7. **DELEGATION**

- 7.1. The **District Engineer** is hereby delegated the powers to execute and amend all forms related to this Bylaw, including:
 - (a) Statutory Right of Way;
 - (b) Subdivision and **Development** Servicing Agreement;
 - (c) Maintenance Agreement;
 - (d) Section 219 Covenant for Onsite Water Treatment;
 - (e) Section 219 Covenant for Onsite Sewerage system;
 - (f) Drawing Standards Policy; and
 - (g) Latecomer Agreements.
- 7.2. Delegation contained with this Bylaw includes the successor, lawful deputy, and any person designated to act in <u>histheir</u> place.

8. APPLICATION PROCEDURES

- 8.1. Under the procedures set out in this Bylaw, if an Owner of land intends:
 - to subdivide a parcel of land; or to develop a parcel of land the Owner must make application to the District for subdivision or development.
- 8.2. An application must:
 - (a) be signed by the Owner of each parcel of land that is the subject of the application or by a person authorized in writing by the Owner to act as histheir-or-her agent for the purpose of making the application;
 - (b) be made in writing on the application forms prescribed by the **District**;
 - (c) include the information required under this Bylaw; and
 - (d) be accompanied by the applicable fees.

9. **OWNER'S ENGINEER**

- 9.1. Unless exempted by the **District Engineer** the **Owner** must retain, at the **Owner's** sole expense, a Professional Engineer who shall:
 - (a) prepare engineering design drawings in accordance with the provision of this bylaw.
 - (b) be responsible for the design, layout, approval of materials, field reviews of installation, information for and certification of as-built drawings and documents, for all services that are the responsibility of the **Owner** under this Bylaw;
 - (c) be responsible for coordinating communication between the **District** and the **Owner**, the **Owner's Engineer**, and the **Contractor**.
 - (d) ensure that the work is performed in accordance with all applicable laws, ordinances, rules, regulations, codes, Bylaws, and orders of the **District** or other authorities having jurisdiction.
 - (e) ensure all permits, licenses, approvals and certificates required for the performance of the work are obtained
- 9.2. If the Owner's Engineer can demonstrate and certifies that an alternative solution meets the intended safety, operational and functional objectives set out in the provisions of this bylaw, then, the District Engineer may permit the alternative solution. Notwithstanding permission granted by the District Engineer in this section, the Owner and Owner's Engineer retain full responsibility for the alternative

solution. The District Engineer may require third-party consulting engineer to evaluate the alternative solution, at the Owner's Expense.

9.3 Where the site conditions or existing conditions create extreme challenges related to physical works or are not financially feasible, the District Engineer may vary from the specifications and standards in this bylaw.

10. **MMCD**

- 10.1. MMCD Specifications are hereby incorporated by reference into and form part of this Bylaw.
- 10.2. **MMCD** Specification provisions shall apply to all works constructed within the **District**. Where the provisions contained in this Bylaw are in conflict with the **MMCD** Specifications, this Bylaw shall supplement or supersede the **MMCD** Specifications.

11. DUTY OF CARE

11.1. This Bylaw does not create any duty at law on the part of the District, its Council, District Engineer, officers, employees or other representatives concerning anything contained in this Bylaw. All works, services, improvements and all matters required pursuant to this Bylaw are the responsibility of the Owner and Applicant and all persons acting on their behalf. No approval of any kind, certificate, permit, review, inspection, or other act or omission by the District or any of its representatives, including any enforcement, or lack of enforcement of the provisions of this Bylaw shall relieve the Owner and Applicant and all persons acting on their behalf from this duty pursuant to this Bylaw and shall not create any cause of action in favour of any person against the District, its Council, District Engineer, officers, employees or other representatives concerning anything contained in this Bylaw.

12. **COMPLIANCE**

- 12.1. No parcel may be subdivided or **developed** unless the subdivision or **development** conforms to the provisions set out in this Bylaw.
- 12.2. The **District Engineer** or the **Building Inspector** may issue a compliance order to the **Owner** or any other person found to be in contravention of this Bylaw, which may:
 - (a) require a person who contravenes this Bylaw to comply with the Bylaw within a time limit specified in the order;
 - (b) include an order to Stop Work or otherwise cease construction or **development** of works;
 - (c) require tests and evidence of proof of materials, equipment devices, construction methods, assemblies or soil conditions meet the requirements of this Bylaw;
- 12.3. If a compliance order is issued, approval may not proceed until the **District Engineer** or **Building**Inspector is satisfied that the required actions or repairs and any required fees or charges have been paid;
- 12.4. All costs associated with rectifying non-compliance issues shall be the sole responsibility of the Owner.
- 12.5. If the required actions or repairs, or any part thereof, are not completed in accordance with the provisions of this Bylaw the **District** may draw funds from the Letter of Credit and may complete the works at the expense of the Owner. If there is insufficient security, then the **Owner** will pay such

SCHEDULE A DEFINITIONS

- A.1.1Unless otherwise defined in this Bylaw, a word or expression in this Bylaw has the meaning assigned to it in the *Local Government Act, Interpretation Act, Community Charter, Transportation Act* or *Land Title Act* or any of successor legislation.
 - (a) In this Bylaw:
- "Applicant" means an Owner of land or histheir agent duly authorized in writing, who applies for approval to subdivide or develop that land.
- "Approving Officer" means the person appointed as the Approving Officer of the District of Lake Country, or histheir designate, appointed pursuant to the provisions of the Land Title Act.
- "arterial highway" means a highway where the primary use is to provide connection from collector highways to other collector highways with limited access from local highways.

"boulevard" means that portion of highway between:

- (a) the curb and the adjoining property,
- (b) the curb and a separate sidewalk,
- (c) the road boundary and the adjoining property, and
- (d) the curb lines on the median strips or islands. does not include curbs, sidewalks, ditches, or driveways.
- "Building Inspector" means the person appointed by the District as the Chief Building Inspector or histheir designate.
- "Certificate of Total Performance" means documentation signed by the District Engineer indicating that total performance has been achieved and approved in accordance with this Bylaw.
- "collector highway" means a highway where the primary use is to provide connection from local highways to other collector highways and arterial highways while providing limited access to properties.
- "community sewer system" means a system of works for the collection, treatment, and disposal of sewage that is owned, operated, and maintained by the District.
- "community water system" means a system of works for the distribution of water and connection to a system of water works as referred to in Part 2 of the *Drinking Water Protection Act* which is owned, operated, and maintained by the District, or a private water utility.
- "contractor" means the person, firm or corporation retained by the Owner, directly or indirectly to construct, erect, or install the works.
- "Council" means the elected Council of the District of Lake Country.
- "cul-de-sac" means a highway which has only one point of intersection with another highway except for access by way of emergency access, and that terminates in a vehicle turning area that is to be permanently closed.
- "designated integrator" means the company or individual designated by the **District** to carryout PLC, HMI, and SCADA programming.

