5.20 Landscaping & Exterior Furniture

5.20.1 Landscaping

5.20.1.1 Tree and Shrub Preservation

1. Existing plant material to be retained, including plants that may be affected by construction activities both within and outside the actual project limits, shall meet the protection and maintenance requirements specified in this section. Such plant and root systems shall be protected from damage, compaction and contamination resulting from construction.

2. All deciduous trees within the work zone shall be protected with wood plank tree protection. Maintain tree protection during construction period. Remove only when risk of damage has passed and upon approval by the University’s representative.

3. Tree protection shall be 28 x 89 mm wood planks, minimum 1500 mm long, secured with two bands of metal strapping. Place wood planks around base of trunk at 150 mm maximum on centre to provide full protection from impact and abrasion. Do not puncture or damage bark with wood planks or fasteners. Arrange wood planks around branches and other irregularities to provide protection without damaging tree.

4. Prevent damage to trees and shrubs in lawn areas or planting beds that are to remain by erecting a snow fence barrier to provide a continuous barricade between designated plant materials and the work area prior to construction. Place snow fence at drip-line of trees unless inadequate to provide a 1.5 m buffer zone between the fence and limit of construction. Drip-line is defined as ground surface directly beneath tips of outermost branches, at least 3 m radius from the tree trunk or larger as directed by the University’s representative. With the permission of the University’s representative, the fence may be placed within drip-line of tree in order to provide a buffer zone of up to 1.5 m, but in no case less than 1 m from the outer circumference of the trunk.

5. Do not operate, park, repair or refuel equipment, do not store construction materials or stockpile any earth materials within barricades or within 2 m of the outer edge of the drip line of a tree. Do not cause flooding or deposition of sediment where trees are located. Maintain barricades during construction operations, and remove on completion as directed by the University’s representative.

6. Snow fence barrier shall be standard plastic fencing or approved equivalent in good condition, 1.2 m high, supported vertically by steel T-bars, and horizontally at the top of the fencing by 39 x 89 mm wood railing, bolted to the steel T-bars. T-bars are to be straight, 1.8 m long. Drive T-bars vertically 60 cm into ground, spaced maximum 4.5 m apart. Wire snow fence at 3 places to each T-bar. Stretch snow fence to prevent sag.

5.20.1.2 Tree and Shrub Planting

1. Tree planters for a single specimen in paved areas shall have a minimum inside dimension of 3.05 m (10 ft.). The minimum clearance from adjacent paving and structures (e.g., steps, curbs, walls, fences, and buildings) shall be 3.05 m (10 ft.) or 50% of the average mature spread for trees, and 900 mm (3 ft.) or 50% of the average mature spread for shrubs, whichever is the greater measurement. Departure from these minimum clearance requirements must have the approval of the University before installation begins.
2. Planting mixture should be 3 parts topsoil, 1 part sterilized mushroom compost, 1 part peat moss, free of weeds, roots, stones, and similar material. It should be placed in layers of not more than 150 mm at a time.

3. Installation requirements for subgrade, plant pit, planting soil mixture, root ball, mulch, finish grade around tree, staking, trunk wrap, and pruning shall be as shown on page 10.

4. Installation requirements for subgrade, base of plant pit, planting soil mixture, root ball, mulch, and pruning shall be as shown on page 11.

5. Planting should be inspected by the project manager at all stages of installation.

5.20.1.3 Subgrade Preparation and Finish Grading

1. Subgrade preparation is required under all areas designated to receive landscaping as shown on drawings.

2. Subgrade should be free of rocks, weeds, roots and other debris. Foreign material shall not be buried beneath areas to be landscaped.

3. Completed subgrade should be even and have positive drainage. Subgrade should be scarified to a minimum 100 mm (4 in.) depth. Subgrade shall be approved by project manager before topsoil placement begins.

4. Topsoil mixture shall be 3 parts Grade 1 topsoil, 1 part sterilized mushroom compost, 1 part peat moss. Mixture should avoid being excessively wet and should be free of weeds, roots, rocks and other debris.

5. Place topsoil in dry weather, on dry unfrozen grade to obtain minimum depth after settlement of 100 mm (4 in.) or depth specified in planting details. Allow settling to occur for 1 week or roll to facilitate settling. Top layer should be loosely raked to allow for rooting of seed or sod. Surface should be smooth, uniform and sufficiently firm to prevent sinkage pockets when irrigated. Surface should fall smoothly to catch basin rim and finish flush, and ensure positive drainage away from building and sidewalks.

6. Project manager should be present for inspection at all stages of grading.

5.20.1.4 Seeding

1. <under development Feb.2010>

5.20.1.5 Sodding

1. <under development Feb.2010>

5.20.2 Exterior Furniture

5.20.2.1 Benches

1. <under development Feb.2010>
5.20.2.2 Trash Receptacles
1. <under development Feb.2010>

5.20.2.3 Precast Free-Standing Planters
1. <under development Feb.2010>

5.20.2.4 Precast Tree Grates
1. <under development Feb.2010>

5.20.2.5 Wood Fences and Gates
1. Wood fence should be sturdy, durable, attractive and low maintenance.
2. Design should discourage climbing. Footing and joint detailing should minimize damage from moisture and impact from vehicles and maintenance equipment.
3. Lumber shall be pressure-treated. Colour and finish should be compatible with the site and architectural character. Apply weatherproof sealant per manufacturer’s specifications.
4. Hardware should be rustproof and tamper-resistant.

5.20.2.6 Commemorative Displays
1. <under development Feb.2010>

5.20.3 Misc. Landscape Elements

5.20.3.1 Lighting
1. <under development Feb.2010>

5.20.3.2 Pre-made Pavers
1. <under development Feb.2010>