

# CITY OF KELOWNA

## BYLAW NO. 10696

### Amendment No. 16 to Subdivision, Development and Servicing Bylaw No. 7900 - Miscellaneous Housekeeping

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A bylaw to amend the "City of Kelowna Subdivision, Development and Servicing Bylaw No. 7900".

The Municipal Council of the City of Kelowna, in open meeting assembled, enacts that City of Kelowna Subdivision, Development and Servicing Bylaw No. 7900 be amended as follows:

1. THAT the **INDEX, SCHEDULES** be amended by deleting:

- "5. City of Kelowna Construction Standards (Supplemental Standards to MMCD "GOLD" Book)
6. Master Municipal Construction Documents (MMCD) - 2000 Gold Book Edition (3 Volumes) - Published and Available from "The Master Municipal Construction Documents Association"

And replacing it with the following:

- "5. City of Kelowna Construction Standards (Supplemental Standards to MMCD "PLATINUM" Edition Volume II, 2009)
6. Master Municipal Construction Documents (MMCD) - 2009 Platinum Edition Volume II - Published and Available from "The Master Municipal Construction Documents Association"

2. AND THAT **SCHEDULE 4 DESIGN STANDARDS, 2. SANITARY SEWER, 2.15 Force Main, Materials**, sub-paragraph (e) be amended by deleting:

- Force main pipe must be identifiably different than water main pipe and should be white in colour (refer to supplemental specifications 5.1 Section S02732).

And replace it with:

- Force main pipe must be identifiably different than water main pipe. Refer to supplemental specifications 5.1 Section 33 34 01S.

3. AND THAT SCHEDULE 4 DRAINAGE, 3.3 MAJOR SYSTEM DESIGN, sub-section Control Structures be amended by adding the following after the sentence that reads "Build up of sediment shall not restrict inflows and suitable designs shall be provided to allow ease of sediment removals."

"Culvert and Bridge Capacity

The following service levels are to be used for design:

<u>Road Class</u>	<u>Design Flood Frequency Bridges, Culverts</u>
Arterial and Collector	1:200 year flood
Local	1:100 year storm plus provision for overflow if on major channel"

4. AND THAT SCHEDULE 4, 4. HIGHWAY be amended by deleting:

- 4.1 General
- 4.2 Road Classification
- 4.3 Vertical Alignment
- 4.4 Horizontal Alignment
- 4.5 Road Cross-Section
- 4.6 Curb and Gutter, Sidewalks and Bikepaths
- 4.7 Appurtenances
- 4.8 Pavement Structure

And replacing it with:

- 4.1 General
- 4.2 Road Classification
- 4.3 Vertical Alignment
- 4.4 Horizontal Alignment
- 4.5 Road Cross-Section
- 4.6 Curb and Gutter, Sidewalks and Bikepaths
- 4.7 Appurtenances
- 4.8 Pavement Structure
- 4.8.1 Subgrade Preparation
- 4.8.2 New Pavement Design
- 4.8.3 Design of Overlays for Existing Pavements

5. AND THAT SCHEDULE 4, 5. ELECTRICAL, ELECTRICAL, STREET LIGHTING AND COMMUNICATION WIRING, be amended by deleting:

- “5.1 General
- 5.2 Electrical
- 5.3 Street Lighting
- 5.4 Communication Wiring”

And replacing it with:

- “5.1 General
- 5.1.1 Rules and Regulations
- 5.1.2 Conduits
- 5.2 Electrical
- 5.3 Street Lighting
- 5.3.1 Design Levels
- 5.3.2 Pole Locations
- 5.4 Communication Wiring
- 5.5 Overhead/Underground Requirements
- 5.6 Kiosks/Laminate Wrapping Requirements”

6. AND THAT SCHEDULE 4, DESIGN STANDARDS, 7. HILLSIDE DEVELOPMENT STREET STANDARDS be amended by deleting:

- 7.1 General
- 7.2 Street Trees
- 7.3 Hillside Street Classification
- 7.3.1 Arterial Streets
- 7.3.2 Village Collector Streets (“Main Street”)
- 7.3.3 Collector Streets
- 7.3.4 Minor Collector Streets
- 7.3.5 Village Local Streets
- 7.3.6 Local Streets
- 7.3.7 Public Lanes
- 7.3.8 Cul-de-Sac Streets and Hillside Emergency Accesses”

And replacing it with:

- 7.4 General
- 7.5 Street Trees
- 7.6 Hillside Street Classification
- 7.3.1 Arterial Streets
- 7.3.2 Village Collector Streets (“Main Street”)
- 7.3.3 Collector Streets
- 7.3.4 Minor Collector Streets
- 7.3.5 Village Local Streets
- 7.3.6 Local Streets
- 7.3.7 Public Lanes
- 7.3.8 Cul-de-Sac Streets and Hillside Emergency Accesses
- 7.3.9 Lighting Standards
- 7.3.10 Sanitary Sewer Location and Corridors”