"development" or "developed" means the construction, alteration, or extension of buildings and/or structures for any use authorized by the Zoning Bylaw that requires issuance of a Building Permit or through an approved Development Permit, but does not include internal alterations of a building and/or structure where the principal use of the building and/or structure, or part thereof, is not changing. The altering of land for any use authorized under the Zoning Bylaw or through an approved Development Permit is considered to be Development.

"District" means the municipality of the District of Lake Country.

"District Engineer" means the Director of Engineering and Environmental Services for the District of Lake Country or <u>histheir</u> designate.

"engineer" means a person who is registered, or duly licensed as such, under the provisions of the *Engineers* and *Geoscientists Act of British Columbia*.

"field reviews" mean such reviews of the works:

- (a) at the site of subdivision or development to which the subdivision application or building permit relates, and
- (b) where applicable, at the fabrication site where components of the required works are fabricated,

that the Owner's Engineer, in histheir or her professional discretion, considers to be necessary in order to ascertain that the work conforms in all material respects to the design drawings and supporting documents prepared by the Owner's Engineer and marked, "Reviewed for Construction" by the District Engineer. This will include keeping record of all site visits and any corrective actions taken as a result thereof.

"final approval" with respect to subdivision, means approval of a subdivision pursuant the Land Title Act and; with respect to development, means issuance of a Certificate of Substantial Completion.

"frontage" means the width of a parcel measured along the shortest parcel boundary which immediately adjoins a highway other than a lane or a walkway.

"geoscientist" means a person who is registered, or duly licensed as such, under the provisions of the *Engineers* and Geoscientists Act of British Columbia.

"highway" means a public street, road, trail, lane, bridge, trestle, tunnel any other public way or any other land or improvement that becomes or has become a highway by any of the following:

- (a) deposit of a subdivision, reference or explanatory plan in a land title office under section 107 of the Land Title Act;
- (b) a public expenditure to which section 42 applies;
- (c) a common law dedication made by the government or any other person;
- (d) declaration, by notice in the Gazette, made before December 24, 1987;
- (e) in the case of a road, colouring, outlining or designating the road on a record in such a way that section 13 or 57 of the Land Act applies to that road;
- (f) an order under section 56 (2) of this Act;
- (g) any other prescribed means;

"local highway" means a highway where the primary use is to provide access to properties while providing limited access to other local highways and collector highways.

"lane" means a highway intended to provide secondary access to parcels of land.

"minimum building elevation" means the elevation of the underside of the lowest floor in a building or if lower, the lowest floor elevation in a crawl space.

"MMCD" means the Master Municipal Construction Specifications, 2009 Platinum Edition Volume II, prepared by the Master Municipal Construction Document Association as amended from time to time.

"offsite" means located on public highway, public land, or statutory right-of-way at final approval of the subdivision or development as the case maybe.

"onsite" means located on private property during development at final approval but prior to substantial completion of the subdivision or development.

"Overhead wiring" means the installation of above ground electrical and communication wiring usually installed from pole to pole.

"Owner" means, in respect of real property, the person registered as an Owner of an estate in fee simple, the tenant for life under a registered life estate, or the registered holder of the last registered agreement for sale, and includes histheir agent duly authorized in writing.

"Owner's Engineer" means the engineer or firm of engineers engaged by the Owner to design and prepare engineering drawings for a subdivision or development and to co-ordinate all design work and quality assurance/quality control required for the works under the provisions of this Bylaw.

"parcel" means any lot, block, or other area in which land is held or into which land is subdivided but does not include a highway.

"Preliminary Layout Review" means a review of drawings, plans, information and documents by the Approving Officer to determine, on a preliminary basis: (a) whether the proposed subdivision would be against the public interest or otherwise unsuitable for subdivision; and (b) if not against the public interest or otherwise unsuitable for Subdivision, what the Owner must include in the application for subdivision or development.

"private water utility" means a water utility operated under the authority of the Comptroller of Water Rights.

"repair(s)" means restore to original or new condition.

"reviewed for construction" means documents, including construction drawings that have been reviewed by the District and stamped as such.

"road" means the portion of the highway that is improved, designed, or ordinarily used for vehicular traffic and excludes the road shoulder.

"sewerage system" means a system for treating domestic sewage that uses one or more treatment methods and a discharge area, an area used to receive effluent discharged from a treatment method, but does not include a holding tank or a privy.

"sidewalk" means a concrete-surfaced pedestrian walkway.

B.2 Preliminary Layout Review

- B.2.1 An **Applicant** wishing to **subdivide** land including by lot line adjustment and applying for a **Preliminary Layout Review** of the **subdivision**, must pay the applicable fees set out in the **District** Fees Bylaws.
- B.2.2 Subject to legislation changes, a **Preliminary Layout Review** issued by the **Approving Officer** is valid for a period of one year. Upon expiration of the one-year time period the **Owner** must make a new application for **subdivision**.
- B.2.3 The **Owner** may apply for one, six-month extension if the **Owner's Engineer** submits a letter to the **District Engineer** and the Ministry of Transportation and Infrastructure (if applicable) certifying at least sixty percent (60%) of the **works** required under this Bylaw (based on the estimated total capital cost of constructing and installing the **work(s**) have been completed.

B.2

B.3 Phased Strata or Strata Conversion

B.3.1 Applications for approval of a phased strata plan declaration or strata conversion must be accompanied by applicable fees in accordance with **District** Bylaws.

