

MMCD Section 01 33 01 Project Record Documents

1.0 GENERAL

1.7 Recording Site Conditions 1.7.5 Add New Specification:

From the day of commencement of the *Work*, the Contractor shall maintain a careful daily record of the progress of the *Work* on his standard record form, with applicable trades listed. This record shall be open to the Owner's inspection at all reasonable times. A copy of the record shall be turned over to the Regional District at weekly intervals.

1.7.6 Add New Specification:

Contractor's diary shall record all pertinent data such as:

- 1.1 Daily weather conditions, including maximum and minimum temperatures.
- 1.2 Commencement, progress and completion of various portions of the *Work*.
- 1.3 Dates of visits or inspections by government authorities, inspectors, and any other visitors to the *Site*.
- 1.4 Record of *Work* force employed, and *Work* performed thereby.

1.8 Payment

1.8.1 Delete:

Payment for all *Work* performed under this Section will be incidental to Payment for *Work* described in other Sections unless shown otherwise in the Schedule of Quantities and Prices

Replace with:

Payment for all *Work* performed under this section will be by lump sum for *Work* described under other Sections as specified in the Schedule of Quantities and Prices"

MMCD Section 01 55 00 Traffic Control, Vehicle Access and Parking

1.0 GENERAL

1.0.7 *Add New Specification:*

The Contractor shall designate a Traffic Control Supervisor/Site Safety Officer responsible for *Site* safety and traffic control with specific training as identified in the MoTT Traffic Control Manual and *Work Safe BC*. The Traffic Control Supervisor must review signage identified in the Contractor's Traffic Plan prior to construction and then on a daily basis.

1.0.8 *Add New Specification:*

Public relations related to the *Works* and Traffic Control Plan is the responsibility of the Contractor and is considered incidental to the *Work*.

1.0.9 *Add New Specification:*

The Contractor shall provide daily notification and coordination as required with all emergency and public services, including garbage collection, Canada Post, Public Transit, school buses and all impacted residents and businesses. The Contractor is required to provide 48 hours notification prior to any changes to the traffic control measures.

MMCD Section 01 57 01 Environmental Protection

1.0 GENERAL

1.4 Environmental

1.4.2.5 *Add New Specification:*

To avoid undue impact to any nesting birds, vegetation will not be removed or altered during the sensitive breeding period. If land clearing is necessary within this window, land clearing will proceed only after the Contractor's bird nesting survey has completed an onsite survey to confirm no impact to nests.

If bird nests are found in areas requiring vegetation removal, appropriate buffer zones will be implemented to reduce sensory disturbance until chicks have fledged.

1.4.4 *Add New Specification:*

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1.6 Payment

1.6.1 *Delete:*

Payment for all *Work* performed under this Section will be incidental to Payment for *Work* described in other Sections unless shown otherwise in the

Replace with:

Payment for all *Work* performed under this Section including preparation of a Construction Environmental Monitoring Plan will be by lump sum for *Work* described in other Sections as specified in the Schedule of Quantities and Prices

MMCD Section 01 58 01 Project Identification

1.0 GENERAL

1.2 Temporary Project Signage 1.2.1 *Add New Specification:*

(6) 2 appropriate Work signs in accordance with the Traffic Management Plan (TMP), 1 placed at each end of the project limits at approved locations by the Contract Administrator.

1.2.1 *Delete:*

Provide and erect, within 3 weeks of signing Contract, a project sign in a location designated by Contract Administrator.

Replace with:

Provide and erect, within 7 – 14 days of project start date, a project sign in a location designated by Contract Administrator.

1.2.2.1 *Delete:*

Advise residents and/or other parties within the affected area of planned construction activities and schedule. Coordinate with and obtain Contract Administrator's approval before delivery or mailing of public notices.

Replace with:

Contractor to deliver to businesses and residents copies of letter, provided by the Owner, advising these persons of intended construction activities. The Contractor shall deliver these letters no sooner than Fourteen (14) Days and no later than Seven (7) Days before the start of construction in the affected area.

MMCD Section 03 30 20 Concrete Walks, Curbs and Gutters

1.0 GENERAL

1.4 Measurement and
Payment

1.4.8 *Delete:*

Payment for adjustment of existing catch basins and other utilities covers required for installation of curb and gutter and walks will be made for each item to be adjusted. Relocation, if required, will be paid for as newly installed items.

Replace with:

No Payment for adjustment shall be made of existing catch basins and other utilities covers required for installation of curb and gutter and walks will be incidental to the *Work*. Adjustment shall include: removal of existing frame and cover; cleaning; re-set to meet new grade, profile and cross fall; replace grade rings.

