

FAIRVIEW CITY

ORDINANCE NO. 2024-01

AN ORDINANCE OF FAIRVIEW CITY, UTAH, ESTABLISHING UNIFORM POWER STANDARDS

WHEREAS, the City Council of Fairview recognizes the importance of uniform power standards to ensure the efficient and safe provision of electricity within the city;

WHEREAS, Exhibit A, attached hereto and incorporated herein by reference, outlines the uniform power standards for Fairview City;

WHEREAS, the Council finds that adopting the power standards as outlined in Exhibit A will promote consistency, safety, and reliability in the city's power infrastructure;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF FAIRVIEW CITY, UTAH, AS FOLLOWS:

Section 1: Adoption of Power Standards

1. The power standards as presented in Exhibit A are hereby adopted and accepted by the City Council of Fairview City.

Section 2: Implementation

1. All new power installations and modifications to existing power infrastructure within the jurisdiction of Fairview City shall comply with the standards set forth in Exhibit A.

BE IT FURTHER ORDAINED that this ordinance shall become effective immediately upon passage and publication in accordance with the laws of the State of Utah.

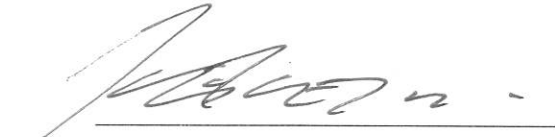
APPROVED AND ADOPTED by the City Council of Fairview City, Utah, this 18th day of April, 2024.

IN WITNESS THERETO:



Brad Welch, Mayor

ATTEST:


Nathan Nelson, City Recorder

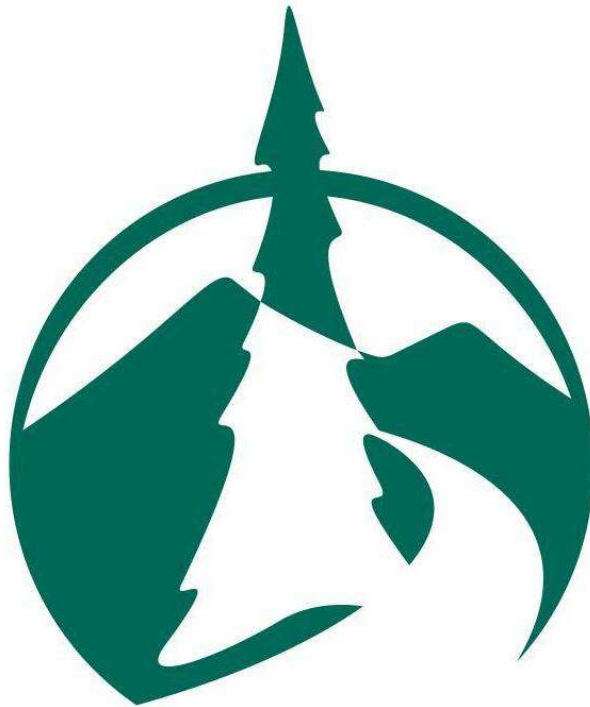
City Council Voting:

	Yea	Nay	Absent	Abstain
Robert St. Jacques	<u>X</u>	___	___	___
Casey Anderson	<u>X</u>	___	___	___
Jim Cheney	<u>X</u>	___	___	___
Shirlene Rasmussen	<u>X</u>	___	___	___
Mike MacKay	<u>X</u>	___	___	___

EXHIBIT A

FAIRVIEW CITY POWER

Electrical Construction Guidelines and Specifications



FAIRVIEW CITY
gateway to skyline drive

Revised April 18, 2024

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All diagrams and drawings courtesy of Payson City, Utah.

INTRODUCTION

This manual was prepared to aid developers, contractors, and engineers in establishing electric service for new and remodeled structures. We recognize that you may require personal assistance from our staff, and we encourage you to contact us by calling the Fairview City Power Department at 435-427-3858 to discuss your electric service requirements with us. Additional copies are also available online. It is the desire of Fairview Power and the local electrical code enforcing authority to provide you, the Customer (developers, contractors, owners etc.), with high-quality, safe electric service.

In order to avoid unnecessary repetition, the word "Utility" as used in the following pages shall indicate the Fairview City Power Department.

The requirements of this manual are intended to apply to relocated services, rewired services, and house moves, as well as to new services, unless a specific exception is granted

This document includes a TABLE OF CONTENTS that directs the user to a specific topic and page.

The use of this document will allow the Developer to more closely comply with adopted standards. This document is not intended to fully represent the current adopted ordinances, construction standards and drawings, master plans, or other City requirements. The Developer shall be responsible to comply with all of the adopted ordinances and standards of Fairview City.

SECTION 1: CODES AND ORDINANCES

1. GENERAL

- a. It is necessary that the construction of new or, remodeled installations conform to applicable provisions of the National Electrical Code (NEC), National Electrical Safety Code (NESC), and Fairview City codes. OSHA rules must be followed both during construction and maintenance.

2. DEFINITIONS:

- a. CONTRACTOR shall refer to the person or persons actually performing the construction work.
- b. CUSTOMER shall refer to any individual requiring utility services.
DEVELOPER shall refer to the contractor, property owner or agent as applicable
- c. OWNER shall refer to subdividers, developers, contractors or others responsible for the project within Fairview City.

3. CITY ORDINANCES

Provisions for qualifications of contractors, bonding, permits, inspection, fees, etc., are outlined in title 14 of the Municipal Code and resolutions shall apply here-in. Items contained therein that must be complied with relating to electrical distribution construction include:

- i. Obtaining a business license
- ii. Inspections
- iii. Obtaining permits
- iv. Penalties for violations
- v. Power line extension fees
- vi. Customer deposits Electrical connection fees
- vii. Metering.

4. CHANGES OR CONFLICTS IN REQUIREMENTS AND GUIDELINES

- a. These requirements and guidelines are issued with the intent of complying with all applicable codes, ordinances, regulations, and tariffs; however, in the case of conflict, the appropriate regulation, tariff, code, or ordinance will supersede the interpretation offered in this manual. In addition, these, requirements are subject to change in the event that the governing codes, ordinances, regulations, or tariffs are changed. The Utility does not assume responsibility for keeping this manual current and should be consulted in case of doubt on the applicability of any item.

- b. The phrase "consult Utility" as used in this manual shall mean a consultation with Fairview City Power is to be made for each and every installation or project.

5. UTILITY DISCLAIMER

The locations, materials, slopes, flow line, rim elevations, and sizes of the existing underground or overhead utilities are shown as accurately as possible, but due to the age of the infrastructure and reporting errors the sizes and locations of the utilities shown on the Fairview GIS map are approximate and should not be used for design purposes. The owner and contractor of a development project are responsible for contacting Blue Stakes to locate all the existing utilities and performing potholes to field verify the sizes, materials, and depths of the existing utilities prior to construction and ordering materials.