B.4 Building Permit

- B.4.1 An **Owner** of a **parcel** who applies to develop land must submit a Building Permit application in accordance with the Building Bylaw.
- B.4.2 The **Building Inspector** may impose conditions on the approval of a Building Permit required in connection with the **development**, including, but not limited to a **Subdivision and Development Servicing Agreement**.
- B.4.3 If works are required for a Building Permit application:
 - (a) on a **highway** immediately adjacent to any **parcel** being **developed** up to the centre line of the **highway** and
 - (b) on the **parcel** itself, the **Owner** must provide the **works** that are required to be provided under this Bylaw.
- B.4.4 If required, a grant or charge over land on which the works are located shall be provided to the District in a form required, in priority over liens, charges and encumbrances, and executed in registerable form. The grant or charge may include a highway dedication, statutory right of way, highway reservation, permit or license, as required by the District.
- B.4.5 The **District Engineer**, in their sole discretion, may approve the issuance of a building permit in advance of the **offsite work** having been completed provided that a valid servicing agreement, with security for **works**, is in place and that the signatories to the servicing agreement and building permit are one and the same.
- B.4.6For a partial or phased **development**, the **Owner** shall:
 - (a) construct a percentage of the **offsite work** proportional to the percentage of the site being **developed**, or

- (b) provide cash in lieu in accordance with this Bylaw
- B.4.7In addition to design drawings required by the Building Bylaw, the **Owner** must submit design drawings prepared by an **engineer** to the **District Engineer** for approval, identifying:
 - (a) the works to be constructed on the parcel being developed; and on the highway abutting the parcel; and
 - (b) the intended connection of **onsite works** to **offsite works**.
- B.4.8The construction, installation, and connection of all works must conform to:
 - (a) the design drawings marked, "Reviewed for Construction", and initialed by the **District Engineer**; and
 - (b) the provisions of this Bylaw and all other Bylaws of the **District**.

B.5 Subdivision

- B.5.1An **Owner** of a **parcel** who applies for **subdivision**:
 - (a) on a **highway** immediately adjacent to the **parcel** up to the centre line of the **highway**, and
 - (b) on the **parcel** itself, must provide the **works** that are required to be provided under this Bylaw.
- B.5.2No works shall be required on highways immediately adjacent to the **frontage** of a proposed remainder **parcel** that has potential for further **subdivision** under the existing **zoning** designation.
- B.5.3The construction, installation, and connection of all works must conform to:
 - (a) the design drawings marked, "Reviewed for Construction" and initialed by the **District Engineer**, and
 - (b) the provisions of this and all other **District** Bylaws.

B.6 Exemptions

- B.6.1 Boundary Adjustment Subdivisions involving lands that have been:
 - (a) **developed** with a permitted use;
 - (b) appropriately serviced; and
 - (c) do not create additional parcels,
 - shall not be subject to the requirements of this Bylaw except:
 - (i) unprotected or existing services shall be protected by way of easement or statutory right-of-way, or relocated as required by the **District Engineer**;
 - (ii) **parcels** currently serviced with on-site sewage disposal shall provide confirmation from a qualified professional that the existing system is satisfactory for its intended purpose;
 - (iii)lots served by other than a water distribution system shall adhere to the applicable water source design and construction requirements of this Bylaw;
 - (iv)where connection to a community sanitary sewer, storm sewer, and/or water distribution system, which in the District Engineer's opinion can be achieved cost effectively without a main extension, each adjusted parcel shall be connected to the applicable system.

B.6.2 Where a Building Permit has been issued for:

(a) the construction, renovation or addition to a single-family or two-family building, or for an associated accessory building, the **Owner** shall not be required to:

- (i) construct, install or pay monies in lieu of highways, walkways, curb, gutter, sidewalk, street lighting, and underground wiring;
 (ii) connect to a water distribution system unless, in the opinion of the District Engineer, the connection can be achieved with a cost-effective main extension.
 (iii) connect to the District's community sewer system unless:

 (A) in the opinion of the District Engineer the connection can be achieved with a cost-effective main extension or;
 (B) the construction, renovation or addition complies with the onsite sewerage system requirements of this bylaw. For clarity, where the construction, renovation or addition does not comply with onsite sewerage system requirements, a connection to the District's
 Community Sewer System is required.
- (b) a renovation of a building where there is no increase to the building floor area, the

 Owner shall not be required to construct, install or pay moneys in lieu of highways,

 walkways, curb, gutter, sidewalk, street lighting, and underground wiring, unless there is
 a significant change of use that warrants any or all of these improvements, in the
 opinion of the District Engineer."

B.6.2If a Building Permit is issued for the:

- (a) construction, renovation or addition to a single-family dwelling or two-family building, or
- (b) construction of an accessory building,

the **Owner** shall not be required to:

- (i)construct, install or pay monies in lieu of highways, walkways, curb, gutter, sidewalk, street lighting, and underground wiring;
- (ii) connect to a water distribution system unless, in the opinion of the District Engineer, the connection can be achieved with a cost effective main extension;
- (iii) connect to the **District**'s **community sewer system** unless;
 - A. the proposed renovation or addition does not increase the number of bedrooms;
 - B. connection can, in the opinion of the **District Engineer**, be achieved with a costeffective main extension or;
 - C. the proposed construction, renovation, or addition complies with the applicable onsite sewerage system design and construction requirements of this bylaw.

If the proposed construction, renovation or addition does not comply with the applicable onsite sewerage system design and construction requirements then a connection to the District community sewer system is required.

- <u>B.6.3</u>In simple servicing cases where a standard drawing contained in **District** policy is deemed by the **District Engineer** to be sufficient for construction purposes, the **District Engineer** may, in <u>histheir</u> sole discretion, where a **District** approved **contractor** is being used, waive the requirement for engineering design drawings.
- <u>B.6.3B.6.4</u> Subdivision or Building Permit applications where the District is the owner or agent are exempted from the Works and Services requirements of this Bylaw, unless Council passes as resolution imposing such requirements.

B.7 Statutory Rights of Way

B.7.1 **Works** under this Bylaw must be located within dedicated **highway**s or statutory rights of way in favour of the **District**.

