

# LANDSCAPE GUIDELINES

# FOR DEVELOPMENT WITHIN THE

# CITY OF KAMLOOPS



	La	ndscape Guidelines for Development within the City of Kamloops	
1.0	INTRO 1.1 1.2 1.3 1.4	DDUCTION Objective Direction Scope Executive Summary	1 1 1
2.0	APPR	OVAL AUTHORITY	2
3.0	PLAN 3.1 3.2 3.3 3.4	APPROVALS Approval Procedure Professional Design Input Underground Irrigation Revision to the Approved Plan	3 3 3
4.0	SECU	RITY BONDING REQUIREMENTS	4
5.0	LAND	SCAPE PLAN REQUIREMENTS	4
6.0	LAND 6.1 6.2	SCAPE INSPECTIONS Inspection Procedure Release of Security Bonding	5
7.0	OWNE 7.1 7.2	ER/CONTRACTOR/CONSULTANT CONTRACTUAL ARRANGEMENTS .	6
8.0	REVIE	W AND INSPECTIONS INVOLVING CITY-OWNED PROPERTY	6
9.0	GENE 9.1 9.2	RAL GUIDELINES FOR LANDSCAPE DESIGN Commercial, Industrial and Institutional Requirements Multiple Family Development Requirements	7
10.0	TECH 10.1 10.2 10.3 10.4 10.6 10.7	NICAL GUIDELINES FOR SITE LANDSCAPING	8 9 9 0

# Appendices:

Appendix 'A' - Recommended Plant Materials	12
Appendix 'B' - Planting Guide	
Appendix 'C' - British Columbia Society of Landscape Architects Guidelines	
for Use of Schedules L-1, L-2, L-3	20

# 1.0 INTRODUCTION

## 1.1 <u>Objective</u>

The Development and Engineering Services Department has prepared this document in order to assist developers in proceeding through the landscape approval process by providing an understanding of the quality level of work expected and by providing information regarding the design and completion of the landscape project.

## 1.2 <u>Direction</u>

It is the intent of the Development and Engineering Services Department to promote the benefits of a planned landscape design by establishing landscape guideline criteria that place emphasis on the practicality, aesthetics and ease of maintenance of a project.

Components of a landscape design such as site layout, grading, selection of plant material compatible with the local climate, provision of suitable topsoil and the design of underground irrigation systems are all aspects which can reduce expensive maintenance and replacement of materials, when given due consideration during the initial design stage.

# 1.3 <u>Scope</u>

The text of this document outlines the design and installation guidelines for commercial, industrial, institutional or multiple family property designated as such in the City of Kamloops Zoning By-law No. 5-1-2001, as amended from time to time.

#### 1.4 Executive Summary

The following is a summary of the guidelines required for landscape development within the City:

#### Boulevards

- Landscaping and maintenance of the public boulevard is the responsibility of the adjacent property owner.
- Boulevard landscaping should be consistent along the street frontage and a logical extension of the landscaping on the adjoining property.
- Landscape materials should be hardy and should provide visual interest throughout the seasons.

#### Walkways

- Lighting or paving can be used to clearly identify walkways.
- Walkways are necessary to provide convenient access to buildings from sidewalks.
- Minimizing grade changes and curb cuts as well as providing ramps and railings will ensure safe and convenient access for persons with disabilities.

# Amenity Areas

- Amenity areas are required for all multi-family projects.
- Amenity areas may be either outdoor landscaped areas or indoor building space.
- Landscaped amenity areas provide space for active and passive recreation and may include: walkways, seating areas, playgrounds, games courts and picnic areas.
- Amenity areas enhance building appeal and function.
- Amenity areas should account for 15 per cent of the total value of the landscaping

#### Irrigation

- Landscaping for new development must be serviced by underground irrigation.
- A regular supply of water will ensure plants become well established and remain healthy.
- An automatic underground irrigation system is a good long-term investment that is easily installed in new development projects.
- Consider following xeriscape principles to reduce water consumption when planning landscaping.

#### Fencing and Screening

- Landscaped areas can be used to screen storage and parking areas from the street.
- Fence height or landscaped areas should not obstruct visibility for vehicles or pedestrians.
- Standards for fence heights or screens are provided in the Zoning By-law.
- Garbage bins must be screened by enclosures (landscaping is not considered an enclosure).

# 2.0 APPROVAL AUTHORITY

The City of Kamloops Zoning By-law No. 5-1-2001, as amended from time to time, provides the Director of Development Services with the regulatory authority to approve landscape development plans.

The Planning and Development Division of the Development and Engineering Services Department, under the guidance of the Director of Development and Engineering Services, shall perform the approval process and shall be considered the approving authority.

## 3.0 PLAN APPROVALS

#### 3.1 Approval Procedure

To obtain approval for a landscape plan, the following procedure must be completed:

- a) Five copies of a detailed landscape plan are submitted to the Development and Engineering Services Department.
- b) The Development and Engineering Services Department shall distribute the submitted plans as follows:
  - i) Engineering Development Section Engineering Development Technician;
  - ii) Development and Engineering Services Department/Building Inspection Division - Building Inspector;
  - iii) Development and Engineering Services Department/Planning and Development Division Planning Landscape Inspector;
  - iv) Development and Engineering Services Department/Planning and Development Division Planning Technician II; and
  - v) Parks, Recreation, and Cultural Services Department Parks Horticulture Foreman.
- c) If the plan is not approved, the Development and Engineering Services
   Department shall notify the applicant via letter of the deficiencies of the plan.
   Submission of five copies of the revised plan will be required for further review.
- d) If the plan is approved, the Development and Engineering Services Department shall notify the applicant via letter of the acceptance of such.
- e) After the plan has been approved, twelve colour copies on letter sized paper must be provided for all Development Permit applications to be included in the Development Services report to City Council.

#### 3.2 Professional Design Input

The approving authority reserves the right to require a developer to submit landscape plans, including Schedules L-1 and L-2, bearing the stamp of a member in good standing of the British Columbia Society of Landscape Architects.

#### 3.3 Underground Irrigation

For properties where new development occurs, the landscape plan must include the specifications for a designed underground irrigation system. Automatic control devices for these systems are encouraged.

Where an existing development is to be improved, the approving authority shall determine the suitability for underground irrigation on a site specific basis.

When connecting to a potable water supply, all underground irrigation systems must have a backflow prevention device installed on the main connection line to the BC Plumbing Code and City of Kamloops specifications.

### 3.4 Revision to the Approved Plan

It is beneficial for both the landscape contractor and the owner of a development property to ensure that any proposed revisions to an approved landscape plan are submitted and approved prior to the institution of the revisions. Revisions must be approved by the projects Landscape Architect and the approving authority. Unnecessary delay and expense can be avoided by ensuring early and adequate communication with the approving authority.

# 4.0 SECURITY BONDING REQUIREMENTS

When a landscape plan has been approved by the Director of the Development and Engineering Services Department, the developer will be required to provide a landscape bond for 125 per cent of the estimated value of the landscaping in the form of either a cheque or an irrevocable bank letter of guarantee for a time period acceptable to the approving authority. The estimated value of the landscaping will be determined by the Director of Development Services. Should the developer and the Director of Development Services not agree on such an estimate, then the developer must provide an estimate acceptable to the Director of Development Services which shall thereafter be used as the estimated value of the landscaping. Landscape estimates should include all materials, labour, and applicable taxes.

