

SECTION 335 Borrow Excavation

Generally, borrow excavation is material obtained from outside the right-of-way to complete the construction of embankments. When there are instances where borrow is obtained within the right-of-way, please follow procedures in [CMM 231](#).

The department will use the earthwork summary in the plans to explicitly show the areas intended for borrow during construction. Except for backfilling of excavated marshes or for other work for which borrow may be specifically required, borrow excavation should not be placed in an embankment until the roadway and drainage excavation for the applicable mass haul division has been substantially completed.

[Standard spec 208.2.1](#) describes material quality. Original cross-sections for determining quantities of borrow are to be taken on the pit area after clearing and grubbing has been completed. Original cross sections may be taken either before or after removal of the topsoil as deemed desirable. Final cross sections, however, must then be taken either after the topsoil is replaced, if originals were taken before topsoil removal, or before the topsoil is replaced, if the originals were taken after topsoil removal. The contractor may be required to suitably shape the pit for taking accurate measurements. Refer to [CMM 775](#) for guidance on borrow pit surveys.

Occasionally the contractor may want to move a small amount of borrow excavation from an isolated source that is not easy or convenient to section. In this case the project engineer may decide to measure that material by truck count. It is important to be aware that the pay volume for the borrow excavation is the original in-place volume, not the volume in the trucks. The two volumes are related by an expansion factor. Refer to [CMM 232](#) for guidance and examples showing how to measure and pay for borrow excavation that is trucked.

The standard specifications provide for borrow pit cleanup, fertilizing, and seeding. Borrow pits, adjacent disturbed areas, and associated haul roads will usually be fertilized and seeded. Use standard seed mixtures specified in standard spec 630.2.1.5 and seeding rate requirements specified in standard spec 630.3.5. Standard spec 630.3.4 requires the contractor to seed the borrow pit and disposal sites off the right-of-way and consult with the landowner or landowner's agent when selecting the seed mix. Additional information is provided in [CMM 640](#) about seeding and fertilizing.

See [CMM 158](#) for archaeological, paleontological, and environmental considerations for borrow pits. All noncommercial borrow pits must be in compliance with local zoning requirements. The contractor must also follow the approved ECIP for selected sites.