

FORM 631



GOVERNMENT OF NEWFOUNDLAND AND LABRADOR
Department of Transportation and Works
Highway Design Division

SECTION 631

SEEDING

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631.01 SCOPE

This specification covers the requirements for surface preparation, the supply and spreading of topsoil and the supply and application of lime, fertilizer and grass seed, together with the provision of maintenance of the seeded areas for a period of two months.

631.02 MATERIALS

The following materials shall be supplied by the Contractor and shall conform to the requirements as stated.

631.02.01 Topsoil

Topsoil shall be fertile loamy material of a quantity acceptable to the Engineer. It shall be free from roots, vegetation or other debris of such size and quantity as would, in the opinion of the Engineer, prevent proper application of the topsoil, and free from stones and clods over 50 mm in greatest diameter. Topsoil badly infested by seeds and noxious weeds will not be accepted.

The topsoil may only be taken from a source of supply approved by the Engineer.

Soil removed as part of the grubbing operations may be used if the material meets the requirements of this section.

Contractors should note that legislation prohibits the removal of topsoil from areas zoned by Government for agricultural use. Information regarding the location of these agricultural zones may be obtained from the appropriate Government Department.

631.02.02 Lime

Lime shall be agricultural quality lime free from lumps.

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631.02.03 Fertilizer

Fertilizer shall be free from lumps and have the plant food ratio of 10 nitrogen to 20 phosphorus to 20 potash plus 2% F.T.E.

631.02.04 Grass Seed

Grass seed shall consist of a mixture 45% Kentucky Blue, 10% Wild White Clover, 10% Italian Rye Grasses, and 35% Creeping Red Fescue.

631.02.05 Water

Water used in the work shall be free of any impurities which would inhibit germination or otherwise adversely affect growth.

631.03 PREPARATION OF SURFACE

Seeding shall be carried out only within the limits as staked by the Engineer.

Surfaces that are to be treated with seeding shall first be trimmed to restore the ground to the condition it was in prior to any erosion which may have taken place. This work shall consist of such dozer and hand work that is necessary to restore the ground to the lines and slopes as existed on completion of grading operations.

At the edges of the area to be treated with seeding, the ground shall be hand excavated to such depth that will allow for the placing of 70 mm of topsoil, such that after the topsoil is placed the ground will be flush over the joint so as to allow the free flow of water across the joint, and also so as to present a neat appearance.

All areas to be seeded shall be fine graded to a uniform surface and the surface materials shall be loosened to a depth of 25 mm. These areas shall be so maintained until the topsoil is placed.

631.04 PLACING TOPSOIL

After completion of preparation of surface operations, topsoil shall be uniformly spread over the entire area to be seeded. The topsoil shall be placed to a depth not less than 70 mm. All clods or lumps shall be pulverized and any roots or foreign matter shall be raked up and removed from the site.

631.05 APPLICATION OF LIME, FERTILIZER AND GRASS SEEDS

On completion of placing topsoil operations; lime, fertilizer and grass seed shall be evenly spread over the surface to be seeded using approved spreaders. They shall not be mixed before application. Lime and fertilizer shall not be spread after the sowing.

Spreading shall only be carried out on calm days so as to avoid uneven application of the materials and segregation of the grass seed mixture.

It is preferable to seed in early summer or the last two weeks of August.

Should rainfall be insufficient, during the period of sowing and initial grass growth, water shall be applied immediately before and after seeding and subsequently thereafter during the maintenance period. Watering when carried out shall be done in such a manner as not to cause any erosion.

No seeding shall take place after 20th September.

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Lime shall be applied in such quantities as to obtain a pH value of 6.5 for the topsoil. This will often be obtained by applying the lime at the rate of 4500 kilograms per hectare.

Fertilizer shall be applied at the rate of 1100 kilograms per hectare.

The grass seed mixture shall be applied at the rate of 85 kilograms per hectare.

The surface shall be lightly raked to a depth of 10 mm immediately after seeding.

631.06 MAINTENANCE

The Contractor shall be responsible for maintaining seeded areas to ensure proper and adequate growth of the grass during a period of two months following sowing.

Should the treated area require watering in the Engineer's opinion, then the Contractor shall thoroughly water the seeded area taking care not to cause any erosion.

During the maintenance period, any defect caused by defects in materials, workmanship or damages caused by watering or the weather shall be re-seeded with grass seed at the Contractor's expense.

631.07 MEASUREMENT FOR PAYMENT

The slope area actually seeded, from within the limits as staked by the Engineer, will be measured in square metres, rounded to the nearest whole number.

631.08 BASIS OF PAYMENT

Payment at the contract price for seeding shall be compensation for all labour, materials and equipment-use for: the preparation of the ground to be treated with seeding, the supply and placing of topsoil, lime, fertilizer and grass seed and the raking of the freshly seeded ground, together with such watering and maintenance as may be required over the two month maintenance period.