# City of Kelowna Regular Council Meeting AGENDA



Monday, September 24, 2018 1:30 pm Council Chamber City Hall, 1435 Water Street

sales subzone.

**Pages** 1. Call to Order This meeting is open to the public and all representations to Council form part of the public record. A live audio and video feed is being broadcast and recorded by CastaNet and a delayed broadcast is shown on Shaw Cable. Confirmation of Minutes 4 - 14 2. PM Meeting - September 17, 2018 **Public in Attendance** 3. International Children's Games Committee Update 15 - 23 3.1 Annual Presentation to Council by Heather Schneider, Society President. **Development Application Reports & Related Bylaws** 4. 24 - 34 Wallace Hill Rd 4205, A17-0005 - Walter Baran 4.1 To consider an application to the Agricultural Land Commission for a Subdivision for the purpose of a Homesite Severance. Non-Development Reports & Related Bylaws 5. 5.1 Amendment to Development Application Fees Bylaw No. 10560 35 - 37 To amend the Development Application Fees Bylaw No. 10560 to include fees for rezoning to a retail cannabis sales subzone. 38 - 39 BL11684 - Amendment No. 7 to Development Application Fees Bylaw No. 10560 5.2 To give Bylaw No. 11684 first, second and third readings in order to amend the Development Application Fees Bylaw to include fees for rezoning to a retail cannabis

5-3	Harvey Ave 1864 - Ponderosa Motel	40 - 90
	This report provides the basis for the recommended resolutions requiring the owner of the Property, formerly operated as the Ponderosa Motel, to take the necessary remedial action(s) to remedy the hazardous, unsafe and nuisance conditions at the Property.	
5-4	Fall 2018 Rental Housing Agreement Bylaws	91 - 92
	To authorize the City to enter into a Housing Agreement with 1017476 BC Ltd., Ki-Low-Na Friendship Society and 554764 BC Ltd. for purpose built rental housing projects that are pursuing Revitalization Tax Exemption Agreements in accordance with Bylaw No. 9561.	
5.5	Highway 33 E 1759, BL11688 - Housing Agreement Authorization Bylaw - Ki-Low-Na Friendship Society	93 - 100
	To give Bylaw No. 11688 first, second and third readings in order to authorize the City of Kelowna to enter into a Housing Agreement with the Ki-Low-Na Friendship Society.	
5.6	Nickel Rd 200-220, BL11689 - Housing Agreement Authorization Bylaw - 554764 BC Ltd.	101 - 108
	To give Bylaw No. 11689 first, second and third readings in order to authorize the City of Kelowna to enter into a Housing Agreement with 554764 BC Ltd.	
5.7	Richter St 1730 & 1740, BL11690 - Housing Agreement Authorization Bylaw - 1017476 BC Ltd.	109 - 116
	To give Bylaw No. 11690 first, second and third readings in order to authorize the City of Kelowna to enter into a Housing Agreement with 1017476 BC Ltd.	
5.8	Rental Housing Revitalization Tax Exemption Agreements	117 - 181
	To bring forward four 10-year Revitalization Tax Exemption Agreements for approval to support the purpose-built rental housing projects identified in the report from the Planner Specialist, dated September 24, 2018 in accordance with Revitalization Tax Exemption Program Bylaw No. 9561	
5.9	Okanagan Rail Trail – Grand Opening and Status Report	182 - 196
	To provide Council information on the Grand Opening and updated status of the Okanagan Rail Trail.	
5.10	2018 Budget Amendment – Laurel Packinghouse Museum Courtyard	197 - 198
	To change the source of funding for the development of the Laurel Packinghouse Courtyard project to using \$235,000 in BC Gaming Grant funding received.	

# 5.11 Budget Amendment for the Park Improvement & Shoreline Stabilization works at Strathcona Park

199 - 200

To amend the 2018 Financial Plan in order to proceed with the consulting work for the shoreline stabilization and park development project between Strathcona Park and Royal Avenue.

#### 5.12 Canyon Falls Neighbourhood Learning Centre

201 - 215

To provide Council with an update on the Neighbourhood Learning Centre at Canyon Falls Middle School and to seek Councils approval to develop a joint-use agreement with School District #23.

#### 6. Bylaws for Adoption (Non-Development Related)

### 6.1 BL11657 - 2019 Permissive Tax Exemption Bylaw

216 - 229

#### Requires a 2/3 majority of Council.

To adopt Bylaw No. 11657 in order to exempt from taxation certain lands and improvements situated in the City of Kelowna.

# 6.2 BL11692 - Amendment No. 18 to Subdivision, Development and Servicing Bylaw No. 7900

230 - 362

To adopt Bylaw No. 11692 in order to amend Subdivision, Development and Servicing Bylaw No. 7900 to align with industry best practice.

#### 7. Mayor and Councillor Items

#### 8. Termination



# City of Kelowna Regular Council Meeting Minutes

Date: Location: Monday, September 17, 2018

Council Chamber

City Hall, 1435 Water Street

Members Present

Mayor Colin Basran, Councillors Maxine DeHart, Ryan Donn, Gail Given, Tracy Gray, Charlie Hodge, Brad Sieben, Mohini Singh and Luke Stack\*

Staff Present

City Manager, Doug Gilchrist; City Clerk, Stephen Fleming; Community Planning Department Manager, Ryan Smith\*; Urban Planning Manager, Terry Barton\*; Suburban and Rural Planning Manager, Dean Strachan\*; Community Planning Supervisor, Laura Bentley\*; Acting Divisional Director, Community Planning & Strategic Investments, Derek Edstrom\*; Acting Saufferer\*; Property Investments, **Johannes** Strategic Management Manager, Mike Olson\*; Fire Chief, Travis Whiting\*; Infrastructure Engineering Manager, Joel Shaw\*; Integrated Transportation Department Manager, Rafael Villarreal\*; Transit and Programs, Matt Worona\*; Divisional Director, Infrastructure, Alan Newcombe\*; Divisional Director, Financial Services, Genelle Davidson\*; Revenue Supervisor, Angie Schumacher\*; Solid Waste Supervisor, Scott Hoekstra\*; Infrastructure Operations Department Manager, Ian Wilson\*; Building Services Manager, Martin Johansen, Legislative Coordinator (Confidential), Clint McKenzie

Guests

Cynthia Coates, Regional District of Central Okanagan Waste Reduction Office and Stephen Power, HDR, Consultant

(\* Denotes partial attendance)

#### Call to Order

Mayor Basran called the meeting to order at 1:31 p.m.

Mayor Basran advised that the meeting is open to the public and all representations to Council form part of the public record. A live audio and video feed is being broadcast and recorded by Castanet and a delayed broadcast is shown on Shaw Cable.

#### 2. Confirmation of Minutes

Moved By Councillor Hodge/Seconded By Councillor Gray

R852/18/09/17 THAT the Minutes of the Regular Meetings of August 27, 2018 be confirmed as circulated.

**Carried** 

- Development Application Reports & Related Bylaws
  - 3.1 Lougheed Rd 205, Z18-0016 Mission Group Commercial Ltd., Inc. No. BC0933421

Staff:

Displayed a PowerPoint Presentation summarizing the application.

# Moved By Councillor Given/Seconded By Councillor Stack

R853/18/09/17 THAT Rezoning Application No. Z18-0016 to amend the City of Kelowna Zoning Bylaw No. 8000 by changing the zoning classification of Lot A, Section 2, Township 23, ODYD, Plan KAP84518, located at 205 Lougheed Road, Kelowna, BC from the CD25 – Light Industrial – Residential Mixed Use zone to the I2 – General Industrial zone, be considered by Council;

AND THAT the Rezoning Bylaw be forwarded to a Public Hearing for further consideration;

AND THAT final adoption of the Rezoning Bylaw be considered subsequent to the outstanding conditions of approval as set out in Attachment "A" attached to the Report from the Community Planning Department dated Sept 17<sup>th</sup>, 2018;

AND FURTHER THAT final adoption of the Rezoning Bylaw be considered in conjunction with Council's consideration of a Development Permit for the subject property.

Carried

3.2 Lougheed Rd 205, Z18-0016 (BL11681) - Mission Group Commercial Ltd., Inc. No. BC0933421

# Moved By Councillor Gray/Seconded By Councillor Hodge

R854/18/09/17 THAT Bylaw No. 11681 be read a first time.

Carried

3.3 Thompson Rd 1260, Z18-0080 - Karoly Gabor and Cristeta Pastorin Gabor

Staff:

Displayed a PowerPoint Presentation summarizing the application.

