
REVISION INFORMATION
DIVISION 3 – UNDERGROUND WORKS
STANDARD CONSTRUCTION SPECIFICATIONS

REVISION SUMMARY

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Revised Specifications

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Revised Standard Details

- Revised SD-002, SD-005, SD-010, SD-011 and SD-023

EXPLANATION OF THE REVISION SUMMARY

(All revisions are highlighted yellow in Specifications)

Revised Specifications

CW 2030-R – Excavation, Bedding and Backfill

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| Clause 4.5 | Revised title to “Backfill Material to Replace Rock and Unsuitable Material” |
| Clause 4.8.2 | Added new clause for measurement and payment for replacement of specified backfill with granular backfill or cement-stabilized backfill |
| Clause 4.8.3 | Added new clause for measurement and payment for replacement of specified backfill with granular backfill or cement-stabilized backfill |
| Clause 4.8.4 | Revised Clause number from 4.8.2 |

CW 2110-R – Watermains

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| Clause 2.5.2 | Added new Clause for water service plugs |
| Clause 2.10.2 | Added new Clause for “Cast Couplings” and renumbered the remainder of the section |
| Section 2.14 | Added new Section “Pressurized Water Supply Pipe” |
| Clause 3.8.6 | Added new Clause for installation of new hydrant on existing watermain. |
| Clause 3.9.4 | Revised to refer to new Clause 3.8.6 |
| Section 3.15 | Revised title to “Connecting Existing Water Services to New Watermains” |
| Section 3.16 | Revised title to “Plugging and Abandoning Watermains and Water Services” |

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| Clause 3.16.1 | Added “and large diameter water services” |
| Clause 3.16.2 | Added “and large diameter water services” |
| Clause 3.16.3 | Added new Clause for abandoning existing large diameter water services on watermains in service |
| Clause 3.16.4 | Added new Clause for abandoning existing small diameter water services on watermains in service |
| Clause 3.17.5 | Added “ Cut existing watermain pipe square to the pipe axis,” sentence |
| Clause 3.18.3.1 | Revised to “Locate one anode adjacent to the curb stop and one anode adjacent to the corporation stop where the corporation stop is more than 4.5 metres away from the curb stop for new water service installation and for water service renewal from existing curb stop to existing watermain.” |
| Clause 3.24.1 | Added “residential, commercial and industrial customers” and “new” |
| Clause 4.1.3 | Added “Measurement where the type of backfill used in shafts changes will be from the midpoint distance between adjacent shafts.” |
| Clause 4.1.4 | Added new clause “Extraction of existing pipe required to install new pipe will be included with payment for trenchless method of installation” and renumbered remainder of section |
| Clause 4.3.1 | Added “and New Hydrant Assembly on Existing Watermain” to first sentence |
| Clause 4.3.6 | Added new Clause specifying PVC pipe and couplings required to connect a new hydrant assembly to an existing watermain will be included with the hydrant assembly installation |
| Clause 4.4.1 | Added “and New Watermain valve on Existing Watermain” to first sentence |
| Clause 4.4.1 | Added “watermain” to second sentence |
| Section 4.14 | Revised title to “Plugging and Abandoning Watermains and Water Services” |
| Clause 4.14.1 | Added “and large diameter water services” |
| Clause 4.14.2 | Added new Clause for measurement and payment for abandoning existing large diameter water services on watermains in service |
| Clause 4.14.3 | Added new Clause for measurement and payment for abandoning existing small diameter water services on watermains in service |
| Clause 4.15.2 | Added “continuous to the first sentence |
| Clause 4.15.2 | Added “long” to the last sentence |
| Clause 4.15.3 | Revised wording |

CW 2130 – R8 Gravity Sewers

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| Clause 3.8.3 | Added “Alternately installing grout between frame and pre-cast concrete riser as approved and directed by Contract Administrator.” |
| Clause 3.8.6 | Added “and frame” |
| Clause 3.9.1.4 | Added “Remove construction debris and materials from manholes and sewers when the Work is complete.” |
| Clause 3.9.2.7 | Added “Remove construction debris and materials from manholes and sewers when the Work is complete.” |
| Clause 3.10.3 | Deleted “new” from the first sentence |
| Clause 3.10.3 | Revised third sentence to refer to Section 3.16 |
| Clause 3.11.3 | Revised to refer to Section 3.8 |
| Clause 3.12.2 | Added reference to Section 3.3 |
| Clause 3.12.2.4 | Added “Connect new sewer pipe to existing manhole in accordance with Section 3.8.4 of this specification.” |