# 5.0 LANDSCAPE PLAN REQUIREMENTS

The following is a summary of information required on landscape plans submitted for approval:

- a) Bear the stamp of a registered Landscape Architect in good standing with the British Columbia Society of Landscape Architects.
- b) The landscape plan is to be prepared to a suitable metric scale which must be clearly identified.
- c) A north arrow must be shown.
- d) Total area of on-site landscaping in square metres must be indicated.
- e) All existing trees, shrubs, and any other existing natural features must be accurately located on the plan. Where removal of any of the above features is requested, identification of such must be included.
- f) Accurate identification and location of existing and proposed buildings and other structures, parking areas, retaining walls, sidewalks, walkways, steps, patios, fences, access driveways, garbage storage areas and other types of storage areas, amenity areas, etc. must be provided.
- g) All hard surface materials must be indicated.
- h) All existing property lines, including clearly defined boundaries, right-of-ways and existing and future roads are to be indicated.
- i) Utility service lines, whether overhead or underground, located within proposed planter beds or tree areas are to be identified.

- j) Existing and proposed site elevations are to be shown regardless of the extent of site grading. This information can be shown by the use of contours and/or spot elevations.
- k) A plant material list identifying common and botanical plant names, initial and mature plant sizes and callipers, quantities of each species and proposed plant spacing must be provided on the plan.
- I) Planting details and specifications are to be indicated.
- m) Edging materials are to be identified.
- n) Details of retaining walls, fences and amenity areas are required.
- o) Techniques required to protect existing vegetation during site development are to be detailed.
- p) Design criteria, system layout and specifications for underground irrigation systems must be submitted with the overall landscape plan.
- q) Detailed irrigation plans.
- r) Length of maintenance and plant guarantee periods are to be indicated.

#### 6.0 LANDSCAPE INSPECTIONS

#### 6.1 Inspection Procedure

It is the developer's responsibility to notify the approving authority at the following phases of a landscape project in order to accommodate inspection of the work:

- a) after the sub grade has been prepared, but before the placement of topsoil, sod, plant material, etc.
- b) upon final completion of the landscape project and commencement of maintenance period(s).

Should any phase of the landscape project not receive acceptance, the developer shall be notified in writing of the remaining deficiencies and these deficiencies must be corrected to the satisfaction of the approving authority prior to the commencement of subsequent phases of the project.

The approving authority will not conduct a final inspection without receiving a Schedule L-3 bearing the professional seal of the project Landscape Architect.

#### 6.2 Release of Security Bonding

Release of the landscape bonding shall be facilitated upon approval of the final inspection phase. Security shall be held back for work that remains incomplete. The remaining 5 per cent of the security shall be released upon approval of the maintenance inspection.

In the event that seasonal conditions preclude the completion of a landscape project, the developer may request the release of up to 40 per cent of the security bond provided that a minimum of 50 per cent of the project has been completed. Release of a portion of the security bond in this manner shall be approved on a site specific basis only.

A portion of the security will be retained for all projects utilizing hydroseeding or similar treatment until such time as the grass coverage of the seeded area is deemed acceptable to the approving authority.

# 7.0 OWNER/CONTRACTOR/CONSULTANT CONTRACTUAL ARRANGEMENTS

# 7.1 <u>Contract</u>

To ensure the mutually acceptable completion of a landscape project, it is recommended that the owner of a property, where landscaping is to occur, enter into a contract with the consultant and/or the contractor in order to ensure that the responsibilities of both parties for the following items are clearly identified:

- a) Inspection for adequacy of growing medium, plant material, site grading, drainage, mulch and fertilizing techniques.
- b) Terms of acceptance.
- c) Terms of takeover by the owner.
- d) Establishment of a guarantee period.
- e) Maintenance requirements.
- f) Payment requirements.
- 7.2 Insurance

It is recommended that the contractor provide, maintain and pay for insurance in the following categories:

- a) Comprehensive General Liability Insurance coverage protecting all necessary parties against personal injury (including death) and property damage in an amount not less than \$1,000,000.00 inclusive for any single occurrence.
- b) Automobile Insurance coverage protecting all necessary parties against personal injury (including death) and property damage in an amount not less than \$1,000,000.00 inclusive for any single occurrence.

# 8.0 REVIEW AND INSPECTIONS INVOLVING CITY-OWNED PROPERTY

a) The Parks, Recreation, and Cultural Services Department representatives must be given an opportunity to review all plans up to and including final detailed landscape and irrigation plans.

6

- b) The Parks and Recreation Services Department representatives should be made aware of the landscape contractor's qualifications and construction schedule after the award of work. The landscape contractor must agree to periodic inspections by representatives of the Parks and Recreation Services Department to ensure work on City-owned property is being undertaken as per landscape drawings. Any concerns regarding workmanship will be coordinated through the Planning Landscape Inspector.
- c) The representative of the Parks and Recreation Services Department and the Planning Landscape Inspector will meet for a final site inspection with the landscape contractor at a time and date established by the Planning Landscape Inspector.
- d) Upon a final inspection and completion of any deficiencies, a date for the maintenance and plant material guarantee period will be established and agreed upon by the Planning Landscape Inspector, representatives of the Parks and Recreation Services Department, the landscape contractor and the developer. These dates shall be noted in writing.

#### 9.0 GENERAL GUIDELINES FOR LANDSCAPE DESIGN

#### 9.1 <u>Commercial, Industrial and Institutional Requirements</u>

Prior to the approval of landscape plans for the above noted development proposals, the following conditions are to be met to the satisfaction of the Director of Development Services:

- a) Adequate landscape screening is required for all exposed parking, service, storage and garbage areas, service kiosks and mechanical equipment.
- b) Internal vehicular routes and parking areas are to be defined by raised concrete curbing.
- c) Pedestrian walkways to building entrances must be provided from parking areas, municipal sidewalks (if applicable), garbage and storage areas. If the developer wishes to construct a walkway to an adjacent park path system, approval must first be obtained in writing from the Director of Development Services.
- d) Walkways and ramps for the handicapped must be provided in accordance with Part 3.8 of the British Columbia Building Code.
- e) Vehicular access must be defined by landscape areas.

#### 9.2 <u>Multiple Family Development Requirements</u>

Prior to the approval of a landscape plan for the development proposals, the following conditions are to be met to the satisfaction of the Director of Development Services:

 Adequate landscape screening is required for all exposed parking, service, storage and garbage areas, service kiosks and mechanical equipment. Landscape islands that screen parking areas are to be a minimum of 1.5 m in width. Where trees are provided, they are to be a minimum 3" calliper when installed.

- b) Internal vehicular routes and parking areas must be defined by raised concrete curbing.
- c) Pedestrian walkways to building entrances must be provided from parking area, municipal sidewalks (if applicable), storage, garbage and amenity areas.
- d) Walkways and ramps for the handicapped must be provided in accordance with Part 3.8 of the British Columbia Building Code.
- e) Vehicular access must be defined by landscape areas.
- f) Adult and child recreational facilities must be identified, located and fully dimensioned on the site plan. The recreational facilities must be located as remotely as possible and screened from ground floor units, privacy areas of adjacent properties, roadway and parking areas. The required area for recreational facilities must comply with the requirements outlined in City of Kamloops Zoning By law No. 5-1-2001.
- g) Patios are to be a minimum 9 m5 (100 sq. ft.) in area. Privacy screening for each patio area must be provided.
- h) Landscaping must incorporate the principles of landscape design stipulated in the Multiple Family Development Permit Guidelines.