# Moved By Councillor Sieben/Seconded By Councillor Singh

R855/18/09/17 THAT Rezoning Application No. Z18-0080 to amend the City of Kelowna Zoning Bylaw No. 8000 by changing the zoning classification of Lot 71 Section 22 Township 26 Osoyoos Division Yale District Plan 19162, located at 1260 Thompson Road, Kelowna, BC from the RU1 – Large Lot Housing zone to the RU6 – Two Dwelling Housing zone, be considered by Council;

AND THAT the Rezoning Bylaw be forwarded to a Public Hearing for further consideration;

AND FURTHER THAT final adoption of the Rezoning Bylaw be considered subsequent to the outstanding conditions of approval as set out in Schedule "A" attached to the Report from the Community Planning Department dated September 17, 2018.

Carried

3.4 Thompson Rd 1260, Z18-0080 (BL11682) - Karoly Gabor and Cristeta Pastorin Gabor

## Moved By Councillor Hodge/Seconded By Councillor Gray

R856/18/09/17 THAT Bylaw No. 11682 be read a first time.

Carried

## 3.5 Moraine Ct 675, Z18-0085, Aislinn and Michael O'Grady

Staff:

Displayed a PowerPoint Presentation summarizing the application.

# Moved By Councillor DeHart/Seconded By Councillor Hodge

R857/18/09/17 THAT Rezoning Application No. Z18-0085 to amend the City of Kelowna Zoning Bylaw No. 8000 by changing the zoning classification of Lot A, Section 22, Township 26, ODYD, Plan 32670 located at 675 Moraine Ct from RU1 – Large Lot zone to RU1c – Large Lot Housing with Carriage House zone be considered by Council;

AND THAT the Rezoning Bylaw be forwarded to a Public Hearing for further consideration.

Carried

# 3.6 Moraine Ct 675, Z18-oo85 (BL11683) - Aislinn and Michale O'Grady

## Moved By Councillor Gray/Seconded By Councillor Hodge

R858/18/09/17 THAT Bylaw No. 11683 be read a first time.

Carried

# 3.7 McBride Rd 1180, Z18-0082 - Gerard Charles Feist

Staff:

Displayed a PowerPoint Presentation summarizing the application.

# Moved By Councillor Hodge/Seconded By Councillor Given

R859/18/09/17 THAT Rezoning Application No. Z18-0082 to amend the City of Kelowna Zoning Bylaw No. 8000 by changing the zoning classification of Lot 3, Section 19, Township 26, ODYD, Plan 13804 located at 1180 McBride Road from RU1 – Large Lot Housing zone to RU1c – Large Lot Housing with Carriage House zone be considered by Council;

AND THAT the Rezoning Bylaw be forwarded to a Public Hearing for further consideration.

Carried

# 3.8 McBride Rd 1180, Z18-0082 (BL11685) - Gerard Charles Feist

# Moved By Councillor Donn/Seconded By Councillor Given

R860/18/09/17 THAT Bylaw No. 11685 be read a first time.

Carried

# 3.9 Fitzpatrick Rd 425, Z18-0079 - Harpal Singh Kohri and Kirandeep Kohri

Staff:

- Displayed a PowerPoint Presentation summarizing the application.

## Moved By Councillor Singh/Seconded By Councillor Stack

R861/18/09/17 THAT Rezoning Application No. Z18-0079 to amend the City of Kelowna Zoning Bylaw No. 8000 by changing the zoning classification of Lot 4 Section 35 Township 26 Osoyoos Division Yale District Plan 23428, located at 425 Fitzpatrick Road, Kelowna, BC from the RU1 – Large Lot Housing zone to the RU6 – Two Dwelling Housing zone, be considered by Council;

AND THAT final adoption of the Rezoning Bylaw be considered subsequent to the outstanding conditions of approval as set out in Schedule "A" attached to the Report from the Community Planning Department dated September 17, 2018;

AND THAT final adoption of the Rezoning Bylaw be considered subsequent to the approval of the Ministry of Transportation and Infrastructure;

AND FURTHER THAT the Rezoning Bylaw be forwarded to a Public Hearing for further consideration.

Carried

3.10 Fitzpatrick Rd 425, Z18-0079 (BL11686) - Harpal Singh Kohri and Kirandeep Kohri Moved By Councillor Donn/Seconded By Councillor Given

R862/18/09/17 THAT Bylaw No. 11686 be read a first time.

Carried

3.11 Union Rd 2053 and Summerhill Pl 148, Z18-0060 - 1119422 BC Ltd. & City of Kelowna

Staff:

- Displayed a PowerPoint Presentation summarizing the application.

# Moved By Councillor Donn/Seconded By Councillor Singh

R863/18/09/17 THAT Rezoning Application No. Z18-0060 to amend the City of Kelowna Zoning Bylaw No. 8000 by changing the zoning classification of Lot M, Section 4, Township 23 ODYD, District Plan KAP56062 located at 2053 Union Road, Kelowna, BC from the A1 – Agricultural 1 zone to the RU6 – Two Dwelling Housing zone be considered by Council;

AND THAT Rezoning Application No. Z18-0060 to amend the City of Kelowna Zoning Bylaw No. 8000 by changing the zoning classification of Lot N, Section 4, Township 23, ODYD, Plan KAP56062 located at 148 Summerhill Place, Kelowna, BC from the RU2 – Medium Lot Housing zone to the RU6 – Two Dwelling Housing zone be considered by Council;

AND FURTHER THAT the Rezoning Bylaw be forwarded to Public Hearing for further consideration.

Carried

3.12 Union Rd 2053 and Summerhill Pl 148, Z18-0060 (BL11687) - 1119422 BC Ltd. & City of Kelowna

# Moved By Councillor Stack/Seconded By Councillor DeHart

R864/18/09/17 THAT Bylaw No. 11687 be read a first time.

Carried

#### Bernard Ave 366-368, DP18-0135 - 1109069 BC LTD., Inc. No BC1109069 3.13

Staff:

Displayed a PowerPoint Presentation summarizing the application and responded to questions from Council.

# Moved By Councillor Sieben/Seconded By Councillor DeHart

R865/18/09/17 THAT Council authorizes the issuance of Development Permit No. DP18-0135 for Parcel A and B on Plan B1311 of Lot 2 Block 17 District Lot 139 ODYD Plan 462, located at 366 & 368 Bernard Avenue, Kelowna, BC subject to the following:

1. The dimensions and siting of the building to be constructed on the land be in accordance with Schedule "A,"

The exterior design and finish of the building to be constructed on the land, be in accordance with Schedule "B";

AND FURTHER THAT this Development Permit is valid for two (2) years from the date of Council approval, with no opportunity to extend.

Carried

#### Bylaws for Adoption (Development Related) 4.

McCarthy Rd 9580, Z18-0050 - The Flowr Group (Okanagan) Inc., Inc. No. 4.1 BC0974062

# Moved By Councillor Given/Seconded By Councillor Hodge

R866/18/09/17 THAT Rezoning Bylaw No. 11649 be amended at third reading to revise the legal description of the subject properties from the northerly 92.5 feet of Lot 3 measured along the east boundary of the said lot by the full depth thereof shown on Plan B15892 Section 11 Township 20 ODYD Plan 4273 and Lot 2 Section 11 Township 20 ODYD Plan 4273 to Lot A Section 11 Township 20 ODYD Plan Epp84663;

AND THAT final adoption of Rezoning Bylaw No. 11649 be considered by Council.

McCarthy Rd 9580, Z18-0050 (BL11649) - The Flowr Group (Okanagan) Inc. 4.2

# Moved By Councillor DeHart/Seconded By Councillor Stack

R867/18/09/17 THAT Bylaw No. 11649 be amended at 3rd reading by deleting the legal descriptions that read:

The Northerly 92.5 feet of Lot 3 measured along the east boundary of the said lot by the full depth thereof shown on Plan B15892 Section 11 Township 20 ODYD Plan 4273 and Lot 2

Section 11 Township 20 ODYD Plan 4273

And replacing it with:

Lot A Section 11 Township 20 ODYD Plan EPP84663.

AND THAT Bylaw No. 11649 be adopted.

Carried

#### Non-Development Reports & Related Bylaws 5.

# Capri-Landmark Urban Centre Plan Endorsement

Staff:

Displayed a PowerPoint Presentation providing an overview of the Capri-landmark Urban Centre Plan and responded to questions from Council.

