

**THE DISTRICT OF HOPE**

***SUBDIVISION AND DEVELOPMENT SERVICING***  
**DESIGN MANUAL**

**GENERAL REQUIREMENTS**

# GENERAL REQUIREMENTS

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## SECTION 1 INTRODUCTION

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- 1.1 This Manual sets out the general requirements in connection with the *Subdivision and Development Servicing Bylaw* No. \_\_\_\_ and shall be read in conjunction with that Bylaw.
- 1.2 In adopting this Manual, *Council*, through its various departments, has reviewed the needs of the *Municipality* with respect to *engineering* standards, compared the benefits of alternative practices, and identified the most acceptable approaches to provide *municipal* services.
- 1.3 The definitions contained in the *Subdivision and Development Servicing Bylaw* shall apply to this manual as well.
- 1.4 Revisions to the manual may be made from time to time as conditions change and/or improvements are warranted, subject to the approval of the *Approving Officer*.
- 1.5 The most current edition of this manual shall supersede all previous issues.
- 1.6 For the purposes of this manual, “the Work” means anything and everything to be done for the setting out, execution, and fulfillment of the specifications in the Manual.
- 1.7 The *Approving Officer* may delegate to designated staff members the authority to fulfill the responsibilities set out in this manual. Where the term “*Approving Officer*” is used in this manual, that term also applies to any designated staff members in all sections of this manual, except for Section 1 – Introduction.

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## SECTION 2    STANDARDS OF *ENGINEERING* WORKS

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- 2.1    All *Engineering works and services* as required by the *Subdivision and Development Servicing Bylaw* or as provided for the *Municipality* shall be designed, constructed and carried out to the criteria, standards, specifications and requirements stipulated in the *Subdivision and Development Servicing Bylaw*, its Schedules, this Manual and the Master Municipal Construction Documents as incorporated by reference into the Bylaw.
- 2.2    The *Subdivision and Development Servicing Bylaw*, its schedules, and this manual shall take precedence over the Master Municipal Construction Documents, if there is a conflict between the requirements of the documents.

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## SECTION 3 THE RESPONSIBILITIES OF THE *MUNICIPALITY, THE DEVELOPER, AND THE DEVELOPER'S AGENTS*

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### *Approving Officer's Status*

3.1 The *Approving Officer* shall be the *Municipality's* representative during the construction period and shall observe the Work in progress on behalf of the *Municipality*.

### *Consultants and Contractors to be retained by the Municipality*

3.2 Unless otherwise specifically approved by the *Approving Officer*, the *Municipality* may directly retain consultants for the design, construction and supervision of new or modifications to existing pump stations, control stations, meter stations and reservoirs.

3.3 The *Municipality* may directly retain consultants for the design, construction and supervision of the Work.

3.4 The *Municipality* may directly retain contractors constructing or modifying these *works and services*.

3.5 Where the *Developer* is financially responsible for the Work mentioned in 3.2, 3.3 and 3.4, the *Developer* shall post adequate certified cheques, bonds or irrevocable and automatically renewable Letters of Credit prior to the *Municipality* commencing the Work.

### *The Developer and the Developer's Agents' Responsibilities*

3.6 Authority for an agent to act on behalf of the *Developer* may be indicated by one of the following:

- (a) A completed Agent's Authorization form;
- (b) A authorization letter signed by the *Developer*;
- (c) A completed *Engineer's* Undertaking form; or
- (d) Other written evidence deemed acceptable by the *Approving Officer*.

3.7 The *Developer* shall be responsible for ensuring that his or her agents comply with any related provincial and *municipal* requirements.

3.8 The *Developer* shall retain, at his own expense, a *Developer's Engineer* for the design, construction, inspection and maintenance of the *Works and services*.

- 3.9 The *Developer*, the *Developer's Engineer*, and the *Owner* shall be aware of the areas and degrees of performance and responsibilities.
- 3.10 The design criteria and standards set out by the *Municipality* shall be considered as the minimum criteria or standards and shall not relieve the *Developer's Engineer* of his professional responsibilities nor from satisfying himself of the adequacy of his or her design.