MMCD Section 31 11 41 Shrub and Tree Preservation

1.0 GENERAL

1.3 Measurement and
Payment

1.3.1 *Delete:*

Payment for all shrub and tree preservation and grade changes items includes all applicable *Work* described in this Section and shall cover all area of shrubs or individual trees to be attended to as shown on Contract Drawings or as directed by Contract Administrator.

Replace with:

Payment for all shrub and tree preservation, including tree protection fencing, grading, exposing root zone and hand excavation, and *Works* deemed necessary by a certified arborist or the Contract Administrator, is applicable to all *Work* performed under this Section, and incidental to Payment for *Work* described in other

Sections unless shown otherwise in the Schedule of Quantities and Prices

MMCD Section 31 15 60 Dust Control

3.0 EXECUTION

3.1 Application

3.1.5 *Add New Specification:*

The Contract Administrator may request additional street cleaning which shall be at the Contractor's expense.

3.1.6 *Add New Specification:*

Aqueous chloride and magnesium cannot be used for *Work* areas within 100m of a watercourse, and *Work* areas that are draining to a watercourse.

MMCD Section 31 23 01 Excavating, Trenching and Backfilling

1.0 GENERAL

1.7 Disposal

1.7.2 *Add New Specification:*

The Contractor shall locate their own legal dump *Site* for disposal of all soil, rock and other unsuitable or excess material that results from the completion of the *Works*.

1.10 Measurement
Payment

and 1.10.3 *Delete:*

Payment for over-excavation including backfilling will only be made for over-excavation authorized by Contact

Administrator. Payment will be based on before and after excavation cross-section areas at sufficient equal intervals over the length of over-excavation.

Replace with:

Payment for over-excavation including backfilling will only be made for over-excavation authorized by Contact Administrator. Payment will be based on length of pipe removed in the over-excavation.

1.10.9 *Add New Specifications:*

Payment will be made for temporary patching by lineal metre of trenching in asphalt. No Payment will be made for re-patching of asphalt, this is considered inclusive of temporary patch.

1.11 Inspection and Testing

1.11.2 *Add New Specification:*

Procter test of backfill material must be provided to Contract Administrator prior to the start of construction.

1.11.3 *Add New Specification:*

Minimum trench compaction testing, per 50m of trench 1 per 0.5m of trench depth @ 95% and one in top 0.3 @ 100% SPD.

1.11.4 *Add New Specification:*

Granular Base Course testing 2 – Per 50m Trench, 100% SPD.

3.0 EXECUTION

3.6 Surface Restoration

3.6.6 *Delete:*

Temporary pavement patching:

- (1) Patch arterial and collector roads same day excavation made.
- (2) Patch all other roads within 24 h of closing trench.
- (3) Patching material to be hot-mix asphalt on all roads unless specified otherwise, cold-mix may be used only where directed by Contract Administrator.

- (4) Place temporary pavement to 50mm minimum thickness.
- (5) Maintain temporary patch to ensure safe and smooth conditions.

Replace with:

Temporary pavement patching:

- (1) Temporary Patching – As soon as any portion of the highway can be re-opened to traffic, a temporary asphalt patch must be applied.
- (2) Excavations across entrances, whether private or commercial, must be backfilled and thoroughly compacted by the end of the current working day. The surface must be restored, whether paved or gravel, to its original condition within 48 hours. Affected property owners must be notified at least 48 hours in advance before excavating a driveway.
- (3) No separate Payment for temporary pavement patching, considered incidental to Excavating, Trenching and Backfilling.
- (4) Place temporary pavement to 50mm minimum thickness.
- (5) Maintain temporary patch to ensure safe and smooth conditions.

3.6.7 *Delete:*

Permanent pavement restoration:

- (1) Install permanent pavement within 30 days of placement of temporary patch or sooner where directed by Contract Administrator
- (2) Remove broken or cracked pavement as well as any paved areas showing settlement and dispose off-Site.
- (3) Remove underlying granular road base material as required to permit placement of specified thickness of permanent pavement. Ensure remaining base meets specified thickness.

Material and placement of road base to Section 32 11 23 - Granular base.