# Moved By Councillor Stack/Seconded By Councillor Sieben

R869/18/09/17 THAT Council defer further consideration of the Capri-Landmark Urban Centre

AND THAT Council direct staff to reconsider the transportation network and parks as presented in the current Plan and report back to Council.

Carried

Councillors Donn and Given - Opposed

#### City of Kelowna Land Strategy 5.2

Staff:

Displayed a PowerPoint Presentation summarizing the City's Land Strategy.

### Moved By Councillor Donn/Seconded By Councillor Sieben

R870/18/09/17 THAT Council receives, for information, the report from the Acting Divisional Director, Community Planning and Strategic Investments dated September 17, 2018, with respect to City of Kelowna Land Strategy;

AND FURTHER THAT Council approve the City of Kelowna Land Strategy attached as Schedule `Α'.

Carried

#### **Fortis Operating Agreement** 5.3

Staff:

Provided an overview of the Fortis Operating Agreement.

# Moved By Councillor Donn/Seconded By Councillor Hodge

R871/18/09/17 THAT Council receives for information, the Report from the Manager, Property Management, dated September 17, 2018, regarding the proposed Operating Agreement with Fortis Energy Inc.;

AND THAT Council approves the City entering into an Operating Agreement with Fortis Energy Inc. as per the general terms and conditions of the agreement attached to the Report of the Manager, Property Management, dated September 17, 2018;

AND FURTHER THAT Mayor and City Clerk be authorized to execute all documents necessary to complete the transaction.

Carried

#### Contract for Fire Dispatch Services for the City of Vernon and Okanagan Indian 5.4

Staff:

- Provided an overview of the Fire Dispatch Services Contract for the City of Vernon and Okanagan Indian Band and responded to questions from Council.

# Moved By Councillor Hodge/Seconded By Councillor Donn

<u>R872/18/09/17</u> THAT Council receives, for information, the report from the Fire Chief dated September 10, 2018 with respect to contracts for fire dispatch services for the City of Vernon (Vernon) and the Okanagan Indian Band (OKIB);

AND THAT Council approves entering into a contract to provide fire dispatch services with Vernon and OKIB in the form attached to this report;

AND THAT the Mayor and City Clerk be authorized to execute all documents associated with these transactions;

AND FURTHER THAT the 2018 Financial Plan be amended to reflect the revenues and expenses as outlined in the Financial/Budgetary Considerations section of this report.

Carried

# 5.5 Update Regional Transportation Plan and STPCO

Item deferred to later in the meeting.

# 5.6 Bylaw 7900 - Schedule 4 and 5 Update

Staff:

 Displayed a PowerPoint Presentation summarizing the amendments to Bylaw No. 7900 and Council Policy 266.

# Moved By Councillor Given/Seconded By Councillor Donn

R874/18/09/17 THAT Council receives, for information, the report from the Infrastructure Engineering Manager dated September 17, 2018, with respect to amending the Subdivision, Development and Servicing Bylaw 7900 Design and Construction Standards and Council Policy No. 266 – Subdivision, Development & Servicing - Approved Products List;

AND THAT Council Policy No. 266 – Subdivision, Development & Servicing – Approved Products List be amended as set out in Attachment A to the Report of the Infrastructure Engineering Manager dated September 17, 2018;

AND FURTHER THAT Bylaw No. 11692, being Amendment No. 18 to Subdivision, Development and Servicing Bylaw No. 7900 be forwarded for reading consideration.

Carried

5.7 BL11692 - Amendment No. 18 to Subdivision, Development and Servicing Bylaw No. 7900

# Moved By Councillor Sieben/Seconded By Councillor DeHart

R875/18/09/17 THAT Bylaw No. 11692 be read a first, second and third time.

Carried

# 5.5 Update Regional Transportation Plan and STPCO

Staff:

- Displayed a PowerPoint Presentation summarizing the STPCO update.

- Responded to questions from Council.

Guest, Stephen Power, HDR

- Continued with the PowerPoint Presentation and provided an update on the Regional Transportation Plan.

## Moved By Councillor Given/Seconded By Councillor Hodge

R873/18/09/17 THAT Council receives, for information, the report of the Integrated Transportation Manager, dated September 17, 2018 with respect to the Sustainable Transportation Partnership of the Central Okanagan (STPCO) and the Regional Transportation Plan.

Carried

## 5.8 2018 Budget Amendment – Phase 2 Water Integration Project

Staff:

- Provided a summary of reasons for requesting the budget amendment.

#### Moved By Councillor Stack/Seconded By Councillor Singh

<u>R876/18/09/17</u> THAT Council receives for information, the report from the Senior Engineer – Infrastructure, dated September 17, 2018 regarding a 2018 Budget Amendment – Phase 2 Water Integration Project;

AND THAT the 2018 Financial Plan be amended to include twelve million dollars (\$12 million) of Provincial funding for the Phase 2 Water Integration Project.

Carried

# 5.9 2018 Flood Damage Response and Recovery

Staff:

- Provided a summary of reasons for requesting the transfer of funds.

## Moved By Councillor Hodge/Seconded By Councillor Given

R877/18/09/17 THAT Council receives for information, the report from the Infrastructure Divisional Director dated September 17, 2018 regarding the 2018 Flood Damage Response and Recovery;

AND THAT the 2018 Financial Plan be adjusted to include the transfer of up to \$60,000 from the 2018 Freshet Preparation project to support the ongoing work for the 2018 Flood Damage Response and Recovery project.

**Carried** 

#### 5.10 Debt Policy

Staff.

Displayed a PowerPoint Presentation summarizing the Debt Financing Policy.

### Moved By Councillor Given/Seconded By Councillor Hodge

R878/18/09/17 THAT Council adopts Council Policy No. 377, being a Debt Policy as outlined in the report from the Divisional Director, Financial Services dated September 17, 2018.

Carried

#### Investment of Kelowna Funds 5.11

Staff:

Displayed a PowerPoint Presentation summarizing the amendments to the Policy.

### Moved By Councillor Given/Seconded By Councillor Hodge

R879/18/09/17 THAT Council Policy No. 316, being Investment of Kelowna Surplus Funds, be revised as outlined in the Report from the Divisional Director, Financial Services dated September 17, 2018.

Carried

#### 2019 Permissive Tax Exemption Bylaw No. 11657 5.12

Councillor Stack declared a conflict of interest as his employer may be a recipient of a permissive tax exemption and left the meeting at 4:47 p.m.

Staff:

Displayed a PowerPoint Presentation summarizing the recommended changes to the 2019 Permissive Tax Exemptions and responded to questions from Council.

# Moved By Councillor Gray/Seconded By Councillor Hodge

R880/18/09/17 THAT Council receives, for information, the Report from the Revenue Supervisor dated September 17, 2018 with respect to the 2019 Permissive Tax Exemption Bylaw;

AND THAT Bylaw No. 11657, being the Permissive Tax Exemption Bylaw be forwarded for reading consideration.

Carried

#### BL11657 - 2019 Permissive Tax Exemption Bylaw 5.13

# Moved By Councillor Sieben/Seconded By Councillor DeHart

R881/18/09/17 THAT Bylaw No. 11657 be read a first, second and third time.

Carried

Councillor Stack rejoined the meeting at 4:52 p.m.

#### Update on Curbside Cart Collection and Recycle BC 5.14

Staff:

Displayed a PowerPoint Presentation summarizing the partnership with Recycle BC and responded to questions from Council.

# Guest, Cynthia Coates, Regional District of Central Okanagan Waste Reduction Office

Responded to questions from Council.

# Moved By Councillor Donn/Seconded By Councillor Given

R882/18/09/17 THAT Council direct staff to maintain the existing curbside recycling program

AND THAT Council authorizes the Mayor and the City Clerk to execute a contract extension with Recycle BC for a new five-year term (November 30, 2018 – December 31, 2023).

Carried

# 5.15 Amendment to 2018 Financial Plan – City Hall Elevator Renewal

#### Staff:

- Provided reasons the City Hall elevator requires replacing.

## Moved By Councillor Hodge/Seconded By Councillor Singh

R883/18/09/17 THAT Council receives, for information, the report from the Building Services Manager dated September 17, 2018, with respect to a budget amendment for \$77,850.

AND THAT the 2018 Financial Plan be amended to include up to \$77,850 for the City Hall Elevator Renewal project funded from the Building Repair Reserve.

Carried

#### 5.16 Downtown Kelowna Business Improvement Area

#### Staff:

- Presented the Certificate of Sufficiency to Council and confirmed that Council may proceed with adoption consideration.