SECTION 2: SERVICES**1. APPLICATION FOR SERVICES**

- a. It is important the Utility be provided as early as possible with accurate load information and the date when the Customer will require service, so all necessary arrangements for the service may be completed. Requests for service to commercial and industrial customers normally require 60 days advance planning by the Utility in order to serve the load.
- b. It is the responsibility of the Developer to purchase from Fairview City any and all transformers, sectionalizers, switches, or other equipment as required by the Utility. Equipment purchased without approval that does not meet the Utility's specifications will be returned to the Developer unused.
- c. For commercial, industrial, residential subdivisions, mobile home parks, and apartment complex applications, the requests for service shall include a plot plan. Plot plans should show preferred service and meter, location, and single line diagram of the electrical layout. The request must show panel size amperage and 3-phase loads.
- d. The Utility has a staff available to provide advice on service requirements and related problems relative to electric energy utilization for new, existing, and reconstructed installations. The Customer or the Contractor will be held liable for any damage to Utility equipment or personal injury unless adequate notice is given to the Utility and approval is granted regarding the change or addition.
- e. When conditions are encountered during construction that require changes in the service arrangements, the Utility must be consulted so mutually satisfactory alternate arrangements can be made. Communication with the Utility will bring this service to you.
- f. **All Utilities such as Cable TV, Phone, Gas, etc. must be contacted after approval for service has been given.**

2. TYPES OF SERVICE

- a. The electric service available is 60 hertz (cycles), alternating current, single or three-phase.
- b. The secondary voltages and connections available are:
 1. Overhead Service
 - Single-phase, 120/240 volt, three-wire, grounded
 - Three-phase, 208Y/120 volt, four-wire, grounded, wye
 - Three-phase, 480Y/277 volt, four-wire, grounded, wye
 11. Under certain conditions, at the option of the Utility, the following services may be supplied:

- Single-phase, 240/480 volt, three-wire, grounded
 - Three-phase, 240/120 volt, four-wire, grounded delta
 - Three-phase, 480/240 volt, four-wire delta
- iii. Underground Service
- Single-phase, 120/240 volt, three-wire, grounded
 - Three-phase, 208Y/120 volt, four-wire, grounded, wye
 - Three-phase, 480Y/277 volt, four-wire, grounded, wye
- c. The nominal primary voltage of the Utility's distribution system may differ from under certain conditions. Primary delivery will be at the distribution voltage standard for the location at which it is requested.
3. APPROVAL FOR SERVICE
- a. It is required that an electrical installation be approved by Sanpete County before it can be energized by the Utility. The service will be energized by the Utility only after all service requirements have been met. A minimum of 24 to 48 hours' notice is required for inspections and GPS. Prior to beginning, a representative from the Utility will meet on site with the excavator, electrical contractor and developer, with an approved stamped set of plans from the Utility, to answer any questions or unique problems with the project.
- b. Meter base location must be approved by the Utility before excavation can begin.
4. PERMANENT SERVICE CONNECTION
- a. Only authorized Utility employees shall make the permanent (or temporary) connection or disconnection of the Utility's electric service to a building or structure.

SECTION 3: INSPECTIONS**1. INSPECTION CHECKLIST**

- a. If the project is a subdivision, provide an electronic map of the project.
- b. Approved stamped plan must be completed prior to pre-construction meeting.
- c. Property corners with elevations are required before digging begins.
- d. Map must denote sidewalk being Monolithic, park strip, or none.
- e. Trenching I-foot behind walk. If no sidewalk trenching shall be 4-feet behind curb.
- f. 3-feet from final grade to top of conduit for primary. Exception 6-inch conduit at all equipment must be 6-feet deep.
- g. All 90-degree bends are standard 90-degree rigid or IMC.
- h. Trench depth at locations of equipment to be deep enough to allow the standard 90-degree sweeps to be fully utilized without cutting or modifying in any way.
- i. 2-foot separation between communication and power.
- j. Warning tape placed on 12 inches of sand above power conduit.
- k. If joint trenched with other utilities, place warning tape on I-foot of sand and cover with 1-foot of sand.
- l. Flat bottom trench. All trenching must be inspected and GPS obtained prior to backfill. Trenches backfilled before inspection will be excavated at the Contractor's expense.
- m. Road sleeves for conduit to be gray PVC 70-feet in length (min) and in line I-foot behind the sidewalk.
- n. Shade conduit with sand I-foot on all sides of the conduit.
- o. 90-degree bends stubbed up and placed 2' off front and side of property line.
- p. All conduits are capped.
 - i. Schedule 40 Bell End Couplings installed at end of conduit.
- q. All future stubs plugged and capped with a rubber cap and marked with flags (available through Fairview City).
- r. Electrical conduit is gray Schedule 40 PVC.
- s. Secondary junction boxes are supplied by Fairview City and are elevated. (Flush-Mount Secondary Junction Boxes are not acceptable.)

- t. Transformer sleeves and pads are 6-inches, Sectionalizers are 10- to 12-inches, and Switches are 12- to 14-inches above back of walk and level at final grade.
 - u. Secondary junction boxes are 2- to 3-inches above final grade and must be level.
 - v. verified before installation.
 - w. Street light foundation level and bolts above grade.
 - x. Conduit for streetlight follows the secondary conduit and turns 90-degrees in to streetlight foundation.
 - y. Stubbed conduit must be 12 inches above grade.
 - z. 2500# Mule tape installed inside all Primary conduit.
 - aa. Three-phase transformer pad 6-inches above grade with #4 rebar center mat. Pad dimensions and reinforcing meets Fairview City Standards. See Standard Details at the end of this document. 1-foot and 6-inch separation between secondary and primary conduits in the pad.
 - bb. Metering (transformer or building).
2. SERVICES
- a. Depth of trench 3-feet (min) for primary, 2.5-feet (min) for secondary from top of conduit to final grade.
 - b. 90-degree bends are 90-degree rigid or IMC sweeps.
 - c. Attached to existing secondary conduit stub (stub may need to be adjusted straight).
 - d. Trench flat and straight from junction to meter base. Install 1-foot of sand above conduit upon backfill.
 - e. Meter base location (see specifications).
 - f. Check service connections to be tight and oxide inhibiting compound used.
 - g. Bolt on meter hub on service conduit.
 - 1. Meter base tied to UFER in foundation.

SECTION 4: SAFETY

1. SEALS

- a. The purpose of seals placed by the Utility on meters and associated service equipment is to prevent injury and/or tampering.
- b. Under normal circumstances, seals are not to be removed except by the Utility.
- c. If an emergency should require seal removal (only by authorized electrical contractors) without prior notification, the Utility must be notified as soon as possible, so the installation can be inspected and the seal replaced. When this occurs, the party removing the seal shall accept all liability for damage or alternation to equipment, injury to persons or property, and loss of revenue to the Utility, from the time the seal is removed until 72 hours after the Utility has been notified that the equipment is ready to be re-sealed.

