



CITY OF  
Ames™

**Reference Guide For Obtaining  
Permits and Utility Services  
For New Construction**

*(Revised May 2015)*



## Table of Contents

City Offices – Telephone Numbers.....	1
Application for Utilities.....	2
Building Permits – New Residential .....	3
Building Permits – Commercial/Industrial.....	4
Temporary Electric Service/Meter.....	5, 31
Permanent Electric Service/Meter.....	6, 32, 33
Tapping Water Main 2” and Larger .....	7
Water Services & Fire Lines 2” and Larger .....	8
Construction Water Meter .....	9
Permanent Water Meter.....	10
Backflow Prevention – Containment .....	11
Using Water Without Meter .....	12
Yard Meter .....	13
Hydrant Meter .....	14
Driveways – New & Replacement .....	15
Sidewalks – New & Replacement .....	16
Water Meter Installation Diagrams .....	17-26
Ames Area Utilities – Telephone Numbers .....	27
Electric Services Addendum.....	28-35
Electric Services Index of Standard Drawings.....	36
Electric Service Standard Drawings.....	37-47

# City Offices – Telephone Numbers

## **ELECTRIC SERVICES DEPARTMENT**

Electric Meter Division.....	239-5510
<i>Temporary Electric Meter</i>	
<i>Permanent Electric Meter</i>	
Electric Distribution Division.....	239-5500
<i>Trench Inspection</i>	
<i>Service Connection</i>	
Electric Engineering Division.....	239-5175
<i>Electric Service Location &amp; Sizing</i>	

## **FIRE DEPARTMENT**

Inspection Division.....	239-5153
<i>Building Permits and Inspections</i>	
<i>Electrical Permits and Inspections</i>	
<i>Mechanical Permits and Inspections</i>	
<i>Plumbing Permits and Inspections</i>	

## **PUBLIC WORKS DEPARTMENT**

Engineering & Traffic Divisions.....	239-5160
<i>Street &amp; Right-of-Way Permits</i>	
<i>Driveway Forms &amp; Subgrade Inspection</i>	
<i>Sidewalk Forms &amp; Subgrade Inspection</i>	
Utility Maintenance Division.....	239-5550
<i>Water Main Tapping</i>	

## **FINANCE DEPARTMENT**

Utility Customer Service Division.....	239-5120
<i>Application for Utility Service</i>	
<i>Account Billing and Information</i>	

## **WATER & POLLUTION CONTROL DEPARTMENT**

Water Meter Division.....	239-5151
<i>Construction Water Meters</i>	
<i>Permanent Water Meters</i>	
<i>Yard Meters</i>	
<i>Backflow Prevention – Containment</i>	
<i>Application for Hydrant Meters</i>	
<i>Application for Using Water without a Meter</i>	

**APPLICATION FOR UTILITIES****Utility Customer Service  
515 Clark Avenue, Rm 136  
515-239-5120**

1	Complete Application for Utility Service (if necessary) and a Meter Request Form
2	Meter Division Receives Orders to Install Meters
3	Meter Fees Billed Through Finance/Accounting Division
4	Monthly Utility Charges Billed Through Finance/Utility Customer Service

1. A meter request form may be obtained from the Utility Customer Service Division or the Inspection Division at 515 Clark Avenue or by downloading the form from the website [www.amesutilities.com](http://www.amesutilities.com). (Click on the new construction link.) A completed form may be returned in person, by mail, or by fax (515-239-5286). If the applicant is not an active customer in the utility billing system, a separate application for utility service may be required. The applicant will be contacted, and a form may be mailed or faxed to the customer. A deposit may be required.
2. Once the application and the meter request form are received by Utility Customer Service, a service order(s) is sent to the Electric and/or Water Meter Division to install the meter(s). When you are ready for the meter(s), you must contact the appropriate division to schedule the meter(s) to be installed. (Electric – 515-239-5510; Water – 515-239-5151)
3. After the meter(s) has been installed, fees will be invoiced and billed through the Accounting Division of the Finance Department.
4. Charges for the utility consumption are billed to the customer's name on the Application for Utility Service by the Utility Customer Service Division of the Finance Department.

**BUILDING PERMIT  
NEW RESIDENTIAL  
Single-Family**

**Inspection Division  
515 Clark Avenue  
515-239-5153**

**[www.cityofames.org/Inspections](http://www.cityofames.org/Inspections)**

1	Apply for Building/Zoning Permit
2	Apply for Electrical, Mechanical, Plumbing Permits
3	Inspections Required

1. Builders – Submit building plans and application for building permit.

**Builders must possess:**

- a. A valid State Division of Labor registration number and provide proof of same prior to permit issuance
- b. Contractor’s General Liability Insurance in not less than \$500,000 combined single limit and provide proof of same prior to permit issuance

2. Subcontractors – Submit permit application for electrical, mechanical, and plumbing work. **Subcontractors must possess:**

- a. A current license, issued by the State of Iowa, for electrical, mechanical, or plumbing work
- b. A valid State Division of Labor registration number and provide proof of same prior to permit issuance
- c. Contractor’s General Liability Insurance in not less than \$500,000 combined single limit and provide proof of same prior to permit issuance
- d. And must register with the City of Ames Inspection Division prior to permit issuance

3. Inspection of the work is required at various stages of construction. These generally correspond to the beginning, middle, and end of the project.

- a. Building – Footing, Foundation, Framing, Final
- b. Electrical – Service, Rough-in, Final
- c. Mechanical – Gas Piping, HVAC System, Rough-in, Final
- d. Plumbing – Sewer, Water, Groundwork, Rough-in, Final

Builders and subcontractors are responsible to call and request inspections not less than 24 hours in advance. Additional inspections may be performed throughout the project as deemed necessary by the inspector. See *Ames Municipal Code* Chapter 5 for complete procedures; visit the web at [www.cityofames.org/attorneyweb/pdfs/chap05.pdf](http://www.cityofames.org/attorneyweb/pdfs/chap05.pdf); or contact the Inspection Division at [inspections@city.ames.ia.us](mailto:inspections@city.ames.ia.us).

<b>BUILDING PERMIT</b>	<b>Inspection Division</b>
<b>NEW COMMERCIAL/INDUSTRIAL</b>	<b>515 Clark Avenue</b>
<b>Including Apartments, Townhouses, &amp; Condominiums</b>	<b>515-239-5153</b>
	<b><a href="http://www.cityofames.org/Inspections">www.cityofames.org/Inspections</a></b>

1	Apply for Building/Zoning Permit
2	Apply for Electrical, Mechanical, Plumbing Permits
3	Inspections Required

1. Builders – Submit site plan; submit building plans and application for building permit.
  - a. Owner or owner’s agent must submit site plan to Planning and Housing Department for review by Development Review Committee (DRC). Following approval, submit application for building permit to Inspection Division.
  - b. Builders must possess a valid State Division of Labor registration number and provide proof of same prior to permit issuance.
  - c. Builders must possess Contractor’s General Liability Insurance in not less than \$500,000 combined single limit and provide proof of same prior to permit issuance.
  
2. Subcontractors – Submit permit application for electrical, mechanical, and plumbing work. **Subcontractors must possess:**
  - a. A current license, issued by the State of Iowa, for electrical, mechanical, or plumbing work
  - b. A valid State Division of Labor registration number and provide proof of same prior to permit issuance
  - c. Contractor’s General Liability Insurance in not less than \$500,000 combined single limit and provide proof of same prior to permit issuance
  - d. And must register with the City of Ames Inspection Division prior to permit issuance
  
3. Inspection of the work is required at various stages of construction. These generally correspond to the beginning, middle, and end of the project.
  - a. Building – Footing, Foundation, Framing, Final
  - b. Electrical – Service, Rough-in, Final
  - c. Mechanical – Gas Piping, HVAC System, Rough-in, Final
  - d. Plumbing – Sewer, Water, Groundwork, Rough-in, Final

Builders and subcontractors are responsible to call and request inspections not less than 24 hours in advance. Additional inspections may be performed throughout the project as deemed necessary by the inspector. See *Ames Municipal Code* Chapter 5 for complete procedures; visit the web at [www.cityofames.org/attorneyweb/pdfs/chap05.pdf](http://www.cityofames.org/attorneyweb/pdfs/chap05.pdf); or contact the Inspection Division at [inspections@city.ames.ia.us](mailto:inspections@city.ames.ia.us).

**TEMPORARY ELECTRIC  
SERVICE/METER****Electric Meter Division  
2208 Edison Avenue  
515-239-5510**

1	Obtain Electrical Permit
2	Complete Meter Request Form and Application for Municipal Utility Service (if necessary)
3	Contact Electric Engineering Division to Determine Source for Temporary Service
4	Temporary Service Inspection
5	Contact Electric Meter Division When Ready for Meter
6	Meter Installation and Service Connection

1. Obtain an electrical permit from the Inspections Division at 515 Clark Avenue.
2. The contractor or property owner must complete a Meter Request Form and an Application for Municipal Utility Service (if necessary). *See Page 2 of this booklet for further instructions.*
3. Contact the Electric Engineering Division at 515-239-5175 to determine the power source for temporary service. The temporary service shall be in front or back of, and within two feet of, the power source. Any variation must be approved by the Electric Meter Division prior to service connection. Select site location to allow for lateral trenching at a later date.
4. Contact the Inspections Division at least 24 hours in advance to schedule an inspection of the temporary service installation. The site address must be on the temporary meter stand.
5. Contact the Electric Meter Division at least 24 hours in advance to schedule a crew to connect the service and set the meter. If an overhead service drop is required, the Electric Meter Division, upon notification of the readiness of the service, will submit a service order to the Electric Distribution Division for connection. This may require additional time.
6. Crews from the Electric Services Department will install a meter and connect the temporary service.



**PERMANENT ELECTRIC  
SERVICE/METER**

**Electric Meter Division  
2208 Edison Avenue  
515-239-5510**

1	Obtain Electrical Permit
2	Complete Meter Request Form and Application for Municipal Utility Service
3	Contact Electric Engineering Division to Determine Source for Permanent Service
4	Pick Up Meter Socket
5	Install Meter Socket – Residential and Commercial Service
6	Conduit Installation and Trench Inspection
7	Service Entrance Inspection
8	Service Conductor Installation
9	Meter Installation and Service Connection

1&2. *Refer to Steps 1 & 2 on Page 5 of this booklet.*

3. Contact the Electric Engineering Division at 515-239-5175 to determine the power source for permanent service. Please provide load requirements and anticipated schedule.
4. The Electric Meter Division will issue a meter socket for the permanent service upon confirmation that a Meter Request Form has been turned in to the Utility Customer Service Division office.
5. The contractor/customer is responsible for installing the socket, service panel, grounds, and service conduit. For commercial installations, meter sockets must be marked to identify apartment, suite, etc. and must correspond with the indicators given to Utility Customer Service Division.
6. Residential homes/duplexes require a service conduit (with a 500-lb minimum pull rope/tape inside) installed at 30-inch minimum cover-depth after final grade from the socket location to the utility source. Commercial buildings require service conduit installed at 36-inch minimum cover depth after final grade. Before backfilling the trench, contact the Electric Distribution Division at 515-239-5500 at least 24 hours in advance to schedule a conduit inspection.
7. Contact the Inspections Division at least 24 hours in advance to schedule an inspection of the service entrance installation.
8. Contact the Electric Distribution Division at least 24 hours in advance to schedule the installation of service conductors.
9. Contact the Electric Meter Division at least 24 hours in advance to schedule a crew to connect the service and set the meter.

**TAPPING WATER MAIN**  
**For Services 2” and Larger**

**Utility Maintenance Division**  
**2207 Edison Avenue**  
**515-239-5550**

1	Contractor is Responsible for Tapping Valve and Sleeve, Valve Box, Extension, Top, and Lid
2	Call Iowa One-Call for Locates
3	Obtain Excavation and Right-of-Way Permit

1. The contractor should schedule the tap with their utility vendor. The contractor must provide the tapping valve and sleeve, valve box, extension, top, and lid according to the latest edition of the Iowa Statewide *Urban Design Standards for Public Improvements* and Iowa SUDAS *Standard Specifications*.
2. Call Iowa One-Call at 1-800-292-8989 for utility locates. Locates will be completed within 48 hours.
3. Contact the Public Works Department (City Hall, 515 Clark, 515-239-5160) for an Excavation and Right-of-Way Permit.
4. Notify Utility Maintenance at 515-239-5551, 24 hours in advance, with location before tapping water main.