#### Moved By Councillor DeHart/Seconded By Councillor Sieben

R884/18/09/17 THAT Council receives for information, the Certificate of Sufficiency from the City Clerk dated September 17, 2018 pertaining to the establishment of the Downtown Kelowna Business Improvement Area.

AND THAT Bylaw No. 11645 being the Downtown Kelowna Business Improvement Area Bylaw be forwarded for adoption.

Carried

# 5.17 BL11645 - Kelowna Downtown Business Improvement Area (2019-2023)

# Moved By Councillor Singh/Seconded By Councillor Sieben

R885/18/09/17 THAT Bylaw No. 11645 be adopted.

Carried

#### 6. Mayor and Councillor Items

#### Councillor DeHart:

- Reminder that the Cops for Kids Ride is back in town later this week.
- Spoke to her attendance at a Celebrity Tennis Tournament.
- Reminder that the Chinese Fall Lantern Festival is on Sunday, September 23<sup>rd</sup>.

#### Councillor Sieben:

- Congratulated Councillor Donn for successfully warming up the crowd at the well attended Terry Fox Run.

#### Councillor Hodge:

- Commented on the closing of Rosie's Pub; a long time Kelowna Institution and wished all the best to Rosie as an outstanding downtown business owner for so many years.

Councillor Gray:

Spoke to her attendance at the Parkinson Super Walk and provided a reminder that there is a Kidney Walk on Sunday, September 23rd at City Park.

#### Councillor Donn:

- Commented that 22 new paramedics have been hired in the Okanagan, 16 of whom will be in
- Congratulated those who stepped up to run for public office.

#### Councillor Given:

Spoke to her attendance along with the Mayor at UBCM and felt that Kelowna was well received in meetings with Ministers.

#### Mayor Basran:

Spoke to his attendance at UBCM where he met with Ministers and lobbied for more support for additional supportive spaces coming from the Journey Home Strategy initiative.

Commented on joint research efforts from UBCO, TRU, and UNBC, with support from the corresponding three Mayors, for the Province to fund research chairs in natural disasters and climate change at each institution.

Spoke to his participation in a press conference on permitting local governments to impose a vacant home levy rather than a Province wide Speculation Tax.

#### Termination 7.

This meeting was declared terminated at 5:32 pm.

Mayor Basran /cm/acm



Presentation to Kelowna City Council September 17, 2018

# TEAM KELOWNA

INTERNATIONAL CHILDREN'S GAMES



# THE JERUSALEM GAMES JULY 29 – AUGUST 3, 2018

- 1,200 ATHLETES
- 69 CITIES
- 3 CANADIAN CITIES- WINDSOR, HAMILTON, AND KELOWNA
- SPORTS: ATHLETICS, FENCING, STREETBALL 3 X 3, BASKETBALL 5 X 5, TENNIS, JUDO, SWIMMING, SOCCER, VOLLEYBALL
- FIRST GAMES IN ISRAEL 50<sup>TH</sup> ANNIVERSARY OF THE ICG, WWW.ICG-JERUSALEM2018.COM/
- SECOND LARGEST CITY



# TEAM KELOWNA -16 ATHLETES 3 COACHES 1 HOD 1 ASS'T 1 CITY REP

# **Swimmers:**

Lauren Griffin-Lepine Teagan Wright Coach Jennifer Griffin-Lepine

# **Girls Basketball**

Avery Chalmers
Jordyn Elliott
Shaelyn Faitalay
Asia Hanson
Phoebe Molgat
Denae Skelton
Tatum Wade
Coach: Mitch Goodwin

# Boys basketball

Noah Burnett
Kyle Houston
Michael Kraus
Alex Mace
Dominic Malfair
Liam McAusland
Tristan Morgan
Coach: Jayson McCarthy

Special thanks to the City of Kelowna and family, sport and community sponsors



# THE GAMES















# GIRLS BASKETBALL - SILVER MEDAL









# **BOYS BASKETBALL – FOURTH PLACE!**



# **SWIMMERS**







Congrats to each of our swimmers who both swam personal bests at the Games!!

# ATHLETE FEEDBACK ON THE GAMES

**AVERY CHALMERS** 





- TWO NEW COMMITTEE MEMBERS
- LAKE PLACID WINTER GAMES JANUARY 6 11, 2019 GIRLS HOCKEY, BIATHLON AND CROSS COUNTRY
- UFA RUSSIA: JULY 2019 CLIMBING, SOCCER AND BEACH VOLLEYBALL.
- KECSKEMET HUNGARY JULY 2020



# REPORT TO COUNCIL



Date: September 24, 2018

**RIM No.** 1210-21

To: City Manager

From: Community Planning Department (TH)

**Application:** A17-0005 **Owner:** Walter Baran

Address: 4205 Wallace Hill Road Applicant: Rosanne Stotz

**Subject:** ALR Homesite Severance Application

Existing OCP Designation: REP – Resource Protection Area

Existing Zone: A1 – Agriculture 1

#### 1.0 Recommendation

THAT Agricultural Land Reserve Appeal No. A17-0005 for Lot 1 Section 34 Township 29 ODYD Plan 6171, located at 4205 Wallace Hill Road, Kelowna for a Homesite Severance Subdivision of agricultural land in the Agricultural Land Reserve pursuant to Section 21(2) of the Agricultural Land Commission Act, be supported by Council subject to the following:

- 1. Decommissioning of the dwelling identified as *Dwelling 2* in Schedule "A" to an agricultural accessory structure, or demolition of the structure;
- 2. Removal of mobile home identified as Dwelling 3 in Schedule "A";
- 3. Registration of a Section 219 Restrictive Covenant to establish a Residential Footprint on the remainder parcel in general accordance with Schedule "B";
- 4. Registration of a Section 219 Restrictive Covenant on the newly created lot to limit location of the driveway.

AND THAT Council directs Staff to forward the subject application to the Agricultural Land Commission for consideration.

#### 2.0 Purpose

To consider an application to the Agricultural Land Commission for a Subdivision for the purpose of a Homesite Severance.

#### 3.0 Community Planning

Community Planning supports the application with conditions as eligibility is met under the requirements set by the Agricultural Land Commission (ALC) regarding homesite severance. The proposed subdivision with conditions will also see the subject parcel brought into compliance regarding multiple dwellings on the parcel.

Kelowna's Agricultural Plan recommends continued support for homesite severance applications consistent with ALC Policy #11. This policy allows farmers to retire or sell the property while retaining the homesite for themselves. ALC policies state that consideration of any homesite severance should be reviewed in the context of the overall agriculture integrity of the parcel, where the size and configuration will, in the Commission's opinion, constitute a viable agriculture remainder. As such, homesite severance parcels are minimized in size to help ensure the remainder is viable. Staff consider City and provincial policies and regulations as well as the City of Kelowna Agricultural Advisory Committee comments (included in this report) when processing homesite severance applications.

The applicant meets the eligibility criteria for a homesite severance regarding ownership of the land prior to December 1972. As with all agricultural applications through the ALC, should this be supported by Council and the ALC, a Farm Protection Development Permit must be issued as well as all conditions typical of a subdivision in Kelowna, including a Preliminary Layout Review letter.

Kelowna's policies relating to this application are noted in 5.0 Current Development Policies section of this report. Kelowna's Agricultural Advisory Committee comments are located at the end of this report.

#### 4.0 Proposal

#### 4.1 Background

Subject Property Map: Existing Conditions



Two dwellings existed on the parcel prior to 1973 when Regional District of Central Okanagan lands were amalgamated with the City of Kelowna. At the time, a single family dwelling was permitted on an agricultural parcel, a mobile home was also permitted if used solely for immediate family or seasonal farm help. As such, it is considered that the mobile home was placed for immediate family or seasonal farm help.

Based on Building Permit records with the City of Kelowna, the following structures exist:

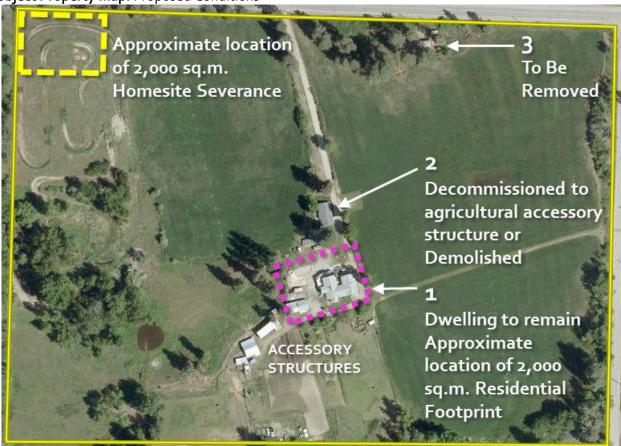
**DWELLING 1:** Principle Single Family Dwelling, constructed prior to 1973. In 1999 a secondary suite was constructed as an addition. Multiple agricultural accessory structures exist to the west.