#### 10.0 TECHNICAL GUIDELINES FOR SITE LANDSCAPING

10.1 <u>Site Preparation</u>

All stumps and/or visible surface roots should be removed and cleared and grubbed material shall be stockpiled in a location separate from the growing medium stockpiles.

Trees or tree groupings to be protected should be clearly and accurately identified by flagging on site before and during clearing and grubbing operations and should be preserved by the use of an approved form of snow fencing erected beyond the 'drip-line' of the vegetation allocated for protection.

#### 10.2 Grading

The preparation of the sub-grade by rough grading, filling and compacting provides a base that will allow the placing of growing medium to the specified depth.

Debris, roots, branches, stones, building materials, contaminated sub-soil, visible weeds and anything else that may interfere with the proper growth and development of the finished landscaping should be removed.

The sub-grade should be prepared to a consistent 80 85 per cent Standard Proctor Density. Fill material is to be placed in 250 mm (10") lifts and compacted to 80 85 per cent S.P.D. Areas of excessive compaction are to be tilled to a depth of 150 mm (6") and compacted to 80 85 per cent S.P.D.

All sub grade should be scarified to a minimum depth of 150 mm (6") immediately before placing growing medium. Grade transitions of sub grade should be smooth and even and shall be such that ponding cannot occur on the sub grade surface.

Minimum and maximum gradients for landscaped areas are as follows:

Lawns and grass	2% min.	33% max.
Planter areas	2% min.	50% max.

#### 10.3 Drainage

In areas where depressions occur and/or where hard surfaces are proposed, such as parking lots, adequate drainage, collection and disposal facilities must be provided. These facilities shall be provided for the protection of dwellings, other improvements and usable lot areas from water damage, flooding and erosion.

All drainage systems are to be designed, installed and maintained in a manner as to prevent siltation and must comply with the specifications and regulations of the current edition of the BC Plumbing Code. Approval for the proposed systems shall be under the authority of the City of Kamloops, Building Division.

Drainage swales and gutters should have a minimum slope of 0.5 per cent and have adequate depth and width to accommodate maximum designed runoff flows without overflow. Swales should be grassed or paved as appropriate to avoid potential erosion.

#### 10.4 Growing Medium

Topsoil should be friable loam, neither heavy clay nor of a very light sandy nature. It must be clear of roots, sod and stones in excess of 50 mm 0/(2") and should have a pH range of 5.5 to 7.5. Topsoil should be free of crabgrass, couch grass, noxious weeds or seeds or parts thereof.

On-site native organic topsoil may be used, provided it meets the standard for topsoil noted above. Care is to be taken to ensure that no sub-soil is mixed into the organic material when stripping and stockpiling occurs. Peat moss, sand, manure, and fertilizer can be added to topsoil deficient in nutritive characteristics. Manure should be well rotted, crumbly and contain not more than 40 per cent sawdust, straw or shavings.

Topsoil should not be handled or spread in a wet or frozen condition.

Recommended minimum depths of topsoil are:

Grassed Areas	150 mm (6")
Flower Beds	300 mm (12")
Shrub Beds	450 mm (18")
Trees	150 mm (6") completely around root ball perimeter.

Topsoil should be fine graded after placing to the finished elevations and contours required. Rough spots and low areas are to be eliminated to ensure positive surface drainage. The surface should be finished smooth, uniform and firm against deep foot printing with a fine loose surface texture.

#### 10.5 <u>Seeding and Sodding</u>

Prior to seeding or sodding, the required fertilizer should be applied to and worked into the topsoil medium by raking at a rate specified by the manufacturer. A soil test is recommended to determine the type of fertilizer required.

Sod should be laid immediately upon delivery. Sod shall be laid with staggered joints, placed tightly together so that no joints are visible and no pieces overlap. Sod shall be cut a minimum 20 mm (34") in thickness to a maximum of 38 mm (12") in thickness and should not be dried out or overheated.

On any steep slope, sod should be laid at right angles to the slope and every row shall be pegged with wooden pegs, driven flush with the sod, at intervals not more than 0.6 m (2 ft.). Placement of sod on banks exceeding 33 per cent in gradient shall not be permitted.

New sod should be protected from foot traffic during laying and only sharp tools are to be used when cutting sod. All proposed sod should be disease free, relatively void of broad leafed weeds, couch grass, crabgrass and other weed grasses, stones and other debris. The sodded area should be rolled or tamped to provide sufficient pressure to ensure a good bond between sod and growing medium. No sod should be placed on frozen ground.

Seeded grass should consist of an approved grass seed mixture and shall be applied by means of an approved seeder at a rate recommended by the supplier. Seeding should be done in two applications at right angles to each other.

Mulch may be applied with the seed or immediately following seeding with a hydraulic seeder. The mulch should be applied to form an even, uniform mat over the seeded area and no area should be seeded in excess of that which can be mulched on the same day.

Hydraulic seeding shall be performed with a hydraulic seeder/mulcher and should be done with care to ensure that the solution does not come in contact with the foliage of trees, shrubs, and other vegetation. Any overspray or damage that occurs during hydraulic seeding should be promptly rectified. Wildflower seed, if required, should be applied following grass hydroseeding.

#### 10.6 Plant Material and Planting

The selection and spacing of proposed plant material should conform to the specifications listed in Appendix 'A'.

Plants are to be true to name, type and form and representative of their species or variety. Plants shall be compact and properly proportioned, not weak, thin or injured. All plants shall have normal, well developed branches and vigorous, fibrous root systems. They shall be free from defects, decay, disfiguring roots, abrasions of the bark, plant diseases and all forms of objectionable disfigurements. Plants should be 'faced' to give best appearance.

Trees shall have straight stems and shall be well and characteristically branched for the species or variety. Ground cover plants shall have healthy tops to a size proportionate to the root system typical of the species or variety.

In order to ensure suitable nursery stock, the initial planting height and calliper (or diameter), measured 300 mm (12") from the ground level must be provided for all tree species. Shrub pot sizes must also be listed.

#### 10.7 Installation of Plant Material

Install plant material immediately upon delivery to site. In the event that this is not possible, protect adequately and keep moist to prevent deterioration. Plant material must be planted at same depth it was previously grown.

For balled and burlapped or container grown plants, form soil in concave manner in bottom of plant pit. For bare root plants, form soil in convex manner. All broken or damaged roots should be pruned.

Soil should be backfilled in layers. Burlap should be folded back and covered by soil layers. Fill plant pit with water, allowing soil to settle. After settlement, fill to grade with soil and build a minimum 100 mm (4") soil tip around outer edge of plant pit.

The excavation pits for trees and shrubs shall conform to the following dimensions:

a) Pits for trees and shrubs, balled and burlapped or in containers, shall be excavated to at least twice the volume of the root ball or container with a minimum depth of 150 mm (6") under the root ball. Plastic or non-deteriorative containers are to be removed prior to planting. No burlap to be exposed after plant pit is filled with soil.

b) Pits for bare root trees shall be excavated to at least 300 mm (12") wider than the root spread with a minimum of 150 mm (6") under the root spread.

c) Pits for bare root shrubs shall be excavated to at least 150 mm (6") wider and 150 mm (6") deeper than the root spread.

