

TS No.	Superseded (Remove)	Revised/New (Insert)	Remarks
TS 1.00	Apr 2014	Sep 2017	<p>Construction Specification for Maintenance of Traffic</p> <ul style="list-style-type: none"> • Section 1.00.02 References; TS 1150 changed to TS 1151. Reference to Police Services and Transportation Services Memorandum of Understanding Guidelines for Road Occupancy Traffic Control deleted. • Section 1.00.03 Definitions; new definition Superpave added • Subsection 1.00.05.01 Superpave 9.5 Asphalt; title revised. HL-3F changed to Superpave 9.5 in title and in first sentence. • Subsection 1.00.05.02 Superpave 19.0 Asphalt; title revised. HL-8 changed to Superpave 19.0 in title and in first sentence. • Subsection 1.00.07.03 Temporary Traffic Lanes; HL-8 changed to Superpave 19.0 in first paragraph. HL-3F changed to Superpave 9.5 in third paragraph. • Subsection 1.00.07.06 Temporary Sidewalks and Bus Stops; HL-3F revised to Superpave 9.5. • Subsection 1.00.07.07 Bicycle Facilities; HL-3F changed to Superpave 9.5. • Clause 1.00.07.11.03 Traffic Control Persons and Traffic Control Devices; deleted. Remaining sections renumbered. • Clause 1.00.07.11.03 Traffic Control Persons and Traffic Control Devices; second paragraph revised. • Clause 1.00.07.11.04.02 Traffic Control Requirements; Table 1 – 4th row and Note 3 revised. • Subsection 1.00.07.12 Maintenance of Temporary Work; HL-3F changed to Superpave 9.5 in second paragraph. • Subsection 1.00.09.01 Superpave 9.5 Asphalt for Maintenance of Traffic; title changed. Superpave 19.0 for Maintenance of Traffic; title revised. • Subsection 1.00.10.02 Superpave 9.5 for Maintenance of Traffic – Item; title revised. Superpave 19.0 for Maintenance of Traffic – Item; title revised. • Subsection 1.00.10.03 Site Fence – Item; added "relocation". • Subsection 1.00.10.05 Crowd Control Barrier – Item; added "relocation".
TS 1.10	Apr 2014	Sep 2017	<p>Construction Specification for Field Office</p> <ul style="list-style-type: none"> • Section 1.10.06 Equipment; item j) and k) deleted, Item l) and m) new. Revised sixth paragraph requiring adjustable ergonomic office chair. Revised eighth paragraph for field office from 14 to 30 Days.

TS No.	Superseded (Remove)	Revised/New (Insert)	Remarks
TS 2.10	Apr 2014	Sep 2017	<p>Construction Specification for General Excavation</p> <ul style="list-style-type: none"> • Section 2.10.02 References; T-216.02-9 added. • Subsection 2.10.07.08 Unauthorized Excavation; 2nd new sentence added. • Subsection 2.10.09.01 General Excavation; first paragraph rewritten.
TS 2.20	Apr 2014	Sep 2017	<p>Construction Specification for Excavation of Track Allowance</p> <ul style="list-style-type: none"> • Section 2.20.07 Construction; incorporated TR503SS. Added three new paragraphs. • Subsection 2.20.09.01 Excavation of Track Allowance, Excavation of Foundation Slab, heading revised. • Subsection 2.20.10.01 Excavation of Track Allowance – Item; heading revised.
TS 3.10	Apr 2014	Sep 2017	<p>Construction Specification for Asphalt Heater Scarifying</p> <ul style="list-style-type: none"> • Subsection 3.10.07.02 Scarifying Limits; revised HL-8 (HS) to Superpave 19.0.
TS 3.17	Apr 2014	Sep 2017	<p>Construction Specification for Strip Asphalt Overlain on Concrete Gutter</p> <ul style="list-style-type: none"> • Subsection 3.17.09.01 Strip Asphalt Overlain on Concrete Gutter; added linear metres. • Subsection 3.17.10.01 Strip Asphalt Overlain on Concrete Gutter; added item to heading.
TS 3.20	Apr 2014	Sep 2017	<p>Construction Specification for Tack Coat</p> <ul style="list-style-type: none"> • Section 3.20.02 References; LS-216 title corrected AASHTO standard T40-02 replaced by R066-15; Code of Practice for the Reduction of VOC Emissions from Cutback and Emulsified Asphalt; added. ASTM D402/D402M and D6997 added. • Section 3.20.03 Definitions; Ozone Season, Cutback Asphalt and Emulsified Asphalt; new. • Subsection 3.20.04.01 Recording Keeping; new subsection. • Clause 3.20.04.01.10 Procurement Enablers of Paving Projects; new clause. • Clause 3.20.04.01.02 End-Uses Paving Compacting; new clause. • Subsection 3.20.04.02 Reporting; new subsection. • Subsection 3.20.05.01 Practices Regarding Cutback Asphalt during the Ozone Season; new subsection. • Subsection 3.20.05.02 Practices Regarding Cutback Asphalt Outside of the Ozone Season; new subsection. • Subsection 3.20.05.01 Practices Regarding Emulsified Asphalt during the Ozone Season; new subsection. • Subsection 3.20.05.01 Practices Regarding Emulsified Asphalt Outside of the Ozone Season; new subsection • Section 3.20.08 Quality Assurance; T40 changed to R066.

