice, shuttling kids and planning vacation, the last thing you want to worry about is paying bills! Take paying your power bill off your “to-do” list by choosing a payment option that fits your lifestyle. Our e-Bill program is a fast, free and paperless way to view and pay your bill online and on the go. To use e-Bill, you will need to set up your My Energy Account and then you'll be ready to pay your bill anytime from any internet connection.

Why sign-up for e-Bill?

- **FREE Electronic Paperless Billing:** Access your bill at your convenience by logging into your online account. You'll receive an email notification when your bill is available to review online – 24 hours a day, 7 days a week. It's fast, convenient and completely secure.
- **FREE Online Payments:** Once you enroll in the e-Bill program and receive email notification that your bill is available, you can use your checking or savings account to pay your bill.
- **Add EZ Pay:** Sign up for EZ Pay at the same time and ensure that all your utility bills get paid on time. Through EZ Pay, you can have your payment automatically withdrawn and applied to your NorthWestern Energy account when it's due. You won't have to do a thing! The E-bill program gives you secure, convenient delivery and saves time.



New Service Guarantees

As your electric and gas utility, NorthWestern Energy is serious about maintaining the highest service standards in the utility industry. To assure our customers of our commitment, we guarantee the following service standards:

- We will provide prompt and courteous customer service. If your requests are not handled in a courteous and prompt manner, please let us know. Your comments will help us serve you better.
- We will respect your property. Respecting your property is a fundamental courtesy. If our employees damage your property, we will respond with a prompt and mutual resolution.

Public safety always must take precedence over normal service. In the event of uncontrollable circumstances, such as severe weather or uncontrollable damages, we will respond promptly to restore service, then resume our commitments without penalty.

Delivering
a bright future.

*Dale Schultz
System Integrity Manager*

34 years of service

**NorthWestern[®]
Energy**

Delivering a Bright Future

**NorthWesternEnergy.com
11 E Park St, Butte, MT 59701-1711**