

INDEX

- 1.01 Intent
- 1.02 Detailed Specifications and Conditions
- 1.03 Definitions
- 1.04 Right-of-Way or Easement Documents
- 1.05 Engineering Field Reviews
- 1.06 Testing
- 1.07 Rectification, Repair and Warranty
- 1.08 Security for Required Works and Services
- 1.09 City Acceptance
- 1.10 Building Permits
- 1.11 Approved Products List

1.01 Intent

This is the Engineering Standards and Specifications referred to as Appendix 'I' of the most current City of Parkville Subdivision Servicing Bylaw.

These Standards and Specifications apply to the design and installation of works and services, lot grading, drainage and sediment control on publicly managed land, including public property and statutory right-of-ways over private property within the City of Parkville. Works and services include storm drains, sanitary sewers, water mains, roads, streetlighting and street trees together with their respective connections and appurtenances and any other services which are required to be designed and/or installed.

These Standards and Specifications do not cover the design or installation of power, telephone, cablevision, gas or postal services, except for locations within road right-of-ways and off-sets from other services. These utilities shall be shown on the key plans and on all record drawings.

These Standards and Specifications are applicable unless superceded by an amendment to the Subdivision Servicing Bylaw.

The City Standard Drawings shall form an integral part of these Standards and Specifications.

1.02 Detailed Specifications and Conditions

All services shall be designed and installed as detailed in these Standards and Specifications, and good engineering practice shall be applied.

Where strict compliance with these specifications is impractical or unreasonable, the City Engineer may permit a minor variance to the specifications. This request for a variance and its rationale shall be made in writing and submitted to the City Engineer for approval before the work is carried out. A record of these changes shall be sent to the City Works Inspector.

The performance and responsibilities of parties and persons carrying out the installation of services shall be as set out in the Standards and Specifications.

1.03 Definitions

In these specifications, unless the context otherwise requires:

"APPLICANT" means a person who has applied for approval of a proposed subdivision, building permit subject to the Works and Services Bylaw or a zoning amendment, whether as the owner or as the agent for the owner of the land included therein.

"CONSULTANT" means a Professional Engineer, registered in the Province of British Columbia, experienced in the field of civil engineering that is retained by the Applicant. The Applicant shall covenant and agree that the Consultant maintains Professional Liability and Errors and Omissions insurance to a value of \$500,000 per occurrence during the term of the Consultant's engagement.

"CONTRACTOR" means any person, persons or corporation that undertakes the installation of City services on behalf of either the Applicant or the City.

"CITY" refers to the City of Parksville.

"CITY ENGINEER" or **"ENGINEER"** refers to the Director of Engineering for the City of Parksville or any employee authorized to act on his or her behalf.

"WORKS INSPECTOR" means the city employee authorized by the City Engineer who shall from time to time make such field reviews and tests of work being carried out, as he or she considers necessary.

1.04 Right-of-Way or Easement Documents

- .1 The Applicant shall arrange the preparation of all required right-of-way documents. These documents shall be per City of Parksville standard documents (if available) and must be reviewed and submitted to the City Engineer by the Consultant together with his/her recommendations to execute the documents. The Consultant must ensure the documents are appropriate for their intended use.
 - The right-of-way documents within a proposed subdivision shall be registered at the Land Title and Survey Authority (LTSA) Office concurrent with subdivision approval.
 - Private easement documents must be prepared by the Applicant's lawyer and submitted with the lawyer's letter of intent to register the easement with the subdivision plan, concurrent with subdivision approval.
- .2 Right-of-way documents for power, telephone, cablevision and gas facilities shall be prepared and registered by the respective utility companies.
- .3 It is preferable that right-of-ways are located within a single property, adjacent to and parallel with property boundaries. Right-of-ways must be clear of proposed building sites.
- .4 Where sanitary sewer, storm sewer or water facilities are not yet available, right-of-ways shall be provided by the Applicant for the eventual installation of the sanitary sewer, storm sewer or water facility as required by the City Engineer.

1.05 Engineering Field Reviews

The Consultant is responsible for field reviews and record drawings of all works and services constructed by the Applicant as part of the development proposal. The Consultant shall confirm that materials used during construction are in conformance with the City's Approved Products list.

The Applicant shall covenant and agree that the Consultant shall be retained to complete field reviews and record drawings.

Engineering field reviews shall consist of general and sufficient field reviews to ensure that the works and services are constructed in accordance with the accepted for construction drawings. Sufficient field reviews shall range from one field review per day during construction to full time resident field review for major developments. The Consultant and City Engineer will jointly determine the level of field review before construction begins. The Consultant shall submit copies of field review reports complete with photographs to the City Engineer at the end of each business day.

