

Number: E-16-004

Date: 12/29/16

## **ENGINEERING DIRECTIVE**

Patricia A. Leavenworth, P.E. (signature on o	riginal)
CHIEF ENGINEER	

## **Temporary Concrete Barrier Retrofitted to MASH TL-3**

The primary purpose of this Engineering Directive is to formally issue new Construction Standard Details for retrofitting Temporary Concrete Barrier to meet the *Manual for Assessing Safety Hardware* ("MASH") Test Level 3 ("TL-3") performance requirements. These new Construction Standard Details are listed below.

In addition, existing standard detail drawings for Precast Portable Concrete Barrier are renamed "Temporary Concrete Barrier, MASH TL-2" and may continue to be used in appropriate MASH Test Level 2 ("TL-2") locations, as specified in E-16-002. These revised Construction Standard Details are also listed below.

The new MASH TL-3 barrier retrofit drawings and the revised MASH TL-2 barrier drawings now include critical MASH test result values for each system. These test result values should be used by MassDOT personnel, designers and contractors to ensure that appropriate temporary barrier systems are proposed and correctly deployed in all locations.

The dynamic deflection at the base realized during MASH Test 3-11 for Temporary Concrete Barrier Retrofitted to MASH TL-3 was 59.0 inches. The dynamic deflection at the base realized during MASH Test 2-11 for Temporary Concrete Barrier, MASH TL-2 was 29.9 inches.

These new and revised standard detail drawings are included in the *December 2016 Construction Standard Details* which shall be referenced in the plans and contract documents of all projects advertised after January 22, 2017. In addition, Temporary Concrete Barrier Retrofitted to MASH TL-3 may be used on any active MassDOT construction project where a MASH TL-3 system is required, provided that all other site-specific dynamic deflection and length of need requirements can also be met by the barrier system.

## **New Standard Details**

- E 403.8.0 Temporary Concrete Barrier, Retrofitted to MASH TL-3 (1/2)
- E 403.9.0 Temporary Concrete Barrier, Retrofitted to MASH TL-3 (2/2)

## **Revised Standard Details**

- E 403.1.0 Temporary Concrete Barrier, MASH TL-2 (1/3)
- E 403.2.0 Temporary Concrete Barrier, MASH TL-2 (2/3)
- E 403.3.0 Temporary Concrete Barrier, MASH TL-2 (3/3)