SECTION 32 17 23 – painted traffic lines and markings

1. General
   1. SUMMARY
      1. Provide labour, materials, products, equipment, and services to complete painted traffic lines and marking Work in accordance with the Contract Documents.
      2. Related Requirements:
         1. Section 32 12 16 – Asphalt Paving for Parking Lots and Driveways.
         2. Section 32 16 26 – Concrete Curbs and Sidewalks.
         3. Section 32 17 26 – Tactile Warning Surface.
   2. REFERENCE STANDARDS
      1. CAN/CGSB 1.74, Alkyd Traffic Paint.
      2. FED-STD 595B, Standard Paint Colours.
      3. OPSS 1712, Material Specification for Organic Solvent Based Traffic Paint.
      4. OPSS 1713, Material Specification for Thermoplastic Pavement Marking Material.
      5. OPSS 1714, Material Specification for Field Reacted Polymeric Pavement Marking Material.
      6. OPSS 1750, Material Specification for Traffic Paint Reflectorizing Glass Beads.
   3. submittals
      1. Provide required product information in accordance with Section 01 33 00 – Submittal Procedures.
      2. Product Data:
         1. Submit manufacturer's product data indicating:
            1. Performance criteria, compliance with appropriate reference standard, characteristics, limitations and troubleshooting protocol.
            2. Product transportation, storage, handling, and installation requirements.
   4. QUALITY ASSURANCE
      1. Applicator's qualifications: Perform Work of this Section by a company approved by manufacturer and having specialized equipment suitable for type of work specified.
   5. SITE CONDITIONS
      1. Do not install Work of this Section outside of following environmental requirements without manufacturer's written acceptance:
         1. Durable Pavement Marking Material: Minimum 0 deg C and no forecast of rain within 4 h of start of application.
         2. Traffic Paint: Ambient air and surface temperature minimum 5 deg C and maximum 43 deg C. Maximum relative humidity 85%, wind speed is less than 60 km/h and no forecast of rain within 4 h of start of application.
2. Products
   1. MATERIALS

SPEC. NOTE: Edit to suit Contract. Hot applied thermoplastic pavement marking material can only be used on long stretches of roadway where large machinery used in application can be accommodated.

* + 1. Durable Paint:
       1. Hot applied thermoplastic pavement marking material: to OPSS 1713, lead-free [with glass beads OPSS 1750], colour to FED-STD 595B, Hot Extruded Thermoplastic Road Markings Material by Lafrenz Road Services Ltd.
       2. Cold applied plastic pavement marking material: Flexible 2 component, solvent free and lead free, cold curing acrylic or methacrylate road marking material to OPSS 1714, [with glass beads OPSS 1750], colour to FED-STD 595B, System 400 Road Markings Materials by Lafrenz Road Services Ltd.
    2. Traffic Paint:
       1. Organic solvent based, lead-free to OPSS 1712 or CAN/CGSB 1.74.

1. EXECUTION
   1. EXAMINATION
      1. Verify pavement surface is properly cured. Report defects to Consultant.
      2. Commencement of Work means acceptance of existing conditions.
   2. INSTALLATION
      1. Cold applied plastic pavement marking material [with reflectorizing glass beads] to be used for bus parking lots and driveways.
      2. Hot applied thermoplastic pavement marking material [with reflectorizing glass beads] to be used for roadways.
      3. Traffic paint to be used for all other parking areas.
   3. PREPARATION
      1. Clean pavement surface and remove loose material.
      2. Verify pavement surface is free from ponding water, frozen matter, dust, oil, grease, scaling or laitance and other foreign matter detrimental to performance.
      3. Prohibit traffic in work area, until Work of this Section is complete.
   4. APPLICATION
      1. Lay out traffic lines and markings as indicated on the Drawings and in accordance with manufacturer's instructions.
      2. Apply durable pavement marking material [with reflectorizing glass beads] using marking machine. Minimum 1.90 mm ± 0.40 mm measured dry film thickness.
      3. Apply traffic paint to achieve uniform colour and density. Coverage shall be 3 sq.m/L (150 sq.ft./gal).
      4. Provide adequate shielding or masking during spray application of traffic paint.
      5. Make lines 100 mm wide unless otherwise indicated.
      6. Lines shall be parallel and have neat, straight, clean sharp edges. Lines shall be of uniform colour and density.
      7. Paint markings to be within plus or minus 12 mm of dimensions indicated.
      8. Refinish ragged edges or lines incorrectly laid out. Remove incorrect lines. Make inconspicuous.
   5. PROTECTION
      1. Supply and install temporary barricades and traffic cones to protect freshly painted line work from being marked or otherwise disturbed until after paint is dry.
      2. Remove temporary barricades and traffic cones when Work is complete and ready for traffic.

END OF SECTION