

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

- .1 Comply with requirements of Division 1.

1.2 SUBMITTALS

- .1 Samples.
 - .1 Submit samples in accordance with Section 01 33 00 - Submittal Procedures.
 - .2 Submit: Sod for type specified.
- .2 Install approved samples in one square metre mock-ups and maintain in accordance with maintenance requirements during establishment period.
 - .1 Obtain approval of samples by Departmental Representative.

1.3 QUALITY ASSURANCE

- .1 Perform Work in accordance with the site specific Erosion and Sedimentation Control Plan (ESC) as specified at Section 01 57 14.
- .2 Test Reports: certified test reports showing compliance with specified performance characteristics and physical properties.
- .3 Certificates: product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements.

1.4 SCHEDULING

- .1 Schedule sod laying to coincide with preparation of soil surface.
- .2 Schedule sod installation when frost is not present in ground.
- .3 No phosphates to be used in fertilizers.

1.5 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate and recycle waste materials in accordance with Section 01 74 21 – Construction/Demolition Waste Management and Disposal.
- .2 Divert unused fertilizer from landfill to official hazardous material collections site approved by Departmental Representative.
- .3 Do not dispose of unused fertilizer into sewer systems, into lakes, streams, onto ground or in locations where it will pose health or environmental hazard.

PART 2 - PRODUCTS

2.1 MATERIALS

- .1 Number One Turf Grass Nursery Sod: sod that has been especially sown and cultivated in nursery fields as turf grass crop.
 - .1 Turf Grass Nursery Sod types:
 - .1 Number One Kentucky Bluegrass Sod - Fescue Sod: Nursery Sod grown solely from seed mixture of cultivars of Kentucky Bluegrass and Chewing Fescue or Creeping Red Fescue, containing not less than 40% Kentucky Bluegrass cultivars and 30% Chewing Fescue or Creeping Red Fescue cultivars.
 - .2 Number One Named Cultivars: Nursery Sod grown from certified seed.
 - .3 Mow sod at height directed by Departmental Representative within 36 hours prior to lifting, and remove clippings
- .2 Sod establishment support:
 - .1 Wooden pegs: 17 mm x 8 mm x 200 mm.
- .3 Water:
 - .1 Supplied by Contractor at designated source.
- .4 Fertilizer:
 - .1 To Canada "Fertilizers Act" and "Fertilizers Regulations".
 - .2 Complete, synthetic, slow release with 65 % of nitrogen content in water-insoluble form.

2.2 SOURCE QUALITY CONTROL

- .1 Obtain approval from Departmental Representative of sod at source.
- .2 When proposed source of sod is approved, use no other source without written authorization from Departmental Representative.

PART 3 - EXECUTION

3.1 PREPARATION

- .1 Verify that grades are correct and prepared in accordance with Section 32 91 19.13 - Topsoil Placement and Grading. If discrepancies occur, notify Departmental Representative and do not commence work until instructed by Departmental Representative.
- .2 Do not perform work under adverse field conditions such as frozen soil, excessively wet soil or soil covered with snow, ice, or standing water.
- .3 Fine grade surface free of humps and hollows to smooth, even grade, to contours and elevations indicated, to tolerance of plus or minus 8 mm for Turf Grass Nursery, surface to drain naturally.

- .4 Remove and dispose of weeds; debris; stones 25 mm in diameter and larger; soil contaminated by oil, gasoline and other deleterious materials; off site.

3.2 SOD PLACEMENT

- .1 Lay sod within 24 hours of being lifted if air temperature exceeds 20 degrees C.
- .2 Lay sod sections in rows, joints staggered. Butt sections closely without overlapping or leaving gaps between sections. Cut out irregular or thin sections with sharp implements.
- .3 Roll sod, providing close contact between sod and soil by light rolling. Use of heavy roller to correct irregularities in grade is not permitted.

3.3 SOD PLACEMENT ON SLOPES AND PEGGING

- .1 Start laying sod at bottom of slopes.
- .2 Peg sod on slopes steeper than 3 horizontal to 1 vertical, and within 1 m of drainage swales and ditches, or as indicated, to following pattern:
 - .1 100 mm below top edge at 200 mm on centre for first sod sections along contours of slopes.
 - .2 Not less than 3-6 pegs per square metre.
 - .3 Not less than 6-9 pegs per square metre in drainage structures.
 - .4 Drive pegs to 20 mm above soil surface of sod sections.

3.4 FERTILIZING PROGRAM

- .1 Fertilizer:
 - .1 Complete commercial synthetic fertilizer with minimum 65% insoluble nitrogen – No phosphate fertilizers to be used.
 - .2 Formulation ratio: 1:4:4
 - .3 Bonemeal: finely ground with minimum analysis of 20% phosphoric acid. Ratio for 1 year maintenance applications:
 - .4

Date	Rate	Ratio
May	N @ 60 kg/ha	3:0:0
June	N @ 60 kg/ha	3:1:3
July	N @ 60 kg/ha	3:1:3
Sept	N @ 25 kg/ha	1:2:3
October	N @ 25 kg/ha	1:1:6
- (Dates are adjustable depending upon construction schedule).

3.5 MAINTENANCE DURING ESTABLISHMENT PERIOD

- .1 Perform following operations from time of installation until acceptance.
- .2 Water sodded areas in sufficient quantities and at frequency required to maintain optimum soil moisture condition to depth of 75 mm to 100 mm.
- .3 Maintain sodded areas weed free 95%. Fertilize areas as per fertilizing program. Spread half of required amount of fertilizer in one direction and remainder at right angles and water in well.

3.6 ACCEPTANCE

- .1 Turf Grass Nursery Sod areas will be accepted by Departmental Representative provided that:
 - .1 Sodded areas are properly established.
 - .2 Sod is free of bare and dead spots.
 - .3 No surface soil is visible from height of 1500 mm when grass has been cut to height of 70 mm.
- .2 Areas sodded in fall will be accepted in following spring one month after start of growing season provided acceptance conditions are fulfilled.

3.7 MAINTENANCE DURING WARRANTY PERIOD

- .1 Perform following operations from time of acceptance until end of warranty period.
- .2 Repair and re-sod dead or bare spots to satisfaction of Departmental Representative.

3.8 CLEANING

- .1 Upon completion of installation, remove surplus materials, rubbish, tools and equipment barriers.

END OF SECTION