SCHEDULE G DESIGN AND CONSTRUCTION OF HIGHWAYS AND WALKWAYS

G.1 General

- G.1.1All **highways** and **walkways** must be constructed in accordance with this Bylaw. It is recommended that Local **highways** and **walkways** within strata **subdivisions** or **developments** shall be designed and constructed in accordance with this Bylaw.
- G.1.2A **highway** proposed to be dedicated by a plan of **subdivision** must not be shown on the plan of **subdivision**, dedicated, laid out, or constructed unless the dimensions, locations, alignment and gradient meet the requirements for **highway**s prescribed in this Bylaw.
- G.1.3**Development**s may require **frontage road**s, double **frontage** lots, deep lots with rear service **lanes** or such other treatment as may be necessary in the public interest for the separation of through and local traffic.
- G.1.4Where the **Approving Officer** believes that, due to terrain and soil conditions, a **highway** of a specified width under this Bylaw cannot be supported, protected, or drained, he may determine that the **Owner** provide, at the **Owner**'s expense, land of a width that, in the **Approving Officer**'s opinion, would permit the **highway** to be supported, protected, or drained pursuant to the *Local Government Act*.
- G.1.5In reviewing engineering plans, the **District Engineer** must consider the sufficiency and suitability of the proposed **road** system, the arrangement, width, grade, and location of all **road**s in relation to existing and planned **road**s, to topographical features, to public convenience and safety, and to the proposed uses of the land to be serviced by such **road**s.
- G.1.5 In the preparation of the Pre-Design Report submission for **highways**, the **Owner's Engineer** shall address the following general design considerations:
 - (a) the sufficiency and suitability of the proposed road system;
 - (b) the arrangement, width, grade, and location of all roads in relation to existing and planned roads;
 - (c) all District bylaws, plans, programs and policies;
 - (d) topographical features,
 - (e) public convenience and safety;
 - (f) the proposed uses of the land to be serviced by such roads.
 - (g) Operation and Maintenance (O&M) requirements
 - (h) Continuation of existing roads
 - (i) The design and arrangement of **highways** within a **subdivision** shall provide for the continuation or projection of existing **roads** in the surrounding area. In no case shall the arrangement of **highways** within a proposed **subdivision** make impractical the extension of **roads** and the **subdivision** of adjoining **parcels**.
 - (ii) The design and arrangement of **highways** must consider the impact of new development on the surrounding road network. Traffic calming measures must be implemented if the following conditions are expected:
 - A. Potential for short-cutting due to the new connections having a shorter route to a main road;
 - B. Geometric conditions that may facilitate speeding (e.g., high operating speeds and straight roadways; and
 - (a)C. Unsafe conditions due to geometric conditions.

G.1.6

- G.1.6In the preparation of engineering plans for highways, the Owner's Engineer shall take into account the following general design considerations:
 - (a) Continuation of existing roads:
 - (i) The design and arrangement of highways within a subdivision shall provide for the continuation or projection of existing roads in the surrounding area. In no case shall the arrangement of highways within a proposed subdivision make impractical the extension of roads and the subdivision of adjoining parcels.
 - (ii) The design and arrangement of highways must consider the impact of new development on the surrounding road network. Traffic calming measures must be implemented if the following conditions are expected:
 - A. Potential for short-cutting due to the new connections having a shorter route to a main road;
 - B. Geometric conditions that may facilitate speeding (e.g., high operating speeds and straight roadways; and
 - C. Unsafe conditions due to geometric conditions.
 - (b) Topography to be taken into account
 - (i) The design and arrangement of highways shall be suited to the topography of the land proposed to be subdivided or developed
- G.1.7Driveways, retaining walls, vegetation and other private or municipal improvements on private or municipal property or **highway**s affected by the **road** construction shall be restored at minimum to the condition existing prior to construction and to the satisfaction of the **District Engineer**.
- G.1.8Paving shall not be undertaken until all underground utilities have been constructed in accordance with this Bylaw nor during snow, heavy rain, temperatures below 5 degrees C, or other unsuitable conditions. Asphaltic concrete shall not be placed on a frozen, muddy or rutted base.
- G.1.9Tie-ins to existing pavement shall be made in accordance with Standard Drawings. The existing pavement shall be cut back to produce a neat vertical face with a straight edge as described in Table E-1 Supplemental MMCD Specification 31 23 01.
- G.1.10 The timing for the installation of the top lift of asphalt shall be at the **District Engineer's** discretion and dependent on District requirements with respect to ensuring **stormwater** is able to enter catch basins on steeper sections of road.

G.2 Classification of Highways

G.2.1Prior to design of the **road** system, the **Owner's Engineer** shall consultant with the **District Engineer**, to classify each **road** proposed adjacent to and within the **subdivision**.

G.3 Transportation Requirement Assessment

- G.3.1The **District Engineer** may, in <u>histheir</u> sole discretion, <u>direct-require</u> the **Owner's Engineer** to prepare a transportation requirement assessment that considers the following requirements and amenities:
 - (a) Criteria set out in TABLE G-1TABLE G-1;
 - (b) traffic volumes and expected speeds;
 - (c) the need for and applicability of alternate intersection configurations, including roundabouts;

- (d) the need to accommodate normal traffic, emergency vehicles, transit, pedestrians, cyclists, and parking;
- (e) drainage constraints/options;
- (f) street or intersection lighting;
- (g) traffic calming;
- (h) snow storage;
- (i) hillside slope/width restrictions;
- (j) right of way width availability;
- (k) desire to encourage use of certain routes for varying types of traffic (e.g. truck, farm, and commercial traffic);
- (I) minimize capital costs as well as future maintenance and rehabilitation costs; and
- (m) the **District's** standard drawing **road** cross sections.

TABLE G-1- TYPICAL HIGHWAY CROSS SECTION REQUIREMENTS AND AMENITIES										
	Lane		Urban-Undivided				Rural-Undivided			Urban
										Divided
	Residential	Commercial	Local Hillside	Local	Collector	Arterial	Local	Collector	Arterial	Arterial
Lane Width	6	7.5	3.2	3.2	3.5	3.5	3.2	3.5	3.5	3.5
Bike Lane ⁶	n/a	n/a	1.5	1.5	1.5	1.8	1.5	1.5	1.8	1.8
Parking	No	No	2.4 ¹	2.4 ¹	2.4 ¹	2.4 ¹	None	None	None	2.4 ¹
Shoulder	n/a	n/a	n/a	n/a	n/a	n/a	1.5	1.5	2.0	n/a
Ditch	n/a	n/a	n/a	n/a	n/a	n/a	2.5	2.5	2.5	n/a
Curb & Gutter (type)	n/a ⁸	n/a 8	Barrier	Barrier	Barrier	Barrier	None	None	None	Barrier
Sidewalk	n/a	n/a	One side ²	One side ²	Two sides	Two sides	None	None	None	Two sides
Pathway ⁶	n/a	n/a	None	None	None	None	None	2.0 ³	2.0 ³	None
# of Lanes	n/a	n/a	2	2	2-4	4	2	2	2-4	4
Pavement Width	5	7.5	9.4 4, 5, 9	9.4 4, 5, 9	12.4 ^{4, 5,} _{9,}	20 ⁹	9.4	10	10-17 ⁹	18 ⁹
R/W width	6	7.5	18 20 ⁵	18 ⁹	22	30	20	20	28	25-35 ^{1, 7}
Standard Dwg #	DLC R2	DLC R3	DLC R4	DLC R5	DLC R6	DLC R7	DLC R8	DLC R9	DLC R10	DLC R11

