



**CONSTRUCTION SPECIFICATION FOR
RESTORING UNPAVED ROADWAY SURFACES**

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301.01 SCOPE

This specification covers the requirements for the restoration of unpaved roadway surfaces to the required cross-section, profile, and density in preparation for its subsequent cover with a granular or surfacing course.

301.01.01 Specification Significance and Use

This specification has been developed for use in provincial- and municipal-oriented Contracts. The administration, testing, and payment policies, procedures, and practices reflected in this specification correspond to those used by many municipalities and the Ontario Ministry of Transportation.

Use of this specification or any other specification shall be according to the Contract Documents.

301.01.02 Appendices Significance and Use

Appendices are not for use in provincial contracts as they are developed for municipal use, and then, only when invoked by the Owner.

Appendices are developed for the Owner's use only.

Inclusion of an appendix as part of the Contract Documents is solely at the discretion of the Owner. Appendices are not a mandatory part of this specification and only become part of the Contract Documents as the Owner invokes them.

Invoking a particular appendix does not obligate an Owner to use all available appendices. Only invoked appendices form part of the Contract Documents.

The decision to use any appendix is determined by an Owner after considering their contract requirements and their administrative, payment, and testing procedures, policies, and practices. Depending on these considerations, an Owner may not wish to invoke some or any of the available appendices.

301.02 REFERENCES

When the Contract Documents indicate that provincial-oriented specifications are to be used and there is a provincial-oriented specification of the same number as those listed below, references within this specification to an OPSS shall be deemed to mean OPSS.PROV, unless use of a municipal-oriented specification is specified in the Contract Documents. When there is not a corresponding provincial-oriented specification, the references below shall be considered to be to the OPSS listed, unless use of a municipal-oriented specification is specified in the Contract Documents.

When the Contract Documents indicate that municipal-oriented specifications are to be used and there is a municipal-oriented specification of the same number as those listed below, references within this specification to an OPSS shall be deemed to mean OPSS.MUNI, unless use of a provincial-oriented specification is specified in the Contract Documents. When there is not a corresponding municipal-oriented specification, the references below shall be considered to be the OPSS listed, unless use of a provincial-oriented specification is specified in the Contract Documents.

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

Ontario Provincial Standard Specifications, Construction

OPSS 314	Untreated Granular, Subbase, Base, Surface Shoulder, and Stockpiling
OPSS 501	Compacting
OPSS 506	Dust Suppressants

301.03 DEFINITIONS

For the purpose of this specification, the following definitions apply:

Restored Surface means unpaved roadway surfaces prepared to the required grades and density and ready for a subsequent cover of granular or surfacing courses.

Scarification means uniform loosening of the roadway surface to remove damaged areas such as ravelling and potholes.

Surfacing Course means any bearing or wearing course or courses placed on the roadway and consisting of hot mix asphalt (HMA), Portland cement concrete, bituminous cold mix, and surface treatment.

Unpaved Roadway Surface means surfaces that are typically existing granular, but may include sub-grade soil surfaces.

301.06 EQUIPMENT

301.06.01 Templates

Templates not less than 3 m long shall be used to determine the crossfall of all restored surfaces.

Where the surface is to receive concrete pavement or concrete base, a metal template shall be used.

301.07 CONSTRUCTION

301.07.01 Dust Suppressants

Dust suppressants shall be according to OPSS 506.

301.07.02 Method

Restoring roadway surfaces shall consist of the following:

- a) The scarification of the existing surface specified in the Contract Documents to a depth not less than 75 mm but sufficient to remove potholes.
- b) Restoring or reshaping the scarified material.
- c) Compacting of the scarified materials according to OPSS 501.
- d) Ensuring that the finished surface is within tolerance by checking the accuracy with the template.

The Contractor is responsible to maintain the scarified surface to the profile, cross-section, and density specified in the Contract Documents until the project is accepted or, if applicable, until any subsequent granular or surfacing course is completed.

Prior to scarification, roadway surfaces not more than 150 mm above grade shall be loosened and the materials removed to grade.