**WATER SERVICE &  
FIRE LINE INSTALLATIONS**  
For Services 2” and Larger

**Inspection Division**  
**515 Clark Avenue**  
**515-239-5153**

[www.cityofames.org/Inspections](http://www.cityofames.org/Inspections)

1	Licensed Master Plumber Obtains Permit and Piping Installed
2	Chlorinate Pipe and Call for Inspection
3	Flush Line
4	Call for Sample to be Taken
5	Inspection Division Reports Test Results to Plumbing Contractor
6	Call Water Meter Division for Meter Installation

**Instructions for disinfection, flushing, and sampling procedures are available at the Inspection Division office located at 515 Clark Avenue (City Hall).**

1. A licensed master plumber must obtain a plumbing permit from the Inspection Division. Piping is installed under the supervision of a licensed journeyman plumber.
2. The plumber must chlorinate the pipe and call the Inspection Division to inspect the pipe and to perform a pressure test. The chlorinated water must remain in the pipe for at least 24 hours.
3. After the 24-hour retention time, the plumber will flush the service line until total chlorine levels are equal to levels in the distribution system. Another 24 hours must pass before a bacteriological sample may be taken.
4. If the service is a combined fire and domestic service, both services, regardless of size, must be sampled. When the service line is ready for a water sample to be taken, the plumber must fill out a form requesting a bacteriological analysis and return it by mail, fax, or in person to the Inspection Division.
5. After the testing is complete (24 hours minimum after test set up), the Laboratory Services Division staff will report results to the Utility Maintenance and Water Meter Divisions. The Utility Maintenance Division will contact the Inspection Division. The Inspection Division will call the plumber with the test results. If the sample does not pass, steps 4 and 5 must be repeated. **After samples are collected, the service shall remain off at the tapping valve, and water shall not be used until the samples have passed AND a water meter has been installed.**
6. The plumber is responsible for contacting the Water Meter Division to schedule an appointment for the water meter installation. The plumber shall be present at the time the water meter is installed.

<b>CONSTRUCTION WATER METER</b>		<b>Water Meter Division</b> <b>300 E. 5<sup>th</sup> Street, Bldg. 2</b> <b>515-239-5151</b>
1	Obtain Plumbing Permit	
2	Complete Application for Municipal Utility Services	
3	<b>Inspection of Service Line – All services 2” and larger must meet Inspection Division requirements as described on pages 7 and 8.</b>	
4	Safe Access to Service Line	
5	Call Water Meter Division for Appointment to Install Meter	

**All water services must remain off at the curb until a water meter has been installed. Unprotected water meters will be allowed from April 15 through October 15. If the water meter cannot be protected from freezing, then refer to “Using Water Without a Meter” on page 12.**

1. A licensed master plumber must obtain a plumbing permit from the Inspection Division located at 515 Clark Avenue (City Hall). The Water Meter Division will size the water meter according to the number of fixture units listed on the plumbing permit. The meter fee for the permanent meter will be billed when the construction meter is installed.
2. The contractor or property owner must complete an Application for Municipal Utility Services. An application may be obtained from the Inspection Division, at the Utility Customer Service Division, or on the web at [www.amesutilities.com](http://www.amesutilities.com). A completed form may be faxed to 515-239-5261.
3. The Water Meter Division will be notified by the plumbing inspector when the service line has passed inspection. To schedule an inspection, contact the Inspection Division. The inspector will place a lock on the meter valve or curb box when the inspection has been completed. Authorization must be given by the Water Meter Division to remove the lock.
4. Safe access to the water meter location must be provided. The meter technician will determine if the work area is a safe environment.
5. Call the Water Meter Division at 515-239-5151 to schedule an appointment to have the water meter installed. The water meter will be installed within 48 hours from the time of notice. Upon installation, a valve and hose bibb vacuum breaker will be provided with the construction meter to provide a minimum amount of backflow protection. The valve and vacuum breaker may be removed from the meter coupling when the water meter is connected to the building’s plumbing system.

**PERMANENT WATER METER**

**Water Meter Division**  
**300 E. 5<sup>th</sup> Street, Bldg. 2**  
**515-239-5151**

1	Construction Near Completion
2	Wire Installed for Remote Reading Register
3	Schedule Appointment to Have Water Meter Installed
4	Call for Final Inspection
5	Adequate Space for Water Meter Installation and Future Maintenance

1. Permanent water meters will be installed once the construction is near completion (plumbing work, copper ground wire around meter, drywall, exterior siding/painting completed, etc.). **If a backflow assembly for containment and/or isolation is required, the test report must be received by the Cross-Connection Control Coordinator (in the Water Meter Division) before the permanent water meter can be installed.**
  
2. A 22/3 gauge braided, shielded wire must be installed from the meter setting to within 3' of the electric meter. A radio ERT will be connected when the permanent water meter is installed. This requirement pertains to locations outside of the City of Ames electric service territory and certain commercial installations. Please refer to Sec. 28.214 of the Municipal Code for further requirements.
  
3. Call the Water Meter Division to schedule an appointment to have the permanent water meter installed. The meter will be installed within 48 hours from the time of notification. (Note: If a yard meter is to be installed, it will be installed at the same time.)

If the yard meter is supplying an irrigation system, the backflow assembly for the irrigation system must be tested; and the test report must be received by the Cross-Connection Control Coordinator (in the Water Meter Division) before the yard meter can be installed. (Note: The permanent master meter will be installed and the remote read register connected at the same time.)

4. Once the permanent meter(s) has been installed and the project is ready for final inspection, call the Inspection Division at 515-239-5153. **Occupancy is prohibited until a final inspection has been completed and either a Temporary Certificate of Occupancy or Certificate of Occupancy has been issued by the Inspection Division.**
  
5. There must be sufficient clear space provided where the service line enters the building to allow installation and future maintenance of the water meter as described in Section 28.205 of the *Ames Municipal Code*. (See pages 17-26 for diagrams of typical water meter installations.)

<b>BACKFLOW PREVENTION CONTAINMENT</b>		<b>Water Meter Division</b>
<b>New Water Services</b>		<b>300 E. 5<sup>th</sup> Street, Bldg. 2</b>
		<b>515-239-5151</b>
1	Identify Backflow Prevention Needs for Proposed Facility	
2	Install Required Backflow Prevention Assembly	
3	Test Assembly and Submit Test Report	

1. In order to determine if backflow prevention assemblies are needed, the Water Meter Division requires the following information.

- Plans or drawings that have been submitted to the building official
- Other information that can be provided about the activities and water use in the proposed facility

The Inspection Division will notify the contractor or property owner if a backflow prevention assembly is required.

2. Backflow prevention assemblies shall be installed in the horizontal plumbing immediately after the water meter and upstream of any branch piping. Any other location must be approved in writing by the Water Meter Division prior to installation. (See pages 17-26 for diagrams of typical meter and backflow prevention assembly installations.)

Water service will be interrupted for testing of and repairs to backflow prevention assemblies. If this is unacceptable, the customer may, at his/her expense, install parallel piping including a backflow prevention assembly.

If hot water is used in the building’s plumbing system, thermal expansion must be provided for as stated in Chapter 21.501,47),(b),(viii),g. of the *Ames Municipal Code* at [www.cityofames.org/attorneyweb/pdfs/chap21.pdf](http://www.cityofames.org/attorneyweb/pdfs/chap21.pdf).

3. Backflow prevention assemblies shall be tested by a registered backflow prevention assembly technician at the time of installation and on an annual basis thereafter. In some instances, assemblies may require more frequent testing. Examples of this may include assemblies with a history of repeated failures or assemblies that have been subjected to fire, flood, or other environmental conditions. For new construction, the test report must be submitted to the Water Meter Division before the permanent water meter is installed.

**USING WATER WITHOUT METER****Water Meter Division  
300 E. 5<sup>th</sup> Street, Bldg. 2  
515-239-5151**

1	Complete Application
2	Schedule Appointment to Turn Service On
3	Schedule Appointment to Turn Service Off
4	Charges Calculated

1. Complete an Application to Use Water Without Meter at the Water Meter Division.
2. An appointment will be made at the time the application is completed to have the service turned on.
3. The Water Meter Division must be contacted when water is no longer needed or when a water meter can be installed.
4. Charges will be calculated by the Water Meter Division and billed through the Finance Department. The charges will begin the day the service is turned on and end when the Water Meter Division has turned off the service or installed a water meter. The per-day rate is set by City Council; please consult the fee schedule for current charges.

**YARD METER****Water Meter Division  
300 E. 5<sup>th</sup> Street, Bldg. 2  
515-239-5151**

1	Obtain Plumbing Permit
2	Complete Application for Municipal Utility Services
3	Call for Inspection
4	Schedule Appointment for Meter Installation
5	Monthly Charges

1. The yard meter may be included on the original plumbing permit; if it is not, the plumber must apply for another permit at the Inspection Division.
2. The contractor or property owner must complete an Application for Municipal Utility Services. Only one form is needed for all municipal utility services. This form may be obtained at the Inspection Division or Utility Customer Service Division. The completed form may be faxed to 515-239-5261.
3. A 22/3 gauge braided, shielded wire must be installed from the meter setting to within 3' of the electric meter. A radio ERT will be connected when the permanent water meter is installed. This requirement pertains to locations outside of the City of Ames electric service territory and certain commercial installations. Please refer to Sec. 28.214 of the Municipal Code for further requirements. Once the plumbing work has been completed and the wire ran, call the Inspection Division at 515-239-5153 to schedule an inspection. (See page 25 for diagram of typical yard meter installation.)
4. Call the Water Meter Division to schedule an appointment to have the yard meter installed. The meter will be installed within 48 hours from the time of notification. If the yard meter is supplying an irrigation system, the backflow assembly for the irrigation system must be tested; and the test report must be received by the Cross-Connection Control Coordinator (in the Water Meter Division) before the yard meter can be installed. (Note: The permanent master meter will be installed and the remote read register connected at the same time.)
5. A monthly charge is assessed for yard meters. To inquire about the current monthly charge, call either the Water Meter Division at 515-239-5151 or Utility Customer Service Division at 515-239-5120.



**HYDRANT METER****Water Meter Division  
300 E. 5<sup>th</sup> Street, Bldg. 2  
515-239-5151**

1	Complete Application for Hydrant Meter
2	Schedule Appointment for Installation of Hydrant Meter
3	Contact Water Meter Division When Finished With Hydrant Meter
4	Charges Calculated and Billed

**Unprotected hydrant meters will be allowed from April 15 through October 15. If the hydrant meter cannot be protected from freezing, then refer to “Using Water Without a Meter” on Page 12. There are a limited number of hydrant meters available.**

1. Apply for hydrant meter at the Water Meter Division. A signature is required by the individual or contractor’s representative who will be responsible for any damages that may occur to the hydrant, meter, or backflow prevention device.
2. When the application is completed, an appointment will be scheduled for a water meter technician to meet the individual or contractor’s representative at the hydrant to install the hydrant meter. It is the responsibility of the individual or company requesting the hydrant meter to provide a means to secure the outlet valve to prevent unauthorized water usage.
3. Call the Water Meter Division when the hydrant meter is no longer needed. If a date to remove the meter has been predetermined and noted on the application, the Water Meter Division will remove the meter on that date unless otherwise notified. The means to secure the outlet valve must be removed prior to the removal of the meter.
4. The setting/removal fees and water rates are determined by City Council and may change annually. The current fee schedule can be found in Appendix Q of the *Ames Municipal Code*. A monthly fee will be charged for the hydrant meter. The fee is based on the meter size. If the hydrant meter is used fewer than 30 days, the rate will be pro-rated for the number of days the hydrant meter is used. Charges will be calculated by the Water Meter Division and billed through the Finance Department once the meter has been removed.

