919-M-054 TRAFFIC SIGNS

(Adopted 11-20-19)

The Standard Specifications are revised as follows:

SECTION 919, AFTER LINE 39, INSERT AS FOLLOWS:

Digital printed signs shall have transparent and opaque durable ink as recommended by the manufacturer. Digital printed colors shall have a warranty life of the base reflective sign sheeting. Digital applied colors shall present a smooth surface, free from the foreign material, bubbles, blemishes, streaks or spotted areas, and all messages and borders shall be clear and sharp. Digital printed signs shall meet the daytime color and luminance, and nighttime color requirements of ASTM D 4956. Overlapping of colors will not be allowed.

All digital printed signs shall be from an integrated system, including reflective sheeting, durable inks, and clear overlay film all from the same manufacturer applied to aluminum substrate in accordance with 919.01(a)1. Only digital printers recommended by the manufacturer of the reflective sheeting shall be used.

Finished digital printed signs shall have a UV-protective clear overlay applied to the entire face of the signs. Overlay shall be part of an integrated component system as recommended by the reflective sheeting manufacturer. On temporary construction signs digitally printed with black ink only, the protective overlay film is optional.

SECTION 919, BEGIN LINE 73, DELETE AND INSERT AS FOLLOWS:

3. Demountable Letters, Numbers, and Symbols

If demountable letters, numbers, or symbols are used, the bBacking material for letters, numbers, and symbols shall be 0.040 in. thick aluminum sheets in accordance with ASTM B 209, alloy 3003-H14. Borders shall be 0.032 in. thick aluminum sheet in accordance with ASTM B 209, alloy 6061-T6.

(b) Sheeting Material

Only sheeting materials from the Department's list of approved Sign Sheeting Materials shall be used for Type IV through Type X sheeting. Type IV or higher sheeting shall be used for highway signsall sheet signs except as specified herein. For contracts let on or after September 1, 2020, Type VIII or higher reflective sheeting shall be used for sheet signs with a red background color and Type XI sheeting shall be used for all panel signs. Type XI highway sheeting shall be from the Department's list of approved Sign Sheeting Materials or from a manufacturer that has complete test results from the National Transportation Product Evaluation Program, NTPEP, showing that the ASTM D 4956 minimum requirements have been met. A type C certification in accordance with 916 shall be furnished for Type XI sheeting. The sheeting type for the sign copy and border shall be the same type or higher than the sheeting type used for the background. Sheeting materials will be placed and maintained on the Department's approved list in accordance with ITM 930806, Procedure H.

A non-prorated manufacturer's written warranty against delamination, blistering, discoloration, or 15% or greater loss of retro-reflectivity compared with the minimum

initial ASTM D 4956 value, shall be provided to, and in favor of, the Department by the reflective sheeting manufacturer. The warranty shall cover a period of 10 years.

SECTION 919, BEGIN LINE 115, DELETE AND INSERT AS FOLLOWS:

(c) Letters, Numbers, and Symbols, and Accessories

Letters, numbers, and symbols, and accessories shallmay be demountable.