

Bylaw 7900 – Subdivision, Development and Servicing Bylaw 2019 Updates

Joel Shaw, P. Eng. & Rod MacLean, P. Eng. | August 12, 2019

# Subdivision, Development and Servicing (Bylaw 7900)



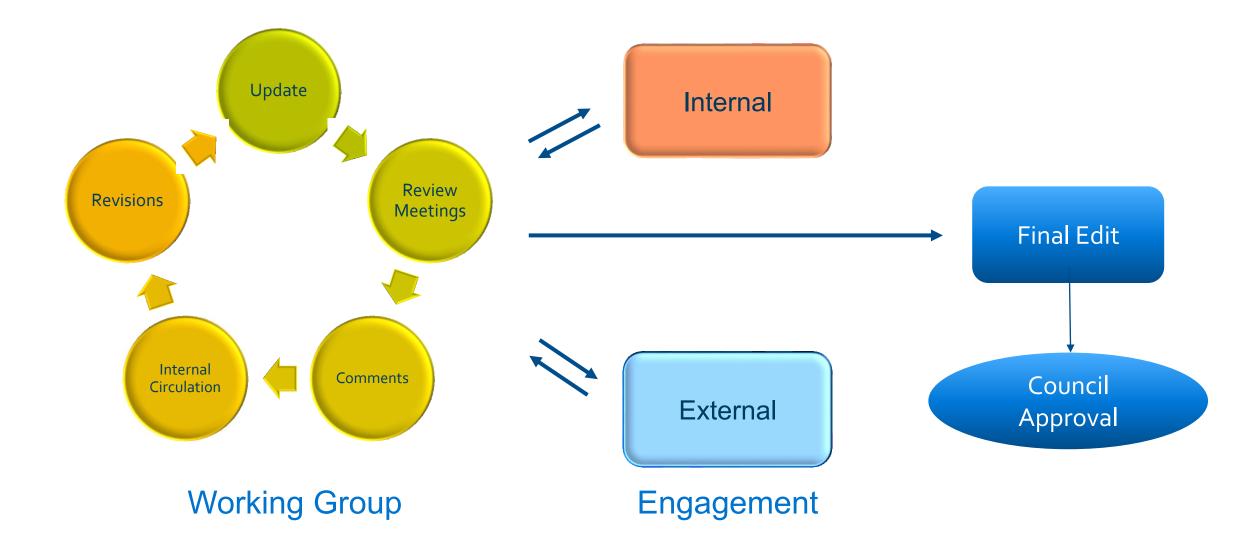
- Sets out subdivision application procedures
- Provides Design and Construction Standards for works and services
  - Schedule 4 Design Standards
  - Schedule 5 Construction Standards
- Approved Products List (Policy 266)



### Objectives

- Update Design and Construction Standards in Bylaw 7900
  - Format to Municipal Infrastructure Design Guidelines (MMCD, 2014)
- Ensure quality and long-lasting infrastructure
- "Living Document"
- Complements:
  - MMCD Specifications and Standard Detailed Drawings.
  - City Schedule 5 Supplementary Specifications and Supplementary Standard Detailed Drawings.
  - City Policy 265 (Engineering Drawing Submission Requirements).

#### Bylaw 7900 Review Workflow





### Design and Construction Standards

- Water
- Sanitary Sewer
- Drainage
- Transportation
- Electrical, Street Lighting
- Landscaping & Irrigation
- Hillside Development Standards



### Design and Construction Standards

### ▶<mark>Water</mark>

- Sanitary Sewer
- Drainage Stormwater Management
- Transportation
- Electrical, Street Lighting
- Landscaping & Irrigation
- Hillside Development Standards



- Protect Okanagan Lake
- Improve Water Quality
- Address Climate Change
- Hillside and Hazardous Slope Issues





#### Protect Okanagan Lake

- Route minor systems to natural watercourses
- Eliminate permanent groundwater pumping into the City storm sewer.
  - Reduce capacity issues near outlets to lake
  - Eliminate reliance on deeper water table
  - Improve groundwater quality into Okanagan Lake.
- Improve water quality
- Address Climate Change
- Hillside and Hazardous Slope Issues