**CONSTRUCTION OF  
NEW AND REPLACEMENT  
DRIVEWAYS**

**Public Works Engineering Division  
515 Clark Avenue  
515-239-5160**

1	Driveway Application (formerly Curb Cut Application)
2	New Construction
3	Inspection
4	Specifications
5	Length of Time to Complete

1. For all new driveway approaches and widening of existing driveway approaches, you must submit a Driveway Application for approval. Driveway location and width will be reviewed by the City Traffic Engineer. Prior to approving the Driveway Application, the City Traffic Engineer may require that the driveway width and location be modified to meet traffic movement requirements on the abutting street. A Driveway Application is not necessary for replacement of existing driveway at the same width and location. There is a \$50.00 fee for either a Commercial or Residential Driveway Application.
2. Driveway Application permits for new driveways in conjunction with new structures are issued as part of the building permit. The \$50.00 fee is included as part of the building permit fee.
3. All driveway forms and subgrade must be inspected by the city's Public Works Engineering Division prior to placing concrete. The Engineering Division needs two hours' notification in order to respond. Call 239-5160 to schedule an inspection.
4. The City of Ames uses as its standard the latest edition of the Iowa Statewide *Urban Design Standards for Public Improvements* and Iowa SUDAS *Standard Specifications*. If you have a copy of these specifications, please use them as your guide for driveway and approaches to driveways. The City of Ames has copies of help sheets for driveway construction. You may obtain a copy from the City of Ames Public Works Department by calling 515-239-5160.
5. Once the Driveway Application is approved, the applicant will receive a copy of the form which will allow them one year from the date of issuance to complete the work.

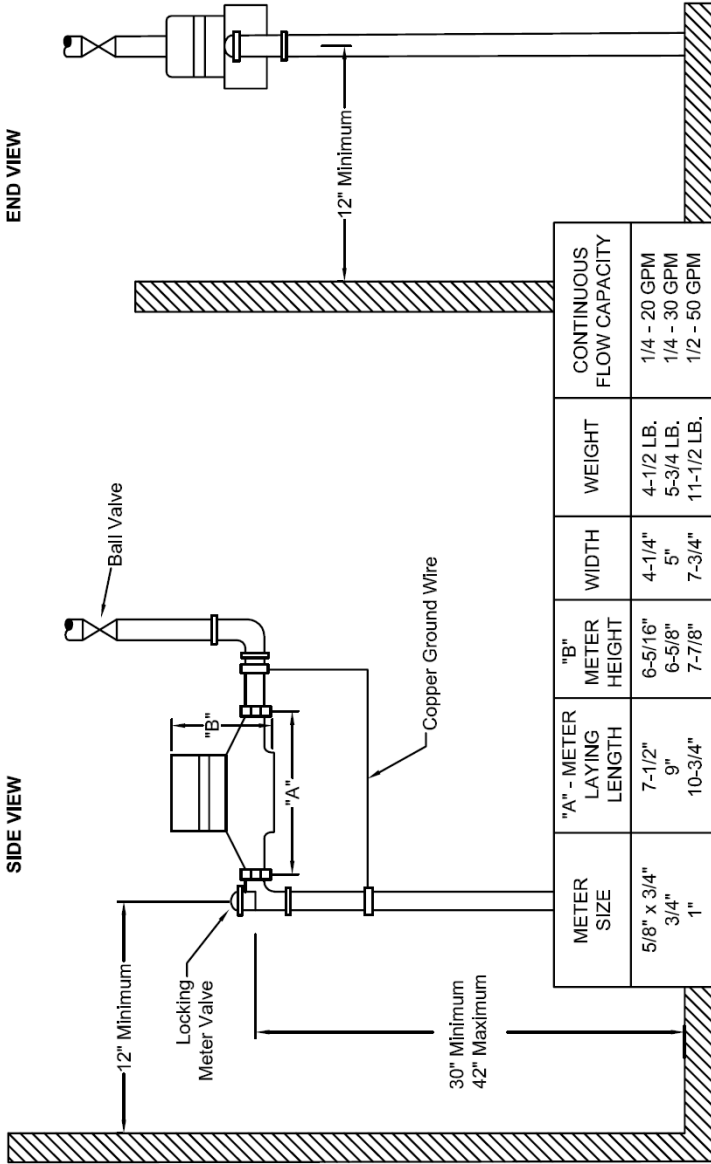
**CONSTRUCTION OF  
NEW AND REPLACEMENT  
SIDEWALKS**

**Public Works Engineering Division  
515 Clark Avenue  
515-239-5160**

1	Permits for New Sidewalk
2	Existing Sidewalk Replacement
3	Specifications for Sidewalks
4	Staking of Sidewalks
5	Inspection of Sidewalks

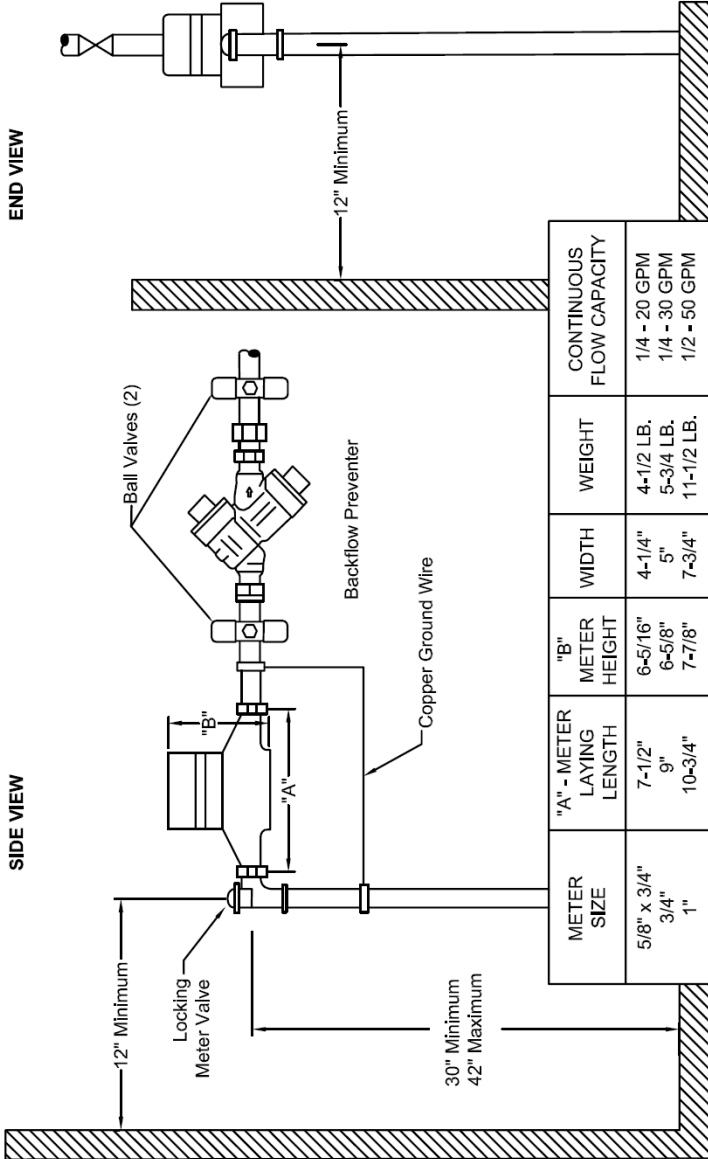
1. New sidewalk construction requires a City of Ames sidewalk permit. Permits are obtained from the Inspection Division located on the second floor of City Hall. Call the Inspection Division at 515-239-5153 for fee schedules since there may be periodic changes.
2. Existing sidewalk replacement does not require a sidewalk permit.
3. Sidewalks must be built in accordance with the latest edition of the Iowa Statewide *Urban Design Standards for Public Improvements* and Iowa SUDAS *Standard Specifications*, as adopted by the City of Ames. If you have a copy of these specifications, please use them as your guide for construction and replacement of sidewalks. The City of Ames has copies of help sheets for sidewalk construction. You may obtain a copy from the City of Ames Public Works Department by calling 515-239-5160.
4. Staking of sidewalk location and grade for compliance with the specifications is the responsibility of the permit holder or property owner. Questions about interpretation of the specifications can be directed to the Public Works Engineering Division at 515-239-5160.
5. Prior to placing any concrete, the Engineering Division must inspect the forms and subgrade. Call 515-239-5160 to schedule an inspection. Please give at least a two-hour advance notice on requests for inspections.

TYPICAL INSTALLATION FOR 5/8", 3/4", AND 1" DISC METER



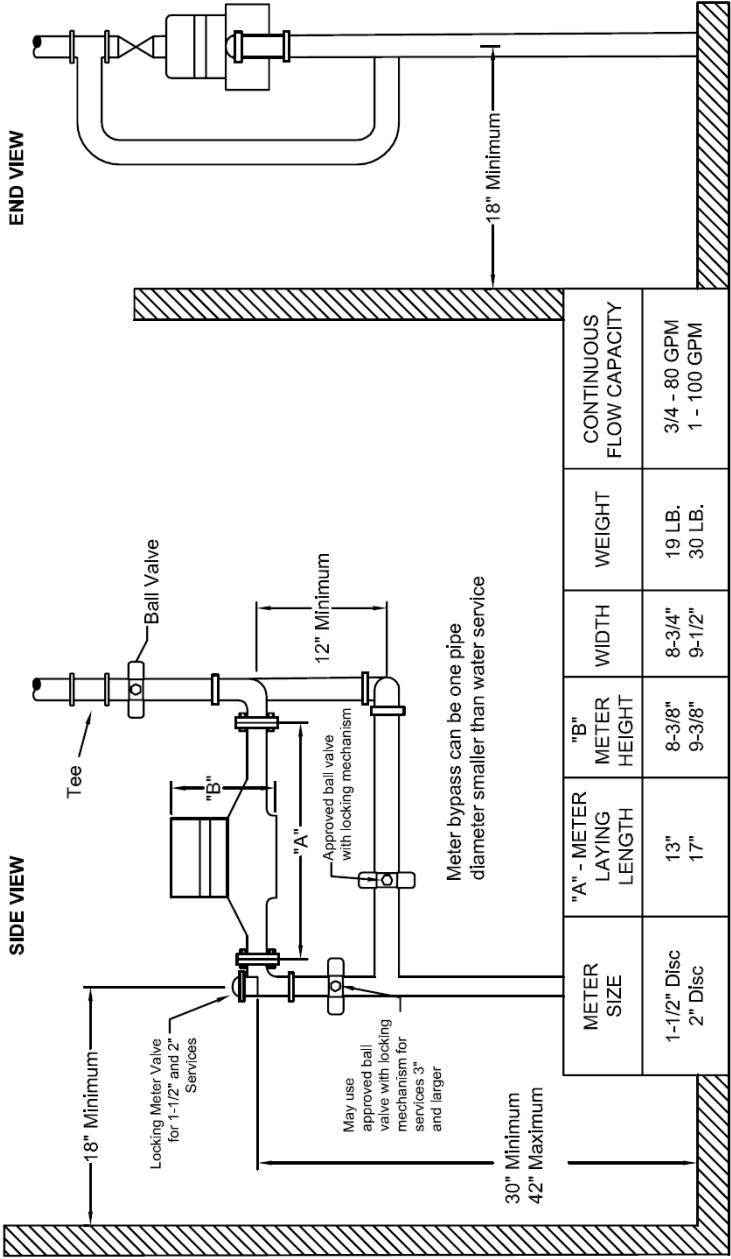
Schematic not drawn to scale  
Revision date: September 17, 2009