2. WORK NEAR HIGH VOLTAGE OVERHEAD POWER LINES

- a. As set forth in Section 54-8c-1 through 54-8c-7 of the Utah Code, no person or thing may be brought within 10-feet of any high voltage overhead power line unless:
 - i. The responsible party has notified the Utility operating the high voltage line of the intended activity; and
 - ii. The responsible party and the Utility have completed mutually satisfactory safety precautions for the activity; and
 - iii. The responsible party has made prior arrangements to pay the Utility for the mutually satisfactory safety precautions (if applicable).
- b. The Utility recommends a minimum of 3 business days' notice be given before any work near its lines is scheduled to begin.
- c. The National Electrical Safety Code (NESC) requires that homes, buildings, bridges, signs, antennas, etc. have sufficient horizontal and vertical clearance to overhead power lines. Consult with the Utility for applicable distances.

SECTION 5: METERING

1. SERVICES

- a. The location of the service entrance on the Customer's premises is an important consideration to both the Customer and the Utility. The typical service meter location is 5-feet from the front on the side of the building. Some exceptions to this location can be made by the Utility.
- b. The location where the developer or contractor attaches to the City Electrical system shall be determined by the Utility.
- c. The Utility shall be consulted in order to designate the point of attachment for overhead service drops and underground service laterals.
- d. The Utility will provide, install, and maintain meters for secondary voltage service.
- e. The Customer will provide, install, and maintain all service equipment, including switches, service entrance conductors, raceways, enclosures, and meter sockets, and will provide right-of-way and space for the installation and maintenance of the Utility facilities.

2. WORKING SPACE

- a. To permit access to metering installations and to provide safety Personnel, a working and standing space entirely on the property of the customer is to be provided in front of all meter socket(s).
- b. Clearances must be at least as shown in figure 5-2.1 below:

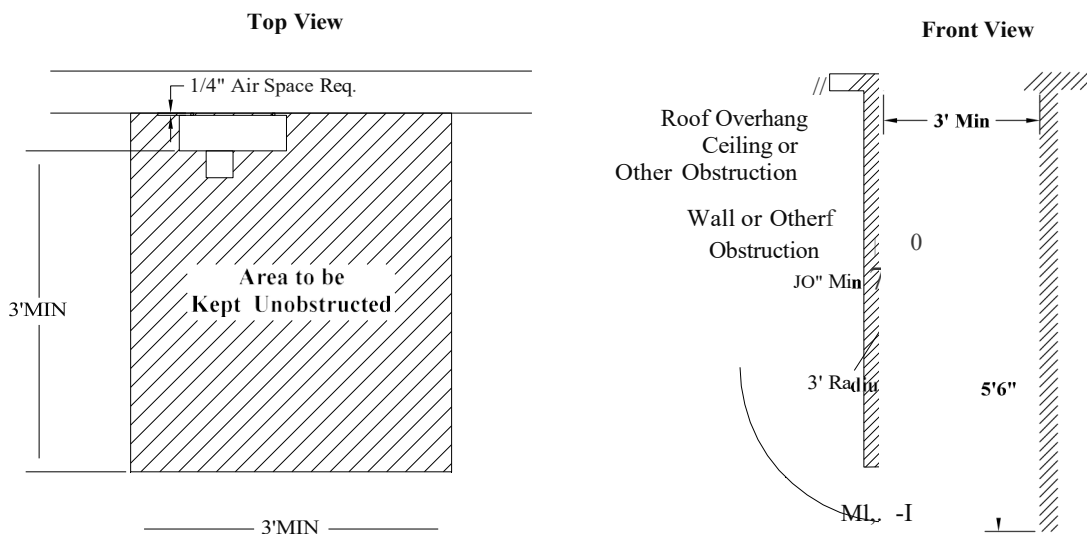


Figure 5-2.1- Minimum Clearances around Meters

- c. Maintain a three (3) foot minimum radius from gas meter to electrical meter base. The customer will furnish, install, and maintain or make contribution in aid of construction to the Utility at the option of the Utility for permanent barricades to provide protection where the working space is exposed to vehicles or hazardous conditions. The determination of need, type, size, and location of barricades is at the sole discretion of the Utility.
 - d. All service entrance conductors must be installed in continuous rigid galvanized steel or IMC. Electrical grade PVC schedule 40 may only be used below ground. Risers will be rigid galvanized steel or IMC for the first 10-feet then PVC schedule 40 may be used up the pole.
 - e. All rigid galvanized steel or IMC conduit will be supported with a wrapped rigid galvanized steel or IMC 90-degree standard rigid or IMC.
3. SEALING OF CABINETS AND GUTTERS
- a. Any exterior junction boxes before the meter will be sealed by Fairview City.
4. CONDUCTOR IDENTIFICATION
- a. Neutral shall be identified with the color white.
 - b. In a four-wire delta service, the conductor with the higher voltage to ground will be identified with the color orange.
 - c. For multi-housing, commercial and industrial, gang meter bases requiring parallel wire feeds will be required.
 - d. The wire needs to be the appropriate color per industry standard for identification and size determined by the Utility. 120- and 208-volt 3 phase to be black, red, blue, and white. 480-volt 3 phase to be brown, orange, yellow, and white. No colored tape will be accepted.
 - e. Number and size will be determined by the Utility.
- 5.
- a. Suitable space and provisions for mounting meter bases must be provided by the customer at a location acceptable to the Utility.
 - b. Residential meters should be located on the side within the front 5-feet of the building. More than 5-feet exceptions can be made by the Utility.
 - c. The center of any meter socket located outdoors on structures shall not be more than 6-

feet or less than 4.5-feet above the finished grade or floor immediately in front of the meter.

- d. The center of meter sockets in mobile home pedestals shall not be less than 42-inches above finished grade. Meters in pedestals must be suitably protected from physical damage.
- e. In the case of vertical 4-gang meter bases, the bottom of the lowest meter socket shall be at least 36-inches above final grade.

6. TEMPORARY SERVICE

- a. Temporary pedestals will be provided by Fairview City.

7. DISCONNECTION AND RECONNECTION OF SERVICE

- a. The Utility will disconnect and reconnect any service supplying Customer-owned service equipment that for safe working conditions must be de-energized prior to modification.
- b. There will be no charge for the disconnection. The reconnection will be done without charge if it can be completed on the initial trip or on a second trip scheduled during regular working hours and at the Utility's convenience; otherwise, the Customer will be billed a reconnection charge according to Title 14 of the Fairview City Municipal Code.

SECTION 6: OVERHEAD POWER SERVICE**1. CUSTOMER EQUIPMENT ON UTILITY POLES**

- a. Customer-owned metering equipment, switching devices, conduits, conductors, luminaries, etc. are not to be mounted on the Utility's poles.

