

Subdivision Servicing Bylaw Review

Planning & Development Committee

(December 7, 2023)

Subdivision Servicing Bylaw Review



Statutory Authority:

Under the *Local Government Act* the Regional District may regulate, by bylaw, the design of:

- water distribution systems;
- fire hydrant systems;
- sewage collection & disposal systems;
- road standards; and
- street lighting.

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Land Use Planning:

- An RGS promotes sustainable development that makes efficient use of infrastructure.
- An OCP supports an RGS and guides land use, including high-level infrastructure plans.
- A zoning bylaw supports an OCP by regulating use and density, which impacts infrastructure.
- A subdivision bylaw supports zoning by establishing service & design standards for infrastructure.



Subdivision Servicing Bylaw Review



History of RDOS Subdivision Servicing Bylaws:

- first such bylaw adopted by the Board was in 1970 (No. 104 – Area “D” Subdivisions);
- have been six (6) different iterations of this bylaw over past 50 years;
- current bylaw was adopted in 2002 (based on 1995 bylaw);
- applied to all of the electoral areas by 2008 as part of implementation of “1.0 ha Policy”.



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Applying Servicing Standards (Subdivision Process)

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Subdivision Process

- Applications must be submitted to the Ministry of Transportation and Infrastructure (MoTI).
- MoTI will refer a subdivision application to the Regional District for comment.
- The Regional District will advise MoTI of applicable land use bylaw requirements that apply to the subdivision.
- Approving Officer may refuse a subdivision application that does not comply with RDOS bylaws.

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Official Community Plan (OCP) Bylaw

Development Permits / Parkland Dedication Priorities



Zoning Bylaw

Parcel Size, Parcel Width, Setbacks, Hooked Parcels, Useable Area, etc.



Subdivision Servicing Bylaw

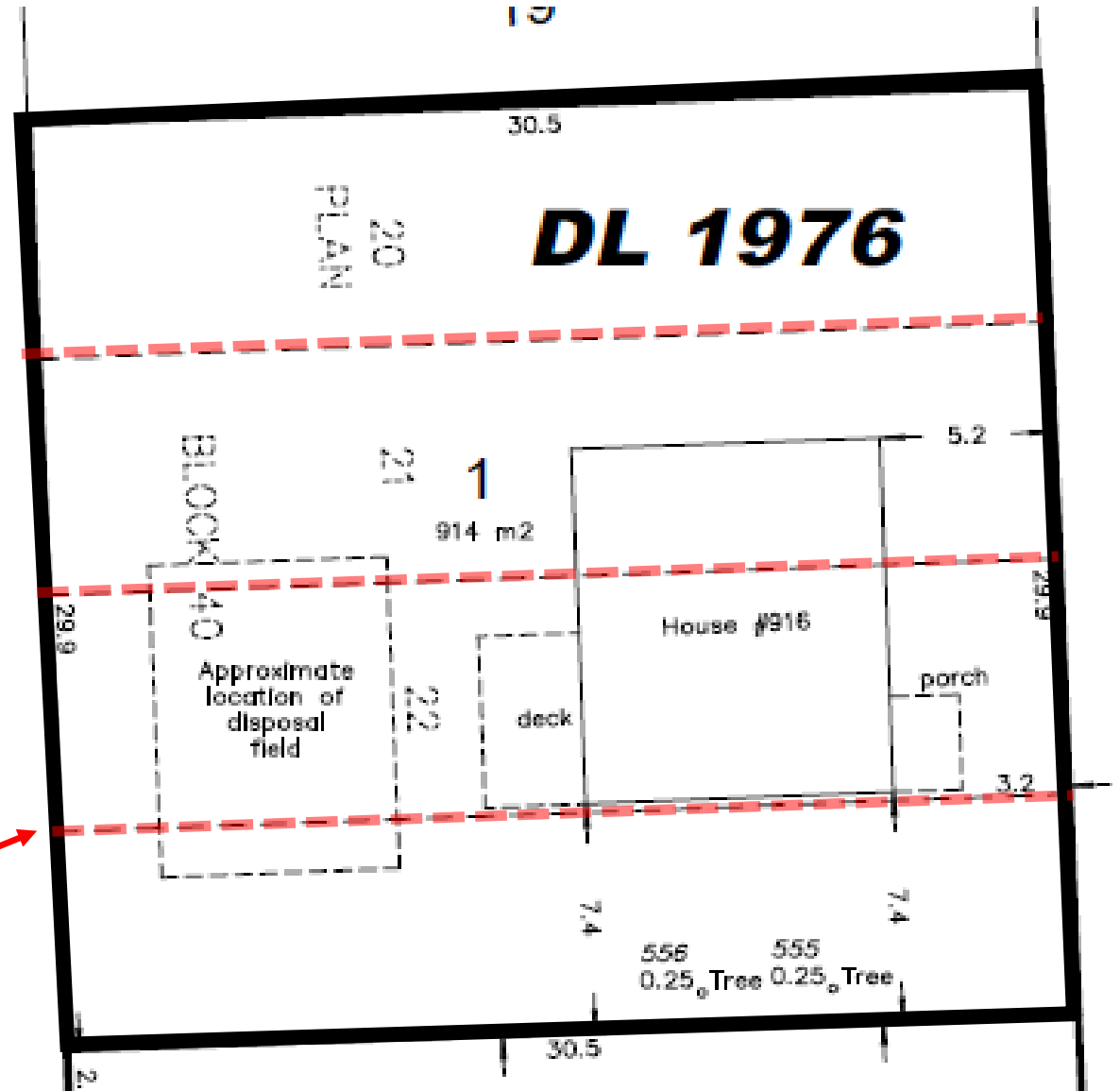
Provision of Water, Sewage Disposal, Underground Electrical Conduits, Fire Hydrants

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Parcel Consolidation

A subdivision involving the consolidation of existing parcels, or the addition of closed roads to an existing parcel is exempt from the requirements of the bylaw.