**DWELLING 2:** Pickers Cottage, Building Permit issued 1988. Legal documents signed by Walter Baran declared "the cottage placed on the subject lands will be used solely by the families of full time agricultural workers on the site, or to accommodate seasonal agricultural labourers employed on the site."

**DWELLING 3:** Mobile Home located along Wallace Hill Rd. This was placed prior to 1973. This mobile home is in a location identified by the applicant as low-lying and regularly flooded.

Two known on-site septic systems exist on the property, one was expanded in 1999 when the secondary suite was added to the principle dwelling. Currently, a portion of the land has active agriculture in the form of hay production which does not warrant a full time permanent dwelling for farm help. The locations of the principle dwelling and additional two dwellings do not meet the intent of one contiguous residential footprint on agricultural land.

Subject Property Map: Proposed Conditions



#### 4.2 Project Description

The subject parcel is 27.45 acres. The application is to subdivide the agricultural parcel into two lots. The parcel known as a homesite severance is 2,000 sq.m. (0.5 acre) in size, proposed on the northwest corner of the subject property. This site is consistent with other homesite severances and the standard farm residential footprint. The remainder parcel would be 26.9 acres in size.

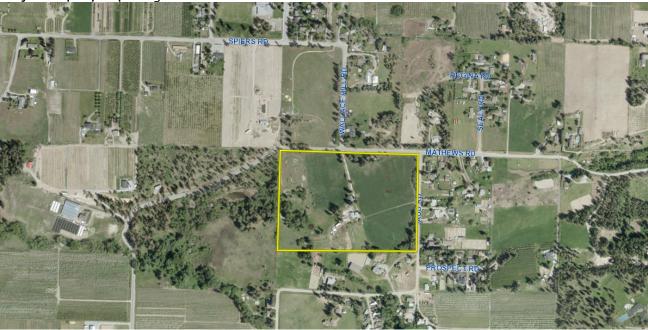
The applicant will be required to bring the subject parcel into compliance regarding multiple dwellings as a condition of the subdivision. This means decommissioning to an agricultural accessory structure or

demolishing Dwelling 2 – pickers cottage, and removal of Dwelling - 3 mobile home. As per the building permit issued for Dwelling 2, it was solely for the purpose of full and part time farm workers which is not warranted on the land. The nature of a mobile home is that it is not a permanent dwelling and may be moved or removed at the end of its intended use or lifecycle.

A residential footprint covenant is also required to be registered on the land to ensure that only one contiguous area exists on the parcel for all residential uses. This would be located to include Dwelling 1 - principle dwelling and be 2,000 sq. m. in size. Should the land owner of the subject parcel wish to place a mobile home for immediate family only, a mobile home would be permitted within the approved residential footprint that is required to be registered on legal title surrounding Dwelling 1.

Driveway access to the proposed parcel is a concern of Development Engineering. In this location, the driveway should be located as far east as possible to reduce a "hidden driveway" effect when heading east on Wallace Hill Road. Staff did bring this up as a concern early in the application and suggested the homesite severance parcel be located on the northeast corner of the subject property. The applicant expressed that the north east corner of the property floods regularly along Wallace Hill Road. The mobile home is located on the lowest elevation on the land along Wallace Hill Road.





#### 4.3 Site Context

The subject parcel is 27.45 acres (11.1 Ha) in size. It is located on south side of Wallace Hill Rd, The parcel borders both Wallace Hill Road / Mathews Road and Jaud Road. The Parcel and all surrounding parcels are within the ALR. The area is mainly zoned A1 – Agriculture 1, with A1c and RR3 zoned parcels adjacent.

Preist Creek (East Channel) also known locally as Casorso Creek runs through the southwest portion of the property and includes two natural wetlands. One wetland is a natural Riparian Marsh. Much of the west portion of the parcel remains naturalized and undisturbed due to Preist Creek. The proposed application does not directly interfere with the operation or pose a risk to the two wetlands or Preist Creek.

The Subject parcel has never been subdivided; a previous address was 2985 Mathews Road which was changed by Canada Post to adhere to naming conventions.

BC Land Classification identifies approximately 65% of the property (area unaffected by Preist Creek) to be Class 5 and 4 with improvements of irrigation to Class 3. Soil classifications follow a similar profile as all land

not within Preist Creek and wetland area are Gammil and Paradise, which drain rapidly, and typically used for vineyards, tree fruits as well as pasture and hay production.

Adjacent land uses are as follows:

Orientation	Zoning	Land Use
North	A1	Agriculture
Fact	A1	Agriculture –Stables
East	RR <sub>3</sub>	Rural Residential
South	A1	Agriculture
500111	A1c	Agriculture - Stables
West	A1	Natural Undisturbed

#### 4.4 Application Process

This homesite severance process is carried out in the following steps.

- 1. Local Council has the right to support or not support an application. Should Council not support, the application is cancelled and does not move forward. Should Council support;
- 2. The application is sent to the ALC for review. One of three outcomes will occur.
  - a. Support for the application.
  - b. Support with specific conditions/changes to the application.
  - c. Denial of the application.

Should the ALC move the application forward;

- 3. Any and all Conditions of the ALC and Local Government need to be met.
  - a. ALC will state specific items that need to be completed prior to Subdivision.
  - b. Kelowna requires a number of items to be completed prior to Subdivision. They include but are not limited to:
    - i. Farm Protection Development Permit.
    - ii. Subdivision Preliminary Layout Review letter.
    - iii. Servicing upgrades for the existing and proposed lot.
    - iv. Decommissioning/removal of multiple dwellings.
    - v. Registration of residential footprint covenant.
    - vi. Landscape Buffer on newly created parcel.
    - vii. Payment of DCCs for newly created parcel.

#### 5.0 Current Development Policies

### 5.1 <u>Kelowna Official Community Plan (OCP)</u>

Minimize the impact of urban encroachment and land use conflicts on agricultural land. 1

**Resource Protection Area** <sup>2</sup> Generally, land areas within this designation (whether they are within the permanent growth boundary or not) will not be supported for exclusion from the ALR for more intensive development than that allowed under current zoning regulations, except in specific circumstances where the City of Kelowna will allow exceptions to satisfy civic objectives for the provision of park/recreation uses.

<sup>&</sup>lt;sup>1</sup> City of Kelowna Official Community Plan, Objectives, Farm Protection Development Permit Guidelines Chapter

<sup>&</sup>lt;sup>2</sup> City of Kelowna Official Community Plan, Future Land Use Chapter

**Protect Agricultural Land** <sup>3</sup> Retain the agricultural land base by supporting the ALR and by protecting agricultural lands from development, except as otherwise noted in the City of Kelowna Agricultural Plan. Ensure that the primary use of agricultural land is agriculture, regardless of parcel size.

**Subdivision** <sup>4</sup> Maximize potential for the use of farmland by not allowing the subdivision of agricultural land into smaller parcels (with the exception of Homesite Severances approved by the ALC) except where significant positive benefits to agriculture can be demonstrated.

**Homeplating** <sup>5</sup> Locate buildings and structures, including farm help housing and farm retail sales area and structures, on agricultural parcels in close proximity to one another and where appropriate, near the existing road frontage. The goal should be to maximize use of existing infrastructure and reduce impacts on productive agricultural lands.

#### 5.2 <u>Agricultural Land Commission Act</u>

**ALC Homesite Severance on ALR Lands Policy L-11 January 2016** <sup>6</sup> attached to this report for reference.

#### 6.o Technical Comments

#### 6.1 Development Engineering

The location of the driveway for the proposed 2,000 sq.m. parcel should be at the furthest point away from the road bend fronting the proposed lot.

#### 6.2 Building and Permitting

B&P will provide a comprehensive report, based on required works at the time of ALC approval of the proposed subdivision on the subject property.

#### **Agricultural Advisory Committee**

The above noted application was reviewed by the Agricultural Advisory Committee at the meeting held on April 12, 2018 and the following recommendations were passed:

The AAC recommends that Council support ALR Application No. A17-0005 with the following anecdotal comments: The Committee did make note that the additional dwellings on the subject property need to be addressed by Council and the ALC. The Committee encouraged Staff to work with the Applicants to determine if there are any solutions to the drainage issue that was raised by the Applicant's Representative.