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TS 3.30	Apr 2014	Sep 2017	<p>Construction Specification for Hot Mix Asphalt Sidewalks, Boulevards and Driveways</p> <ul style="list-style-type: none"> • Section 3.30.02 References; OPSS 510 revised to OPSS.MUNI 510. TS 1150 revised to TS 1151. OPSS 510 revised to OPSS.MUNI 510. TS 1151 added. Drawing T-310.050-8 added. • Subsection 3.30.04.01 General; revised TS 1150 to TS 1151 in first paragraph. • Subsection 3.30.05.01 Hot Mix; deleted in its entirety. • Subsection 3.30.05.01 Superpave 12.5 Asphalt; new heading title and subsection. • Subsection 3.30.05.02 Superpave 19.0 Asphalt; new subsection. • Subsection 3.30.05.03 Asphalt Emulsion; added third sentence regarding VOC emissions. • Subsection 3.30.05.04 Granular A Base; Sentence revised. • Subsection 3.30.07.01 Asphalt Sidewalk; new subsection. • Subsection 3.30.07.02 Asphalt Driveway – Residential; new subsection. • Subsection 3.30.07.03 Asphalt Driveway – Commercial; new subsection. • Subsection 3.30.07.04 Asphalt Boulevard; new subsection. • Subsection 3.30.07.05 Sidewalk Resurfacing; new subsection.
TS 3.40	Apr 2015	Sep 2017	<p>Construction Specification for Concrete Road Base</p> <ul style="list-style-type: none"> • Section 3.40.03 Definitions; GU/GUL and HE added. • Subsection 3.40.05.01 Concrete; add note a regarding allowing 37.5 mm stone for 250 mm or greater thicknesses. Add bullet notes for 7 day and 24-hour concrete. • Subsection 3.40.09.02 Supplemental Cost for 7 Day Concrete; new subsection. • Subsection 3.40.09.03 Supplemental Cost for 24-hour Concrete; new subsection. • Subsection 3.40.10.02 Supplemental Cost for 7 Day Concrete; new subsection. • Subsection 3.40.10.03 Supplemental Cost for 24-hour Concrete; new subsection.
TS 3.41	n/a	Jun 2017	<p>Construction Specification for Concrete Bus Pad</p> <ul style="list-style-type: none"> • New specification.