TYPICAL INSTALLATION FOR 5/8", 3/4", AND 1" DISC METER  
WITH BACKFLOW PREVENTION



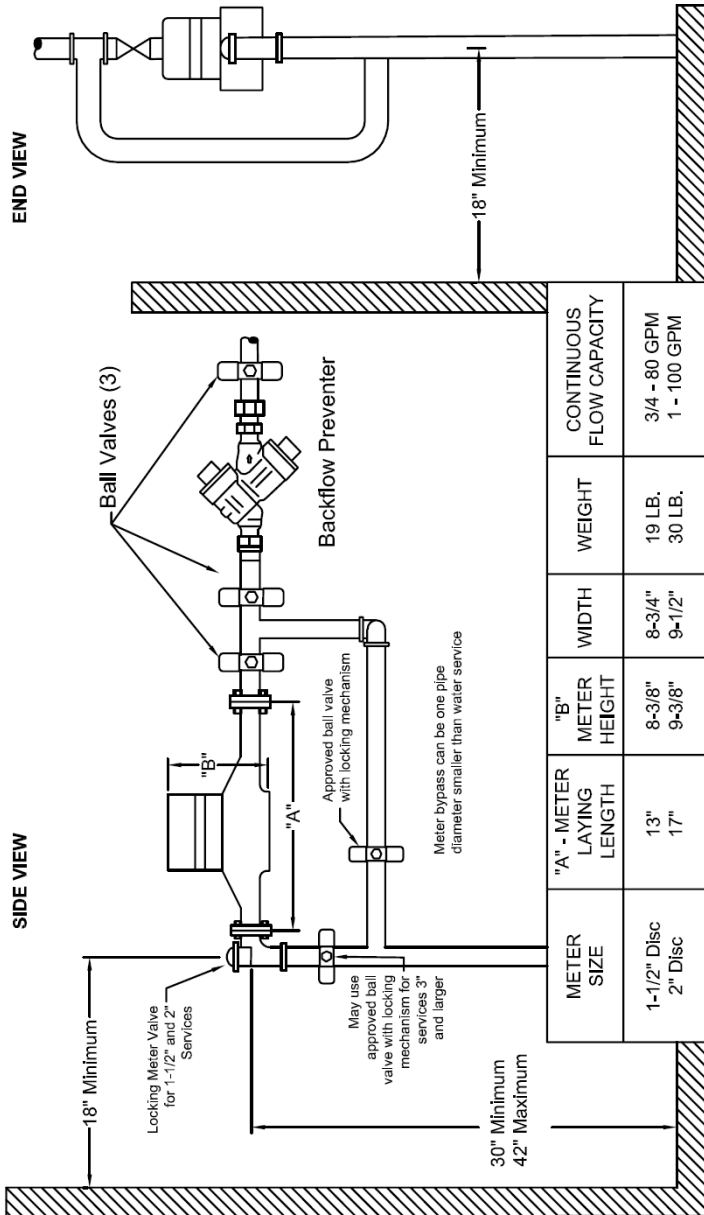
Schematic not drawn to scale  
Revision date: September 17, 2009

# TYPICAL INSTALLATION FOR 1-1/2" AND 2" ULTRASONIC AND DISC METER



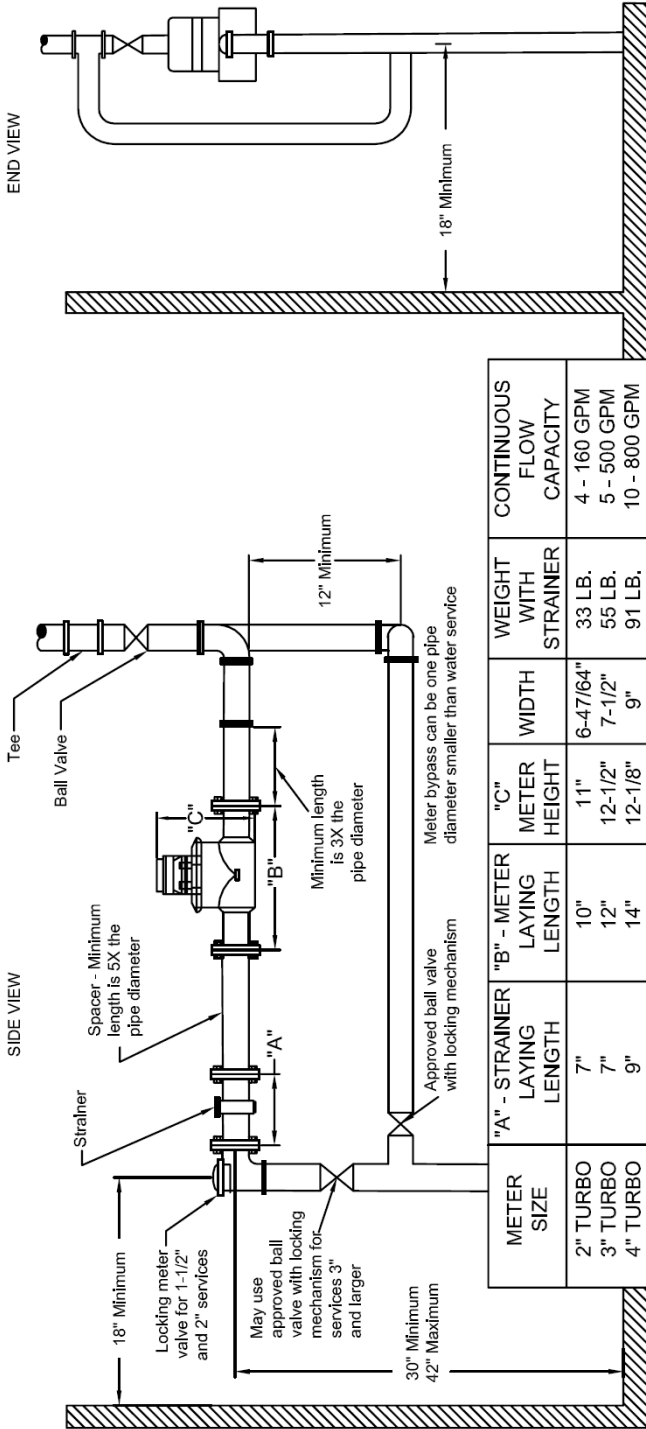
Schematic not drawn to scale  
Revision date: September 17, 2009