- Parking is not required in **developments** where there are no fronting lots except in areas of parks, schools, recreational facilities, or green space Deleted by Bylaw 1228.
- 2 Deleted by Bylaw 1228 Sidewalk required one side where more than 20 homes are accessed from the road and both sides where more than 40 homes are accessed. Sidewalk is required on at least one side where the road is part of a walking route shown in the Transportation for Tomorrow Plan. Barrier curb is required wherever curb and gutter is required.
- 3 Trail/bike path to be asphalt surface.
- 4 Pavement width is measured from back of curb to back of curb except for rural **roads** where it is measured to edge of asphalt.
- Pavement is widened to accommodate parking where required. Alternate locations for parking that are not in the **road** carriage way may be considered by the **District Engineer** at a rate of one space per home where **road** right of way width is available.
- 6 <u>Deleted by Bylaw 1228 Bike lanes or trail/bike paths are not required where fewer than 40 housing units are served.</u>

- 7 <u>Deleted by Bylaw 1228 Parking is required where **development** has **frontage** lots.</u>
- 8 Curb may be required for drainage.
- 9 Pavement width and right of way width may vary depending on configuration of driving, bike and parking lanes.
 - G.3.2Where parts of a proposed subdivision or development front on an existing road, the configuration of the improvements will take into consideration the existing road setting and existing and proposed cross section improvements as shown in the District's Mobility Master Plan and Mobility Improvement Program, as amended from time to time.
 - G.3.2 In cases where parts of the proposed **subdivision** or **development** front on an existing **road**, the configuration of the improvements will take into consideration the existing **road** setting and existing and proposed cross section improvements as shown in the **District**'s "**Transportation for Tomorrow** Road Improvement Plan" as amended from time to time.
 - <u>G.3.3</u>Where reasonably practical, driveway access will be from local **road**s rather than from collector and/or **arterial highway**s.
 - <u>G.3.4In determining the Highway Cross Section Requirements, the Owner's Engineer shall consider the following:</u>
 - (a) Systems Modelling (Section D.3)
 - (b) The sufficiency and suitability of the proposed road (Section G.1.5)
 - (c) Transportation Requirement Assessment (Section G.3)
 - (d) Typical Highway Cross Section Requirements and Amenities (Table G-1)
 - G.3.3(e) Whether the proposed subdivision or development front an existing road (Section G.3.2)
 - G.3.4 The transportation requirement assessment will be used to determine typical road cross sections in consultation with and subject to the approval of the **District Engineer**.

G.4 Consistency with Official Community Plan

G.4.1The location, classification, and standards all **highway**s proposed within a **subdivision** shall take into account the proposed use of the land and shall conform to the provisions of the **District** of Lake Country Official Community Plan.

G.5 Local highways

G.5.1Local **highway**s within a proposed **subdivision** shall be arranged so that their use by through traffic will be discouraged.

G.6 Culs-de-sac

- G.6.1 Cul-de-sac streets shall not exceed 300 metres in length and shall be provided with a turning area of not less than 12.5 m radius designed to permit safe and adequate space for the turning of emergency and motor vehicles at the terminus of the cul-de-sac.
- G.6.2 Where circumstances are such that a cul-de-sac bulb is impractical, the **District Engineer** may, at histheir discretion, permit a hammerhead configuration in accordance with Standard Drawings.
- G.6.3 Turning areas in all culs-de-sac shall be designated as no parking areas with signs and pavement markings in conformance with G.13.

the core, then an additional three cores shall be taken in the immediate area and the average of the three cores shall be used.

G.31 Non-Compliance with Specifications

G.31.1 General

G.31.2 If the **Owner** fails to ensure that histheir contractor complies with the paving and construction specifications as set out in this Bylaw, the following shall apply. Any penalty for deficiencies will be in the form of a reduction in the amount of security for works returned to the **Owner**.

G.31.3 Hot Mix Asphalt Concrete

- (a) A Marshall analysis will be performed from a sample obtained at the paving site on a frequency of one analysis per day, with at least one analysis required per project or 700 tonnes of asphalt.
- (b) When analysis identifies non-conformance with specified properties, remedial measures must be immediately initiated. Evidence that compliance exists with the approved mix design must be provided. Failure to do so must result in suspension of paving operations.

G.31.4 Aggregate Gradation

- (a) When the aggregate fails to comply with tolerances set forth in this Bylaw, the **Owner's Engineer** will initiate the following action:
- (b) When two (2) consecutive gradation analyses identify non-compliance with the specified tolerances, the **contractor** must be served notice and a third test will be initiated.
- (c) If continued non-compliance is indicated from the third test, the **Contractor/Owner** must suspend production. It must not commence construction again until it has demonstrated that corrective action has been taken and that the aggregate gradation is within the specified tolerance limits.

G.31.5 Asphalt Cement

TABLE G-20 -PAYMENT ADJUSTMENT FOR NON-COMPLIANCE WITH TOLERANCE					
Asphalt Content Deviation from Design %	Payment Adjustment Factor				
0.30 OR LESS	0.00				
0.31 TO 0.40	0.20				
0.41 TO 0.50	0.75				
0.50 OR GREATER	Remove and replace				

G.31.6 Penalty will be applied for asphalt cement content non-compliance where the amount of penalty for Hot Mix Asphalt Paving equals the unit bid price times the payment adjustment factor times the quantity to which the factor is to be applied, i.e.:

 $A_C = P(F_C)(Q_n)$

where:

Ac = Adjustment for asphalt cement content non-compliance

P = Unit bid price

FC = Payment adjustment factor for Asphalt Cement Content non-compliance

Qn = Asphalt measured for payment which was produced during the production period to which a test applies