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TS 3.50	Apr 2015	Sep 2017	<p>Construction Specification for Concrete Curb and Concrete Curb and Gutter</p> <ul style="list-style-type: none"> • Section 3.50.02 References; OPSS 510 revised to OPSS.MUNI 510, T-310.020-2 added. • Section 3.50.03 Definitions; GU/GUL and HE added. • Subsection 3.50.05.01 Concrete; add bullet notes for 7 day and 24-hour concrete. • Clause 3.50.07.07.01 Concrete Curb; heading revised. Both paragraphs revised. • Subsection 3.50.09.01; headings revised. • Subsection 3.50.09.02 Monolithic Curb and Sidewalk; deleted. • Subsection 3.50.09.02 Supplemental Cost for 7 Day Concrete; new subsection. • Subsection 3.50.09.03 Supplemental Cost for 24-hour Concrete; new subsection. • Subsection 3.50.10.01; heading revised. • Subsection 3.50.10.02 Supplemental Cost for 7 Day Concrete; new subsection. • Subsection 3.50.10.03 Supplemental Cost for 24-hour Concrete; new subsection.
TS 3.55	Apr 2014	Sep 2017	<p>Construction Specification for Brick Gutter</p> <ul style="list-style-type: none"> • Section 3.55.02 References; A82-06 (2001) revised to A82-06 (2011). • Subsection 3.55.07.03 Ramping and Protection; HL-8(HS) changed to Superpave 19.0.
TS 3.70	Nov 2016	Sep 2017	<p>Construction Specification for Concrete Sidewalk and Concrete Raised Median</p> <ul style="list-style-type: none"> • Section 3.70.03 Definitions; GU/GUL and HE added. • Subsection 3.70.05.01 Concrete; add bullet notes for 7 day and 24-hour concrete • Subsection 3.70.07.09 Finishing Concrete; tooled joint removed from fifth paragraph. • Subsection 3.70.09.01 Concrete Sidewalk; added second sentence. • Subsection 3.70.09.03 Supplemental Cost for 7 Day Concrete; new subsection. • Subsection 3.70.09.04 Supplemental Cost for 24-hour Concrete; new subsection. • Subsection 3.70.10.01 Concrete Sidewalk – Item; added removal of formwork in first paragraph. • Subsection 3.70.10.02 Concrete Raised Median – Item; added removal of formwork in first paragraph. • Subsection 3.70.10.03 Tactile Walking Surface Indicators – Item; added removal of formwork in first paragraph. • Subsection 3.70.10.04 Supplemental Cost for 7 Day Concrete; new subsection. • Subsection 3.50.10.05 Supplemental Cost for 24-hour Concrete; new subsection. • Appendix 3.70-A; notes to designer revised.

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TS 3.75	Apr 2017	Sep 2017	<p>Construction Specification for Streetcar Track Pavement and Foundation Slab</p> <ul style="list-style-type: none"> • Section 3.75.03 Definitions; GU/GUL and HE added. • Subsection 3.75.05.01 Concrete; add third note for 24-hour concrete (HE) strength. • Subsection 3.75.07.06 Placing Concrete; revised wording. • Subsection 3.75.09.03 Supplemental Cost for 7 Day Concrete; new subsection • Subsection 3.50.10.02 Supplemental Cost for 24-hour Concrete; new subsection.
TS 3.80	Apr 2015	Sep 2017	<p>Construction Specification for Concrete Unit Pavers</p> <ul style="list-style-type: none"> • Section 3.80.02 References; OPSS 1004 changed to OPSS.MUNI 1004. • Subsection 3.80.05.08 19 mm Type II Clear Stone; title revised. First sentence revised and new table added. • Clause 3.80.07.02.02 Concrete Base; HL-8 stone changed to clear stone.
TS 3.90	Apr 2015	Sep 2017	<p>Construction Specification for Crack Repair</p> <ul style="list-style-type: none"> • Section 3.90.02 References; TS 1150 changed to TS 1151. • Clause 3.90.05.02.01 Superpave 19.0 Asphalt; title revised. First sentence revised. • Clause 3.90.07.02.02 Concrete Base Repair; second sentence deleted. • Clause 3.90.07.02.03 Asphalt Paving; title revised. HI-8 (HS) changed to Superpave 19.0. • Section 3.90.08 Quality Assurance; second sentence added.