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| Clause 3.12.3 | Added "Remove construction debris and materials from sewers when the Work is complete". |
| Section 3.14 | Revised the title to "Removal and Replacement of Existing Manholes, Catch Basins and Catch Pits" |
| Clause 3.14.1 | Added "Remove existing manholes, catch basins and catch pits as excavation progresses." |
| Clause 3.14.1 | Added references to SD-010, SD-011 and SD-025 |
| Clause 3.14.1 | Revised wording of Sub-clauses .1, .2 and .3 |
| Clause 3.14.2 | Added "Remove construction debris and materials from manholes, catch basins, catch pits and sewers when the Work is complete." |
| Section 3.18 | Revised title to "Connecting Existing Sewer Services to New Sewers" |
| Clause 3.18.2 | Revised to "Connect to the existing sewer service pipe at the location shown on the Drawings or within the limits of excavation for on-line sewer renewals unless otherwise directed by the Contract Administrator" |
| Clause 3.18.3 | Revised to "Cut fully through the existing sewer service pipe leaving a neat square end or remove existing sewer service pipe at a joint location within the excavation" |
| Clause 3.18.5 | Added "Install fittings, required length of new sewer service pipe and connect to the tee on the new sewer in accordance with Section 3.10 of this specification." |
| Clause 3.21.3 | Added "Flow control by temporary sewer isolation and by-pass pumping to be in accordance with Clause 3.13 of CW 2140" |
| Clause 3.21.4 | Revised clause number from 3.21.3 |
| Clause 4.3.1 | Replaced "Manholes and New Manholes on Existing Sewers" in the first sentence with "the Items of Work listed below." |
| Clause 4.3.1 | Added the following "Items of Work:" "Manhole" "New Manhole on Existing Sewer" "Remove and Replace Existing Manhole" |
| Clause 4.3.3 | Added "Pipe, couplings and connections to existing sewer required to install a new manhole on an existing sewer will be included in manhole installation." |
| Clause 4.3.4 | Added "Removal of existing manhole will be included with installation of new manhole." |
| Clause 4.4.1 | Replaced "Catch Basins and Catch Pits" in the first sentence with "Items of Work listed below." |
| Clause 4.4.1 | Added the following "Items of Work" "Catch Basin " "Catch Pit" "Remove and Replace Existing Catch Basin" "Remove and Replace Existing catch Pit" |
| Clause 4.4.3 | Added "Removal of existing catch basin or catch pit will be included with installation of new catch basin or catch pit." |
| Clause 4.8.1 | Added "made by replacing" and "continuous" to the first sentence |
| Clause 4.8.1 | Added "up to 3.0 metres long" to the last sentence |
| Clause 4.8.2 | Revised the wording |
| Section 4.13 | Revised title to "Connecting Existing Sewer Services to New Sewers" |
| Clause 4.13.1 | Replaced "Connecting New Sewer Service to Existing Sewer Service" with "Connecting Existing Sewer Service to New Sewer" |
| Clause 4.13.2 | Added "Supply and installation of fittings will be included in the sewer service connection." |

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| Clause 4.13.3 | Added "Installation of sewer service risers will be measured and paid for in accordance with Section 4.7." |
| Clause 4.13.4 | Added "Installation of sewer service pipe will be measured and paid for in accordance with Section 4.5." |
| Clause 4.13.5 | Added "Supply and installation of up to 1.0 metre of new sewer service pipe measured horizontally at grade above the centreline of the sewer service pipe will be included with the connection of existing sewer services to a new sewer renewed on-line." |

CW 2140 – Sewer and Manhole Cleaning

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| Clause 3.6.1 | Revised "upstream" to "downstream" and "downstream" to "upstream" |
| Clause 3.13.9 | Added "Provide approved traffic ramps for by-pass pumping discharge hoses where crossing roadways and traffic lanes and locate where directed and approved by the Contract Administrator" |
| Clause 4.7.2 | Added "the first" and "lineal" to the first and second sentences |
| Clause 4.7.3 | Added new clause for measurement and payment for solid debris cutting at pipe joints and services |
| Clause 4.7.4 | Revised clause number from 4.7.3 |

CW 2145 – Sewer and Manhole Inspection

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| Clause 3.7.3 | Deleted "or one per video recording whichever is greater." |
| Clause 3.12.1 | Added "...of an actual sewer and manhole inspection performed by..." |
| Clause 4.2 | Added "...and manhole inspections." |

CW 2160 – Concrete Underground Structures and Works

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| Clause 2.16 | Revised "B) Cement-Stabilized Fill" to "C) Cement-Stabilized Fill" in Table CW 2160.1 |
| Clause 2.16 | Revised "C) Flowable Cement-Stabilized Fill" to "D) Flowable Cement-Stabilized Fill" in Table CW 2160.1 |

CW 2165 – Stormwater Retention Basin Revetment and Soil Sterilization

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| Clause 2.1.1 | Replaced reference to CW 3710 with "Approved Products for Surface Works" |
| Clause 2.2 | Deleted |

Revised Standard Details

SD-002 Standard Trench and Excavation Backfill Classes

- Revised detail for Class 2 and 3 Backfill to include a minimum 300 millimetre thick layer of compacted excavated material over granular backfill in boulevards
- Revised hatching pattern for specified restoration for Class 4 and Class 5 detail

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SD-005 Concrete Thrust Blocks for Vertical Bends

- Revised title to “Concrete Thrust Blocks for Vertical Bends”

SD-010 Standard Precast Concrete Manhole (For up to 525 Diameter Pipe)

- Revised “Manhole Isolation Detail in Accordance With SD-220C” to “Manhole Isolation Detail in Accordance With SD-220A and SD-220B”

SD-011 Standard Precast Concrete Pipe Manhole (For up to 600 to 1500 Diameter Pipe)

- Added “Manhole Isolation Detail in Accordance With SD-220A and SD-220B”

SD-023 Curb and Gutter Inlet With Catch Pit

- Revised “Minimum 250 dia. Lead to Sewer or Manhole” to “Minimum 250 dia. Lead to Catch Basin”