

FORM 636



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

SECTION 636 EROSION CONTROL BLANKET

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636.01 SCOPE

Contractors are advised that this item includes the supply and installation of the erosion control blanket, application of lime and hydroseeding.

636.02 MATERIALS

The Erosion Control Blanket shall be Bonded Fibre Matrix or equivalent. Any blanket must be approved by the Department Design Engineer. Installation shall be in accordance with the manufacturers recommendations.

636.03 APPLICATION

The Bonded Fibre Matrix, (BFM), shall be hydraulically applied and upon drying, adhere to the soil in the form of a continuous, 100% coverage biodegradable erosion control blanket.

The Bonded Fibre Matrix shall be comprised of long strand, thermally defibrated wood fibres, (>88% of total volume by weight), held together by organic tackifiers, (10%), and mineral bonding agents, (>2%), which upon drying, become insoluble and non-dispersible.

The matrix which forms shall be designed, tested and proven to perform in a manner equal or superior to biodegradable erosion control blankets, (ECB's). Documentation of testing at an industry recognized laboratory shall be provided which demonstrates superior performance as measured by reduced water runoff, reduced soil loss, and better plant germination, as compared to erosion control blankets. The formed matrix shall meet the following performance requirements:

1. The material, when mixed into a liquid slurry, shall pass a free liquid quality control test, (liquids separate from fibrous solids, no greater than 25 mm in 1 minute's time), as measured on a standard test board.
2. The matrix, when dry shall not dissolve or disperse upon re-wetting.
3. The matrix, shall have no holes > 1mm in size.
4. The matrix shall have no gaps between the product and the soil.
5. The matrix shall have a minimum water holding capacity of 1000g/100g, (1.2gal/LB matrix).
6. The matrix shall have no germination or growth inhibiting components, and shall not form a crust which inhibits water infiltration.
7. The matrix shall be comprised of material which are 100% biodegradable and 100% beneficial to plant growth.

The Bonded Fibre Matrix, (BFM), shall be installed by a contractor certified by the manufacturer and trained in the proper procedures for mixing and application of the product. The BFM shall be mixed according to manufacturer's recommendations, and contractor shall demonstrate "free liquid" test to inspector upon request. Bonded Fibre Matrix shall be spray applied at a minimum rate of 660 kg/ha,

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utilizing standard hydraulically seeding equipment, in successive layers as to achieve 100% coverage of all exposed soil. The BFM shall not be applied over standing water, nor immediately before, during, or immediately after rainfall. The matrix shall have opportunity to dry for 24 hours after installation, with exceptions approved by the engineer.

636.04 BASIS OF PAYMENT

Payment at the contract price for this item shall be compensation in full for all labour, materials and equipment-use required to supply and install the erosion control blanket including all anchoring, application of lime for hydroseeding as per Section 635 of the Specifications Book and hydroseeding as per Section 632 of the Specifications Book. Measurement for payment shall be by means of the total surface area protected within the limits as staked by the engineer measured in square metres rounded to one decimal place.