- (4) Compact base to a minimum 95% Modified Proctor density.
- (5) Restore pavement as detailed on Standard Detail Drawing G5. If thickness of existing pavement permits, grind 35mm depth along edge of pavement. Dry if necessary and paint clean, dry edge with asphalt emulsion (tack coat).
- (6) Place and compact hot-mix pavement material to minimum thickness as shown on Standard Detail Drawing G5.
- (7) Material and placement of hot-mix pavement to Section 32 12 16 - Hot-Mix Asphalt Concrete Paving.
- (8) Restore surface to smooth condition and match with grade of adjacent pavement.
- (9) Where shown on Contract Drawings place hot-mix overlay over restored trench section and adjacent pavement to Section 32 12 16 Hot-Mix Asphalt Concrete Paving.
- (10) Maintain restored pavements in complete repair during Maintenance Period. Effect repairs within 14 days from receipt of written notice from Contract Administrator or immediately if so directed by Contract Administrator if dangerous situation exists.

Replace with:

Permanent Pavement Restoration

- (1) Asphalt concrete must be restored to a minimum of 100mm thickness. Asphaltic concrete must meet ministry standards as set out in Section 502, Standard Specifications for Highway Construction.
- (2) Asphalt concrete is to be laid in 2 or more lifts or layers, Each lift is to be thoroughly compacted before successive lifts are applied.
- (3) Permanent pavement patch to must be to Ministry standards for 1 year from the date of installation of patch.

- (4) Final permanent pavement shall be completed after the following Spring/Summer to allow for any settlement to occur.
- (5) Eradication of existing lane markings, placement of temporary markings and final line painting shall be the responsibility of the Contractor. All materials and procedures must comply with Ministry specifications and Manual of Standard Traffic Signs & Pavement Markings.
- (6) The Contract Administrator shall arrange a final inspection of the installation with the Ministry upon completion. Any deficiencies identified during the inspection must be repaired by the Contractor within 2 weeks (weather permitting).
- (7) Mill driving lane as shown in Contract Drawings to a depth of 50mm as shown in detail RD1.
- (8) Restore pavement as detailed on supplemental Detail Drawing RD1. Pavement surface must be dry and clean, dry edge with asphalt emulsion (tack coat).
- (9) Place and compact hot-mix pavement material to minimum thickness as shown on RD1.
- (10) Material and placement of hot-mix pavement to Section 32 12 16 - Hot-Mix Asphalt Concrete Paving.
- (11) Restore surface to smooth condition and match with grade of adjacent pavement.
- (12) Where shown on Contract Drawings place hot-mix overlay over restored trench section and adjacent pavement to Section 32 12 16 Hot-Mix Asphalt Concrete Paving.
- (13) Maintain restored pavements in complete repair during Maintenance Period. Effect repairs within 14 days from receipt of written notice from Contract Administrator or immediately if so directed by Contract Administrator if dangerous situation exists.

3.7 Temporary Gravel 3.7.1 *Add New Specification:*
Surface. Temporary Gravel Surface.
Ensure the temporary gravel surface is even and does not have irregularities exceeding 10mm when checked with a 3m straightedge placed in any direction. Contractor shall be responsible for maintaining a smooth gravel surface to the motoring public at all times, and shall respond to any Owner Request to fix any potholes that may develop at the Contractor's expense.

MMCD Section 32 01 16.7 Cold Milling

1.0 GENERAL

1.5 Measurement and 1.5.1 *Delete:*
Payment Payment for cold milling includes cost of mobilization, demobilization, demonstration milling test section and disposal of off-site or delivery to another location as specified.

Replace with:

Payment for cold milling includes cost of mobilization, demobilization, demonstration milling test section and disposal of off-site or delivery to another location as specified and is considered included under Permanent Pavement Restoration.

1.5.3 *Delete:*
Payment for cold milling and respread milled material as based, or subbase includes cost of mobilization, demobilization and demonstration milling test sections, compaction and disposal surplus materials off-site of delivery to another location as specified.

Replace with:

Payment for cold milling and respread milled material as based, or subbase includes cost of mobilization, demobilization and demonstration milling test sections, compaction and disposal surplus materials off-site of delivery to another location as specified by Contract

Administrator. Reusing milled material onsite shall also include, stockpiling and double handling, spreading, grading and compacting milled material. Payment will be made by square metres with a minimum depth of 50mm of compacted millings.

1.5.4 *Add New Specification:*

Payment for supply, installation and removal of temporary asphalt slope around manholes, valve covers, and utility covers is incidental to the milling Work.

3.0 EXECUTION

3.2 Preparation

3.2.4 *Add New Specification:*

All manhole rims, valve covers, and utility cover lids must have an asphalt slope from the top of the lid to milled surface of sufficient length to prevent damage to vehicular traffic. These slopes are to be completely removed immediately prior to final paving. These appurtenances must be monitored until final paving. Use of temporary sloped collar will also be acceptable for a period of less than 7 days.