#### 7.0 Application Chronology

Date of Application Received: April 12, 2017
Date of Agricultural Advisory Committee: April 12, 2018

**Report prepared by:** Tracey Hillis, Planner

**Reviewed by:** Laura Bentley, Community Planning Supervisor

**Approved for Inclusion:** Ryan Smith, Community Planning Department Manager

<sup>&</sup>lt;sup>3</sup> City of Kelowna Official Community Plan, Agricultural Land Use Policies Chapter

<sup>&</sup>lt;sup>4</sup> City of Kelowna Official Community Plan, Agricultural Land Use Policies Chapter

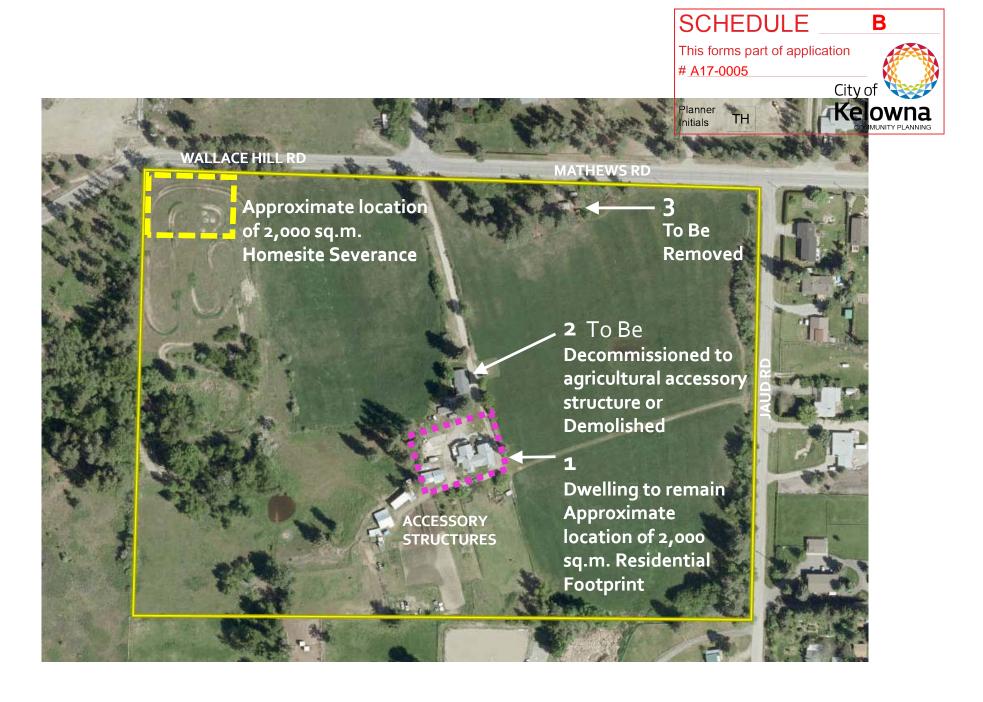
<sup>&</sup>lt;sup>5</sup> City of Kelowna Official Community Plan, Agricultural Land Use Policies Chapter

<sup>&</sup>lt;sup>6</sup> Agricultural Land Commission Act, Policy L-11

## Attachments:

Schedule "A" Existing Conditions Schedule "B" Proposed Conditions Attachment "A" ALC Homesite Severance on ALR Lands Policy L-11 January 2016









Policy L-11 January 2016

1

#### HOMESITE SEVERANCE ON ALR LANDS

This policy is intended to assist in the interpretation of the <u>Agricultural Land Commission Act</u>, 2002, including amendments as of September 2014, (the "ALCA") and BC Regulation 171/2002 (<u>Agricultural Land Reserve Use, Subdivision and Procedure Regulation</u>), including amendments as of August 2016, (the "Regulation"). In case of ambiguity or inconsistency, the ALCA and Regulation will govern.

The purpose of this policy is to provide a consistent approach to situations where property under application has been the principal residence of the applicant as owner-occupant since December 21, 1972 and the applicant wishes to dispose of the parcel but retain a homesite on the land.

A subdivision application under Section 21 (2) of the ALCA is required.

Persons making use of this homesite severance policy (the "Homesite Severance Policy") must understand the following:

- a. there is no automatic right to a homesite severance;
- the Agricultural Land Commission (the "Commission") shall be the final arbiter as to whether a particular homesite severance meets good land use criteria; (see #4 below)
- c. a prime concern of the Commission will always be to ensure that the "remainder" will constitute a suitable agricultural parcel. (see #5 below).

Without limiting the generality of the foregoing, the following guidelines apply to homesite severance applications.

- 1. A once only severance may be permitted where the applicant submits documentary evidence that he or she has continuously owned and occupied the property as his or her principal place of residence since December 21, 1972.
- Where an applicant for a homesite severance has had a previous subdivision application approved by the Commission resulting in the creation of a separate parcel, the Commission may deny any further subdivision under the Homesite Severance Policy.
- 3. An application for a homesite severance will be considered only where the applicant submits documentary evidence showing a legitimate intention to sell the remainder of the property upon the approval of the homesite severance application. (An interim agreement for sale, a prospective buyer's written statement of intent to purchase, a real estate listing, or some other written evidence of a pending real estate transaction may be acceptable as documentation)
  - In considering the application, the Commission may make an approval subject to sale of the remainder within a specified period of time.

- An order of the Commission authorizing the deposit of the subdivision plan will be issued to the Registrar of Land Titles only when a transfer of estate in fee simple or an agreement for sale is being registered concurrently.
- 4. There will be cases where the Commission considers that good land use criteria rule out any subdivision of the land because subdivision would compromise the agricultural integrity of the area, and the Commission will therefore exercise its discretion to refuse the homesite severance.

The following two options apply to a homesite severance:

- a. the existing homesite may be created as a separate parcel where it is of a minimum size compatible with the character of the property (plus a reasonable area, where required, for legal access purposes); or
- b. where the location of the existing homesite is such that the creation of a parcel encompassing the homesite would, in the Commission's opinion, create potential difficulty for the agricultural operation or management of the remainder, the Commission may, if it deems appropriate, approve the creation of a homesite severance parcel elsewhere on the subject property.
- 5. The remainder of the subject property after severance of the homesite must be of a size and configuration that will, in the Commission's opinion, constitute a suitable agricultural parcel. Where, in the Commission's opinion, the remainder is of an unacceptable size or configuration from an agricultural perspective, there may be three options:
  - a. the Commission may deny the homesite severance;
  - b. the Commission may require that the remainder be consolidated with an adjacent parcel; or
  - c. the Commission may require the registration of a covenant against the title of the remainder and such a covenant may prohibit the construction of dwellings.
- 6. A condition of every homesite severance approved by the Commission shall be an order stipulating that the homesite is not to be sold for five years except in the case of the death of the owner. Prior to the issuance of a Certificate of Order authorizing deposit of the subdivision plan, the owner shall file with the Commission a written undertaking or other legal documentation satisfactory to the Commission setting out this commitment.
- 7. Where a homesite severance application has been approved by the Commission, local governments and approving officers are encouraged to handle the application in the same manner as an application under Section 514 of the <a href="Local Government Act">Local Government Act</a> insofar as compliance with local bylaws is concerned.

Unless defined in this policy, terms used herein will have the meanings given to them in the *ALCA* or the Regulation.

#### RELATED POLICY:

ALC Policy L-17 Activities Designated Permitted Non-Farm Use in the ALR: Lease for a Retired Farmer – Zone 2

# Report to Council



Date: September 24, 2018

**RIM No.:** 1250-04

To: City Manager

From: R. Smith, Community Planning Department Manager

**Subject:** Amendment to Development Application Fees Bylaw No. 10560

Report Prepared by: K. Brunet, Planner

#### Recommendation:

THAT Council, receives, for information, the Report from the Community Planning Department dated September 24, 2018 recommending that Council amend the City of Kelowna Development Application Fees Bylaw No. 10560;

AND THAT Bylaw No. 11684 being Amendment No. 7 to the Development Application Fees Bylaw No. 10560 be forwarded for reading consideration.

#### Purpose:

To amend the Development Application Fees Bylaw No. 10560 to include fees for rezoning to a retail cannabis sales subzone.

