

This specification outlines the requirements for scarifying and reshaping of a road surface prior to the application of Selected Granular Base Course or asphaltic pavement.

PART 1 REFERENCES

This specification refers to the following standards, specifications, or publications:

ASTM International

D698 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12 400 ft-lbf/ft³ (600 kN-m/m³))

PART 2 GENERAL

1.12.1 **NOT APPLICABLE**

PART 2 PART 3 PRODUCTS

2.13.1 **NOT APPLICABLE**

PART 3 PART 4 EXECUTION

4.1 EXAMINATION

.1 **Verification of Conditions:** verify that conditions of substrate previously installed under other Sections or Contracts are acceptable for roadway subgrade reshaping installation in accordance with manufacturer's written instructions.

- .1 **Visually inspect substrate in presence of Owner.**
- .2 **Inform Owner of unacceptable conditions immediately upon discovery.**
- .3 **Proceed with installation only after unacceptable conditions have been remedied and after receipt of written approval to proceed from the Owner.**

3.14.2 SCARIFYING AND RESHAPING

.1 Where directed by the Owner the Contractor shall scarify and reshape a road surface prior to the application of Selected Granular Base Course or Asphaltic Pavement. The scarifying and reshaping shall be carried out within the lengths designated by the Owner, and within the width to be

covered by the proposed pavement plus 0.3 m on each side, or to such other widths as the Owner may designate.

- .2 Where the road surface consists of Selected Granular Base Course of a particular type, then the scarifying shall be to the full depth of the base course of that type, or to a depth of 300 mm, whichever is less.
- .3 Where the road surface consists of subgrade consisting of common material, then the scarifying shall be to a depth of not less than 300 mm.
- .4 Unsuitable roadbed materials as determined by the Owner, that are encountered during the scarifying operation shall be excavated to the lateral limits and depth directed by the Owner and shall be disposed of as directed. Such work shall be carried out in accordance with Section 02224 – Roadway, Excavation, Embankment & Compaction.
- .5 No boulders greater than 150 mm in diameter shall be left within 300 mm of the top of the subgrade composed of Other Material. Such boulders over 150 mm in diameter that cannot be removed by the scarifying operation shall be removed by hand excavation, blasting or any other suitable method. All excavated boulders shall be removed and disposed of from the subgrade and ditches and then disposed of.
- .6 Excavations resulting from removal of boulders or Unsuitable Material shall be backfilled with approval material to the specified grades.
- .7 Pulverize and break down scarified material to 19 mm maximum soil clod size, except that stones larger than this size may be left intact as directed by the Owner.
- .8 Blade and trim pulverized material to elevation and cross section dimensions as indicated by the Owner.
- .8.9 Whenever the materials incorporated in the existing subgrade are insufficient to provide the required profile and cross-section, the Contractor shall add and blend additional approved material as directed by the Owner. Such work shall be carried out in accordance with Section 02224 – Roadway, Excavation, Embankment & Compaction.
- .8.10 The maximum variation from the specified profile and cross-section of the compacted scarified and reshaped road surface shall be 30 mm, except in those instances where paving is to take place directly on top of the scarified and reshaped material, in which case the finished surface shall not deviate at any place on a 3 m~~etre~~ straight edge by more than 10 mm.
- .9.11 Where due to traffic use, or for whatever other reason, the scarified and reshaped road surface no longer lies within the required tolerance, then, before placing the next materials, the Contractor shall scarify and reshape the affected area again, at their own expense.

3.24.3 COMPACTING

- .1 Road material disturbed by the scarifying and reshaping shall be compacted.
- .2 Where subgrade is scarified and reshaped, the disturbed materials shall be compacted to a minimum not less than of 95 % maximum Standard Proctor dDry dDensity in accordance with ASTM D698, Method D.
- .3 Where select granular base course is scarified and reshaped the disturbed materials shall be compacted to not less than 100 % of the Maximum Standard Proctor dDry dDensity in accordance with ASTM D698.
- .4 Shape and roll alternately to obtain smooth, even and uniformly compacted subgrade surface and compacted base.
- .5 Apply water as necessary during compaction to obtain specified density.
- .6 If material is excessively moist, aerate by scarifying with suitable equipment until moisture content is corrected to value suitable for compaction.
- .7 Use mechanical tampers to compact areas not accessible to rolling equipment to specified density.

4.4 SITE TOLERANCES

- .1 Reshaped compacted surface to be within plus or minus 10 mm of elevation or as otherwise indicated.

3.34.5 PROTECTION MAINTENANCE

- .1 Protect and maintain reshaped finished surfaces in conditions conforming to this Section to degree of compaction and within tolerance specified until succeeding materials are applied surfaces are covered with required granular or pavement course or until project is accepted by Owner.

PART 4PART 5 PAYMENT

4.15.1 MEASUREMENT FOR PAYMENT

- .1 Scarifying and reshaping existing roadbed including compaction will be measured in square metres.
- .2 Where subgrade was constructed, or some selected granulars were placed under a previous contract, then such scarifying and reshaping of the road surface as the Owner's Representative requires shall be carried

out and measured for payment. This measurement for payment shall be of the horizontal area actually scarified and reshaped from within the limits of length and width as designated by the Owner's Representative, and will be measured in square metres, rounded to the nearest whole number.

4.25.2 BASIS OF PAYMENT

- .1 All costs associated with the work outlined in this specification shall be deemed to be included in the appropriate unit and lump sum prices quoted as outlined in the Measurement for Payment subsection of this section and as included in the MERX Schedule of Quantities and Prices.
- .2 Repair of soft areas will be paid for measured in accordance with Section 02224 – Roadway, Excavation, Embankment & Compaction.
- .3 Additional fill material shall be paid for in accordance with Section 02224 – Roadway, Excavation, Embankment & Compaction.
- .4 Where subgrade and select base course are in the same contract:
 - .1 Where subgrade was constructed under the same contract that also calls for the placing of selected granular base course, then any required scarifying and reshaping of the subgrade prior to placing granulars will not be measured for payment and no payment for the scarifying and reshaping will be made.
 - .2 Boulders removed from the top 300 mm of common material subgrade, on a grading and placing selected granular base course job will not be measured for payment. However, boulders removed from the top 300 mm of subgrade in common material cuts will be measured for payment in accordance with Section 02224 – Roadway, Excavation, Embankment & Compaction.
- .5 Where road surface was constructed under a previous contract:
 - .1 Boulders removed from the top 300 mm of common material subgrade, on a job where subgrade was constructed on a previous contract will be measured for payment in accordance with Section 02224 – Roadway, Excavation, Embankment & Compaction. The measurement for payment will be done in this case regardless of whether the boulders were from a cut or a fill.
 - .2 The excavation of Unsuitable Material in the roadbed shall be measured for payment in accordance with the provisions of Section 02224 – Roadway, Excavation, Embankment & Compaction.