2. OVERHEAD SERVICE DROP - 480 VOLTS AND UNDER

- a. The Utility will locate the service entrance, to avoid having conductors pass over swimming pools, buildings, trees, or other obstructions if at all possible.
- b. In areas served from overhead lines, an overhead service drop will be installed by the Utility from the Utility distribution line to the point of connection to the Customer's service entrance. Customer's service entrance conductors must extend a minimum of 2-feet from the service entrance weather head on the Customer's residence, building, or structure.
- c. The Customer will provide a suitable point of attachment for the service drop. The point of attachments will be high enough above both initial and final grade and in a proper position to provide not less than minimum clearances as specified in the NESC.
- d. It is the Customer's responsibility to ensure that the route of the service drop is not obstructed by buildings, trees, or other objects. The point of attachment will be on the side of the building designated by the Utility.
- e. Supports for service drops must meet NEC requirements and be extended from and tied into the main structural members of the building.
- f. The service mast shall extend through the roof on a building. Where mast is longer than 10-feet, top of mast shall be solid or a full 10-feet of rigid or IMC.

3. MULTIPLE UNIT RESIDENTIAL OVERHEAD SERVICE

- a. The Utility will locate the service entrance, to avoid having conductors pass over swimming pools, buildings, trees, or other obstructions if at all possible.
- b. The Utility will extend an overhead service drop from its distribution lines to the point of connection to the Customer's service entrance conductors at the service head. The Utility requires the grouping of service heads at a common location and will not extend service drop conductors from the point of attachment to the individual service heads.

4. NON-RESIDENTIAL OVERHEAD SERVICE

- a. The Utility will locate the service entrance, to avoid having conductors pass over swimming pools, buildings, trees, or other obstructions if at all possible.
- b. The point of attachment to the Customer service entrance conductors and service voltage for non-residential installations must be approved by the Utility prior to the installation of the Customer's service equipment. Where more than one service entrance of the same voltage and phase to a building is necessary, the service entrance(s) must be grouped so that they may be served from the same set of service drops.
- c. Pole-mounted transformer installations are limited to a size that can safely be supported.

Installations requiring transformers that cannot be safely mounted on poles must be served by pad mount transformers.

- d. A Customer whose load may require 300 kilovolt-amperes or more of installed transformer capacity must consult the Utility to determine what the installation requirements will be.

5. OVERHEAD SERVICE TO MANUFACTURED HOMES

- a. Overhead service to manufactured homes with factory installed meter bases will be provided under the same requirements as outlined in this document.

SECTION 7: UNDERGROUND POWER SERVICE**1. GENERAL**

- a. Before making any preparation for underground service, the Customer or his representative must obtain approval and construction standards from the Utility covering the proposed installation and the Customer's responsibilities.
- b. Customers adequately served by existing overhead distribution facilities, but desiring underground service should contact the Utility for details of the Utility Electric Service Regulations for conversions. In areas where underground service is specified by local ordinances, special rules may apply.
- c. The minimum wire size for residential service is 1/0 URD Triplex for 100-amp and 125-amp breakers. 2/0 URD Triplex for 150-amp breaker. 4/0 URD Triplex for 200-amp breaker.
- d. Oxide inhibiting compound shall be used on all connections.
- e. If existing secondary service wire goes bad and is not in conduit, the property owner will be responsible for all trench excavation.

2. TRENCHES, CONDUIT, AND BACKFILL PROVIDED BY THE CUSTOMER

- a. Fairview City will supply the conduit unless the customer has spoken to the utility and they have determined otherwise.
- b. Trenches are to be as straight as possible to avoid excessive bends from transformers or junction boxes to meter base. Trenches may only deviate a maximum of two (2) feet from a straight line. Existing conduit stub outs are provided but may be required to be moved to keep conduit straight in line with utility equipment and customer meter base.
- c. All metal conduit below ground level must be protected by a corrosion inhibiting wrap. (10 mil PVC pipe wrap). No wrap will be allowed under the top unistrut clamp. Top unistrut must remain above final grade.
- d. Call Before You Dig. Utah law requires The Blue Stakes One Call Location Center be notified at least two working days prior to excavation. The excavation must not be started until locations have been made or the Utility has informed the excavator that they have no facilities in the area. This notification may be made by calling 811 or 1-800-662-4111 (Utah toll free). More information is available at all Utility business offices.
- e. Damaged equipment, electrical cable and/or materials resulting from carelessness by equipment operators will be repaired at the expense of the responsible party.

3. DEPTH

- a. The trench depth shall have a minimum of 3-feet of backfill over the top of the primary conduit and a minimum depth of 2.5-feet for secondary. Depth at equipment to utilize standard 90-degree sweep rigid or TME.
- b. Depth is measured from final grade to the top of conduit.

4. BACKFILL

- a. The Customer will be responsible for backfilling trenches. Cables shall not be energized

until backfill is complete.

- b. 3-inch red warning tape will be placed in all primary trenches, 1-foot above conduit.
 - c. If joint trenched with other utilities, place 1-foot of sand over conduit, warning tape on sand, then cover with 1-foot of sand.
5. JOINTUSE
- a. Telephone, TV, and other electrical communication cables may be placed in the same trench as the Utility cables, provided that the installation is in accordance with the Utility specifications and is mutually agreed upon by all parties concerned. See Figure 7-5.1.

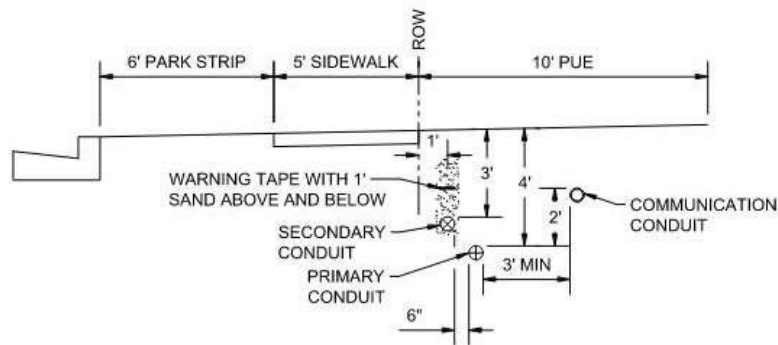


Figure 7-5.1 - Joint Trench Use Separation Requirements

- b. The Utility normally will not install electrical cables in a common trench with non-electric utilities such as water, gas, and sewer, unless unusual conditions such as adverse soil or route restrictions exist. All such installations require the prior approval of the Utility.
 - c. Communication conduits must NOT be in gray electrical conduit.
 - d. Other utilities must be separated from power by at least four feet with an elevation change of 12-inches.
6. CONDUITS
- a. The Utility requires the use of conduit for all underground service installations. Rigid galvanized steel, IMC, and gray electrical grade PVC schedule 40 (underground only) conduits are acceptable materials for conduits installed by the Customer. Generally, conduits are installed in property fronts. All PVC Duct network must be inspected and GPS obtained before backfilling.
 - b. The following procedure for making cemented conduit joints will be used to join PVC to PVC:
 1. Cut the conduit square and remove all burrs from both the inside and outside with a file or knife.
 11. Remove dirt, grease and moisture from the end of the conduit and inside the coupling.

