

## PLUMBING SPECIFICATION:

PART 1 – GENERAL 1.1 WORK INCLUDED: Furnish all labor, material and equipment necessary for the complete installation of the sanitary sewer system (including soil waste and vent piping), water service, water meter, tap valves, boxes, and cold and hot water supply system including all required 140 degree piping; all required electric; hot water heater; plumbing fittings and fixtures; and all related fittings and controls; all other work required for a complete system as detailed on the Drawings or specified in this Section.

### PERMITS AND INSPECTIONS

All work shall be installed in strict accordance with State, County and Municipal Ordinances and Regulations. All permits and fees shall be applied and paid for under this Section, including all required inspections for water, and sanitary drainage systems, required water meter and all taps to water mains and connections to sewers.

1.3 FRANCHISE OWNER'S EQUIPMENT: Make final connections to all Owner's equipment and furnish and install any fittings or incidental accessories that may be necessary by job conditions or that may be required by local building or health codes for completing final connections and making equipment ready for operation.

### UNDER-SLAB UTILITIES

Dimensions for all under-slab utilities are critical for later equipment installation. Cross-reference all Drawings with this work, including all elevations, showing dimensional location of this work.

### PART 2 – PRODUCTS

#### 2.1 MATERIALS:

Water piping above grade shall be type "L" hard drawn copper tubing, with wrought copper fittings; piping below grade shall be type "K" soft copper tubing, with flared fittings.

Sizes are shown on Plumbing Drawings. Piping shall be made up with sweat fittings. Solder shall be 95-50 type. The entire length of all type "K" piping under the slab and penetrating through the slab will be installed in the 1/2 in. thick Armaflex insulation.

Building sewer and all underground drainage and vent lines shall be sized as shown on Drawings, or as required by local codes. They shall be PVC solid wall pipe Sch. 40 and fittings, unless otherwise shown or noted. If allowed by local codes, from 10 ft. outside the buildings, sewer pipe shall be PVC Sch. 40 pipe. Minimum size of pipes to be 2" in. Vents above grade shall be as shown on Drawings. If permitted by local codes, type DWV copper may be used with DWV fittings.

Condensate I.W. drip drains shall be PVC pipe drains, floor drain with open funnel type, as shown on Drawings or as required by code, as manufactured by the Josam Company or Joy R. Smith, Inc.

FD to be Josam No. 30000-A. All exposed parts to be of nickel bronze finish.

2.3 ROOF FLASHING: Cap flashing for roof vents shall be galvanized metal sleeve, overlapping 4 in. on exterior and turned 2" into stack and closely fitted into interior surface of stack to avoid reducing opening size unnecessarily. A 16 oz. copper flashing shall be provided around the pipe and flashed into the built-up roofing. Coordinate cap flashing with Section 05710 – Built-Up Bituminous Roof.

2.4 HOT WATER HEATER Note: Specifications provide general guidance for hot water heaters. Contractor to consult Drawings, local Health Department review of Drawings before ordering water heater.

Furnish and install a hot water heater as noted on the plumbing drawings.

### PART 3 – EXECUTION 3.1 INSTALLATION

All piping and equipment shall be installed in accordance with the Drawings and shall comply with all applicable codes, particularly health and plumbing, and standards of good practice.

Verify inverts of sewer and drainage connections before installing sewer lines.

### 3.2 WATER SUPPLY LINES

Water service, located as shown on Site Drawing, shall be installed and tested as required by the local utility company. Service to be 1 1/4" inch, type "K" copper, or as indicated on Drawings.

Piping shall be of minimum sizes shown on Drawings.

Provide valves on all lines as shown on drawings and on up-stream and down-stream side of water meter. Each fixture shall have separate stop and waste valves and all piping shall be concealed except as otherwise indicated on Drawings. Where water pipes and valves are exposed in finished, piping shall be threaded chrome and shall have chrome plated escutcheons and valve as required.

Non-freeze wall hydrant "NFWH" shall be installed as indicated on the Drawings and shall have separate 3/4 in. main feed. When serving exterior areas, hose bibbs shall be frost-proof type with removable key handle. Fasten securely to wall. Install 18 in. above finish slab. Insulate all piping in spaces subject to freezing with 1-1/2 in. pipe insulation as specified above. All piping shall be properly supported with hangers of compatible material and all water pipes passing through concrete shall be wrapped with an approved plastic tape to prevent chemical actions.

### 3.3 SANITARY SEWER SYSTEM

Sewer system shall be installed and tested in accordance with all applicable codes and as indicated on the Drawings and Specifications. When house trap and fresh air inlet is required by code, trap shall have brass cleanout plugs flush with floor.

Vents shall be sized as shown, or as required or permitted by local codes, and shall project above roof a minimum of 1 foot. All vents shall be 3 in. minimum diameter through roof, (use increaser if necessary) unless codes require greater dimension. Sewer piping shall be properly sloped and all required fittings, vents, traps and cleanouts shall be provided. VERIFY INVERTS AT SEWER TAP AND BUILDING BEFORE

STARTING INSTALLATION. Minimum testing of waste piping – plug openings and fill the entire system to the top of the vents with water and allow to remain at least 30 minutes.

3.4 FINAL CONNECTIONS: Complete the final connections of equipment

### LEASING OFFICE

### CLUB HOUSE

Walker Mill Apartments

1926 Rochelle Avenue  
Forestville, Maryland 20747

### FEDERAL CAPITAL PARTNERS

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I CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY  
OR APPROVED BY ME AND THAT I AM A DULY LICENSED  
PROFESSIONAL ENGINEER UNDER THE LAWS OF THE  
STATE OF MARYLAND.  
LICENSE NUMBER: 16868,  
EXPIRATION DATE: March 25, 2016

graphic scales

project: 21418  
phase: Permit  
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PLUMBING  
SPECIFICATIONS

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