# TYPICAL INSTALLATION FOR 1-1/2" AND 2" ULTRASONIC AND DISC METER WITH BACKFLOW PREVENTION



Schematic not drawn to scale  
Revision date: September 17, 2009

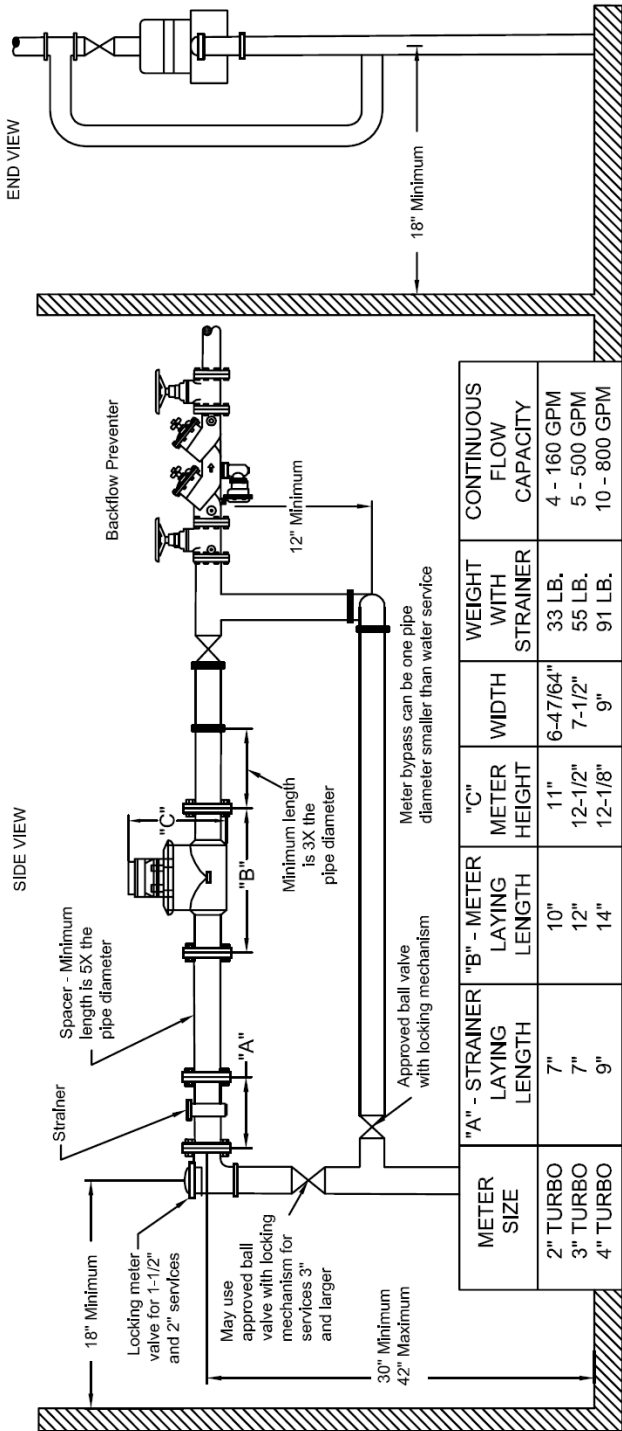
# TYPICAL TURBO METER INSTALLATION



Schematic not drawn to scale  
Revision date: September 17, 2009

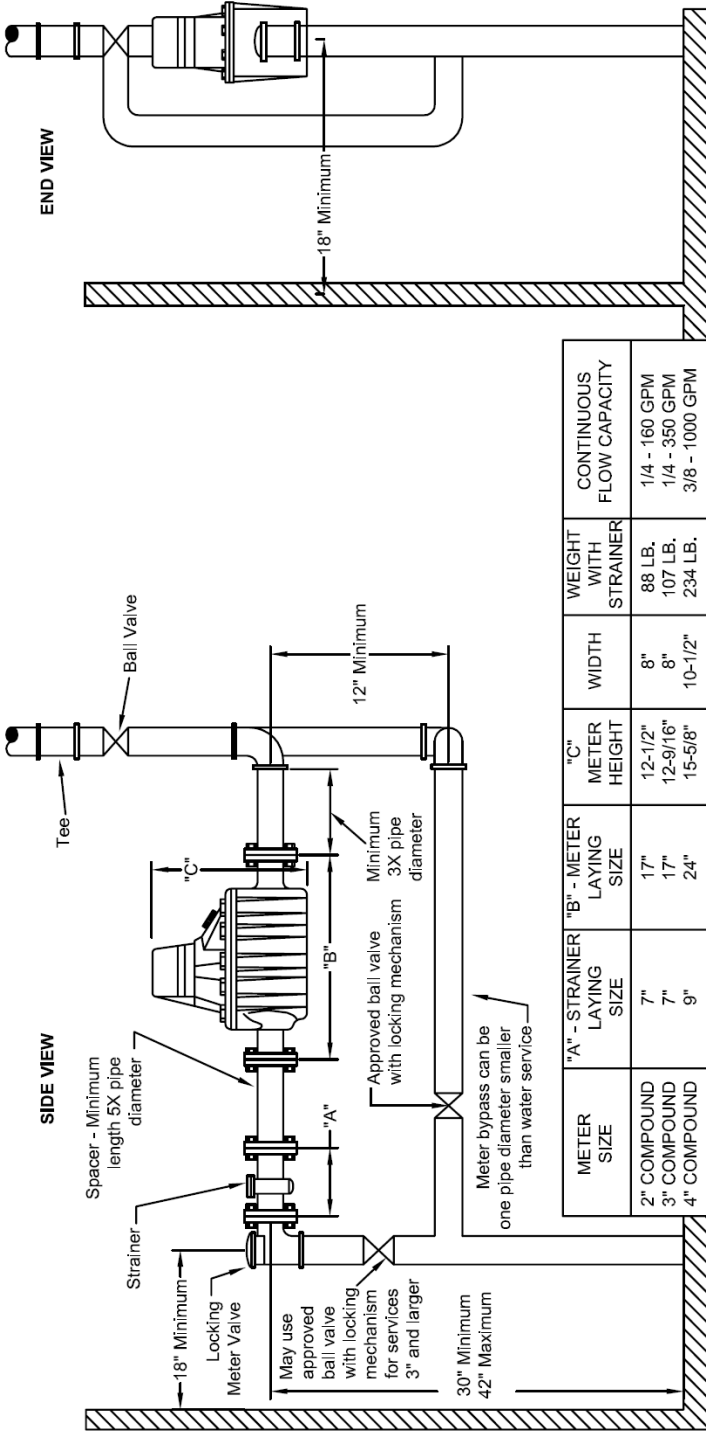


# TYPICAL TURBO METER INSTALLATION WITH BACKFLOW PREVENTION



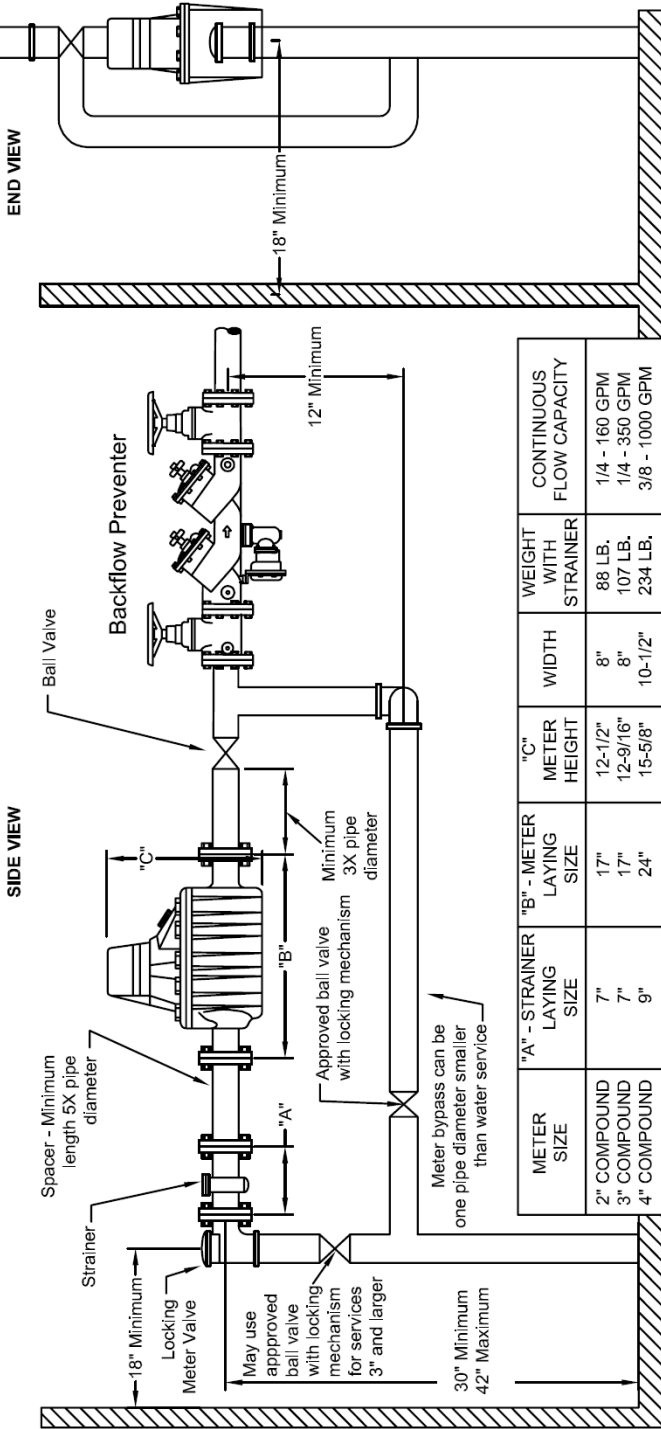
Schematic not drawn to scale  
Revision date: September 17, 2009

# TYPICAL MAG METER INSTALLATION



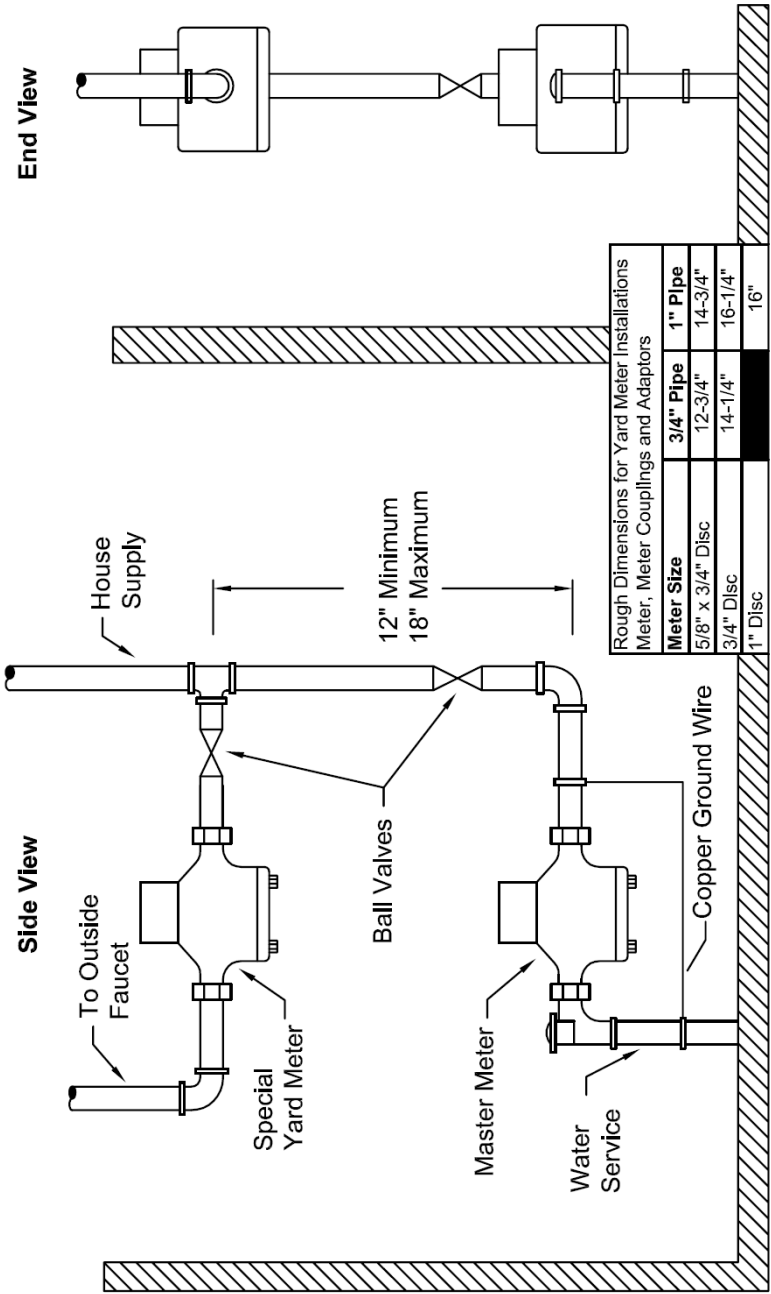
Schematic not drawn to scale  
Revision date: September 17, 2009

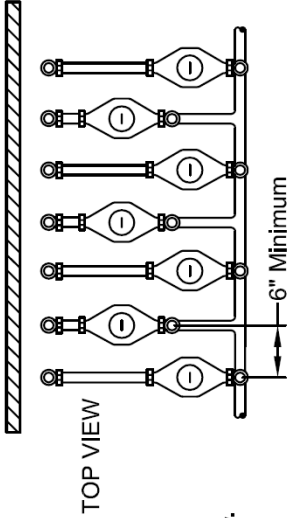
# TYPICAL MAG METER INSTALLATION WITH BACKFLOW PREVENTION



Schematic not drawn to scale  
Revision date: September 17, 2009

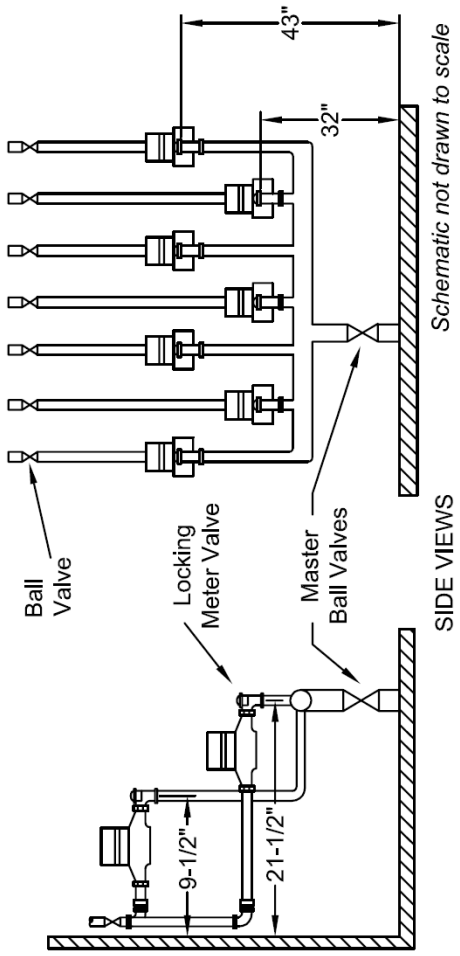
# TYPICAL INSTALLATION FOR YARD METER





**TYPICAL METER MANIFOLD**

Spacing shown is for a 5/8" x 3/4" meter. If larger meters are required, the meter spacing needs to be adjusted accordingly. Please refer to the table on the inside of the back cover for rough dimensions of meter spacing.



## **Quick Reference Other Utility Telephone Numbers**

Iowa One Call .....	1-800-292-8989
<i>Utility Locates – Call 48 Hours Before Digging</i>	
Alliant Energy (Gas) .....	1-800-255-4268
Mediacom (CATV) .....	In Ames 233-4646
	Outside Ames 1-800-262-3843
Century Link (Telephone) .....	1-800-603-6000



CITY OF

Ames™

ELECTRIC SERVICES

***Reference Guide for Contractors to Obtain  
Permits and Electric Services - Addendum***

## Table of Contents

Electrical Permits – Residential & Commercial.....	30
Temporary Electric Service/Meter.....	31
Permanent Electric Service/Meter (Residential).....	32
Permanent Electric Service/Meter (Commercial).....	33
Existing Service Upgrades/Relocations.....	34
Service Removal/Abandonment.....	35
Ames Area Utilities – Telephone Numbers.....	36
Index of Standard Drawings.....	37



**ELECTRICAL PERMIT  
RESIDENTIAL & COMMERCIAL**

**Inspection Division  
515 Clark Avenue  
515-239-5153**

**[www.cityofames.org/InspectionsWeb](http://www.cityofames.org/InspectionsWeb)**

1	Apply for Electrical Permit
2	Inspections Required

1. Electrical contractors – Submit permit application for electrical work. **Contractors must possess:**
  - a. A current license, issued by the State of Iowa, for electrical work
  - b. A valid State Division of Labor registration number and provide proof of same prior to permit issuance
  - c. Contractor’s General Liability Insurance in not less than \$500,000 combined single limit and provide proof of same prior to permit issuance
  - d. And must register with the City of Ames Inspection Division prior to permit issuance
2. Inspection of the work is required at various stage of construction. These generally correspond to the beginning, middle, and end of the project.
  - a. Electrical – Service, Rough-in, Final

Electrical contractors are responsible to call and request inspections not less than 24 hours in advance. Additional inspections may be performed throughout the project as deemed necessary by the inspector. See *Ames Municipal Code* Chapter 5 for complete procedures; visit the web at [www.cityofames.org/attorneyweb/pdfs/chap05.pdf](http://www.cityofames.org/attorneyweb/pdfs/chap05.pdf); or contact the Inspection Division at [inspections@city.ames.ia.us](mailto:inspections@city.ames.ia.us)

**TEMPORARY ELECTRIC  
SERVICE/METER**

**Electric Meter Division  
2208 Edison Avenue  
515-239-5510**

1	Obtain Electrical Permit
2	Complete Meter Request Form and Application for Municipal Utility Service (if necessary)
3	Contact Electric Engineering to Determine Source for Temporary Service
4	Temporary Service Inspection
5	Contact Electric Meter Division When Ready for Meter
6	Meter Installation and Service Connection

1. Obtain an electrical permit from the Inspections Division at 515 Clark Avenue (ph.515-239-5153).
2. The contractor or property owner must complete a Meter Request Form and an Application for Municipal Utility Service (if necessary).
3. Contact the Electric Engineering Division (ph. 515-239-5175) to determine the power source for temporary service. The temporary service shall be in front of, or back of, and within two feet of, the power source. Any variation must be approved by the Electric Distribution Division prior to service connection. Select site location to allow for lateral trenching at a later date.
4. Contact the Inspections Division at least 24 hours in advance to schedule an inspection of the temporary service installation. The site address must be on the temporary meter stand.
5. Contact the Electric Meter Division at least 24 hours in advance to schedule a crew to connect the service and set the meter. If an overhead service drop is required, the Electric Meter Division, upon notification of the readiness of the service, will submit a service order to the Electric Distribution Division for connection. The may require additional time.
6. Crews from the Electric Services Department will install a meter and connect the temporary service.