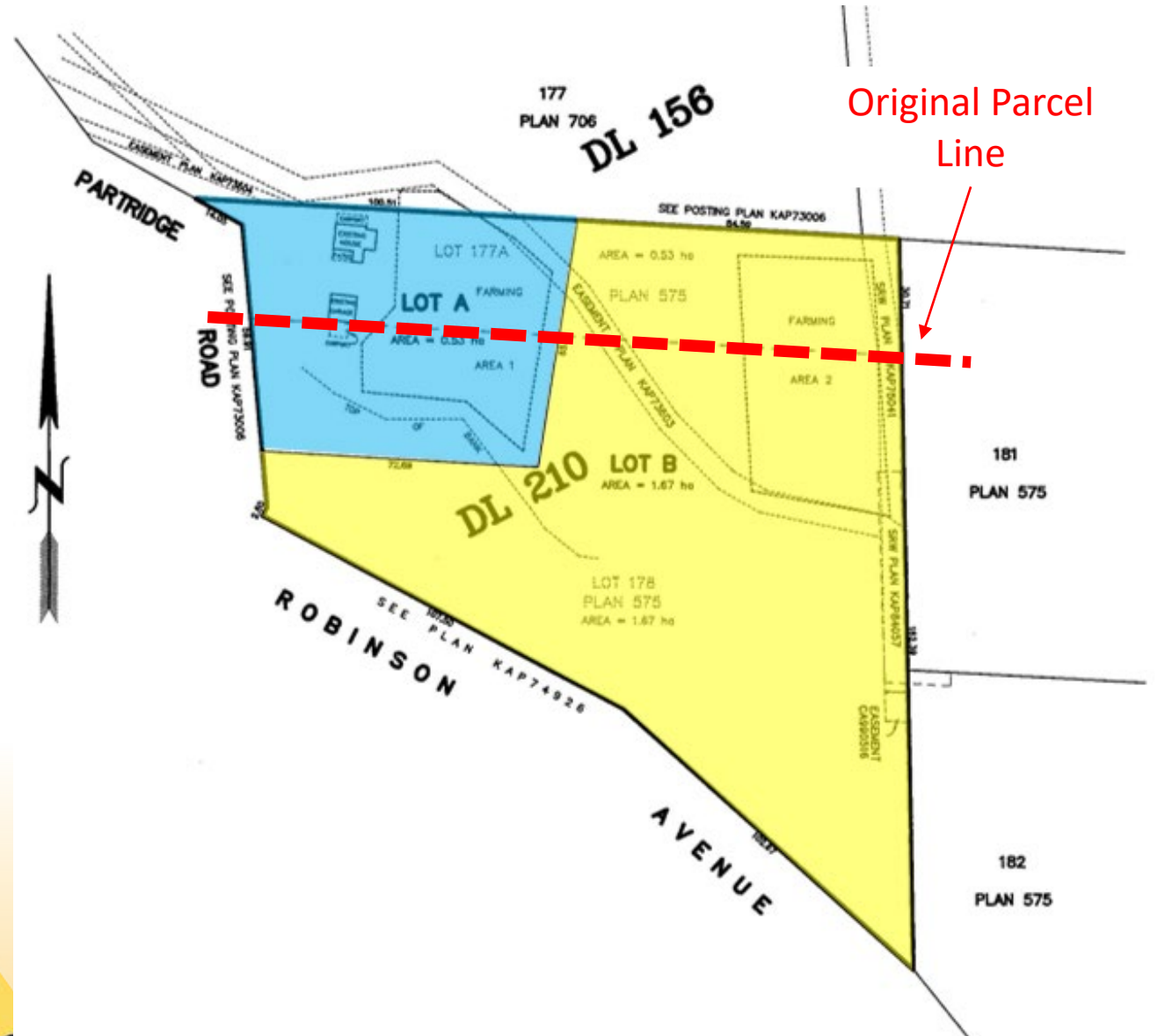
Original Parcel Lines



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Boundary Adjustments

A subdivision involving the alteration of lot lines between two or more parcels is exempt from the requirements of the bylaw.

