

**TOWNSHIP OF SPALLUMCHEEN
SUBDIVISION, DEVELOPMENT AND
STANDARDS BYLAW NO. 2107, 2023**



Welcome to Spallumcheen!

We'd like to help you during your development process.

This Bylaw is designed to consider best management practices, alternative service levels, or specifications that address environmental or technical solutions providing more sustainable approaches for works and services that may be considered where warranted by site-specific conditions.

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THE CORPORATION OF THE TOWNSHIP OF SPALLUMCHEEN
SUBDIVISION, DEVELOPMENT AND
STANDARDS BYLAW NO. 2107, 2023

A Bylaw to regulate and require the provision of works and services in respect to the subdivision and development of land within the Corporation of the Township of Spallumcheen.

WHEREAS the Township of Spallumcheen Council has authority pursuant to the *Local Government Act* to regulate and require the provision of works and services for the subdivision or development of land;

NOW THEREFORE, the *Council* of the Township of Spallumcheen, in open meeting assembled, enacts as follows:

PART 1 INTRODUCTION

1.1 CITATION:

This Bylaw may be cited as the "**Township of Spallumcheen Subdivision, Development and Standards Bylaw No. 2107, 2023**".

1.2 REPEAL BYLAWS

Upon adoption of this bylaw, the "Township of Spallumcheen Subdivision, Development and Standards Bylaw No. 2010, 2020" and amendments thereto are hereby repealed.

PART 2 INTERPRETATION

2.1 Purpose

The purpose of this Bylaw is to establish standards for *Works and Services* which should be constructed and installed to service any *Subdivision* or *Development* of lands within the Township of Spallumcheen.

2.2 Definitions

In this bylaw, unless the context otherwise requires:

- 2.2.1 "*Alternative Engineered Water Supply Systems*" means any water supply system not defined in this Bylaw that is designed by a *Professional Engineer*, registered under the Engineers and Geoscientists Act;
- 2.2.2 "*Applicant*" means an *Owner* of land or his/her authorized agent applying for approval to *Subdivide* or *Develop* that land;
- 2.2.3 "*Application for Building Permit*" means the information, documents, agreements, covenants and *Fees* required under this Bylaw for a *Development*;
- 2.2.4 "*Application for Subdivision*" means the information, documents, agreements, covenants and *Fees* required for a *Subdivision* under this Bylaw;
- 2.2.5 "*Approval, Final*" means the *Approving Officer* affixation of his or her signature to the *Subdivision* plan pursuant to the *Land Title Act*;
- 2.2.6 "*Approving Officer*" means the person appointed by the *Township* as the *Approving Officer* under the *Land Title Act*, and includes his or her lawful designate;
- 2.2.7 "*Benefiting Lands*" means lands, other than lands that are the subject of the *Owner's Application for Subdivision* or *Application for Development*, that are capable of being connected to or serviced by *Excess or Extended Services* and are identified as such in a *Latecomer Agreement*;
- 2.2.8 "*Building Bylaw*" means the Township of Spallumcheen *Building Bylaw*, as amended from time to time;
- 2.2.9 "*Building Inspector*" means the person appointed by the *Township* as the *Building Inspector* under the *Building Bylaw* and includes his or her lawful designate;
- 2.2.10 "*Building Permit*" means permission or authorization, in writing, by the *Building Inspector* to perform work regulated by the *Building Bylaw* and the *British Columbia Building Code*;
- 2.2.11 "*Certificate of Acceptance*" means a certificate issued by the *Township* verifying that all conditions of this Bylaw have been met by the *Owner*;

- 2.2.12 "*Certificate to Proceed with Construction*" means a notice issued by the *Chief Administrative Officer* or designate authorizing the *Owner* to proceed with *Construction* of the *Works and Services*;
- 2.2.13 "*Certificate of Substantial Completion*" means a certificate issued by the *Consulting Engineer*, certifying that *Substantial Completion* of all of the *Works and Services* has been achieved;
- 2.2.14 "*Certificate of Total Completion*" means a certificate issued by the *Chief Administrative Officer* or designate, certifying that *Total Completion* of all of the *Works and Services* has been achieved;
- 2.2.15 "*Chief Administrative Officer*" means the person appointed by the Council as Chief Administrative Officer as described in Section 147 of the Community Charter;
- 2.2.16 "*Community Drainage System*" means a system of *Works and Services* owned, operated and maintained by the Ministry of Transportation and Infrastructure or the *Township*, designed and constructed to control the collection, conveyance and disposal of surface and other water;
- 2.2.17 "*Community Sewer System*" means a system of sewage disposal which serves two or more *Parcels* and which is owned, operated, and maintained by an *Improvement District* under the Water Sustainability Act, Local Government Act, or the Community Charter, and amendments thereto; a Municipality, a *Regional District*, a Greater Board, or an Agency of Her Majesty the Queen in Right of Canada or Her Majesty the Queen in right of the Province of British Columbia or by a strata corporation;
- 2.2.18 "*Community Water System*" means a system of waterworks which serves five *Parcels* or more and which is owned, operated, and maintained by an *Improvement District*, Municipality, *Regional District* or Greater Board, or a Water Utility regulated under the *Water Act*, *Water Sustainability Act*, and amendments thereto;
- 2.2.19 "*Construct*" or "*Construction*" means build, erect, install, repair, alter, add, enlarge, move, locate, re-locate, re-construct, upgrade, demolish, remove, excavate, or shore;
- 2.2.20 "*Construction Costs*" means the estimated *Construction* costs of *Works and Services* as determined by the *Consulting Engineer* and accepted by the *Chief Administrative Officer* or designate;
- 2.2.21 "*Consulting Engineer*" means a *Professional Engineer* retained by the *applicant* to work on their behalf;
- 2.2.22 "*Contract Documents*" means the contract documents between the *Owner* and its contractor in connection with the *Construction* of *Works and Services*;
- 2.2.23 "*Council*" means the Municipal Council of the Corporation of the Township of Spallumcheen;
- 2.2.24 "*Cul-de-sac*" means a *Highway* with only one point of intersection with another and which terminates in a vehicular turning area;
- 2.2.25 "*Day*" means calendar day;
- 2.2.26 "*Design Drawings*" means the drawings identifying the *Works and Services* requirements of this Bylaw, provided by the *Owner* and submitted to the *Township* pursuant to an *Application for Subdivision* or application for *Development*;

- 2.2.27 “*Develop*” or “*Development*” means any *Construction* to which the *Building Bylaw* applies;
- 2.2.28 “*Excess or Extended Services*” means those *Works and Services* in respect of:
- a) a portion of a *Highway* system that will provide access to *Benefiting Lands*; and
 - b) a portion of a water, sewage or drainage system that will serve *Benefiting Lands*;
- 2.2.29 “*Estimated Cost of Works and Services*” means an estimate prepared by the *Consulting Engineer* that itemizes the fair market value of the *Work and Services* and which includes the value of all professional *Fees* for design, approvals, *Construction* period services and *Record Drawings*;
- 2.2.30 “*Fees*” means those *Fees* payable to the *Township* in connection with the *Subdivision* or *Development* of land, as prescribed by the Township of Spallumcheen Fees and Charges Bylaw;
- 2.2.31 “*Fees and Charges Bylaw*” means the current Township of Spallumcheen Fees and Charges Bylaw, as amended from time to time;
- 2.2.32 “*Frontage*” means that length of *Parcel* boundary which immediately adjoins a *Highway*, other than a *Lane* or walkway;
- 2.2.33 “*Highway*” means a street, *Road*, *Lane*, bridge, viaduct, and any other way open to public use, as defined in the Community Charter, but does not include a private right of way on private property;
- 2.2.34 “*Improvement District*” means as the context may require, either the public corporate body or the tract of land incorporated under the Municipal Act and includes the *Improvement District* constituted under a former Act, which has operated a *Community Water System* in the Municipality, prior to May 14th, 1996;
- 2.2.35 “*Lane*” means a *Highway* generally more than 3 metres but not greater than 8 metres in width, intended to provide secondary access to *Parcels* of land;
- 2.2.36 “*Latecomer*” means an *Owner* of *Benefiting Lands* who wishes to connect to or use *Excess or Extended Services* prior to the expiration of a *Latecomer Agreement* to which the *Benefiting Lands* are subject, provided that a *Latecomer* who makes an *Application for Subdivision*, or an *Application for Development*, with respect to the *Benefiting Lands*, will also be considered an “*Owner*” of a *Parcel* or proposed *Parcel* for the purpose of this Bylaw;
- 2.2.37 “*Latecomer Agreement*” means an agreement between the *Owner* and the *Township*, in the form prescribed by the *Township*, as referred to in Section 508 of the *Local Government Act*;
- 2.2.38 “*Latecomer Charges*” means those charges determined and imposed by the *Township* and as defined by the *Latecomer Agreement*;
- 2.2.39 “*Legally Constructed Dwelling*” means a residential dwelling that has been constructed in accordance with a *Building Permit* issued by the *Township*, or a residential dwelling proven to have been constructed prior to 1986, or residential dwelling where the owner provides a sworn affidavit stating that the dwelling was constructed prior to 1986.

2.2.40 “*Maintenance Period*” means:

- a) the period of one year from the date on which all obligations of the *Owner* and its *Consulting Engineer(s)* have been performed.
- b) with respect to *Works and Services* that appear to be incomplete, defective or deficient during the *Maintenance Period* referred to in 2.2.41(a), the period of one year from the date on which such *Works and Services* are completed or corrected.

2.2.41 “*Maintenance Security*” means:

- a) a deposit in the form of cash or a certified cheque provided for the *Maintenance Period*, or
- b) an unconditional irrevocable standby auto-renewing letter of credit in a form satisfactory to the *Township*, expiring no earlier than one year from the date of issuance and providing for a right of renewal unless the letter of credit is perpetual, issued to the *Township* by a branch of a chartered bank, credit union or trust company;

2.2.42 “*Maintenance Security Agreement*” means an agreement between the *Owner* and the *Township* that the *Owner* is responsible for the maintenance of the *Works and Services* of the subdivision for a specified period of time upon declaration of *Substantial Completion*;

2.2.43 “*MMCD*” means the most current edition of the Master Municipal Construction Documents and Design Guidelines;

2.2.44 “*Medical Health Officer*” means the official appointed under the Health Act who has jurisdiction over the area in which the *Subdivision* or *Development* is located;

2.2.45 “*Official Community Plan*” means the Township of Spallumcheen Official Community Plan (OCP) Bylaw, as amended from time to time;

2.2.46 “*Off-site Works and Services*” means *Works and Services* that are directly attributable to the *Subdivision* or *Development* and that will be owned and maintained by the *Township* following issuance of the *Certificate of Total Completion*;

2.2.47 “*Onsite Water Supply*” means a well or other *Potable Water* source that is provided on a *Parcel* when a *Community Water System* is unavailable;

2.2.48 “*Owner*” means the registered *Owner* of land proposed to be *Developed* or *Subdivided*, or their agent authorized in writing, and includes:

- a) the tenant for life under a registered life estate;
- b) the registered holder of the last registered agreement for sale; and
- c) the holder or occupier of land held in the manner as referenced in the *Local Government Act*.

2.2.49 “*Owner/Consulting Engineering Confirmation*” means a confirmation letter from the *Owner* and the *Consulting Engineer*, in the form prescribed by the *Township*;

2.2.50 “*Panhandle Lot*” means any *Parcel* which gains *Highway Frontage* through the use of a narrow strip of land which is an integral part of the said *Parcel* (hereinafter called the “access strip”);

- 2.2.51 “*Parcel*” means any lot, block, or other area in which land is held or into which land is held or *Subdivided* but does not include a *Highway* or portion thereof;
- 2.2.52 “*Potable Water*” means water that meets the microbiological parameters and the health based chemical and physical parameters of the *Guidelines for Canadian Drinking Water Quality*;
- 2.2.53 “*Preliminary Layout Review*” means such drawings, plans, information and documents as the *Approving Officer* requires, and in such form as is required by the *Township*, 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* should include in the *Application for Subdivision Approval*;
- 2.2.54 “*Preliminary Layout Review Letter*” means a letter from the *Approving Officer* to the *Owner* advising of the *Approving Officer’s* response to *Preliminary Layout Review* information provided by the *Owner*;
- 2.2.55 “*Professional Engineer*” means an individual who is registered with the Association of Professional Engineers and Geoscientists of the Province of British Columbia as a professional engineer under the *Professional Governance Act*;
- 2.2.56 “*Professional Geoscientist*” means an individual who is registered with the Association of Professional Engineers and Geoscientists of the Province of British Columbia as a professional geoscientist under the *Professional Governance Act*;
- 2.2.57 “*Qualified Water Quality Specialist*” means a *Professional Engineer*, or a person designated under the Applied Science Technologists and Technicians Act, or a person who provides written confirmation of their certification and authority to verify that a water source meets the *potable water* standards of this bylaw or to determine the potential for, and method of, treating a water source to ensure that it meets the potable water standards of this bylaw.
- 2.2.58 “*Qualified Well Driller*” means a person being listed on the Register of Qualified Well Drillers in the Province of British Columbia pursuant to the Ground Water Protection Regulation.
- 2.2.59 “*Qualified Well Pump Installer*” means a person being listed on the Register of Qualified Well Pump Installers in the Province of British Columbia pursuant to the Ground Water Protection Regulation.
- 2.2.60 “*Record Drawings*” means drawings prepared by and certified by the *Consulting Engineer* that record the location, properties and details of all *Works and Services*;
- 2.2.61 “*Regional District*” means the Regional District of the North Okanagan;
- 2.2.62 “*Registered Onsite Wastewater Practitioner*” means a person who is qualified to act as a registered onsite wastewater practitioner in the Sewerage System Regulation under the Public Health Act.
- 2.2.63 “*Road*” means the portion of a *Highway* to be used for vehicular traffic movement;

- 2.2.64 “*Road Construction Permit*” means a permit issued by the *Township* in connection with an application by an *Owner* to *Construct Works and Services* on, in or under a *Highway* or *Township* lands, or to encroach upon a *Highway* or *Township* lands in *Constructing Works and Services* on the *Owner’s lands*;
- 2.2.65 “*Road Frontage*” means the perimeter of the *Parcel* that abuts a *Road*;
- 2.2.66 “*Service Application*” means an application made by the *Owner* to connect to the *Township’s Works and Services*, in the form prescribed by the *Township*;
- 2.2.67 “*Statutory Declaration*” means the *Owner’s* sworn declaration that all amounts relating to the *Works and Services* due and owing to third parties as of the date on which the *Statutory Declaration* is given have been paid, including all amounts owing to contractors and sub-contractors, and all assessments and levies under applicable legislation;
- 2.2.68 “*Statutory Right-of-Way Agreement*” means an agreement between the *Owner* and the *Township*, in the form prescribed by the *Township*, as referred to in the *Land Title Act*;
- 2.2.69 “*Strata*” means a bare land strata plan or a building strata plan as defined in the *Strata Property Act*;
- 2.2.70 “*Subdivide*” or “*Subdivision*” means:
- a) the division of land into two or more *Parcels* whether by plan, apt descriptive words, or otherwise;
 - b) the consolidation of *Parcels* into one *Parcel* by plan;
 - c) the creation of a *Highway* or a portion of a *Highway* by plan; or
 - d) a boundary adjustment between two *Parcels*;
- 2.2.71 “*Subdivision Approval*” means the execution by the *Approving Officer* of a plan of *Subdivision*;
- 2.2.72 “*Subdivision, Large Lot*” means a *Subdivision* where two or more parcels one hectare or greater in size are created;
- 2.2.73 “*Subdivision, Minor Rural*” means a *Subdivision* on a *Parcel* that is zoned CR – Country Residential, SH – Small Holdings, or A2 – Agricultural where one to two additional *Parcels* are being created, that is, one existing *Parcel* is being *Subdivided* into two or three *Parcels*;
- 2.2.74 “*Subdivision, Minor Urban*” means a *Subdivision* on a *Parcel* that is zoned R1 – Single Family Residential where one to two additional *Parcels* are being created, that is, one existing *Parcel* is being *Subdivided* into two or three *Parcels*;
- 2.2.75 “*Subdivision, Small Lot*” means a *Subdivision* where two or more *parcels* less than one hectare in size are created;
- 2.2.76 “*Substantial Completion*” means the stage of completion of all of the *Works and Services* when the *Works and Services* are ready to be used for their intended purpose, as determined by the *Chief Administrative Officer* or designate;

- 2.2.77 “*Surveyor*” means a person currently licensed to practice by, and is in good standing with, the Association of British Columbia Land Surveyors;
- 2.2.78 “*Total Completion*” means when all *Works and Services*, including all incomplete, defective or deficient *Works and Services* that were apparent when the *Certificate of Substantial Completion* was issued have been completed or corrected, as certified by the *Consulting Engineer* and agreed by the *Township*;
- 2.2.79 “*Township*” means the Corporation of the Township of Spallumcheen, a municipality, as described in its Letters Patent;
- 2.2.80 “*Water Authority*” means an *Improvement District*, Municipality, *Regional District*, Greater Board, Water Utility regulated under the Water Act, and amendments thereto, or an Agency of Her Majesty the Queen in Right of Canada;
- 2.2.81 “*Watercourse*” means any natural or artificial stream, river, creek, ditch channel, canal, conduit, culvert, drain, waterway, gully or ravine in which water flows in a definite direction or course, either continuously or intermittently, and has a definite channel, bed and banks and includes an area adjacent thereto subject to inundation by reason of overflow or flood water;
- 2.2.82 “*Works and Services Agreement*” means a written agreement in a form prescribed by the *Township* that describes the terms and conditions agreed upon between the *Township* and the *Owner* relative to provision of *Works and Services* associated with a *Subdivision* or *Development*;
- 2.2.83 “*Works and Services*” means site grading, *Highways*, sidewalks, boulevards, boulevard crossings, transit bays, street lighting, wiring, water distribution systems, fire hydrants, sewage collection and disposal systems, drainage collection and disposal systems, engineering, *Record Drawings* and such other infrastructure or systems as may be provided within the *Township* from time to time;
- 2.2.84 “*Zone*” means the *Zones* identified and defined in the *Zoning Bylaw*;
- 2.2.85 “*Zone Amending Bylaw*” means the Bylaw passed by the *Township*, following an application by the *Owner* in connection with the *Subdivision* or *Development* of the *Owner’s* lands, to amend the Township of Spallumcheen *Zoning Bylaw*; and
- 2.2.86 “*Zoning Bylaw*” means Township of Spallumcheen Zoning Bylaw, as amended from time to time.

2.3 Standards of Measure

All units of measure are based on the metric system. Any equivalent imperial units of measure shown in parenthesis after any metric units described in any schedule to this Bylaw are for information purposes only and do not form part of this Bylaw.

2.4 Severability

If any provision contained in the bylaw is found by a court of competent jurisdiction to be invalid, illegal or unenforceable in any respect, the validity, legality or enforceability of the remaining provisions

contained herein shall not be, in any way, affected or impaired thereby to the extent that the purpose of the bylaw may be fulfilled in the absence of the impugned provision or provisions of the bylaw.

2.5 Schedule

The following schedules are attached to and form part of this Bylaw:

SCHEDULE A	HIGHWAYS
SCHEDULE B	DESIGN AND CONSTRUCTION OF WATER DISTRIBUTION SYSTEMS
SCHEDULE C	DESIGN AND CONSTRUCTION OF SANITARY SEWAGE SYSTEMS
SCHEDULE D	DESIGN AND CONSTRUCTION OF DRAINAGE SYSTEM
SCHEDULE E	DESIGN AND CONSTRUCTION OF STREETLIGHTING
SCHEDULE F	DESIGN AND CONSTRUCTION OF SEDIMENT AND EROSION CONTROL SYSTEMS
SCHEDULE G	DESIGN AND CONSTRUCTION OF ELECTRICAL AND COMMUNICATIONS WIRING AND GAS DISTRIBUTION SYSTEMS
SCHEDULE H	DRAWINGS
SCHEDULE I	FORMS, AGREEMENTS, AND CERTIFICATES
SCHEDULE J	MMCD SUPPLEMENTAL SPECIFICATIONS

2.6 Master Municipal Construction Document (MMCD)

All *Works and Services* should be completed in accordance with the following portions of Volume II of the MMCD 2019 Edition of the Master Municipal Construction Document and Design Guidelines, which should form part of this Bylaw, unless specifically modified herein.

