A. Standard Specifications

Specification 1.1 Definitions

(i) Section 1.1.18 Utility Company is added.

Specification 1.2 General

- (i) Section 1.2.21.5 Working During Periods of Inclement Weather or Pre-Scheduled Interruption Greater clarification is provided on what "other work" may take place during periods of increment weather without being considered a site occupancy day.
- (ii) Section 1.2.42 specification amendment amc_c172 Due Care, Claim Settlement and Hold Harmless is now incorporated in the standard specifications.
- (iii) Section 1.2.44.1 new section inserted from specification amendment amc_c173 Definitions and Interpretation, & Occupational Health and Safety Act.
- (iv) Section 1.2.49.1 modified to include reference to Specification 7.1 Temporary Construction Signing.
- (v) Section 1.2.49.2 clarify that providing flagpersons is considered incidental to the Work and is not paid for separately.

Specification 2.3 Grading (Major Rewrite)

- (i) Section 2.3.2.2 Definitions for "suitable" and "unsuitable" material are provided.
- (ii) Section 2.3.2.2 The word "classified" is change to "considered". In all cases the material being described is not a "Class of Excavation".
- (iii) Section 2.3.2.2 Clarifying that wet material is not to be wasted
- (iv) Section 2.3.3.3 A detailed definition of Common Excavation is provided.
- (v) Section 2.3.3.6 Clarifies that any material not designated as Common and/or Borrow Loaded to Trucks will not be paid as such.
- (vi) Section 2.3.4.1.2 Clarifies that the towing traffic includes "hookup".
- (vii) Section 2.3.4.1.3 Reference is provided to the Traffic Accommodation Strategy pertaining to the use of earth pads over existing roadways.
- (viii) Section 2.3.4.4 The term overburden has been removed as it is generally applicable to gravel pits and not roadway excavations.
- (ix) Section 2.3.4.4 Clarify that subsoil within the ROW is to be used in embankments, not salvaged.
- (x) Section 2.3.4.6 Incorporate the requirements of the "PRE" and "POST" Assessment Borrow Reclamation Criteria into the specification. These, along with the specification requirements will be used to evaluate the contractors borrow reclamation efforts prior to construction completion.
- (xi) Section 2.3.4.6 Update clauses pertaining to "approvals" for borrow areas, to

reflect current practices

- (xii) Sections 2.3.4.64 & 2.3.4.6.5 Updated requirements for stockpiling topsoil.
- (xiii) Section 2.3.4.7.2.2 Excavation requirements are outlined for transition points from a cut section to a fill section.
- (xiv) Section 2.3.4.7.2.3 The Consultant is to determine the extent of benching for embankments placed on a hillside.
- (xv) Section 2.3.4.7.5.2 Proper reference is provided on the classification system for soils used by AT.
- (xvi) Sections 2.3.4.7.5.5.1 & 2.3.6.12.5 Lime may be used for drying at the Contractor's discretion. In no case will additional payment be provided.
- (xvii) Section 2.3.4.7.6 Requirements for handling topsoil are outlined when obliterating existing roadways.
- (xviii) Section 2.3.4.9 Clarify payment conditions for overhaul of topsoil, subsoil and other unsuitable material excavated from within borrow areas.
- (xix) Section 2.3.5.1 Requirement for backslopes to be scarified to reduce the potential for erosion.
- (xx) Section 2.3.5.1 Allowance provided for up to 5 km of rough grade.
- (xxi) Section 2.3.6.10 Remove the outdated term of Basic Loading Factor.
- (xxii) Sections 2.3.3.6 & 2.3.6.10 Outlines that Common and/or Borrow Excavation Loaded to Trucks applies only to material that is shown on the plans or as designated in the special provisions.
- (xxiii) Section 2.3.6.17 Method of payment for special materials is outlined.
- (xxiv) Section 2.3.7 Hi-lights that the finished roadway surface shall be in compliance with the specification amendment for surface tolerance.
- (xxv) General updating of contractual language for consistency throughout the specification.