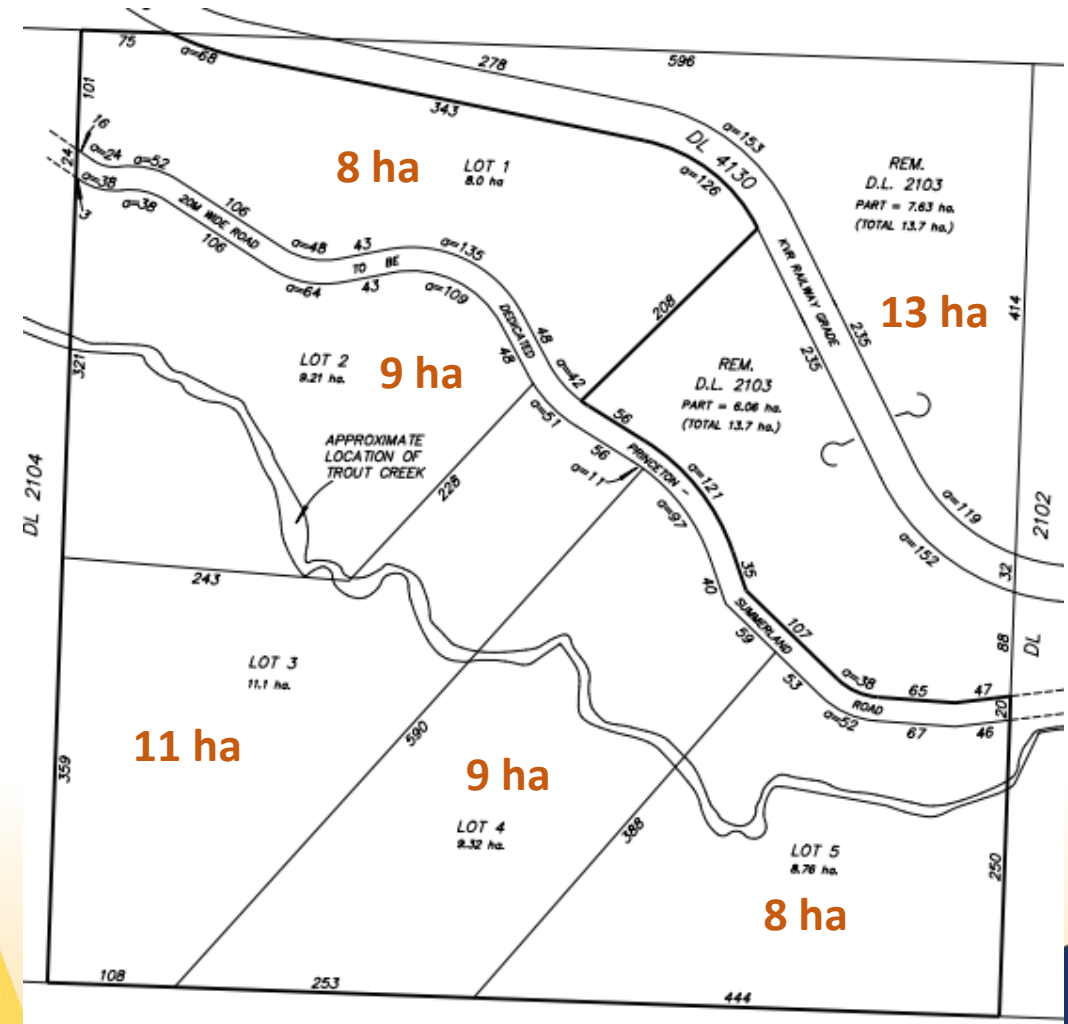


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Creation of new parcels

New parcels greater than 1.0 ha in area shall provide the following in accordance with the design standards in the bylaw:

- on-site sewage disposal (septic);
- private water source (well).



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Septic

- If between 1.0-2.0 ha in area, confirmation from IHA; or
- If greater than 2.0 ha in area, no confirmation required.

Wells

- provide at least 2,300 litres/day;
- flow capacity of 20 litres/minute for one (1) hour; and
- certified by professional engineer.

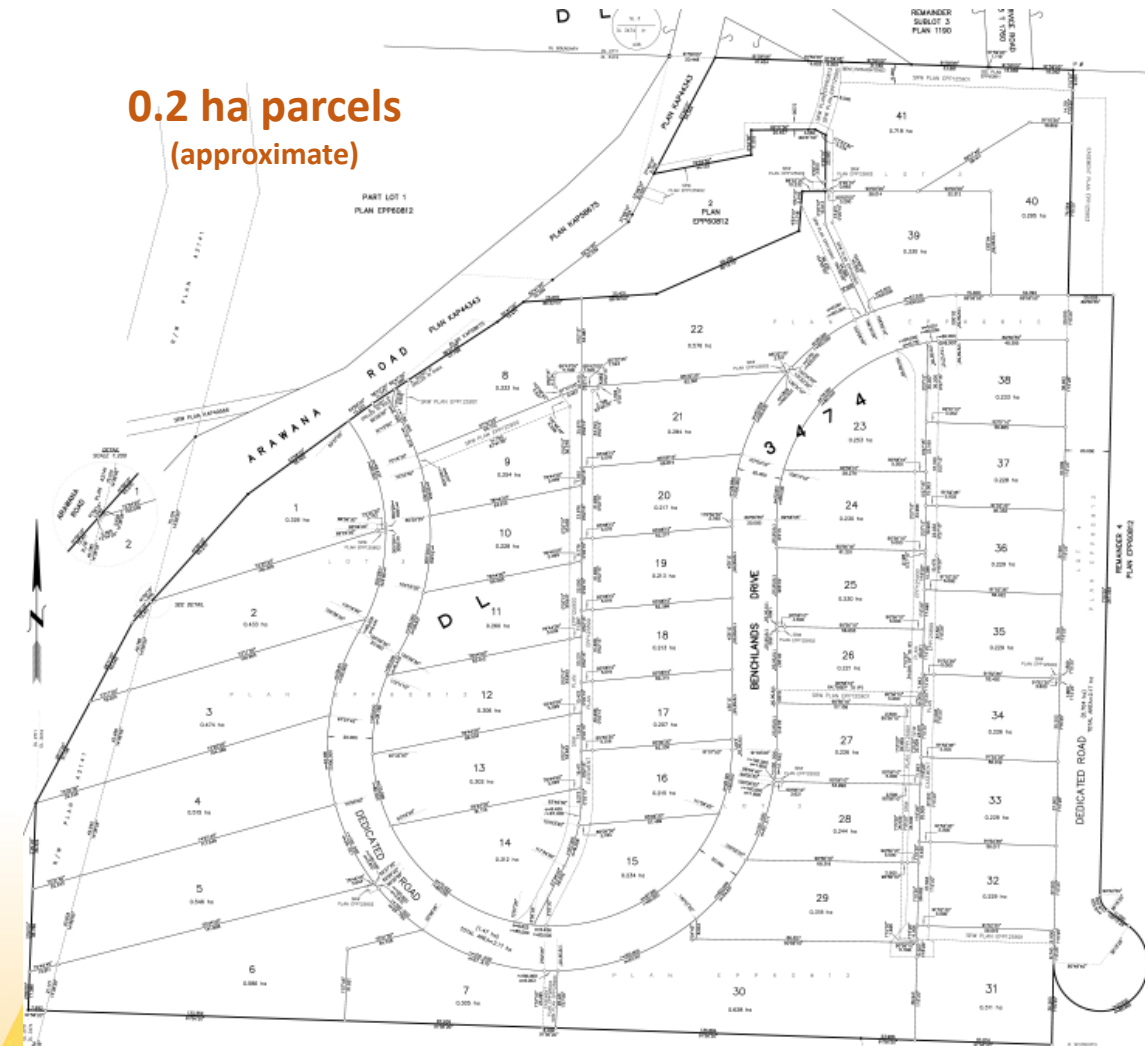


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Creation of new parcels

New parcels less than 1.0 ha in area shall provide the following in accordance with the design standards in the bylaw:

- community sewage system;
- community water system;
- fire hydrants.



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Community Water System

Design Parameters:

- daily domestic flows, fire flows, cover, grades, clearance, etc.