### **Work Performance**

- 3.11 The whole of the Work, and the manner of performing the Work shall be done to the satisfaction of the *Approving Officer*, who shall be the sole judge of the Work and the materials in respect of both quantity and quality.
- 3.12 The *Approving Officer's* decision with regard to the Work and materials shall be final and binding

### **Variation of Work at *Developer's* Request**

- 3.13 The *Approving Officer* shall review any variation to the Work previously proposed, or as previously accepted in design.
- (a) The *Developer's Engineer* shall make the request for any variation in work in writing.
  - (b) The *Developer's Engineer* shall include signed and sealed revisions to the previously accepted drawings with the request for variation.
  - (c) The *Approving Officer's* decision as to the acceptability of the proposed variation shall be final and binding.

### **Unforeseen Conditions**

- 3.14 If, at any time after the drawings have been accepted for construction, unforeseen conditions or circumstances become known which make it necessary that changes in the design or extra works be done in order to complete the project in an acceptable manner, the *Approving Officer* shall have the right to order such changes or extra work as he deems necessary to the complete the Work in an acceptable manner.
- 3.15 The *Developer* shall pay all costs of such extra work.

### **Verbal Agreements**

- 3.16 No verbal instruction, objection, claim or notice by any party to the other shall change or modify any of the terms or obligations contained in any of the

specifications and none of the Specifications shall be held to be waived or modified by any reason of any act whatsoever, other than by an agreed waiver or modification thereof in writing.

### **Service of Notices**

- 3.17 Any notice, order, agreement direction, request or other communication by the *Municipality* shall be deemed given to the *Developer* if the *Municipality*
- (a) leaves the communication at any office of the *Developer*,
  - (b) delivers the communication to any of his officers or employees or the *Developer's Engineer*; or
  - (c) mails the communication to the *Developer's* last known place of business.

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## SECTION 4 CONDUCT OF WORK

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### Responsibility

- 4.1 The *Developer* shall be fully responsible to the *Municipality* for the acts and omissions of his agents and persons directly or indirectly employed by him.
- 4.2 The *Developer* shall agree to bind all agents and employees to the specifications and drawings applicable to *works and services*.
- 4.3 The *Developer* shall not start any work on municipal highways or rights-of-way without written permission from the *Approving Officer*.
- 4.4 The *Developer*, the *Developer's Engineer* and the *Developer's Contractor* shall attend a preconstruction meeting with the *Approving Officer* prior to the start of the construction of the required *works and services*.

### Materials and Workmanship

- 4.5 The whole of the Work shall be performed in a workman-like manner with material and workmanship of the best quality and description.
- 4.6 All material used shall be new, unless otherwise specified.

### Survey Monuments and Legal Postings

- 4.7 All legal posts, stakes, survey monuments and integrated survey monuments within the area of the Work, and all construction stakes and marks on adjoining works, shall be preserved undisturbed and visible.
- 4.8 In the event that any of the above items are disturbed, lost or destroyed, the *Municipality* shall undertake the actual re-establishment of the monuments, at the expense of the *Developer*.
- 4.9 All surveys within integrated areas of the *Municipality* shall be tied to the monument system based on the Surveyor General's instructions.
- 4.10 Additional survey monuments shall be required to achieve a minimum density level as areas become developed.
- 4.11 The *Approving Officer* shall establish integrated survey monument locations in accordance with provincial standards.

- 4.12 The *Developer* shall pay a deposit to the *Municipality* at the time of *Subdivision* to cover the cost of the monument densification.
- 4.13 The *Approving Officer* shall establish the amount of the deposit based on the required monument density and the estimated cost of establishing the monument density.

### **Work of Others**

- 4.14 The *Municipality's* officers, employees, agents and contractors shall be able to enter upon the site of the Work with his or her workmen and materials to do other work.
- 4.15 The *Developer* shall afford any such persons all reasonable facilities to the acceptance of the *Approving Officer*.
- 4.16 The *Developer* shall arrange his work and dispose of his material in such a manner as not to interfere with the Work or storage of materials or others upon the site of the Work.
- 4.17 The *Developer* shall join his work to that of others and perform his work in proper sequence in relation to that of others to the acceptance of *Approving Officer*.

