



## SECTION 212

### SUBGRADING AND SHOULDERING

#### 212.1 Description.

**212.1.1** Subgrading and Shoulderering, Class 1, shall consist of preparing the earth subgrade for surfacing and shoulders by fine-grading, and shaping the existing roadbed of a previously graded roadway and shaping fillslopes, inslopes and ditches as required to complete a finished roadway in accordance with the typical section shown on the plans.

**212.1.2** Subgrading and Shoulderering, Class 2, in addition to the above, shall include the construction and final shaping of earth shoulders.

#### 212.2 Construction Requirements.

**212.2.1** Subgrading and shoulderering will normally be restricted to the roadway from ditch to ditch or to the roadbed and upper portions of fill slopes. All ditches shall be graded to drain. The median, if any, shall be shaped to conform to the typical section. If oversize rock in the subgrade cannot be removed by scarifying, compensation for additional work will be made in accordance with [Sec 104.3](#). No work will be required on backslopes, except that necessary to blend the lower portion of the existing backslope with the regraded ditch. The work on fillslopes shall be confined to the upper 10 feet (3 m) of the slope, measured along the slope line.

**212.2.2** If the subgrade has less density than that required under [Sec 203.5](#), the engineer may order the item of Subgrade Compaction to be performed. When lack of satisfactory density results from improper maintenance by the contractor, the subgrade density shall be restored at the contractor's expense. Earth shoulders shall be constructed in accordance with [Sec 203.4.1.2](#).

**212.2.3** Finishing of ditches, side slopes, cuts and fills shall be to a reasonably smooth and uniform surface that will merge with the adjacent slopes. Finishing by hand methods will not be required, except that all brush, weeds, excess mud and silt or other debris shall be removed from all channels and culverts within the scope of the work in accordance with [Sec 104.11](#), even though such structures are used in place.

**212.2.4** Any additional material required to complete the subgrade or shoulders to proper grade and section shall be obtained from within the right of way limits as directed by the engineer. Excess excavation shall be used for widening shoulders on fill sections or shall be wasted within the limits of the right of way as directed by the engineer.

**212.3 Method of Measurement.** Measurement of Subgrading and Shoulderering, Class 1 and Class 2, will be made to the nearest 100 feet (25 m) along the centerline of each roadbed, regardless of width. For the purpose of measurement, a divided highway will be considered as having two roadbeds. Measurement of ramps will be made from the ramp's gore point.

**212.3.1** Subgrading and Shoulderering, Class 1 and Class 2, will apply only to those sections that have been specifically designated as such on the plans and the class will not be subject to change during construction.

**212.4 Basis of Payment.** The accepted quantity of subgrading and shouldering will be paid for at the contract unit price.

**212.4.1** No direct payment will be made for minor drifting of excavated material or for any additional material required. If additional material is required to be hauled approximately 1000 feet (300 m) or more to complete the work, compensation will be made in accordance with [Sec 104.3](#).

**212.4.2** The repair of major erosion beyond the limits as described in [Sec 212.2.1](#) will be paid for in accordance with [Sec 104.3](#).