#### Background:

The Community Planning Department will begin accepting applications on October 1, 2018 to rezone to a retail cannabis sales subzone. Through consideration of TA18-0008, Council directed Staff to prepare an amendment to the Development Application Fees Bylaw to include a fee for a retail cannabis sales subzone. As the costs associated with the rezoning process for a retail cannabis sales subzone are higher than those for a standard rezoning, a separate fee in the Development Application Fee Bylaw is proposed. A non-refundable application fee is proposed, to capture the costs associated with the initial evaluation review of rezoning applications for retail cannabis sales establishments. The proposed fees have taken in to consideration the costs of developing and implementing a land use regulation for retail cannabis sales establishments.

The proposed fees include an increase of 2% in 2019, rounded to the nearest five dollars. This is consistent with increases to the existing fee chart. The 2018 fee would apply to all applications submitted between October 1 to November 30, 2018, even if applications are not processed until early

2019. After 2019, the Development Application Fee Bylaw will need to be further amended for subsequent years.

The amendment to the Development Application Fee Bylaw also includes the removal of the fee for zoning amendments for Agri-Tourist Accommodation, as this use was removed from the Zoning Bylaw and rezoning applications are no longer accepted.

Internal Circulation: Business License Manager City Clerk

**Legal/Statutory Authority:** Authority to impose fees for processing development applications is established in Section 462(2) of the *Local Government Act* 

**Financial/Budgetary Considerations:** It is anticipated there will be increased costs for application processing and enforcement. These estimated costs will be offset by development application and business license fees.

**Personnel Implications:** Short term impacts are anticipated in development application and business license processes.

Considerations not applicable to this report: Legal/Statutory Procedural Requirements: N/A

**Existing Policy: N/A** 

External Agency/Public Comments: N/A

Communications Comments: N/A Alternate Recommendation: N/A

**Approved for inclusion:** R. Smith, Community Planning Department Manager

#### Attachments:

Schedule "A" – Amendment to Development Application Fees Bylaw No. 10560

## SCHEDULE "A" – Amendments to City of Kelowna Development Application Fee Bylaw No. 10560

						Developme	nt Application Fee Bylaw	No. 10	560				
No.	Section		Ex	isting T	ext		Proposed Text			ext	Rationale		
1.	Schedule "A"		2016	2017	2018	2019		2016	2017	2018	2019	Removal of the "Add "t" Designation for Agri-Tourist	
		Zoning Amendments				Zoning Amendments				Accommodation" from the Fee Bylaw, as this use was			
	Development Application Fees — Table 1	Add "t" Designation for Agri-Tourist Accommodation	\$1300	\$1325	\$1350	\$1375	Add "t" Designation for Agri-Tourist Accommodation	<del>\$1300</del>	<del>\$1325</del>	<del>\$1350</del>	<del>\$1375</del>	removed from the Zoning Bylaw and rezoning applications are no longer accepted	
2.	Schedule "A"	N/A	ı	ı				2016	2017	2018	2019	Creation of a fee for rezoning to a retail cannabis sales	
						Zoning Amendments		<u>, , , , , , , , , , , , , , , , , , , </u>			subzone		
	Development Application Fees – Table 1						Retail Cannabis Sales Subzone Application Fee - Retail Cannabis Sales Subzone Initial Evaluation Review	N/A N/A	N/A N/A	\$9495 \$1000	\$968 <u>5</u> \$1020	Creation of a non-refundable application fee for the initial evaluation review of rezoning applications for a retail cannabis sales subzone	
3.	Schedule "A"  Development Application Fees – Table 1	1 Refundable Amounts (a) Development fees of consideration are eligible administrative costs. (b) No development fees of the submitted to Council.	which are ole for th	e cost of	the develo	opment fee less 50%	<ul> <li>Refundable Amounts:         <ul> <li>(a) Development fees which are refunded prior to Council consideration are eligible for the cost of the development fee less 50% administrative costs.</li> <li>(b) No development fees will be refunded if the application has been submitted to Council.</li> <li>(c) The application fee for the "Retail Cannabis Sales Subzone Initial Evaluation Review" is not refundable</li> </ul> </li> </ul>		Clarification that the fee for the "Retail Cannabis Sales Subzone Initial Evaluation Review" is not refundable				

## **CITY OF KELOWNA**

## **BYLAW NO. 11684**

# Amendment No. 7 to Development Applications Fees Bylaw No. 10560

The Municipal Council of the City of Kelowna, in open meeting assembled, enacts that the City of Kelowna Development Applications Fees Bylaw No. 10560 be amended as follows:

 THAT Schedule "A" - DEVELOPMENT APPLICATION FEES - TABLE 1 FEES PURSUANT TO ZONING BYLAW NO. 8000 AND LOCAL GOVERNMENT ACT - Zoning Amendments section be deleted that reads:

Zoning Amendments				
"C" for Carriage House	\$875	\$890	\$905	\$920
Bylaw Enforcement – Add 'C' for	\$1750	\$1785	\$1820	\$1855
Carriage House				
Add "t" Designation for Agri-Tourist	\$1300	\$1325	\$1350	\$1375
Accommodation				
RU6, RR & A1	\$1375	\$1400	\$1425	\$1450
Comprehensive Development Zone	\$3250	\$3315	\$3380	\$3445
All Other Zones	\$1775	\$1810	\$1845	\$1880
Rezoning Extension	\$450	\$460	\$470	\$480

And replaced with a new **Zoning Amendments** section that reads as follows:

Zoning Amendments				
"C" for Carriage House	\$875	\$890	\$905	\$920
Bylaw Enforcement - Add 'C' for Carriage House	\$1750	\$1785	\$1820	\$1855
RU6, RR & A1	\$1375	\$1400	\$1425	\$1450
Comprehensive Development Zone	\$3250	\$3315	\$3380	\$3445
All Other Zones	\$1775	\$1810	\$1845	\$1880
Rezoning Extension	\$450	\$460	\$470	\$480
Retail Cannabis Sales Subzone	n/a	n/a	\$9495	\$9685
Application Fee - Retail Cannabis Sales Subzone Initial Evaluation Review	n/a	n/a	\$1000	\$1020

AND THAT Schedule "A" - DEVELOPMENT APPLICATION FEES - TABLE 1 FEES PURSUANT TO ZONING BYLAW NO.
 8000 AND LOCAL GOVERNMENT ACT - Refundable Amounts section be deleted that reads:

#### <sup>1</sup> Refundable Amounts:

- (a) Development fees which are refunded prior to Council consideration are eligible for the cost of the development fee <u>less</u> 50% administrative costs.
- (b) No development fees will be refunded if the application has been submitted to Council.

## BL11684 - page 2

And replaced with a new **Refundable Amounts** section that reads as follows:

### <sup>1</sup> Refundable Amounts:

- (a) Development fees which are refunded prior to Council consideration are eligible for the cost of the development fee <u>less</u> 50% administrative costs.
- (b) No development fees will be refunded if the application has been submitted to Council.
- (c) The application fee for the "Retail Cannabis Sales Subzone Initial Evaluation Review" is not refundable.
- 3. This bylaw may be cited for all purposes as "Bylaw No. 11684, being Amendment No. 7 to Development Applications Fees Bylaw No.10560."
- 4. This bylaw shall come into full force and effect and is binding on all persons as and from the date of adoption.

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

Adopted by the Municipal Council of the City of Kelowna this

 Mayor	
City Clerk	

# Report to Council



**Date:** 2018-09-24

File: 0100-01

To: City Manager

From: David Gazley, Bylaw Services Manager

Subject: Draft Council Report - final clean.docx

#### **Recommendation:**

That Council pass the following resolution:

WHEREAS the Council of the City of Kelowna has the authority under Section 72 (1) (a) and (b) of the Community Charter to impose a remedial action requirement in relation to hazardous/unsafe conditions or declared nuisances;

Council hereby considers that the buildings located at 1864 Harvey Avenue (the "Property") are in, and create, an unsafe condition, within the meaning of Section 73 (2)(a) of the Community Charter, as a result of the buildings being insecure on numerous occasions, the buildings being damaged by fire and continuing to deteriorate and/or the buildings contravening Bylaw 10760 and the BC Fire Code;

Council hereby declares the buildings on the Property are a nuisance, within the meaning of Section 74 (2) of the Community Charter, as Council considers that the buildings are so dilapidated and unclean as to be offensive to the community;

Council hereby declares the over-grown vegetation and debris on the Property to be a nuisance, as Council considers they contribute to the unclean and offensive condition of the Property that is offensive to the community;

Council hereby imposes on the owner of a requirement to take remedial action to (a) remove the buildings on the Property as the buildings are: (i) a nuisance (ii) in an unsafe condition, (iii)

contravene the BC Fire Code and Bylaw 10760 and (b) to remove and/or trim the over-grown vegetation and remove the debris on the Property no later than thirty (30) days after notice of this remedial action requirement under s. 77 of the Community Charter has been sent by the City to the owner of the Property.