Specification 2.5 Riprap

- (i) Section 2.5.2.3.2 Rock Riprap Gradation requirements for rock riprap revised to be in line with that specified in the Section 10 Heavy Rock Riprap of the Specifications for Bridge Construction.
- (ii) Section 2.5.4.2 New bid item for Hand Laid Riprap that is placed at locations other than new culverts.

<u>Specifications 2.10 Manholes, Inlets and Catch Basins and 2.13 Livestock Guards and 2.21 Cable Ducts and 2.25 Highway Street Lighting</u>

(i) Section 2.10.3 New section. Reference is provided to Specification 5.5 Supply of

Portland Cement Concrete for sampling and testing requirements.

- (ii) Section 2.10.4.11 New section added for adjustments to manholes, catch basins and water valves. (Previously listed in Specification 4.2 Concrete Curbs, Sidewalks, Medians and Traffic Islands)
- (iii) Section 2.10.5.3 Payment of placing reinforcing steel may be either lump sum (new) or unit bid price as outlined in the contract.
- (iv) Section 2.10.5.5 New section for the measurement and payment for adjustments to manholes, catch basins and water valves. (From Specification 4.2)

Specification 2.13 Livestock Guards

(i) Section 2.13.3 – New section for sampling and testing of Portland Cement Concrete.

Specification 2.21 Cable Ducts

- (i) Section 2.21.2.3 Cement shall be Type 50 not Type V.
- (ii) Section 2.21.2.5 Sealant Reference is provided to the AT Products Lists.
- (iii) Section 2.21.3 New section for the sampling and testing of Portland Cement Concrete.
- (iv) Section 2.21.4.3 Backfilling shall not be undertaken until the Consultant has checked the "ducts".

Specification 2.23 Smoothwall Steel Pipe Culvert Extension and Culvert Liners

(i) New specification based upon previously used special provisions.

Specification 2.25 Highway Street Lighting

- (i) Section 2.25.4 The Contractor will review drawings and identify changes required but will not approve drawings.
- (ii) Section 2.25.5 New section for the sampling and testing of Portland Cement Concrete.
- (iii) Section 2.25.6.12 Reference to "grounding" removed. Already covered in the Canadian Electrical Code, which is referenced elsewhere.
- (iv) Section 2.25.8 Redundant. Regular warranty requirements apply.

Specification 3.1 Subgrade Preparation

(i) Sections 3.1.2.3 and 3.1.3.3 – Clarification that the use of lime for drying is at the Contractor's discretion. In all cases there will be no additional payment for using lime.

Specification 3.2 Aggregate Production and Stockpiling

- (i) Several references to old ACP mix types have been updated with new ACP mix types.
- (ii) Table 3.2.3.2 The minimum testing frequency for pit run contamination reduced to reflect what a materials technician can complete in a single shift.

Specification 3.6 Granular Base Course

- (i) Section 3.6.1.2 Lot definition changed for contracts with small quantities of GBC.
- (ii) Section 3.6.1.2 A "Visually Failed Area" is for any lift of GBC, not just the lower

lift(s).

- (iii) Section 3.6.2.4 Wording to reflect fact that approved products for paints and glass beads are listed in either the special provisions or in the specification amendments.
- (iv) Section 3.6.4.1.1 Increase in the roller minimum weight to 10 tonnes as the current types of rollers used meet or exceed this size.
- (v) Also clarified that two rollers are required and not a roller with two drums.
- (vi) Minimum equipment requirements for the Control Strip may be changed for work within small areas.
- (vii) Section 3.6.4.2 Outlined that vibratory compaction mode may not be allowed near utilities or other restricted areas.
- (viii) Section 3.6.4.3 Reference to the specification amendment for Surface Finish Tolerances provided.