Materials:

- pipes, joints, hydrants, etc.

Installation:

- bedding, testing, excavation, backfill, restoration, etc.



Back-up Generator and Pump House (Faulder)



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Community Sewage System

Design Parameters:

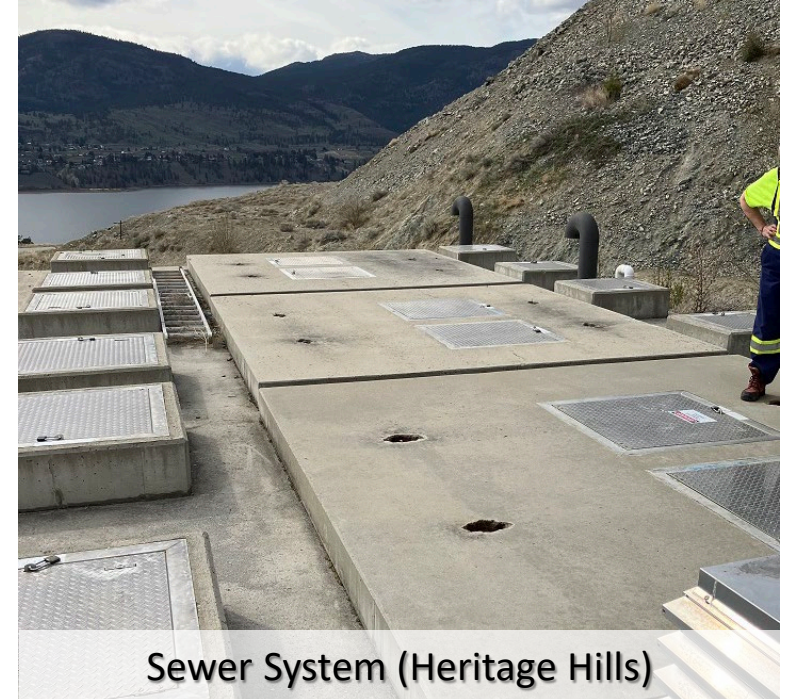
- flows, manholes, cleanouts, velocity, grades, cover, etc.

Materials:

- gravity mains, pipes, etc.

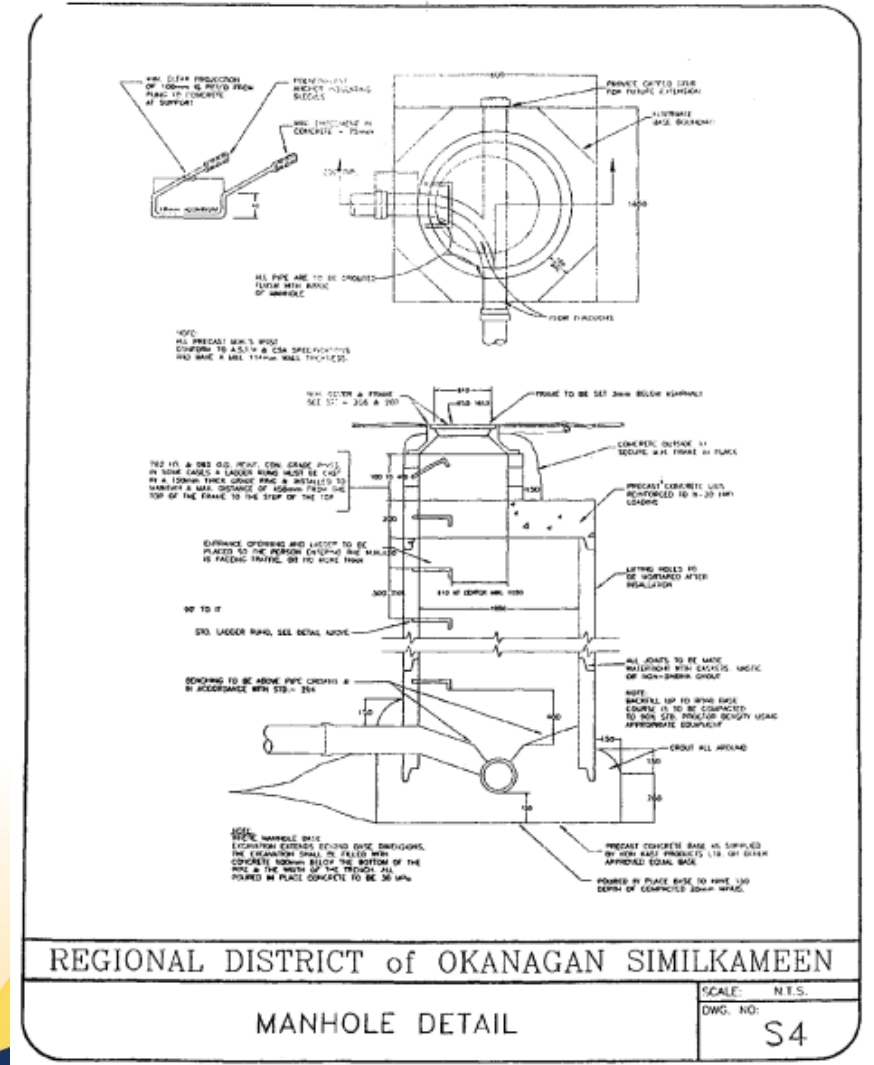
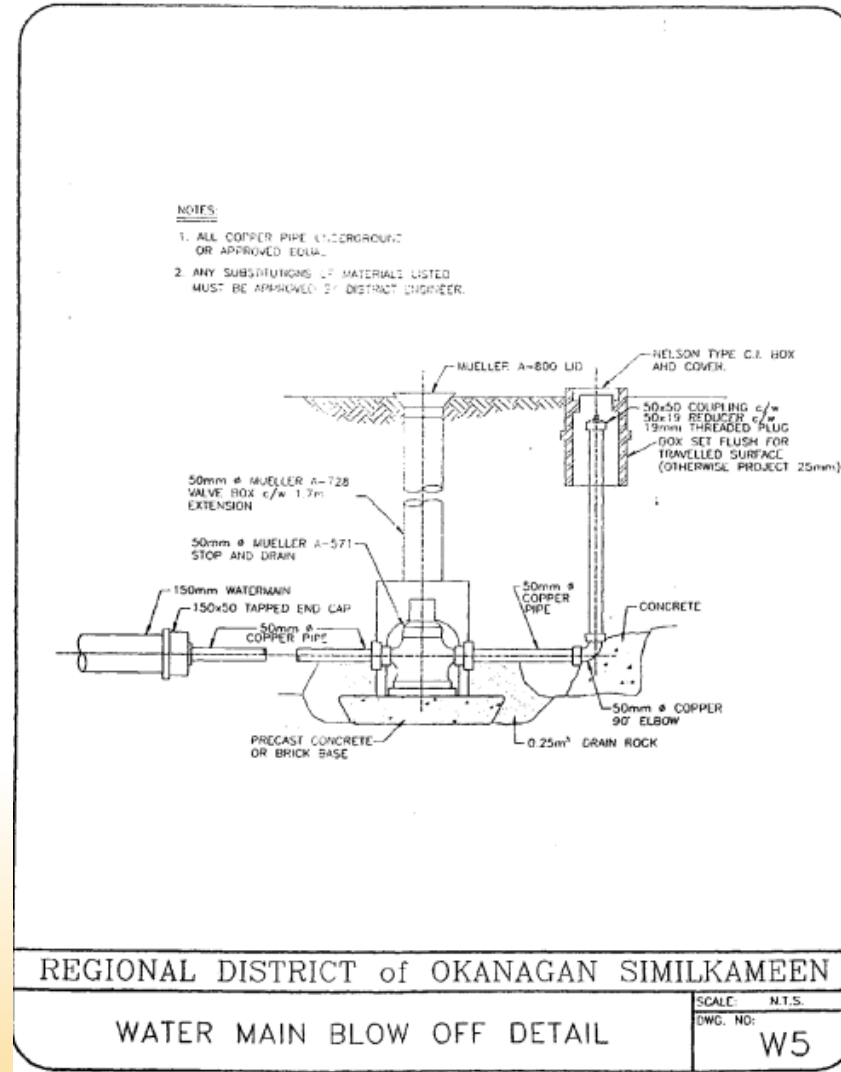
Installation:

