442 MUNI CONSTRUCTION SPECIFICATION FOR CORROSION PROTECTION OF NEW AND EXISTING WATERMAINS

442.02 References

ADD the following:

SSPC-SP1	Solvent Cleaning
SSPC-SP2	Hand Tool Cleaning
SSPC-SP3	Power Tool Cleaning
OPSS 503	Site Preparation for Pipeline, Utilities, and Associated Structures in Open Cut
OPSS 504	Preservation, Protection and Reconstruction of Existing Facilities
OPSS 517	Dewatering of Pipeline, Utilities and Associated Structures
OPSS 441	Watermain Installation in Open Cut
OPSS 410	Pipe Sewer Installation in Open Cut

442.03 Definitions

ADD in the following:

Service Connection means the system used to supply water from the watermain to the property line.

Service Connection Appurtenance Set means the main stop, curb stop, couplings, service box, service box support, and service saddle used in the installation of a service connection.

442.05 Materials

ADD in the following:

442.05.03.02 Petrolatum Tape Primer

The primer shall be comprised of saturated petroleum hydrocarbons inert fillers and passivating agents.

The primer shall be in integral component for the preparation of metal surfaces prior to wrapping. Primer will displace moisture, passivate surface oxides, fill imperfections, and ensure contact for the tape.

442.05.03.03 Petrolatum Tape

The tape shall have a character stable in composition and plasticity over a wide temperature range. Tape shall be non-hardening and non-cracking.

442.05.03.04 Petrolatum Molding Mastic

The mastic shall be comprised of saturated petroleum hydrocarbons inert fillers, reinforcing fibers and thermal extenders.

Mastic shall be cold applied self-supporting for molding around irregular shaped fittings to provide a suitable profile for applying anti-corrosion tapes.

442.05.05 Test Stations

ADD in the following:

All test stations shall be weatherproof and non-metallic and shall be of:

Little Fink as manufactured by Cott Manufacturing Company or approved equal.

Test stations to be installed as per GSSD 1125.010.

442.07.01 General

ADD in the following:

The work of installing corrosion protection on all metallic appurtenances shall include all primer, profiling mastic, and tape. The anti-corrosion materials shall be installed according to the manufacturer's recommendations with a 55% overlap for the tape applications.

442.07.03 Transporting, Unloading, Storage, and Handling

Materials ADD in the following:

Anti-corrosion materials that can be damaged by exposure to elements shall be stored in a clean, dry enclosure.

442.07.04 Anode Installation

DELETE sub sections 442.07.04.04, 442.07.04.05,

ADD in the following subsections:

442.07.15 Cold Weather Work

All work and materials must be protected from freezing.

442.07.16 Surface Preparation

Preparation of the surface area for corrosion protection shall be performed in accordance to:

a) SSPC-SP1 Solvent Cleaning
b) SSPC-SP2 Hand Tool Cleaning
c) SSPC-SP3 Power Tool Cleaning
d) High Pressure Wash (3,000-7,000 psi)

442.07.17 Service Connection Appurtenance Set

Corrosion protection shall be applied to the following metallic components:

a) Service saddle;
b) Main stop;
c) Couplings or fittings;
d) Curb stop.

Reference the appropriate GSSD 1104.010, GSSD 1104.011, GSSD 1104.020.

The appropriate size anode shall be applied to the service pipe if required.

442.07.18 Metallic Fittings

Corrosion protection shall be applied to the following metallic components:

a) Bends or elbows;
b) Tees;
c) Crosses;
d) Caps;
e) Reducers;
f) Pressure release valves;
g) Thrust restraints.

442.07.19 Associated Appurtenances – Hydrants

Corrosion protection shall be applied to the following metallic components:

a) Tee at watermain;
b) Hydrant valve;
c) Hydrant valve – fittings;
d) Hydrant boot;
e) Hydrant barrel: boot to flange on hydrant.

Reference GSSD 1105.030.

442.07.20 Associated Appurtenances – Valves

Corrosion protection shall be applied to the following metallic components:

a) Entire valve exclusive of closing nut;
b) All metallic fittings to connect valve to existing/new distribution system;
c) As indicated on Greater Sudbury Standard Drawings (GSSDs).

442.09 Measurement for Payment

ADD in the following subsections:

442.09.03 Fittings – Metallic

For measurement purposes, corrosion protection shall be included in the unit price for watermain.

442.09.04 Service Connection

For measurement purposes, corrosion protection shall be included in the unit price for service connections.

442.09.05 Hydrant Sets

For measurement purposes, corrosion protection shall be included in the unit price for hydrant sets.

442.09.06 Valves

For measurement purposes, corrosion protection shall be included in the unit price for valves.

442.10 Basis of Payment

ADD in the following:

Payment shall be full compensation for all labour, equipment, and material to do the work under the appropriate item.