#### Protect Okanagan Lake

#### Improve water quality

- Emphasis on water quality to Okanagan Lake.
- Must meet Provincial (MOE) Recreational Water Quality Guidelines.
- Control manholes added
- Expanded Erosion & Sediment Control process
- Address Climate Change
- Hillside and Hazardous Slope Issues





- Protect Okanagan Lake
- Improve water quality
- Address Climate Change
  - Consultant to consider climate change in calculations
  - Flow conditions/debris flow
  - Minimum 15% capacity increase
  - ► Response required.
- Hillside and Hazardous Slope Issues





- Protect Okanagan Lake
- Improve water quality
- Address climate change

#### Hillside and Hazardous Slope Issues

- Focus on safe conveyance of stormwater to natural watercourse
- Roof/site drainage direct to Storm
- No infiltration to ground (except foundation)





### Focus in 2019

Fire Flows (Section 1.5)

Development Permit Stage

▶ No change – Use table.

Building Permit Stage

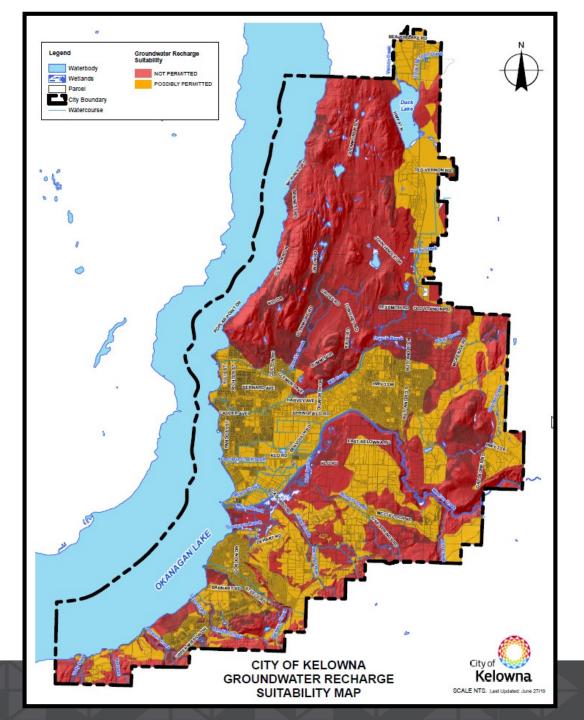
- ► Section 3.2.5.7 of the BC Building Code.
- Automated sprinkler systems to NFPA 13
- Confirmation required.
- Calculated fire flow must not exceed the minimum requirements for that zoning



### Drawing Updates

#### <u>New</u>

Map identifying where Infiltration to Ground is suitable.



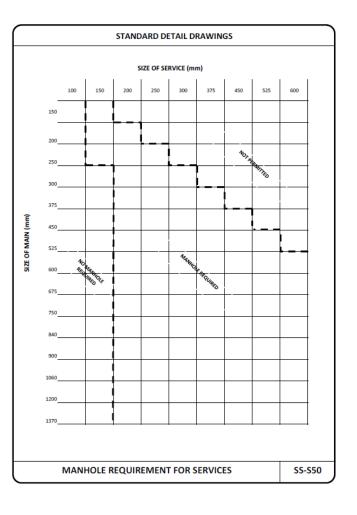


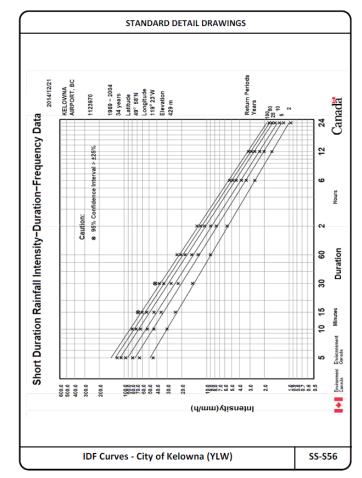
### Drawing Updates

#### <u>Updated</u>

► IDF Curve

Service/Manholes Sizing





## Thank you

0

D

 $\sim$ 

 $\sim$ 

hummen