- a) Specifications – Division 01, 03, 26, and 31 to 34 inclusive
- b) Standard Detail Drawings

2.7 Applicability

This Bylaw applies to all lands within the area incorporated as the Township of Spallumcheen.

PART 3 SERVICING REQUIREMENTS

3.1 Level of Service

The level of services to be constructed by an *Applicant* prior to obtaining approval for a plan of *Subdivision* or issuance of a *Building Permit* shall be based on the *Zone* in which the land is located as set out on the Official Zoning Map of the *Zoning Bylaw* in accordance with Table 3.12, Table 3.14, and Table A-1 and A-2 in Schedule A. Table 3.12 prescribes the minimum level of service to be provided with respect to sanitary sewer, water, drainage, curbs, gutters and sidewalks, street lighting wiring and Highways as set out in Columns 2, 3, 4, 5, 6 and 7 thereto, and the *Zones* which are subject to each service level are described in Column 1.

3.2 Highways

- 3.2.1 All *Highways* created by a proposed plan of *Subdivision* or *Development* shall conform to Schedule “A” of this Bylaw.
- 3.2.2 Where the *Subdivision* abuts an existing *Highway*, the existing *Highway* **may** be upgraded to the standards set out in Schedule “A” at the discretion of the *Chief Administrative Officer* or designate.

3.3 Curbs and Gutters

Curbs and gutters required under Section 3.1 and 3.2 shall be provided in accordance with the standards set out in Schedule “A” of this Bylaw, where indicated in Table 3.12 – Level of Services.

3.4 Potable Water

- 3.4.1 A *Community Water System* shall be required pursuant to Schedule “B” of this Bylaw. The *Community Water System* shall be provided in accordance with the requirements of the *Water Authority* having jurisdiction, or in the case where a *Community Water System* shall become the property of the *Township*, the standards set out in Schedule “B” of this Bylaw must be met.
- 3.4.2 Where a proposed *Subdivision* or *Strata* is located adjacent to a *Community Water System* operated by the *Township* or Improvement Districts or *Irrigation Districts*, or other public utility, the *subdivision* shall connect to that *Community Water System* within public rights-of-way if water is available and as approved by the *Chief Administrative Officer* or designate.
- 3.4.3 Where a connection to a *Community Water System* cannot be provided, the *Subdivision* may be approved with the provision of an onsite *Potable Water* supply, as approved by the *Approving Officer*.
- 3.4.4 An on-site *Potable Water* supply shall meet the quantity and quality standards of Schedule “B”.
- 3.4.5 The use of a cistern may be approved as source of onsite *Potable Water* supply for the *Subdivision* by the *Approving Officer* based on consideration of the following criteria:
- a) The authority having jurisdiction confirms that the *Subdivision* is not able to be serviced by the *Community Water System*; and
 - b) The proposed parcel is located in a S.H., C.R., L.H., or A.2 zone.

- 3.4.6 Notwithstanding sections 3.4.1, 3.4.2, and 3.4.3, the *Approving Officer* may approve the *Subdivision of Parcels* 1.0 ha (2.47 acres) or larger in size in the S.H., C.R., L.H., A.2, I.4, I.5, and I.6 zones without the provision of a *Potable Water* supply if a written report is obtained from a *Professional Geoscientist* or a *Professional Engineer* specializing in groundwater geology or groundwater hydrology verifying that water of sufficient quantity and quality is available year round on or to the proposed *Parcel(s)* to satisfy the requirements of Schedule “B”, and that the extraction of water from the proposed water supply will not deplete the water supply of neighboring wells and surface water sources.
- 3.4.7 Notwithstanding section 3.4.1, 3.4.2, and 3.4.3, the *Subdivision of Parcels* may be approved without the provision of a water sample test and a written report from a professional hydrogeologist or a Professional Engineer if the following conditions are met:
- a) the parcel being created has a Legally Constructed Dwelling; and
 - b) the parcel is greater than 1 hectare; and
 - c) the parcel is serviced with an existing Potable Water source.

3.5 Sewage Disposal

- 3.5.1 For new *Subdivisions*, each *Parcel* shall be provided with connection to a complete sewage collection system installed in accordance with Schedule “C”.
- 3.5.2 If a *Subdivision* or *Strata* is to be serviced with sewage disposal system other than a *Community Sewer System*, an onsite sewage disposal system must be capable of being provided for each proposed *Parcel*. Written confirmation from the *Registered Onsite Wastewater Practitioner* or *Consulting Engineer*, and Interior Health, shall be submitted to the *Township* stating that the Provincial requirements with regard to onsite sewage disposal for proposed *Parcels* have been satisfied.
- a) Except that parcels 2.0 hectares or greater in size are exempt from providing documentation for an onsite sewage disposal system at the time of subdivision; onsite sewage disposal system requirements must be met prior to issuance of a building permit.
- 3.5.3 A *Community Sewer System* shall be provided for *Parcels* less than 1.0 ha in size, except those *Parcels* created pursuant to Section 514 of the *Local Government Act* (subdivision to provide residence for a relative), and meet the requirements of any authority having jurisdiction.
- 3.5.4 *Community Sewer Systems* shall not discharge effluent either directly or indirectly to a *Watercourse*.
- 3.5.5 Proof of connection to a *Community Sewer System* must be provided and shall consist of written confirmation from the authority having jurisdiction that the *Community Sewer System* satisfies the requirements of the authority having jurisdiction.

3.6 Storm Drainage

Each *Parcel* shall be provided with a complete and fully operative drainage system in accordance with the standards set out in Schedule “D” of this Bylaw.

3.7 Street Lighting

All street light fixtures and appurtenant facilities must be installed and approved in accordance with Schedule “E” and the requirements of the Provincial Electrical Inspector, and connection to an

electrical supply shall be in accordance with the requirements of the governing electrical authority, where ornamental street lighting is proposed to serve a *Subdivision*. *Applicants* shall be required to establish a specified area through the Municipality to provide for the future maintenance and service of the street lighting system where installation of ornamental street lighting is proposed.

3.8 Hydro-electricity

- 3.8.1 Hydro-electric service should be provided for all *Subdivisions* of *Parcels* less than 8.0 ha (17.8 ac) in size, except that the Approving Officer may approve the *Subdivision* of *Parcels* without the provision of hydro-electric service in the S.H., L.H., A.2, and C.R. *Zones*.
- 3.8.2 If a *subdivision* is not provided with hydro-electric service, then the *owner* must provide a right of way to allow for the future provision of hydro-electric services to the *parcels* in the *subdivision* and lands beyond; and the right of way provided could be the right of way provided for a *Highway*.
- 3.8.3 All hydro-electric facilities must be installed and approved in accordance with the requirements of the authority having jurisdiction and Schedule “G” of this Bylaw.
- 3.8.4 *Construction* on existing *Parcels*, may be approved by the *Chief Administrative Officer* or designate without the provision of hydro-electric service, if hydro-electric service is not available to the existing *parcel*.

3.9 Underground Wiring Services

- 3.9.1 Electrical distribution, telephone, telecommunications, and television wiring shall be underground where indicated in Table 3.12.
- 3.9.2 All underground wiring services and appurtenant facilities shall be installed and approved in accordance with the requirements of the authorities having jurisdiction and Schedule “G” of this Bylaw.

3.10 Gas Distribution

- 3.10.1 All gas lines and appurtenant facilities shall be installed and approved in accordance with the requirements of FortisBC and Schedule “G” of this Bylaw where the installation of natural gas service is proposed.
- 3.10.2 The *Approving Officer* may approve the *Subdivisions* of *Parcels* without the provision of natural gas service in the S.H., L.H., A.2 and C.R. *Zones*.
- 3.10.3 If a *subdivision* is not provided with natural gas service, then the *owner* must provide a right of way to allow for the future provision of natural gas services to the *parcels* in the *subdivision* and lands beyond
- 3.10.4 *Construction* on existing *Parcels* may be approved *Chief Administrative Officer* or designate without the provision of natural gas service, if natural gas service is not available to the existing *parcel*.

3.11 Park Land

3.11.1 The *Owner* must be required to provide, without compensation, land for public open space or cash-in-lieu of park land in an amount that equals the market value of the land, in accordance with the provisions of Section 510 of the *Local Government Act* where the *Official Community Plan* contains policies and designations respecting the location and type of future parks.

3.11.2 The amount of land required to be provided under Section 3.11.1 above must not exceed 5.0% of the land being proposed for *Subdivision*.

3.11.3 Section 3.11.1 does not apply:

- a) To *Subdivisions* where fewer than three additional *Parcels* would be created; or
- b) To *Subdivisions* where the smallest *Parcel* being created is larger than 2.0 ha (5 ac); or
- c) To consolidations of existing *Parcels*.

3.12 Works and Services Levels

3.12.1 The *Works and Services* described in Sections 3 and 4 of this Bylaw shall be provided to the minimum level of service prescribed in TABLE 3.12, unless exempted.

Table 3.12 - Level of Works and Services Requirements at Subdivision and Building Permit

Column 1 Zone	Column 2 Sanitary Sewer	Column 3 Water	Column 4 Drainage	Column 5 Street Lighting	Column 6 Wiring	Column 7 Highways
<u>Residential</u> R.1, R.5	<1ha. = CSSS 1-2 ha. = On site SD >2ha. = Not required	CWS	SSS, CG	Through Subdivision	Underground	Urban Local
<u>Rural</u> S.H., C.R., A.2, L.H.	1-2 ha. = On site SD >2ha. = Not required	<ul style="list-style-type: none"> • CWS where available • On-Site WS where CWS not available • >1 ha. = 'Report only' is possible • Cistern Possible 	Ditch	Intersections	Overhead	See Section 3.14 text tables and maps and Schedule A
<u>Commercial</u> C.2, C.4 C.5, C.6, C.7	<1ha. = CSSS 1-2 ha. = On site SD >2ha. = Not required	CWS	Ditch	Through Subdivision	Overhead	
<u>Industrial</u> I.1, I.2	<1ha. = CSSS 1-2 ha. = On site SD >2ha. = Not required	CWS	Ditch	Through Subdivision	Overhead	
<u>Industrial</u> I.4, I.5, I.6	<1ha. = CSSS 1-2 ha. = On site SD >2ha. = Not required	<ul style="list-style-type: none"> • CWS where available • On-Site WS where CWS not available • >1 ha. = 'Report only' is possible 	Ditch	Intersections	Overhead	
<u>Special Use</u> S.1	<1ha. = CSSS 1-2 ha. = On site SD >2ha. = Not required	CWS	Ditch	Intersections	Overhead	

CSSS: Community Sanitary Sewer System

CG: Curb and Gutters

CWS: Community Water System

SSS: Storm Sewer System

On site WS: On site Water System

On Site SD: Onsite Sewage Disposal

>2ha = Not Required: for proposed parcels greater than 2 hectares, an onsite sewer system is not required at subdivision, but it will still be required at building permit

>1 ha. = 'Report only' is possible: For parcels 1 hectare or larger the applicant may provide a report verifying that water of sufficient quantity and quality is available as set out under section 3.4

Cistern Possible: A Cistern is a possible option for provision of water subject to criteria and approval, as set out under section 3.4

3.13 Highways

3.13.1 The existing Highway classifications within the Township are described as follows:

- a) Arterial Roadway – An arterial Road has the primary function of carrying through traffic from one area to another with as little interference as possible from adjacent land uses. An arterial Road may provide direct access to property as a secondary function when alternate access is not available. Highway 97A and Highway 97 are arterial Roads.
- b) Collector Roadway – A collector Road has the primary function of distributing traffic between arterial, other collector and local Roads within an area. A collector Road may also provide direct access to properties. Pleasant Valley Road, Otter Lake Cross Road and Salmon River Road are collector Roads.
- c) Local Roadway – A local Road has the primary function of providing direct access to properties. Local Roads normally connect to other local Roads or to collector Roads. All other roads within the Township are local Roads.

3.14 Roads

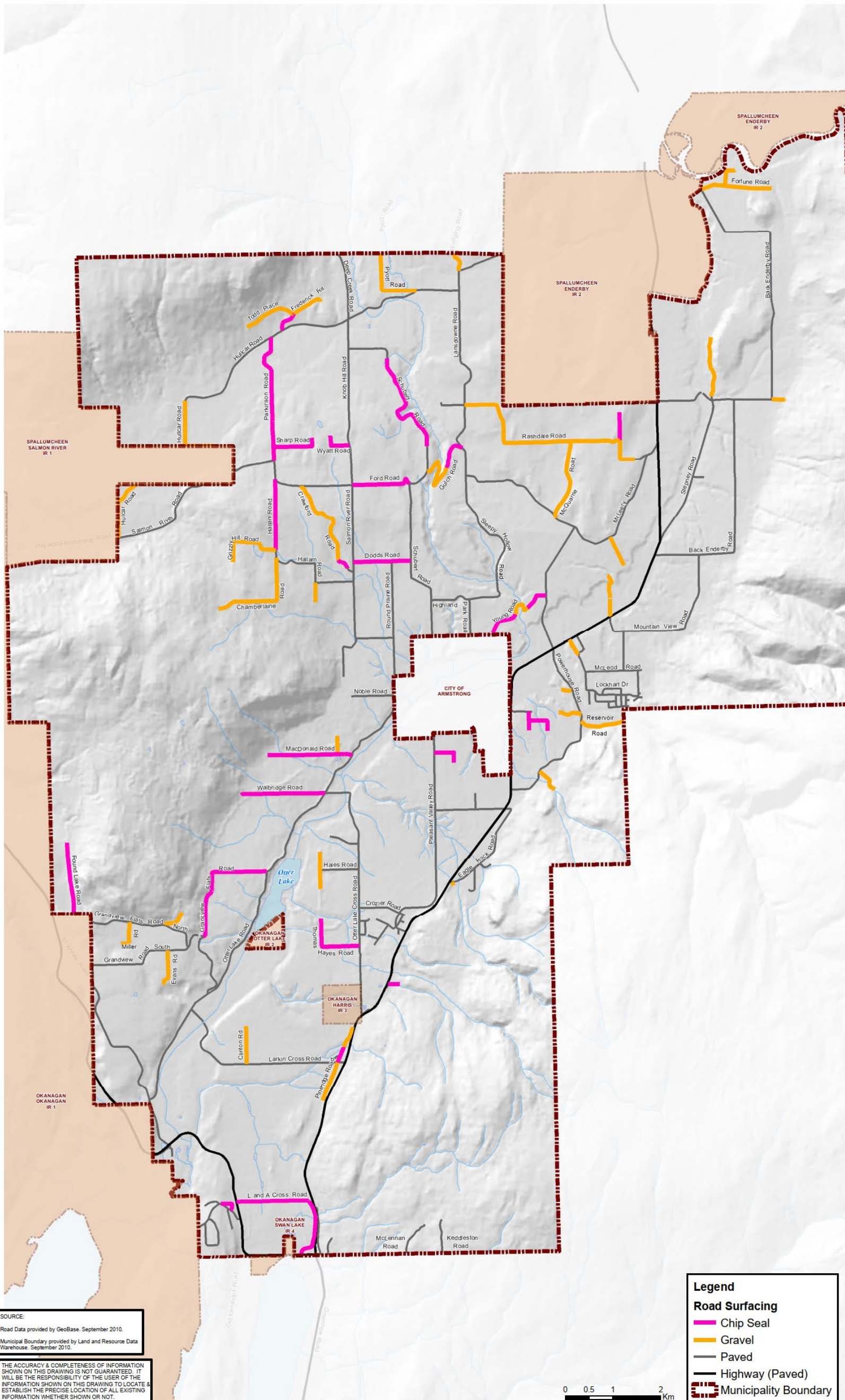
The *Chief Administrative Officer* or designate shall classify all *Roads* within the *Subdivision or Development* in accordance with Figure 3.14.1, Figure 3.14.2, Table 3.14 Surface Type Based on Parcels Served by Road, the Township’s Asset Management Plan and Policy prior to the design of the Road system.

Table 3.14 - Surface Type Based on Parcels Served by Road

Number of Parcels Served by Road	Surface Type
Less than 12 parcels	Gravel
Greater than 12 parcels, up to 40 parcels	Chipseal (Graded Aggregate Seal)
Greater than 40 parcels	Pavement



DATE: AUGUST 2018



Legend

Road Surfacing

- Chip Seal
- Gravel
- Paved
- Highway (Paved)
- Municipality Boundary

SOURCE:
 Road Data provided by GeoBase, September 2010.
 Municipal Boundary provided by Land and Resource Data Warehouse, September 2010.

THE ACCURACY & COMPLETENESS OF INFORMATION SHOWN ON THIS DRAWING IS NOT GUARANTEED. IT WILL BE THE RESPONSIBILITY OF THE USER OF THE INFORMATION SHOWN ON THIS DRAWING TO LOCATE & ESTABLISH THE PRECISE LOCATION OF ALL EXISTING INFORMATION WHETHER SHOWN OR NOT.



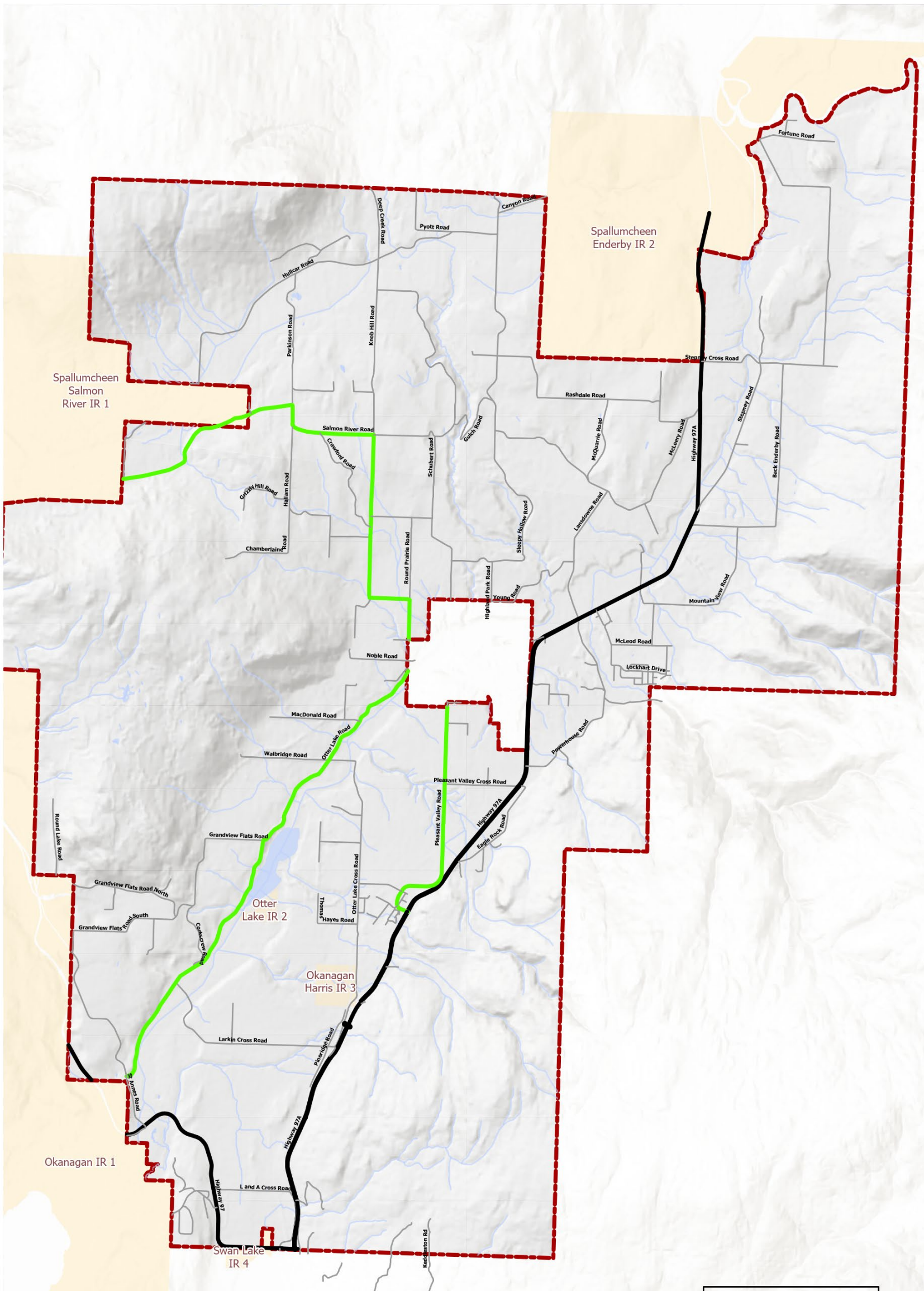
ROAD SURFACING SERVICE LEVELS

Figure 3.14.1



DATE: January 2021

1:75,000



SOURCE:
 Road Data provided by Digital Road Atlas, September 2019.
 Municipal Boundary provided by RDNO, Warehouse, September 2019.