All plant material shall be installed in compliance with Appendix 'B'. Protective wrapping for all thin barked deciduous trees is required and shall consist of new plain burlap or an approved equivalent not less than 150 mm (6") wide tied securely with suitable cord at the top and bottom and at 600 mm (24") intervals.

# Appendix 'A' - Recommended Plant Materials

A list of recommended plant materials which are hardy in the Kamloops area and available from British Columbia Wholesale Nurseries and Garden Centres. For more detailed information on plant material, it is suggested the Planting Guide distributed by British Columbia Nursery Trades Association (Kamloops Chapter) be used.

Trees - Deciduous			
		MATURE	RECOMMENDE
BOTANICAL NAME	COMMON NAME	HEIGHT (M)	D SPACING (M)
Acer ginnala (zone 2)	Amur Maple	6	2.0 - 2.5
Acer glabrum ()	Rocky Mountain Maple	8	3.0 - 4.0
Acer palmatum (zone 6)	Red Japanese Maple	7	1.5
Acer platanoides (zone 3)	Norway Maple	20	3.75 - 4.5
Acer pseudoplatanus (zone 6)	Sycamore Maple	16	3.5 - 4.0
Acer rubrum (zone 3)	Red Maple	30	8
Acer saccharinum (zone 2)	Silver Maple	30	8
Acer saccharum (zone 3)	Sugar Maple	30	8
Aesculus carnea (zone 5)	Red Horse Chestnut	15	4
Amelanchier canadensis (zone 2)	Downy Serviceberry	8	1.60 - 1.75
Amelanchier laevis (zone 4)	Allegany Serviceberry	10	1.7 - 2.0
Betula papyrifera (zone 2)	Paper Birch	25	6.0 - 7.0
Betula pendula 'Gracilis' (zone 2)	Cutleaf Weeping Birch	12	3.5 - 4.0
Catalpa bignonioides (zone 6)	Indian Bean Tree	20	3.75 - 4.0
Cercidiphyllum japonicum (zone 5)	Katsura Tree	20	3.75 - 4.0
Cercis canadensis ()	Eastern Redbud	12	2
Corylus colurna (zone 4)	Turkish Filbert	20	3.0 - 4.0
Crataegus laevigata 'Paulii' (zone 5)	Paul's Scarlet awthorne	10	1.75 - 2.0
Crataegus lavellei (zone 5)	Carriere Hawthorne	8	2
Crataegus mordenensis 'Toba' (zone 3)	Toba Hawthorne	7	2
Elaeagnus angustifolia (zone 4)	Russian Olive	8	4
Fagus sylvatica (zone 6)	European Beech	25	6.0 - 7.0
Fraxinus pennsylvanica lanceolata (zone 2)	Green Ash	20	5.0 - 6.0
Ginkgo biloba (zone 4)	Ginkgo	25	6.0 - 7.0
Gleditsia triacanthos inermis (zone 4)	Thornless Honeylocust	20	5.0 - 6.0
Gleditsia triacanthos inermis 'Moraine' (zone 4)	Moraine Honeylocust	20	5.0 - 6.0
Gleditsia triacanthos inermis 'Suburst' (zone 5)	Sunburst Honeylocust	15	4.5 - 5.0
Laburnum 'Watereri Vossii' (zone 6)	Golden Chain Tree	8	2.0 - 3.0
Malus loensis 'Plena' (zone 3)	Bechtel Crab	6	3
Malus 'Dolgo' (zone 2)	Dolgo Crab	8	3.0 - 4.0
Malus 'Echtermeyer' (zone 5)	Echtermeyer Crab	5	2.5
Malus 'Hopa' (zone 2)	Hopa Crab	10	5
Malus 'Liset' (zone 4)	Liset Crab	10	5
Malus 'Makamik' (zone 4)	Makamik Crab	10	5
Malus 'Profusion' (zone 4)	Profusion Crab	10	5
Malus 'Radiant' (zone 4)	Radiant Crab	8	4
Malus 'Rudolph' (zone 4)	Rudolph Crab	6	3
Malus 'Van Esseltine' (zone 5)	Van Esseltine Crab	6	3
Populus albus 'Raket' (zone 4)	Silver Poplar	20	5.0 - 6.0
Populus hybrid 'Griffin' (zone 1)	Griffin Poplar	15	5
Tree	es - Deciduous		

	MATURE	RECOMMENDE			
COMMON NAME		D SPACING (M)			
		4.0 - 5.0			
		1.5			
		1.5			
		4.5 - 5.0			
		4.0 - 4.5			
		3.5			
,,,,,,,, .		5.0 - 6.0			
		5.0 - 6.0			
		5.0 - 6.0			
		1.5 - 2.0			
		1.5 - 2.0			
		10.0 - 11.0			
		10.0 - 12.0			
		10.0 - 12.0			
		2.2 - 2.5			
		2.2 - 2.5			
		1.75			
		2.2 - 2.5			
		2.2 - 2.5			
		1.75			
		3.5 - 4.0			
		3.0 - 3.5			
		3.0 - 3.5			
	15	3.0 - 3.3			
Trees - Conners	MATUDE	RECOMMENDE			
COMMON NAME		D SPACING (M)			
	· · · · ·	3			
		3.5 - 4.0			
		2			
		2			
		3			
		2			
		1.5 - 2.0			
		1.5 - 2.0			
		4.0 - 5.0			
		3			
		3			
		7.0 - 7.5			
	10	1.0 1.0			
	MATHRE	RECOMMENDE			
COMMON NAME	MATURE HEIGHT (M)	RECOMMENDE D SPACING (M)			
COMMON NAME	HEIGHT (M)	D SPACING (M)			
COMMON NAME Butterfly Bush	HEIGHT (M) 3	D SPACING (M) 0.75			
COMMON NAME Butterfly Bush Japanese Quince	HEIGHT (M) 3 1	D SPACING (M) 0.75 0.6			
COMMON NAME Butterfly Bush Japanese Quince Silver Variegated Dogwood	HEIGHT (M) 3 1 2	D SPACING (M) 0.75 0.6 1			
COMMON NAME Butterfly Bush Japanese Quince Silver Variegated Dogwood Golden Variegated	HEIGHT (M) 3 1	D SPACING (M) 0.75 0.6			
COMMON NAME Butterfly Bush Japanese Quince Silver Variegated Dogwood	HEIGHT (M) 3 1 2	D SPACING (M) 0.75 0.6 1			
	COMMON NAMESwedish Columnar oplarBlireianaPissard PlumAmur CherryMay Day TreeShubert Choke CherryBur OakPin OakRed OakStaghorn SumacCutleaf Staghorn SumacCutleaf Staghorn SumacBlack LocustGolden Weeping WillowLaurel Leaf WillowAmerican Mountain AshEuropean Mountain AshWeeping Mountain AshShowy Mountain AshShowy Mountain AshOakleaf Mountain AshOakleaf Mountain AshCommon LindenLittleleaf LindenCrimean LindenTrees - ConifersCOMMON NAMENorway SpruceEngelmann SpruceVhite SpruceSerbian SpruceSerbian SpruceSwiss Stone PineAustrian PinePonderosa PineEastern White PineScotch PineDouglas FirTrubs - Deciduous	Swedish Columnar oplar15Blireiana10Pissard Plum10Amur Cherry15May Day Tree12Shubert Choke Cherry8Bur Oak20Pin Oak20Red Oak20Staghorn Sumac6Cutleaf Staghorn Sumac5Black Locust20Golden Weeping Willow20Laurel Leaf Willow20American Mountain Ash10European Mountain Ash12Weeping Mountain Ash12Showy Mountain Ash12Showy Mountain Ash10Oakleaf Mountain Ash8American Linden20Littleleaf Linden15Crimean Linden15Crimean Linden15Trees - ConifersMATURE HEIGHT (M)Norway Spruce25Engelmann Spruce40White Spruce25Koster's Blue Spruce20Colorado Spruce25Koster's Blue Spruce20Swiss Stone Pine15Austrian Pine15Ponderosa Pine45Eastern White Pine30Scotch Pine30Douglas Fir75Trubs - Deciduous5			

