



Iowa Department of Transportation

SPECIAL PROVISIONS FOR WATER SERVICES

Polk County

Project No.
HSIPX-28-2(39)--3L-77

Effective Date
February 16, 2010

THE STANDARD SPECIFICATIONS, SERIES 2009, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

090046.01 DESCRIPTION

This work shall consist of checking the depth, relocating and replacing water services and related items such as stop boxes, valves and taps. Figures referenced in this special provision are included in the plans.

090046.02 MATERIALS

All materials used shall meet the requirements of the City of Des Moines plumbing code.

090046.03 CONSTRUCTION

A. Permits and Licenses

All work shall comply with the requirements of the City of Des Moines Plumbing Code. The Contractor shall obtain all permits, pay all fees, and schedule all plumbing inspections as required by the City of Des Moines Permit and Development Office. All work shall be done by a plumber licensed in the City of Des Moines.

B. Corporation Stops And Connections:

1. Excavate and shore the water main at the tap location in accordance with Des Moines Water Works rules and regulations.
2. Schedule Des Moines Water Works to install the corporation stop, pay all fees.

C. Relocate Water Service Stop Box:

1. Relocate Stop Box from its existing location to its new location as shown on the plans or as designated by the Engineer.
2. When Stop Boxes are not as indicated, the relocation shall be verified by the Engineer before relocating.

D. Water Service Depth Check:

1. Excavate water service, measure and assure that existing water service is a minimum of 60 inches below the finished grade and not in conflict with proposed sewers, walls, and other structures
2. If the depth of the service is not adequate, the service shall be lowered in accordance with plans, and this special provision.

E. Lower Water Service:

- 1 The existing water service that meets plumbing code standards shall be lowered to provide a minimum of 60 inches of earth cover and to provide minimum clearances at proposed sewers, walls, and structures as shown in Figure 5010.9 of the plans.
- 2 Replace Stop Box and pipe and fittings if required.

F. Lower Water Service with New Copper:

1. Replace services that do not meet plumbing code standards with new 1-inch copper tubing from the water main to and including the stop box.
2. Lower to provide a minimum of 60 inches earth cover and to provide minimum clearances at proposed sewers, walls, and structures as shown in Figure 5010.7 and 5010.8 of the plans.
3. Replace stop box, if required.

G. New Water Service:

1. At locations where plumbing code enforcement dictates that the existing water service must be reconstructed in conjunction with relocating water services or relocating stop boxes, the existing water service must be reconstructed from the water main to and including the stop box.
2. The new service shall be constructed to provide a minimum of 60 inches of earth cover and to provide minimum clearances at proposed sewers, walls, and structures as shown in Figure 5010.9 of the plans.
3. Utilize the existing corporation tap on the water main and provide all new materials required

H. Relocate Water Service:

1. Relocate the existing water service that meets plumbing code standards when there is conflict with sewer construction.
2. Relocate Stop Box if required.

I. Disconnect Water Service:

1. Disconnect abandoned water service or water service stubs.
2. Abandon in accordance with the requirements of the City of Des Moines Plumbing Code. The water services shall be cut at the corporation stop and the stop closed. The stop box consisting of the stem and casing shall be completely removed.

J. Flushing and Testing:

Flush and test the service in accordance with requirements of the City of Des Moines Plumbing Code.

K. Backfilling:

1. Place backfill in the trench immediately after water service work has been completed.
2. Within street right-of-way, compact each lift to at least 95% of maximum Standard Proctor Density, otherwise compact to at least 90%.
3. In areas 3 feet or more below pavement structure, place backfill in lifts no thicker than 8 inches.
4. In areas less than 3 feet below pavement structure, place backfill in lifts no thicker than 6 inches.
5. Terminate backfill at 8 inches below finish grade in areas to remain unpaved, and to subgrade elevation in areas to be paved. Place 8 inches of topsoil in unpaved areas.
6. Dispose of surplus and unsuitable materials.
7. Hydraulic compaction is not allowed.

090046.04 METHOD OF MEASUREMENT**A. General**

No separate measurement will be made for excavation, backfill and compaction, except as follows:

1. Rock excavation, if encountered and verified by the Engineer, will be measured by the cubic yard removed from the excavation, and will be considered extra work unless otherwise provided for in the contract documents.
2. Where excavated material is found to be unsuitable for backfill and cannot be made suitable in the opinion of Engineer, it shall be replaced with suitable backfill material. Suitable backfill replacement material located within the project limits will not be measured and paid separately. Replacement material furnished by the Contractor from outside the project limits will be measured by cubic yards, including furnishing transporting, and installing, and will be considered extra work unless otherwise provided for in the contract documents.

B. Relocate Water Service Stop Box

1. The Engineer will count each separate Water Service Stop Box relocated, except as described below.
2. Stop boxes relocated in conjunction with "New Water Service", "Lower Water Service," or "Lower Water Service with New Copper" will not be counted.

C. Water Service Depth Check

The Engineer will count the number of Water Service Depth Checks as follows:

1. Water services which are depth checked and do not require lowering, relocation, replacement with a new service, or stop box relocation will be counted for measurement.
2. Water services which are depth checked and found to require lowering, relocation, replacement with a new service, or stop box relocation will not be counted.

3. Water services depth checked that are located in an individual trench will be counted individually
4. Multiple water services depth checked that are located in one trench will be counted as one check depth (measurement will be made for first service checked and additional measurement will be not be made for subsequent services in the same trench).

D. Lower Water Service, Lower Water Service with Copper, New Water Service, Relocate Water Service, Disconnect Water Service, Corporation Stop

The Engineer will count the number of each size of Water Services as follows:

1. Water services that are located in an individual trench will be counted individually.
2. Multiple water services are located in one trench will be counted as 1 for the first service and each additional water service located in the same trench shall be counted as $\frac{1}{2}$.

090046.05 BASIS OF PAYMENT

A. General

The cost of permits, fees, excavation, removal of unsuitable soil, backfill, testing and disinfection shall be considered incidental to this work.

B. Relocate Water Service Stop Box

1. Payment will be made at the unit bid price for each Relocate Water Service completed. Bid price shall include all work and materials required to move the stop box from its existing location to its new location. The bid price shall assume the following:
 - a. Existing ground key stop shall remain in place.
 - b. New ground key stop with connections shall be installed.
 - c. Where required, a new service box stem and rod shall be installed.
2. Stop boxes relocated in conjunction with "New Water Service", "Lower Water Service," or "Lower Water Service with New Copper" will be considered incidental to those items and not be counted for separate payment.

C. Water Service Depth Check

Payment will be made at the unit bid price for each Water Service Check Depth completed. Bid price shall include all work and materials required to complete the work.

D. Lower Water Service, Lower Water Service with Copper, New Water Service

Payment will be made at the unit bid price for each item of work completed. Bid price shall include all work and materials required to complete the work. The bid price shall include a new stop box and any additional pipe and fittings required.

E. Relocate Water Service

Payment will be made at the unit bid price for Water Service Relocation completed. Bid price shall include all work and materials required to complete the work. The bid price shall include any additional pipe and fittings required.

F. Disconnect Water Service, Corporation Stop

Payment will be made at the unit bid price for each item completed. Bid price shall include all work and materials required to complete the specified work on the water service. Removal and replacement of the street pavement, sidewalks, and driveways are paid under separate bid items.