THE ACCURACY & COMPLETENESS OF INFORMATION SHOWN ON THIS DRAWING IS NOT GUARANTEED. IT WILL BE THE RESPONSIBILITY OF THE USER OF THE INFORMATION SHOWN ON THIS DRAWING TO LOCATE & ESTABLISH THE PRECISE LOCATION OF ALL EXISTING INFORMATION WHETHER SHOWN OR NOT.

Legend

Road Classification

- Arterial
- Collector
- Local
- Municipal Boundary



ROAD CLASSIFICATION MAP

Figure 3.14.2

PART 4 SERVICING REQUIREMENTS FOR SUBDIVISIONS AND DEVELOPMENTS

- 4.1** The *Subdivision* or *Development* should be provided with *Works and Services* within the *Subdivision* or on the *Parcel* being developed as prescribed in this Bylaw prior to *Subdivision Approval* or issuance of a *Building Permit*. Any *Subdivision* or *Development* that proposes a level of service for *Roads* or water systems that varies from the standards outlined in this Bylaw must be approved by *Council*.
- 4.2** The *Approving Officer* has the authority to grant *Subdivision Approval*.
- 4.3** The *Chief Administrative Officer* or designate has the authority to:
- a) Determine what *Off-Site Works and Services* are directly attributable to *Subdivision* or *Development* and are accordingly required in any particular case;
 - b) Determine what *Excess or Extended Services* are required in connection with a *Subdivision* or *Development*;
 - c) Determine whether the cost of those *Excess or Extended Services* are excessive such that the municipality cannot pay for those costs;
 - d) Identify the benefiting properties in relation to *Excess or Extended Services*; and
 - e) Determine what proportion of the costs associated with the *Excess or Extended Services* is associated with each benefiting property.
- 4.4** The *Subdivision* or *Development* should be provided with *Off-Site Works and Services* as determined by the *Chief Administrative Officer* or designate prior to *Subdivision Approval* or issuance of a *Building Permit*.
- 4.5** All *Works and Services* required as per Section 4.1 and Section 4.4 should be provided to the standards prescribed in the Schedules of this Bylaw.
- 4.6** Notwithstanding Section 4.1 and Section 4.4, the *Owner* may obtain *Subdivision Approval* or a *Building Permit* prior to the provision of on-site and *Off-Site Works and Services* if the *Owner* provides security in accordance with Section 5.3 and enters into a *Works and Services Agreement* with the *Township*.
- 4.7 Exemptions**
- 4.7.1** Notwithstanding Section 4.1 and Section 4.4, the *Works and Services* requirements of this Bylaw do not apply where:
- a) A *Building Permit* is issued for:
 - i. *Construction* in the R.1, R.5, S.H., C.R., and L.H. Zones; or
 - ii. *Construction* of a single detached dwelling in the A-2 Zone; or
 - iii. *Construction* of buildings less than 300 m² in size.
 - b) the *Parcel* being created is to be used solely for the unattended equipment necessary for the operation of
 - i. a Community Water System
 - ii. a Community Sewage System
 - iii. a community gas distribution system
 - iv. a community radio or television receiving antenna
 - v. a telecommunication relay station

- vi. an automatic telephone exchange
 - vii. an air or marine navigational aid
 - viii. electrical substations or generating stations, or
 - ix. any other similar public service or quasi-public service facility or utility
- c) The *Parcel* being created is to be used solely as public park or as public park in combination with a *Subdivision*.
- d) An application proposes to adjust *Parcel* boundaries so that additional *Parcels* are not created, or subdivide divide one existing *Parcel* into two *Parcels*, and the proposed *Parcels* meet the requirements of Section 4.7.2.
- 4.7.2 Despite Section 4.7.1(d), where an *Applicant* proposes to adjust *Parcel* boundaries, or subdivide one existing *Parcel* into two *Parcels*, the *Applicant* shall:
- a) provide a drawing indicating the locations of existing services and potential locations of extended services, including electrical and communications wiring, gas distribution systems, water systems, and sewer systems, if applicable; and
 - b) identify which *Parcel* will connect to which service.
 - c) Preserve a statutory right of way to allow for future extension of services to the adjusted *Parcel* line or the new *Parcel*; and the right of way provided could be the right of way provided for a Highway.
- 4.7.3 Notwithstanding sections 4.1 and 4.4, a *Minor Rural Subdivision* and a *Minor Urban Subdivision* are, at the discretion of the *Chief Administrative Officer* or designate, exempt from providing the following services:
- a) *Road* improvements required to bring the *Road* up to a standard of an Arterial *Road*, Collector *Road* or Paved Local *Road*. [Note that improvements would still be required to bring the *Road* up to the standard of a Gravel/Chipseal Local *Road*.];
 - b) Curb, gutters and sidewalks;
 - c) Storm Sewer System;
 - d) Street lighting; and
 - e) Underground wiring.
- 4.7.4 In order to be considered for the exemptions outlined in section 4.7.3 above, a *Minor Rural Subdivision* or a *Minor Urban Subdivision*, the resulting *Parcels* must meet the following criteria:
- a) Each proposed *Parcel* is served by the existing *Road* network, and located along an existing *Road* set out in Figure 3.14.1. the Road Surfacing Service Levels map;
 - b) No new *Road* rights of way are required to service the proposed *Parcels*;
 - c) Each proposed *Parcel* can be readily connected to an existing *Community Water System* or is proposed to be serviced with an on-site water system (dug well, drilled well or surface); and
 - d) Each proposed *Parcel* will be serviced with on-site sewage disposal.
- 4.7.5 An *Owner* may only qualify for a single exemption for a *Minor Rural Subdivision* or a *Minor Urban Subdivision*. If a land *Owner* applies for more than one *Minor Rural Subdivision* or *Minor Urban Subdivision*, the exemptions no longer apply, and the *Owner* should meet the full requirements of this Bylaw, or pay amounts equivalent to the costs of providing these services to the *Township*.

- 4.7.6 Despite the exemptions listed above, the *Chief Administrative Officer* or designate may require road upgrades for compliance with Figure 3.14.1 Road Surfacing Level map if an area does not have proper *Road* dedication.
- 4.7.7 Any extenuating circumstances identified by the *Chief Administrative Officer* or designate upon reviewing applications for *Minor Rural Subdivisions* and *Minor Urban Subdivisions* may require a variance from *Council*, therefore voiding sections 4.7.3, 4.7.4, 4.7.5, and 4.7.6.
- 4.7.8 Road improvements required in the S.H., C.R., A.2, and L.H. Zones will be determined by the *Chief Administrative Officer* or designate considering the ultimate servicing plan for the area and the Township's Asset Management Plan.

4.8 Alternative Designs

- 4.8.1 Despite the requirements in Part 4, the *Chief Administrative Officer* or designate, or the *Approving Officer* may approve alternative designs that meet the performance objectives of the requirements set out in Schedules A to G if the *Owner* provides a report prepared by their *Consulting Engineer* clearly demonstrating that the alternative design will meet or exceed the performance objectives of the requirements set out in Schedules A to G.

PART 5 FEES AND SECURITY

5.1 Fees and Payment of Charges

Final Approval of the *Subdivision* or *Development*, issuance of the *Certificate to Proceed with Construction*, issuance of a *Preliminary Layout Review Letter*, issuance of a *Road Construction Permit*, or issuance of *Building Permit*, as the case may be, will not be issued by the *Township* until all applicable *Fees* and charges have been paid.

5.2 Development Approval Fees

5.2.1 The *Owner* should pay a fee to the *Township* for development approval as outlined in the *Township's Fees and Charges Bylaw* for *Subdivisions* prior to issuance of the *Certificate to Proceed with Construction*.

5.2.2 The *Owner* should pay to the *Township* an amount equal to the lesser of 3.0% of the estimated cost to *Construct* the *Works and Services* as approved by the *Township* or the sum of all required reporting costs (i.e. consulting *Fees*, *Design Drawings*) plus administrative *Fees*, for projects with a *Construction* value of greater than or equal to \$500,000, prior to issuance of the *Certificate to Proceed with Construction*.

5.3 Works and Services Security

5.3.1 *Final Approval* of a *Subdivision* or issuance of a *Building Permit* should not be granted prior to the provision of *Works and Services* unless the *Owner* pays to the *Township* a security in an amount equal to:

- a) 100% of the *Consulting Engineer's Estimate of the Cost of the Works and Services* required for the proposed *Subdivision* or *Development* to meet the requirements of this Bylaw in all Rural Zones (S.H., L.H., A.2 and C.R.).
- b) 125% of the *Consulting Engineer's Estimate of the Cost of the Works and Services* required for the proposed *Subdivision* or *Development* to meet the requirements of this Bylaw in all Residential, Industrial, Commercial, and Special Use Zones.

5.3.2 The *Owner* should be responsible for the actual cost of the *Works and Services* regardless of the adequacy of the security deposited with the *Township*.

5.3.3 The required security amount may be reduced, at the discretion of the *Chief Administrative Officer* or designate, upon *Construction* of specific phases of *Works and Services*. The amount of the reduction in security should be 90% of the value of the work undertaken, as determined by the *Owner's Consulting Engineer*, and as agreed to by the *Chief Administrative Officer* or designate. In no case should the security be reduced below 10% of the value of the *Consulting Engineer's Estimate of the Cost of the Works and Services*, plus two times the value of any deficiencies.

5.4 Maintenance Security

5.4.1 The *Township* should:

- a) Return the security required pursuant to Section 5.3.1 of this Bylaw, less 10% to cover deficiencies during the one-year *Maintenance Period*.
- b) Establish the date of commencement of the one-year *Maintenance Period*.

- c) Advise the *Owner* of the terms of the one-year *Maintenance Period*.
- 5.4.2 All *Works and Services* required to be constructed or provided pursuant to the provisions of this Bylaw should remain the sole responsibility of the *Owner* until a *Certificate of Acceptance* has been issued by the *Township*. The *Owner* should maintain the *Works and Services* and repair or replace any defective or deficient *Works and Services* during the one-year *Maintenance Period*. Should the *Owner* fail to maintain, repair or replace said deficient *Works and Services*, the *Township* may undertake such maintenance, repairs or replacement using the 10% security provided for herein.
- 5.4.3 The *Maintenance Period* should not commence until:
 - a) *Substantial Completion* of the *Works and Services* has been achieved.
 - b) The *Record Drawings* have been submitted by the *Owner* and approved by the *Chief Administrative Officer* or designate.
- 5.4.4 The *Chief Administrative Officer* or designate may require the *Maintenance Period* be extended so that it terminates on April 1 following the one-year anniversary of the commencement date of the *Maintenance Period* should the *Maintenance Period* commence between the period November 1 and March 31.

PART 6 GENERAL PROVISIONS

6.1 Compliance

- 6.1.1 No *Parcel* may be *Subdivided* or *Developed*, unless the *Subdivision* or *Development* conforms to the provisions set out in this Bylaw and other Bylaws of the *Township*.
- 6.1.2 All *Works and Services* required by this Bylaw should be constructed at the expense of the *Owner*.

6.2 Validity of Reports

- 6.2.1 The *Township* reserves the right to determine the applicability of reports submitted as part of the *Subdivision* or *Development* approval process that have been in-stream for more than two years.
- 6.2.2 The *Township* may require the *Owner*, at its expense, to submit an updated report based on the following criteria:
- a) if physical conditions affecting the *Subdivision* or *Development* application have changed; or,
 - b) if infrastructure affecting the proposed *Subdivision* or *Development* has changed; or,
 - c) there are changes in the provincial legislation that impact the proposed *Subdivision* or *Development*; or,
 - d) if physical conditions affecting the proposed *Subdivision* or *Development* change due to the impact of climate change.

6.3 Project Certification

- 6.3.1 The *Owner*, at its expense, shall retain a *Consulting Professional(s)* to design, inspect, test and certify all *Works and Services*.
- 6.3.2 The *Consulting Engineer* responsible for the respective *Works and Services* shall, upon satisfactory completion of said *Works and Services*, provide the *Township* with their written certification that they were, in fact, on-site during the period of *Construction* of the *Works and Services* and that said *Works and Services* were installed meeting the requirements of this Bylaw.

6.4 Rights-of-Way and Easements

- 6.4.1 *Works and Services* constructed and installed under this Bylaw should be located within dedicated *Highways* or within statutory rights-of-way granted by the *Owner* in favour of the *Township* or other agencies having jurisdiction.
- 6.4.2 The *Township* may require statutory rights-of-way to be granted by the *Owner* in favour of the *Township* to allow for the eventual *Construction* or installation of a system of *Roads*, water, sewer, or drainage *Works and Services* where *Works and Services* are not required to be constructed or installed under this Bylaw.
- 6.4.3 The *Owner* should register the rights-of-way in the Land Title Office in instances where the *Owner* is required to grant rights-of-way to the *Township*. The terms of the rights-of-way documentation are subject to the approval of the *Chief Administrative Officer* or designate prior to registration.

Township of Spallumcheen Subdivision & Development Standards Bylaw No. 2107, 2023

6.4.4 The *Owner* should submit a copy of the registered rights-of-way plan and agreement to the *Township* upon registration of the rights-of-way and before release of any security being held by the *Township*.

6.4.5 All costs pertaining to the acquisition, surveying and registration of all rights-of-ways should be at the expense of the *Owner*.

6.5 Latecomer

6.5.1 Where the *Owner* is required by the *Township* to provide *Excess or Extended Services*, the *Owner* is entitled to receive *Latecomer Charges* in accordance with:

- a) The *Local Government Act*, and;
- b) The *Latecomer* policy of the *Township*, where applicable, and;
- c) The *Latecomer Agreement* in a form acceptable by the *Chief Administrative Officer* or designate.

6.5.2 The *Chief Administrative Officer* or designate should require the *Owner* to provide appropriate documentation and associated costs respecting potential *Latecomer* eligible properties. The issuance of a *Certificate to Proceed with Construction* should be withheld until receipt of said information.

6.5.3 The interest rate applicable to *Latecomer Charges* should be calculated by the *Township* at the time the *Latecomer Agreement* is signed, and shall equal the prime lending rate of the chartered bank used by the *Township*, less one percent.

6.6 Transfer of Ownership

Works and Services constructed and installed under this Bylaw become the property of the *Township* or the agency having jurisdiction, subject to no encumbrances, on issuance of the *Certificate of Acceptance*.

6.7 Stop Work Order

The *Chief Administrative Officer* or designate or the *Building Inspector* may order:

- a) an *Owner* who contravenes this Bylaw to comply with the Bylaw within a time limit specified in the order; or
- b) an *Owner* to stop *Construction* on the *Works and Services*, or any part thereof, if such *Works and Services* are proceeding in contravention of this Bylaw.

6.8 Record Drawings

6.8.1 The *Owner* should submit *Record Drawings* following the completion of the *Works and Services* and prior to issuance of a *Certificate of Total Completion*.

6.8.2 If the *Owner* wishes to receive *Subdivision* or *Development Approval* prior to submission of required *Record Drawings*, tests results, service cards, inspection reports, video reports, maintenance and operations manuals, and professional certifications, such *Approval* may be granted at the sole discretion of the *Chief Administrative Officer* or designate, subject to a deficiency holdback in an amount pursuant to section 6.8.3.

Township of Spallumcheen Subdivision & Development Standards Bylaw No. 2107, 2023

6.8.3 The *Owner* shall provide security in the amount of \$1,000 per sheet (based on approved drawings) for provision of approved *Record Drawings*, service cards, inspection reports and videos, and all testing results and certifications.

6.9 Works and Services Agreements

6.9.1 The *Chief Administrative Officer* or designate may:

- a) from time to time, prescribe the form of a *Works and Services Agreement*, provided that each such agreement should require the *Applicant* to:
 - i. repair and make good all defects and deficiencies appearing in the *Works and Services* for a period of at least one year following the issuance of a *Certificate of Substantial Completion*;
 - ii. provide to the *Township* throughout the *Construction* period performance, security in the amount of up to 100% or 125%, subject to section 5.3, of the *Construction Costs* in relation to the *Construction* of the *Works and Services*;
 - iii. pay all applicable Fees and charges associated with the application, review, administration and compliance of the *Works and Services*;
 - iv. carry third party liability insurance in an amount and form acceptable to the *Township*, naming the *Township* as an additional insured, in respect of claims arising out of death, personal injury or damage arising from the *Construction* of the *Works and Services*; and
 - v. indemnify the *Township* and save it harmless in respect of all costs and expenses it may incur as a result of faulty workmanship or defective material in the *Works and Services*, in respect of which the *Township* has provided notice to the *Applicant* prior to the *Township's* final acceptance of the *Works and Services*.
- b) execute and deliver such agreements on behalf of the *Township*, and require that such agreements be drafted in a form that is registrable under s. 219 of the *Land Title Act* against title to the land being *Subdivided* or built upon.

6.10 Preliminary Layout Review

6.10.1 The *Approving Officer* shall issue *Preliminary Layout Reviews* for a period of 18 months and may, if having received a written request by the *Applicant*, prior to the expiration of the 18-month period, extend the *Preliminary Layout Review* for a further 9 months. If the *Applicant* has taken what is deemed to be reasonable action by the *Approving Officer* to pursue the proposed *Development*, the *Approving Officer* may approve an extension of 9 months. If the *Applicant* has not taken what is deemed to be reasonable action by the *Approving Officer* to pursue the proposed *Development*, *Council* must decide if an extension to the *Preliminary Layout Review* shall be granted.

6.10.2 A maximum of two 9 months extensions may be granted to the *Applicant*. The *Approving Officer* may grant further extensions on a case by case basis at their discretion, otherwise the *Approving Officer* will require a new subdivision application.

6.11 Agricultural Land Reserve

6.11.1 For the *Applicant's* information, subdivision or development within the Agricultural Land Reserve must meet the regulations of the Agricultural Land Commission.

6.12 Frontage exemptions

6.12.1 Council hereby delegates to the *Approving Officer* the power to exempt a parcel from the statutory or bylaw minimum frontage provided for in Section 512 of the *Local Government Act*.

PART 7 ENFORCEMENT

7.1 Administration

The *Chief Administrative Officer* or designate, *Building Inspector*, or such other person as they may designate, may enter at all reasonable times upon the lands for which an *Application for Development* or for *Subdivision* has been made, for the purpose of administering or enforcing this Bylaw. No person should prevent or obstruct any such official from the carrying out of these duties under this Bylaw.

7.2 Violation

- a) It is an offence for any person to cause, suffer, or permit the *Subdivision* of land in contravention of this Bylaw or otherwise to contravene or fail to comply with this Bylaw.
- b) It is an offence for any person to prevent or obstruct, or attempt to prevent or obstruct the authorized entry of the *Chief Administrative Officer* or designate or other appointed employee, authorized under this Bylaw.