		MATURE	RECOMMENDE
BOTANICAL NAME	COMMON NAME	HEIGHT (M)	D SPACING (M)
Cornus stolonifera (zone 1)	Redtwig Dogwood	2.5	1
Cornus stolonifera 'Flaviramea' (zone 2)	Yellowtwig Dogwood	2	1
Continus coggygria 'Royal Purple' (zone 5)	Smoke Tree	2	1
Cotoneaster acutifolia (zone 5)	Peking Cotoneaster	2	0.45
Cotoneaster horizontalis (zone 5)	Rockspray Cotoneaster	0.9	0.45 - 0.9
Cotoneaster horizontalis 'Lowfast' (zone 6)	Lowfast Cotoneaster	0.9	0.45 - 0.9
Deutzia gracilis (zone 5)	Slender Deutzia	1	0.75
Euonymus alatus (zone 3)	Wing Burning Bush	2	0.6
Forsythia intermedia 'Lynwood Gold' (zone 6)	Forsythia	2	1
Forsythia intermedia 'Spectabilis' (zone 6)	Forsythia	2	1
Hippophae rhamnoids (zone 2)	Sea Buckthorn	6	1.0 - 1.5
Hydrangea arborescens 'Annabelle' (zone 3)	Hydrangea	1	0.75
Kerria japonica 'Pleniflora' (zone 5)	Kerria	2	1.2 - 1.5
Lonicera korolkowii 'Zabellii' (zone 2)	Zabel's Honeysuckle	3	1.0 - 1.25
Lonicera tatarica 'Rosea' (zone 2)	Tartarian Honeysuckle	3	0.6 - 1.0
Philadelphus lewisii 'Waterton' (zone 2)	Waterton Mockorange	2	1.2 - 1.5
Philadelphus virginalis (zone 3)	Virginal Mockorange	3	1.2 - 1.5
Physocarpus opulifolius 'Aureus' (zone 2)	Golden Ninebark	2.5	1.2 - 1.5
Potentilla fruticosa 'Sutters Gold' (zone 3)	Shrubby Cinqufoil	1	0.6 - 0.9
Potentilla fruticosa 'Goldfinger' (zone 2)	Shrubby Cinqufoil	1	0.6 - 0.9
Potentilla fruticosa 'Klondyke' (zone 3)	Shrubby Cinqufoil	1	0.6 - 0.9
Potentilla fruticosa 'Snowflake' (zone 2)	Shrubby Cinqufoil	1	0.6 - 0.9
Potentilla fruticosa 'Coronation Triumph' ()	Shrubby Cinqufoil	1	0.6 - 0.9
Potentilla fruticosa 'Tangerine' (zone 2)	Shrubby Cinqufoil	1	0.6 - 0.9
Potentilla fruticosa 'Red Ace' (zone 3)	Shrubby Cinqufoil	1	0.6 - 0.9
Prunus cistena (zone 3)	Purple Leaf Sand Cherry	2	1.5
Prunus tenella (zone 2)	Dwarf Russian Almond	1	7.5
Prunus tomentosa ()	Nanking Cherry	2	1.5
Rhus aromatica (zone 3)	Fragrant Sumac	2	0.45 - 0.75
Ribes alpinum (zone 2)	Alpine Current	2	0.75 - 1.0
Rosa rugosa 'Hansa' (zone 2)	Rugosa Rose	2	0.35 - 0.45
Rosa foetida 'Persian Yellow' (zone 2)	Persian Yellow Rose	1.5	0.35 - 0.45
Rosa rugosa 'Grotendorst Supreme' (zone 3)	Rugosa Rose	2	0.35 - 0.45
Sambucus Canadensis 'Aurea' (zone 3)	Golden Elder	3	2
Sambucus canadensis Adrea (2016 3) Sambucus racemosa 'Plumosa-aurea' (2016 3)	Golden Plume Elder	3	2
Spirea arguta (zone 3)	Garland Spirea	2	0.5 - 1.0
Spirea bumalda 'Anthony Waterer' (zone 2)	Anthony Waterer Spirea	0.6	0.75 - 1.0
Spirea bumalda 'Goldflame' (zone 3)	Goldflame Spirea	0.6	0.75 - 1.0
Spirea trilobata (zone 2)	Three-lobed Spirea	1	0.75 - 1.0
Spirea Vanhouttei (zone 4)		1.5	0.45
• • •	Bridal Wreath Spirea		1.2 - 1.5
Syringa villosa (zone 2)		3	1.2 - 1.5
Syringa vulgaris (zone 2)	French Hybrid Lilac		
Viburnum lantana (zone 2)	Wayfaring Tree	3 4	1.0 - 1.5
Viburnum opulus 'Roseum' (zone 2)	Snowball Tree		1.0 - 1.5
Viburnum trilobum ()	Highbush Cranberry	3	1.0 - 1.5
Weigela florida 'Bristol Ruby' (zone 3)	Weigela	2	1.0 - 1.5

