



MARICOPA COUNTY  
*Department of Transportation*

MEMORANDUM

**Date:** January 28, 2015 Revised 7/16/2015  
**To:** MAG Specifications and Details Committee  
**From:** Robert Herz, MCDOT Representative  
**Subject:** Proposed Revision to Section 601.4.5 Final Backfill and Section 601.4.8 Granular Material and Native Backfill Material **Case 15-03**

**PURPOSE:** Revise trench final backfill placement requirement of loose non-compacted material from 2 feet to layers not exceeding twelve inches in depth and require Agency approval for depths greater than 12". Add CLSM and granular material to the listing of acceptable materials for final backfill as presently shown on Detail 200-1. Add to Section 601.4.8 identification of the testing procedures required to determine the percent passing the 200 sieve.

**REVISIONS:**

**601.4.5 Final Backfill:** Material placed above the initial backfill to the top of the trench or to the bottom of the road base material. Final backfill shall be placed in horizontal layers not more than twelve inches in depth before compaction. With Agency approval an increase in the loose non-compacted lift depth may be obtained for a project based on specific equipment, methods, and soil conditions. For approval of an increase of the loose non-compacted lift depth, the Contractor shall demonstrate to the satisfaction of the Agency that the required density shall be obtained using the Contractor identified equipment and methods. ~~lifts that shall not exceed 2 feet and~~ The loose lift height shall not be more than can be compacted to the required density with the equipment and methods being used.

Final backfill shall be CLSM per Section 604, ABC per Section 702, granular material or sound earthen-native backfill material per Section 601.4.8. ~~with no piece larger than 4 inches and be free from broken concrete, broken pavement, wood or other deleterious material.~~

Backfill under street pavement shall be constructed per Detail 200-1 with the type of trench and surface replacement as noted on the plans or in the special provisions.

Unless otherwise noted, backfill under single curb, curb and gutter, [attached](#) sidewalk, driveways, valley gutters, etc. shall be the same as the adjacent street pavement.

**601.4.8 Granular Material and Native Backfill Material:** For purposes of this specification, granular material is material for which the sum of the plasticity index and the percent of the material passing a No. 200 sieve does not exceed 23. The plasticity index shall be tested in accordance with AASHTO T-146 Method A (Wet Preparation), T-89 and T-90. [The percent of the material passing a No. 200 sieve shall be tested in accordance with ASTM C136 and ASTM C117.](#)

Native material used for backfill shall be sound earthen material free from broken concrete, broken pavement, wood or other deleterious material with no piece larger than 4 inches.