7.3 Penalties

Every person who violates a provision of this Bylaw commits an offense and is liable upon summary conviction to a penalty not exceeding \$10,000 and costs of prosecution. Every *Day* of violation constitutes a separate offense.

7.4 Remedial Powers

Council may authorize the demolition, removal, or standardization of any *Works and Services*, in whole or in part, that are in contravention of this Bylaw at the expense of the *Owner*.

PART 8 EFFECTIVE DATE

This Bylaw should come into force and take effect upon the final reading and adoption thereof. READ A FIRST TIME this 17 day of July, 2023.

READ A SECOND TIME this 17 day of July, 2023.

READ A THIRD TIME, as amended, this 21 day of August, 2023.

ADOPTED this 11 day of September, 2023.

'ORIGINAL SIGNED'
Christine Fraser
Mayor

'ORIGINAL SIGNED'
Cindy Webb
Corporate Officer

SCHEDULE A
HIGHWAYS

Township of Spallumcheen Subdivision & Development Standards Bylaw No. 2107, 2023

SCHEDULE A HIGHWAYS

A.1 General

- A.1.1 All Works and Services must be Constructed in accordance with this Bylaw and the MMCD Design Guidelines.
- A.1.2 In Sections A.2 to A.13, inclusive,
- (a) the meaning of “*Highway*” does not include “walkways”;
 - (b) the meaning of “intersection” includes the intersection of *Highways* and the intersection with a *Highway* of a *Parcel* pursuant to Section 11(1)(b) of B. C. Reg. 334/79, and amendments thereto; and
 - (c) “K value” means the distance required in metres to affect a one percent change in gradient on a vertical curve.
- A.1.3 The *Chief Administrative Officer* or designate may require an independent Traffic Impact Study.
- (a) The *Chief Administrative Officer* or designate may, in their sole discretion, direct the *Consulting Engineer* to prepare a transportation assessment that considers the following requirements and amenities:
 - (i) the need to accommodate normal traffic, emergency vehicles, transit, pedestrians, cyclists, and parking;
 - (ii) drainage constraints/options;
 - (iii) street or intersection lighting;
 - (iv) traffic calming;
 - (v) snow storage;
 - (vi) hillside slope/width restrictions;
 - (vii) right of way width availability;
 - (viii) desire to encourage use of certain routes for varying types of traffic (e.g. truck, farm, and commercial traffic); and
 - (ix) minimization of capital costs as well as future maintenance and rehabilitation costs.
 - (b) The transportation assessment is subject to the approval of the *Chief Administrative Officer* or designate.
- A.1.4 *Road* classification, anticipated traffic volume, the ultimate servicing plan for the area and the Township’s Asset Management Plan will be used to determine the typical *Road* cross sections or as determined by the *Chief Administrative Officer* or designate.

A.2 Geotechnical Evaluation

- A.2.1 The *Applicant* may be responsible for engaging the services of a *Professional Geoscientist* or *Professional Engineer* with relevant geotechnical experience to investigate surface and sub-surface conditions within the proposed *Subdivision* or *Development*. The *Professional Geoscientist* or *Professional Engineer* with relevant geotechnical experience should prepare a report outlining their findings and should provide clear, definitive recommendations on the geometry and placement of fill sections, compaction requirements over and above those stipulated in this Bylaw, cut slope geometry, pavement structures for *Roads*, and any other geotechnical issues affecting *Road Construction* within the proposed *Subdivision* or *Development*.

A.3 Approval of Engineering Drawings Required Prior to Construction

- A.3.1 Engineering drawings showing detailed design of *Roads* should be submitted to the *Chief Administrative Officer* or designate for approval prior to commencement of *Construction*. These drawings should show existing groundlines and proposed alignments and grades of the *Highways*, horizontal and vertical curve information and all other details for a complete design, as may be required. Grades should be given at all changes in vertical

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and horizontal alignments for centerline and gutter lines. Elevations should be shown on the *Design Drawings* at all changes in vertical alignments.

- A.3.2 The *Consulting Engineer* should detail the location of all proposed traffic islands, retaining walls, guardrails, and permanent barricades. These structures should be designed in accordance with good engineering practice.
- A.3.3 The *Design Drawings* should show the location of all traffic signs, street signs, and other traffic control devices required to be placed in the *Road* allowance.
- A.3.4 *Design Drawings* should show all utility poles, ducts, junction boxes and pipelines. The *Design Drawings* should indicate those utilities which require relocation prior to *Road Construction*. The *Consulting Engineer* should confirm the potential relocation of utilities with the utility *Owner* prior to completion of the *Design Drawings*. For underground systems, *Design Drawings* should show the location of underground wiring and appurtenances including all connections to individual *Parcels*.

A.4 General Design Requirements

- A.4.1 The *Owner* should take into account the following general design considerations:
 - (a) The design and arrangement of *Highways* within a *Subdivision or Development* should provide for the continuation or projection of existing streets in the surrounding area. In no case should the arrangement of *Highways* within a proposed *Subdivision or Development* make the *Subdivision or Development* of adjoining *Parcels* impractical.
 - (b) The design and arrangement of *Highways* should be suited to the topography of the land to be *Subdivided* or *Developed*.
 - (c) The location, classification and standard of all *Highways* proposed within a *Subdivision or Development* should take into account the proposed use of the land and should conform to the provisions of the *Township's Official Community Plan*.

A.5 Highway Right-of-Way Widths

- A.5.1 The width of any *Highway* right-of-way in any proposed *Subdivision* should be in accordance with Tables A.1 and A.2 except:
 - (a) where the proposed *Subdivision or Development* is within a Hillside Development Area and an urban *Road* cross section is being used;
 - (b) where the *Chief Administrative Officer* or designate deems a lesser width is better suited to the use or local conditions; or
 - (c) where a *Highway* is a *Controlled Access Highway* when it should be determined by the Ministry of Transportation and Infrastructure; or
 - (d) where in the opinion of the *Chief Administrative Officer* or designate, terrain and soil conditions are such that the *Highway* should have a statutory right-of-way width of 20.0 m (66 ft) plus:
 - (i) the width required to maintain
 1. any fill material plus 3.0 m (10 ft); or
 2. any cut material plus 3.0 m (10 ft), at the natural angle of repose of that material;
 - (ii) the additional width required for any drainage facilities including ditches needed to drain the *Road*; plus
 - (iii) any further width required for the physical protection of the *Highway* by *construction* of fences, barricades, walls, etc. cannot be contained within a 20.0 m (66 ft) statutory right-of-way sufficient land to support, protect, and drain such *Highway* should be the minimum *Highway* width.

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A.6 Access to Parcels adjoining Controlled Access Highways

A.6.1 Pursuant to the *Highway Act*, and amendments thereto, *Roads* should be provided to give access to *Parcels* adjoining controlled access *Highways*.

A.7 Intersecting Highways

A.7.1 Subject to the *Highway Act* and to the *Land Title Act*, and amendments thereto, where any *Subdivision* contains *Parcels* less than 90.0 m (295 ft) in width, intersecting *Highways* should be dedicated at intervals not greater than 400.0 m (1312 ft) and on the same side of the *Highway* and beginning at any existing lateral *Highway*, except:

- (a) where the *Parcel* being created is pursuant to this Bylaw; or
- (b) where difficult terrain or other natural features render vehicular access impracticable; or
- (c) where the pattern of existing *Subdivision* precludes the necessity of providing access.

A.8 Access to Waterbodies

A.8.1 When a *Subdivision or Development* borders the shore of a body of water, access to the body of water should be given in accordance with the requirements of the *Land Title Act*, and amendments thereto.

A.9 Cul-de-sacs and Turn-Around Areas

A.9.1 In any proposed *Subdivision or Development*, a Cul-de-sac exceeding 366 m in length should be provided with intermediate turnaround areas at a maximum of 366 m intervals. A driveway meeting the requirements of section A.16 (Driveways) may serve as an intermediate turnaround area if approved by the *Chief Administrative Officer* or designate.

A.9.2 Rural and Residential *Subdivisions* should be provided with a turnaround area at the Cul-de-sac terminus having a surface radius of 11.5 m and statutory right-of-way width of 15.0 m, or an approved alternative turn around area such as a hammerhead turn around. Industrial and Commercial *Subdivisions or Developments* should be provided with a turn-around area at the Cul-de-sac terminus having a pavement surface radius of 15.0 m and statutory right-of-way radius of 20.0 m.

A.10 Intersections

A.10.1 The number of *Highway* intersections within a *Subdivision or Development* should be kept to a minimum, and, where practicable:

- (a) Y-shaped intersections should be avoided;
- (b) T-shaped intersections should be used when the intersecting Highway is to carry a small amount of local traffic;
- (c) intersections with more than four legs should be avoided; and
- (d) intersections should not be located in or near sharp curves or near the crest of any rise or hill.

A.11 Intersection Off-Set

A.11.1 Wherever practicable, no intersection should be less than 60.0 m from any other intersection or likely future intersection. Measurement should be made along the centre line of the intersected *Highway*.

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A.12 Intersection Angle

A.12.1 Intersecting *Highways* should meet substantially at right angles (between 70 degrees and 110 degrees). Unless extremely difficult terrain or the pattern of existing *Subdivision* precludes it, a minimum of 15.0 m (49 ft) of an intersecting *Road* should be as close to right angles as practicable with an intersected *Road*. This distance should be measured commencing at the finished *road* shoulder of the intersected *Road* on the side of the contained angle.

A.13 Corner Cut-Offs

A.13.1 6.0 m (20 ft) x 6.0 m (20 ft) corner cut-offs should be provided at *Road* intersections in all *Subdivisions* or *Developments*.

A.14 Curb Return Radii

A.14.1 Curb return radii should conform to the following and be based on the lesser classified *Highway*:

- (a) Arterial Highway: 11.0 m Curb Return Radii
- (b) Collector Highway: 11.0 m Curb Return Radii
- (c) Local Highway: 7.5 m Curb Return Radii
- (d) Industrial Highway: 11.0 m Curb Return Radii

A.14.2 Arterial to arterial curb return radii require specific designs taking into account projected volumes, turning movements and truck traffic.

A.15 Highway Design Criteria

A.15.1 All *Road* classifications and designations for vertical and horizontal alignment elements should be designed utilizing the designated design speeds contained in Table A-1 and in compliance with the most current edition of the *Transportation Association of Canada – Geometric Design Guide for Canadian Roads*, and the *BC Ministry of Transportation and Infrastructure Supplement to TAC Geometric Design Guide*. *Road* design criteria to be referenced from this document includes super elevation, centerline radius, maximum grade, vertical curvature, and sight distance.

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Table A-1 - Highway Design Parameters

<i>Street Type (Std. Drawing Number)</i>	<i>Design Speed (km/h)</i>	<i>Curb & Gutter</i>	<i>Maximum Road Width (m)</i>	<i>Maximum ROW (m)</i>	<i>Parking</i>	<i>Sidewalk/Walkway</i>
Rural Collector Road (Dwg. F-2)	60	Not required	2 Lanes at 3.5 m plus 1.0 m shoulders (paved) and 0.5 m gravel rounding	18	Not permitted	None
Rural Local (Residential) Dwg. F-3;	60	Required if indicated in Table 3.12 of this Bylaw	2 Lanes at 3.50 m (paved), 0.5 m gravel shoulder (Rural Local (Residential))	16	Not permitted	None
Urban Local (Residential) Dwg. F-4;			2 Lanes at 4.25 m (paved) gutter to gutter (Urban Local (Residential))	20	Permitted	1.5 m Sidewalk
Rural Local (Industrial) Dwg. F-5			2 Lanes at 4.0 m plus 1.0 m shoulders (paved) and 1.0 m gravel rounding (Rural Local (Industrial))	20	Not permitted	None
Gravel & Graded Aggregate Seal Road (Dwg. F-6)	60	Required if indicated in Table 3.12 of this Bylaw	2 Lanes at 3.20 m, 0.5 m gravel shoulder	16	Not permitted	None
Private (Bare Land Strata)	20	Not required	6.0 m	N/A	N/A	N/A
Cul-de-sac	As per road standard	As per road standard	11.5m radius to gutter or pavement edge in bulb	15m radius in bulb	Not permitted	As per road standard

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A.15.2 The *Consulting Engineer* should avoid the use of combined maximum grade and minimum radius.

A.15.3 The following criteria should be considered:

- (i) Ksag assumes no illumination.
- (ii) No superelevation applied to local roads.
- (iii) Minimum longitudinal gradient at the gutter line should be 0.5%.
- (iv) Maximum grades are 8% and can be reduced by 1% of grade for each 30.0 m of radius below 150.0 m radius curve.
- (v) With the exception of those trees and shrubs the *Chief Administrative Officer* or designate approves as worthy of preservation and which are located close to the edge of a *Highway* allowance intended for vehicular use, the full width of all *Highways* should be cleared and grubbed. Brush, debris, stumps, and roots should be disposed of to the satisfaction of the *Chief Administrative Officer* or designate.
- (vi) The standard street cross-section for various classifications of *Highways* should be as per Table A-1.
- (vii) Minimum *Road* crossfall should be 3.0%.
- (viii) Minimum *road* gutterline grades for *Roads* having curb and gutter should be 0.5%.

A.16 Driveways

A.16.1 Each property should only have one driveway access per *Road Frontage*, unless the *Owner* has demonstrated need, along with the consideration of safety and good engineering practice, and approval has been received from the *Chief Administrative Officer* or designate for the additional driveway(s).

A.16.2 At the discretion of the *Chief Administrative Officer* or designate, access to large parking areas should be by curb returns rather than by a driveway letdown. The *Chief Administrative Officer* or designate may require deceleration and acceleration *Lanes* for access off major *Roads* for safety and to minimize disruption to traffic flows.

A.16.3 Driveway access grades should be designed to permit the appropriate vehicular access for the *Zone*, without “bottoming-out” or “hanging-up”. From edge of pavement or back of curb to property line, the driveway grade should not exceed 5.0% for the first 6.0 meters. For the next 10.0 m on private property, the maximum allowable driveway grade is 15.0% if accessing a local or collector *Road*. This maximum grade is limited to 10.0% if accessing an arterial *Road*. Maximum driveway grades within *Parcels* should not exceed 15.0%.

A.16.4 Driveways should be located a minimum of 1.0 m from transformers, junction boxers, hydrants, poles, street lights or street signs.

A.16.5 Residential driveway access onto an arterial *Road* is not permitted unless alternate access is impractical. Wherever physically possible, alternate local *Road* or *Lane* access should be dedicated to preclude residential driveways accessing directly onto arterial *Roads*.

A.16.6 Residential driveway accesses serving corner *Parcels* should be a minimum of 7.0 m from the *Parcels* corner nearest the intersection.

A.16.7 All residential driveway accesses should have a minimum width of 5.5m for a minimum distance to the finished *Road* surface of 6.0 m and 4.0 m minimum width thereafter.

A.16.8 A statutory right of way is required to provide public access at least 6.0m into any driveway that will be used as a turn around area on a cul-de-sac exceeding 366m in length; and the road base structure of the driveway within the right of way should be equivalent to the base structure of the adjacent road.

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- A.16.9 All reciprocal access driveways (for a maximum of three single family residences) should have a minimum width of 5.0 m, a maximum *Road* grade of 12%, and the minimum surface treatment should be determined by the *Chief Administrative Officer* or designate.
- A.16.10 Driveway accesses to commercial and industrial corner *Parcels* should be a minimum of 15.0 m from the property line of the adjoining *Road*.
- A.16.11 The maximum width of a driveway to a commercial or industrial property having only one access should be 11.0 m. The maximum width of each driveway to a commercial or industrial property having more than one access should be 9.0 m.

A.17 Emergency Access Roads

- A.17.1 A secondary Emergency Access Road may be required to be provided for Rural or Residential areas served by a Cul-de-sac as determined by *Council* on a case-by-case basis if the number of households served exceeds 100.

A.18 Hillside Design Criteria

- A.18.1 In areas of adverse topography the *Consulting Engineer* may submit a request, in writing, to the *Chief Administrative Officer* or designate for authorization to utilize the Hillside Design Standards. The Standards shown in Table A-2 are the minimum permitted and design of the *Works and Services* will be expected to exceed these Standards wherever possible., Further variations to Hillside Design Standards may be permitted for site specific conditions, at the discretion of *Council*.
- A.18.2 Minimum pavement structure should conform to the Bylaw, the Asset Management Plan, and engineering best practices, or as recommended by a *Professional Geotechnical Engineer* and approved by the *Chief Administrative Officer* or designate .
- A.18.3 Design parameters for *Road* classifications and design speeds should be as provided in Table A-2 and in compliance with the most current edition of the *Transportation Association of Canada – Geometric Design Guide for Canadian Roads* and the *BC Ministry of Transportation and Infrastructure Supplement to TAC Geometric Design Guide*.
- A.18.4 Guidelines for emergency access roads for culs-de-sac include the following:
- (a) Maximum grade: 15%;
 - (b) Minimum right-of-way and roadway width: 4.5 m;
 - (c) Removable bollards or swing gates, at the discretion of the *Chief Administrative Officer* or designate, to prevent access by non-emergency vehicles;
 - (d) Road base structure equivalent to Gravel & Graded Aggregate Seal road;
 - (e) Statutory right of way over road to allow public access if it extends over private property;
 - (f) Shared use with pedestrian walkway or bikeway; and
 - (g) road design may meet an alternate standard as Approved by *Chief Administrative Officer* or designate.

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Table A-2 - Hillside Highway Design Parameters

<i>Street Type (Std. Drawing Number)</i>	<i>Design Speed (km/h)</i>	<i>Curb & Gutter (Optional – dependent on size of Parcels)</i>	<i>Maximum Road Width (m)</i>	<i>Maximum ROW (m)</i>	<i>Parking</i>
Hillside Collector Road (Dwg F-2H)	50	Type 1, Type 2 in Development areas	<ul style="list-style-type: none"> 7.0 m curb to curb (Urban Collector (Small Lot Subdivision)) 7.0 m paved driving surface, 1.0 m paved walkway/shoulder and 0.5 m gravel shoulder (Rural Collector (Large Lot Subdivision)) 	12.0 m (Small Lot Subdivision) 18 m (Large Lot Subdivision)	Not permitted
Hillside Local Road (Dwg F-3H)	40	Type 1, Type 2 in Development areas	<ul style="list-style-type: none"> 7.0 curb to curb (Urban Local (Small Lot Subdivision)) 6.4 m paved driving surface and two 0.5 m gravel shoulders (Rural Local (Large Lot Subdivision)) 	12.0 m (Small Lot Subdivision) 18.0 m (Large Lot Subdivision)	Not permitted
Private, Road (Bare Land Strata)	20	Type 1, Type 2 in Development areas	6.0 m	NA	Not permitted
Emergency Access Lane	20	None	3.5 m	6.0 m	-

- (a) Design Speed for a local Road may be reduced to 30km/h upon request and approval of the *Chief Administrative Officer* or designate .
- (b) Avoid the use of combined maximum grade and minimum radius. Maximum grades are to be reduced by 1% for each 30.0 m of radius below 150.0 m.
- (c) Max. Vertical Grades are 8%. Short pitches (length of pitches should be at the discretion of the *Chief Administrative Officer* or designate) of steeper grades (10% for arterial Roads, and 12% for collector and local Roads) may be acceptable on tangent sections provided the overall grade meets the maximum grade criteria.
- (d) Curb and Gutter Type 1 is non-mountable, and Type 2 is mountable as defined in MMCD
- (e) Ksag assumes no illumination.
- (f) Superelevation is not required on Collector Roads. However, where necessary due to topographic constraints and to avoid excessive cuts or fills, superelevation may be applied.
- (g) No superelevation applied to local Roads.
- (h) All parking should be managed on-site or within small parking pullouts as required.