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TS 4.50	Apr 2014	Sep 2017	<p>Construction Specification for Utility Adjustments</p> <ul style="list-style-type: none"> • Section 4.50.02 References; OPSS 501 changed to OPSS.MUNI 501. OPSS 1351 and OPSS 1850 added. • Subsection 4.50.05.03 Precast Adjustment Units; first paragraph revised. • Subsection 4.50.05.06 New Frame and Covers; new subsection. • Subsection 4.50.07.01 General; fifth paragraph revised, changed from 500 mm to 300 mm depth. • Subsection 4.50.07.02 Precast Concrete Adjustment Units; new item f) added. • Clause 4.50.07.02.01 Installation Procedure; new item 8) added. • Clause 4.50.07.02.02 Adjustment Bricks; new item b) added, remaining reordered. • Subsection 4.50.09.01 Utility Adjustments; first paragraph revised, changed from 450 mm to 300mm depth. • Subsection 4.50.09.02 Concrete Extension; new subsection. • Subsection 4.50.09.03 New Frame and Covers; new subsection. • Subsection 4.50.10.01 Utility Adjustments – Item; last paragraph deleted. • Subsection 4.50.10.02 Concrete Extensions – Item; new subsection. • Subsection 4.50.10.03 New Frame and Covers – Item; new subsection.
TS 4.60	Apr 2016	Sep 2017	<p>Construction Specification for Utility Cut and Restoration</p> <ul style="list-style-type: none"> • Clause 4.60.07.02.03 Backfilling; 75 mm changed to 80 mm. Revised "maximum dry density" to "standard proctor maximum dry density". • Subsection 4.60.07.03 Temporary Repair; HL-3 changed to Superpave 12.5. • Clause 4.60.07.04.02 Permanent Repair to Utility Cut Surfaces; second sentence revised. • Clause 4.60.07.04.03 Placing Asphalt for Permanent Repair; "warm mix" added to third and fourth paragraph. • Subsection 4.60.09.01 Restoration; new subsection. • Subsection 4.60.10.01 Restoration; new subsection.

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TS 4.70	Apr 2016	Sep 2017	<p>Construction Specification for Keyhole Excavation and Reinstatement of Keyhole Cores</p> <ul style="list-style-type: none"> • Revised title of specification. Revised "temporary reinstatement" to "reinstatement". • Section 4.70.01 Scope; Revised "temporary reinstatement" to "reinstatement". • Section 4.70.03 Definitions; Permanent Repair definition revised. • Subsection 4.70.07.02 Keyhole Coring; third paragraph revised. • Subsection 4.70.07.04 Surface Restoration with Keyhole Cores; HL-1 changed to Superpave 12.5. • Subsection 4.70.07.05 Mitigation of Defective Keyhole Cores; entire paragraph revised. • Subsection 4.70.08.02 Removal of Unacceptable Keyhole Cores; last paragraph revised. • Subsection 4.70.09.01 Keyhole Core; new heading. • Subsection 4.70.10.01 Keyhole Core – Item; new heading.
TS 5.00	Apr 2014	Sep 2017	<p>Construction Specification for Sodding</p> <ul style="list-style-type: none"> • Subsection 5.00.05.07 Topsoil; new subsection. • Subsection 5.00.10.01 Nursery Sod - Item, topsoil added to what is included in Contract Price.
TS 13.10	Apr 2015	Sep 2017	<p>Construction Specification for Unshrinkable Fill</p> <ul style="list-style-type: none"> • Section 13.10.03 Definitions; Reclaimed Concrete Material added. • Subsection 13.10.05.01 Use of Reclaimed Concrete Material, new subsection. • Subsection 13.10.07.04 Unshrinkable Fill Protection; HL-3F changed to Superpave 12.5. • Subsection 13.10.10.01 Unshrinkable Fill – Item; HL-3F (Fine) changed to Superpave 12.5.