### **Existing Structures and Utilities**

- 4.18 Any plans or descriptions, verbal or otherwise, of existing public utilities and structures that are given to the *Developer* are intended only as an aid in the location of these items.
- 4.19 Measurements and locations of the existing underground utilities and structures shown on the drawings are compiled from the most reliable information available, and must be verified by the *Developer* prior to proceeding with construction.
- 4.20 The *Municipality* accepts no responsibility for the accuracy of their locations.

### **Drainage**

- 4.21 The *Developer* shall keep all portions of the site properly and efficiently drained during construction and until final acceptance by the *Approving Officer*.
- 4.22 The *Developer* shall be held responsible for all damage which may be caused or result from water backing up or flowing over, through, from or along any part of the Work, or which any of his operations may cause to flow elsewhere.

- 4.23 The *Developer* shall keep existing culverts, drains and ditches affected by the Work clear of excavated material at all times during construction.
- 4.24 When it is necessary to temporarily remove an existing drainage structure, the *Developer* shall provide suitable temporary ditches or other accepted means of handling the drainage.
- 4.25 The *Developer* shall replace culverts and drain pipes at the time of trench backfilling and shall adequately support the culverts and drain pipes such that the trench settlement does not disrupt the flow of water.
- 4.26 The *Developer* shall replace culverts, drains and ditches in such a condition that is at least equal to that which existed before the construction commenced.
- 4.27 The *Developer* shall reinstate the ditches so as to prevent any erosion or seepage.
- 4.28 At all times during the course of construction and to the end of the *Maintenance Period*, there shall be no discharge of any silt, dirt or debris into any existing drainage facility or watercourse.
- 4.29 Streets, catch basins, manhole sumps and siltation controls affected by the *Works and Services* shall be cleaned and maintained as often as the *Approving Officer* deems necessary.
- 4.30 The *Developer* shall confirm that the existing downstream drainage facilities are adequate to receive the drainage from the *Development* without any deleterious impacts.

### **Disposal of Excavate Material on Private Property**

- 4.31 The *Developer* shall not place material from excavations on private property within the Agricultural Land Reserve unless the *Developer* has complied with the requirements of the applicable provincial statutes.
- 4.32 The *Developer* shall make arrangements that are acceptable to the *Approving Officer* for the placement of material from excavations on private property outside of the Agricultural Land Reserve.

### **Work to Fit with Others**

- 4.33 All cutting, fitting and patching of work shall be done to properly fit or receive existing structures and utilities.

- 4.34 The *Developer* shall not endanger existing works by cutting, digging or any other operation and shall not disturb or alter the Work of others except with the written consent of the *Approving Officer*.

### **Damage to Work**

- 4.35 The *Developer* shall be responsible for all loss or damage that may occur on the Work until the same has been delivered to and accepted by the *Approving Officer* as specified.
- 4.36 If any loss or damage occurs before such acceptance by the *Approving Officer*, the *Developer* shall immediately, at his own expense, repair, restore, or re-execute any work that may have been damaged or destroyed.
- 4.37 All repair, restoration or re-execution of the Work that may have been damaged or destroyed shall be carried out and completed to the acceptance of the *Approving Officer*, and at no cost to the *Municipality*.

### **Use of Completed Portions**

- 4.38 The *Municipality* shall have the right to take possession of and use any completed or partially completed portion of the Work, but such possession and use shall not be deemed an acceptance of such Work.
- 4.39 If such prior use increases the cost of uncompleted Work or causes refinishing of completed Work beyond normal wear and tear, the *Developer* shall be entitled to such compensation as the *Approving Officer* may determine.

### ***Municipality's Right to Repair, Restore, or Re-execute the Work***

- 4.40 Should the *Developer* fail to perform the Work to the acceptance of the *Approving Officer* by failing to begin work or to repair, restore, re-execute, or in any manner fails to comply with the specified standards as it applies to any part of the Work as requested by the *Approving Officer* within a period of 7 days of the *Municipality* sending such notice in writing, the *Municipality* shall be able to do the Work itself or employ someone to repair, restore or re-execute the Works.
- 4.41 The *Municipality* shall charge the entire expense of repair, restoration, or re-execution to the *Developer*.
- 4.42 In an emergency, the *Municipality* may immediately commence with the repair and restoration work or the re-execution.

