1.0 **GENERAL**

1.1 **Scope**

.1 This guideline addresses the materials, methodology and services necessary for complete installation of seeded or hydro-seeded lawns and meadows, which includes the control of noxious and pernicious weeds within seeded lawns and meadows.

1.2 **Related Work**

.1 Related Work in Other Sections:

.1 Section 32 80 00 Irrigation
.2 Section 32 91 00 Planting Preparation
.3 Section 32 93 00 Plants

1.3 **Pertinent Standards and Legislation**

.1 Conform to the requirements of the latest editions of the following standards and legislation:

.1 **Canadian Landscape Standard – Current Edition**
.2 British Columbia Standard for Turfgrass Sod
.3 British Columbia Weed Control Act
.4 Canada Seed and Fertilizer Act
.5 Canada Pest Control Products Act

1.4 **Submittals**

.1 Provide Head Landscape Technologist (UBC Municipal Services) with guaranteed analysis of the seed mixtures and specification data of seed prior to installation.

1.5 **Inspections and Approvals**

.1 Notify Head Landscape Technologist (UBC Municipal Services) and/or Landscape Architect (UBC Municipal Services) at least forty-eight (48) hours before seeding or hydro-seeding for inspection of finished grades. All lawn and grass installations are subject to inspection and may be rejected for failure to comply with contract specifications at any time until Total Performance.

.2 Notify Head Landscape Technologist (UBC Municipal Services) at least forty-eight (48) hours before final review of seeded lawns and meadows is required. For release from the Contract, all lawns and meadows must be alive and in a healthy, satisfactory growing condition at the time of inspection.

2.0 **MATERIALS AND DESIGN REQUIREMENTS**

2.1 **General**

1. Avoid creation of convoluted lawn or meadow areas that are less than 2 m wide, end in very narrow angles, punctuated with obstacles, or are oddly shaped that make servicing with riding mowers impossible. Boulevards or medians 2 m wide or less must be planted.

2.2 **Approved Equals**

.1 All seed mixes and hydro-mulches as specified or pre-approved equals. Contact Head Landscape Technologist (UBC Municipal Services).
2.3 Warranty

.1 All workmanship and materials covered under Work of this Section shall be warrantied for a period of one (1) full year from the date of Substantial Performance.

2.4 Materials

.1 Lawn and Meadow Seed:

1. Seed mixtures shall be suited to the climate, growing medium, site orientation, sun exposure, terrain, establishment and lawn class designation or intended use under which they are to be grown.

2. Selections of seed mixtures should take into account the current infestations and impacts of Chaffer Beetle and associated damages by crows and raccoons. Designing with alternate groundcover or planting should also be considered. Consult with authorities, seed suppliers and Head Landscape Technologist (UBC Municipal Services) as required.

3. Seed shall have a minimum germination rate of 75% and minimum purity of 97% except where otherwise required by the professional selecting such seed.

4. Professional consultation is required in selecting or designing special purpose mixes for naturalizing or restoration purposes.

5. The seed mixture shall be mixed, labeled and supplied by a recognized seed supplier. Labels shall include complete details including species names germination percentages, purity of analysis, year of production, and contact info for supplier.

2.5 Hydro-Seeding Materials

.1 Hydro-mulch shall contain no growth or germination inhibiting factors, be dry, be free of invasive and other foreign materials.

2.6 Subgrade Preparation and Finishing

.1 Obtain approval of Head Landscape Technologist (UBC Municipal Services) of subgrade and growing medium prior to seeding of lawns or grasses. Ensure that growing medium is placed to required depths and tolerances as specified and detailed in the Contract Documents and spread evenly over the approved subgrade. Ensure the growing medium is firm against footprints, loose in texture and free of all stones, roots branches etc. as required under Section 32 91 00 Planting Preparation.

.2 Ensure finish grade surfaces are tamped with roller before seeding, and finish grades are congruent with project drawings as specified.

.3 Grades:

1. Lawns and grass areas must be graded at slopes safe for mowing by maintenance crews and safe for all other Campus users. Maximum allowable slope for lawns is 5:1. Slopes over 5:1 are only permitted where pre-approved by Landscape Architect (UBC Municipal Services). (See also Section 31 22 00 Grading, 1.1.1)

2. Crown or slope for surface drainage and eliminate all low spots or depressions.
2.7 Seeding

.1 Scheduling:
   .1 Seeding should be carried out during periods when seasonal conditions are likely to ensure successful germination and continued growth of all species in seed in the grass mix.
   .2 All seeding should be conducted during calm weather, and shall be done on soil that is free of ground frost, snow, and standing water.
   .3 Hydro-seeding shall not be carried out during periods of moderate to heavy rainfall.

2.8 Hydro-Seeding

.1 Temporary fencing, barriers, barricades or signage shall be provided and maintained to protect newly seeded areas from damage including but not limited to, erosion, pedestrian and vehicular traffic or wildlife.

2.9 Maintenance

.1 Refer to Section 32 01 90 Operation and Maintenance of Planting for complete maintenance guidelines.

.2 The maintenance period begins at the time lawns and meadows are planted and continues for 55 days from the date of Substantial Performance.

.3 Maintenance shall consist of all measures necessary to keep grass healthy, in a vigorous growing condition and well rooted into the underlying soil. Maintenance shall include, but shall not be limited to the following:

.4 Maintenance of Lawn Areas:

   .1 Mowing: Once fully established, mow out at regular intervals as required to maintain grass at a standard maximum height of 60mm (2-1/2”). Not more than 1/3 of the blade shall be cut at any one mowing. Heavy clippings shall be removed immediately after mowing and trimming.

   .2 All sodded areas shall be adequately protected with warning signs and fencing until lawn establishment and acceptance by Municipal Services. Fencing shall be maintained in good condition to provide a continuous barrier until Acceptance.

   .3 Edging / Trimming: Absolutely do not use line trimmers around trees and shrubs. Sprinkler heads shall be trimmed to clear as often as necessary to keep them operating properly. The hard surface areas adjacent to the lawns shall be swept and cleaned after each operation.

   .4 Rolling shall be carried out when required to remove any minor depressions or irregularities.

   .5 Weed control shall be carried out before the density of weeds reaches 10 broadleaf weeds or 50 annual weedy grasses per 37 sq. M. (400 square feet).

   .6 Weed control shall reduce the density of weeds to zero or near zero as dictated by intended use and lawn class (see Canadian Landscape Standard).
.5 Maintenance of Meadow Areas:

.1 Weed Control: the use of toxic pesticides for cosmetic purposes has been suspended on UBC Campus. Manual weed control is the preferred method and may be the only permitted methodology. Remove and replace significantly affected lawn and meadow areas. Consult with Head Landscape Technologist (UBC Municipal Services) for approval of any alternative organic weed control substances or methodologies.

***END OF SECTION***