

22.1 Plumbing

SCOPE OF WORK

Subcontractor or Supplier agrees that the Base Bid amount entered above includes the following project-related activities and Scope of Work in accordance with the requirements of the specifications, drawings, and CM Manual. Unless noted otherwise subcontractor will furnish all equipment, materials, labor, supplies, tools, scaffolding, hoisting, transportation, unloading, and handling necessary for the proper installation and completion of this work.

APPLICABLE SPECIFICATIONS

- Division 0 –
- Division 1 – General Requirements
- Firestopping
- 22 01 00 – General Plumbing Provisions
- 22 05 48 – Vibration and Seismic Controls for Plumbing Piping and Equipment
- 22 05 53 – Identification for Plumbing Piping and Equipment
- 22 07 19 – Piping Insulation
- 22 10 05 – Plumbing Piping
- 22 10 06 – Plumbing Specialties
- 22 10 08 – Plumbing Solder
- 22 30 00 - Plumbing Equipment
- 22 40 00 - Plumbing Fixtures

All General Scope Requirements as outlined in Section 3.01.

Section A: Trade- Specific Requirements

1. In the case of discrepancy between drawings, specifications, codes, local and state laws, ordinances, or contract documents, the most stringent governs.
2. Because of the drawing scales it is not possible to indicate all fittings and accessories that may be required. Include any and all fittings, offset, valves, etc., for a complete system.
3. Include temporary water supply.
4. Include water and sewer connections to the job trailer as required.
5. Plumbing contractor is to lay out all lines and elevations associated with this scope of work.
6. It is the responsibility of the plumbing contractor to verify the locations of all existing utilities and services as indicated on the drawings that are to be tied into prior to submitting a bid proposal. Failure to do so will result in the plumbing contractor assuming responsibility for any deviations of existing utilities from the construction documents.
7. Furnish all pipe bedding, cushion materials per construction documents.
8. Provide gradation plan if required. Check all sewer line gradations with existing utilities prior to installation to ensure the required flow is achieved.
9. Upon completion of plumbing contractor's underground work, plumbing contractor is responsible to re-grade area, back fill and compaction to restore slopes and elevations to prevent standing water. Remove all spoils off site. Restore areas to the same state or better before work was commenced.

10. Prior to placement of the concrete slab, all stub ups are to be capped to prevent any concrete debris from falling into sanitary waste and vent lines. After installation of all concrete slabs on grade provide camera inspections of all sanitary sewer and vent lines to verify that lines are free and clear of debris.
11. Furnish and install complete plumbing system per construction documents.
12. Include complete sanitary sewer system.
13. Include natural gas piping required for this scope of work.
14. Furnish and install all domestic water piping required to complete this scope of work.
15. Include any utility company fees, impact costs, metering or vault costs. Include penetration sleeves, saw cutting, and coring required for this scope of work.
16. Furnish on site storage as required by the construction manager for the storage of fixtures and equipment.
17. Include a plumbing representative to be on site during slab pours to ensure plumbing lines remain in place.
18. Include all hoisting and scaffolding as required.
19. Furnish and install all plumbing fixtures including but not limited to urinals, urinal carriers, toilets, sinks and drinking fountains.
20. Include shower and bath units including shower pans as required.
21. Include backflow preventers and tests.
22. Tie new sanitary sewer lines in the existing sanitary sewer system per construction documents.
23. Include selective demolition required to install work in existing building. Remove plumbing items per plumbing plans shown to be removed and legally dispose of off-site. Cap existing lines.
24. Include all associated blocking, anchors, stenciling and tagging for this scope of work.
25. Include pipe supports associated with this scope of work. All miscellaneous steel, uni-strut, all thread rod and accessories required for pipe support, wall or floor penetrations and blocking as required.
26. Coordinate with other trades to locate sleeves and to ensure plumbing does not interfere with any other items.
27. Include all plumbing identification including color coding, stencil, labels tags, etc. per construction documents.
28. Include cutting, coring and patching required for plumbing installations.
29. Supply any access doors (24" x 24" min.) needed for access to plumbing equipment.
30. Install flashing or sealant at each exterior weather barrier penetration per weather barrier manufacturer's recommendation.
31. Include all final connections to Owner-furnished equipment.
32. Include final plumbing connections to food service equipment and casework. Coordinate with those trades for tie-in of plumbing items relating to those trade.
33. Furnish and install all appliance related plumbing as required.
34. Supply roof drains to be installed by roofing contractor. Include roof drain piping and connection to roof drains.
35. Furnish and install solid and/or grease intercepts per construction documents.
36. Include fire-stopping for penetrations created by this scope of work.
37. Include sealants (color selected by Architect) around all plumbing fixtures, sinks and lavatories.
38. Include cleaning, purging and flushing of all lines when complete as related to this scope of work.
39. Ensure all equipment has adequate maintenance access when in place.
40. Clean up waste and debris generated by this scope of work and dispose on a daily basis and as directed by the construction manager.
41. Include documented instructional training to the owner's representative regarding the operation and maintenance of the plumbing systems.
42. All warranties for fixtures, devices, and equipment begin at date of Substantial Completion of Project.

43. Each trade shall provide and install firestopping at all penetrations for their work that crosses through fire-resistance-rated floor and roof construction including both empty / blank openings and openings containing cables, pipes, ducts, conduits, and other penetrating items.

Section B: Project Specific Requirements:

1. Supply and Install all toilets including detention grade stainless steel toilets.
2. Include concrete cutting, coring and patching for new drains and drain repairs inside the existing building.

Section C: Project-Specific Exclusions:

1. Underground utilities beyond 5' outside of building.
2. Some night work will be required to perform work in the kitchen area.

Section D: Project Alternates:

1. Alternate 1.

END OF BID PACKAGE