- 4.43 The repair, restoration or re-execution shall in no way affect the *Developer's* duties and liabilities nor in any way relieve him from the performance and fulfillment of any or all of his obligations and duties described in this schedule.
- 4.44 All such repair, restoration, or re-execution of work shall be carried out and completed to the acceptance of the *Approving Officer*.
- 4.45 The fact that the *Municipality* does not disapprove of or reject any part of the Work or any of the materials supplied in connection with the Works at the time of the *Approving Officer* making an estimate, or at any other time during the execution of the Work, shall not be deemed or be construed to be an acceptance of any such part of the Work or any such materials.
- 4.46 The provisions of this section shall remain in full force and effect and be applicable for the period of the execution of the Work and for the *Maintenance Period*.

#### **Payment of Accounts by *Developer***

- 4.47 The *Developer* shall pay all accounts for labour, services and materials incurred by the *Municipality* as a result of executing any sections of this manual during the execution of the Work, as and when they become due and payable.
- 4.48 Should payment of such accounts not be made when they become due, the *Municipality* will deduct the payment from the *security deposit*.
- 4.49 In the event that the amount is greater than that owing to the *Developer*, the *Developer* shall pay the difference charged by the *Municipality*.

#### **Employee Safety**

- 4.50 The *Developer* shall, at all times, be responsible for the safety of his employees and for the safety, adequacy, efficiency and sufficiency of their work site, equipment and method of executing the Work.
- 4.51 The *Developer* shall be responsible for full compliance with the Workers' Compensation Board's Industrial Health and Safety Regulations, including the proper training and supervision of employees and agents.
- 4.52 The *Developer* shall be responsible for notification of the proposed Work to the Workers' Compensation Board.
- 4.53 The *Developer* shall forward a copy of the notification letter to the *Municipality* prior to commencement of the Work.

## **Public Convenience, Access, Clean Up**

- 4.54 In carrying out the Work, the *Developer* shall consider and provide for the convenience of the public.
- 4.55 The *Developer* shall not obstruct the streets, thoroughfares or sidewalks any longer or to any greater extent than is absolutely necessary in the *Approving Officer's* opinion.
- 4.56 In any case, the *Developer* shall not obstruct any street, roadway or place longer or to a greater extent than is ordered or approved by the *Approving Officer* in writing.
- 4.57 The *Developer* shall provide safe access to driveways, buildings and property, both for vehicles and pedestrians.
- 4.58 The *Developer* shall construct suitable and convenient platforms, approaches, structures, bridges, crossings or other works and shall maintain them in good order and in a serviceable condition as required by *Approving Officer*.
- 4.59 The *Developer* shall not deposit material upon any street, sidewalk, boulevard, grass plot, or other public property without due consultation with *Approving Officer*, so that the least amount of damage will be incurred.
- 4.60 The material shall not be allowed to remain there longer than is necessary.
- 4.61 During all phases of the Work, the *Developer* shall take precautions to abate nuisance caused by mud or dust by clean-up, sweeping, sprinkling with water or other means as necessary to accomplish results acceptable to the *Approving Officer*.
- 4.62 The *Developer* shall obtain written consent from the *Approving Officer* prior to the closure of any public highway access or any right-of-way.

## **Traffic Control, Barriers, Light**

- 4.63 The *Developer* shall, at his own expense, provide, erect and maintain all required barriers, fences, or other proper protection, and shall provide, keep and maintain operating lights with amber globes, or provide watchmen as may be necessary in order to insure safety to the public as well as to those engaged about the premises of the Works.

