Landscape Architect

Introduction

Landscape architecture involves designing outdoor spaces that are functional, aesthetically pleasing, and environmentally responsible. The British Columbia Society of Landscape Architects (BCSLA) serves as the licensing and professional organization for landscape architects in the area. Landscape architects have a "name act" but not a "practice act" in BC, but many jurisdictions require a landscape architect's stamp on work done for any major project or public space.

Many municipalities require (on paper) a Landscape Architects stamp on the drawings for landscape submitted with a proposal. In rural areas with few to no Landscape Architects available, this requirement may be waived.

One of the key pieces of work Landscape Architects do is to create the costing estimate for the landscape work that is required for bonding/Works and Services process.

What does a Landscape Architect do?

Landscape architects design outdoor spaces, conduct site analysis, create concept plans, and oversee construction to ensure design compliance.

The main areas that landscape architecture addresses include:

- **Site Analysis and Planning**: Surveying, regulatory assessments, and environmental analysis.
- **Concept Design**: Basic formal design layout and materials selection.
- **Development Permit Drawings**: Technical drawing bases for construction.
- **Construction Drawings**: Detailed construction specifications and plans.

Landscape architects are also involved in construction oversight to ensure that landscape designs are executed according to plan and meet regulatory standards.

Scope of Work

Site Analysis

Purpose: To gather comprehensive information about the site to inform design decisions.

When Needed: Early in the planning process to understand site conditions and constraints.

Components:

- Surveying and Mapping:

    - Site Features: Identify existing features, such as buildings, paths, and landmarks.
    - Topography and Drainage: Map out elevation changes and water flow patterns.
- Assessment of Vegetation and Trees:
    - Significant Vegetation: Identify and document important plant species and tree locations.
    - Tree Health: Assess the health and condition of existing trees.
- Environmental Elements:
    - Soil Analysis: Evaluate soil types and conditions.
    - Microclimate Analysis: Study solar aspect, wind patterns, and other climatic factors.
- Utilities and Infrastructure:
    - Utility Mapping: Locate underground and above-ground utilities.
    - Historical/Cultural Information: Document historical or cultural elements that may impact design.
- Regulatory Requirements:
    - Zoning and Bylaws: Review local regulations and requirements for the site.
- Preparation of a Site Analysis Diagram or Drawing:

Schematic / Preliminary Concept Design

Purpose: To develop initial design ideas and concepts for the site.

When Needed: After completing the site analysis to establish the foundational design direction.

Components:

- Program Areas:
    - Space Allocation: Define areas for different uses, such as recreation, circulation, and planting.
- Basic Formal Design Layout:
    - Design Elements: Create an initial layout incorporating pathways, open spaces, and focal points.
- Materials Selection:
    - Preliminary Choices: Select materials for hardscapes, plantings, and site furniture.
- Tree Retention and Pedestrian Circulation Plans:
    - Tree Protection: Plan for the retention and protection of significant trees.
    - Circulation: Design pedestrian and vehicular circulation routes.
- Rainwater Management Plan:
    - Stormwater Solutions: Develop preliminary plans for managing rainwater on-site.
- Public Art Locations:

    - Art Integration: Identify potential locations for public art installations.
- Illustrative Concept Plan:
    - Concept Drawing: Prepare a plan-view drawing illustrating the initial design concept.

Development Permit (DP) Drawings

Purpose: To create technical drawings for the development permit application.

When Needed: Required for the development permit application to provide detailed design information.

Components:

- Layout Plans:
    - Detailed site layout showing all design elements.
- Grading Plans:
    - Detailed plans showing grading and elevation changes.
- Materials Plans:
    - Specifications for all materials used in the project.
- Planting Plans:
    - Detailed plans showing plant types, locations, and densities.
- Lighting Plans:
    - Plans detailing site lighting, including fixtures and placement.
- Site Details, Sections, and Elevations:
    - Technical drawings showing construction details, sections, and elevations.
- Furnishing Packages:
    - Specifications and locations for benches, bins, and other site furniture.
- Cost Estimates:
    - Preliminary cost estimates for landscape construction.