A.19 Obstructions to Public Access

A.19.1 The *Chief Administrative Officer* or designate may require the removal of all buildings or structures or other obstructions, of any kind, for the free and uninterrupted use of the public, which are located upon any proposed *Highway* or located within the required setbacks from any proposed *Highway* prior to *Final Approval*.

A.20 Standard Drawings

A.20.1 The following Standard Drawings in Table A-3 for *Highways* are set out in schedule H.

Table A-3 - Standard Drawing Title and Number

Title	Drawings No. (Schedule H)
Rural Collector	F-2
Hillside Collector	F-2H
Rural Local (Residential)	F-3
Hillside Local	F-3H
Urban Local (Residential)	F-4
Rural Local (Industrial)	F-5
Gravel & Graded Aggregate Seal	F-6

A.21 Graded Aggregate Seal Coat

A.21.1 Graded aggregate seal coat (EPS) should be constructed in accordance with SUPPLEMENT TO TAC GEOMETRIC DESIGN GUIDE 1400 SUBDIVISION ROADS CHAPTER and Section 508 Graded Aggregate Seal Coat (EPS) from the BC MoTI 2016 Standard Specifications for Highway Construction (July 1, 2016). EPS Roads shall have a cross slope of 2%-4% and a maximum vertical grade of 3% or as approved by the *Chief Administrative Officer* or designate.

A.22 Curbs, Gutters and Sidewalks

A.22.1 All Works and Services must be *Constructed* in accordance with this Bylaw and the *MMCD Design Guidelines*.

SCHEDULE B

DESIGN AND CONSTRUCTION OF WATER DISTRIBUTION SYSTEMS

Township of Spallumcheen Subdivision & Development Standards Bylaw No. 2107, 2023

SCHEDULE B DESIGN AND CONSTRUCTION OF WATER DISTRIBUTION SYSTEMS

B.1 General

- B.1.1 Where a *Community Water System* is required it should be designed and *constructed* in accordance with the standards and specifications of the authority having jurisdiction and good engineering practices. Where the *Community Water System* is proposed to be connected to a system owned by the Township of Spallumcheen, it is to be designed and constructed in accordance with this Bylaw and the *MMCD Design Guidelines*.
- B.1.2 Proof of connection to a *Community Water System* should be provided and should consist of written confirmation from the authority having jurisdiction that the *Community Water System* satisfies the requirements of the authority having jurisdiction.
- B.1.3 In no case should a water source other than a *Community Water System* service a *Subdivision* occurring within the area of jurisdiction of a *Community Water System* unless the authority responsible for the *Community Water System* confirms that the *Subdivision* is not required to be serviced by the system.
- B.1.4 Where the requirements of this Bylaw for the supply of water cannot be met, engineered alternate water supply systems may be considered by *Council*.
- B.1.5 Note that *applicants* need to ensure they meet the Contaminated Sites Regulation, which applies to *subdivision* and *development*, and may impact the design and construction of water systems, particularly with respect to protection of aquifers.

B.2 Potable Water Source other than a Community Water System

- B.2.1 Unless exempted by this Bylaw, if a *Subdivision* or building is to be serviced with a water source (dug well, drilled well or surface) other than a *Community Water System*, each *Parcel* should be serviced with a *Potable Water* supply. Where the water source is not located on the *Parcel* it will service, the location and access to the water source, including any wells, water mains, and all other appurtenances, should be protected by a statutory right-of-way.
- B.2.2 Unless exempted by this Bylaw, a water sample should be taken from the water source and tested by a laboratory accredited by the Canadian Association for Environmental Analytical Laboratories to determine conformity to *Potable Water* standards. *Potable Water* should be verified in writing by a *Qualified Water Quality Specialist* and the results should be submitted to the *Township*.
- B.2.3 If the water is determined to be not potable, but can be treated in such a manner that it becomes potable as determined by a *Qualified Water Quality Specialist*, a Section 219 Covenant should be registered on the title of the subject *Parcel* as a priority above financial charges stating that an occupancy permit for a dwelling will not be issued until a treatment system meeting the specifications of a *Qualified Water Quality Specialist* has been installed to ensure a *Potable Water* supply.
- B.2.4 As set out in Section 3.4 of this Bylaw, the Approving Officer may approve the Subdivision of Parcels 1.0 ha (2.47 acres) or larger in size in the S.H., C.R., L.H., A.2, I.4, I.5 and I.6 zones without the provision of a Potable Water supply if a written report is obtained from a Professional Geoscientist or a Professional Engineer specializing in groundwater geology or groundwater hydrology verifying that water of sufficient quantity and quality is available year round on or to the proposed Parcel(s) to satisfy the requirements of Schedule "B", and that the extraction of water from the proposed water supply will not deplete the water supply of neighboring wells and surface water sources.

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B.2.5 As set out in Section 3.4 of this Bylaw, *Subdivision of Parcels* where a *Parcel* being created has a legally constructed dwelling and is serviced with an existing *Potable Water* source may be approved without the provision of a water sample test and a written report from a *Professional Geoscientist* or a *Professional Engineer* specializing in groundwater geology or groundwater hydrology.

B.2.6 Dug Wells

Where connection to a *Community Water System* is not required and a dug well is proposed as a source of *Potable Water* for a *Parcel* created by *Subdivision* or building, proof of water should consist of the following:

- (a) A site plan should be provided indicating the location of a constructed well which should be tested by a pumping test that has been conducted by a Qualified Well Driller, or a Qualified Well Pump Installer, or a Professional Geoscientist, or a Professional Engineer, or a person working under the direct supervision of a Qualified Well Driller, Qualified Well Pump Installer, Professional Geoscientist, or Professional Engineer.
- (b) Pumping tests of all dug wells should be conducted during the dry months of the year, defined as the period between August 1 and March 1, or at another time of year as confirmed in writing by a Professional Geoscientist or Professional Engineer in order to determine the year-round capacity of the well. A hydrogeological report should be prepared by the Professional Geoscientist or Professional Engineer and submitted to the Township.
- (c) The hydrogeological report should demonstrate that the dug well can provide at least 6,550 litres of water per Day (1.0 Imperial Gallons per Minute) per Parcel and that this amount can be provided on a year-round basis. The report should demonstrate that the use of the well will not negatively impact the use of neighbouring wells.

B.2.7 Drilled Wells

Where connection to a *Community Water System* is not required and a drilled well is proposed as a source of *Potable Water* for a *Parcel* created by *Subdivision* or *Development*, proof of water should consist of the following:

- (a) A site plan should be provided indicating the location of a *constructed* well which should be tested by a well yield test conducted by a *Qualified Well Driller*, or a *Qualified Well Pump Installer*, or a *Professional Geoscientist*, or a *Professional Engineer*, or a person working under the direct supervision of a *Qualified Well Driller*, *Qualified Well Pump Installer*, *Professional Geoscientist*, or *Professional Engineer*.
- (b) The well yield test should be submitted to the *Township*. A well that demonstrates a yield of at least 20,160 Litres per *Day* (3.0 Imperial Gallons per Minute) satisfies the proof of water quantity requirements of this Bylaw.
- (c) A pumping test must be carried out when a well yield test reports less than 20,160 Litres per *Day* (3.0 Imperial Gallons per Minute) or when a well is less than 15.0 m deep. The pumping test should be conducted by a *Qualified Well Driller*, or a *Qualified Well Pump Installer*, or a *Professional Geoscientist*, or a *Professional Engineer*, or a person working under the direct supervision of a *Qualified Well Driller*, *Qualified Well Pump Installer*, *Professional Geoscientist*, or *Professional Engineer*. The pump test report should demonstrate that the drilled well can provide at least 6,550 Litres of water per *Day* (1.0 Imperial Gallons per Minute).
- (d) Pumping tests of all drilled wells should be conducted during the dry months of the year, defined as the period between August 1 and March 1, or at another time of year as confirmed in writing by the *Professional Geoscientist* or *Professional Engineer* in order to determine the year-round capacity of the well. The report should demonstrate that the use of the well will not negatively impact the use of neighbouring wells.

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B.2.8 Surface Water Source

Where connection to a *Community Water System* is not required and surface water is proposed as a source of *Potable Water* for a *Parcel* created by *Subdivision* or *Development*, submission of the following to the *Township* would satisfy the proof of water quantity requirements of this Bylaw:

- (a) A site plan indicating the location of the surface water source.
- (b) Confirmation in writing from the authority having jurisdiction that a water license will be issued pursuant to the Water Act that authorizes on a year-round basis, a minimum quantity of 2,273 litres (500 Imperial Gallons) per *Day* per *Parcel*.

B.3 Community Water Systems - General

B.3.1 If a water distribution system is required, *Subdivision* or *Development* should not be approved until:

- (a) the *Owner* provides each *Parcel* within the *Subdivision* or *Development* with a water service connected to a water distribution system that is connected by trunk water mains, to an existing *Community Water System*, and
- (b) All *Works and Services* should be installed in accordance with the standards set out in *Township Bylaws*, *MMCD* and the regulations of the local *Water Authority*.

B.4 Domestic Demand Criteria

B.4.1 For rural and residential areas, the daily domestic demand criteria for the purposes of designing water distribution systems should be as follows:

TABLE B.4.1 - DAILY DOMESTIC DEMAND CRITERIA	
Average Daily Flow	= 700 litres/capita/day
Peak Daily Flow	= 1440 litres/capita/day
Peak Hour Flow	= 2160 litres/capita/day

B.4.2 For rural and residential areas with separate domestic and irrigation systems, the criteria for supplying domestic water to rural and residential developments for all indoor uses should be as follows:

- (a) Average Daily Flow: 400 L/ca/day
- (b) Peak Daily Flow: 500 L/ca/day
- (c) Peak Hour Flow: 2.5 times Peak Daily Flow

B.4.3 The unit densities should be selected to suit the particular circumstances as approved by the *Chief Administrative Officer* or designate . Densities for specific development types are indicated in TABLE B 4.2.

TABLE B.4.3 - COMMUNITY WATER SYSTEM DENSITIES		
	People/Ha.	People/Unit
Single Family	24-30	3
Multi-family Low	85	2
Multi-family Medium	(3 storey) 120	2
Multi-family High	(4-12 storey) 320-960	2
Mobile Home	45	2
Industrial	50	-
Institutional	50	-
Commercial	75	-

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B.5 Fire Demand Criteria

B.5.1 Water distribution systems should be designed to ensure that fire flows, as required by the most recent Fire Underwriters’ Survey, are available for required durations. Notwithstanding, the provisions of the Fire Underwriters’ Survey, fire flows should not be less than as set out in Table B.5.1:

	Required Fire Flow
Single & Two Dwelling Housing	60 litres/sec
Modular/Mobile Home	60 litres/sec
Three & Four Plex Housing	90 litres/sec
Apartments & Row Housing	150 litres/sec
Commercial	150 litres/sec
Industrial	225 litres/sec
Institutional	150 litres/sec

B.5.2 Notwithstanding the above table, for all *Subdivisions* or *Development*, with due consideration for anticipated building size, the *Consulting Engineer* should provide detailed design calculations to the *Chief Administrative Officer* or designate supporting the rate and duration of the design flows prior to completing the final design.

B.6 Design Pressures

The water distribution systems should be designed to provide domestic flow rates at the probable building main floor elevation on each *Parcel* as per Table B.6:

<i>Type of Pressure</i>	<i>Pressure</i>
Maximum static pressure	827 Kpa
Minimum static pressure	275 Kpa
Minimum residual pressure at peak hour	250 Kpa
Minimum residual pressure at fire flow conditions	140 Kpa

B.7 Hydraulic Network Considerations

- B.7.1 Where an existing hydraulic network model exists, the *Township* will provide information for design calculations.
- B.7.2 Depending on the complexity and extent of the proposed water distribution system, the *Township* may elect to complete a hydraulic analysis to confirm available pressure and flows in the system with the addition of the proposed *Subdivision* or *Development*. The *Owner* will be required to pay for this third-party analysis.
- B.7.3 The maximum length of any permanent, non-interconnected watermain should be less than 150.0 m. All mains exceeding 150.0 m, unless for a temporary situation, should be looped.
- B.7.4 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 *Township* or the agency having jurisdiction.

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B.8 Location and Grade of Water Mains

- B.8.1 Watermains should be located in the *Road* right-of-way as shown on the Standard Drawings. (e.g. Statutory right of way).
- B.8.2 A minimum horizontal clearance of 1.0 meter between a water main and underground utilities should be provided, except for sanitary and storm sewer mains.
- B.8.3 A minimum 3.0 meter clear horizontal distance between (outside of pipe barrel) a watermain and a sanitary or storm sewer main should be maintained.
- B.8.4 Water mains and services must be of sufficient depth to prevent freezing. Soil type and groundwater levels should be considered. Minimum depth is 1.5m.

B.9 Services

- B.9.1 The diameter of water services should be approved by the *Chief Administrative Officer* or designate.
- B.9.2 Separate water services installed in accordance with Standard Drawings should be provided to each *Parcel* and installed on the same side of the *Parcel* as the sanitary sewer service.
- B.9.3 Curb stops should 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 by the *Chief Administrative Officer* or designate.

SCHEDULE C

DESIGN AND CONSTRUCTION OF SANITARY SEWAGE SYSTEMS

Township of Spallumcheen Subdivision & Development Standards Bylaw No. 2107, 2023

SCHEDULE C DESIGN AND CONSTRUCTION OF SANITARY SEWAGE SYSTEMS

C.1 General

- C.1.1 Where the provisions of this Bylaw require an onsite sewerage system, the *Owner* should arrange for design and *Construction* of such services in accordance with the provisions of this Bylaw.
- C.1.2 Onsite disposal is permitted for existing *Parcels* greater than 1.0 ha in size. However, *Subdivision* of land into *Parcels* less than 1.0 hectare in size, is not permitted in cases where connection to a *Community Sewer System* is not possible.
- C.1.3 Where a *Community Sewer System* is required by this Bylaw, each *Parcel* or *Development* shall be provided with an individual sewer connection to the *Township's* sanitary sewer system. All *Works and Services* must be *Constructed* in accordance with this Bylaw and the *MMCD Design Guidelines*.
- C.1.4 Community sanitary sewage systems should not discharge effluent either directly or indirectly to a *Watercourse*.
- C.1.5 The *Owner* should provide proof of connection to a community sanitary sewage system that includes written confirmation from the authority having jurisdiction that the system satisfies all requirements.
- C.1.6 The *Community Sewer System* should be used as the method of sewage disposal for *Subdivisions* if connection to a *Community Sewer System* can be achieved without a main extension. This requirement is not applicable to *Subdivision* or *Development* within the Agricultural Land Reserve and land or *Development* that is to be used for agricultural purposes.
- C.1.7 Note that *applicants* need to ensure they meet the Contaminated Sites Regulation, which applies to *subdivision* and *development*, and may impact the design and construction of sanitary sewage systems, particularly with respect to protection of aquifers.

C.2 Onsite Sewage Disposal

- C.2.1 An onsite sewage disposal system should be capable of being provided for each proposed *Parcel* for *Subdivisions* that will not be serviced with a *Community Sewer System* in accordance with the standards prescribed by the authority having jurisdiction.
- C.2.2 For proposed *Parcels* smaller than 2.0 ha in size, written confirmation from the authority having jurisdiction should be submitted to the *Township* stating that their requirements for onsite sewage disposal have been met.
- C.2.3 Notwithstanding the above, a *Parcel* should not be serviced by onsite sewage disposal if a *Community Sewer System* is available to service the *Parcel*.
- C.2.4 *Parcels* with Existing Dwellings
- Where a *Parcel* contains a *Legally Constructed Dwelling* serviced by an existing onsite sewage disposal system, the *Owner* must provide documentation that the on-site sewage disposal system has either:
- (a) a Record of Sewerage System that has been accepted by the Interior Health within the past 15 years for the Legally Constructed Dwelling; or,
 - (b) been inspected by a *Registered Onsite Wastewater Practitioner* or *Consulting Engineer*, who provides a report indicating any deficiencies and/or maintenance required to the existing on-site sewage disposal system in order to ensure performance in accordance with the on-site sewage disposal requirements of the Sewerage System Regulation of the *Public Health Act*, along with a follow up letter indicating that the required maintenance has been completed; or,

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- (c) been inspected by a *Registered Onsite Wastewater Practitioner or Consulting Engineer*, who confirms that the existing on-site sewage disposal system is performing in accordance with the on-site sewage disposal requirements of the Sewerage System Regulation of the *Public Health Act*, and has capacity to service the existing dwelling unit.

C.3 Design Flows

- C.3.1 Sanitary sewer facilities *Constructed* in or for a *Subdivision or Development* should be designed to provide sufficient capacity to convey flows from the entire upstream contributing area as determined by the *Consulting Engineer* and as approved by the *Chief Administrative Officer* or designate.
- C.3.2 All *Parcels* should be serviced by gravity flow unless otherwise approved by the *Chief Administrative Officer* or designate.
- C.3.3 The sanitary sewer system should be designed based on the following criteria:
 - (a) Domestic Flow Rate = 350 litres/capita/day, plus;
 - (b) Infiltration rates for:
 - (i) New pipes not in water table = 5,000 l/ha/day
 - (ii) New pipes in water table = 8,000 l/ha/day
 - (c) Unit Densities must be selected to suit the particular circumstances as approved by the *Chief Administrative Officer* or designate. Densities for specific development types are indicated in TABLE C.3.3

TABLE C.3.3 - SANITARY SEWER SYSTEM DENSITIES		
	People/Ha.	People/Unit
Single Family	24-30	3
Multi-family Low	85	2
Multi-family Medium	(3 storey) 120	2
Multi-family High	(4-12 storeys) 320-960	2
Mobile Home	45	2
Industrial	50	-
Institutional	50	-
Commercial	75	-

- (d) A peaking factor should be applied to the average flow rate.

$$\text{Peaking Factor} = f \left(1 + \frac{14}{4 + \sqrt{P}} \right)$$

Where

- P=Population in thousands
- f = Reduction factor,
- The Reduction factor shall apply as follows:
 - New residential areas = 0.75
 - Old residential areas = 0.85
 - Commercial and Industrial area = 1.00

- (e) Peak design flows should be determined by applying the peaking factor to the average daily flow and adding inflow and infiltration (I & I) flows.

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- (f) Pipes should be designed so that the flow does not exceed $d/D=0.67$ for pipes 250 mm diameter and less, or $d/D=0.75$ for pipes greater than 250 mm diameter. (d=flow depth and D=pipe diameter).

C.4 Alignment of Sewer Mains

- C.4.1 Routing of the sewers should be approved by the *Chief Administrative Officer* or designate.

C.5 Depth and Cover

- C.5.1 The depth of the sewer main should be sufficient to provide “gravity flow” service connections to both sides of the *Highway* and should allow for future extension(s) to properly service all of the upstream tributary lands.
- C.5.2 The minimum depth of cover should be 1.2 m.
- C.5.3 The maximum depth of cover is 4.5 m unless approved by the *Chief Administrative Officer* or designate.