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TS 310	Apr 2014	Sep 2017	<p>Construction Specification for Hot Mix, Hot Laid Asphaltic Concrete Paving</p> <ul style="list-style-type: none"> • Section 310.02 References; revised OPSS 206 to OPSS.MUNI 206, OPSS 314 to OPSS.MUNI 314. Revised title of TS 1101. Added TS 3.20 and TS 1151. • Section 310.03 Definitions; four definitions deleted; HL-8 (HS, 10% RAP); HL, Hot Mix, Mixture, Mix; HL (HS) Types, High Stability Types; Large Stone Bind Course (LSBC). Two definitions added; Superpave and Warm Mix Asphalt (WMA). • Subsection 310.05.01 Asphaltic Concrete; revised TS 1150 to TS 1151. • Subsection 310.05.02 Tack Coating Material; revised wording. • Clause 310.06.01.01 Mechanical Pavers; gas-fired revised to infra-red in last sentence. • Subsection 310.07.01 Superpave and Stone Mastic Asphalt; title changed. • Clause 310.07.01.04 Transportation of the Hot Mix; second paragraph revised. • Clause 310.07.01.07 Placing Hot Mix Asphalt; third paragraph revised. 2nd last paragraph revised to say "Contractor shall take" from "City may take". • Clause 310.07.01.08 Use of Paving Equipment; fourth paragraph revised. • Clause 310.07.01.10.01 Requirement for all Joints; changed 50 mm to 25 mm. • Clause 310.07.01.10.02 Tacking of Joints; paragraph revised. • Clause 310.07.01.10.03 Requirement for Longitudinal Joints; third paragraph revised. • Clause 310.07.01.11.01 Compaction Testing Based on Nuclear Density Gauge Testing; Table 4 revised. • Subsection 310.08.01 General; first paragraph revised. • Subsection 310.09.01 Superpave and Stone Mastic Asphalt Mixes; heading title changed. • Clause 310.09.01.02 Theoretical Mass; changed 97 to 91 percent. • Clause 310.09.01.04 Payment Area; Table 6 and notes revised. • Clause 310.09.01.05 Density Factors; sentence revised. • Subsection 310.10.01 Superpave and Stone Mastic Asphalt; heading title changed. • Clause 310.10.01.03 PGAC and PGAC-E; TS 1150 changed to TS 1151.

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TS 405	Apr 2014	Sep 2017	<p>Amendment to OPSS 405 (Nov 2008) Construction Specification for Pipe Subdrains</p> <ul style="list-style-type: none"> • Subsection TS 405.05.08 Clear Stone; deleted. • Subsection TS 405.07.05 Bedding; second sentenced changed 19 mm crushed clear stone to clear stone. • Subsection TS 405.07.07 Embedment and Backfill Material; second sentence changed 19 mm crushed clear stone to clear stone.
TS 501	Apr 2014	Sep 2017	<p>Amendment to OPSS.MUNI 501 (Nov 2014) Construction Specification for Compaction</p> <ul style="list-style-type: none"> • Subsection TS 501.05.01 Granular Material; OPSS 510 revised to OPSS.MUNI 510. • Subsection TS 501.08.01 General; OPSS 510 revised to OPSS.MUNI 510.
TS 1003	Apr 2014	Sep 2017	<p>Material Specification for Aggregates Hot Mixed, Hot Laid Asphaltic Concrete</p> <ul style="list-style-type: none"> • Entire specification revised in its entirety to accommodate Superpave and Stone Mastic Asphalt.
TS 1010	Apr 2015	Sep 2017	<p>Amendment to OPSS.MUNI 1010 (Apr 2013) – Material Specification for Aggregates – Base, Subbase, Select Subgrade and Backfill Material</p> <ul style="list-style-type: none"> • Section 1010.03 Definitions; Granular A Native is new definition. Granular A definition revised. • Subsection 1010.05.02; Granular A Native, new subsection. Remaining subsections renumbered. • Title revised.
TS 1101	Apr 2014	Sep 2017	<p>Amendment to OPSS.MUNI 1101 (Nov 2016) – Material Specification for Performance Graded Asphalt Cement</p> <ul style="list-style-type: none"> • Entire specification revised. • Title revised.
TS 1150	Apr 2014	- - -	<p>Material Specification for Hot Mixed, Hot Laid Asphaltic Concrete</p> <ul style="list-style-type: none"> • Cancelled specification. Replaced with new TS 1151.
TS 1151	- -	Sep 2017	<p>Material Specification for Superpave, Stone Mastic and Warm Mix Asphalt</p> <ul style="list-style-type: none"> • New specification.

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TS 1350	Apr 2015	Sep 2017	<p>Amendment to OPSS.MUNI 1350 (Nov 2014) – Material Specification for Concrete – Materials and Production</p> <ul style="list-style-type: none"> • Section 1350.02 References; OPSS 904 revised to OPSS.MUNI 904, OPSS 1440 revised to OPSS.MUNI 1440. • Subsection 1350.05.01 Materials for Concrete; Note 'a' added to fifth row in Table A. • Subsection 1350.10.01 Compressive Strength Acceptance; insert new first paragraph. • Subsection 1350.10.02 Small Lot Acceptance; first two paragraphs deleted, new third bullet point added. • Clause 1350.10.02.01 Track Allowance; new clause. • Subsection 1350.10.03 High Early Strength; new subsection.