**PERMANENT ELECTRIC  
SERVICE/METER (RESIDENTIAL)**

**Electric Meter Division  
2208 Edison Avenue  
515-239-5510**

1	Obtain Electrical Permit
2	Complete Meter Request Form and Application for Municipal Utility Service
3	Contact Electric Engineering to Determine Source for Permanent Service
4	Pick Up Meter Socket
5	Install Meter Socket
6	Conduit Installation and Trench Inspection
7	Service Entrance Inspection
8	Service Conductor Installation
9	Meter Installation and Service Connection

1. & 2. *Refer to Pages 30 & 31 of this guide for further instructions.*
- 3.. Contact the Electric Engineering Division at 515-239-5175 to determine the power source permanent service. Please provide load requirements and anticipated schedule.
4. The Electric Meter Division will issue a meter socket (single or duplex) for the permanent service upon confirmation that a Meter Request Form has been turned into the Utility Customer Service office. The customer supplies the socket for installations that require more than a duplex socket. Milbank sockets are preferred. Alternates are Cutler Hammer, Siemens/Talon or (Square D.Multi tenant only).
5. The contractor/customer is responsible for installing the socket, service panel, grounds, and service conduit.
6. Residential homes/duplexes require a service conduit (wth a 500-lb minimum pull rope/tape inside) installed 30” minimum cover-depth after final grade from the socket location to the utility source. Before backfilling the trench, contact the Electric Distribution Division at 515-239-5500 at least 24 hours in advance to schedule a conduit inspection.
7. Contact the Inspections Division at least 24 hours in advance to schedule an inspection of the service entrance installation.
8. Contact the Electric Distribution Division at least 24 hours in advance to schedule the installation of service conductors.
9. Contact the Electric Meter Division at least 24 hours in advance to schedule a crew to connect the service and set the meter.

**PERMANENT ELECTRIC  
SERVICE/METER (COMMERCIAL)**

**Electric Meter Division  
2208 Edison Avenue  
515-239-5510**

1	Obtain Electrical Permit
2	Complete Meter Request Form and Application for Utility Service
3	Contact Electric Engineering to Determine Source for Permanent Service
4	Pick Up Meter Socket (If applicable)
5	Install Meter Socket(s)
6	Conduit Installation and Trench Inspection
7	Service Conductor Installation
8	Service Entrance Inspection
9	Meter Installation and Service Connection

1. & 2. *Refer to Pags 30 & 31 of this guide for further instructions.*
3. Contact the Electric Engineering Division at 515-239-5175 to determine the power source permanent service. Please provide load requirements and anticipated schedule.
4. The Electric Meter Division will issue a meter socket (single or duplex) for the permanent service upon confirmation that a Meter Request Form has been turned into the Utility Customer Service office. \*The contractor/customer is responsible for providing all service entrance equipment not provided by the City. This includes, but not limited to, multi-unit meter stacks, CT cabinets, meter disconnect switches, and combined meter/disconnect sockets.\*
5. The contractor/customer is responsible for installing the service entrance equipment, service panel, grounds, and service conduit. For commercial installations, meter sockets must be marked to identify apartment, suite, etc. and must correspond with the addresses given to Utility Customer Service.
6. Commercial buildings require service conduit installed at 36” minimum cover-depth after final grade. Before backfilling the trench, contact the Electric Distribution Division at 515-239-5500 at least 24 hours in advance to schedule a conduit inspection.
7. Contact the Electric Distribution Division at least 24 hours in advance to schedule the installation of service conductors.
8. Contact the Inspections Division at least 24 hours in advance to schedule an inspection of the service entrance installation.
9. Contact the Electric Meter Division at least 24 hours in advance to schedule a crew to connect the service and set the meter.

**EXISTING SERVICE  
UPGRADES/RELOCATION**

**Electric Meter Division  
2208 Edison Avenue  
515-239-5510**

1	Obtain Electrical Permit
2	Contact Electric Engineering to Discuss Scope of Project
3	Pick Up Meter Socket (If applicable)
4	Install Meter Socket
5	Conduit Installation and Trench Inspection
6	Service Entrance Inspection
7	Service Conductor Installation
8	Meter Installation and Service Connection

1. Obtain an electrical permit from the Inspections Division at 515 Clark Avenue (ph. 515-239-5153). *See Page 30 for further instructions.*
2. Contact the Electric Engineering Division at 515-239-5175 to discuss the scope of the project and determine if any relocation fees will be charged to the customer. Please provide load requirements and anticipated schedule.
3. Contact the Electric Meter Division at 515-239-5510 to determine if a new meter socket will be issued.
4. The contractor/customer is responsible for installing the socket, service panel, grounds, and service conduit.
5. Residential homes/duplexes require a service conduit (with a 500-lb minimum pull rope/tape inside) installed 30" minimum cover-depth after final grade from the socket location to the utility source. Before backfilling the trench, contact the Electric Distribution Division at 515-239-5500 at least 24 hours in advance to schedule a conduit inspection.
6. Contact the Inspections Division at least 24 hours in advance to schedule an inspection of the service entrance installation.
7. Contact the Electric Distribution Division at least 24 hours in advance to schedule the installation of service conductors.
8. Contact the Electric Meter Division at least 24 hours in advance to schedule a crew to connect the service and set the meter.

**SERVICE  
REMOVAL/ABANDONMENT**

**Electric Meter Division  
2208 Edison Ave  
515-239-5510**

1	Obtain Demolition Permit
2	Contact Utility Customer Service to Request Service Disconnection
3	Contact Electric Meter to Remove Meter
4	Contact Electric Distribution to Remove/Abandon Conductor (If applicable)

1. Obtain a demolition permit from the Inspections Division at 515 Clark Avenue (ph. 515-239-5153).
2. Contact the Utility Customer Service Department at 515-239-5120 to request service disconnection. Please provide anticipated schedule for disconnection.
3. Contact the Electric Meter Division at 515-239-5510 to request meter removal.
4. Contact the Electric Distribution Department at 515-239-5501 to schedule the removal and abandonment of overhead or underground conductor. The contractor/customer is responsible for removing all customer-owned cables and equipment.

## **Index of Standard Drawings**

Minimum Clearance for Electrical Service – 300V and Less  
(EM #700)

Clearance for Through the Roof Service Mast  
(EM #701)

200 Amp Single Phase OH Service – Wall Mounted Mast  
(EM #702)

200 Amp Single Phase OH Service – Through Roof Mast  
(EM# 703)

200 Amp Single Phase UG Residential Service  
(EM #704)

600 Amp & Below Single Phase UG Commercial Service  
(EM #705)

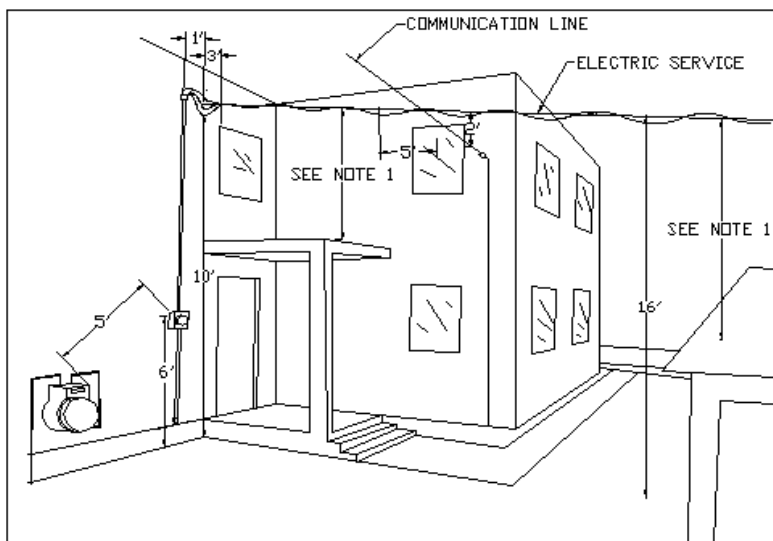
600 AMP & Below Three Phase UG Commercial Service  
(EM #706)

800 Amp & Above Three Phase CT Metered Commercial  
(EM #707)

Multi-tenant Commercial Service  
(EM #711)

Single Phase UG Residential (Duplex) Service  
(EM #712)

Trench Requirements  
(U200)

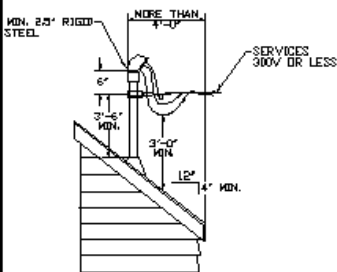
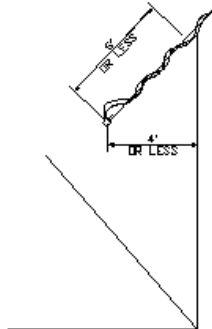
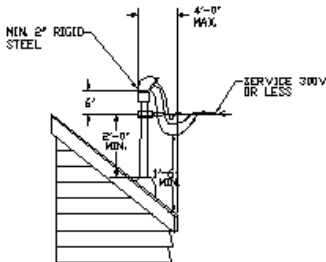


NOTES:

1. On buildings where service passes over but does not attach, the vertical clearance must be 11' if accessible or 3.5' if inaccessible.

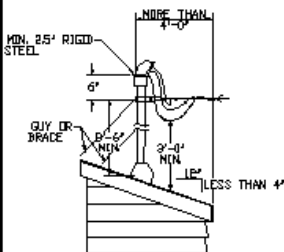
<b>AMES MUNICIPAL ELECTRIC SYSTEM</b>  REVISED: 8-8-97  APPROVED:	<b>MINIMUM CLEARANCE FOR ELECTRICAL SERVICES 300V AND LESS</b>	<b>ELECTRIC METERING</b>
		EM700
		PAGE 1 OF 1





**NOTE:**

1. If not more than 6' of service passes over the roof to attach to a through the roof service support located not more than 4' from the roof edge, the clearance can drop 18".
2. No coupling is allowed in conduit between the weather head and bottom of the soffit.



**NOTE:**

- If roof has a slope of at least 4/12 and 4' or more of the service conductor passes over the roof, the minimum clearance allowed is 3'-0".