7. AND THAT SCHEDULE 4, 7. HILLSIDE STREET STANDARDS, 7.3.8 Cul-de-Sac Streets and Hillside Emergency Accesses title be deleted and replaced with a new title “, 7.3.8 Cul-de-Sac Streets, Hillside Emergency Accesses and Hillside Private Lanes”;

8. AND THAT SCHEDULE 4, 7. HILLSIDE STREET STANDARDS, TABLE 1 - HILLSIDE STREET STANDARDS be deleted in its entirety and replaced with a new SCHEDULE 4, 7. HILLSIDE DEVELOPMENT STREET STANDARDS, TABLE 1 - HILLSIDE DEVELOPMENT STREET STANDARDS as attached to and forming part of this bylaw as Appendix 'A' ;
9. AND THAT SCHEDULE 5, CONSTRUCTION DRAWINGS, Drawings Index for Reference, be amended by deleting:

<i>Part 2b</i>	<b>STORM AND SANITARY SEWERS</b>
SS-S50	Manhole Requirement for Services
SS-S51	Drainage Drywell
SS-S52	Drainage Drywell Installation
SS-S53	Pipe Perforation and Bedding Detail for Ground Water Recharge
SS-S54	Catch Basin Trapping Hood
SS-S55	Flow Control Chamber (with sediment grease trap)
SS-S56	IDF Curves
SS-S57	RipRap Design Chart

And replacing it with:

<i>Part 2b</i>	<b>STORM AND SANITARY SEWERS</b>
SS-S50	Manhole Requirement for Services
SS-S51	Drainage Drywell
SS-S52	Drainage Drywell Installation
SS-S53	Pipe Perforation and Bedding Detail for Ground Water Recharge
SS-S54	Catch Basin Trapping Hood
SS-S55	Flow Control Chamber (with sediment grease trap)
SS-S56	IDF Curves
SS-S57	RipRap Design Chart
SS-S9	Inspection Chamber for 100 to 200 Sanitary Sewer Connection

10. This bylaw shall come into full force and effect as of the date of adoption.

11. This bylaw shall be cited as "Bylaw No. 10696, being Amendment No. 16 to Subdivision, Development and Servicing Bylaw No. 7900".

Read a first, second and third time by the Municipal Council this

Adopted by 2/3 majority of the Municipal Council of the City of Kelowna this

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Mayor

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City Clerk

APPENDIX "A"

Hillside Street Standards										
Street Conditions		Street Section Specifications								
Street Type and Condition (Std Drawing number)		Max. Units Served	Design Speed <sup>1</sup> (km/h)	Max. Grade (%)	ROW <sup>2</sup> (m)	Street Width <sup>2</sup> (m)	Parking	Curb & Gutter	Sidewalk <sup>3</sup>	Street Trees
Arterial Streets		>600								
Condition A (median) (SS-H1)	within village centre where environmental conditions permit		60 (50) <sup>4</sup>	8 (10) <sup>11</sup>	23.0	16.0 <sup>5</sup>	none permitted	barrier curb required	required both sides <sup>6</sup>	required both sides and in median
Condition B (SS-H2)	within 10-minute walking distance <sup>7</sup> of village centre; or, within village centre where environmental conditions do not permit the use of Condition A		60 (50) <sup>4</sup>	8 (10) <sup>11</sup>	17.0 <sup>8</sup>	10.0 <sup>8</sup>	none permitted	barrier curb required	Required both sides <sup>6</sup>	required both sides
Condition C (SS-H3)	greater than a 10-minute walking distance <sup>7</sup> from village centre.		60 (50) <sup>4</sup>	8 (10) <sup>11</sup>	15.0 <sup>8</sup>	10.0 <sup>8</sup>	none permitted	barrier curb required	Required one side <sup>6</sup>	required both sides
Village Collector Streets (main street)		600								
Condition A (SS-H4)	• where commercial development fronts street		50	10	20.0	12.8	required on-street both sides	barrier curb required	required both sides	required both sides
Condition B (SS-H5)	• where no commercial development fronts street		50	10	20.0	12.8	required on-street both sides	barrier curb required	required both sides	required both sides
Collector Streets		600								
Condition A (SS-H6)	• development <sup>9</sup> fronts both sides		50 (40) <sup>4</sup>	10 (12) <sup>11</sup>	18.2 <sup>8</sup>	8.6 <sup>8</sup>	required above curb both sides	rollover curb required	required both sides <sup>6</sup>	required both sides
Condition B (SS-H7)	• development <sup>9</sup> fronts one side only		50 (40) <sup>4</sup>	10 (12) <sup>11</sup>	14.9 <sup>8</sup>	8.6 <sup>8</sup>	required above curb one side	rollover curb required <sup>12</sup>	required one side <sup>6</sup>	required both sides
Condition C (SS-H8)	• no development <sup>9</sup> fronts street		50 (40) <sup>4</sup>	10 (12) <sup>11</sup>	14.0 <sup>8</sup>	8.6 <sup>8</sup>	none permitted <sup>10</sup>	rollover curb required <sup>12</sup>	required one side <sup>6</sup>	required both sides
Minor Collector Streets		500								
Condition A (SS-H9)	• development <sup>9</sup> fronts both sides; or, development <sup>9</sup> fronts one side only		50 (40) <sup>4</sup>	10 (12) <sup>11</sup>	13.3 <sup>8</sup>	7.0 <sup>8</sup>	required above curb one side	rollover curb required	required one side <sup>6</sup>	required on one side
Condition B (SS-H10)	• no development <sup>9</sup> fronts street		50 (40) <sup>4</sup>	10 (12) <sup>11</sup>	12.4 <sup>8</sup>	7.0 <sup>8</sup>	none permitted <sup>10</sup>	rollover curb required	required one side <sup>6</sup>	required on one side

