



Montana Department of Transportation
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Memorandum

To: District Construction Engineers
From: Mark Wissinger, P.E.
Construction Engineer
Date: April 10, 2006
Subject: Moisture Requirements for Compaction

This memo clarifies the documentation process to follow when the contractor makes a written request to the Engineering Project Manager (EPM) to compact soils at a lower moisture content, in accordance with Standard Specification 203.03.3. Following is the recommended process:

- The contractor makes a written request to the EPM, to include:
 - The soils class,
 - The locations of the soil using the project stationing.
- The EPM reviews and researches the request by discussing the proposal with the District Materials Lab Supervisor (DMS) and District Geotechnical Engineer.
- They will investigate the soil/moisture relationship and determine if compacting the soils at lower moisture content is detrimental to the long term serviceability of the roadway.
- When the EPM, DMS, and Geotechnical Engineer make a determination if the request is to be approved/denied, the EPM sends a written response to the contractor to include any stipulations. In instances where concurrence cannot be reached, the Materials Engineer will make the final decision.
- Copies of response letters are to be placed in the project file, Lab file and attached to the first compaction summaries it applies to. All other summaries should have a note explaining that the compaction was accepted at the lower moisture content in accordance with the approval letter.

This process provides for some flexibility in moisture content requirements, by the use of engineering judgment, while assuring that soil density is not compromised. Past project history has shown that certain soil types may be more readily compacted when the moisture content is more than 2% under optimum. A-1-a, A-1-b, and A-4 are the soil types where this is most likely to occur. A-6 and A-7 soils should not be accepted if the moisture content does not meet the +/- 2% requirement.

CC: District Administrators Loran Frazier, PE CES Bureau EPMs
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