Design Development (BP) Drawings

Purpose: To create detailed plans for building permits and construction.

When Needed: Required for building permit applications and to guide construction.

Components:

- Detailed Integration from Consultants:
    - Incorporate detailed input from structural, mechanical, and electrical consultants.
- Schematic Details and Construction Specifications:
    - Prepare detailed construction plans and specifications.
- Compliance with Building Codes:
    - Ensure all designs comply with relevant building codes and regulations.

Construction Drawings

Purpose: To provide detailed construction documentation for implementation.

When Needed: Required for construction to ensure accurate execution of the design.

Components:

- Construction Detailing:
  - Prepare detailed construction drawings with specifications for all design elements.
- Refinement of BP Drawings:
  - Refine building permit drawings based on final design decisions and regulatory feedback.
- Development of Specifications for Landscape Scope of Work:
  - Detailed specifications for all aspects of landscape construction.
- Coordination with Other Professionals:
  - Ensure coordination with architects, engineers, and other professionals involved in the project.
- Compliance with Building Codes:
  - Verify that all construction drawings meet building code requirements.

Construction Review

Purpose: To ensure construction is executed according to design and specifications.

When Needed: During the construction phase to monitor progress and ensure compliance with design plans.

Components:

- On-Site Inspections and Reviews:
  - Conduct regular site visits to inspect construction progress.
- Management of Change Orders:
  - Manage and approve any changes to the original design during construction.
- Resolution of Construction Issues:
  - Address any issues or discrepancies that arise during construction.
- Final Inspections and Preparation of Deficiency Lists:
  - Identify and document any deficiencies in the construction work.

Substantial Completion and Project Close Out Review

Purpose: To ensure the project is completed to satisfaction and address any deficiencies.

When Needed: At the end of construction to finalize the project and prepare for handover.

Components:

- Review of Completed Work:
  - Conduct a thorough review of the completed landscape work.
- Identification of Deficiencies:
  - Prepare a detailed report identifying any remaining deficiencies.
- Preparation of As-Built Drawings:
  - Create as-built drawings reflecting the final constructed state.
- Final Sign-Off:
  - Conduct final inspections and sign-off on completed work.
- Warranty Review After One Year:
  - Conduct a warranty review after one year to assess plant material and other elements.

Report Details

- Executive Summary: A brief summary of findings and key recommendations.
- Terms of Reference: Outline of the scope of work and specific objectives of the landscape architecture study.
- Project Details: Background information, site description, and overview of proposed development plans.
- Site Investigation: Detailed description of site analysis, surveys, and environmental assessments.
- Evaluation and Analysis: Interpretation of data, assessment of site conditions, and development of design concepts.
- Design Recommendations: Specific recommendations for landscape design, site planning, and material selection.
- Plans/Drawings/Statements: Site plans, concept designs, development permit drawings, and construction drawings.
- References/Appendices: List of literature references and appendices with detailed data, site analysis diagrams, and supplementary information.

What is generally required at each stage in the development process?

Preliminary Inquiry	• Site Analysis and general landscape concept statement (optional)
Pre-Application	• Site Analysis • Statement of landscape design directions – based on review of applicable policies and guidelines. • Possible initial concept sketch.
Rezoning	• Site Analysis • Schematic/Preliminary Concept Design and rationale statement.

Subdivision	● Design Development Drawings ● Construction Drawings where landscape is an integral part of the servicing concept (eg: rain garden designs), and so a costing can be established for bonding.
Development Permit	● Development Permit Drawings ● Costing of proposed plan for bonding purposes.
Building Permit	● Construction Drawings
Construction	● Site construction review and reports
Post-Construction	● Substantial Completion/Project Close Out