- bedding, testing, excavation, backfill, restoration, etc.



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Examples of
“Standard
Drawings”
(current)



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Development Variance Permits

Examples of approved variances to servicing requirements since 2021 include the following:

- to provide street lighting;
- to prove a private water source on large, rural parcels;
- to extend a sewer main to the edge of a property line;
- to construct a well on each parcel of a proposed subdivision that is dependent on groundwater as a source of water.

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Regional District sign-off

- MoTI will issue a Preliminary Layout Review (PLR) to an applicant containing requirements to be met.
- Compliance with Regional District bylaw requirements are included as a condition in the PLR.
- When RDOS bylaw requirements have been met, including servicing standards, a “Letter of Compliance” (LoC) will be provided to the Ministry and applicant.



Subdivision Servicing Bylaw Review

Bylaw Review Project

Subdivision Servicing Bylaw Review

Project Overview:

- Subdivision Servicing Bylaw review/update has been a multi-year project;
- Subdivision regulations reviewed to date include:
 - highway and road standards (authority resides with MoTI);
 - stormwater management (authority resides with MoTI);
 - electrical power and natural gas (no legislative authority);
 - confirmation of water & sewer (new parcel size req.);
 - street lighting (“dark skies”).

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Project Overview – Guiding Principal:

- reference the Master Municipal Construction Documents (MMCD) Association's *Municipal Infrastructure Design Guideline Manual* for specifications and drawings, as applicable.
- The *Manual* provides a standardized set of guidelines that can be adopted by local government involved with the design and construction of servicing infrastructure.
- Draft Bylaw contains exceptions to the *Manual* in the design schedules.



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Exemptions:

- Conservation of Natural Areas
 - a wildlife management area designated under the *Wildlife Act*;
 - a park preserved in its natural state and having no buildings or structures; or
 - natural area conservation.

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Building Permits:

- Uncommon for regional district's to list building permits as a trigger for servicing requirements;
- Current bylaw only exempts BPs authorizing the construction of a building containing no more than two (2) dwelling units.
 - commercial, industrial, institutional and agriculture?
- Section 506(9) of the *Local Government Act* provides discretion to apply servicing requirements to BPs as required.

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Building Permits:

- Mitigating considerations:
 - Building Bylaw requires proof of servicing at BP stage;
 - Water Use Regulation Bylaw mandates connection to RDOS water system (where existing);
 - Subdivision Servicing Bylaw mandates connection to RDOS sewer system (where existing);
 - Construction requiring community water & sewer systems should be occurring in “Growth Areas” under RGS; and
 - Proposed regulation of private utilities.



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Water & Sanitary Design Guideline

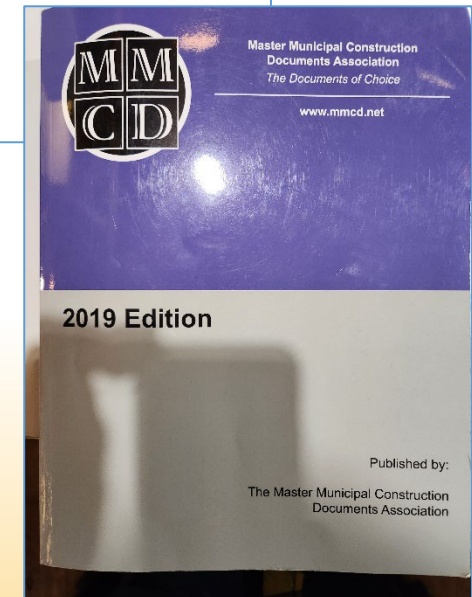
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Water & Sanitary Design Guidelines:

- What guidance is provided?
- MMCD Design Guidelines 2022
- MMCD Volume II
 - General Conditions, Specifications and Standard Detail Drawings
- RDOS provides revisions to the above to suit local needs



