




March 30, 2004

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SUBJECT: Project Delivery Memo #04-01 – Material Transfer Device/Vehicle
Specifications

Purpose and Direction

Background: For some years, we have known the benefits of using a material transfer device (MTD) or a material transfer vehicle (MTV) in the paving of hot mix asphalt. Properly used, this equipment aids in maintaining a consistent speed of the paving machine, minimizes aggregate segregation, and provides for a more uniform temperature of hot mix pavement in the lay down operation.

In the late 1990s, specifications for a material transfer vehicle and a material transfer device were developed. The “vehicle” was a piece of equipment that was operated independently from the paving machine, which was capable of storing, mixing and delivering the hot mix to the paving machine. The “device” was an attachment to the paving machine that provided for a small amount of storage and a degree of mixing. These two specifications were used and modified by regions over the next several years. About two years ago, the HQ Construction Office obtained copies of the region specifications that had been used, with the purpose of developing a single specification that all regions could agree upon. Circulation of the draft to the regions, incorporation of comments, and final adjustment to make it compatible with the revised Section 5-04 have resulted in the attached GSP.

Types of Projects Affected: It is intended that this GSP be used in all projects with Hot Mix Asphalt unless otherwise determined by Region Construction Staff. Considerations that might be given to not using the GSP might include: projects with no mainline paving; projects that utilize a cyclic density specification; and emergency projects.

Direction: This specification gives direction and guidance on equipment and methods to be used for paving hot mix asphalt. The Department direction is to continue to work towards finding a specification that provides a measurement of the end product. At such time as an end result specification can be developed and adopted statewide, the use of the method specification will become unnecessary.

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Value in Making the Change: Developing the MTD/V specification and establishing it as a general special provision, will allow easy access to the specification by designers. It will also establish uniformity among the regions that will provide a degree of predictability to the bidders.

Action Requested

Project Development

Most, if not all regions have been using a Region GSP similar to this that requires the use of a MTD/V for HMA paving. The attached GSP should be used for all projects containing Hot Mix Asphalt unless otherwise determined by the Region Construction Staff. Region GSPs requiring MTD/V use need to be retired.

Contract Ad and Award

The Region GSP for MTD/V should be replaced with the attached version by addendum, if it is possible to do so without impacting the scheduled bid opening.

Construction

No changes are required for current projects that have region-generated special provisions for the use of MTD/V

DN:cd
KJD/HJP
Attachment

cc/att: John Conrad
Kevin Dayton
Harold Peterfeso
Region Construction Engineers
Region Material Engineers
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Material Transfer Device/Vehicle GSP

Section 5-04.3(3) is supplemented with the following:

For any course of hot mix asphalt (HMA) used in traffic lanes with a depth of 0.08 feet or greater, the direct transfer of the HMA from the hauling equipment to the paving machine will not be allowed. A material transfer device or vehicle (MTD/V) shall be used to deliver the HMA from the hauling equipment to the paving machine.

The MTD/V shall mix the HMA after delivery by the hauling equipment but prior to lay down by the paving machine. Mixing of the HMA shall be sufficient to obtain a uniform temperature throughout the mixture. If a windrow elevator is used, the length of the windrow may be limited in urban areas or through intersections at the discretion of the Engineer.