AMES MUNICIPAL  
ELECTRIC SYSTEM

REVISED: 8-4-97

APPROVED:

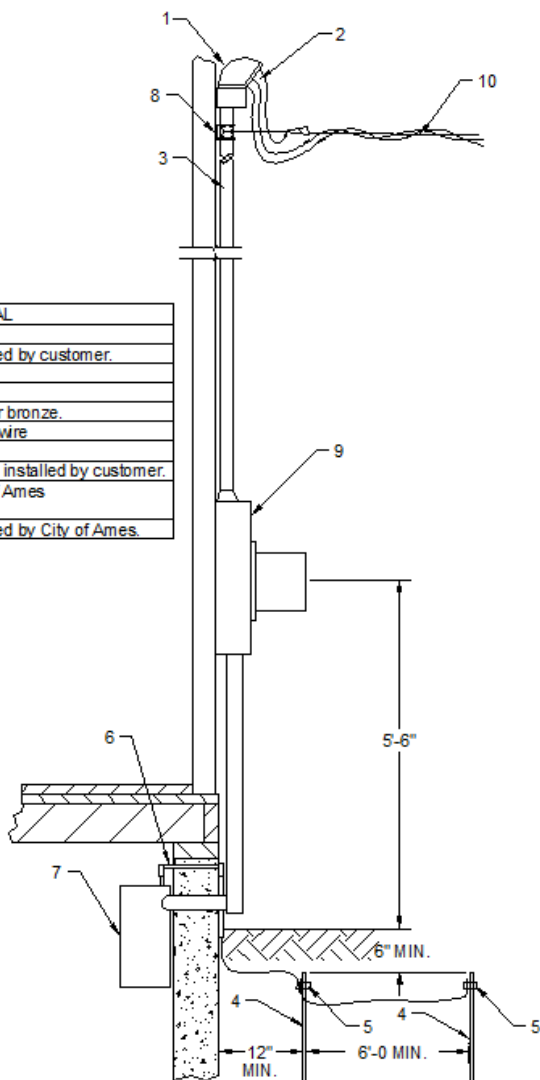
CLEARANCE FOR THROUGH THE  
ROOF SERVICE MAST  
300 V AND LESS

ELECTRIC METERING

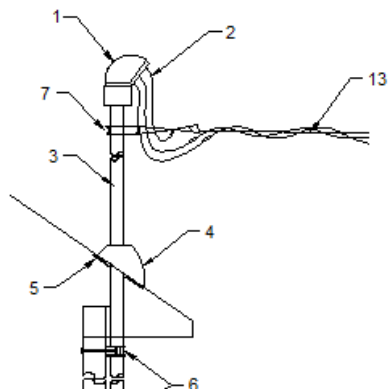
EM701

PAGE 1 OF 1

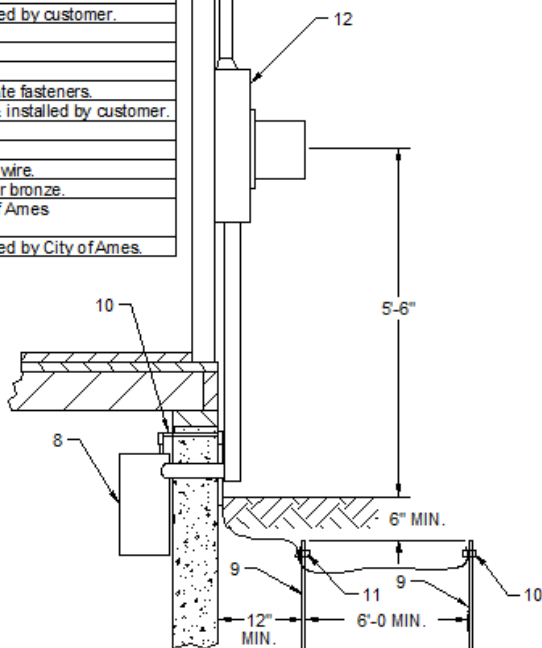
ITEM	QTY.	MATERIAL
1	1	Weather head
2	24" Min	Service wire, provided & installed by customer.
3	1	Service mast, rigid steel only
4	2	Ground rod, 8'-0 min. per NEC.
5	2	Solderless connector, copper or bronze.
6	As Req'd	Nonmetallic conduit for ground wire
7	1	Customer's service panel.
8	1	Service attachment, provided & installed by customer.
9	1	Meter base, provided by City of Ames & installed by customer.
10	1	Service wire, provided & installed by City of Ames.



CITY OF AMES ELECTRIC SERVICES	200 AMP SINGLE PHASE OVERHEAD SERVICE WALL MOUNTED MAST	ELECTRIC METERING
		EM702
REVISED: NCM 1/17/08		PAGE 1 OF 1
APPROVED:		



ITEM	QTY.	MATERIAL
1	1	Weather head
2	24' Min.	Service mast, provided & installed by customer.
3	1	Service mast, rigid steel only
4	1	Roof Flashing
5	2	Solid blocking between rafters.
6	2	Mounting brackets with adequate fasteners.
7	1	Service attachment, provided & installed by customer.
8	1	Customer's service panel.
9	2	Ground rod, 8'-0 min. per NEC.
10	As Req'd	Nonmetallic conduit for ground wire.
11	2	Solderless connector, copper or bronze.
12	1	Meter base, provided by City of Ames & installed by customer.
13	1	Service wire, provided & installed by City of Ames.



CITY OF AMES  
ELECTRIC SERVICES

REVISED: NCM 1/17/08

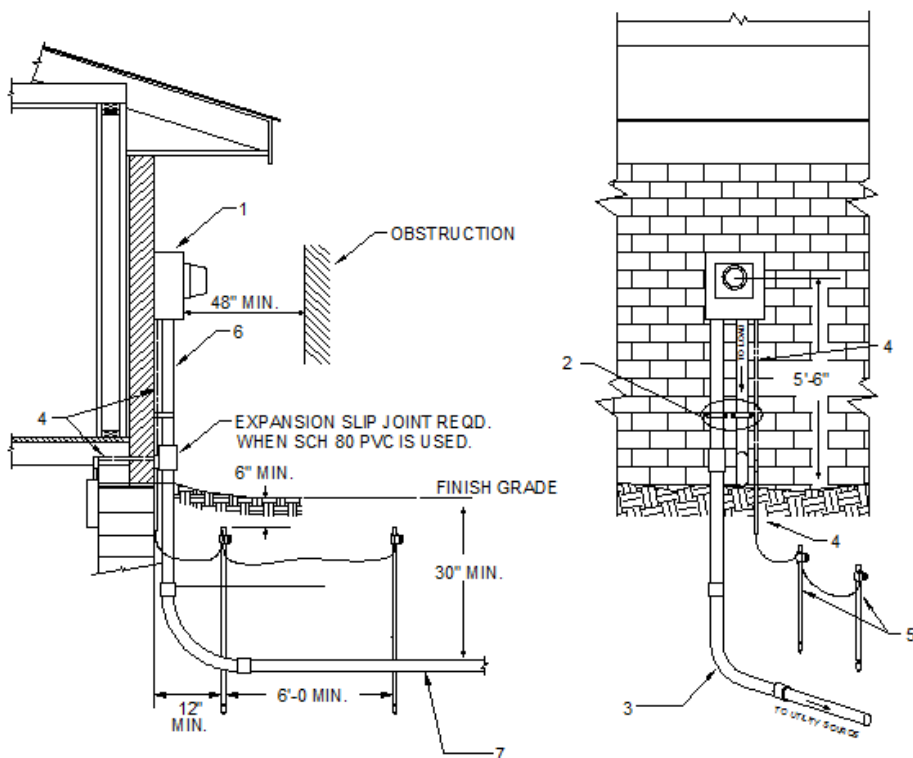
APPROVED:

200 AMP SINGLE PHASE  
OVERHEAD SERVICE  
THROUGH ROOF MAST

ELECTRIC METERING

EM703

PAGE 1 OF 1



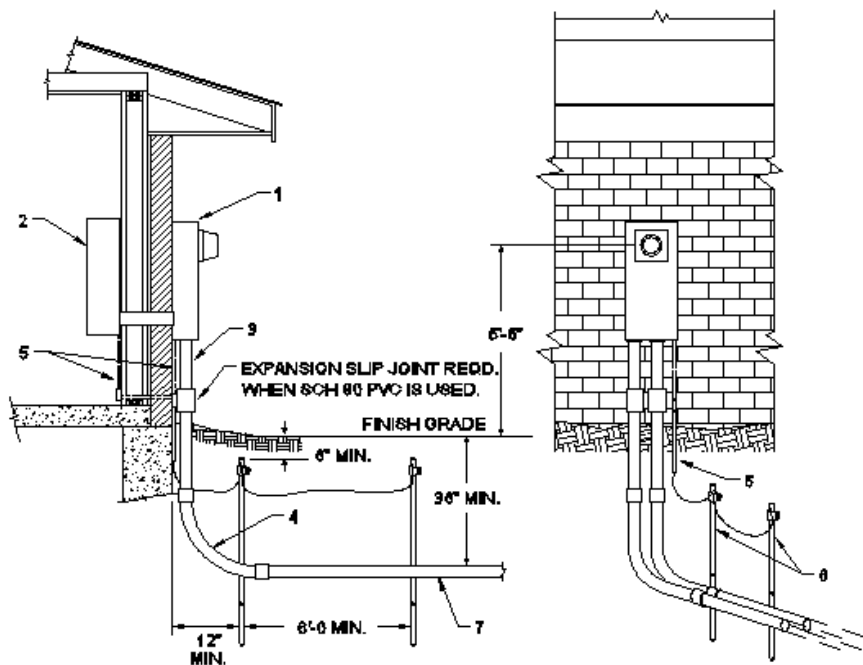
ITEM	QTY.	MATERIAL
1	1	Meter base, provided by City of Ames & installed by owner.
2*	3	Mounting brackets with adequate fasteners.
3*	2	2" Schedule 40 PVC elbow with minimum 24" sweep radius
4*	As Req'd	Nonmetallic conduit for ground wire.
5*	2	Ground rod, 5/8" X 8'-0 min. per NEC.
6*	As Req'd	2" Schedule 80 PVC or Galv. rigid steel conduit above grade.
7*	As Req'd	2" Schedule 40 PVC in trench to utility source.

\*Note: Items 2 through 7 supplied and installed by owner.

4\* Note: If the meter base has a main disconnect the grounding conductor shall be bonded in the meter base. Otherwise it will be bonded to the main panel, not both.

Communications ground connections shall not be bonded to the meter base. See page 2 for other notes.

CITY OF AMES ELECTRIC SERVICES	200 AMP SINGLE PHASE UNDERGROUND RESIDENTIAL SERVICE	ELECTRIC METERING
		EM704
REVISED: NCM 2/1/08		PAGE 1 OF 1
APPROVED:		



ITEM	QTY.	MATERIAL
1	1	Meter base, provided by City of Ames & installed by customer.
2	1	Main disconnect switch.
3	As Req'd.	4" SCH 80 PVC or Galv. rigid steel conduit above grade.
4	As Req'd.	4" SCH 40 PVC or Galv. rigid steel elbow (124" minimum radius)
6	1	Nonmetallic conduit for ground wire.
8	2	Ground rod, 5/8" x 8'-0 min. per NEC.
7	As Req'd.	4" SCH 40 PVC to electric utility source

\*Note: Items 2 through 7 supplied and installed by owner.

5" Note: If the meter base has a main disconnect the grounding conductor shall be bonded in the meter base. Otherwise it will be bonded to the main panel, not both.

Communications ground connections shall not be bonded to the meter base. See page 2 for other notes.

CITY OF AMES  
ELECTRIC SERVICES

REVISED: NCM 2/10/2010

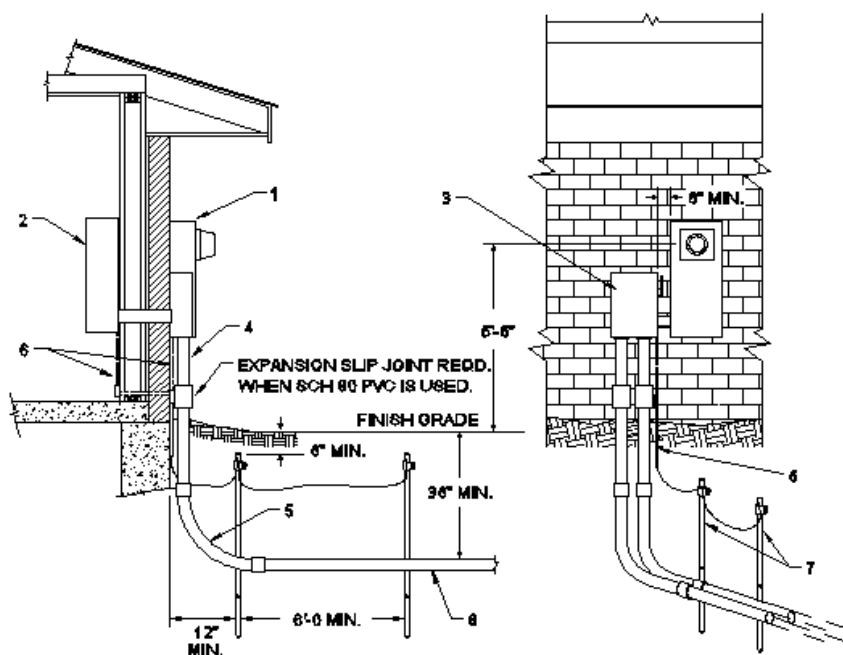
APPROVED:

COMMERCIAL SERVICE  
SINGLE PHASE  
600 AMP & BELOW  
DIRECT METERED

ELECTRIC METERING

EM705

PAGE 1 OF 2



ITEM	QTY.	MATERIAL
1	1	Meter base, provided by City of Ames & installed by customer.
2*	1	Main disconnect switch.
3*	1	Meter disconnect switch.
4*	As Req'd.	4" SCH 80 PVC or Galv. rigid steel conduit above grade.
5*	As Req'd.	4" SCH 40 PVC or Galv. rigid steel elbow (24" minimum radius)
6*	1	Nonmetallic conduit for ground wire.
7*	2	Ground rod, 5/8" x 8'-0 min. per NEC.
8*	As Req'd.	4" SCH 40 PVC to electric utility source

\*Note: Items 2 through 8 supplied and installed by owner.