SCHEDULE D

DESIGN AND CONSTRUCTION OF DRAINAGE SYSTEMS

Township of Spallumcheen Subdivision & Development Standards Bylaw No. 2107, 2023

SCHEDULE D DESIGN AND CONSTRUCTION OF DRAINAGE SYSTEMS

D.1 General

- D.1.1 All drainage systems within the *Township* should be designed using an overall Stormwater Management concept, the primary objective being to limit the effect of peak flows on properties, receiving streams and *Watercourses*.
- D.1.2 Drainage systems should be designed in accordance with the standards and specifications set out in this Bylaw and the *MMCD Design Guidelines*.
- (a) These standards are not intended to be a substitute for sound engineering knowledge and experience. Drainage designs should be prepared under the direction of a *Consulting Engineer* with the appropriate experience and knowledge.
- (b) These standards are intended to cover only minimum requirements. Drainage designs should conform to all pertinent *Township* Bylaws, regulations, guidelines, and policies as well as federal and provincial statutes and guidelines.
- D.1.3 The presence of existing drainage infrastructure or water courses does not imply that these facilities have adequate capacity to receive additional flows from the *Subdivision* or *Development*, nor does it mean that the drainage pattern of this facility is necessarily acceptable to the *Township*.
- D.1.4 The determination of the primary method for the management and disposal of stormwater should be at the discretion of the *Chief Administrative Officer* or designate . To aid in this determination, the *Owner* may be required to commission a study by a Professional Geoscientist or a Professional Engineer specializing in groundwater geology or groundwater hydrology or geotechnical engineering to determine the viability of ground disposal for storm water taking into consideration, as a minimum, the following:
- (a) The tributary drainage area including all contributing areas;
- (b) Upslope and downslope conditions affecting both surface and groundwater;
- (c) Bed rock or impermeable soil interface location and direction of groundwater flow;
- (d) Potential for surface break out of groundwater and the location of potential breakout; and
- (e) Potential for damage or inconvenience to public or private property and structures.
- D.1.5 Where ground disposal of stormwater is determined not to be a viable alternative by the *Chief Administrative Officer* or designate, a system of pipes, open channels, storage facilities and treatment facilities with ultimate conveyance to a natural water course should be employed.
- D.1.6 A Stormwater Management Plan must be prepared and approved for *Subdivisions* that meet all three of the following requirements:
- (a) The subdivision will create more than 3 Parcels; and
- (b) any of the Parcels are smaller than 1 ha; and
- (c) there are potential impacts to the neighbouring downstream properties.
[note that a stormwater management plan is not required for two lot splits, boundary adjustments, new parcels created that are 1ha or larger, and the construction of individual homes and buildings on existing lots]
- D.1.7 The *Chief Administrative Officer* or designate may exempt Rural *Subdivisions* or *Developments* located in hillside areas from providing a Stormwater Management Plan if provided with proof that there are no impacts to the neighbouring downstream properties.
- D.1.8 Note that *applicants* need to ensure they meet the Contaminated Sites Regulation, which applies to *subdivision* and *development*, and may impact the design and construction of drainage systems, particularly with respect to protection of aquifers.

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D.2 Stormwater Design

- D.2.1 The *Consulting Engineer* should design the storm drainage system so that all downstream drainage facilities are capable of handling the projected post *Development* flows. Stormwater should be directed to an acceptable discharge point, such as lake, a major creek, a ditch or trunk main with adequate capacity.
- D.2.2 Stormwater management systems should incorporate such techniques as *Parcel* grading, surface infiltration, sub-surface disposal, storage, or other acceptable methods, to limit the peak run-off from the *Subdivision* or *Development*.
- D.2.3 The drainage system shall provide water quality treatment for flows up to 50.0% of the two-year event and provide storage up to the 100-year (plus 10.0% volumetric safety factor) event with a maximum outlet rate based upon the five-year pre-*Development* rate generated by the *Subdivision* or *Development*.
- D.2.4 For water quality treatment, stormwater should be routed through some form of water quality treatment facility utilizing “best management practices” including but not limited to the urban runoff quality control guidelines published by the province of British Columbia, Municipal Waste Branch Environmental Protection Division, BC Environment (June 1992) to remove suspended solids and floatables. The facility may be catch basins with sumps and trapping hoods with flow to drywells and subsequent overflow to the *Township's* stormwater system or other treatment such as a wetland. The *Township* will accept mechanical treatment where other options are considered to be impractical.
- D.2.5 The release rate is to be based upon the post-*Development* outlet hydrograph mirroring the pre-*Development* runoff hydrograph up to the five-year level. Release rates not based on this criteria may be allowed by the *Township* based on downstream system capacity, ability to convey flows without causing erosion, or negatively impacting receiving stream flood protection or water quality.
- D.2.6 An overflow should be provided to route any excess water to the designated 100-year flood route. Such an overflow can be in the form of a spillway or may be incorporated in the flow control structure through oversizing of downstream pipes, provision of overflow pipes or such other arrangement approved by the *Township*.
- D.2.7 A stormwater management plan should include all drainage facilities, *Parcel* grading (showing pre and post-*Development* contours), major flood path routing, and all other information pertinent to the design.
- D.2.8 A *Parcel* grading plan is required for all *Development* to address:
- (a) The need to convey stormwater through or around the *Subdivision* or *Development* directed towards the historical drainage pathway.
 - (b) The need to address stormwater outlet flow rates and location of outfall.
 - (c) The potential for disruption of groundwater infiltration patterns and the impact on subsurface flows.
- D.2.9 Each storm drainage system should consist of the following:
- (a) A minor system consisting of pipes and ditches which convey flows for a 10-year return frequency.
 - (b) A major system consisting of a piped system, surface flood paths, *Roadways*, and water courses which convey flows for a 100-year return frequency. Major flood path routing is required wherever surface overland flows in excess of 0.05 m³/s are anticipated. Creeks regulated by the Ministry of Environment may require design to a 1 in 200-year flood.

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- (c) Driveway culverts that form part of the minor system should be designed to the 10-year return frequency with the design headwater not to exceed half the diameter of the culvert. Minimum culvert diameter should be 450 mm with head walls at each end.
 - (d) 200-year return where required by the Ministry of Environment
 - (e) For major structures such as bridges, a 1 in 200-year flood should be used.
- D.2.10 The hydrologic criteria needed to calculate basin runoff are rainfall, soil types, vegetation and ground cover, extent of *Development* and land slope and shape. In areas where upstream flows originate in natural/undisturbed areas, consideration should be given to the impact of an intense rainfall event on frozen ground.
- D.2.11 Culverts crossing *Roadways* should be designed to accommodate the 100-year return frequency. The headwater profile may not exceed half the diameter of the cross culvert. Major overland flow routes protected by statutory right-of-way in favour of the *Township* are required down-stream of any low-point in a *Road* or *Cul-De-Sac*.
- D.2.12 The drainage system, including driveway culverts, should be designed to accommodate the major design flow, should any facility become blocked or restricted.
- D.2.13 A *Parcel Drainage System* should identify individual *Parcel* drainage patterns. Where runoff from a *Parcel* will cross neighbouring properties, the *Owner* should provide:
- (a) *Drainage Works and Services* designed and *Constructed* to dispose of the runoff on the *Parcel*, or
 - (b) A surface or sub-surface conveyance system designed and *Constructed* as part of the overall storm drainage system and where necessary, be protected by statutory rights-of-way,
 - (c) A system of storage components, where necessary, for overall effective storm system operation and management.
- D.2.14 The *Consulting Engineer* should assess the potential for groundwater problems and a storm drainage service connection should be required and permitted only in areas where groundwater has been identified as a potential problem by the *Consulting Engineer* or in a drainage plan adopted by the *Township*. Where groundwater is a potential problem, each *Parcel* should be provided with a storm drainage service connection.

D.3 Site and Parcel Grading

- D.3.1 *Developments* and *Subdivisions* should incorporate site and *Parcel* grading techniques in accordance with the following criteria:
- (a) Each *Parcel* should be graded to drain to a *Township* drainage system or to a natural drainage course independent of adjacent *Parcels*. Minimum *Parcel* grades should be 2%. *Parcel* grading is to be uniform and consistent.
 - (b) Areas around buildings (or proposed building sites) should be graded away from the (proposed) foundations to prevent flooding. Grading within 2.0 m of the structure should have 10% slope or minimum 0.15 m drop.
 - (c) *Parcels* lower than adjacent *Roadways* should be avoided where possible. Otherwise, an approved stormwater management technique should be incorporated to direct the runoff to an existing or proposed drainage system. Proper flood proofing is required at the low points of *Roadways*.
 - (d) Existing or proposed buildings should be sited above the hydraulic grade line of the Major System. The Minimum Building Elevations (MBE) should be noted on the drawings.
 - (e) *Parcel* grading should not channelize flow for discharge into natural *Watercourses*. Where *Parcel* grading directs runoff to natural drainage courses, measures should be implemented to distribute rather than concentrate flows.

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- (f) Avoid drainage across adjacent *Parcels* where practical. Side and rear yard swales should be employed as necessary.

D.4 Minimum Building Elevations (MBE)

- D.4.1 The MBE is defined as the elevation of the lowest floor slab in a building or the underside of the floor joists where the lowest floor is *Constructed* over a crawlspace. A crawlspace is defined as the space between a floor and the underlying ground having a maximum height of 1.2m to the underside of the joists and not used for the storage of goods or equipment damageable by floodwater.
- D.4.2 The MBE should be established at least 0.6m above the service connection invert and 0.3m above the 100-year hydraulic grade line elevation. MBE's accepted by the *Township* may not be revised without the permission of the *Chief Administrative Officer* or designate.
- D.4.3 For sites near a *Watercourse* for which a floodplain elevation has been established, the MBE is 0.3m above the 200-year return period.

D.5 Roof Drainage and Building Perimeter Foundation Drainage

- D.5.1 Roof drainage should be:
 - (a) discharged to the ground and dispersed via splash pads at the downspouts, provided that the site is graded away from the building and not in steep slope areas, or
 - (b) to an approved sub-surface soak-away system, or
 - (c) To an approved rain storage tank for on-site reuse
- D.5.2 If site grading in accordance with Clause E.3 is not possible, roof drainage may be discharged into the *Community Drainage System*, at the discretion of the *Chief Administrative Officer* or designate, where the size of the proposed or existing *Community Drainage System* can be shown to accommodate the anticipated flows.
- D.5.3 Roof leaders and foundation drains should not discharge at the top of bank of a natural *Watercourse* or other open channel.
- D.5.4 Building perimeter foundation drains should be discharged into the municipal drainage system where the size of the proposed and existing downstream storm sewer has been designed for, or can be shown to accommodate the anticipated flows.
- D.5.5 Under no circumstances should a building perimeter foundation drain be connected to sanitary sewer.

D.6 Culverts

- D.6.1 Culverts located in *Watercourses* or culverts crossing *Roads* should be designed for the 1:100 year event (or for conditions which require a 200 year design flow). Driveway culverts that form part of the minor system should have capacity for the runoff from the 1:10 year storm. All culverts should be sized with the design headwater not to exceed the top of the culvert. The *Consulting Engineer* should determine whether the culvert will operate under the inlet or outlet control at design conditions.
- D.6.2 The minimum depth of cover for culvert should be 0.3 m, subject to the applicable pipe loading and strength criteria.
- D.6.3 The maximum length of a driveway culvert is 6.0 m, unless otherwise permitted by the *Chief Administrative Officer* or designate.

D.7 Inlet and Outlet Structures

- D.7.1 Provide inlet and outlet structures for all culverts larger than 400.0 mm. Pipes larger than 1,200.0 mm diameter and non-circular culverts require specially designed inlet and outlet structures.
- D.7.2 Outlets having discharge velocities in excess of 1.0 m/s require rip rap protection and/or energy dissipating structures for erosion control.
- D.7.3 Hinged trash racks should be required at the inlets of all pipes that are 450.0 mm and larger. Grills may also be required at the inlets on smaller diameter storm sewers, at the discretion of the *Chief Administrative Officer* or designate.

D.8 Ditches

- D.8.1 Ditches should only be provided if in accordance with the applicable *Road* classification and design standards. They may also be considered by the *Chief Administrative Officer* or designate for special interim situations.
- D.8.1 Ditches adjacent to *Roads* should conform to the following Table D.8.1:

TABLE D.8.1 – DITCH SPECIFICATIONS	
Item	Specification
Maximum depth	1.0 m
Minimum bottom width	0.5 m
Maximum side slope	1.5(H): 1(V)
Minimum grade	0.5%

- (a) Where soil conditions are suitable or where erosion protection is provided, higher velocities may be permitted. If grades are excessive, erosion control structures or ditch enclosures may be required.
- (b) The minimum statutory right-of-way width for a ditch through private property should be 5.0 m or the width of the ditch plus 3.0 m, whichever is greater. The ditch should be offset in the statutory right-of-way to permit a 3.0 m wide access for maintenance vehicles. Additional statutory rights-of-way may be required to facilitate the ditch *Construction* and access. The top of the ditch should be a minimum 0.5 m away from any property line.

SCHEDULE E

DESIGN AND CONSTRUCTION OF STREETLIGHTING

Township of Spallumcheen Subdivision & Development Standards Bylaw No. 2107, 2023

SCHEDULE E DESIGN AND CONSTRUCTION OF STREETLIGHTING

E.1 General

- E.1.1 The *Chief Administrative Officer* or designate may require the *Owner* to provide street lighting *constructed* in accordance with this Bylaw and the *MMCD Design Guidelines*.
- E.1.2 The *Chief Administrative Officer* or designate may also require additional street lighting be installed in locations where street lighting will improve public safety.

E.2 Permits

- E.2.1 It is the *Owners* sole responsibility to obtain all required electrical permits and inspections. A copy of the permits should be submitted to the *Township* upon application for *Final Approval*.

E.3 Products

- E.3.1 Unless otherwise approved by the *Chief Administrative Officer* or designate, LED Downlight fixtures should be used for the streetlights. Fixtures should be full cutoff fixtures with the exception of some decorative lighting fixtures for the purpose of matching decorative styles in existing areas. For every 10 fixtures, 1 spare luminaire and pole should be provided.
- E.3.2 All luminaires should be Philips Roadstar series or equivalent as approved by the *Chief Administrative Officer or designate*.

E.4 Scheduling

- E.4.1 Scheduling of work with the governing electrical authority is the *Owner's* responsibility. Where costs are incurred for installing the light system, these costs should be considered as part of the cost of the *Works and Services* and should be at the expense of the *Owner*.

E.5 Approval

- E.5.1 Prior to issuance of a Certificate of Total Completion:
- (a) the *Owner* should submit a copy of the Certificate of Inspection by the governing electrical authority showing that the installation is unconditionally approved.
 - (b) If the *Subdivision or Development* is not located in an existing local service area with streetlights, the *Owner* should submit a letter formally requesting that the local service area boundary be expanded to include the *Subdivision or Development*.

E.6 Connection to Utility

- E.6.1 An allowance for a minimum of eight streetlights per electrical connection should be made and future extension of the street lighting system should be accommodated in this requirement.
- E.6.2 Connection should be made in accordance with Standard Drawings.
- E.6.3 All street lighting in public rights-of-way should be provided with electrical metering equipment in accordance with standards of the appropriate electrical utility.
- E.6.4 All street lighting kiosks should have a test switch.

SCHEDULE F

DESIGN AND CONSTRUCTION OF SEDIMENT AND EROSION CONTROL SYSTEMS

Township of Spallumcheen Subdivision & Development Standards Bylaw No. 2107, 2023

SCHEDULE F DESIGN AND CONSTRUCTION OF SEDIMENT AND EROSION CONTROL SYSTEMS

F.1 General

- F.1.1 Where the provisions of this Bylaw require a sedimentation and erosion control system, design and *Construction* of such systems should be in accordance with the provisions of this Bylaw and the *MMCD Design Guidelines*.

SCHEDULE G

DESIGN AND CONSTRUCTION OF ELECTRICAL AND COMMUNICATIONS WIRING AND GAS DISTRIBUTION

Township of Spallumcheen Subdivision & Development Standards Bylaw No. 2107, 2023

SCHEDULE G DESIGN AND CONSTRUCTION OF ELECTRICAL AND COMMUNICATIONS WIRING AND GAS DISTRIBUTION SYSTEMS

G.1 General

- G.1.1 Power supply, communication wiring, and gas service for each *Parcel* should be designed and *Constructed* in accordance with this Bylaw.
- G.1.2 The *Owner* should obtain a letter of confirmation from the applicable utility that electrical, communication, and gas distribution infrastructure have been installed to their satisfaction.

G.2 Utility Locations

- G.2.1 Systems of *Works and Services* for electrical and communications wiring and gas distribution systems should be installed in accordance with the standards required by the particular utility and any applicable federal and provincial codes.
- G.2.2 All utility work should be installed in alignments as generally indicated on the Standard Drawings. The *Consulting Engineer* is responsible to coordinate with each utility the actual offsets required prior to a submission of *Design Drawings* to the *Township*.
- G.2.3 All systems should be designed and *Constructed* so as to fully service all *Parcels* in a *Subdivision* or *Development*, unless exempted from providing specific electrical, communication, and gas distribution infrastructure.

SCHEDULE H

DRAWINGS

Township of Spallumcheen Subdivision & Development Standards Bylaw No. 2107, 2023

SCHEDULE H DRAWINGS

H.1 General

H.1.1 Where *Works and Services* are required to be *constructed* to service a *Subdivision or Development*, the *Consulting Engineer* should prepare engineering *Design Drawings* in accordance with the provisions of this Bylaw.

H.2 MMCD

H.2.1 *MMCD* Standard Detail Drawings should be referenced to and interpreted simultaneously with the pertinent sections of this Bylaw.

H.2.2 AutoCAD Standard border and blocks should be as per *MMCD*.

H.3 Record Drawings

H.3.1 Prior to the issuance of a *Certificate of Total Completion* the *Owner* should deposit with the *Township*: one complete set of original *Record Drawings*; and

- (a) electronic copies of the drawings in a format acceptable to the *Chief Administrative Officer* or designate.
- (b) one set of Service Cards in the prescribed format for:

- (i) water
- (ii) sanitary sewer
- (iii) storm sewer
- (iv) fire hydrants

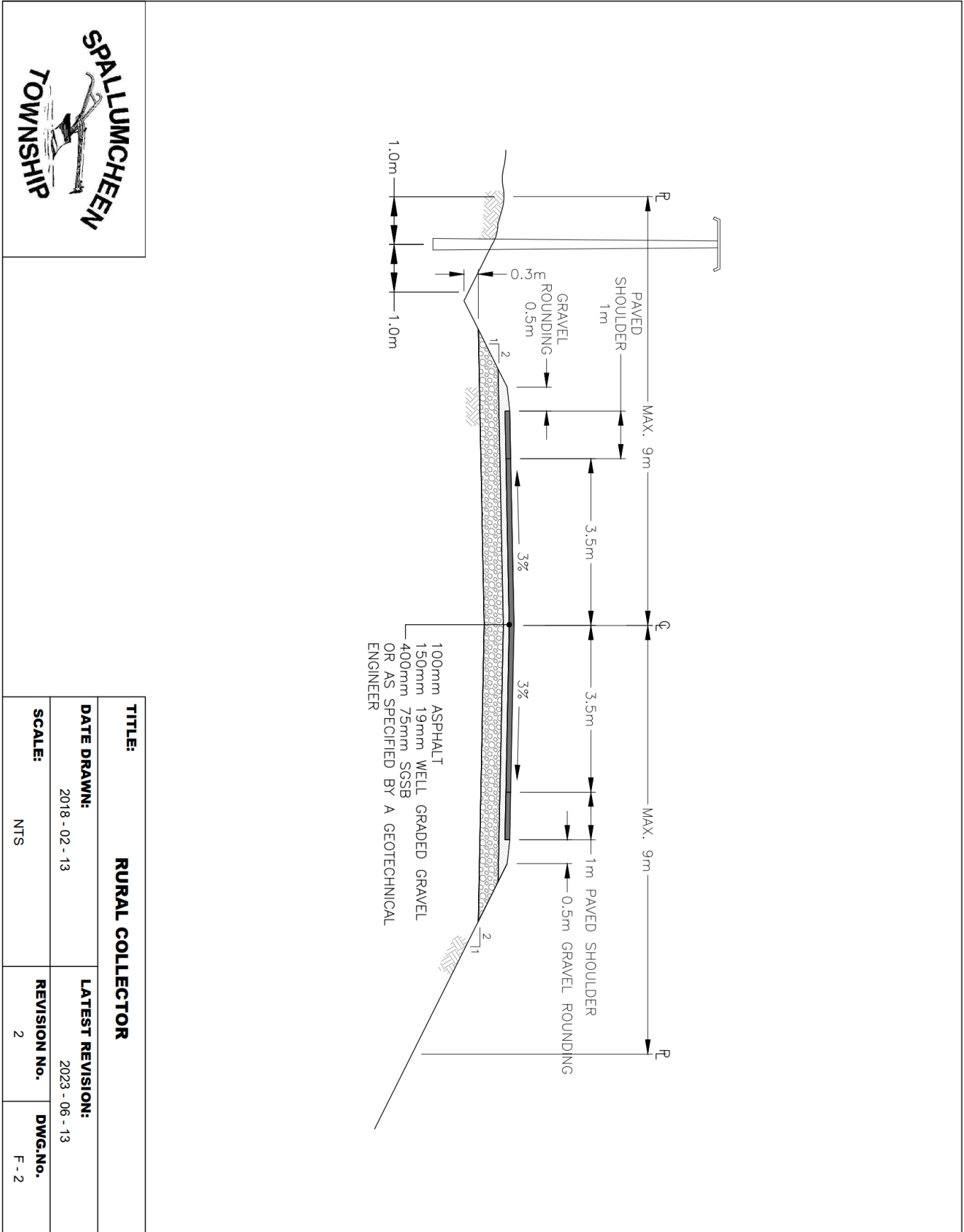
H.4 Electronic Drawings

H.4.1 General Requirements

- (a) The *Owner* should submit to the *Chief Administrative Officer* or designate a complete set of electronic drawings of the *Subdivision or Development* in DWG format compatible with the current version of AutoCAD being used by the *Township*.

