


**City of Nanaimo's MOESS Update**  
Updating our Standards Manual of Engineering Standards & Specifications

December 9, 2019 www.nanaimo.ca/goto/MOESS

**MoESS Edition Update No 13.**

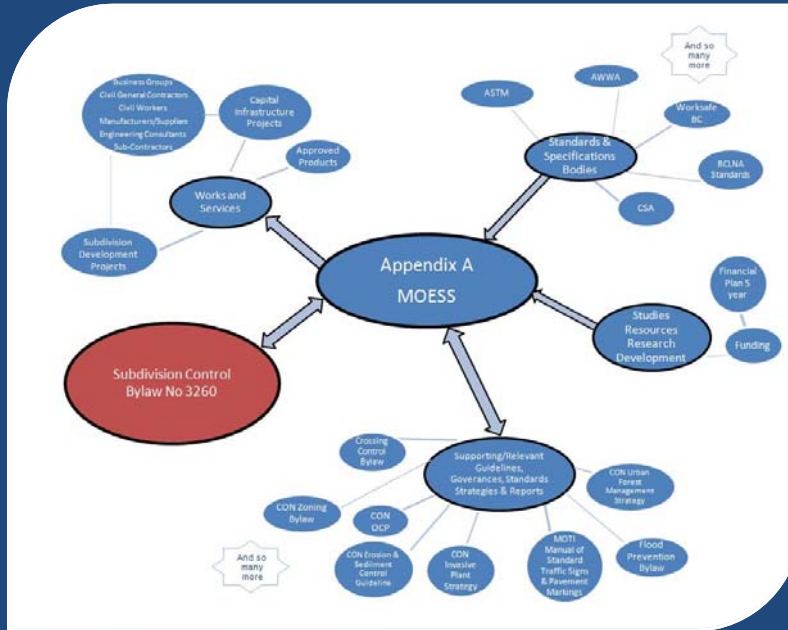
**MoESS is Schedule 'A' of the Subdivision Control Bylaw**



- Introduction
- 1.0 - General Drafting Requirements
- 2.0 - General Definitions and References
- 3.0 - General Requirements
- 4.0 - Excavation, Trenching and Backfill
- 5.0 - Water Distribution System
- 6.0 - Sanitary Sewer System
- 7.0 - Stormwater Management
- 8.0 - Transportation
- 9.0 - Aggregates and Granular Material
- 10.0 - Roadway, Lighting and Traffic Signals
- 11.0 - Cast In Place Concrete Works
- 12.0 - Asphaltic Concrete Paving
- 13.0 - Surface Treatments
- 14.0 - Landscape
- Appendix

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# MoESS Update Timeline



• Nov 2018 - Nov 2019	Preparation of the Draft Changes
• Nov 2019	Review Package - Stakeholder Review of the Proposed Changes
• Dec 9, 2019	Presentation to the Governance and Priorities Committee
• Dec 2019	Preparation of the Final Draft
• Jan 13 2020	Information Report to Council
• Feb 3 2020	Staff Report to Council
• Feb 24, 2020	Fourth Reading Amending Bylaw
• Feb 2020 - Apr 2020	Preparation for Publication
• May 1, 2020	Implementation / Publication Date

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### Sectional Reviews for 9 of 14 Sections



Urban Forestry Management Strategy



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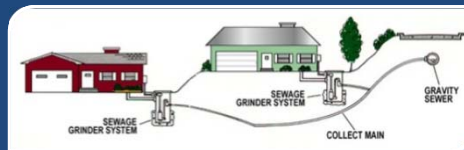
Materials & Aggregates



Complete Street Guidelines



Sanitary Sewer System



Low Pressure Sewers

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# Section 8: Transportation

Updating our Standards through a Complete Street Lens

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## Section 8: Transportation

### Why: Safe Active Mode Facilities

**WHICH FACILITIES WILL MAKE RIDERS FEEL SAFER?**

Facility Type	Percentage of Riders
Shared-Use Path	28-40%
Side Path	51-56%
Separated Bike Lane	5-9%
Buffered Bike Lane	4-7%
Bike Lane	5-9%
Shoulder	4-7%
Shared Lane	4-7%

**28-40% No Way No How** vs. **51-56% Interested but Concerned** vs. **5-9% Enthused & Confident** vs. **4-7% Strong & Fearless**

*Note: Percentages represent the level of comfort that people feel bicycling, according to peer-reviewed surveys as recently as 2016. Source: FHWA Bikeway Selection Guide: [https://safety.fhwa.dot.gov/ped\\_bike/tools\\_solve/docs/thesis18077.pdf](https://safety.fhwa.dot.gov/ped_bike/tools_solve/docs/thesis18077.pdf) For more information, please visit FHWA's Bicycle and Pedestrian Program webpage: [https://www.fhwa.dot.gov/environment/bicycle\\_pedestrian/](https://www.fhwa.dot.gov/environment/bicycle_pedestrian/)*

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## Section 8: Transportation

# Why: Safe Vehicle Facilities

← Nanaïmo Existing: 3.2-4.3m →

← Proposed: 3.2-3.6m →

<b>Lane Width in Meters</b>	2.60 - 2.80	2.80 - 3.25	3.25 - 3.60	3.60 and higher
<b>City</b>	Jakarta, Singapore	Amsterdam, Berlin, Copenhagen, Paris, Tokyo, Toronto	New Delhi, Mumbai, Knoxville, Greensboro, New York, Sao Paulo	Beijing, Chennai, Fortaleza
<b>Fatality Rate per 100,000 population</b>	3.6 - 6.4	1.3 - 3.2	6.1 - 11.8	20.0 - 27.2
<b>Safety Index</b>	Less safe	Safe	Unsafe	Very unsafe

Source: Fatality rate data from WRI Cities Safer By Design, Qiu J et. al. (2014), Sivak and Schoettle (2015); Lane width data from Masud Karim (2015), Mohan D et. al. (2015)

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## Section 8: Transportation

# What: Historic to Complete

Nora Avenue, Chico, CA by Dan Bar

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## Section 8: Transportation



### Where: The Standards

- Updated Road Classifications that incorporate both their network function and land use
- Complete & Separated Multi-Modal Cross-Sections
- New Accessible/Universal Design Features: Updated Ramp Details, Raised Local Crossings, etc.



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## Section 8: Transportation



### Where: The Standards



Protected Intersections



Raised Crossings



Safe Bus Stop Placement and Design



Curb Extensions



Separating Road Users in Physical Space



Protected and Connected Bicycle Lanes

BC. Community ROAD SAFETY TOOLKIT  
Module 1: Protecting people walking and cycling

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Section 8: Transportation



*How: 203 Street, Langley*



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Section 8: Transportation



*How: 2<sup>nd</sup> Ave, Seattle*



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Questions?

\*Full List of Resources & Material References Available Upon Request

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