

209 – SPECIAL FILL

SECTION 209

SPECIAL FILL

209.1 DESCRIPTION

Provide and place special fill (foundation) for the foundation for the MSE system as shown in the Contract Documents.

Provide and place special fill (retained soil) behind the MSE wall as shown in the Contract Documents.

BID ITEMS

Special Fill (*)

* Foundation or Retained Soil

UNITS

Cubic Yard

209.2 MATERIALS

a. General. Provide soil meeting the requirements specified in the Contract Documents.

Material will be accepted under this specification with the receipt and approval by the KDOT Geotechnical Unit of laboratory test reports detailing the test results in accordance with the appropriate ASTM standards as performed by an AMRL certified and KDOT Geotechnical Unit approved laboratory.

Use soil for the special fill exhibiting a minimum drained friction angle and minimum undrained cohesion, as shown on the plans. Determine the strength properties of the soil in CIU single stage triaxial tests with pore pressure measurements (ASTM D 4767) if the soil is defined as fine grained by ASTM D 2487. If the soil is fine-grained, it must be of low plasticity as defined by ASTM D 2487. Use effective consolidation stresses as shown on the plans. Multi-stage tests will not be acceptable.

If the soil is a coarse-grained soil as defined by ASTM D 2487, it must be classed as low plasticity. Determine the strength properties of the soil in Consolidated - Drained Direct Shear (ASTM D 3080) testing. These soils similarly must exhibit a minimum drained friction angle as shown on the plans. Do not use these soils in areas prone to flooding. Use normal stresses as shown on the plans.

b. Shear Testing. Perform all shear testing on samples compacted to Type AA compaction standards (SECTION 205) for cohesive soils; or at 75% Relative Density for granular soils at optimum moisture content.

209.3 CONSTRUCTION REQUIREMENTS

Compact the fill to Type AA, MR-3-3 (SECTION 205) unless specified otherwise in the Contract Documents. Do not exceed 8-inch loose, lift thickness. Each lift will have a minimum of 2 density and moisture tests performed. Fill material different from that specifically approved for use will not be accepted until the testing requirements as set forth in **subsection 209.2** are met.

209.40 MEASUREMENT AND PAYMENT

The Engineer will measure the special fill by the cubic yard.

Payment for "Special Fill" at the contract unit price is full compensation for the specified work.