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Fluorescent Sheeting Implementation

The Michigan Department of Transportation (MDOT) has been working with Michigan Infrastructure and Transportation Association (MITA) and its industry partners on the use of a 6-inch wide angle prismatic lens reflective sheeting for reflectorizing reboundable traffic control devices such as drums and 42-inch channelizing devices. MDOT, MITA, and industry partners piloted a number of successful projects over the last two years and have been working jointly to develop an implementation plan. Safety for both the motoring public and the workers is the number one reason for this change. Fluorescent reflective sheeting can increase distance visibility providing up to 2.5 seconds of additional driver reaction time at 55 MPH, compared with high intensity sheeting. Additionally, during weather events and low light conditions when approximately 35 percent of work zone crashes occur historically in Michigan, improved motorist visibility will reduce the potential of a traffic crash or fatality. This is a safety initiative that will help reach MDOT's goal of "Towards Zero Deaths".

Specification will be according to ASTM D 4956. The fluorescent orange sheeting color must have a daytime luminance factor that meets or exceeds 20, (ASTM D 4956 Table 2 – Daytime Luminance Factor (Y %)), and the fluorescent orange and white sheeting classified as Type IV sheeting. For projects incorporating the new sheeting the following pay items will be used:

- "Plastic Drum, Fluorescent, Furn"
- "Plastic Drum, Fluorescent, Oper"
- "Channelizing Device, 42 Inch, Fluorescent, Furn"
- "Channelizing Device, 42 Inch, Fluorescent, Oper"

The following implementation plan was based on the average service life of the drums and 42-inch channelizing devices, which will allow industry to upgrade during the normal replacement cycle. The schedule detailed below, provides inclusion beginning with October 2017 project lettings on the interstate system.

The phase in period is described below for project letting dates:

- Official notification to industry of the upcoming phase in period was provided on 4/7/2016.
- Project lettings on or after 10/1/2017 – Type IV Fluorescent Orange and Type IV White required on all “I” routes.
- Project lettings on or after 10/1/2018 – Type IV Fluorescent Orange and Type IV White required on all “BR”, “US”, and “M” routes.
- Project lettings on or after 10/1/2020 – Type IV Fluorescent Orange and Type IV White required on all projects let through MDOT including local agency projects.
- Maintenance, utility, and permit work performed on state trunk line on or after 10/1/2020 will require – Type IV Fluorescent Orange and Type IV White.
- Selected projects may require the use of the new sheeting on a project-by-project basis after the Frequently Used Special Provision is released for each cycle

Contractors may implement new fluorescent sheeting on drums and 42 inch channelizing devices prior to the above specific dates, as an “equal to or better than” substitution, at no additional cost to MDOT.

During the phase in period, the intermixing of drums and 42 inch channelizing devices with fluorescent orange sheeting and high intensity standard orange sheeting, on the same project will not be allowed.

Intermixing of drums and 42 inch channelizing devices with fluorescent sheeting from different companies of the same grade will be allowed.

Please contact the Work Zone Delivery Engineer for any additional guidance.