

STANDARD SPECIFICATIONS

SECTION 15050

HOT TAP CONNECTIONS

PART 1 - GENERAL

A. Description

This section describes materials, requirements and procedures for hot tap (system under pressure) connections to existing distribution systems.

B. Related Work Specified Elsewhere

1.	Existing Facilities	01045
2.	Chlorination of Domestic Water Mains for Disinfection	15041
3.	Hydrostatic Testing of Pressure Pipelines	15042
4.	Copper, Brass and Bronze Pipe, Fittings and Appurtenances	15057
5.	Cement-Mortar Lined and Coated Steel Pipe	15076
6.	Manual Valves	15100

C. Approved Manufacturers

1. Service Saddles and Corporation Stops

See Section 15057

2. Tapping Sleeves

Mueller

3. Tapping Valves

See Resilient Seated Wedge Gate Valves Section 15100

D. Direct Tap

All taps into existing pipes will be made through a service saddle, tapping sleeve, welded nozzle or welded coupling. Direct taps are not permitted.

PART 2 – MATERIALS

A. Service Saddles and Corporation Stops

Service saddles and corporation stops shall comply with Section 15057.

B. Tapping Sleeves

1. Tapping sleeves onto pipelines 12-inch and smaller shall be full circle cast iron with mechanical joint end glands.
2. Gaskets shall be Bunz-N rubber with a wide cross section.
3. Tapping sleeves onto 14-inch and larger ACP shall be fabricated steel with mechanical joint ends. All fabricated parts shall be epoxy coated per Section 09900. All bolts and trim hardware shall be Type 316 stainless steel.

C. Tapping Valves

Tapping valves shall be flanged resilient seat wedge gate valves per Section 15100.

D. Weld Nozzles

Weld nozzles and reinforcing plates shall be fabricated steel per Section 15076.

PART 3 – EXECUTION

A. Notification

The contractor shall provide proper notification to the District inspector prior to making a hot tap connection per Section 01045.

B. Verification

The contractor shall pothole the proposed connection to verify the outside diameter, location and type of pipe to be tapped.

C. Surface Preparation

The pipe barrel to be tapped shall be thoroughly cleaned with a wire brush to provide a smooth, hard surface for the saddle, sleeve or nozzle.

D. Service Saddle and Corporation Stop

Service saddles and corporation stops will be installed onto ACP, DIP OR PVC mains in accordance with the manufacturer's accordance and Section 15057. The outlet shall be oriented to comply with the intended use of the service connection.

E. Weld Nozzles

Nozzles and reinforcing plates are to be welded onto steel pipe shells in accordance with Section 15076 and MNWD standard drawing W-6. The connection is to be air tested in the presence of the District inspector prior to making the tap.

F. Tapping Sleeves

Tapping sleeves shall be installed per District MNWD standard drawing W-6, and as modified below.

1. The tapping sleeve shall be installed in accordance with the manufacturer's instructions and to the satisfaction of the District representative.
2. The pipe barrel shall be thoroughly cleaned with a wire brush to provide a smooth, hard surface for the sleeve.
3. The sleeve shall be supported independent of the pipe during the tapping operation.
4. The sleeve shall be pressure tested in the presence of the District representative prior to tapping.
5. Thrust blocks shall be provided at the tapping sleeve per Section 03300.

G. Tapping Valve

The tapping valve shall be installed on the tapping sleeve or weld nozzle per Section 15100. All flange bolts shall be Type 316 stainless steel.

H. Hot Tap

1. The hot tap into the existing pipe shall be made using the appropriate type of cutting machine and shell cutting bit for the material being tapped.
2. The tapping machine operated per the manufacturer's operating instructions.
3. Proper care shall be taken to prevent cutting material from entering the pipeline. The tapping coupon must be extracted.

I. Mortar Coating Repair

The exterior mortar coating on welded steel pipe shall be repaired in accordance with Section 15076.

J. Disinfection

The interior of the tapping valve and connecting piping shall be sprayed with a sodium hypochlorite solution prior to connection.

END OF SECTION