Unsuitable material encountered during restoring operations shall be removed to a depth not greater than 150 mm and replaced by acceptable granular material.

Materials loosened from the roadway surface and reshaped or incorporated during the restoring operation shall not require loading, hauling, or moving other than by blading.

301.07.03 Surface Tolerances

The surface of the unpaved roadway shall be restored to the specified tolerances for the following types of surfacing courses.

301.07.03.01 Granular Courses

The restored surface shall not deviate more than the following:

- a) 30 mm from the specified grade and cross-section.
- b) 30 mm at any place as measured in any direction with a 3 m straight edge when the work is to prepare the subgrade for granular courses.
- c) 15 mm at any place as measured in any direction with a 3 m straight edge when the work is to prepare the granular surface for granular courses.

301.07.03.02 Bituminous Courses

The restored surface shall not deviate more than the following:

- a) 30 mm from the specified grade and cross-section.
- b) 30 mm at any place as measured in any direction with a 3 m straight edge when the work is to prepare the subgrade to receive full depth HMA.
- c) 10 mm at any place as measured in any direction with a 3 m straight edge when the work is to prepare the granular surface to receive HMA.

301.07.03.03 Portland Cement Concrete Courses

The restored surface shall not deviate more than the following:

- a) 10 mm from the specified grade and cross-section.
- b) 10 mm at any place as measured in any direction with a 3 m straight edge when the work is to prepare a granular surface to receive concrete pavement or concrete base.

301.07.04 Surface Widths

The restored surface width shall be as specified in the Contract Documents.

301.07.05 Management of Excess Material

Management of excess material shall be according to the Contract Documents.

Acceptable material from resurfacing operations shall be placed on the adjacent shoulders, spread, and trimmed to the specified grade and cross-section and compacted according to OPSS 501.

301.09 MEASUREMENT FOR PAYMENT

301.09.01 Actual Measurement

301.09.01.01 Restoring Roadway Surfaces

Measurement of restored roadway surfaces shall be by area in square metres.

301.09.02 Plan Quantity Measurement

When measurement is by Plan Quantity, such measurement shall be based on the units shown in the clauses under Actual Measurement.

301.10 BASIS OF PAYMENT

301.10.01 Restoring Roadway Surfaces - Item

Payment at the Contract price for the above tender item shall be full compensation for all labour, Equipment, and Material to do the work.

301.10.02 Water

Payment for water for compaction shall be according to OPSS 501 and payment for water for dust suppression shall be according to OPSS 506.

301.10.03 Additional Materials

Payment for additional materials shall be according to OPSS 314.

**Appendix 301-A, November 2009
FOR USE WHILE DESIGNING MUNICIPAL CONTRACTS**

Note: This is a non-mandatory Commentary Appendix intended to provide information to a designer, during the design stage of a contract, on the use of the OPS specification in a municipal contract. This appendix does not form part of the standard specification. Actions and considerations discussed in this appendix are for information purposes only and do not supersede an Owner's design decisions and methodology.

Designer Action/Considerations

The designer should specify the following in the Contract Documents:

- The location, profile, and cross-section of the surfaces to be restored. (301.07.02)
- The density of materials used to restore roadway surfaces. (301.07.02)
- The surface width of restored surface. (301.07.04)

The designer may consider the following when determining surfaces to restore: (301.07.04)

- The width of the granular course when the work is to prepare the sub-grade or base for granular courses.
- The width of the proposed pavement plus 0.5 m on each side when the work is to prepare a granular road surface to receive the surfacing course.
- The full width of the earth surface when the work is to prepare the earth surface to receive a full depth hot mix asphalt.
- The width of proposed subsequent lanes against initial concrete base or pavement plus 0.5 m.

The designer may consider a geotechnical investigation to identify the existing conditions.

The designer should ensure that the General Conditions of Contract and the 100 Series General Specifications are included in the Contract Documents.

Related Ontario Provincial Standard Drawings

No information provided here.