- 111. Test fit the conduit into the coupling. It should penetrate easily 1/4 to 3/4 of the way.
 - 1v. End Bell Couplings required to be placed at the end of conduit.
 - v. CAUTION: Cement that is jelly-like or that has not been used within one year of the date stamped on the can, should be replaced, and not used.
 - v1. Apply an even layer of cement to the conduit and inside the coupling. A second layer should be applied to the conduit if necessary to completely fill the gap.
 - v11. Assemble the joint immediately while the cement is still soft and wet. Forcefully bottom the conduit into the coupling. Turn the pipe or fitting during (but not after) assembly to distribute the cement evenly. Hold in position for 30 seconds. Wipe off excess cement.
 - viii. Allow 15 minutes setting time for good handling strength. The joint will be completely set within 24 hours.
 - c. If the customer installs own conduit without the ability to pull Mule Tape through, they will be liable for repair.
 - d. When the conduit terminates at the Utility pole, consult the Utility for exact conduit location.
 - e. For a utility service lateral, the top of the conduit is to be 36-inches (min) below finished grade.
 - f. Stub outs must be put at all transformers and splice box locations for future hookups. Stub outs must be at least 3-feet from transformers and splice boxes and have a PVC or rubber plug and cap provided by Fairview City.
 - g. All metal conduits below ground level must be protected by a corrosion inhibiting wrap.
7. CLEARANCES FROM SWIMMING POOLS
- a. Follow all National Electrical Safety Code (NESC) recommendations for clearances from swimming pools.
8. RESIDENTIAL SUBDIVISIONS
- a. High voltage distribution systems in subdivisions will be loop connected where advantageous and be connected in a balanced three phase network, if practical, as determined by the Utility Director.

- b. All high voltage distribution systems in subdivisions and mobile home parks will be installed according to design and layout prepared by an Electrical Engineer and the Utility. An as-built map of the power network must be submitted to the Utility after installation. All changes must be approved before work begins.
- c. A set of plans stamped "Approved for Construction" from Fairview City must be used and available on site at all times.
- d. As per the Subdivision Regulations of the Fairview City Municipal Code, all costs incurred, including labor and material, will be paid by the developer. The City will terminate primary connections and will pull any underground primary wire. The City will perform all work done on overhead energized conductors and the Contractor will pay all costs associated with any line extensions involving live primary wires.
- e. Material and labor charges are to be paid prior to ordering of high voltage wire, connectors, and transformers.
- f. The Developer or subcontractor can install the secondary system, however, they must be licensed with the city prior to beginning construction. All installations must be inspected and approved prior to burial of underground systems. Costs incurred because of a grade change or transformer realignment shall be borne by the subdivider/developer.
- g. Individual residences within the subdivision will be responsible to trench and backfill. Standard 90-degree sweep rigid or IMC must be used at meter base.
1. All street lighting in Subdivisions and Mobile Home parks shall be installed by the subdivider according to City specifications. After final inspection of lighting system, Fairview City will assume ownership and will maintain said system.

9. NON-RESIDENTIAL

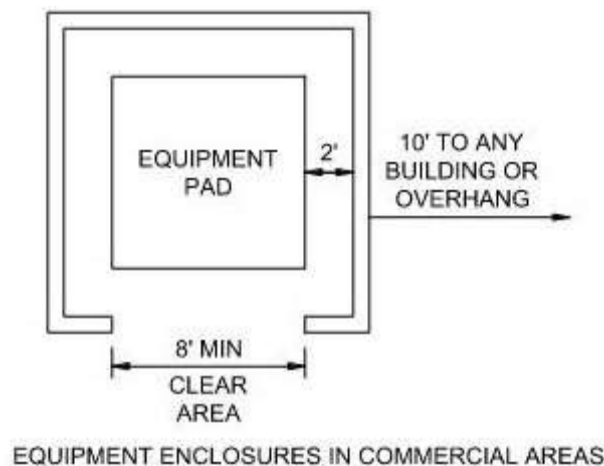
- a. For underground service to commercial or industrial buildings or projects, the Customer or Developer is responsible for all trenching, backfilling, conduit, wire terminators, pulling and terminating secondary wire, meters and transformer pads or vaults within the project.
- b. Where a pad mounted transformer, current transformer enclosure, or other equipment are installed in a location where it might be struck by a motorized vehicle, the Customer is to install barrier posts approved by the Utility to protect this equipment.
- c. Primary cables will be installed by the Utility. The Utility will install the conduit up the pole. The Utility will designate the proper position on the pole for the conduit prior to the contractor installation of the 90-degree standard rigid sweep and 10-feet of rigid IMC at the base of the pole.
- d. All conduits shall be capped at both ends at the time of installation to keep free of dirt and debris.

10. SERVICE AT PRIMARY VOLTAGE

- a. The Utility will provide primary voltage delivery to qualified Customers without transformation, from the high-voltage or "Primary" distribution system under terms and conditions set forth in which provide that:
 - i. The distribution system's nominal voltage is used;
 - ii. Service at primary voltage will not, in the Utility's judgment, adversely affect the operation of the Utility's distribution System or service to other Customers; and
 - iii. Such service Can be supplied in a safe and reliable manner.
- b. All Customers requesting service at a primary voltage must agree to those special requirements that the Utility may from time to time establish as necessary.

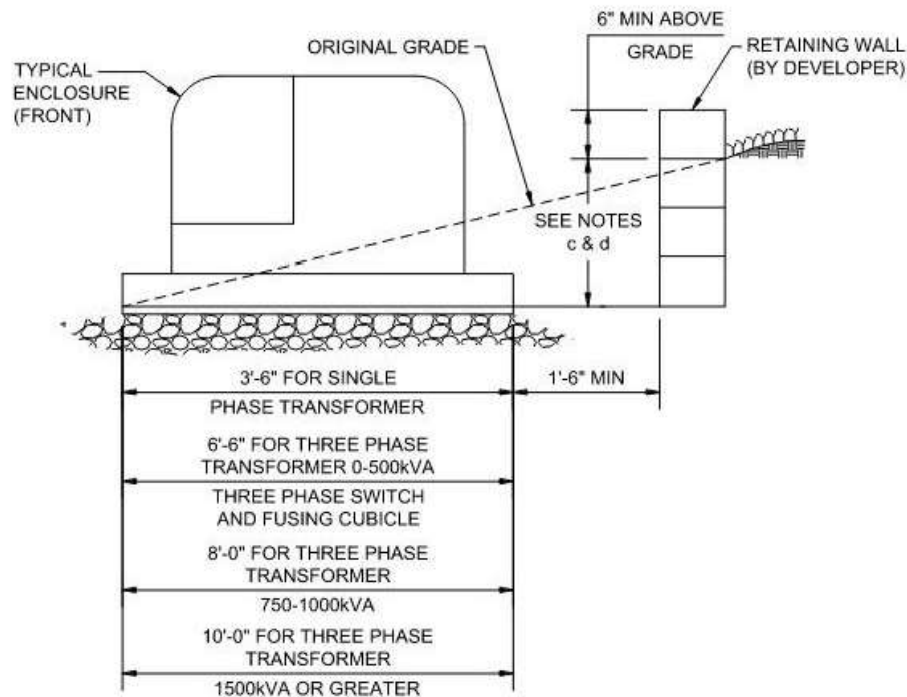
SECTION 8: INSTALLATION**1. CLEARANCES**

