

SECTION S914 - CURB STOP AND BOX

S914-1 DESCRIPTION

Work consists of the installation of new curb stops and curb boxes, adjusting existing curb boxes, removal of existing curb boxes, removal of existing water meter pits, or adjusting existing water meter pits as required in the Contract Documents and as directed by the Project Manager.

Work is to be in conformance with requirements of Section S900 General Water Provisions.

S914-2 MATERIALS

S914-2.01 Curb Stop

For copper water service tubing, curb stop is to be open left ball valve type with cast brass body, "O" ring seals fitted with flared couplings for copper water service tubing connections, and is to include water service line insulator which is to be located on customer's (downstream) side of curb stop.

For polyethylene water service tubing, curb stop is to be open left ball valve type with cast brass body, "O" ring seals fitted with quick joint compression couplings for polyethylene water service tubing connections.

S914-2.02 Water Service Line Insulator

Water service line insulator is to be installed for purpose of providing protection against electrical shock and water service line electrolysis by stray electric current, and is to be made and supplied by manufacturer of curb stop. Water service line insulator is to be made from nylon, with high dielectric, compressive and impact strength characteristics. Nylon is to be inert and recommended for water service applications. Water service line insulator is to be supplied with necessary fittings that permit connection between curb stop and existing water service tubing. Insulator will not be necessary if connecting to a non-metallic inside water service. Insulator is required only where new copper water services are installed.

S914-2.03 Curb Box

Curb box is to be two piece 2-1/2 inch new style screw extension type curb box capable of extending to at least 5 feet 4 inches. Service box screw extension may be required for greater depths. Curb box is to consist of cast or ductile iron screw top section and cast iron, ductile iron or white injection molded plastic screw bottom section, new style, heavy duty, cast or ductile iron flush fit cover, stationary rod, centering ring and pin. For 1-1/2 inch and 2 inch curb stop, curb box is to be supplied with enlarged base. All metallic components are to be heavily coated with asphalt base paint.

Curb box cover is to be cast, with word "WATER" cast into top of cover. Curb box cover is to be supplied with brass pentagon shaped head bolt.

S914-3 CONSTRUCTION DETAILS

S914-3.01 General

Existing curb box that is found to be defective shall be replaced as directed by the Project Manager

Upon completion of the work, excavation shall be backfilled and disturbed surface area restored.

S914-3.02 Installation

New curb stop shall be placed in the trench on a precast solid concrete block support at an elevation to provide a minimum cover of 4 feet 6 inches.

Curb stop shall be installed complete with water service pipe insulator positioned on customer's (downstream) side of curb stop. Water service line insulator shall be installed in conformance with manufacturer's and AWWA recommendations.

Overall installation shall be tested for leaks under line pressure in the presence of the Project Manager prior to backfilling, and all connections made watertight and free from leakage.

Curb box shall be carefully set and braced to insure that it remains in a vertical position centered on the curb stop during and after backfilling. Proper alignment and height of curb box shall be maintained, until completion of the Project. Top of curb box shall be flush with the finished grade. Backfilling of the trench shall be done in a manner so as to avoid damage to water service pipe and curb stop and box.

S914-3.03 New Curb Stop and Box at New Water Service

New curb stop and box shall be connected to the new water service pipe as required, and existing curb stop and box removed. Cost of removing existing curb stop and box shall be included in Section S913 Water Service Pipe (2 inch and Smaller).

S914-3.04 New Curb Stop and Box at Existing Water Service

Existing water service shall be shut off at corporation stop. Existing curb stop and box disconnected and removed, and new curb stop and box connected to the existing water service.

S914-3.05 Replace Existing Curb Box Assembly

Existing curb box assembly shall be replaced with a new curb box assembly. Prior to installation, curb stop shall be checked for proper operation.

S914-3.06 Adjust Existing Curb Box/Water Meter Pit Assembly

Existing curb box shall be adjusted to finished grade. Prior to adjusting existing curb box, Bureau of Water will check existing curb box to insure that it is functioning properly, and check existing curb stop that shut off rod is properly attached.

S914-3.07 Remove Existing Curb Box/Water Meter Pit Assembly

Existing curb box/water meter pit assembly on abandoned water service shall be removed and disposed of.

S914-4 METHOD OF MEASUREMENT

The quantity to be measured for payment shall be the number of curb stops and boxes, or water meter pits actually installed, adjusted, or removed.

S914-5 BASIS OF PAYMENT

S914-5.01 General all Items

The unit price bid for all items shall include the cost of: verifying the location and disposition of water service; preparation and submittal of water service record information and card; pavement saw cutting; and furnishing all labor, material and equipment necessary to complete the work.

Seventy-five (75) percent of the unit price bid will be paid upon completion of the installation and acceptance of the water service work. The remaining twenty-five (25) percent will not be paid until all water service record information and cards have been prepared, submitted and approved. Failure to correct any erroneous or incomplete information will result in holding twenty-five (25) percent of payment in retainage until work is satisfactorily completed.

S914-5.02 New Curb Stop and Box at New Water Service

The unit price bid shall also include the cost of: furnishing and installing curb stop with water service line insulator including all necessary fittings; curb box assembly; concrete block; connecting to water service pipe; pressure testing curb stop; final adjustment of curb box to finished grade and alignment; fittings and materials necessary to connect curb stop; removal of existing curb stop and box; and removal of water meter pit where required.