Township of Spallumcheen Subdivision & Development Standards Bylaw No. 2107, 2023

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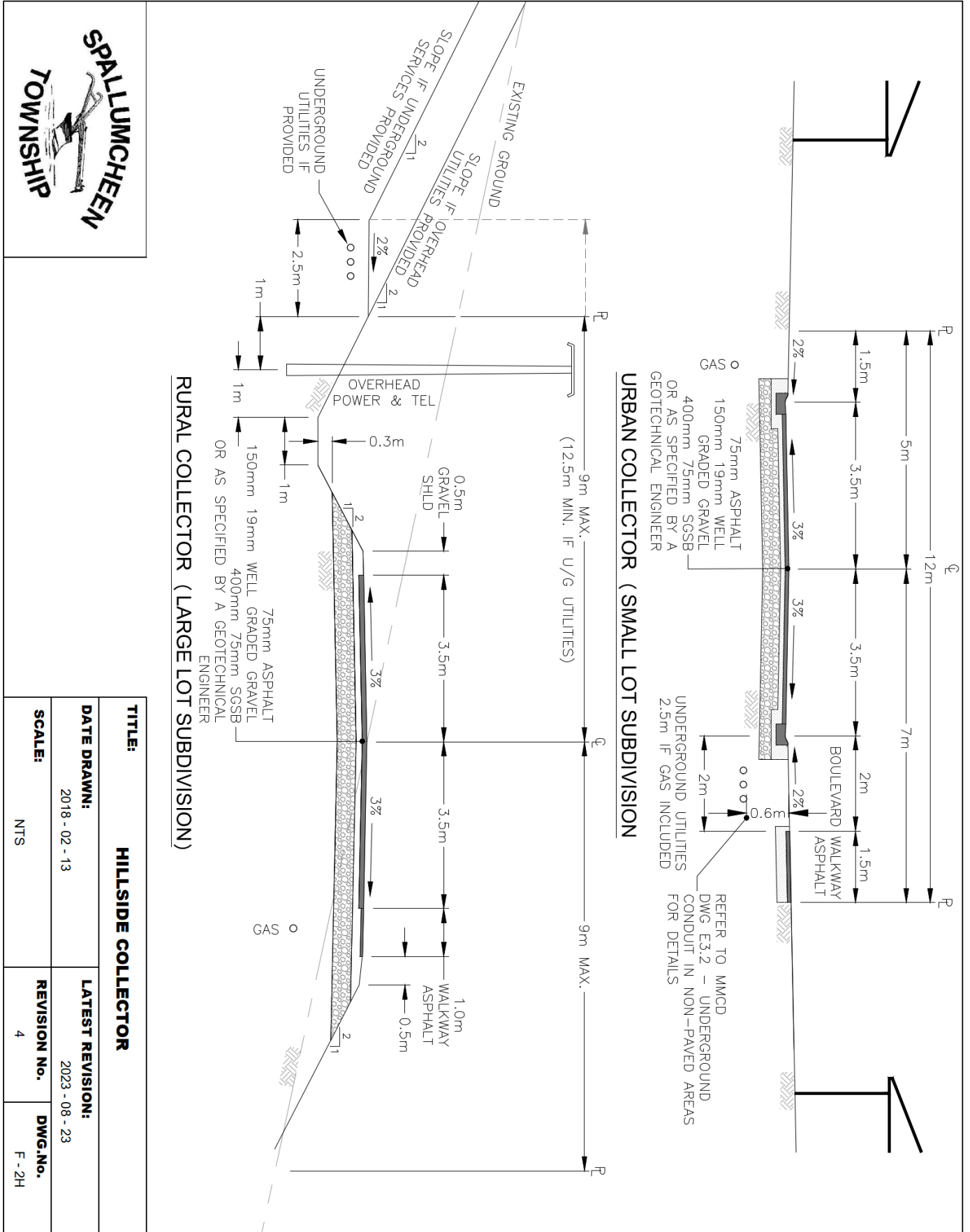
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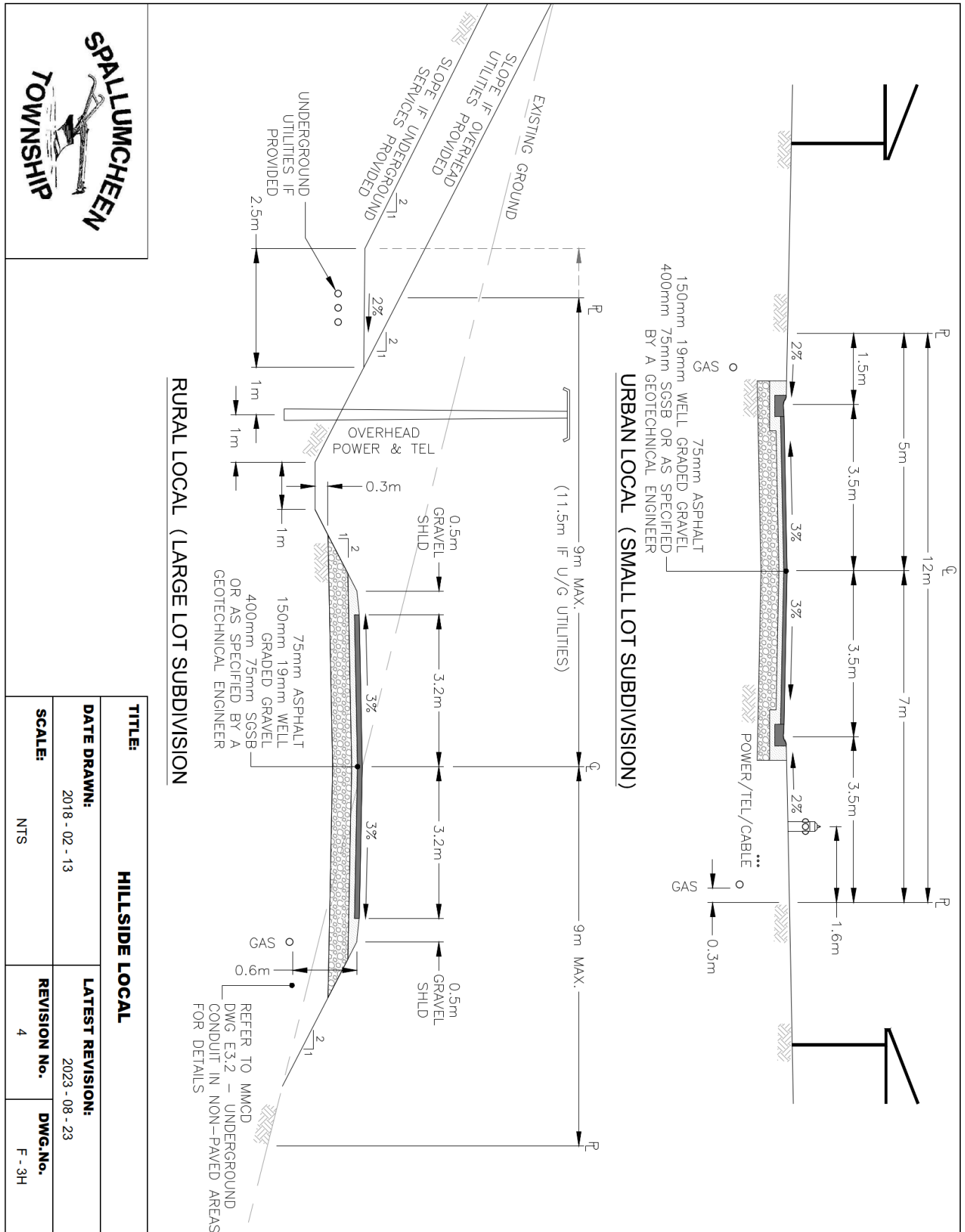
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REVISION No.: 2

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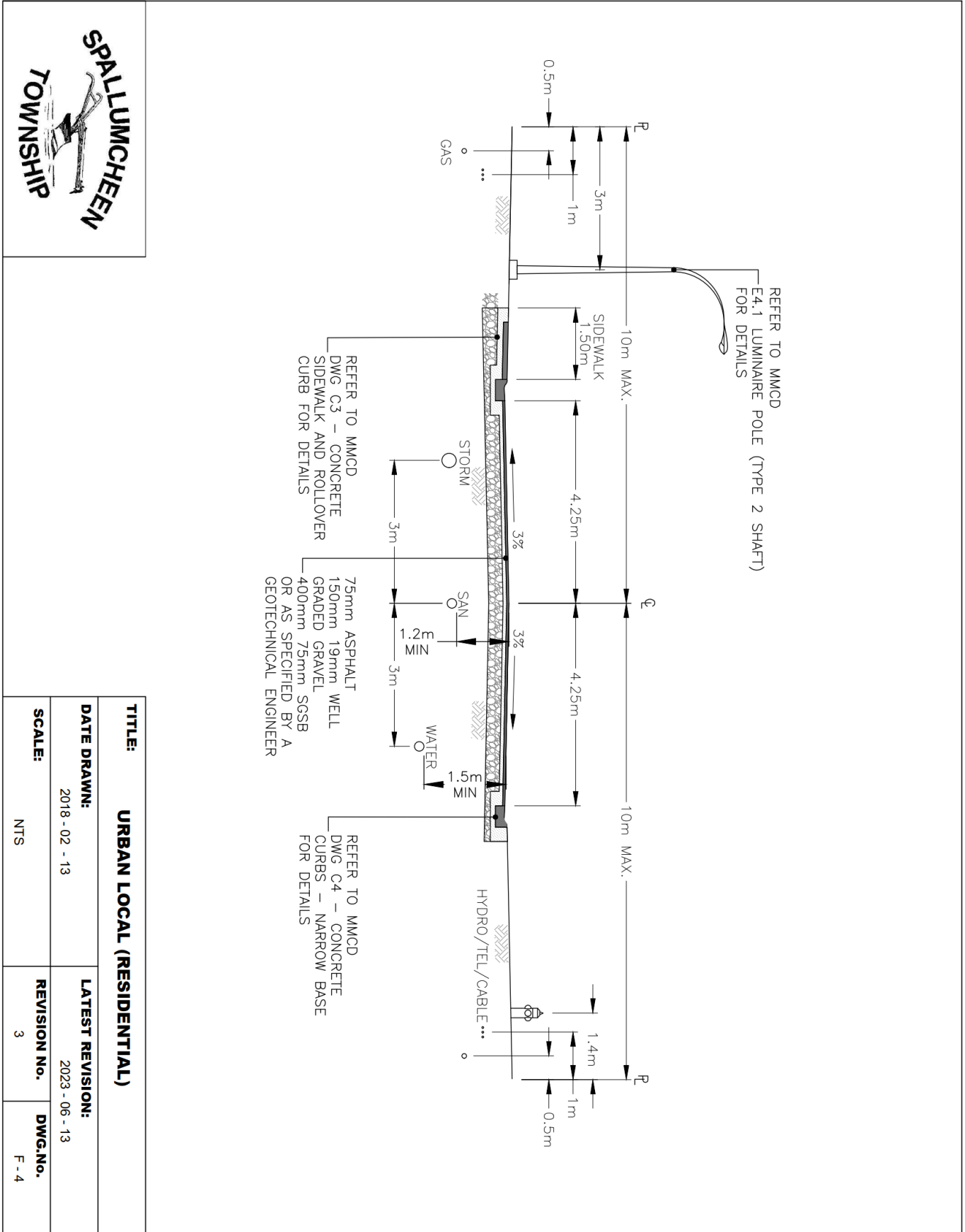


TITLE: HILLSIDE COLLECTOR		
DATE DRAWN:	2018 - 02 - 13	LATEST REVISION:
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		DWG.No.
		F - 2H



Township of Spallumcheen Subdivision & Development Standards Bylaw No. 2107, 2023

\\usl-urban-systems.com\projects\Projects_KEL\1369\0066\01\1D-Drafting-Design-Analysis\CAD\DES\1369.0066.01 Road Cross Sections.dwg, F-4, 2023/06/13 02:10 pm rdavies



TITLE: URBAN LOCAL (RESIDENTIAL)

DATE DRAWN: 2018 - 02 - 13

SCALE: NTS

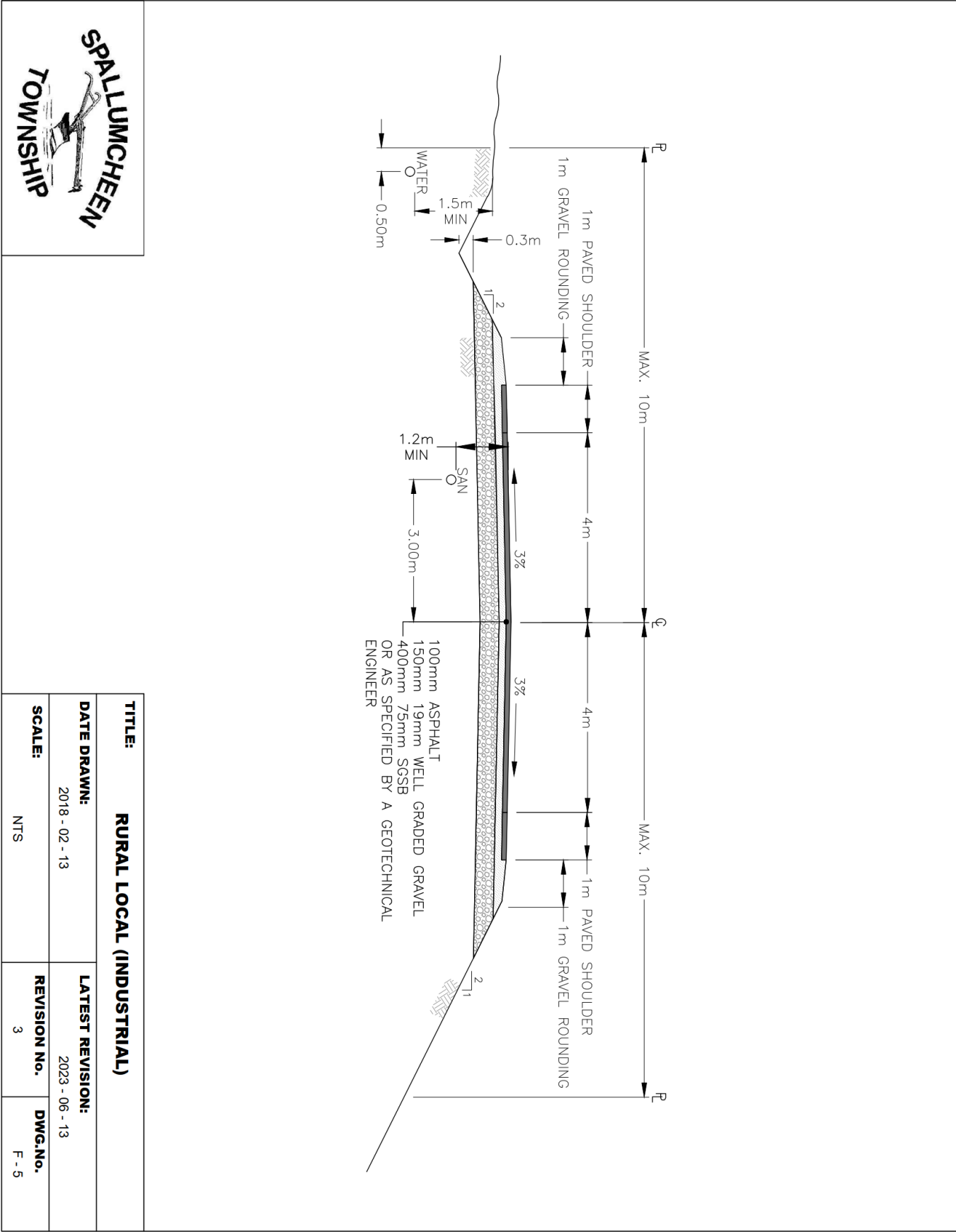
LATEST REVISION: 2023 - 06 - 13

REVISION No.: 3

DWG.No.: F - 4

Township of Spallumcheen Subdivision & Development Standards Bylaw No. 2107, 2023

\\sl.urban-systems.com/projects/Projects_KEL1369\0066\01\1D-Drafting-Design-Analysis\CAD\DES\1369.0066.01 Road Cross Sections.dwg, F-5, 2023/06/13 02:10 pm rdavies



TITLE: RURAL LOCAL (INDUSTRIAL)

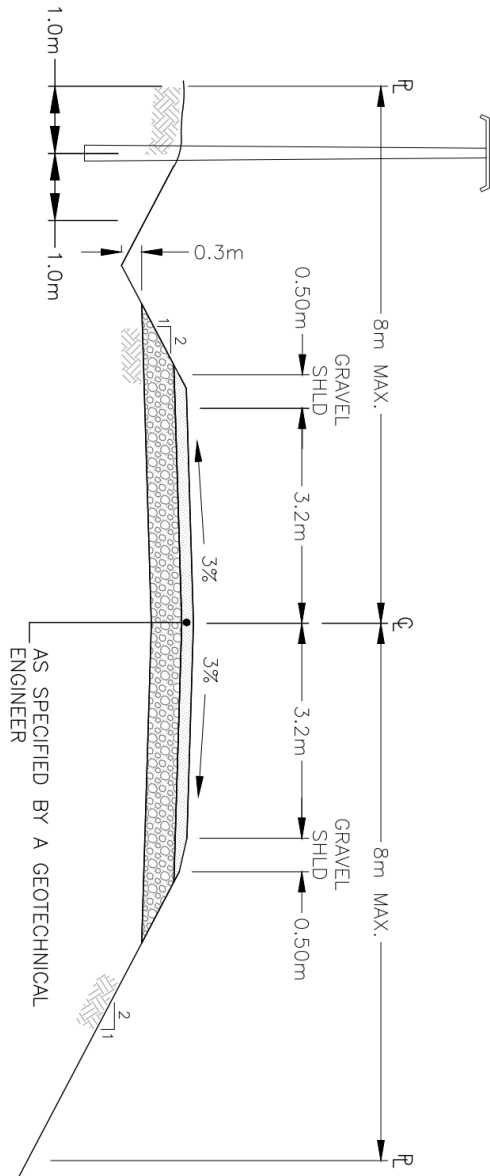
DATE DRAWN: 2018 - 02 - 13

LATEST REVISION: 2023 - 06 - 13

SCALE: NTS

REVISION No. 3

DWG.No. F - 5



RURAL LOCAL (GRAVEL & GRADED AGGREGATE SEAL)



TITLE: GRAVEL & GRADED AGGREGATE SEAL CROSS SECTION		
DATE DRAWN: 2018 - 02 - 13	LATEST REVISION: 2023 - 06 - 13	
SCALE: NTS	REVISION No. 3	DWG.No. F - 6

SCHEDULE I

FORMS, AGREEMENTS, AND CERTIFICATES

Township of Spallumcheen Subdivision & Development Standards Bylaw No. 2107, 2023

SCHEDULE I FORMS, AGREEMENTS, AND CERTIFICATES

I.1 Works and Services Agreement

I.1.1 Prior to *Works and Services* being carried out:

- (a) on a Township Highway or
- (b) in a statutory right of way in favour of the *Township*

for the servicing of a *Subdivision* or *Development*, the *Owner* should:

- (i) enter into a Works and Services Agreement; and
- (ii) provide a security deposit in accordance with this Bylaw.