Shrubs - Conifer

		MATURE	RECOMMENDE
BOTANICAL NAME	COMMON NAME	HEIGHT (M)	D SPACING (M)
Chamaecyparis pisifera 'Aurea' (zone 6)	Sawara False Cypress	10	0.6
Chamaecyparis pisifera 'Plumosa Aurea' (zone 6)	Golden Plume Cypress	9	0.6
Chamaecyparis pisifera 'Filifera' (zone 5)	Thread Cypress	3	0.5
Juniperus chinensis 'Mint Julep' (zone 4)	Mint Julep Juniper	1.6	1.2
Juniperus chinensis 'Pfiteriana Aurea' (zone 3)	Golden Pfitzer Juniper	1.2	1.2
Shru	ubs - Conifer		
		MATURE	RECOMMENDE
BOTANICAL NAME	COMMON NAME	HEIGHT (M)	D SPACING (M)
Juniperus chinensis 'Pfiteriana Glauca' (zone 4)	Blue Pfitzer Juniper	1.5	1.5
Juniperus chinensis 'Pfiteriana Old Gold' (zone 4)	Gold Coast Juniper	0.9	0.9
Juniperus horizontalis 'Plumosa Compacta' (zone 2)	Andorra Juniper	1.5	1.5
Juniperus horizontalis 'Wiltonii' (zone 4)	Wilton Carpet Juniper	1	1
Juniperus sabina (zone 5)	Savin Juniper	1	1
Juniperus sabina 'Arcadia' (zone 3)	Arcadia Juniper	0.3	1
Juniperus sabina 'Buffalo' (zone 2)	Buffalo Juniper	0.4	1.2
Juniperus sabina 'Skandia' (zone 2)	Skandia Juniper	0.2	1
Juniperus sabina 'Tamariscifolia' (zone 4)	Tamarix Juniper	0.5	1.2 - 1.5
Juniperus scopulorum 'Blue Haven' (zone 3)	Blue Haven Juniper	5	1.2 - 1.5
Juniperus scopulorum 'Pathfinder' (zone 3)	Pathfinder Juniper	5	1.2 - 2.0
Juniperus virginiana 'Burkii' (zone 3)	Burk Juniper	5	1.2 - 2.0
Picea abies 'Nidiformis' (zone 3)	Nest Spruce	0.5	1
Picea glauca albertiana 'Corica' (zone 5)	Dwarf Alberta Spruce	1.5	1
Taxus media 'Hatfieldii' (zone 5)	Hatfield Yew	5	1.2 - 2.0
Taxus media 'Hicksii' (zone 5)	Hick's Yew	5	1.2 - 2.0
Thuja occidentalis 'Brandon' (zone 3)	Siberian Cedar	9	0.5 - 1.0
Thuja occidentalis 'Elegantissima' (zone 4)	Siberian Cedar	9	0.5 - 1.0
Thuja occidentalis 'Fastigiata' (zone 4)	Pyramid Cedar	9	0.5 - 0.6
Thuja occidentalis 'Globosa Aurea' (zone 3)	Globe Cedar	0.5	1
Thuja occidentalis 'Hetz Midget'(zone 3)	Globe Cedar	0.5	1
Thuja occidentalis 'Holmstrupp' (zone 4)	Holmstrupp Cedar	5	0.5 - 0.6
Thuja occidentalis 'Little Gem' (zone 3)	Globe Cedar	0.6	1.2
Thuja occidentalis 'Rheingold' (zone 3)	Globe Cedar	1	2
Thuja occidentalis 'Smaragd' (zone 3)	Emerald Cedar	8	0.5 - 0.6
Thuja occidentalis 'Techney' (zone 4)	Techney Cedar	5	0.5 - 0.6
Thuja occidentalis 'Wareana' (zone 2)	Siberian Cedar	8	05 - 1.0
Thuja occidentalis 'Woodwardii' (zone 3)	Globe Cedar	1.2	2.0 - 2.4

Vines and Creepers			
		MATURE	RECOMMENDE
BOTANICAL NAME	COMMON NAME	HEIGHT (M)	D SPACING (M)
Aristolochia sipho (zone 5)	Dutchman's Pipe	10	1
Campis radicans (zone 5)	Trumpet Vine	10	.75 - 1.0
Clematis jackmanii (zone 3)	Jackman's Clematis	2.5	0.4 - 0.5
Lonicera brownii 'Scarlet Dropmore' (zone 2)	Dropmore Climbing	5	0.75 - 1.0
	Honeysuckle		
Parthenocissus quinquefolia (zone 3)	Virginia Creeper	15	0.75 - 1.0

# Vines and Creepers

		MATURE	RECOMMENDE
BOTANICAL NAME	COMMON NAME	HEIGHT (M)	D SPACING (M)
Parthenocissus quinquefolia 'Engelmannii' (zone 2)	Self-Clinging Virginia Creeper	15	0.75 - 1.0
Parthenocissus quinquefolia 'Veitchii' (zone 6)	Boston Ivy	15	0.75 - 1.0
Polygonum aubertii (zone 6)	Silver Lace Vine	15	0.75 - 1.0

Ground Covers				
BOTANICAL NAME	COMMON NAME	MATURE HEIGHT (M)	RECOMMENDE D SPACING (M)	
Ajuga (zone 4)	Bugle Carpet	8	0.25	
Arctostaphylos (zone 2)	Bearberry/Kinnikinnick	4	0.75 - 1.0	
Cotoneaster (zone 5)	Cotoneaster (see shrubs- deciduous)			
Cytisus barkwoodii (zone 6)	Broom	2 m	1.2	
Cytisus praecox (zone 6)	Warminster Broom	1 m	1	
Genista tinctoria (zone 3)	Dyer's Greenwood	60	0.6	
Genista lydia (zone 3)	Dyer's Greenwood	60	0.6	
Genista pilosa (zone 5)	Dyer's Greenwood	10	0.1	
Euonymus (zone 5)	Burning Bush (see shrubs- deciduous)			
Juniperus ()	Juniper (see shrubs- conifer)			
Mahonia aquifolium (zone 5)	Oregon Grape	1.5 m	1	
Pachysandra terminalis (zone 3)	Japanese Spurge	20	0.25	
Parthenocissus quinquefolia (zone 3)	Virginia Creeper (see vines)			
Polygonum cuspidatium compactum (zone 3)	Polygonum	60	0.6	
Thymus ()	Thyme	10	0.1	
Vinca minor ()	Periwinkle	20	0.2	

# Appendix 'B' - Planting Guide

#### Shrubs:

Planting shrubs bought in metal or plastic containers:

- 1. Soak plant in bucket of water for 2 hour before planting.
- 2. Dig hole twice as wide and twice as deep as container and fill hole with water.
- 3. Make a mixture of good soil by using a your soil, a sharp sand and a peat moss, decomposed manure or good compost or leaf mould, and a handful of bone meal.
- 4. Take plant out of container carefully.
- 5. Put some of the mixture of the soil in bottom of hole so the soil line of the shrub will be equal to existing soil line. Re-soak hole then add mixture to soil line. Re-soak.
- 6. Make a dyke around new planting to hold water. Soak twice a week in cool weather and three times a week in hot weather.
- 7. Cover new planting with sawdust, bark or straw to retain moisture and stop soil from packing.

#### Trees:

#### Before Planting:

- Learn about its biological needs.
- Each species has a different tolerance to minimum temperatures, wet or dry growing conditions, light levels, acidic or alkaline soils and tolerance to insects and disease.

#### Factors to Consider:

- Shape trees grow in a variety of sizes and shapes. Select a form that will fit the planting space provided. For example, you may choose a vase-shaped tree to create an arbor over a driveway, or select a narrow columnar form to provide a screen between two buildings.
- Size at Maturity Before planting, know what the tree will look like as it nears maturity. Consider its height, crown spread and root space. Be conscious of scale; very large trees can be overpowering on a small property. Do not plant tall trees close to or directly underneath overhead power lines.
- *Function* shade (this is why many people plant trees); aesthetics (colour, texture, flowers, fruit); windbreaks and screens (low branching conifers that hold their foliage are most effective for screening unsightly areas, providing privacy and a break from the wind); fruit (provides interest, food for the homeowner and for birds and wildlife).