SCHEDULE H DESIGN AND CONSTRUCTION OF SIDEWALKS, CURBS, GUTTERS, BOULEVARDS AND LANDSCAPING

H.1 General

- H.1.1All curbs, **sidewalk**s, gutter, **boulevard**, and landscaping must be designed and constructed in accordance with this Bylaw.
- H.1.2The minimum width of sidewalks shall be 1.5 metres. The **District Engineer** may in <u>histheir</u> sole discretion, <u>direct-require</u> that a sidewalk width be increased.
- H.1.3The location of **sidewalk**s shall be as follows:
 - (a) Arterial highways sidewalks are required on both sides of highway;
 - (b) **Collector highways sidewalks** are required on one side of **highway** as <u>directed required</u> by the **District Engineer**;
 - (c) Local highways sidewalks are required on one side of the highway, where the highway will be used to provide the public with safe and efficient access to educational facilities, government facilities, parks, recreation sites, hiking trails, pedestrian corridors, shopping centers, entertainment centers, health institutions, religious institutions, or where identified as per Standard Drawings for the road class. The location shall be as directed required by the District Engineer.
- H.1.4In accordance with **District** Bylaws and policies, upon completion of **highway**, curb, gutter, and **sidewalk** construction, **boulevards** must be shaped and graded to match and blend with surrounding areas.
- H.1.5Trees, shrubs, dry land grass as well as turf or mulch complete with irrigation must be in accordance with Schedule C-1 and **District** irrigation standards.
- H.1.6In areas of rural cross sections without curb, gutter, or **sidewalk**; **boulevard**s must be shaped and graded to match and blend with surrounding areas seeded with coarse grasses (Okanagan Dryland Grass Mix).
- H.2 **Driveway Access** *deleted by Bylaw 1193, 2022*

H.3 Wheelchair Ramps

H.3.1Wheelchair ramps must be provided at all intersections on **road**ways that are being provided with **sidewalk**s and constructed in accordance with Standard Drawings.

H.4 Barrier Curb Crossing

H.4.1Barrier Curb Crossings must be provided at all access locations and must be constructed in accordance with Standard Drawings.

- I.5.2 Hydraulic Network Considerations
 - (a) Where there is an existing hydraulic network model in place, the **District** will provide information for design calculations.
 - (b) Depending on the complexity and extent of the proposed water distribution system, the District may elect to carry out a hydraulic analysis showing minimum design flows and pressures. The Owner will be required to pay for this analysis.
 - (c) The maximum length of any permanent, non-interconnected water main must be less than 150 m. All mains exceeding 150 m, unless it is a temporary situation, must be looped.
 - (d) Where the water system network is deficient, installation of supplementary mains may be required and may necessitate the provision of rights of way in favour of the **District** or the agency having jurisdiction.
 - (e) The minimum pipe size for all water mains shall be 200 mm diameter. The **District Engineer** may require water mains larger than 200 mm diameter if on a distribution or transmission route. The minimum water main size for commercial or industrial areas shall be 200 mm.
 - (f) In residential areas, fire hydrant leads must be 150 mm diameter minimum. Water mains 100 mm in diameter may be permitted for domestic service on dead-end roads where no further extension is planned. Wherever practical, water mains must be looped. Dead-end mains must not be promoted.

1.6 Location and Grade of Water Mains

- I.6.1 Water mains must be located in the **road** right of way as shown on Standard Drawing. (e.g. Statutory right of way).
- I.6.2 A minimum horizontal clearance of 1 meter between a water main and underground utilities must be provided, except for sanitary and storm sewer mains.
- I.6.3 A minimum three-meter clear horizontal distance between a water main and a sanitary or storm sewer main must be maintained.
- I.6.4 In special cases such as installations in rock or hardpan and subject to any provincial regulations, the horizontal clearance may be reduced with the approval of the **District Engineer** and the Interior Health Authority, provided the invert of the water main is a minimum of 450 mm above the crown of the sanitary sewer. On side hill streets the water main must be located on the cut side of the centre line of the street.
- 1.6.5 Water mains must be designed to follow a straight alignment between intersections and at grades parallel to the **road** centerline unless otherwise approved by the **District Engineer**.
- I.6.6 Curved alignments may be accepted provided the pipe alignment is at a parallel offset to an established boundary. In no case shall the radius of curvature be less than 300 times the outside diameter of the pipe barrel. The design drawings must indicate the method for achieving the curvature. In no case shall curvature be established in PVC pipelines using joint deflection.
- I.6.7 Water mains must be designed at grades that minimize high points in the main. Where a high point is unavoidable, a hydrant, a service, or an air release valve must be installed at the high point as directed-required by the District Engineer.
- I.6.8 Where the slope of the water main exceeds 20%, anchorage is recommended. Slopes 30% or greater require anchorage and trench dams must be incorporated in the design.

- I.6.9 Gas main, electric or telephone duct, or other utility lines may only be installed in the same trench with water mains when horizontal and vertical separation is maintained.
- I.6.10 Where it is necessary for a water main to cross other underground services, the crossing must be made at an angle greater than 20 degrees and the vertical clearance between services at the crossing point must be not less than 150 mm except for sanitary sewers where clearance must be in accordance with the *Public Health Act*.
- I.6.11 Design drawings must indicate whether the water main passes over or under other underground services which it is crossing.

1.7 Services

- 1.7.1 The diameter of water services must be approved by the **District Engineer**.
- 1.7.2 The diameter of water services shall be determined considering water distribution system pressures, requirements for sprinklers and building size (fixture counts). In no case shall the diameter be less than 19 mm.
- I.7.3 The diameter of water services for **District** Parks shall be as <u>directed required</u> by the **District Engineer**, but in no case shall the diameter be less than 25 mm.
- I.7.4 Separate water services installed in accordance with Standard Drawings must be provided to each **parcel** and installed on the same side of the **parcel** as the sanitary sewer service.
- 1.7.5 Tappings shall be made at an angle of < 30 and > 10 degrees above the horizontal centerline plane of the pipe.
- I.7.6 Curb stops must be located 2.0 meters from the property corner pin. Where such location will conflict with other services, alternate alignments may be submitted for approval.
- 1.7.7 19 mm diameter service connections may be tapped directly into mains 150 mm diameter and greater. 25 mm diameter service connections may be tapped directly into mains 200 mm diameter and greater, except in the use of PVC water mains where all service connections must be made with double strap service saddles. 40 mm and 50 mm diameter service connections must be made using double strap service saddles. Multiple corporation stops must be staggered.

1.8 Blow Offs

I.8.1 Blow offs are required at the end of all dead-end water mains and must be constructed and installed in accordance with Standard Drawings.

I.9 Water Sampling Stations

I.9.1 The District Engineer may require water sampling stations to be installed. Water sampling stations shall be Kupferle Foundry Eclipse 88.

1.10 Air Valves

- 1.10.1 The general application of the three types of air valves must be:
 - (a) air/vacuum valves for filling or discharging mains and preventing negative pressures,
 - (b) air release valves for small air release during normal operation, and
 - (c) combination valves for combination of air/vacuum and air release valves.
- I.10.2 Air valves are not required on water mains 200 mm diameter and smaller, except as determined by the **Owner's Engineer** or as required by the **District Engineer**.
- I.10.3 Combination air valves must be installed at the summit of all mains 250 mm diameter and larger, except where the difference in grade between the summit and valley is less than 600 mm. Where practical, with approval of the **District Engineer**, fire hydrants may be located to facilitate an air release.

