

**Part 1            General**

**1.1                RELATED REQUIREMENTS**

- .1        The list of work sections in this division is indicative and non-exhaustive. It does not exclude the works described in the other specification sections, shown in the drawings or necessary for the execution of the works in keeping with overall intent of the plans.
- .2        Section 01 33 00 - Submittal Procedures.
- .3        Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

**1.2                SECTION CONTENT**

- .1        Supply and application of asphalt prime to granular base surface prior to asphalt paving.

**1.3                REFERENCES**

- .1        American Society for Testing and Materials International, (ASTM)
  - .1        ASTM D140-[01], Standard Practice for Sampling Bituminous Materials.
- .2        Canadian General Standards Board (CGSB)
  - .1        CAN/CGSB-16.1-M89, Cutback Asphalts, for Road Purposes.
  - .2        CAN/CGSB-16.2-M89, Emulsified Asphalts, Anionic Type, for Road Purposes.
- .3        Government of Québec, Minister of Transport
  - .1        Cahier des charges et devis généraux (CCDG) - latest edition.

**1.4                RELATED SUBMITTALS**

- .1        Submit samples in accordance with Section 01 33 00 - Submittal Procedures.
- .2        Submit two 1 L samples of asphalt prime proposed for use to Departmental Representative in new, clean, air-tight, wide mouth jars or bottles made of plastic, at least two weeks prior to commencing work.
- .3        Sample asphalt prime coat materials in accordance with ASTM D140.
- .4        Provide access on tank truck for Departmental Representative to sample material to be incorporated into Work, in accordance with ASTM D140.

**1.5                QUALITY ASSURANCE**

- .1        Upon request from Departmental Representative, submit manufacturer's test data and certification that asphalt prime material meets requirements of this Section in accordance with Section 01 33 00 - Submittal Procedures.

**1.6 DELIVERY, STORAGE, AND HANDLING**

- .1 Deliver, store and handle materials in accordance with ASTM D140.
- .2 Provide, maintain and restore asphalt storage area.

**1.7 WASTE MANAGEMENT AND DISPOSAL**

- .1 Separate waste materials for reuse or recycling in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal, and with the Waste Reduction Workplan.

**Part 2 Products**

**2.1 MATERIALS**

- .1 Asphalt material: To CAN/CGSB-16.1, grade: RM-20.
- .2 Sand blotter: Clean granular material passing 4.75 mm sieve and free from organic matter or other deleterious materials.
- .3 Water : clean, potable, free from foreign matter.

**2.2 MATERIALS**

- .1 Pressure Distribution Equipment :
  - .1 Designed, equipped, maintained and operated so that asphalt material can be :
    - .1 Maintained at constant temperature.
    - .2 Applied uniformly on surfaces of variable widths.
    - .3 Applied at a controlled rate of 1.2 L/m<sup>2</sup> with uniform pressure; allowable deviation not exceeding 0.1 L/m<sup>2</sup> in any case.
    - .4 Distributed in uniform spray, without atomization, and at required temperature.
  - .2 Equipped with meter that registers meters of travel per minute, visibly located to enable truck driver to maintain constant speed required for application of asphalt tack coat at specified rate.
  - .3 Equipped with a pump that has a graduated flow meter readily visible to operator. Pump to operate by separate power unit independent of truck power unit.
  - .4 Equipped with easily legible, accurate and sensitive device that registers temperature of liquid in reservoir.
  - .5 Equipped with accurate volume-measuring device or calibrated tank.
  - .6 Equipped with nozzles of same make and dimensions, adjustable for fan width and orientation.
  - .7 Equipped with nozzle spray bar, with operational height adjustment.
  - .8 Cleaned if previously used with incompatible asphalt material.

---

**Part 3 Execution**

**3.1 APPLICATION**

- .1 Obtain Departmental Representative's approval of granular base surface before applying asphalt prime.
- .2 Cutback Asphalt :
  - .1 Heat asphalt prime to a temperature hot enough for adequate and compliant pumping and spraying.
  - .2 Apply asphalt prime to granular base at rate of 1.2 L/m<sup>2</sup> but not exceeding 2 L/m<sup>2</sup>, as directed by Departmental Representative.
  - .3 Apply on dry surface unless otherwise directed by Departmental Representative.
- .3 Apply asphalt prime only on unfrozen surface.
- .4 Apply asphalt prime on MG 20 wherever asphalt pavement is to be laid.
- .5 Apply priming binder on a clean and dust-free surface to ensure binder adheres well.
- .6 Emulsion must penetrate quickly through the first few centimeters of the foundation.
- .7 Do not apply prime when air temperature is less than 10°C or when rain is forecast within two hours.
- .8 Paint contact surfaces of curbs, gutters, headers, manholes and like structures with thin, uniform coat of asphalt prime material.
- .9 Prevent overlap at junction of applications.
- .10 Do not prime surfaces that will be visible when paving is complete.
- .11 Apply additional material to areas not sufficiently covered as directed by Departmental Representative.
- .12 Keep traffic off primed areas until asphalt prime has set.
- .13 Contractor must wait 24 hours before laying pavement. This provides for adequate curing time.

**3.2 USE OF SAND BLOTTER**

- .1 If asphalt prime fails to penetrate within 24 hours, spread sand blotter material in amounts required to absorb excess material.
- .2 Allow sufficient time for excess prime to be absorbed as directed by Departmental Representative.
- .3 Apply second application of sand blotter as required.

- .4 Sweep and remove excess blotter material.

**END OF SECTION**