S914-5.03 New Curb Stop and Box at Existing Water Service

The unit price bid shall also include the cost of: furnishing and installing curb stop with water service line insulator including all necessary fittings; curb box assembly; concrete block; connecting to water service pipe; pressure testing curb stop; final adjustment of curb box to finished grade and alignment; fittings and materials necessary to connect curb stop; shut down water service at corporation stop; shut down water main; removal of existing curb stop and box; and removal of water meter pit where required.

S914-5.04 Install New Curb Stop

The unit price bid shall include the items in Subsection S914-5.02 New Curb Stop and Box at New Water Service, except that a new curb box assembly will not be included.

S914-5.05 Replace Existing Curb Box Assembly

The unit price bid shall also include the cost of: removing existing curb box assembly; furnishing and installing new curb box assembly; checking existing curb stop; final adjustment of curb box to finished grade and alignment.

S914-5.06 Adjust Existing Curb Box

The unit price bid shall also include the cost of: checking existing curb stop and box assembly for defects; final adjustment of curb box to finished grade and alignment.

S914-5.07 Remove Existing Curb Box Assembly

The unit price bid shall also include the cost of removal and disposal of existing curb box assembly.

Existing curb box assembly removal in conjunction with other water service related work such as abandonment of existing water service at tap, installation of new curb stop and box, or replacement of existing curb box assembly, will be included in the unit price bid for those items as indicated in the Basis of Payment.

Existing curb box assembly removal in areas of pavement reconstruction, sidewalk/driveway replacement, or trench and culvert excavation, will be considered as part of the general excavation, and cost of removal will be included in the unit price bid for those items under Sections 203 Excavation and Embankment, R206 Trench and Culvert Excavation and S608 Sidewalk and Driveway.

S914-5.08 Adjust Existing Water Meter Pit

The unit price bid shall also include the cost of final adjustment of water meter pit to finished grade and alignment.

S914-5.09 Remove Existing Water Meter Pit

The unit price bid shall also include the cost of removal and disposal of existing water meter pit.

S914-5.10 Excavation, Backfill and Surface Restoration

Excavation, furnishing and placing of bedding and select granular backfill, and surface restoration will be paid for under separate bid items or included in the unit price bid for the item as indicated in the item

description. No separate payment shall be made for placement of select backfill excavated from the trench

Excavation that is included in the pay item does not include rock excavation. Rock excavation will be paid for under separate bid item.

Payment will be under:

ITEM NO.	ITEM	PAY UNIT
S914.01XXXX	Furnish and Install New X" Curb Stop and Box at New Water Service	Each
S914.02XXXX	Furnish and Install New X" Curb Stop and Box at New Water Service (Including Excavation and Backfill)	Each
S914.03XXXX	Furnish and Install New X" Curb Stop and Box at New Water Service (Including Excavation, Backfill and Surface Restoration)	Each
S914.04XXXX	Furnish and Install New X" Curb Stop and Box at Existing Water Service	Each
S914.05XXXX	Furnish and Install New X" Curb Stop and Box at Existing Water Service (Including Excavation and Backfill)	Each
S914.06XXXX	Furnish and Install New X" Curb Stop and Box at Existing Water Service (Including Excavation, Backfill and Surface Restoration)	Each
S914.07XXXX	Furnish and Install New X" Curb Stop	Each
S914.08XXXX	Furnish and Install New X" Curb Stop (Including Excavation and Backfill)	Each
S914.09XXXX	Furnish and Install New X" Curb Stop (Including Excavation, Backfill and Surface Restoration)	Each
S914.1001	Replace Existing Curb Box Assembly (3/4" to 1-1/2")	Each
S914.1002	Replace Existing Curb Box Assembly (2")	Each
S914.1101	Replace Existing Curb Box Assembly (3/4" to 1-1/2") (Including Excavation and Backfill)	Each
S914.1102	Replace Existing Curb Box Assembly (2") (Including Excavation and Backfill)	Each
S914.1201	Replace Existing Curb Box Assembly (3/4" to 1-1/2") (Including Excavation, Backfill and Surface Restoration)	Each
S914.1202	Replace Existing Curb Box Assembly (2") (Including Excavation, Backfill and Surface Restoration)	Each
S914.13	Adjust Existing Curb Box	Each
S914.14	Adjust Existing Curb Box (Including Excavation and Backfill)	Each
S914.15	Adjust Existing Curb Box (Including Excavation, Backfill and Surface Restoration)	Each
S914.19	Remove Existing Curb Box Assembly	Each
S914.20	Remove Existing Curb Box Assembly (Including Excavation and Backfill)	Each
S914.21	Remove Existing Curb Box Assembly (Including Excavation, Backfill and Surface Restoration)	Each
S914.22	Adjust Existing Water Meter Pit	Each
S914.23	Adjust Existing Water Meter Pit (Including Excavation and Backfill)	Each
S914.24	Adjust Existing Water Meter Pit (Including Excavation, Backfill and Surface Restoration)	Each
S914.25	Remove Existing Water Meter Pit	Each
S914.26	Remove Existing Water Meter Pit (Including Excavation and Backfill)	Each
S914.27	Remove Existing Water Meter Pit (Including Excavation, Backfill and Surface Restoration)	Each

REVISED February 13, 2014