

SECTION 22 00 10
GENERAL REQUIREMENTS FOR PLUMBING WORK PART 1 - GENERAL
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PART 1 - GENERAL

3.01 RELATED DOCUMENTS

- A. This Section is to coordinate with and be complementary to the General Requirements and Summary of work, Division 01.
- B. Examine all Drawings and all Sections of the Specifications for requirements and provisions affecting the Work of this Section.
- C. Section 22 05 00 – Common Work Results for Plumbing Work shall apply.

3.02 SCOPE OF WORK

- A. Plumbing work includes but is not limited to providing all labor, materials, equipment and other incidental items required to provide the following work:
 - 1. The project consists of gas piping replacement in 04 existing buildings: 1 to 14.
 - 2. Scope of work will include the following:
 - a. Existing gas meters are to remain (Con Edison to confirm).
 - b. Replace all existing gas piping from gas meters to all gas connection equipment, including all gas risers and overhead gas service piping from point of entry in building to gas meters.
 - c. Provide new gas piping and risers, and new connections to all gas equipment. New piping and risers shall be located in existing pipe locations and utilize existing floor and wall penetrations where possible.
 - d. All concealed existing gas piping shall be abandoned in place.
 - e. New gas piping and risers are to run exposed and not concealed.
 - f. Contractor shall provide and install a temporary single burner electric cooktop in each tenant's apartment during shut-down of gas service to perform gas piping replacement. Refer to Specification Section 11 31 13.
 - g. Exclusions:
 - h. The replacement of all underground gas piping from street to building service valve (Con Edison to confirm).
 - i. The replacement of gas meters (Con Edison to confirm).
 - 3. Piping
 - a. Provide all pipe supports and pipe hangers.
 - b. Support piping as high as possible at ceilings. Maintain all required headroom clearance at floor.
 - 4. Miscellaneous Work
 - a. Perform all shutdown and restoration of services. Perform all required tests. Flush systems clean of debris and adjust for proper operation.
 - b. Obtain all permits.
 - c. Follow "Dust Control" in performing removal and demolition work.
 - 5. Gas service fully coordinated with Con Edison including gas meter/regulator rig assembly (inside building), all connections, all piping, supports, fittings, gas rig, valves, etc. to tenants cooking equipment.

3.03 CODES AND STANDARDS

- A. The complete installation shall conform to the Building Code of the City of New York, Plumbing Code of the City of New York, Fuel Gas Code of the City of New York and all applicable laws,

ordinances, regulations, codes (state, city, local and federal), and shall be subject to control of authorities having jurisdiction.

- B. Wherever requirements of such laws, codes, regulations differ from the drawings or specifications, they shall take precedence over the drawings, specifications, except where the drawings or specifications are more stringent or require better materials, which would also be acceptable to authorities (i.e., the more stringent requirements shall always apply).
- C. Comply with Occupational Safety and Health Act (OSHA) requirements.
- D. Perform all plumbing work under the supervision of a NYC master licensed plumber.

3.04 FEES, PERMITS AND INSPECTIONS

- A. Secure all permits and pay all fees required by local and state governing bodies necessary to complete the construction. Failure to investigate all applicable payments before the bid submission shall not constitute grounds for additional monies from the Owner. The Owner shall be furnished with all certificates of approval.
- B. Obtain fees, permits, taxes, or certificates required by governing bodies, Board of Fire Underwriters, or other agencies affecting work as specified herein, or required for Certificates of Occupancy.

3.05 CARE OF WORK AND SAFEGUARDS

- A. Protect all equipment, material, and work from damage by any cause until it is completed and accepted by the Owner.
- B. Replace, repair and restore any damaged or stolen material at no cost to the Owner.

3.06 REFERENCE DOCUMENTS AND STANDARDS

- A. Accepted plumbing standards and organization whose abbreviations are used to identify such standards are listed below:
 1. A.N.S.I., American National Standards Institute, Inc.
 2. A.S.T.M., American Society for Testing and Materials.
 3. C.S., Commercial Standard - National Bureau of Standards.
 4. F.S., Federal Specifications.
 5. U.L., Underwriters Laboratories.
 6. F.M., Factory Mutual

3.07 GUARANTEE

- A. In addition to the requirements stated in the specifications, guarantee all equipment, materials and appurtenances installed to be free from all defects. Upon written notice from the Authority, promptly correct all defects without additional cost to the Owner. Make good, at no extra cost any defects in materials or workmanship that may appear. The guarantee period shall be from one (1) year after final inspection and acceptance of the project.

PART 2 - PRODUCTS

4.01 QUALITY OF MATERIALS AND SUBSTITUTIONS

- A. Materials furnished and installed shall be new and of makes and sizes specified or indicated, unless permission is obtained in writing to substitute equipment and materials for approval before placing orders. Workmanship must be first class in every respect.
- B. Replace any defective work at his own expense immediately upon notification.

- C. Remove material or equipment installed before shop drawings are submitted and annotated as "No Exception taken" or "Make Corrections Noted" comment, and/or in the opinion of the Authority the material or equipment does not meet intent of Drawings and Specifications, at no extra cost to Owner. The Authority shall have right for final approval or disapproval for any material.
- D. Note that comments "No Exception taken" or "Make Corrections Noted" marked on shop drawings or other information submitted in accordance with requirements hereinbefore specified does not assure that the Authority representative attests to dimensional accuracy or dimensional suitability of material or equipment involved or mechanical performance of equipment. Comment's on shop drawings does not invalidate Plans and Specifications if shop drawings are in conflict with Plans and Specifications.