## Benefits of Trees:

- What Trees Really Do work 24 hours every day to improve our environment and quality of life.
- *Trees Reduce Air Pollution* they settle out, trap and hold particulate pollutants (dust, ash, pollen and smoke) that can damage human lungs; they absorb CO2 and other dangerous gases and in turn, replenish the atmosphere with oxygen.
- Tree Conserve Water and Reduce Soil Erosion this results in reduced surface runoff of water from storms; reduced soil erosion and sedimentation of streams; reduced amounts of chemicals transported to streams; and reduced wind erosion of soil.
- *Trees Save Energy* air conditioning costs can be reduced by up to 30 per cent by having shade trees planted on the south and southwest sides of a building; heating costs may be reduced by planting evergreens as windbreaks, planted on the north side of a building they block north winter winds.
- *Trees Modify Local Climate* by lowering air temperature through shading; increasing humidity in a dry climate (evapotranspiration); and reducing glare and reflection on sunny days.
- Trees Increase Economic Stability by attracting businesses and tourists, by making people linger and shop longer along tree-lined streets and by adding 5 per cent to 20 per cent to residential property values.
- *Trees Reduce Noise Pollution* by absorbing and blocking noise from the urban environment.
- Trees Create Homes for Wildlife and Birds by providing food and shelter.
- Trees Soften Landscapes and Provide Good Feelings as they add natural character and provide us with variety in colours, shapes and textures; screen harsh scenery and soften the outline of masonry, metal and glass; create a feeling of relaxation and wellbeing; provide privacy and a sense of solitude and security; and accentuate seasons in the city.

#### How To Plant a Tree:

#### 1. Dig the Planting Hole

Before you start, locate all underground utilities. Dig a planting hole at least twice the diameter of, and no deeper than, the root ball. The loose excavated soil, when placed back around the tree will encourage new root growth necessary to establish the tree. The root ball needs to be set on firm ground so it will not settle.

#### 2. <u>Plant the Tree</u>

Lift the tree by the root ball (never by the trunk), remove its container and place the tree into the planting hole. Make sure that the top of the root ball is no deeper than existing ground level. If the tree is balled and burlapped, remove any twine or wire and pull the burlap away from the trunk. Make sure that the tree is standing straight and backfill with the original soil. As you fill the hole, gently firm the soil around the tree, to hold it in place. Create a soil well around the tree for watering. Water the tree thoroughly to settle the soil and eliminate any air pockets.

#### 3. <u>Prune the Tree Only If Necessary</u>

Examine the tree for injury to branches. Prune broken branches back to other branches or to the trunk. While pruning, do not damage the branch collar (the swollen area where one branch meets another).

#### 4. <u>Stake the Tree Only If Necessary</u>

Staking is usually unnecessary for balled, burlapped, and container-grown trees. If needed, stake the tree to keep it upright until established. Drive two or three stakes, spaced equal distance apart, outside the planting area. Attach a broad, soft strapping material, loosely to the trunk. Use material that will not cut into the trunk. The stakes should not be left in place more than one year.

#### 5. <u>Mulch and Water</u>

Lastly, place a layer of mulch around the tree (in the soil well), about two to four inches deep. The tree should be watered at least once a week and more often in hot weather. Watering should taper off in mid-fall so the tree will harden for the winter.

# Appendix 'C' - British Columbia Society of Landscape Architects Guidelines for Use of Schedules L-1, L-2, L-3

#### BY:

## THE BRITISH COLUMBIA SOCIETY OF LANDSCAPE ARCHITECTS [BCSLA]

# Preface: The purpose of these guidelines is to aid BCSLA members in the use of the Schedules, to ensure they are used in a uniform manner throughout British Columbia.

What are the benefits of using Schedules L-1, L-2 and L-3?

- Assigns responsibility for design and field review to the appropriate consultant.
- Provides municipalities with a tool for ensuring that agreements regarding landscapes are consistent with final products.
- Provides developers with a tool for assuring municipalities of their intention to provide what is shown on the landscape architect's drawings.
- Gives Council a tool for enforcing the terms of development permit agreements.
- Gives building officials a tool for addressing nuisance items associated with landscaping that are not addressed in the Building Code.
- Provides assistance to municipalities by assigning field review to the landscape architect.

How should the use of these forms be initiated?

- As the use of the landscape schedules is not required by all municipalities, at the time of preparing the proposal or contract for landscape architectural services, submission of these forms should be discussed with the building department and prime consultant to ensure that they are familiar with the project owner would also usually be warranted.
- A special meeting between the building department, planning department, your firm and the prime consultant is recommended as a way of avoiding confusion around the use of the schedules.

#### When should these forms be used?

- BCSLA recommends that the forms should be used when the local authority requests that they be used, <u>and</u> whenever a landscape architectural plan is being submitted in support of a building permit application provided that the landscape architect will be involved through to completion of construction.
- If a development permit is being applied for, the planning department may wish to require that a landscape architect be retained to provide these schedules at the time of building permit application as a condition of the development permit.

Note that it is incumbent upon the landscape architect to negotiate an agreement that provides for sufficient levels of effort to allow design and field reviews to be provided for the length of the project.



Appendix 'C' - Guidelines for Use of Schedules L-1, L-2, L-3 British Columbia Society of Landscape Architects

Who are the forms submitted to?

- Forms should be submitted to the Coordinating Registered Professional as defined in the Building Code, who will then submit them as a package including sealed drawings and Letters of Assurance to the Building Official. They should not be submitted directly to the Building Official without copies being sent to the Coordinating Registered Professional.
- Note: these forms should never be used to assure landscape architectural design and field services for other groups, corporations, persons or agencies other than to a municipal building department. They should never be used outside of the context of the letters of assurance as defined in the Building Code.

At what point in the project should the forms be submitted?

- Schedules L-1 and L-2 should be submitted along with sealed landscape drawings at the time of building permit application and when required by the Coordinating Registered Professional. The sealed drawings should be complete and be coordinated with the other design disciplines involved with the project and with any terms of the Development Permit if applicable.
- Schedule L-3 should be submitted when all field reviews are complete and there are no outstanding items left by the builder to complete. It is recommended to check with the local authority and registered coordinating professional prior to submitting Schedule L-3 to ensure that there are no concerns that your firm is unaware of.

Who should seal the landscape schedules?

- The BCSLA recommends that Landscape Schedules should only be sealed by firm principals. Where firm principals do not include a landscape architect, then the most senior landscape architect in the firm should seal the Landscape Schedules.
- The same landscape architect should seal all three schedules.

What organizations have been or will be notified about the use of these schedules?

- The Architectural Institute of BC, The Association of Professional Engineers and Geoscientists of BC, The Building Officials' Association of BC, The Planning Institute of BC, The Ministry of Municipal Affairs, The BC Law Society, The Union of BC Municipalities and The BC Housing Authority.

What items should be initialled in form L-2?

- Only those items and areas of work for which the Landscape Architect is professionally competent and responsible for.
- Note: It is the coordinating registered professional's role to check that all items pertaining to the project area assigned to a registered professional, however, the landscape architect should take appropriate steps to avoid confusion in this area.
- Extra care should be taken when accepting responsibility for tree protection measures where survival of the trees is questionable. It should be clear that the landscape architect's responsibility extends to designing and reviewing the tree protection provisions as opposed to guaranteeing tree survival as no such guarantees are possible.



Appendix 'C' - Guidelines for Use of Schedules L-1, L-2, L-3 British Columbia Society of Landscape Architects

Extra care should be taken to avoid initialling items for which the landscape architect holds limited or no responsibility for. For example, if irrigation is being designed by others it should not be initialled by the landscape architect.

Will the use of these schedules lead to increased liability exposure for landscape architects?

- If a landscape architect has made errors or omissions or acted negligently, the duty of care and responsibilities of that landscape architect will likely be more easily ascertained. However, by formalizing the roles of those involved with the project, it may also more quickly indicate that the landscape architect has acted in a professionally responsible manner.

What action should be taken if construction works initialled by the landscape architect are not properly completed and where the Owner is applying for an occupancy permit or release of bonds posted for landscape works?

