

Modify 33 50 00 per the following (deletions are shown struck through and additions are double underlined). Remainder of section is unchanged.

.01 Gas

A. Characteristics

1. Underground natural gas systems at University locations may be owned and operated by either the University, or by the local natural gas distribution company. At some locations, both conditions may exist.
2. University owned gas piping network on University Park Campus is carried at 5 psi. Gas is natural with heating value at ~~10504030~~ btu/cu. ft. Parts of the system owned by Columbia Gas of Pennsylvania will be carried at 35-50 psi.
3. At all locations consult with Engineering Services for gas system ownership and procedures to be followed.

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~~At all locations consult with Utility Systems Engineering Services for gas system ownership and procedures to be followed.~~

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B. Distribution Systems

1. Piping

~~a. All underground pipeline installations will materials used in the gas line installation and the construction methods at University Park Campus shall be in accordance according with the U.S Department of Transportation, Pipeline and Hazardous Materials Safety Administration, Pipeline Safety Regulations Part 192, Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards and the International Fuel Gas Code.~~

~~a.b. All contractors installing underground pipelines must be certified under the Pipeline Safety Regulations Part 192 and will provide copies, and as approved by Columbia Gas of Pennsylvania, Incorporated or, at other locations, in accordance with regulations of the certification to the University local gas company.~~

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~~c. The design professional will provide gas loads and Furnish a gas pressure requirements to Engineering Services for meter and regulator sizing. The meter and and meter with a bypass in accordance with the International Fuel Gas Code, and as approved by Columbia Gas of Pennsylvania, Incorporated. This regulator will shall be provided by installed external to the University building and supported in a manner having the contractor will perform approval of the installation.~~

~~d. The piping material to be used will be determined by Engineering Services.~~

~~b.e. When it is determined in a project that a pipeline owned by Columbia Gas of Pennsylvania, Incorporated, or the local gas distribution company will~~

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be within the contract limits of that project a site utility drawing will be provided to the company for review and comment.~~at other locations.~~

- ~~e. Gas piping at the University Park Campus shall be Schedule 40, black, with corrosion resistant material, conforming to ASTM, A53. Joints in buried piping shall be welded. Joints above ground shall be screwed with malleable fittings for piping two (2) inches and smaller (unless otherwise required by the gas company) and welded for piping two and a half (2-1/2) inches and larger.
 - ~~• All welding shall be performed by a certified welder.~~
 - ~~• Welded fittings shall conform to ASTM A234 and screwed fittings shall be 150 pound black malleable. All pipe and joints shall be coated for corrosion protection with plastic material similar to pipe covering.~~
 - ~~• Consult with Engineering Services for standards to be used at other locations.~~~~
- ~~d. Gas piping shall not be carried through manholes. Where a branch line is taken from a gas main located in a tunnel, a valve and curb box shall be located outside the tunnel.~~
- ~~e. At low points on horizontal piping and at the foot of each riser and each drop, a full size drip pocket six (6) inches long, shall be installed.~~
- ~~f. All underground lines shall be protected from corrosion by the installation of magnesium anodes as required. Install test stations at adjacent buildings or in the ground with concrete aprons.~~

C. System Tests

- ~~1. All gas lines installed shall be tested in accordance with the International Fuel Gas Code.~~

END of revision

Update Commentary:

Section was updated primarily for the following reasons:

- 1) Add regulatory requirements of 49 CFR 191 and 192 to standards.
- 2) Update campus system requirements.