<b>TABLE 1 (continued)</b>										
<b>Hillside Street Standards</b>										
Street Conditions			Street Section Specifications							
Street Type and Condition (Std Drawing number)		Max. Units Served	Design Speed <sup>1</sup> (km/h)	Max. Grade (%)	ROW (m)	Street Width <sup>2</sup> (m)	Parking	Curb & Gutter	Sidewalk <sup>3</sup>	Street Trees
<b>Village Local Streets</b>		<b>200</b>								
Village Local (SS-H11)	<ul style="list-style-type: none"> <li>development<sup>9</sup> fronts at least on side</li> </ul>		40 (30) <sup>4</sup>	12	17.4	8.7	required on-street both sides	barrier curb required	required minimum one side <sup>6</sup>	required both sides
<b>Local Streets</b>		<b>200</b>								
Condition A (SS-H12)	<ul style="list-style-type: none"> <li>development<sup>9</sup> fronts both sides</li> </ul>		30	15	14.1	6.0	required above curb both sides	rollover curb required	optional one side <sup>6</sup>	required on one side
Condition B (SS-H13)	<ul style="list-style-type: none"> <li>development<sup>9</sup> fronts one side only</li> </ul>		30	15	12.3	6.0	required above curb one side	rollover curb required	optional one side <sup>6</sup>	required on one side
Condition C (SS-H14)	<ul style="list-style-type: none"> <li>no development<sup>9</sup> fronts street</li> </ul>		30	15	10.5	6.0	none permitted <sup>10</sup>	rollover curb required	optional one side <sup>6</sup>	required on one side
<b>Public Lane</b>		<b>10</b>								
(SS-H15)	<ul style="list-style-type: none"> <li>all cases</li> </ul>		20	12 (15) <sup>11</sup>	6.0	5.7	on edge of paved surface	rollover curb required	none	--
<b>Hillside Emergency and Utility Vehicle Access</b>		<b>--</b>								
<ul style="list-style-type: none"> <li>provide a secondary access route, if possible, where a cul-de-sac exceeds maximum street length as specified by the City of Kelowna</li> </ul>			--	15	4.5	4.5	--	--	--	--

**Footnotes:**

1. See Table 2 for alignment design criteria for each design speed.
2. Street width measured from curb face (gutterline).
3. For all conditions, sidewalks should terminate at a destination or connect with another sidewalk or trailhead.
4. Minimum permitted design speed reduction, where necessary due to topographic constraints, and approved by the City.
5. Separate left turn lanes to be provided in the medians.
6. Where issues of livability warrant, (eg. extreme topographic conditions) sidewalk(s) may be located in a separate dedicated corridor and street ROW width reduced accordingly. Unless necessary for pedestrian connectivity to schools, parks, commercial areas or land beyond, a sidewalk is not required for local streets accessing 30 lots or less. Street right of way may be reduced accordingly if a sidewalk is not required. (see Standard Drawings)
7. For this purpose, the 10-minute walking distance is considered to be ½ mile (0.8 km).
8. Where required, ROW and street widths will be increased at major intersections to provide for separate turning lanes.
9. "Development" includes all residential, mixed-use, commercial, institutional and park uses.
10. All parking shall be managed on-site or within small parking pullouts, as required.
11. Maximum grade permitted where necessary due to topographic constraints and as approved by the City.
12. Where no fronting development (driveway access not required), barrier curbs to be considered to restrict illegal parking on sidewalks.