- 4.64 Where it is practicable, in the *Approving Officer's* opinion, the *Developer* shall keep any roadway open for travel for the use of the public for such width as the *Approving Officer* may direct.
- 4.65 The *Developer* shall provide a sufficient number of “No Thoroughfare”, “Detour” or other signs or notices, as determined by the *Approving Officer*.
- 4.66 The *Developer* shall cause to be placed at distance from the obstruction to serve sufficient warning to the travelling public and maintain such signs in good order in conspicuous places wherever any roadway, sidewalk or thoroughfare is torn up or dangerous, and so long as it remains unsafe or unfinished.
- 4.67 The *Developer* shall provide vehicular or pedestrian traffic warning, control or barrier devices which shall be in accordance with the Traffic Control Manual for work on Roadways as published by the Ministry of Transportation of Highways and subject to the acceptance of or on the conditions of the *Approving Officer*.

### **Disposal of Debris**

- 4.68 No person shall dispose of debris from construction and site clearance works or material brought to the site unless the person obtains prior approval from the *Municipality* for the method of disposal.

### **Easement Releases**

- 4.69 On completion of the Work on private or *Municipal* property or *Municipal rights-of-way*, the *Developer* shall obtain from each property owner affected a formal release in writing, verifying that the clean-up has been performed and complete to the property owner's acceptance and that the property owner has no further claim upon the *Developer* or the *Municipality* as a result of such work.
- 4.70 The *Developer* shall provide all such releases to *Approving Officer*.
- 4.71 The *Approving Officer* shall retain the releases as part of the *Municipality's* records.

### **Arbitration**

- 4.72 In the case of any dispute between the *Municipality* and the *Developer* during the progress of the Work, or afterwards, as to any matter arising thereunder either party, at his option, give to the other notice of such dispute and demand arbitration thereof.

- 4.73 The parties may then agree to submit the matters in dispute to arbitration in accordance with the laws of the Province of British Columbia.
- 4.74 If there is no agreement as to arbitration, either party may elect to have such dispute determined by a Court of competent jurisdiction.
- 4.75 Arbitration shall not be a cause for the stoppage of work.

**Maintenance of Works and Services, including Landscaping.**

- 4.76 The *Maintenance Period* shall be the one year period from the date shown on the *Certificate of Substantial Performance*.
- 4.77 The *Developer* shall guarantee the stability and sufficiency of the materials and workmanship supplied and the whole of the Work performed and shall be responsible for and shall make good all defects, imperfections, vandalism acts and settlements which have become apparent during the *maintenance period*.
- 4.78 Should the *Developer* fail to make good any defects, imperfections, vandalism acts, settlements or clean-up after the *Approving Officer* has given 7 days notice in writing to do so during the *Maintenance Period*, the *Municipality* shall be entitled to make alternative arrangements for the execution of the repairs and to recover the costs from the *Developer*.
- 4.79 During the *Maintenance period*, the *Developer* shall replace any plant material that dies, is damaged or that fails to grow satisfactorily as determined by the Director of *Development Services*.
- 4.80 All replacements of the plant material shall be with plant material of the same kind and size as the original plantings.
- 4.81 The warranty on replacement plant material shall extend for the period equal to the original warranty and *maintenance period*.
- 4.82 The *Approving Officer* reserves the right to extend the *Developer's* warranty and maintenance responsibilities for *landscaping* for an additional year if, at the end of the initial warranty and *maintenance period*, leaf *Development*, growth or overall vigour is not sufficient to ensure future survival.

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## SECTION 5 AGREEMENTS, BONDING, INSURANCE, PERMITS

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### *Servicing Agreement*

- 5.1 Prior to commencement of construction of the *Works and services*, the *Municipality* may require the *Developer* to execute a *Servicing Agreement*.
- 5.2 The purpose of the *Servicing Agreement* is to protect the *Municipality* against claims, including liability, for matters arising from the construction, installation, and inspection of the Work and to allow for provisions which enable the *Approving Officer* to consider the signing of the *Subdivision Plans* prior to the start, completion or both of the Work.
- 5.3 The *Servicing Agreement* may make provisions for the security deposit, indemnity clause, insurance requirements, warranty and *maintenance periods*, and administration fees.
- 5.4 In the preparation of a valid *Servicing Agreement*, the *Developer* shall submit the following:
- a) 2 signed and sealed copies of the *Servicing Agreement*;
  - b) security deposits;
  - c) a certificate of insurance in accordance with the requirements of the *Servicing Agreement*;
  - d) 4 complete sets of accepted design drawings.
  - e) The non-refundable administration fees set out in Schedule B of the Bylaw.
- 5.5 The *Municipality* shall prepare the *Servicing Agreement*.