- Concerns should be brought to the Owner's or the Prime Consultant's attention. If the objects of concern are not remedied, the building department and planning departments should be notified to ensure that they are aware of deficiencies. Failure to notify the local authority will serve to dilute and confuse the use of these forms.
- The landscape architect should be aware that there are limited enforcement powers given by the schedules in themselves to the landscape architect.

Does the Building Official have the authority to not issue an occupancy permit if a Schedule L-3 has not been issued due to landscape works incomplete?

- The Building Code does not give this power unless the work is in contravention with the building code or creates an unsafe condition. The building code gives little guidance on landscape matters. However if there has been a landscape bond posted, the authority can hold the bond until it is satisfied. The landscape architect may recommend to building departments that a condition of bond release should be receipt of a Schedule L-3.

What if an owner or builder requests or makes a change in the plans such as a plant material substitution or deviation from a design detail, and whose details are not a stipulation of the building code?

- It is up to the judgement of the landscape architect as to whether the request or change is a significant deviation from the plans and expectations of the local authority. If the change is significant the request should be discussed with the responsible official at the local authority.

Other questions? Please forward clarification requests in writing to:

The British Columbia Society of Landscape Architects 110 - 355 Burrard Street Vancouver BC V6C 2G8 Phone: (604) 682-5610 Fax: (604) 681-3394 Email: bcsla@direct.ca

#### SCHEDULE L-1

#### ASSURANCE OF PROFESSIONAL DESIGN AND COMMITMENT FOR FIELD REVIEW

 Building Permit No.

 Note:
 1.

 This letter and the attached Schedule L-2 are submitted at the request of the Building Official addressed below, before issuance of a *building* permit, only in conjunction with, and not in replacement of, Schedules B-1 and B-2 submitted by *registered professionals* under Section 2.6 of the British Columbia Building Code.

 2.
 The form of this letter is endorsed by the British Columbia Society of Landscape Architects.

3. In this letter the words in italics have the same meaning as in the British Columbia Building Code.

# 

Legal Description of Project (Print)

The undersigned hereby gives assurance that the design of the

\_ Landscape Architectural

(Initial)

components of the plans and supporting documents prepared by this Landscape architect, in support of the application for the *building* permit, substantially comply with the B.C. Building Code and other applicable enactments respecting safety except for construction safety aspects.

Subject to the undersigned's continued engagement by the owner of the project, the undersigned hereby undertakes to be responsible for field reviews of those components of the Landscape Architectural work at the Project Site listed on the attached Schedule L-2. The extent of the field reviews will be such as the undersigned, in his or her professional discretion, considers necessary to ascertain whether the work on those components substantially complies in all material respects with the plans and supporting documents prepared by the undersigned in connection with the Project.

SCHEDULE L-1 (continued) Building Permit No.

The undersigned undertakes to notify the Building Official addressed above in writing as soon as possible if the undersigned's contact relating to the Project is terminated at any time during construction.

I am a registered member in good standing of the British Columbia Society of Landscape Architects.

Name (Print)		
Signed	Date	
Address (Print)		
Phone	(Affix PROFESSIONAL SEAL here)	
(If the Landscape Architect is a member of a fin	rm, complete the following.)	
I am a member of the firm		
and I sign this letter on behalf of the firm.	(Print name of firm)	

\***Note:** This letter has been prepared by the British Columbia Society of Landscape Architects to assist local governments, project owners, architects, engineers and geoscientists ensure that the landscape components of the Project comply in all material aspects with the plans and supporting documents prepared by the landscape architect relating to the Project.

#### SCHEDULE L-2

#### SUMMARY OF DESIGN AND FIELD REVIEW REQUIREMENTS

Building Permit No.				
Note:	<ol> <li>This form and Schedule L-1 are submitted at the request of the Building Official addressed in Schedule L-1, before issuance of a <i>building</i> permit, only in conjunction with, and not in replacement of, Schedules B-1 and B-2 submitted by <i>registered professionals</i> under Section 2.6 of the British Columbia Building Code.</li> <li>The form of this letter is endorsed by the British Columbia Society of Landscape Architects.</li> <li>In this letter the words in italics have the same meaning as in the British Columbia Building Code.</li> </ol>			
Date:				
	(Registe	ered Landscape Architect)		
Project:				
LANDSCAP	E ARCHITECTURAL (initial appli	cable items)		
1.1	Tree Protection Measures			
1.2	Landscape Grading			
1.3	Landscape Retaining Walls			
1.4	Landscape Paving			
1.5	Landscape Structures			
1.6	Landscape Fencing			
1.7	Landscape Furnishings			
1.8	Growing Medium			
1.9	Site Planting			
2.0 2.1	Site Irrigation			
2.1	(other)			
Name (Print)		(Affix PROFESSIONAL SEAL here)		

(If the landscape architect is a member of a firm, complete the following.)

I am a member of the firm	
and I sign this letter on behalf of the firm.	(Print name of firm)

\***Note:** This letter has been prepared by the British Columbia Society of Landscape Architects to assist local governments, project owners, architects, engineers and geoscientists ensure that the landscape components of the Project comply in all material aspects with the plans and supporting documents prepared by the landscape architect relating to the Project.

#### SCHEDULE L-3

#### ASSURANCE OF PROFESSIONAL FIELD REVIEW AND COMPLIANCE

**Building Permit No** 

	Ballar			
Note:	<ol> <li>This letter is submitted at the request of the Building Official addressed below, after completion of the project but before the issuance of an occupancy permit or the Building Official's final inspection, only in conjunction with, and not in replacement of, Schedule C-B submitted by <i>registered professionals</i> under Section 2.6 of the British Columbia Building Code.</li> <li>The form of this letter is endorsed by the British Columbia Society of Landscape Architects.</li> </ol>			
To:	The Building Official	Date:		
Addres	s (Print)			

Dear Sir/Madam:

Re:

Name of Project (Print)

Address of Project (Print)

Legal Description of Project (Print)

The undersigned hereby gives assurance that

- (a) I have fulfilled my obligations for field review as outlined in Schedule L-1, "ASSURANCE OF PROFESSIONAL DESIGN AND COMMITMENT FOR FIELD REVIEW," and Schedule L-2, "SUMMARY OF DESIGN AND FIELD REVIEW REQUIREMENTS," and
- (b) those components of the project opposite my initials in Schedule L-2 substantially comply in all material respects with:
  - (i) the applicable requirements of the B.C. Building Code and other applicable enactments respecting safety, not including construction safety aspects, and
  - (ii) the plans and supporting documents prepared by the undersigned in support of the application for the *building* permit,
- (c) I am a registered member in good standing of The British Columbia Society of Landscape Architects.

SCHEDULE L-3 (continued) Building Permit No.\_\_\_\_\_

The registered landscape architect shall complete the following:

	-
Name (Print)	
Signed	Date
Address (Print)	-
	-
	-
Phone	(Affix PROFESSIONAL SEAL here)
(If the Landscape Architect is a member of a	a firm, complete the following.)
I am a member of the firm	
and I sign this letter on behalf of the firm.	(Print name of firm)

\***Note:** This letter has been prepared by the British Columbia Society of Landscape Architects to assist local governments, project owners, architects, engineers and geoscientists ensure that the landscape components of the Project comply in all material aspects with the plans and supporting documents prepared by the landscape architect relating to the Project.