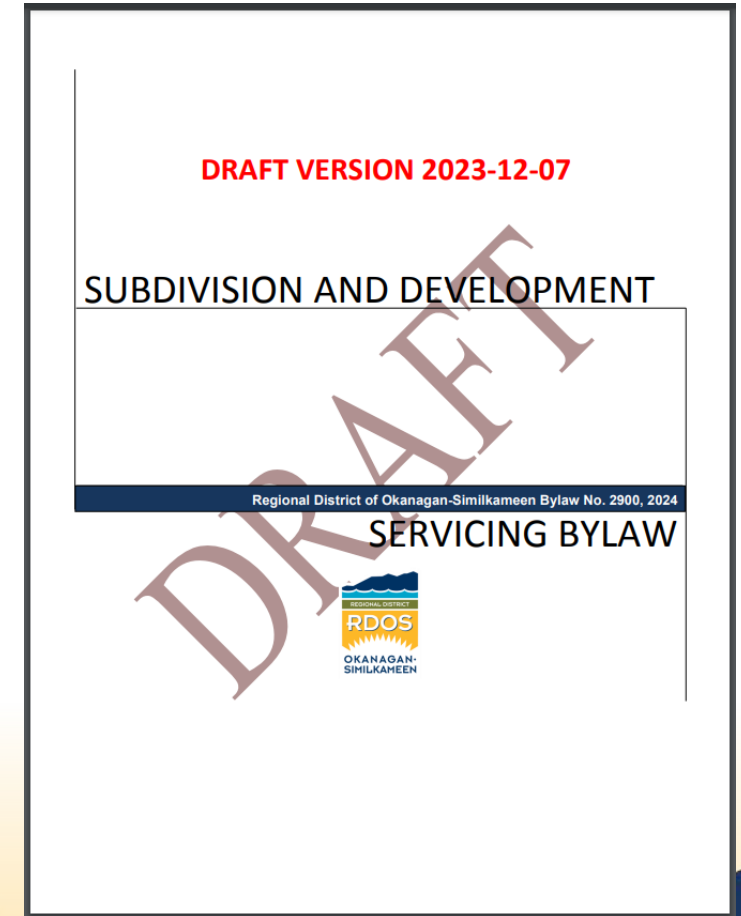
Design Guidelines 2022



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Water & Sanitary Design Guidelines:

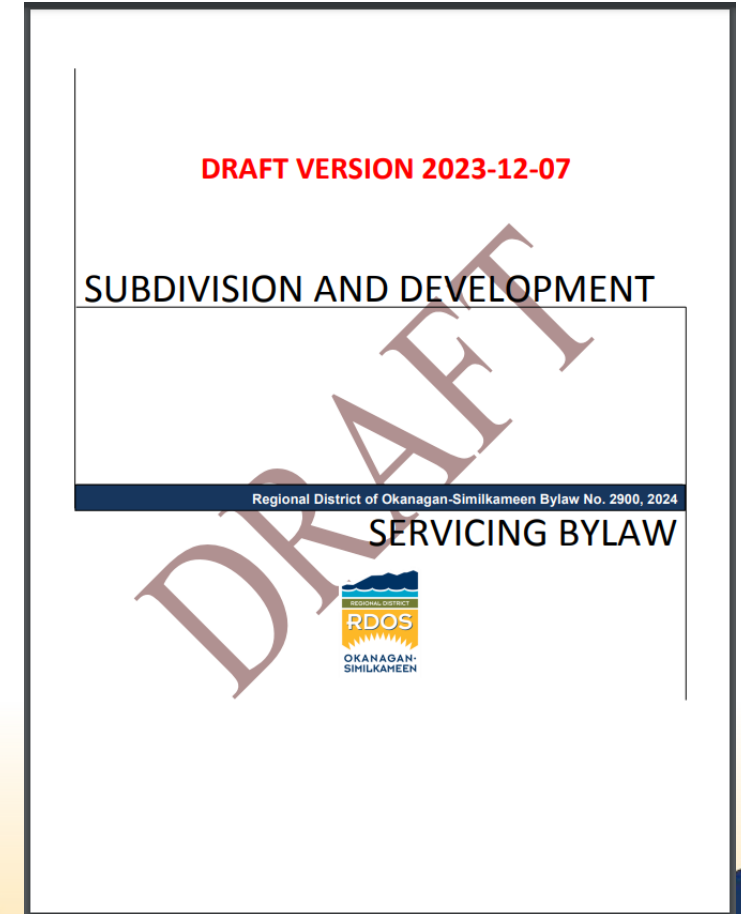
- What guidance is provided?
- RDOS Subdivision and Development Servicing Bylaw No. 2900:
 - Schedule A – Water Systems
 - Schedule B – Sewer Systems
 - Schedule C – Standard Detail Drawings
 - Supplemental Specifications to MMCD



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Water Design Guidelines – Schedule ‘A’:

- MMCD Design Guidelines for Water Distribution – 18 pages
- Outlines methods for estimating demands and design criteria for important infrastructure:
 - Reservoirs,
 - Pump Stations,
 - PRVs,
 - Watermains.



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Water Design Guidelines – Schedule ‘A’ Highlights:

- Per capita demands increased to suit Okanagan:
 - Max Day Demand increased from 600 L/d/c to 1800 L/d/c for metered connections.
- Requirement to comply with OHS Reg. Part 9 (Confined Spaces):
 - preference for above ground structures; and
 - confined spaces must have suitable isolation means.
- Requirements for private water source added (similar to past SDS schedule).