### **Security Deposit**

- 5.6 The *Municipality* shall require a *Security Deposit* from the *Developer* that is acceptable to the *Approving Officer* to ensure the construction, installation and maintenance of the Work as identified in the *Servicing Agreement*.

### **Indemnity Clause**

- 5.7 As stipulated in the *Servicing Agreement*, the *Developer* agrees to save harmless and effectually indemnify the *Municipality* against:
- a) all actions and proceedings, costs, damages, expenses, claims and demands whatsoever and by whomsoever, brought by reason of the performance of the Work;

- b) all expenses and costs which may be incurred by reason of the execution of work resulting in damage to any property owned in whole or in part by the *Municipality* or which the *Municipality* by duty or custom is obliged, directly or indirectly, in any way or to any degree, to construct, repair or maintain;
- c) all expenses and costs which may be incurred by reason of liens for non-payment of labour or materials, Worker's' Compensation assessments, Employment Insurance, Federal or Provincial taxes, and for encroachments owing to mistakes in surveying;
- d) all actions and proceedings, costs, damages, expenses, claims and demands arising from the *Developer's* trespass or damage to private property or properties owned by a person other than the *Municipality*.

5.8 If the *Municipality* pays any monies because of failure of the *Developer* to execute the indemnity clause in the *Servicing Agreement*, then the *Municipality* may charge all such monies and reasonable expenses to the *Developer*.

### **Public Liability and Property Damage**

5.9 Prior to the commencement of any work, the *Developer* shall obtain and maintain in force during the term of the *Servicing Agreement* and the *maintenance period*, a policy of insurance acceptable to the *Municipality* with limits of not less than the following:

- a) Comprehensive public liability insurance and property damage insurance providing coverage of at least \$3,000,000 inclusive against liability for bodily injury or death and/or damage to property on an all risk occurrence basis;
- b) Motor vehicle insurance for public liability and property damage providing coverage of at least \$3,000,000 inclusive on owned, non-owned or hired vehicles;
- c) Completed operations coverage on all-risk coverage basis of at least \$4,000,000 inclusive against liability for bodily injury, death and/or damage to property of others arising out of the existence of any condition in the Work when completed or any installation or repair operations during the *maintenance period*.

5.10 All policies of insurance providing coverage called for by this part, excluding motor vehicle insurance, shall include the following provisions:

- a) that the *Municipality* shall be named as an additional insured;
- b) that the insurance shall apply as though a separate policy has been issued to each named insured;
- c) that each Contractor engaged in the Work shall be named as an additional insured in respect of the performance of the Work;
- d) that no expiry, cancellation or material change in the policy shall become effective until after 30 days notice of such cancellation or change has been given to the *Municipality* by registered mail.

- 5.11 The *Developer* shall not commence the Work until the above provisions have been satisfied.
- 5.12 The *Developer* shall maintain the insurance policies until the end of the *maintenance period*.
- 5.13 As a condition for permission to construct the *Developer* shall deliver to the *Municipality* an Insurance Certificate signed by a licensed insurance agent and a copy of the insurance policy.

### **Patents and Copyrights**

- 5.14 The *Developer* shall pay all royalties, patent and license fees and hold and save harmless the *Municipality*, its officers, agents, servants and employees from liability of any nature or kind, including costs and expenses for or on account of any copyrighted or uncopyrighted composition, secret process, patented or unpatented invention, articles or appliances manufactured or used in the execution of the Work, including their use by the *Municipality*.
- 5.15 If the *Developer* fails to save the *Municipality*, its officers, agents, servants and employees in manner aforesaid, the *Municipality* may recover from the *Developer* any monies collected from the *Municipality*, its officers, agents, servants and employees by reason of such failure.

### **Road closures**

- 5.16 Work undertaken on a highway or on a gazetted or otherwise dedicated *highway right-of-way* or all full or partial road closures requires the prior approval of the *Approving Officer* before work is undertaken.