3.4 Placing

3.4.6 *Add New Specification:*

Unless otherwise specified in writing by Contract Administrator, the milling of the existing asphalt shall be followed by repaving within 5 Days of the commencing of the milling. The milled asphalt surface shall be graded, monitored, signed and maintained at no additional cost to the Owner.

MMCD Section 32 12 16 Hot Mix Asphalt Concrete Paving

1.0 GENERAL

1.5 Measurement Payment

and 1.5.1

Delete:

Payment for asphaltic concrete paving includes all construction joint preparation, supply and placing of the asphaltic concrete, compaction, adjusting and

cleaning frames, covers and lids of all castings affected and taped temporary pavement markings.

Measurement by asphaltic concrete paving for the specified design mixes for lower and upper courses will be for asphalt concrete mixes for lower and upper courses will be for asphalt concrete actually incorporated into *Work* based on weigh tickets provided to Contract Administrator as loads are delivered.

Replace with:

Payment for asphaltic concrete paving includes all construction joint preparation, supply and placing of the asphaltic concrete, compaction, adjusting and cleaning frames, covers and lids of all castings affected and taped temporary pavement markings.

Measurement by asphaltic concrete paving for the specified design mixes for lower and upper courses will be for asphalt concrete actually incorporated into *Work* based on weigh tickets provided to Contract Administrator as loads are delivered or by square meters as shown in the Schedule of Quantities and Prices.

1.5.7 *Delete:*

Payment for saw cutting asphaltic concrete of Portland cement concrete pavement will only be made for permanent reinstatement and other specific *Work* shown on Contract Drawings or as directed by Contract Administrator and will not include saw cutting prior to trench excavation for pipe laying *Work*.

Replace with:

Payment for saw cutting asphaltic concrete or Portland cement concrete pavement will be considered included under Permanent Pavement Restoration. Saw cutting must meet all MMCD and MoTT requirements and Standards.

1.5.2.3 *Add New Specification:*

Asphalt Infill Strip Permanent Patch is incidental to pavement restoration. Patch area shall be done in 2 lifts, 1 - 65mm and 35mm Overlay.

1.5.2.4 *Add New Specification:*

Asphalt Permanent patch, 1 Core for every 150m to determine pavement thickness and Density. Core to be taken within the Trench Patch to determine overall thickness is met.

1.5.2.5 *Add New Specification:*

Asphalt Marshall Density 1-Per 400 Tonnes, Minimum 1 Per Day.

1.5.2.6 *Add New Specification:*

Asphalt Density Testing (Nuclear Density Gauge) 1 Per 20m

3.0 EXECUTION

3.3 Preparation

3.3.3 *Delete:*

Adjust existing castings to new elevations and protect from asphaltic mix.

Replace with:

Adjust existing castings to new elevations and protect from asphaltic mix. Contractor shall inform utility agencies with sufficient notice in regard to the affected utility covers. The Contractor shall loosen the utility covers and make adjustments. Adjustment will be completed by the Contractor. Adjustment shall be completed at least 1 day prior to paving.

3.7 Joints

3.7.4 *Delete:*

Construct feather joints so that thinner portion of joint contains fine graded material obtained by changed mix design or by raking out coarse aggregate in mix. Place and compact joint so that joint is smooth and

without visible breaks in grade. Location of feather joint as specified.

Replace with:

Feather joints are not permitted. Butt joints only.

MMCD Section 33 01 30.1 CCTV Inspection of Pipelines

2.0 PRODUCTS

2.2 Materials

2.2.3

Delete:

Digital report data storage to be CD-R.

Replace with:

Digital report data and videos to be stored on a USB memory stick or web-based server and provided to the Owner.

MMCD Section 33 11 01 Waterworks

1.0 GENERAL

1.7 Scheduling of Work

1.7.4

Delete:

Do not interrupt water service for more than 3 h and confine this period between 09:00 and 16:00 h unless otherwise authorized.

Replace with:

A minimum of 48 hours prior provide written notification, pre-approved by the Owner, Emergency Services, and to affected residents of impending water service interruption. Affected consumers to be identified in conjunction with the Owner. No services shall be interrupted for more than 8-hours in any 1 day. If necessary, then temporary service must be provided.

1.7.6

Add New Specification:

Existing services and new hydrants to be tied into new main after new main has passed pressure and chlorine testing and tied into the system by the Owner. Coordination of change over shall limit interruption of service as noted in 1.7.4. and be approved by the Contract Administrator.

1.8 Measurement and 1.8.2
Payment

Delete:

Payment for watermain and service connections include saw cutting pavement, trench excavation, disposal of surplus excavated material, bedding, supply and installation of all pipe, bolts, gaskets and tie rods, imported or native backfill as shown on the Drawings, cleaning, pressure and leakage testing, flushing, disinfection, all surface restoration specified under Section 31 23 01 - Excavation Trenching and Backfilling - 3.6, except permanent pavement restoration, and all other *Work* and materials necessary to complete the installation as shown on the Drawings, and specified under this Section.