I.11 Fire Hydrants

- I.11.1 Fire hydrants must be located as specified in the most recent publication of the Fire Underwriter's Survey, "Water Supply for Public Fire Protection".
- I.11.2 Where hydrants are located other than at intersections, they must be located on the projection of the property line dividing two lots. In selecting the location of a hydrant, the probable route of the firefighting equipment must be considered in consultation with the Fire Department.
- I.11.3 A hydrant must not be located within 3 meters of a utility pole, pad mounted transformer, light standard, or any other obstructions.
- I.11.4 Legal access and clearance of 1.3 m must be maintained around the fire hydrant.
- 1.11.5 Hydrants must be flow tested with results added to the hydrant service card.
- I.11.6 All hydrants must be painted in a specific colour (team green) and be colour-coded according to the **District** Fire Department standards utilizing the NFPA standard regarding expected flow rates.
- I.11.7 For hydrants located across a rural **road** ditch, provision for access, including a culvert and frost protection must be provided.
- I.11.8 All hydrants must be bagged until **substantial performance** is achieved.

1.12 Valving

- I.12.1 Valves must be located as follows:
 - (a) In a cluster at the pipe intersection or at the projected property line, when located in an intersection, to avoid conflicts with curbs and **sidewalks**:
 - (i) 3 valves at "X" intersection,
 - (ii) 2 valves at "T" intersection,
 - (iii) or as <u>directed-required</u> by the **District Engineer** so that specific sections of mains may be isolated
 - (b) Not more than 200 m apart for single family residential. All other zones require special designs.
 - (c) Not more than two hydrants are isolated.

provide sediment containment. Buildup of sediment shall not restrict inflows and suitable designs shall be provided to allow ease of sediment removals.

M.18.4 Culvert and Bridge Capacity

(a) Culverts over 30 m in length and/or 400 mm in diameter shall be constructed with headwalls and endwalls at the <u>direction-requirement</u> of the **District Engineer**. The headwall shall be constructed with a free swinging, weighted grating. To protect against entry, the **District** may require a locking mechanism which limits the range of movement of the grating.

M.18.5 Ground Recharge Systems

(a) Ground recharge systems are not normally considered for major flood routing. However, given the soil conditions in the **District** area, geotechnical investigations may support the retention and ground infiltration of major events in some areas.

M.18.6 Ditch and Swale Construction

(a) Velocity of flow in ditches and/or swales is not to exceed the limits given below for the various types of materials used as the conveyance surface. Shown in TABLE M-4TABLE M-4 below.

TABLE M-4 VELOCITY FLOW LIMITS					
Lining Materials	Maximum Permissible Velocity m/s				
Fine sand	0.45				
Fine gravel	0.75				
Stiff clay	1.00				

(b) For velocities higher than 1.00 m/s, the Rip Rap Design Chart shown below is to be used shown in Error! Reference source not found. below.

SCHEDULE R DRAWINGS

R.1 General

- R.1.1Where works are required to be constructed to service a **subdivision** or **development**, the **Owner's Engineer** must prepare engineering design drawings in accordance with the provisions of this Bylaw.
- R.1.2 Drawings submitted to the District for review subsequent to the initial drawing submission, must clearly identify any revisions using a "revision cloud".
- R.1.3 When required, the **District Engineer** may request that the **Owner's Engineer** provide 3-dimensional renderings of the proposed **subdivision** or **development**.

R.2 MMCD

- R.2.1 MMCD Standard Detail Drawings must be referenced to and interpreted simultaneously with the pertinent sections of this Bylaw.
- R.2.2 AutoCad Standard border and blocks shall be as per **MMCD**.

R.3 As-Constructed Drawings

- R.3.1 Prior to the issuance of a **Certificate of Total Performance** the **Owner** must deposit with the **District**:
 - (a) one complete set of original as-constructed drawings; and
 - (b) electronic copies of the drawings in a format acceptable to the **District Engineer**.
 - (c) one set of Service Cards in the prescribed format for:
 - (i) Water
 - (ii) sanitary sewer
 - (iii)storm sewer
 - (iv)fire hydrants
- R.3.2As-constructed drawings must be prepared in accordance with the provisions set out in this Bylaw.

R.4 Design Drawings

R.4.1In simple servicing cases where a standard drawing contained in this Bylaw is deemed by the **District Engineer** to be sufficient for construction purposes, the **District Engineer** may, in histheir sole discretion, waive the requirement for design drawings where a **District** approved **contractor** is being used

R.5 Standard Drawings

- R.5.1 Existing works refers to previously constructed works.
- R.5.2 Proposed **work**s refers to **work**s to be constructed and installed during the current **subdivision** or **development** phase.

S.2 Commitment by Owner and Engineer

- S.2.1 A Commitment by **Owner** and Engineer must be submitted to the **District Engineer** prior to review of design drawings.
- S.2.2 A Commitment by **Owner** and Engineer shall be signed by the **Owner** and **Owner's Engineer** certifying that:
 - the **Owner's Engineer** has been contracted by the **Owner** for the design of all **works**, reviews and designs associated with the **subdivision** or **development**;
 - (a) the **Owner's Engineer** shall adhere to all Provincial Statute for histheir or her profession;
 - (b) the **Owner's Engineer** shall ensure that the **works** comply with the provisions of all **District** Bylaws, permits, policies, and applicable legislation and regulations;
 - (c) the **Owner's Engineer** shall ensure that only qualified personnel are retained to carry out tests, inspect or carry out design **work**, detailing, or **field reviews**;
 - (d) the **Owner's Engineer** has been given contractual mandate by the **Owner** for the purposes of **subdivision** or **development**;
 - (e) the **Owner's Engineer** shall submit summary reports to the **District Engineer** on request;
 - (f) the **Owner's Engineer** shall submit letters of Certification of Bylaw Compliance as required;
 - (g) the **Owner's Engineer** is licensed to practice as an **engineer** in the Province of British Columbia;
 - (h) the **Owner's Engineer** covenants that his their or her firm presently carries, and will continue to carry for the duration of the project, liability insurance in the amount of five million dollars (\$5,000,000).
- S.2.3 Notification of termination of the **Owner's Engineer** shall be provided to the **District Engineer** in writing thirty (30) days prior to any intended termination;
- S.2.4 Where the **Owner's Engineer** ceases to be retained at any time during construction of the **works**, **work** on shall cease until:
 - a new Engineer has been retained; and
 - (a) an updated Commitment by **Owner** and **Engineer** and Commitment to Design and **Field review** have been submitted to the **District Engineer**.