Specification 3.19 Prime Tack and Fog Coats

- (i) Section 3.19.2 Liquid asphalts used shall be as listed on the Department's Recognized Products List.
- (ii) An estimated range in application rates for Fog Cost is provided.

Specification 3.21 Double Seal Coat

(i) Some equipment requirements for rollers are removed to be consistent with the other seal coat specification.

Specification changes handled through the Seal Coat Task Group

Specification 3.24 Chip Seal Coat

- (i) Section 3.24.5.5 For subsequent brooming the posted speed restriction on four-lane highways has been changed to 80 km per hour.
- (ii) Section 3.24.6 & 3.24.8 The second application of line paint is now to be applied a minimum of two weeks following the initial application.

Specification changes handled through the Seal Coat Task Group.

Specification 3.30 Asphalt Pavement Crack Routing and Sealing

(i) Section 3.30.2.1 – Crack sealant products to be listed on the AT Products List.

Section 3.3.0.5.4 – Update the wording to reflect current AT practices, i.e. asphalt product testing done by a testing firm designated by the Department.

Specification 3.31 Asphalt Pavement Crack Sealing

(i) Section 3.31.2 – Crack sealant products to be listed on the AT Products List. Quality Control testing procedures have also been updated.

Specification 3.35 Crack Repair – Mill and Fill

(i) New specification based upon previously used special provisions.

Specification 3.50 ACP - EPS & Specification 3.53 Superpave

(i) Section 3.50.2.3 – Interim lane marking products to be listed on the AT Products

List.

- (ii) Section 3.50.3.1 Requirement that the testing laboratory doing the Marshall mix design shall be pre-qualified with the Department. (Spec 3.50 only)
- (iii) Section 3.50.3.2 Updated to include brand new mix type designations. Other sections also revised for the new mixes. (Spec 3.50 only).
- (iv) Section 3.50.3.3 Updated to reflect that the Consultant verifies the mix design prior to mix production.
- (v) Section 3.50.3.3 Method A of AASHTO T304 is removed for Fine Aggregate Angularity. Same test as TLT-125.
- (vi) Section 3.50.4.3 Minimum number of QC samples for RAP rheology testing is changed to be consistent with the mix design requirements when using RAP.
- (vii) Section 3.50.4.4.2.2 Outlines when smoothness testing is required for passing and climbing lanes.
- (viii) Section 3.50.4.5 & 3.50.6.2.1 Editing to shorten the text. No change in content or intention.
 - (ix) 3.50.4.8.3 Clarifies that appeals for segregation will only be for lane.kms which are in penalty.
 - (x) Section 3.50.5.2.2 Paver laid levelling lifts with a designated thickness less than 20 mm will be considered as preliminary levelling.
- (xi) Section 3.50.6.2 Editing change only. Text has been shorten.
- (xii) Section 3.50.6.3 Minimum thickness for an overlay depends upon the thickness of the defective material.
- (xiii) Table A (Spec 3.50 only) and Table C updated to account for thin single lift overlays.
- (xiv) Table 3.50A For column 2 (material less than 35 mm but greater than 20 mm, lower lifts) from 90.0% to 90.9% the payment is changed from "Remove and Replace" to "50% of Unit Price".
- (xv) Table 3.50 C Smoothness. Remove the words "for Tangents and Curves" from the heading in column 1
- (xvi) Tables 3.50 D, E and F updated to account for Mix Type S3 (25 mm topsize)

Specification 3.53 Asphalt Concrete Pavement – Superpave

- (i) Table 3.5.3.2.2C & section 3.53.3 Traffic loading ranges updated to be more in line with that used for the new Marshall mix types.
- (ii) Table 3.53 A Table modified to insert notes contained at the end of the table directly into the table. In column 2 (less than 35 mm and greater than 20 mm) the payment adjustment from 86.0% to 86.9% has been changed from "Remove and Replace" to "50% of Unit Price".
- (iii) Table 3.53 C Smoothness. Remove the words "for Tangents and Curves" from the heading in column 1.