Replace with:

Payment for watermain and service connections include saw cutting pavement, trench excavation, dewatering, shoring, disposal of surplus excavated material, bedding, installation of all pipe, bolts, gaskets and tie rods, imported or native backfill as shown on the Drawings, cleaning, pressure and leakage testing, flushing, disinfection, all surface restoration specified under Section 31 23 01 - Excavation Trenching and Backfilling - 3.6, except permanent pavement restoration, and all other *Work* and materials necessary to complete the installation as shown on the Drawings, and specified under this Section. Supply of all pipe, bolts, gaskets and tie rods and all related fittings and appurtenances will be supplied by the Owner and can be picked up at a location as noted in the Contract Documents. Measurement for watermain will be made along centreline of main, through valves and fittings, with no deduction for length of valves or fittings, over surface after *Work* has been completed.

1.8.4 *Delete:*

Payment for service connections includes mainline saddles where specified, corporation stops, curb stops, service pipes and all related fittings and appurtenances specified and/or shown on Standard Detail Drawings W2a or W2b, as applicable. Payment

includes all applicable *Work* described in 1.8.2 of this section.

Replace with:

Payment for service connections includes mainline saddles where specified, corporation stops, curb stops, service pipes and all related fittings and appurtenances specified and/or shown on Standard Detail Drawings W2a or W2b, as applicable. Payment includes all applicable *Work* described in 1.8.2 of this section. All mainline saddles where specified, corporation stops, curb stops, service pipes and all related fittings and appurtenances, will be supplied by the Owner and can be picked up at a location as noted in the Contract Documents.

1.8.5 *Delete:*

Payment for test points, air-release/air-vacuum and combination air valves and apparatus and blow-off assembly as separate items includes all materials, *Works* and appurtenances shown on Standard Detail Drawings W5 to W8 and W10 with valve chambers to be paid for under separate items. Payment includes all applicable *Work* described in 1.8.2 of this section.

Replace with:

Payment for test points, air-release/air-vacuum and combination air valves and apparatus and blow-off assembly as separate items includes all materials, *Works* and appurtenances shown on Standard Detail Drawings W5 to W8 and W10 with valve chambers to be paid for under separate items. Payment includes all applicable *Work* described in 1.8.2 of this section. All air-release/air-vacuum and combination air valves and apparatus and blow-off assembly and related fittings and appurtenances, will be supplied by the Owner and can be picked up at a location as noted in the Contract Documents.

1.8.6 *Delete:*

Payment for air valve chamber complete with drain arrangement includes all materials, *Work* and

incidentals shown on Standard Detail Drawings W6 and W7 as separate items for each location. Payment includes all applicable Work described in 1.8.2 of this section.

Replace with:

Payment for air valve chamber complete with drain arrangement includes all materials, Work as shown on Standard Detail Drawings W6 and W7 as separate items for each location. Payment includes all applicable Work described in 1.8.2 of this section. Air valve chamber and related fittings and appurtenances, will be supplied by the Owner and can be picked up at a location as noted in the Contract Documents.

1.8.9 *Delete:*

Payment for localized concrete encasement, thrust and anchor blocs and support blocks as shown on Contract Drawings or directed by Contract Administrator includes all necessary extra excavation and formwork and supply and placement of concrete as specified in Section 03 30 53 - Cast-in-Place Concrete. Measurement will be based on volume calculated from actual measurement of the dimensions of components constructed as detailed in the Contract Drawing.

Replace with:

No Payment will be made for localized concrete encasement, thrust and anchor blocks and support blocks and is considered included in the Waterworks 1.8.2. Includes all necessary extra excavation and formwork and supply and placement of concrete as specified in Section 03 30 53 - Cast-in-Place Concrete.

1.8.14 *Delete:*

Payment for hydrants includes the hydrant body, lateral connections from mainline tee off watermain to hydrants, isolation valve at the mainline tee and curb valve with adjustable valve box and all other incidental Work as shown on Standard Detail Drawing W4.

Replace with:

Payment for hydrants includes the installation of hydrant body, lateral connections from mainline tee off watermain to hydrants, isolation valve at the mainline tee and curb valve with adjustable valve box and all other incidental *Work* as shown on Standard Detail Drawing W4. Hydrant, connections, valves and related fittings and appurtenances, will be supplied by the Owner and can be picked up at a location as noted in the Contract Documents.