S.3 Commitment to Design and Field review

- S.3.1 A Commitment to Design and Field Review from the Engineer representing each engineering specialty shall be submitted to the **District Engineer** prior to issuance of a Certificate to Commence Construction.
- S.3.2 A Commitment to Design and Field Review shall be signed by the **Owner's Engineer** and each Engineering Specialist certifying that:
 - (a) the **works** identified by the **Engineer**'s initial, will be designed, constructed and installed in accordance with all applicable **District** Bylaws, permits and policies and legislation and regulations;
 - (b) **Field reviews** shall be completed and provided to the **District Engineer** during construction.
 - (c) The **District** shall be notified immediately in writing if the contract for **field reviews** is terminated at any time during construction.
 - (d) the Engineer is licensed to practice as an engineer in the Province of British Columbia;
 - (e) the **Owner's Engineer** covenants that his their or her firm presently carries, and will continue to carry for the duration of the project, liability insurance in the amount of five million dollars (\$5,000,000).

S.4 Certificate to Commence Construction

- S.4.1 No person shall excavate or fill land for the purpose of constructing **works**, nor shall any person construct or install any of the **works** until a Certificate to Commence Construction has been issued.
- S.4.2 The **District Engineer** shall not issue a Certificate to Commence Construction until the **Owner** submits the following information:
 - (a) three complete paper copy sets and one electronic copy in pdf format of design drawings showing all pertinent information as required by this Bylaw and prepared in accordance with this Bylaw;
 - (b) detailed design calculations in support of the **street lighting** layout.
 - (c) detailed design calculations in support of the fire flows and storage required in the design of a **community water system**.
 - (d) detailed design calculations in support of a **storm drainage system**.
 - (e) detailed design calculations in support of a **community sewer system**.
 - (f) plans and documentation in support of a Drainage, Sediment and Erosion Control Plan.
 - (g) Letter of Commitment by **Owner** and **Engineer**;
 - (h) Quality assurance/quality control documentation
 - (i) Letter of Commitment to Design and field review;
 - (j) If required, letters approving design from the Ministry of Transportation and Infrastructure, and other agencies having jurisdiction.

S.5 Certification of Bylaw Compliance

- S.5.1 A Certificate of Bylaw Compliance from each Engineer shall be submitted to the **District Engineer** prior to the issuance of a **Certificate of Total Performance**.
- S.5.2 A Certificate of Bylaw Compliance may not be submitted until after Substantial Performance of the **work**s.
- S.5.3 After submission of Certification of Bylaw Compliance, each Engineer must arrange and conduct a final inspection with the **District Engineer** to determine the acceptability of the Certification of Bylaw Compliance.
- S.5.4 A Certification of Bylaw Compliance shall be signed by the **Owner's Engineer** and the **engineer** representing each engineering specialty certifying that:
 - (a) all obligations for **field reviews** pursuant to this Bylaw have been met;
 - (b) all obligations pursuant to the previously submitted Commitment to Design and Field Review have been met;
 - (c) works identified in the signed Commitment to Design and Field Review comply in all materials respects with the provisions of this Bylaw and the design drawings and supporting documentation submitted in support of the subdivision or development application;
 - (d) the final as-constructed drawings and supporting documents prepared have been submitted;
 - (e) the **Owner's Engineer** is licensed to practice as an **engineer** in the Province of British Columbia;
 - (f) the Owner's Engineer covenants that his their or her firm presently carries, and will continue to carry for the duration of the project, comprehensive general liability insurance in the amount of two million dollars (\$2,000,000);
 - (g) the **Owner's Engineer** covenants that <u>histheir</u> or her firm presently carries, and will continue to carry for the duration of the project, automobile liability insurance in the amount of two million dollars (\$2,000,000);

(h) the **Owner's Engineer** covenants that <u>histheir or her</u> firm presently carries, and will continue to carry for the duration of the project, errors and omissions insurance in the amount of five hundred thousand dollars (\$500,000)

S.6 Certification of Slope Stability

- S.6.1 A Certification of Slope Stability from the geotechnical Engineer shall be submitted to the **District Engineer** prior to the issuance of **Certificate of Total Performance**.
- S.6.2 A Certificate of Slope Stability may not be submitted until after Substantial performance of the **work**s.
- S.6.3 A Certification of Slope Stability shall be submitted by a geotechnical Engineer certifying that:
 - (a) all obligations for slope stability review pursuant to this Bylaw have been met;
 - (b) all issues related to safety and slope stability have been addressed;
 - (c) In consideration of slope stability matters due consideration has been given to, "Guidelines for Legislated Landslide Assessments for Proposed Residential **Developments** in BC", Association of Professional Engineers of British Columbia, Revised May, 2010;
 - (d) works identified in the signed Commitment to Design and Field Review comply in all materials respects with the provisions of this Bylaw and the design drawings and supporting documentation submitted in support of the subdivision or development application;
 - (e) the final as-constructed drawings and supporting documents prepared have been submitted;
 - (f) the **Engineer** is licensed to practice as an **engineer** in the Province of British Columbia;
 - (g) A report confirming slope stability on the lots created as required in Schedule D of this Bylaw.

S.7 Certification of Total Performance

- S.7.1 A **Certificate of Total Performance** will be issued by the **District Engineer** indicating that **total performance** of the **work**s has been achieved, once the **Owner** has complied with the provisions of this Bylaw.
- S.7.2 The **District Engineer** must not issue a **Certificate of substantial performance** until the following has been submitted:
 - (a) as-constructed drawings;
 - (b) Utility Service Cards;
 - (c) Maintenance Security Agreement;
 - (d) Certification of Bylaw Compliance;
 - (e) three copies of the plan of **subdivision** which have been executed by all required parties and are ready for registration;
 - (f) executed copies of all Statutory Right of Way plans and agreements, if applicable and which are ready for registration;
 - (g) all applicable fees, charges and security deposits;
 - (h) video reports and air testing results;
 - confirmation that a final inspection has been conducted by the District Engineer and Owner's Engineer;
 - (j) a letter from the governing electrical authority approving the **street lighting** installation;
 - (k) a letter from communication, gas, and electrical utilities as applicable and Ministry of Transportation and Infrastructure as applicable, confirming that their requirements have been met;
 - (I) a letter from the applicable private water utility approving the water distribution system; and