In addition to the Consultant carrying out field reviews, the Works Inspector may periodically conduct field reviews. If the Works Inspector notes unacceptable materials or practices, or deviations from the drawings, the Consultant shall take remedial action to the satisfaction of the City Engineer. Under no circumstances shall the Consultant rely on the Works Inspector for field reviews.

If the Consultant wishes to make any changes to the accepted design, either before or during the construction of the work, he/she shall first submit a change order showing proposed revisions to the City Engineer. If approval is granted for the change, then the original drawing shall be immediately revised and sealed by the Consultant and new prints issued prior to the change in work being performed.

The attention of the Contractor and of the Consultant is directed to the safety regulations of Worksafe BC regarding excavations. All City employees have been instructed not to enter excavations that are not in compliance with the Workers Compensation Act and the Occupational Health & Safety Regulations. Therefore, no approval will be given to installations that cannot be viewed because of unsafe working conditions.

1.06 Testing

The City Works Inspector will be given 48 hours (two working days) written notice of the intent to conduct testing, unless otherwise noted.

1.07 Rectification, Repair and Warranty

At his own expense, the Applicant shall execute, repair, alter, reconstruct or replace all work required to remedy any defect, fault or deficiency in the completed work. The Applicant's responsibility shall not only be up to the acceptance of the Consultant's record drawings, but also during a period of warranty herein referred to as the maintenance period of a minimum of twelve (12) months after the date of substantial completion, i.e., until final acceptance of works and services.

During the maintenance period, all works of rectification repair and warranty shall be executed as the need for them becomes apparent, or upon the written request of the City Engineer. Should the Applicant neglect or fail to commence the execution of such works within seven (7) days (or less, depending on the scenario) from the date of the written request, the City is entitled to remedy the work using the warranty security held under Section 1.08.

1.08 Security for Required Works and Services

Where it has been determined that works are required pursuant to this Bylaw, the Applicant will be required to construct works or provide security for the works prior to issuance of a building permit or subdivision approval. This security (called a security deposit) will be specified in a Servicing Agreement and may be provided in the form of cash or an irrevocable letter of credit drafted in accordance with the City's current guidelines.

Reduction of the security deposit shall be completed using the City's standard form.

Partial release of securities shall be permitted during the course of the project prior to the release granted at substantial completion. A sealed letter from the Consultant detailing the works completed to that point, along with an estimate of the cost of those works less applicable holdbacks, will be required to release security. The cost estimate of completed works shall be submitted using the City's standard form.

1.09 City Acceptance

Prior to receiving substantial completion, the Consultant shall submit a report summarizing the scope of work of the project and all testing results and any deficiencies to the City Engineer. The constructed works will then enter the one year maintenance period and the security deposit will be reduced to a minimum holdback of \$5,000.00 or five percent of the cost of the accepted completed works and 100 percent of the cost of any deficiencies, whichever is greater. Street trees, if required and not planted, will be considered deficiencies.

If no security deposit has been provided, the Applicant shall enter into a maintenance agreement with the City and provide the City with security of \$5,000 or five percent of the cost of the works as outlined in the paragraph above, whichever is greater, prior to substantial completion.

Certified record drawings shall be forwarded to the City no later than thirty days following the date of substantial completion (see Section 3.0 for submission requirements).

Prior to the expiration of the maintenance period, the City and Consultant will review the works for acceptability, and a final report will be provided by the Consultant to the City. Once all deficiencies have been addressed and the maintenance period has ended, final acceptance will be awarded by the City Engineer and the security deposit will be released for the accepted works. It is not the City's responsibility to contact the Consultant for the end of maintenance period inspection.

1.10 Building Permits

No building permit shall be issued until

- a certificate of substantial completion of the works has been issued by the City Engineer; or, alternatively,
- design, security and a Servicing Agreement for the works have been provided.

1.11 Approved Products List

The City has a policy of maintaining an approved products list. Only those products listed in the City of Parksville Approved Products List, which may be amended from time to time, will be accepted for installation.

This list should not be considered an endorsement of any given products, but rather as a listing of products that have been demonstrated to meet the operational and maintenance expectations of the City. The Approved Products List does not cover all products presently in use in the City. Products that have not been noted on this list shall be to the minimum CSA, ASTM, AWWA or other standards referenced within the text of the City of Parksville Engineering Standards and Specifications manual.

The Approved Products List will be reviewed and updated on a periodic basis. Any requests to have products added to this list should be made through the Engineering Department.