4.02 PRODUCT HANDLING

- A. In addition to the requirements of the General Conditions, include for the following:
 - 1. Care and protection of plumbing work until all plumbing work has been tested and accepted.
 - 2. After delivery, before, during and after installation, protect equipment and materials against theft, injury and damage for all causes.
 - 3. Coat polished or plated metal part with Vaseline immediately after installation.
 - 4. Protect equipment outlets and pipe, openings with caps.
- B. Receive, properly house, handle, hoist, and deliver to proper location, equipment and other materials required for the contract.

4.03 MATERIALS

- A. Design:
 - 1. Unless otherwise specified, equipment or material of same type or classification, used for the same purpose, shall be products of the same manufacturer. All material shall be new and of the latest design of manufacturer providing equipment or materials.
 - 2. Equipment and accessories not specifically described or identified by manufacturer's catalog numbers shall be designed in conformity with ASME, or other applicable technical standards, suitable for maximum working pressure and shall have neat and finished appearance.

PART 3 - EXECUTION

5.01 SUPERVISION

- A. Upon initiation of construction, keep a suitable force of men (including supervisory personnel) on the site at all times.

5.02 COORDINATION

- A. Schedule construction and time limitations for each phase of the work. Work shall be coordinated to permit proper setting of the work of other trades.
- B. Where piping work and appurtenances are in place prior to completion of adjacent concrete and masonry work, protect work against damage and displacement until construction is completed.

5.03 CLEANING AND PROTECTION

- A. Protect piping, and all other equipment during storage at site, from damage, rain, dirt, and ground water.

- B. After completion of project, clean exterior surface of equipment included in this Division.
- C. During erection protect piping and equipment from damage and dirt. Cap the open top of piping installed vertically.
- D. Keep and maintain the safety of all trade materials and tools on the job until final completion.
- E. Protect the work equipment and material of all other trades from damage by the work or other personnel, and shall make good all damage thus caused.
- F. Provide all work, materials and equipment until finally inspected, tested and accepted; protect work against theft, injury or damage; and carefully store material and equipment received on site which are not immediately installed. Close open ends of work with temporary covers or plugs during construction to prevent entry of obstruction material. Cover and protect in an acceptable manner to the Architect, all equipments and materials from damage due to water, spray-on fireproofing, construction debris, etc.
- G. Clean equipment and piping of iron cuttings and other foreign matters, as they are installed particular attention should be given to:
 - 1. Valve seats and glands.
 - 2. Flange or union faces or seats.

5.04 CUTTING AND PATCHING

- A. Provide all cutting, chasing, or boring in construction. Where existing foundations or walls below grade are involved, specific instructions shall first be obtained from the Authority.
- B. Cutting, chasing or boring will not be permitted in bearing walls, trusses, girders, or similar structural items unless special permission is obtained from the Authority. Be responsible for damages resulting from failure to observe this provision.

5.05 ROUGH-IN

- A. Verify final locations for rough-ins with field measurements and with the requirements of the actual equipment to be connected.

5.06 ADJUSTING AND BALANCING

- A. A. Make all required adjustments to Plumbing system devices until all specified performances are met.

5.07 CLEAN-UP

- A. Provide for the general clean-up of all areas affected by the work. All rubbish and accumulative material shall be removed from the premises and the premises left "broom clean" upon completion.

5.08 HOISTING AND SCAFFOLDING

- A. Furnish, install, operate and maintain in safe condition hoisting equipment and machinery required for the project to properly carry out and complete the work, except as may otherwise be specifically provided for in each trade sections of Specifications.
- B. Hoisting equipment and machinery, and operation to comply in all respects to applicable federal, state, and local laws, ordinances, codes, rules, and regulations applicable to the work.
- C. Provide all scaffolding, ladders and other equipment required for the proper execution of this work, all of which must conform to all laws, rules and regulations governing same.
- D. Remove equipment from job site after completion.

5.09 INSTALLATION PHASING/SCHEDULING REQUIREMENTS

- A. Develop and submit a detailed coordinated phasing plan with all proposed gas shutdowns (and duration of shutdowns) for each building for approval by NYCHA and the Construction Manager within 30 days of receipt of notice to proceed. Coordinate the phasing/scheduling of all work with General and Existing Conditions, and Plumbing trade). Provide all required temporary and bypass piping, valves, connections, etc. and coordinate all required shutdowns with NYCHA a minimum of four (4) weeks in advance of shutdowns. All shutdown work shall be performed within the timeframe defined by NYCHA. All shutdowns shall be limited to a maximum duration of four (4) hours. No shutdown will be permitted on weekends or legal holidays. Phasing of work includes but is not limited to the following work:
1. Develop written detailed coordinated phasing plan with activities, durations, shutdowns, sketches, etc. and obtain approval of phasing/scheduling plan by NYCHA, the Construction Manager, and the utility company Con Edison.
 2. Provide all work associated with the replacement of gas piping (including flexible piping connectors to gas ranges in tenants apartments), valves, gas meters, testing, etc.
 3. File all work with NYC agencies and obtain all required permits and approvals.
 4. Coordinate all phasing with construction manager.
 5. Remove existing exposed gas piping, risers and gas meters (including flexible piping connectors to gas ranges in tenants' apartments), cap and abandon in place all concealed gas piping.
 6. Test and confirm gas system is ready for operation in compliance with the Local Utility Company and with the Department of Buildings.
 7. There shall be a minimum of interruption to the gas supply to the residents. Schedule work so that shutdowns are performed only after all peripheral work has been performed and the shutdown made only as required for the connection.

END OF SECTION 22 00 10 22 00 10