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## SECTION 6    MONITORING AND SECURITY DEPOSIT

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### Monitoring of the Work during Construction

- 6.1    The *Approving Officer* may monitor any part of the Work and any other places where material for the Work is being prepared or stored as and when he deems it necessary.
- 6.2    The *Developer* shall afford the *Approving Officer* every necessary facility and access.
- 6.3    Where monitoring by the *Approving Officer* discovers deficiencies, the *Approving Officer* may undertake further monitoring and inspection to review the Works.
- 6.4    The *Developer* shall supply representative samples of materials as and when required by the *Approving Officer* and shall provide any available competent labour required by the *Approving Officer* on site in connection with survey, measurements, inspections and testing of the Work.
- 6.5    No payment shall be made by the *Municipality* for the cost to the *Developer* of any labour, material, work or delay occasioned by this requirement.
- 6.6    At the request of the *Approving Officer* and at the time requested by the *Approving Officer*, the *Developer* shall open for inspection any part of the Work that has been covered up.
- 6.7    Monitoring of construction of the Work by the *Approving Officer* is limited to ensuring that the Work is in general compliance with the standards stipulated in the bylaw and that the finished product will be in general conformity with the intent of the accepted plans and in a condition acceptable to the *Municipality*.
- 6.8    Monitoring does not constitute day to day inspection, supervision or coordination of the Work, and neither is monitoring intended to serve in place of inspection of the Work by the *Developer's Engineer*.
- 6.9    The *Developer's Engineer* shall undertake regular inspection and supervision of the Works to ensure that the Work is being performed in compliance with approved design drawings and the requirements of the *Subdivision and Development Servicing Bylaw*.

- 6.10 The *Developer's Engineer* shall submit inspection reports weekly to the *Approving Officer*.
- 6.11 The *Developer's Engineer* shall provide such professional services as required by the *Engineers and Geoscientists Act Code of Ethics*.
- 6.12 The *Developer's Engineer* shall be responsible for:
- a) on-site *Engineering* inspection of *works and services*;
  - b) ensure that there is geotechnical testing and assurances for the *Works and Services*, where required; and
  - c) ensuring that all the requirements of the *Municipality* are carried out to a satisfactory conclusion.
- 6.13 The *Developer* shall be responsible for making arrangements to ensure the inspection, supervision and coordination of the Work including but not limited to the *Works and services* for hydro, gas, electrical and communication services and for ensuring that all requirements of the *Municipality* are met and completed within the stipulated time limits.
- 6.14 Upon substantial completion of the construction and prior to the issuance of the *Certificate of Substantial Performance*, the *Developer's Engineer* shall submit an Inspection Certificate and an Inspection Checklist that state that all construction has been completed in compliance with approved design drawings and in compliance with the *Subdivision and Development Servicing Bylaw*.
- 6.15 Within 60 days of the date of issuance of the *Certificate of Substantial Performance*, the *Developer's Engineer* shall submit the certified Record Drawings.

### **Service Record Cards and Record Drawings**

- 6.16 Prior to issuance of the *Certificate of Substantial Performance* and the release of the building permits, the *Developer* shall deliver to the *Approving Officer* an Inspection Checklist and a services record card for each parcel.
- 6.17 The services record card shall show:
- a) *rights-of-ways* and easements;
  - b) the location and depth of water, storm sewer, sanitary sewer, and the location of hydro, cable and telecommunication connections and streetlights;
  - c) the *Minimum Building Elevation*;
  - d) the elevation of *parcel* corners; and
  - e) existing frontage information adjacent to the *parcel*.

- 6.18 The *Municipality* may conduct spot checks to verify the authenticity of the “as-built” information.

### **Certificate of Substantial Performance**

- 6.19 Upon completion of the construction, the *Developer* shall notify the *Approving Officer*.
- 6.20 Upon receipt of notice, the *Approving Officer* may inspect the *Works and Services* and if, necessary, issue a list of deficiencies that must be corrected.
- 6.21 The *Approving Officer* may only issue a *Certificate of Substantial Performance*, when all of the major deficiencies have been corrected and the Inspection Checklist and record cards are submitted and have been accepted by the *Approving Officer*.
- 6.22 Upon acceptance of the Inspection Checklist, the service record cards, and the Record Drawings, the *Municipality* shall release all security withheld less a *Maintenance Deposit* of 15% or \$2,500, whichever is greater, of the total secured costs of the Work, to insure payment of any maintenance or repair.
- 6.23 The value of any deficiencies shall be held in addition to the *Maintenance Deposit*.