Specification 4.2 Concrete Curbs, Medians, Traffic Islands and Flumes

(i) Sections 4.2.3 & 4.2.5 - Sampling and testing and acceptance criteria have been

moved to Specification 5.5 Supply of Portland Cement Concrete.

- (ii) Section 4.2.4.3 Contents of this section on adjusting Catch Basins and Manholes moved to Specification 2.10 Manholes, Inlets and Catch Basins.
- (iii) Section 4.2.4.14.3 Contents of this section on the protection of concrete moved to Specification 5.5 Supply of Portland Cement Concrete.
- (iv) Section 4.2.6.3 Removed. Contents of this section moved to Specification 2.10.

Specification 5.2 Supply of Aggregate

(i) Section 5.2.4.1 – Editing change only, no change in intent.

Specification 5.5 Supply of Portland Cement Concrete

- (i) Sampling, testing and acceptance criteria have been consolidated into this specification.
- (ii) Section 5.5.3.6 Wording on the protection of concrete added from section 4.2.4.14.3.
- (iii) Section 5.5.4 Sampling and Testing Clarification is provided on contractor's responsible for quality control testing and consultant's responsible for quality assurance testing.
- (iv) Section 5.5.5 Payment reductions for substandard concrete are revised to be more in line with Section 4 Cast-In-Place Concrete of the Specifications for Bridge Construction.

Specification 5.7 Supply of Asphalt

- (i) For consistency the word "product" is changed to "material".
- (ii) Section 5.7.2.1 Pre-Qualified asphalt suppliers are listed on the AT Products List.
- (iii) Section 5.7.2.1 Requirement added for the Contractor to notify the Consultant for any change in asphalt supplier.
- (iv) Section 5.7.4 Updated to outline the treatment of reject asphalt product that does not have a separate bid item.
- (v) The Department does not use the "B" penetration grade asphalts and thus reference to these asphalts has been removed. A 120-150(A) grade has also been added.
- (vi) Material specifications for Emulsified Dust Suppressants (ASPH-11), Cold Pour Crack Sealant (ASPH-12) and Hot Pour Crack Sealant (ASPH-13) have been added.

Specification 5.20 Supply of Line Painting Materials

(i) Section 5.20.3 – Sampling and testing for acceptance has been updated to reflect the Department's current method of business.

Specification 5.25 Supply of W-Beam Guardrail and Posts

(i) Section 5.25.3.3 – Standard post lengths will remain as 1.52 m and 2.13 m, but the locations of the 2.13 m posts will be identified elsewhere in the contract.

Specification 7.1 Temporary Construction Signing

(i) Section 7.1.2 – Contractor to develop drawings for non-typical traffic accommodation situations (both rural and urban) that are not covered in the Traffic

Accommodation in Work Zones manual.

(ii) Section 7.1.12.2 – Clarification on the administration of the bonus and penalty assessment for written orders for multiple projects and work phases within a single contract. Previously contained in specification amendment amc_c200 Amendment to Specification 7.1 regarding Bonus and Penalty Assessment.

Specification 7.2 Painted Roadway Lines

- (i) Sections 7.2.5.2 and 7.2.5.3 have been updated to include waterborne paints.
- (ii) Sections 7.2.5 & 7.2.6 updated to included requirements for the removal unacceptable painted lines and existing painted lines based upon previously used special provisions.

Specification 7.3 Painted Pavement Messages

(i) Sections 7.3.4 & 7.35 updated to include requirements for the removal of unacceptable painted messages.

B. Specification Amendments

AMC s116 Tolerance for Surface Finish

(i) Requirement that excess granular base course material will not be paid.

AMC s201 Contracts with Small Quantities of ACP

(i) Amendment to outline the EPS testing and acceptance criteria for contracts with small quantities of ACP.