I.1.2 All *Works and Services* required to be *constructed* at the expense of the *Owners* of the land being *Subdivided* or *developed* should be *constructed* in accordance with the provisions of the Bylaw before the *Approving Officer* approves the *Subdivision* or the *Building Inspector* issues the *Building Permit* unless:

- (a) The *Owner* enters into a *Works and Services Agreement* with the *Township* accepting the terms and conditions in that agreement, and undertaking to *construct* the required *Works and Services* within one year from the date of executing the agreement; and
- (b) The *Owner* deposits with the *Township* security in the form of cash, a bank draft or an irrevocable letter of credit in a form acceptable to the Chief Financial Officer in the amount of:
 - (i) 100% of the Consulting Engineer's Estimated Cost of Works and Services in all Rural Zones (S.H., L.H., A.2 and C.R.); plus
 - (ii) 125% of the Consulting Engineer's Estimate of the Cost of the Works and Services in all Residential, Industrial, Commercial, and Special Use Zones; plus
 - (iii) enter into a Maintenance Security Agreement for the maintenance of the Works and Services for a period of 12 months after the date of Substantial Completion; and
 - (iv) provide a Maintenance Security deposit in accordance with this Bylaw.
- (c) The *Consulting Engineer* certifies that the tender has been awarded and that a contract has been executed between the *Owner* and the contractor; and
- (d) The *Applicant* complies with the provisions of Schedule I, Section I.4, Certificate to Commence *Construction*; and
- (e) The *Applicant* provides written proof that all the requirements of the Ministry of Transportation and Infrastructure and other agencies having jurisdiction have been met, if applicable.

I.1.3 The *Owner* will not be required to enter into a *Maintenance Security Agreement*, nor be required to provide a security deposit when:

- (a) There are no *Works and Services* required under the provisions of this Bylaw; or
- (b) Those *Works and Services* are not required as a result of a Development Variance Permit granted by *Council*

I.2 Commitment by *Owner* and Engineer

I.2.1 A Commitment by *Owner* and Engineer should be submitted to the *Chief Administrative Officer* or designate prior to review of *Design Drawings*.

I.2.2 A Commitment by *Owner* and Engineer should be signed by the *Owner* and *Consulting Engineer* certifying that:

- (a) the *Consulting Engineer* has been contracted by the *Owner* for the design of all *Works and Services*, reviews and designs associated with the *Subdivision* or *Development*;
- (b) the *Consulting Engineer* should adhere to all Provincial Statute for their profession;

Township of Spallumcheen Subdivision & Development Standards Bylaw No. 2107, 2023

- (c) the *Consulting Engineer* should ensure that the *Works and Services* comply with the provisions of all *Township Bylaws*, permits, policies, and applicable legislation and regulations;
 - (d) the *Consulting Engineer* should ensure that only qualified personnel are retained to carry out tests, inspect or carry out design work, detailing, or field reviews;
 - (e) the *Consulting Engineer* has been given contractual mandate by the *Owner* for the purposes of *Subdivision or Development*;
 - (f) the *Consulting Engineer* should submit summary reports to the Chief Administrative Officer or designate on request;
 - (g) the *Consulting Engineer* should submit letters of Certification of Bylaw Compliance as required;
 - (h) the *Consulting Engineer* is licensed to practice as an engineer in the Province of British Columbia; and
 - (i) the *Consulting Engineer* covenants that their 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).
- I.2.3 Notification of termination of the *Consulting Engineer* should be provided to the *Chief Administrative Officer* or designate in writing thirty *Days* prior to any intended termination.
- I.2.4 Where the *Consulting Engineer* ceases to be retained at any time during *Construction* of the *Works and Services*, work on-site should cease until:
- (a) a new Engineer has been retained; and
 - (b) an updated Commitment by *Owner* and Engineer and Commitment to Design and Field review have been submitted to the *Chief Administrative Officer* or designate.
- I.3 Commitment to Design and Field review**
- I.3.1 A Commitment to Design and Field Review from the Engineer representing each engineering specialty should be submitted to the *Chief Administrative Officer* or designate prior to issuance of a Certificate to Commence *Construction*.
- I.3.2 A Commitment to Design and Field Review should be signed by the *Consulting Engineer* and each Engineering Specialist certifying that:
- (a) the *Works and Services* identified by the Engineer's initial will be designed, *constructed* and installed in accordance with all applicable *Township Bylaws*, permits and policies and legislation and regulations;
 - (b) Field reviews should be completed and provided to the *Chief Administrative Officer* or designate during *Construction*;
 - (c) The *Township* should 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; and
 - (e) the *Consulting Engineer* covenants that their firm presently carries, and will continue to carry for the duration of the project, liability insurance in the amount of \$5,000,000.
- I.4 Certificate to Commence Construction**
- I.4.1 No person should excavate or fill land for the purpose of *constructing Works and Services*, nor should any person *Construct* or install any of the *Works and Services* until a Certificate to Commence *Construction* has been issued.
- I.4.2 The *Chief Administrative Officer* or designate should not issue a Certificate to Commence *Construction* until the following, as applicable, has been submitted:
- (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;

Township of Spallumcheen Subdivision & Development Standards Bylaw No. 2107, 2023

- (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) **The lesser** of 3.0% of the *Estimated Cost of Works and Services* as approved by the *Township* **OR** the sum of all required reporting costs (i.e. consulting/legal *Fees*, drawing reviews) plus 18.0% for administrative *Fees*; and
- (k) If required, letters approving design from the Ministry of Transportation and Infrastructure, and other agencies having jurisdiction.

I.5 Certification of Bylaw Compliance

- I.5.1 A Certification of Bylaw Compliance from each Engineer should be submitted to the *Chief Administrative Officer* or designate prior to the issuance of a *Certificate of Total Completion*.
- I.5.2 A Certification of Bylaw Compliance may not be submitted until after *Substantial Completion* of the *Works and Services*.
- I.5.3 After submission of Certification of Bylaw Compliance, each Engineer should arrange and conduct a final inspection with the *Chief Administrative Officer* or designate to determine the acceptability of the Certification of Bylaw Compliance.
- I.5.4 A Certification of Bylaw Compliance should be signed by the *Consulting 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 and Services* identified in the signed Commitment to Design and Field Review comply in all material 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 *Record Drawings* and supporting documents prepared have been submitted;
 - (e) the *Consulting Engineer* is licensed to practice as an engineer in the Province of British Columbia; and
 - (f) the *Consulting Engineer* covenants that their firm presently carries, and will continue to carry for the duration of the project, liability insurance in the amount of \$5,000,000.

I.6 Certification of Slope Stability

- I.6.1 A Certification of Slope Stability from the geotechnical Engineer should be submitted to the *Chief Administrative Officer* or designate prior to the issuance of *Certificate of Total Completion*.
- I.6.2 A Certificate of Slope Stability may not be submitted until after *Substantial Completion* of the *Works and Services*.
- I.6.3 A Certification of Slope Stability should be signed by a *Professional 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;

Township of Spallumcheen Subdivision & Development Standards Bylaw No. 2107, 2023

- (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 and Services* identified in the signed Commitment to Design and Field Review comply in all material 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 *Record 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) the Engineer covenants that their firm presently carries, and will continue to carry for the duration of the project, liability insurance in the amount of \$5,000,000; and
- (h) A report confirming slope stability on the *Parcels* created as required in Schedule D of this Bylaw.

I.7 Certificate of Total Completion

I.7.1 A Certificate of Total Completion will be issued by the *Chief Administrative Officer* or designate indicating that Total Completion of the *Works and Services* has been achieved, once the Owner has complied with the provisions of this Bylaw.

I.7.2 The *Chief Administrative Officer* or designate should not issue a Certificate of Total Completion until the following, as applicable, has been submitted:

- (a) Record Drawings;
- (b) Utility Service Cards;
- (c) A Maintenance Security Agreement;
- (d) a 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;
- (i) confirmation that a final inspection has been conducted by the *Chief Administrative Officer* or designate and Consulting 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;
- (l) a letter from the applicable private water utility approving the water distribution system; and
- (m) confirmation that *Total Completion* of the work has been achieved.

I.8 Maintenance Security Agreement

I.8.1 Upon Substantial Completion of the Subdivision or Development and prior to issuance of a Certificate of Total Completion the Owner should:

- (a) Enter into a *Maintenance Security Agreement* to warrant for the maintenance of the *Works and Services* for a period of one year after the date of *Substantial Completion*; and
- (b) Provide a *Maintenance Security* deposit in accordance with this Bylaw.

I.8.2 The *Owner* will not be required to enter into a *Maintenance Security Agreement*, nor be required to provide a security deposit when:

- (a) There are no *Works and Services* required under the provisions of this Bylaw; or

Township of Spallumcheen Subdivision & Development Standards Bylaw No. 2107, 2023

- (b) *Council grants a Development Variance Permit exempting the Owner from some or all of the Works and Services required under this Bylaw.*

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1.9 Confirmation of Professional Assurance

The Township of Spallumcheen
4144 Spallumcheen Way
Spallumcheen, BC, V0E 1B6

Attention: _____ *Chief Administrative Officer or designate*

Dear Sir:

Re: _____
(Description of Address of Project)

This is to advise that I am a Professional Engineer licensed to practice in the Province of British Columbia and was retained by the Owner to undertake and coordinate all field reviews and inspections required with respect to this project and took all steps as regulated under The Engineering Act of British Columbia and required by good practices and by the definition of “field reviews” hereinafter set forth in order to issue the following certification.

As used herein, “field reviews” should mean such reviews of the work at the project site and at fabrication locations, where applicable, as the Professional Engineer, in their professional discretion, considered to be necessary in order to ascertain that the work substantially conformed in all material aspects to the plans, drawings and supporting documentation and reports accepted by the Township of Spallumcheen.

The following aspects have been reviewed by me or under my direction and have been found to comply with the engineering drawings and plans submitted and accepted by the *Chief Administrative Officer* or designate.

1. Storm Drainage System including, but not restricted to, the following:
 - the location, alignment, size and grade of all pipes and culverts;
 - the spacing of manholes and catch basins;
 - the *Construction* of drywells;
 - materials used for pipes, culverts, manholes, catch basins, pipe and fitting joints, service connections;
 - materials used for pipe bedding and backfilling of trenches; and
 - workmanship in the *Construction* and installation of all materials.

2. Sanitary Sewer System including, but not restricted to, the following:
 - location, alignment, size and grade of all pipes;
 - spacing of manholes and catch basins;
 - materials used for pipes, manholes, pipe and fitting joints, service connections;
 - materials used for pipe bedding and backfilling of trenches; and
 - workmanship in the *Construction* and installation of all materials.

3. Water Distribution System including, but not restricted to, the following:
 - location, alignment, size and grade of all pipes;
 - spacing of hydrants and valves;
 - construction of pumping stations and reservoirs;
 - materials used for pipes, fittings, gate valves, valve boxes, hydrants, service connections, corporation stops, curb stop and boxes, air valves, stops and drains;
 - materials used for pipe bedding and backfilling of trenches; and
 - workmanship in the *Construction* and installation of all materials

Township of Spallumcheen Subdivision & Development Standards Bylaw No. 2107, 2023

- 4. *Roads* including, but not restricted to, the following;
 - alignment, width and grade of all *Roads*;
 - materials used for preparation of *Road* bases and *Road* surfaces; and
 - workmanship in the installation of materials.

- 5. Curb and Gutter, Sidewalks, and Boulevards including, but not restricted to, the following;
 - width and grade of sidewalks and boulevards;
 - alignment and grade of curbs and gutters;
 - materials used for preparation of subgrades and surfaces; and
 - workmanship in the installation of materials.

- 6. Street Lighting, Electrical and Communications Wiring and Gas Installation including, but not restricted to, the following;
 - number and spacing of street lighting poles and luminaries;
 - materials used for street lighting, electrical and communications wiring and gas installations;
 - materials used for backfilling of trenches;
 - workmanship in the installation of materials.

- 7. Geotechnical and site grading works including, but not restricted to the following:
 - lot grading
 - slope construction
 - retaining walls
 - workmanship and the installation of materials
 - rock blasting

I certify that the foregoing areas substantially comply in all material respects with the plans and supporting documents, including all amendments thereto, which supported the application for subdivision approval File No. _____ which were “accepted” by the Township of Spallumcheen.

In addition, significant revisions to the accepted plans and supporting documents have been submitted to the Township in order to depict, as nearly as possible, given my “field reviews” as defined herein, the services as finally designed and built.

Name of Professional Engineer /Geoscientist (Print)

Signed

Dated

(Professional Seal)

Address (Print)

(Phone)

Attached hereto you will find the appropriate “field review” assurance from each of the associated Professional consultants, who are registered in the Province of British Columbia as members in good standing of the Association of Professional Engineers. In the absence of a specifically designated professional in this confirmation, for any foregoing areas, I, the above signatory, shall be the responsible Professional.

Township of Spallumcheen Subdivision & Development Standards Bylaw No. 2107, 2023

ASSURANCE OF "ENGINEERING/GEOSCIENTIST" FIELD REVIEW

Re: _____
(Project Address)

This is to assure that I/We provided "field reviews" as defined herein of all engineering work including checklist items 1 to 7 inclusive except as specifically noted below.

EXCEPTIONS:

	Name (Print)	_____
	Signed	_____
(Professional Seal)		
	Date	_____
	Address (Print)	_____

	Representing	_____

I.10 Prime Contractor Agreement

Any *Contractor* completing *Works and Services* in the *Townships’ Rights-of-Way* or completing *Works and Services* on behalf of the Township of Spallumcheen should be deemed the “Prime Contractor” as defined in the *Workers Compensation Act* and accordingly should comply with all resulting requirements and obligations including coordination of the health and safety activities of all employers at the Place of the Work, and complying with the obligations of a “prime contractor” for a multi-employer workplace as prescribed by the applicable regulations. The Contractor should sign the *Township’s Prime Contractor Agreement* contained at the end of this section.

Township of Spallumcheen Subdivision & Development Standards Bylaw No. 2107, 2023

PRIME CONTRACTOR AGREEMENT

Re: _____

For the purposes of this contract, the successful Proponent, **Company Name** should be deemed the “Prime Contractor” as defined under the regulations of the Worker’s Compensation Act. The Contractor should be responsible for meeting all requirements associated with this role.

“The Contractor should be responsible for safety management for all persons who are present within the boundaries of the work site including but not limited to the Contractor’s workers, the Subcontractor’s workers, the Corporation or Engineer or any other inspector or agent appointed by either of them and other Contractor’s workers and anyone else.”

Date

Date

Name

Name

Township of Spallumcheen
4144 Spallumcheen Way
Spallumcheen, BC, V0E 1B6
Phone: 250-546-3013
mail@spallumcheentwp.bc.ca

Contractor Company Name
Address
City
phone:
email:

Township of Spallumcheen Subdivision & Development Standards Bylaw No. 2107, 2023

I.11 Commitment by Owner and Engineer

Note: To be submitted prior to review of design drawings, and Confirmation of Professional Assurance.

CONFIRMATION OF "COMMITMENT BY OWNER"
RE: DESIGN AND FIELD REVIEW OF CONSTRUCTION
BY A REGISTERED PROFESSIONALS

The Township of Spallumcheen
4144 Spallumcheen Way
Spallumcheen, BC V0E 1B6

Attention: Manager of Operations

Dear Sir:

Re: _____

(Description and Address) of Subdivision or Development

The undersigned has retained as their Professional Engineer and Geoscientist, _____ (the "Consultants"), to undertake and/or co-ordinate and review all associated design criteria and "field reviews" required for this Project. It is understood that he/she will take all such steps as regulated under the Engineers and Geoscientists Act of British Columbia and required by good practices for their profession and by the definition of "field reviews" hereinafter set forth, to ascertain that the design will comply and construction of the project will substantially conform in all material respects with the provisions of the Township of Spallumcheen Subdivision, Development and Standards Bylaw No. 2107, 2023, current revision, and other applicable Permits, Bylaws, Acts and Regulations which apply to the Project. These representatives will ascertain that only qualified personnel are retained to carry out tests, inspect or carry out design work, detailing or "field reviews."

As used herein, "field reviews" shall mean such reviews of the work at the project site and at fabrication locations, where applicable, as the "Consultants", in their professional discretion, considers to be necessary in order to ascertain that the work substantially conforms in all material respects to the plans and supporting documents "accepted" by the Township of Spallumcheen. This will include keeping records of all site visits and any corrective actions taken as a result thereof. In the matter of rock blasting a designate of the professional must be onsite during all blasts and ensure proper public notification and blasting.

The undersigned has given a contractual mandate to the "Consultants" to review reports of other testing and inspection agencies and disciplines where necessary, comment on their acceptability, determine the corrective action to take if unacceptable, and maintain a detailed record of every such report and comments. The "Consultants" will automatically submit a monthly summary progress report to the Manager of Operations, including all field reports and change orders.

Township of Spallumcheen Subdivision & Development Standards Bylaw No. 2107, 2023

NOTE: The owner will notify the Manager of Operations in writing 30 days prior to any intended termination of either or by either "Consultant". It is understood that work on the above project will cease as of the effective date of such termination, until such time as a new appointment is made, and a "Stop Work Order" shall be posted upon the said project by the Township.

Witness Name (Print)

Owner's Name (Print)

Witness Signature

By: _____
(Owner or Owner's
appointed Agent Signature)

Address (Print)

Date: _____

Occupation

Title of Agent (if applicable)

Address (Print)

The Corporate Seal of

was hereunto affixed in the
presence of:

Township of Spallumcheen Subdivision & Development Standards Bylaw No. 2107, 2023

The above must be signed by the Owner or his appointed Agent. The signature must be witnessed. If the Owner is a company, the corporate seal of the company must be affixed to the document in the presence of its duly authorized officers. The officers must also sign, setting forth their positions in the company.

This Engineering "Consultant" acknowledges that they have been retained to ascertain that the design will comply and construction of the project will substantially conform in all material respects with Bylaws as set out above and will submit letters of Confirmation of Professional Design Assurance from others, as needed, for the approval of the development or subdivision. In the absence of a specifically designated professional in this confirmation, for any foregoing areas, I, the above signatory, shall be the responsible Professional. Furthermore, the "Consultant" hereby covenants that they or their firm presently carries liability insurance in the amount of \$ _____ .

Name of Professional Engineer (Print)

Signature of Professional Engineer

Date: _____

Mailing Address (Print)

Phone: _____

Township of Spallumcheen Subdivision & Development Standards Bylaw No. 2107, 2023

This Geotechnical "Consultant" acknowledges that they have been retained to ascertain that the design will comply and construction of the project will substantially conform in all material respects with Bylaws as set out above and will submit letters of Confirmation of Professional Design Assurance from others, as needed, for the approval of the development or subdivision. Furthermore, the "Consultant" hereby covenants that they or their firm presently carries liability insurance in the amount of \$_____.

Name of Professional Geoscientist (Print)

Signature of Professional Geoscientist

Date: _____

Mailing Address (Print)

Phone: _____

SCHEDULE J

MMCD SUPPLEMENTAL SPECIFICATIONS

Township of Spallumcheen Subdivision & Development Standards Bylaw No. 2107, 2023

SCHEDULE J MMCD SUPPLEMENTAL SPECIFICATIONS

J.1 General

J.1.1 The *MMCD* Supplementary updates are not automatically integrated into the electronic documents, these updates are available on the *MMCD* website for the *MMCD* 2019 Edition of the *MMCDA* Documents. All *Works and Services* shall be *constructed* in accordance with these updates.