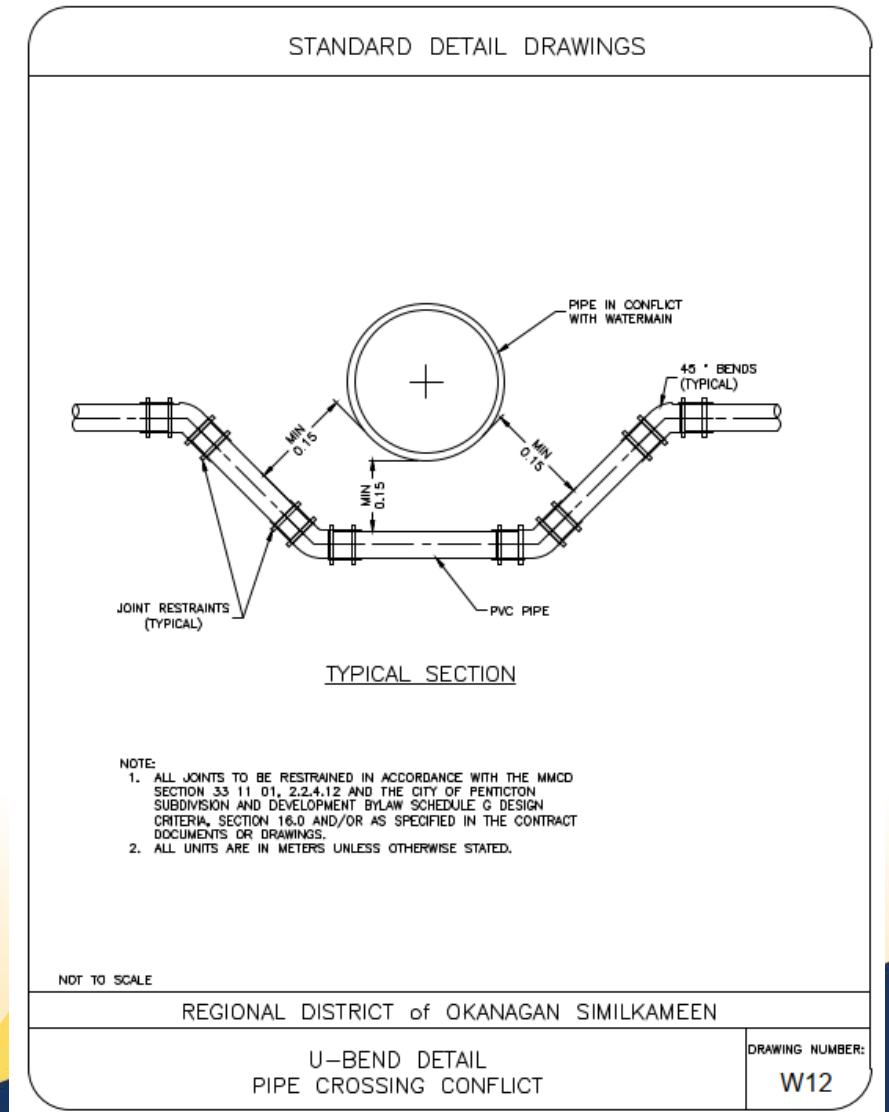
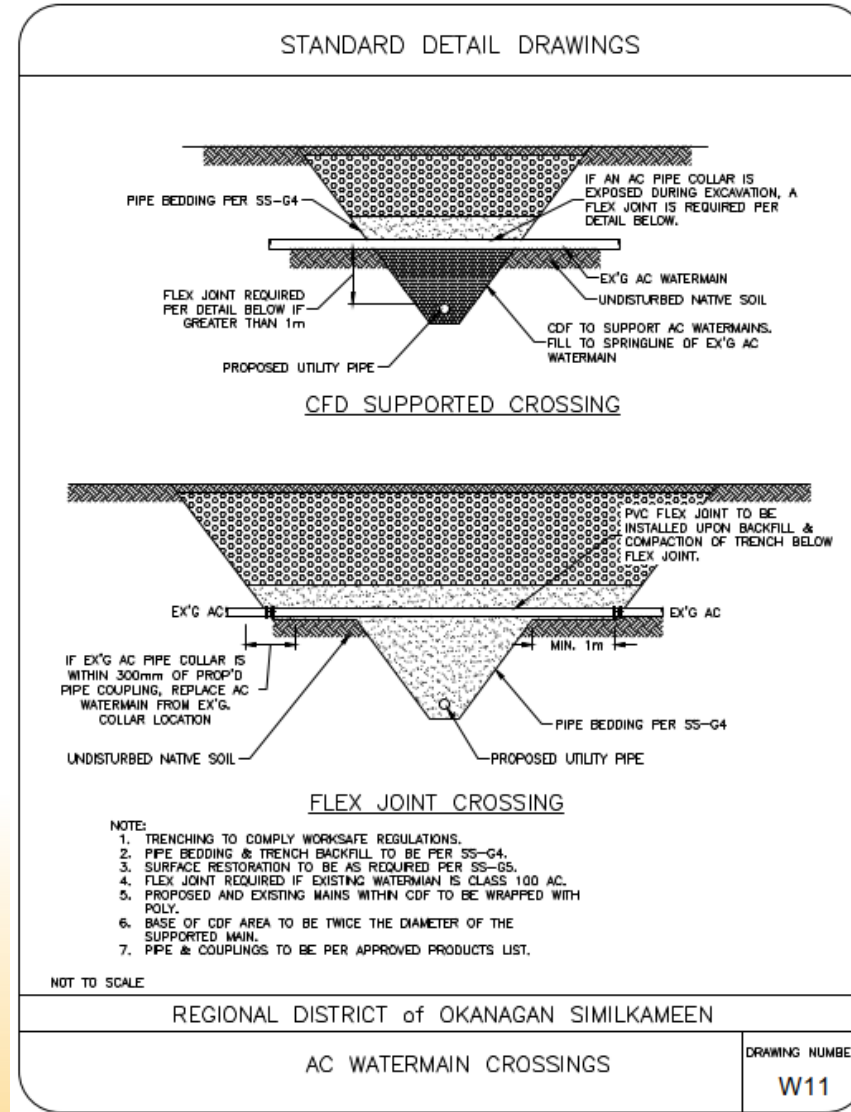
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Pressure Reducing Valve (PRV) Station Examples:



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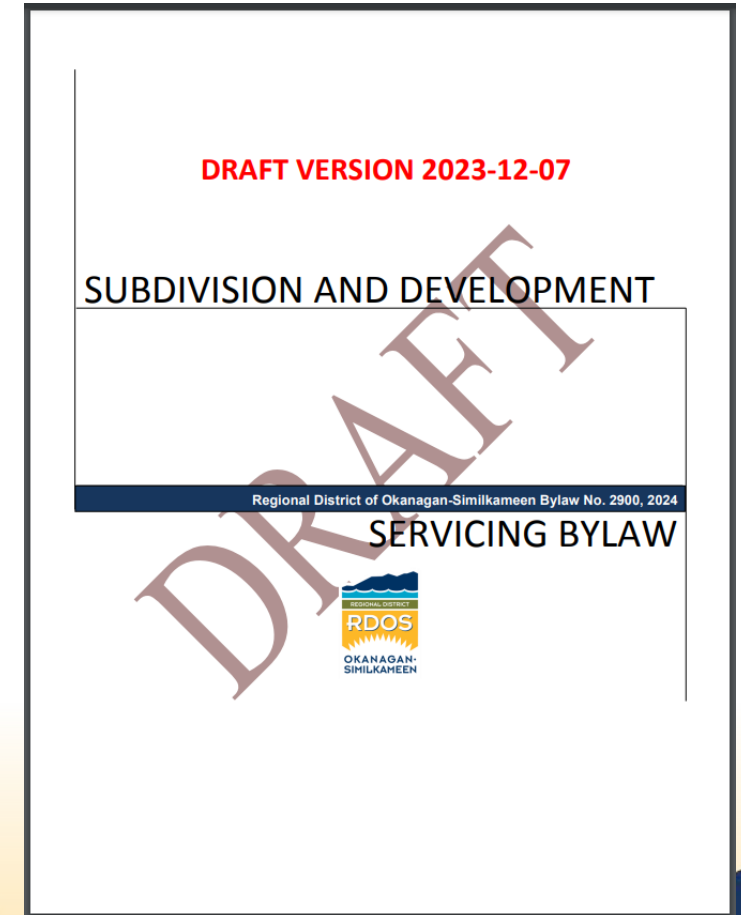
Waterworks “Standard Detail Drawings” (proposed)



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Sewer Design Guidelines – Schedule ‘B’:

- MMCD Design Guidelines for Sanitary Sewers – 12 pages
- Outlines methods for estimating flows and design criteria for important infrastructure:
 - gravity mains,
 - lift stations,
 - forcemains,
 - odour control.



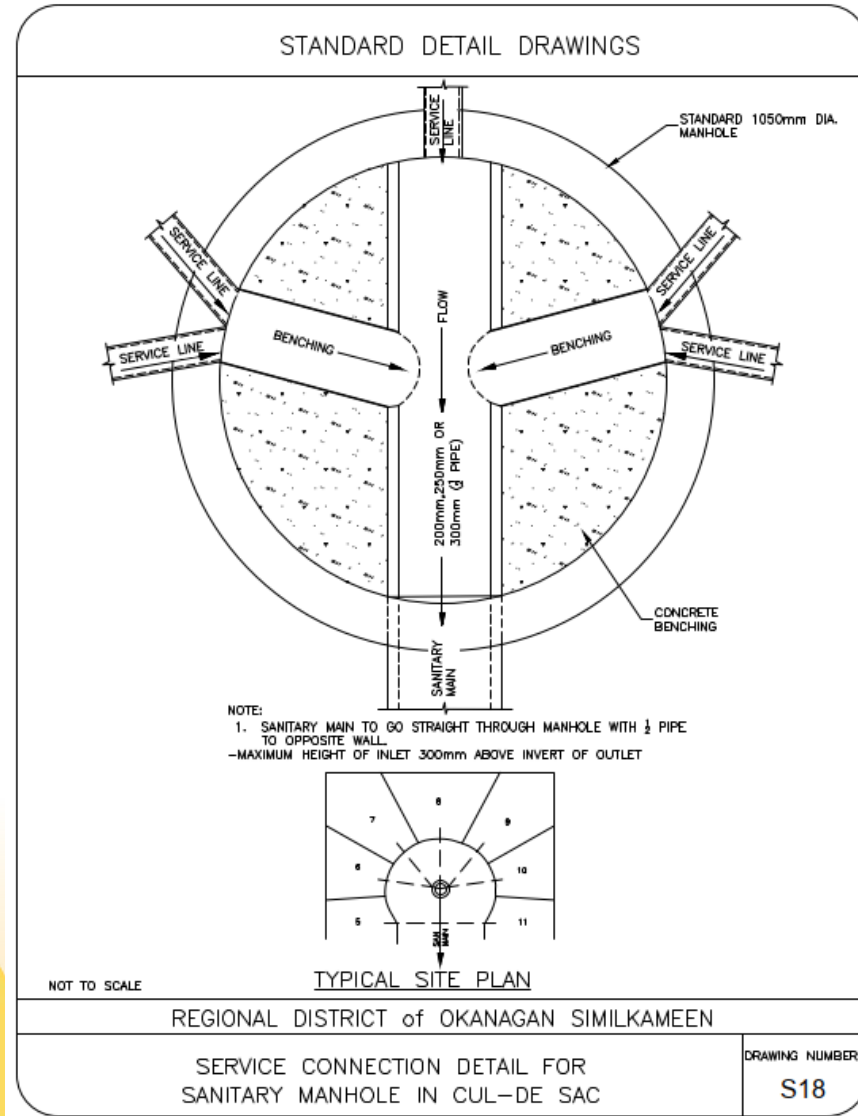
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Sewer Design Guidelines – Schedule ‘B’ Highlights:

- Lift Stations:
 - Class 1, Division 1 motors required.
 - Valve kiosk preferred to eliminate need to enter confined space.
- Curved sewer not recommended.

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Sewer “Standard Detail Drawings” (proposed)



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Lift Station Examples:



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Next Steps:

- Public Engagement:
 - Agency referrals (e.g. MoTI);
 - Information Meeting (consulting engineering firms, etc.)
- Coordinate engagement with review of private utility regulations, Campground Regulations Bylaw & Manufactured Home Park Regulations Bylaw.
- Present feedback to P&D Committee and seek further direction.

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Questions?