- a. Clearances are required for residential equipment near customer fencing or obstructions adjacent to project equipment installations.
- b. No building addition, building overhang or structure shall be built closer than 10-feet horizontally from the edge of any equipment pad unless approved in writing by the Utility.
- c. There shall be no roof or covering over any pad-mounted equipment.
- d. A gate the full width of the opening is permissible across the front or equipment. The gate may be of solid material if a 6-inch clearance for ventilation is maintained between bottom of gate and ground level. The gate is allowed to be lower than 6-inches if constructed of mesh bar, louver, or similar ventilating material. Gate must open at least 90-degrees for full opening width access and must be free of locks which would inhibit access by Utility personnel. Any gate must be furnished by customer.
- e. Obstructions, including but not limited to, fences, trees, shrubs, or other similar large vegetation and large rocks, shall NOT be permitted within 10-feet of the opening side of equipment. The back and sides of all transformers and equipment require at least 18- inches of clearance from the edge of pad to any obstruction. For front or side lot easements, the clearance to the back of pad mounted equipment is defined by the easement line.
- f. Hinged gate(s), when open, may not block the exit route. When gate(s) is in the maximum open position, the exit shall allow a 24-inch wide (min) opening, a minimum of 6-feet from the equipment pad.
- g. When equipment enclosures are constructed in commercial areas, the exit route shall be directly away from the opening side of the pad-mounted equipment.



2. GRADING

- a. When it becomes necessary to notch out or fill a slope to install an enclosure, the cleared area should be of sufficient size to accommodate the enclosure and shoring. Slope in front of enclosure shall not be greater than 20-inches in 8-feet (5H:1V).
- b. Filled with 1-inch minus rock to the bottom of the trench.
- c. A wall is required if this dimension is greater than or equal to 12-inches.
- d. Side walls also required if this dimension is over 18-inches. Side wall to be 6-inches above existing grade and 18-inches from side of transformer pad.
- e. All grading is to be done by Developer.
- f. If assistance is required, contact the Utility.



SECTION 9: EQUIPMENT

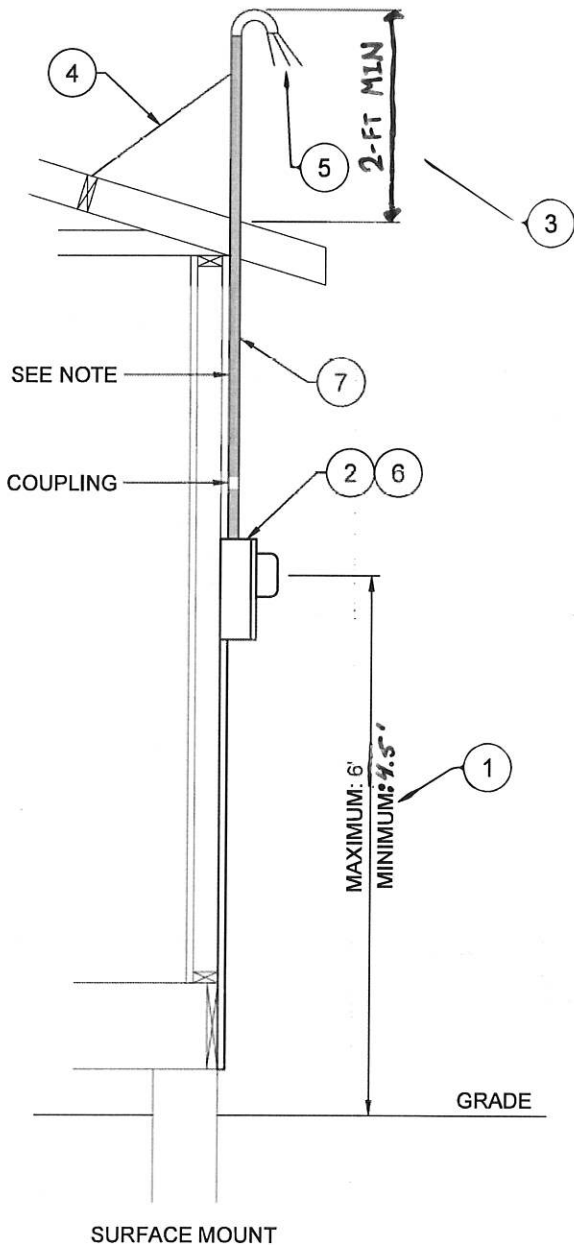
1. UTILITY EQUIPMENT
 - a. The customer must provide their own meter and CT Cabinet. The Utility will provide CT's and installation thereof.