Note: If the meter base has a main disconnect the grounding conductor shall be bonded in the meter base. Otherwise it will be bonded to the main panel, not both.

Communications ground connections shall not be bonded to the meter base. See page 2 for other notes.

CITY OF AMES  
ELECTRIC SERVICES

REVISED: NCM 2/12/2010

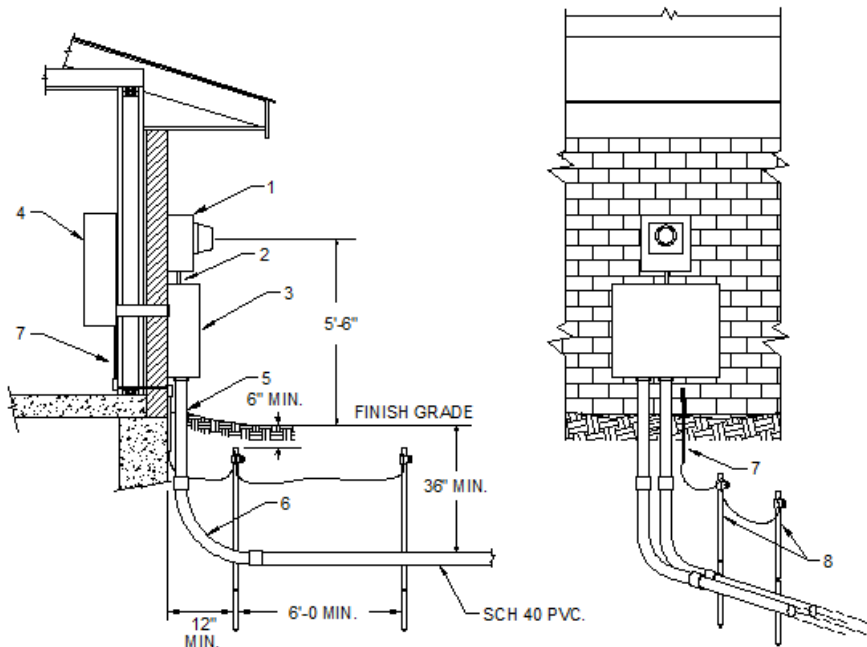
APPROVED:

COMMERCIAL SERVICE  
THREE PHASE  
600A & BELOW  
DIRECT METERED

ELECTRIC METERING

EM706

PAGE 1 OF 1



ITEM	QTY.	MATERIAL
1	1	Meter base, provided by City of Ames & installed by customer.
2	1	1 1/4" rigid conduit.
3	1	42"wx36"h x 12"d CT cabinet with hinged door.
4	1	Main disconnect switch.
5	As Req'd.	4" Galv. rigid steel conduit.
6	As Req'd.	4" Galv. rigid steel elbow (24" minimum radius)
7	As Req'd.	Nonmetallic conduit for ground wire.
8	2	Ground rod, 5/8" x 8'-0 min. per NEC.

\*Note: Items 2 through 8 supplied and installed by owner.  
See page 2 for other notes.

CITY OF AMES  
ELECTRIC SERVICES

REVISED: NCM 2/1/08

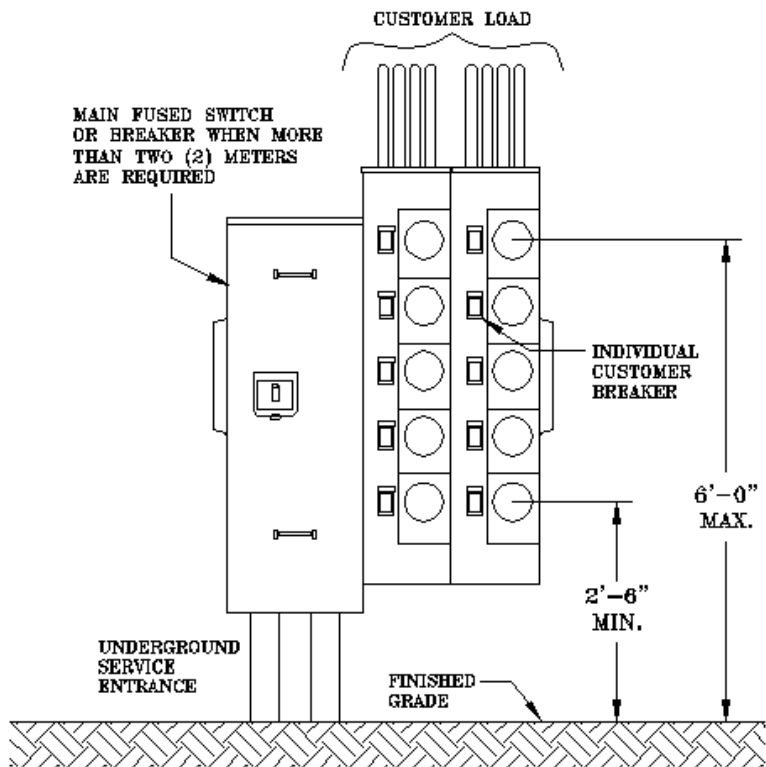
APPROVED:

800 AMP AND GREATER  
3 PHASE  
CT METERED  
COMMERCIAL SERVICE

ELECTRIC METERING

EM707

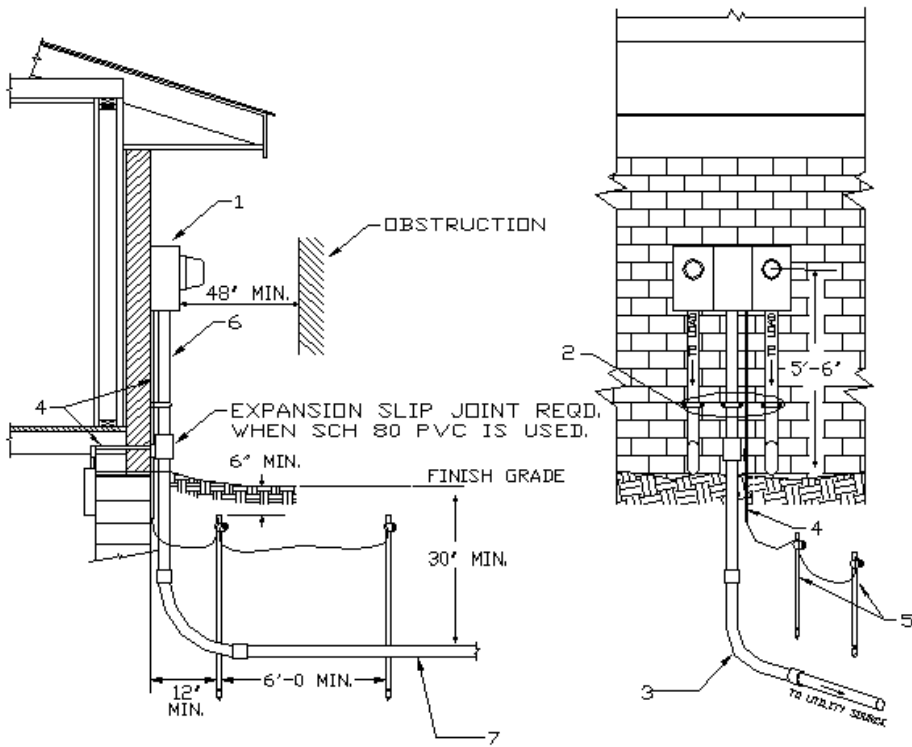
PAGE 1 OF 1



1. Pre-assembled multiple meter equipment shall be supplied by customer. All equipment shall be UL listed.
2. Working space in front of service entrance equipment and meter sockets shall be in accordance with NEC 110.26.
3. Apartments or suites shall be individually labelled with a permanent/weatherproof label.
4. Unused meter sockets shall have a plastic protective cover and shall be sealed.

CITY OF AMES ELECTRIC SERVICES	<b>MULTI-TENANT COMMERCIAL METERING</b>	ELECTRIC METER
REVISED: MEI 11/19/13		EM711
APPROVED:		PAGE 1 OF 1

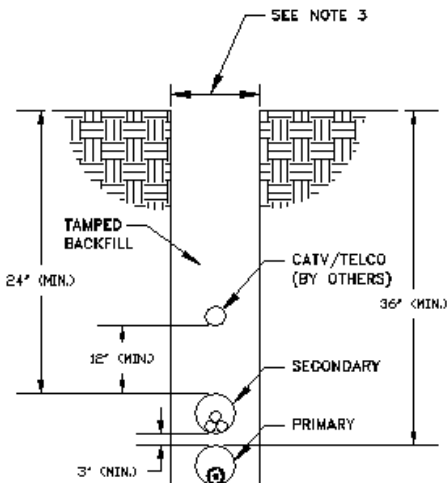




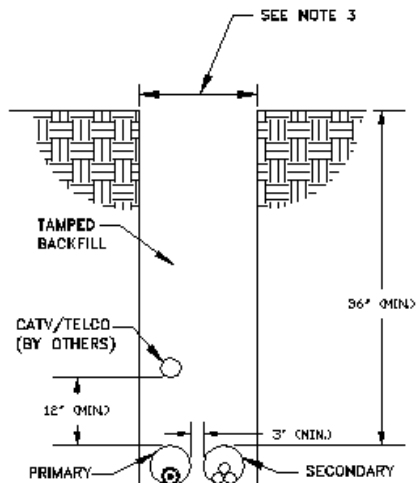
ITEM	QTY.	MATERIAL
1	2	Meter base, provided by City of Ames & installed by owner.
2*	3	Mounting brackets with adequate fasteners.
3*	2	2" Schedule 40 PVC elbow with minimum 24" sweep radius
4*	As Req'd	Nonmetallic conduit for ground wire.
5*	2	Ground rod, 5/8" X 8'-0 min. per NEC.
6*	As Req'd	2" Schedule 80 PVC or Galv. rigid steel conduit above grade.
7*	As Req'd	2" Schedule 40 PVC in trench to utility source.

\*Note: Items 2 through 7 supplied and installed by owner.  
 4\* Note: If the meter base has a main disconnect the grounding conductor shall be bonded in the meter base. Otherwise it will be bonded to the main panel, not both.  
 Communications ground connections shall not be bonded to the meter base.  
 See page 2 for other notes.

CITY OF AMES ELECTRIC SERVICES	DUPLIX RESIDENTIAL METERING	ELECTRIC METER
REVISED: MEI 10/4/13		EM712
APPROVED:		PAGE 1 OF 1



1-PRIMARY CONDUIT AND  
1-SECONDARY CONDUIT  
VERTICALLY ARRANGED



1-PRIMARY CONDUIT AND  
1-SECONDARY CONDUIT  
HORIZONTALLY ARRANGED

**NOTES:**

- 1) CONTACT ELECTRIC ENGINEERING FOR CONDUIT SIZE AND LOCATION PRIOR TO INSTALLATION
- 2) CONTACT ELECTRIC DISTRIBUTION FOR INSPECTION PRIOR TO BACKFILLING TRENCH ROUTES
- 3) TRENCH WIDTH TO BE A MINIMUM OF 3" ON EACH SIDE OF CONDUIT
- 4) FULL-STRING SHALL BE INSTALLED IN CONDUITS

AMES MUNICIPAL ELECTRIC SYSTEM	<b>TRENCH REQUIREMENTS</b>	UNDERGROUND DISTRIBUTION
DRAWN: MEI 12-19-11		U200
APPROVED:		