### **Record Drawing Release**

- 6.24 Within 60 days of the issuance of the *Certificate of Substantial Performance*, the *Developer* shall deliver to the *Approving Officer* two sets of signed and sealed paper prints, one set of mylars, and one set of digital drawing files in a form satisfactory to the *Approving Officer*, unless the *Developer* has provided a deposit to guarantee the completion of the drawings.

### **Security Deposit Reductions**

- 6.25 As the *Works and Services* progress, the *Developer’s Engineer* shall prepare and submit not more than once each month an estimate of the quantity, value, and percentage of Work completed.
- 6.26 Upon verification of the estimate, the *Approving Officer* may release the *security deposit* held by the *Municipality* to a maximum of 85% of the value of the Works completed.
- 6.27 The *Approving Officer* may deny any reductions where, in his opinion, the *security deposit* is required to cover the remainder of the Work.

- 6.28 No release period shall be less than one month.
- 6.29 Security reductions are for the convenience of the *Developer* and, in no case, shall the remaining *security deposit* amount be less than 15% of the cost of the total Works plus the value of any deficiencies.

### **Maintenance Deposit Release**

- 6.30 The *Approving Officer* shall release the *maintenance deposit*, less the cost of any repairs chargeable to the *Developer*, upon expiry of the *maintenance period*, when so requested by the *Developer*.
- 6.31 The *maintenance deposit* does not apply to BC Hydro, BC Gas, Telus (telephone), Cable, or telecommunication approved installations.

### **BC Hydro, BC Gas, Telus (telephone) Security**

- 6.32 Any security held by the *Municipality* specifically marked to bond for BC Hydro, BC Gas, Telus (telephone), Cable or telecommunication installations shall be released only upon written confirmation from the respective utility companies stating that those works are completed and constructed to its specifications.

### **Certificate of Final Acceptance**

- 6.33 The *Approving Officer* shall issue a *Certificate of Final Acceptance* upon the expiration of the *Maintenance period*, provided that the *Developer* has had all damages and deficiencies (excluding normal wear and tear) corrected.

### **Testing or Confirmation of Completed Works**

- 6.34 The *Municipality* reserves the right to conduct independent testing of any works constructed or being constructed.
- 6.35 The independent testing is for the purpose of ensuring that the Work being accepted by the *Municipality* meets the minimum acceptable standards.
- 6.36 The *Municipality* may conduct spot-checks to verify the authenticity of the “as-built” information.
- 6.37 The *Developer* shall bear the costs of testing or spot-checks, if the Works *and Services* do not comply with this manual nor with the construction specifications and standard drawings .

## Issuance of Building Permits

- 6.38 In new *Subdivisions* where *municipal* services are required, all essential services (water, storm, and sanitary systems, lot grading, first lift of asphalt, curbs, sidewalks, street light bases, BC Hydro, Telus (telephone), cable, underground works) shall be in place and accepted by the *Approving Officer* prior to the issuance of the *building permits*.
- 6.39 As an exception to the above section, show homes may be constructed on 10% of the *parcels*, subject to the *Developer* acknowledging in writing that there will be no request for final occupancy inspection of the building until all essential services have been accepted by the *Municipality* and that the *Developer* accepts full liability for any inadequacy in the availability of water for the purposes of fire fighting and of any other services. The *Developer* must *provide* access for fire fighting vehicles to all show homes to the satisfaction of the *Approving Officer*.

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## **SECTION 7    *DEVELOPER'S ENGINEER'S UNDERTAKING***

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- 7.1    The *Developer's Engineer* shall provide a letter of *Engineer's Undertaking*, confirming his responsibilities before, during and after the construction of the *Work and Services*.
- 7.2    The *Developer's Engineer* shall submit the letter of *Engineer's Undertaking* to the *Municipality* prior to the pre-construction meeting.