

TS No.	Superseded (Remove)	Revised/New (Insert)	Remarks
TS 7.20	Jun 2007	Sep 2022	<p>Construction Specification for Cathodic Protection of Existing Iron Watermains</p> <ul style="list-style-type: none"> • Section 7.20.01 Scope; removed five bullet points as this work is detailed in the body of specification. • Subsection 7.20.01.01 Workmanship; deleted as covered in General Conditions of Contract. • Subsection 7.20.01.02 Handling and Storage of Materials; moved to Section 7.20.05 Materials. • Subsection 7.20.01.03 Units, delete subsection as not standard subsection used. • Section 7.20.02 References; add drawing T-1106.02, delete T-1106.08. Add ASTM B843 and G97. • Section 7.20.03 Definitions; delete TS and add GPS and NACE. • Subsection 7.20.04.01 Cathodic Protection Survey – Over the Line Potential; new subsection. • Subsection 7.20.04.02 Final Report Submission; new subsection. • Subsection 7.20.04.03 As-built Data Collection; new subsection. • Subsection 7.20.05.04 Monitoring Probes; deleted as no longer installed. • Subsection 7.20.05.07 Crimp Connectors; new subsection. • Subsection 7.20.07.02 Pre-installation Survey; new subsection. • Subsection 7.20.07.03 Anode Installation; revised wording and added two bullet points. • Subsection 7.20.07.03 Test Station Installation; test stations not required unless specified in the contract. Renumbered to TS 7.20.07.04. • Subsection 7.20.07.04 Installation of Cathodic Protection Monitoring Probe; deleted. • Subsection 7.20.07.05 Post-installation Survey; new subsection. • Subsection 7.20.09.01 Anode Installation; sentence revised. Not paid by invoice. • Subsection 7.20.09.02 Test Station Installation; sentence revised. Not paid by invoice. • Subsection 7.20.09.03 Monitoring Probe Installation; deleted and revised to Cathodic Protection Survey with new measurement for payment for pre and post surveys. • Section 7.20.10 Basis of Payment; three new tender items added.

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TS 7.60	Jan 2015	Sep 2022	<p>Specification for the Cured-In-Place Pipe Lining of Watermains</p> <ul style="list-style-type: none"> • Addressing issues surrounding modified ASTM2990. • Addressing number of issues for clauses that was superseded by WSP in special specification • Cleaning up the language around measuring the actual thickness which was stated in two different clauses in the specification, therefore there was room for error. • Changing design life from 50 to 75 years. • Type testing procedure for liners with fold as the existing language was confusing to the user. • Moving the mechanical insert requirement from 2023 to 2024 construction season. • Other minor revisions.
TS 7.80	Sep 2016	Sep 2022	<p>Material Specification for Large Diameter Watermains</p> <ul style="list-style-type: none"> • Section 7.80.02 References; TS 7.10, TS 7.40, TS 415, TS 416, TS 441, OPSS 441, OPSS 1842, ASTM F2620, AWWA C207 and C226 deleted as not used in body of specification. • Section 7.80.04 Definitions; reordered to be in alphabetical order. Add MECP. • Clause 7.80.05.05.01 Additional Protection; in second paragraph revise T-1110.01-9 to T-1110.01-10. • Subsection 7.80.05.06 Stainless Steel Pipe; added requirement for 100 mm of 32 MPa concrete around pipe for mechanical strike protection. • Subsection 7.80.09.02 Inspection; 2nd paragraph revised to require full-time inspection of welding by certified welder at no cost to the City. • Appendix A; Removed "is a non-mandatory" from Note. • Appendix A; Inspection During Construction; Include percentage of each type of inspection and contractor to conduct field inspection of welds at no cost to the City.
TS 401	Nov 2016	Sep 2022	<p>Amendment to OPSS.MUNI 401 (Nov 2021) – Construction Specification for Trenching, Backfilling and Compacting</p> <ul style="list-style-type: none"> • Reference new OPSS.MUNI 401, November 2021 version which replaced November 2015 version. • Subsection 401.05.01 Bedding Material and Embedment Material; revised title and new second sentence.
TS 403	Apr 2013	Sep 2022	<p>Amendment to OPSS.MUNI 403 (Nov 2016) – Construction Specification for Rock Excavation for Pipelines, Utilities and Associated Structures in Open Cut</p> <ul style="list-style-type: none"> • Reference new OPSS.MUNI 403, November 2016 version which replaced November 2010 version.

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TS 407	Sep 2017	Sep 2022	<p>Amendment to OPSS.MUNI 407 (Nov 2021) – Construction Specification for New Maintenance Hole, Catch Basin, Ditch Inlet, and Valve Chamber Installation</p> <ul style="list-style-type: none"> Reference new OPSS.MUNI 407, November 2021 version which replaced November 2020 version.
TS 410	Sep 2017	Sep 2022	<p>Amendment to OPSS.MUNI 410 (Nov 2018) – Construction Specification for Pipe Sewer Installation in Open Cut</p> <ul style="list-style-type: none"> Reference new OPSS.MUNI 410, November 2018 version which replaced November 2015 version.
TS 412	Apr 2013	Sep 2022	<p>Amendment to OPSS.MUNI 412 (Nov 2018) – Construction Specification for Forcemain Installation in Open Cut</p> <ul style="list-style-type: none"> Reference new OPSS.MUNI 412, November 2018 version which replaced November 2012 version. Updated for MUNI use and latest release.
TS 415	Sep 2017	Sep 2022	<p>Amendment to OPSS.MUNI 415 (Nov 2018) – Construction Specification for Pipeline Installation by Tunnelling</p> <ul style="list-style-type: none"> Reference new OPSS.MUNI 415, November 2018 version which replaced November 2013 version.
TS 416	Sep 2017	Sep 2022	<p>Amendment to OPSS.MUNI 416 (Nov 2018) – Construction Specification for Pipeline and Utility Installation by Jacking and Boring</p> <ul style="list-style-type: none"> Reference new OPSS.MUNI 416, November 2018 version which replaced November 2013 version.
TS 441	Sep 2017	Sep 2022	<p>Amendment to OPSS.MUNI 441 (Nov 2021) – Construction Specification for Watermain Installation in Open Cut</p> <ul style="list-style-type: none"> Reference new OPSS.MUNI 441, November 2021 version which replaced November 2016 version. Clause 441.07.18.02 Air Release and Air/Vacuum Valves; new sentence added.
TS 493	Sep 2017	Sep 2022	<p>Amendment to OPSS.MUNI 493 (Nov 2019) – Construction Specification for Temporary Potable Water Supply Services</p> <ul style="list-style-type: none"> Reference new OPSS.MUNI 493, November 2019 version which replaced November 2015 version.
TS 510	Sep 2017	Sep 2022	<p>Amendment to OPSS.MUNI 510 (Nov 2018) – Construction Specification for Removal</p> <ul style="list-style-type: none"> Reference new OPSS.MUNI 510, November 2018 version which replaced November 2014 version.
TS 518	Apr 2013	Sep 2022	<p>Amendment to OPSS.MUNI 518 (Apr 2017) – Construction Specification for Control of Water From Dewatering Operations</p> <ul style="list-style-type: none"> Reference new OPSS.MUNI 518, April 2017 version which replaced November 2011 version.
TS 1802	Sep 2017	Sep 2022	<p>Amendment to OPSS.MUNI 1802 (Nov 2021) – Material Specification for Smooth Walled Steel Pipe</p> <ul style="list-style-type: none"> Reference new OPSS.MUNI 1802, November 2021 version which replaced November 2015 version.