2. PAD MOUNTED TRANSFORMER SPECIFICATIONS
 - a. Pad mounted transformers will be billed and supplied by the Utility.

3. STREET LIGHT SPECIFICATIONS
 - a. Street light poles, heads, and bases will be billed and supplied by the Utility.

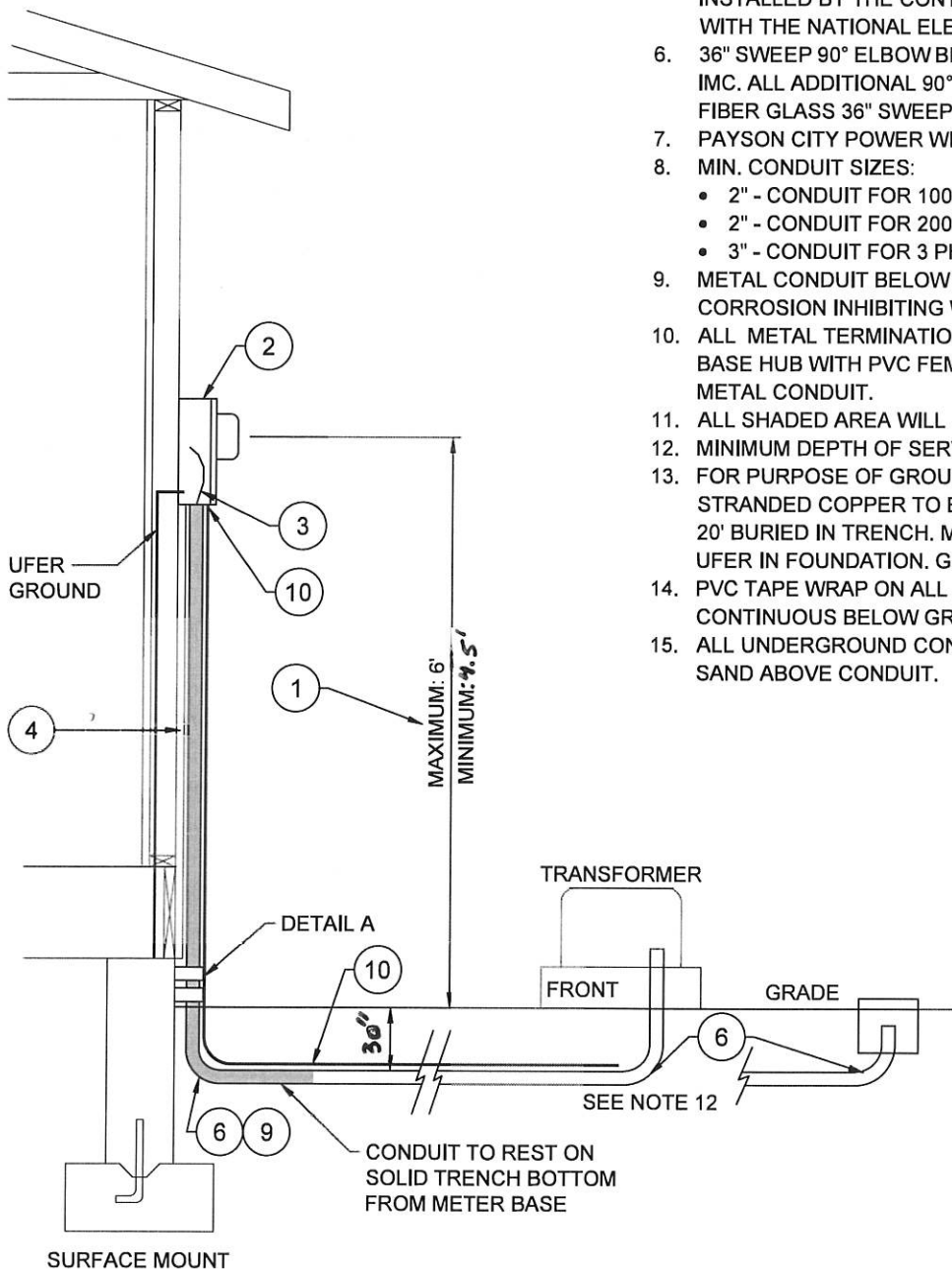
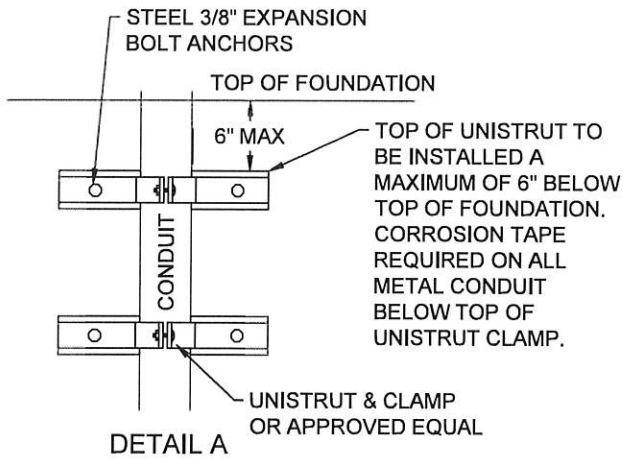
SECTION 10: FAIRVIEW CITY STANDARD DETAILS

See attached



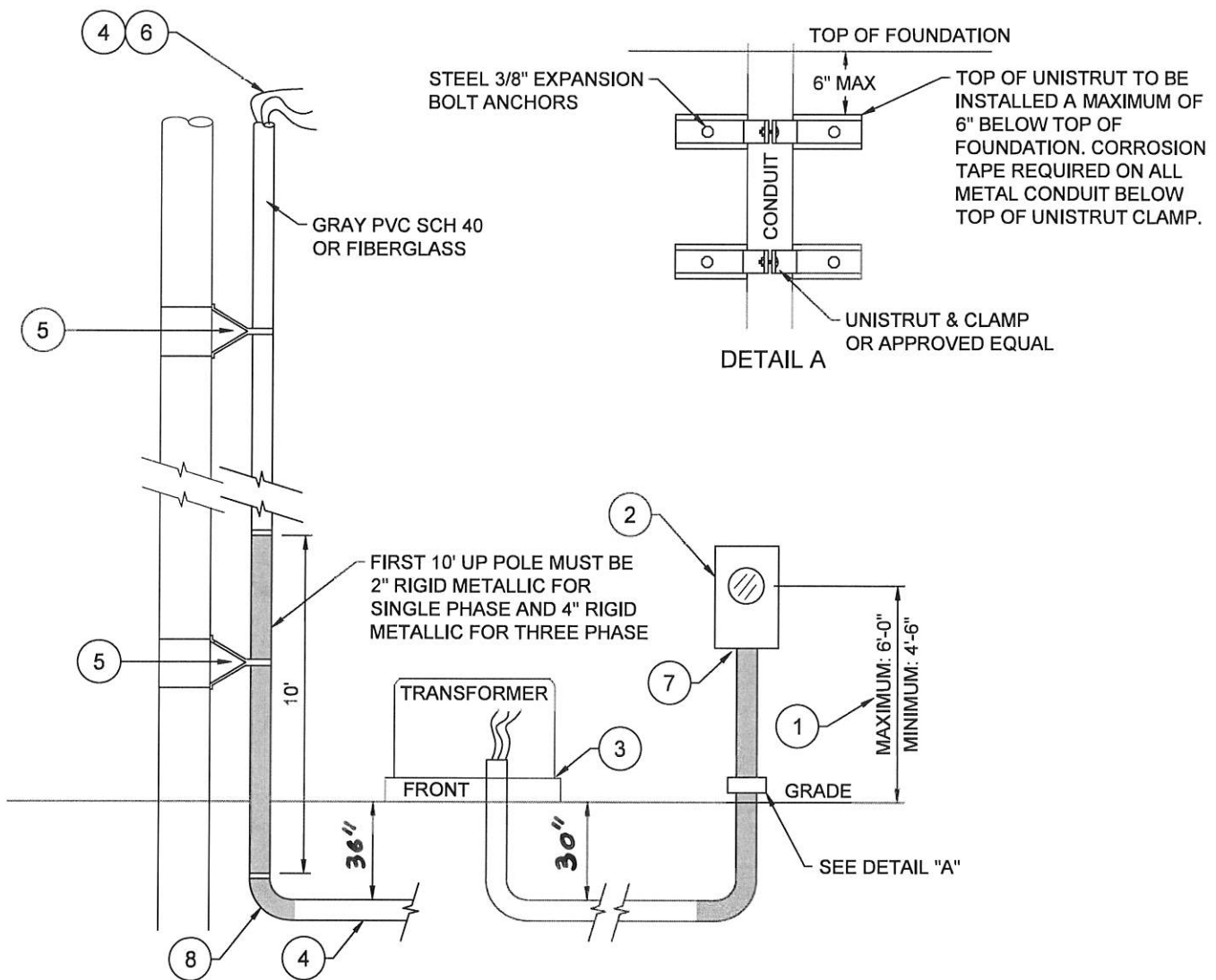
NOTES:

1. HEIGHT OF METER 5'-6" AND NOT TO EXCEED 6', AND NOT LOWER THAN 4.5'.
2. METER BASE (A MANUAL BYPASS IS REQUIRED ON 3 PHASE).
3. STANDPIPE SHALL BE A MINIMUM 2" RIGID METALLIC, OR IMC. AND EXTEND ABOVE ROOF A MINIMUM OF 2'.
4. BRIDAL GUY TO BE INSTALLED IF NECESSARY.
5. CONDUCTORS FURNISHED AND INSTALLED BY CONTRACTOR TO EXTEND 18" FROM THE WEATHER HEAD AND SHALL COMPLY WITH THE NATIONAL ELECTRIC CODE.
 - 100 AMP 1/0 URD
 - 125 AMP 1/0 URD
 - 150 AMP 2/0 URD
 - 200 AMP 4/0 URD
 OXIDE INHIBITING COMPOUND SHALL BE USED ON ALL ALUMINUM CONNECTIONS.
6. ALL METAL TERMINATIONS SHALL HAVE BOLT ON METER BASE HUB.
7. PAYSON CITY POWER WILL FURNISH AND INSTALL METERS.
8. MIN. CONDUIT SIZES:
 - 2" - CONDUIT FOR 100 AMP SERVICE.
 - 2" - CONDUIT FOR 200 AMP SERVICE.
 - 3" - CONDUIT FOR 3 PHASE, 200 AMP SERVICE.
9. ALL SHADED AREA WILL BE RIGID METALLIC CONDUIT OR IMC.
10. NO COUPLING WITHIN 10' OF WEATHER HEAD.
11. (2) 5/8" X 8' COPPER CLAD GROUND RODS SPACED 8' APART SHALL BE USED WITH A MINIMUM OF #6 COPPER CONNECTING TO THE METER BASE. METER BASE TO BE TIED TO UFER WHERE APPLICABLE.



NOTES:

1. HEIGHT OF METER 5'-6" AND NOT TO EXCEED 6', AND NOT LOWER THAN **4.5'**.
2. METER BASE. (A MANUAL BYPASS IS REQUIRED ON 3 PHASE).
3. MINIMUM SIZE SERVICE WIRE PROVIDED BY CONTRACTOR.
 - 100 AMP 1/0 URD
 - 125 AMP 1/0 URD
 - 150 AMP 2/0 URD
 - 200 AMP 4/0 URD
 OXIDE INHIBITING COMPOUND SHALL BE USED ON ALL ALUMINUM CONNECTIONS.
4. CONDUIT TO BE RIGID METALLIC OR IMC FROM GROUND TO METER BASE, (MIN 2") FURNISHED AND INSTALLED BY CONTRACTOR.
5. CONDUIT FROM BUILDING TO CONNECTION POINT WILL BE GRAY PVC-SCH. 40, OR APPROVED EQUAL, FURNISHED AND INSTALLED BY THE CONTRACTOR. CONDUIT WILL COMPLY WITH THE NATIONAL ELECTRIC CODE.
6. 36" SWEEP 90° ELBOW BELOW METER BASE WILL BE RIGID OR IMC. ALL ADDITIONAL 90° ELBOWS WILL BE PREFABRICATED FIBER GLASS 36" SWEEPS.
7. PAYSON CITY POWER WILL FURNISH AND INSTALL METERS.
8. MIN. CONDUIT SIZES:
 - 2" - CONDUIT FOR 100 AMP SERVICE.
 - 2" - CONDUIT FOR 200 AMP SERVICE.
 - 3" - CONDUIT FOR 3 PHASE, 200 AMP SERVICE.
9. METAL CONDUIT BELOW GRADE WILL BE PROTECTED BY A CORROSION INHIBITING WRAP. (10 MILL. PVC PIPE WRAP)
10. ALL METAL TERMINATIONS SHALL HAVE BOLT ON METER BASE HUB WITH PVC FEMALE ADAPTOR TO TRANSITION TO METAL CONDUIT.
11. ALL SHADED AREA WILL BE RIGID METALLIC CONDUIT OR IMC.
12. MINIMUM DEPTH OF SERVICE TRENCH TO BE **30"**.
13. FOR PURPOSE OF GROUNDING, A MINIMUM OF #2 BARE STRANDED COPPER TO BE INSTALLED WITH A MINIMUM OF 20' BURIED IN TRENCH. METER BASE SHALL ALSO BE TIED TO UFER IN FOUNDATION. GROUNDING TO MEET NEC.
14. PVC TAPE WRAP ON ALL METAL PIPE BELOW CLAMP, CONTINUOUS BELOW GRADE TO PVC PIPE.
15. ALL UNDERGROUND CONDUIT TO BE BACKFILLED WITH 2' OF SAND ABOVE CONDUIT.



NOTES:

1. HEIGHT OF METER 5'-6" AND NOT TO EXCEED 6', AND NOT LOWER THAN 4.5'.
2. METER SOCKET TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.
3. PAD OR VAULT FLOOR FURNISHED AND INSTALLED BY CONTRACTOR TO GRADE.
4. SERVICE CONDUIT WILL MEET WESTERN UNDERGROUND COMMITTEE SPEC.3.1, CONDUIT AND CONDUCTORS WILL COMPLY WITH NATIONAL ELECTRICAL CODE, AND BE FURNISHED AND INSTALLED BY CONTRACTOR.
 - 4.1. SINGLE PHASE
 - 4.1.1. 100 AMP 1/0 URD
 - 4.1.2. 125 AMP 1/0 URD
 - 4.1.3. 150 AMP 2/0 URD
 - 4.1.4. 200 AMP 4/0 URD
5. CONTRACTOR TO FURNISH STAND-OFF BRACKETS, CLAMPS AND LAGS, MINIMUM OF ONE FOR EVERY TEN FOOT LENGTH OF CONDUIT.
6. CONTRACTOR TO FURNISH AND INSTALL 2500 LB MULE TAPE FOR PULLING IN PRIMARY CONDUCTORS WITH TEN FEET EXTENDING FROM EACH END.
7. ALL METAL TERMINATIONS SHALL HAVE BOLT ON METER BASE HUB.
8. METAL CONDUIT BELOW GRADE WILL BE PROTECTED BY A CORROSION INHIBITING WRAP. (10 MILL PVC PIPE WRAP). ALL ADDITIONAL 90° ELBOWS WILL BE PREFABRICATED FIBER GLASS 36" SWEEPS.
9. ALL SHADED AREA WILL BE RIGID METALLIC CONDUIT.
10. MINIMUM DEPTH OF SERVICE TRENCH TO BE **30"** FROM TOP OF CONDUIT.
11. MINIMUM DEPTH OF TRENCH FOR PRIMARY LINE WILL BE **36"** FROM TOP OF CONDUIT.

UNDERGROUND SERVICES - 200 AMP MAX
(SINGLE PHASE AND THREE PHASE)

STANDARD PLAN
P-2

SHEET
3 OF 3