### **Purpose:**

This report provides the basis for the recommended resolutions requiring the owner of the Property, formerly operated as the Ponderosa Motel, to take the necessary remedial action(s) to remedy the hazardous, unsafe and nuisance conditions at the Property.

### **Background:**

A 16 Unit motel, known as the former Ponderosa Motel ceased to operate in 2011, although it continues to hold an active business license. The owner of the Property and the business licensee is Witmar Holdings Ltd, 100-3195 Walnut Street, Kelowna, B.C.

The Property has generated a significant enforcement and complaint history over the past eight years. Focusing on the last three-year period, the Bylaw Services Department attended to the Property on December 15, 2015 in response to a complaint from a citizen who advised that in the course of driving by the building daily they observed people going in and out of the buildings all the time. Bylaw Services found transients had set up in one of the vacant buildings. The owner was called to have the building secured. On December 31, 2015 Bylaw Services attended again to find two males sleeping inside the middle, former office building, with a fire in the fireplace. The Fire Department was called to put the fire out and a restoration contractor was called to secure the building. On January 8, 2016 Bylaw Services re-attended to find a basement window and one of the units in front motel building broken into. Since January 1, 2016 the Bylaw Services Department have received 18 calls for service, including variously complaints regarding the presence of transients (three), discarded needles (one), graffiti (one) and unsightly premises and property nuisance (six).

The RCMP have recorded 110 files in regards to the Property. Of those, 21 complaints have been directly related to the fact of the property being vacated and involved the removal of occupants as a result of trespassing, drug activity, violent encounters and other nuisance type complaints.

The Kelowna Fire Department has responded to 4 structure fires and another minor fire at the Property as follows:

- February 20, 2018 structure fire
- December 15, 2015 structure fire
- February 1, 2012 outdoor fire
- January 24, 2012 dumpster fire
- October 19, 2011 chimney fire

The Fire Department also responded to medical calls to the Property on October 27 and November 21, 2015. A separate report from Paul Johnson, Fire Prevention Officer, is attached as Schedule A to this report.

There are three buildings on the Property:

- A building comprising former motel units situated adjacent to the western boundary of the Property in the southwest quadrant at the front of the Property;
- The former office building located towards the center of the Property, just north of the motel units;
- A block construction building at the rear (north) of the Property, comprised of former motel units.

### **Condition of the Property and Buildings**

The property owner took out a demolition permit in January of 2012 as the property had been in a significant state of disrepair. However the owner has failed to act on this permit to present day and the buildings remain on the property.

Each building is in a dilapidated condition, and has been so for some time as evidenced by the photographs of the Property, documenting conditions periodically from 2011 to September of this year, attached as Schedule B to this report. Most of the internal walls separating the motel units in the front building have been removed, along with much of the drywall and there is a hole providing internal access to the basement/crawl space.

The report of Paul Johnson, Fire Prevention Officer, refers to the circumstances of the February 20, 2018 fire, caused by a person squatting in one of the buildings. The lack of effective security to prevent entry to the Property, together with the buildings being abandoned, make the Property attractive as a site for transients to squat. In Mr. Johnson's assessment there is an ongoing fire risk to the buildings, as well as a risk of injury or death to any transient occupant.

In summary, staff consider that the insecure condition of the Property and buildings, the fact of the buildings being vacant (except for transients) and the lack of an onsite presence or management by the owner, create an unsafe condition and contravene the BC Fire Code and Bylaw No. 10760. The buildings are a nuisance by reason of their appearance ad their dilapidated condition.

In addition to the dilapidated and unsightly condition of the buildings, there is over-grown grass, weeds and shrubs and rubbish and debris that contribute to the unsightly condition of the Property. Staff are of the view, again supported by the collection of photographs in Schedule B, that the over-grown vegetation and rubbish is part of the nuisance and that Council may also include a remedial action requirement in respect of these "matters or things" that are in or about any matter or thing — including buildings and structures that are also referenced in s. 74.

#### **Recommended Remedial Action**

Where Council has determined, under s. 73, that a building or a structure is in an unsafe condition or contravenes the BC Building Code or a local government building regulation, or where Council has declared, pursuant to s. 74, that (i) a building or other structure or a similar matter or thing, or (ii) a matter or thing that is in or about any matter or thing referred to in s. 74(1)(1)(a) to (c), is a nuisance, the options for imposing remedial action requirements include:

- (a) requiring the removal or demolition of the building or structure or similar matter or thing, per s. 72(2)(b)(i),
- (b) requiring the building, structure, matter or thing be brought up to a standard specified by bylaw, per s. 72(2)(b)(iii), and
- (c) requiring the owner or occupier to otherwise deal with the building, structure or similar matter or thing in accordance with the directions of council or a person authorized by council, per s. 72(2)(b)(iv)

Staff are not recommending that Council impose a remedial action requirement to bring the buildings on the Property up to a bylaw or Building Code standard for the following reasons:

- the Property has not been operated as a motel since before the owner obtained a demolition permit in 2012;
- the owner has shown no indication of an intention to recommence motel operations and Council cannot require the owner to operate a motel on the Property;
- the buildings have been vacant (with the exception of unauthorized occupation by transients) for several years during which time their condition has continued to deteriorate;
- the 2018 assessed value of the improvements (buildings and structures) on the Property is, according to BC Assessment, only \$100, as opposed to land value of \$1,568,000, indicating any expenses made towards bringing the buildings up to Building Code and bylaw standards will not be reflected (or only minimally reflected) in assessed building values in the future.

Accordingly, staff do not consider that imposing a requirement to bring the buildings up to standard to be a worthwhile exercise of Council's remedial action authority that would serve the public interest. Staff regard the dilapidated condition of the buildings and the visual eyesore/nuisance they present to be the primary concerns that should drive Council's choice of the appropriate remedial action measure. In this case, staff consider the appropriate measure is demolition of the buildings.

With respect to the over-grown vegetation and rubbish, the imposition of a remedial action requirement of removal would bring the condition of the Property, in relation to those matters, up to a standard specified in a bylaw. The Good Neighbour Bylaw No. 11500 provides in s. 4.2 that no owner or occupier of real property shall permit or allow real property to become or remain unsightly. Section 4.3 of the bylaw provides, more specifically, that an owner must not permit an accumulation of filth or rubbish on real property. Under section 3.1 of the Noxious

Weed and Grass Control Bylaw, all owners and occupiers of real property must prevent the infestation of noxious weeds on their property and prevent the growth of grass exceeding 8 inches.

#### **Notice to Owner**

Section 77 of the Community Charter provides that notice of the imposition of a remedial action requirement must be given by personal service or registered mail to (a) the person subject to the requirement, and (b) the owner of the land where the required action is to be carried out. In this case the person subject to the requirement is also the owner. Notice must also be mailed to each holder of a registered charge and any other person who is an occupier of the land. There are no chargeholders or occupants. The time limit for compliance with the remedial action requirement is a minimum of 30 days after the required notice is sent to the owner or person subject to the requirement.

A person who is subject to a remedial action requirement may, under s. 78 of the Charter, request that Council reconsider the imposition of the requirement. Notice of such request must be given within 14 days of the notice of the requirement being imposed. The issue is whether notice must also be given of Council's initial consideration of whether to impose the remedial action requirement. A 2009 BC Supreme Court decision involving the City of Vernon determined that it was not a breach of common law procedural fairness to not give the owner notice and an opportunity to be heard in respect of council considering whether to impose a remedial action requirement (in that case, demolition of a fire-damaged building). The reconsideration provisions in sections 77 and 78 of the Community Charter were determined to provide the affected person an opportunity to be heard and respond to the resolution. Staff are proposing that a similar course be followed here and, should Council decide to impose remedial action requirement(s), notice of the right to request reconsideration will be given to the owner, along with the required notice of the imposition of a remedial action requirement.

Correspondence was directed to the owner of the Property as recently as July 3, 2018 that staff would be proceeding to bring a remedial action request forward to Council for consideration. A copy of the July 3<sup>rd</sup> letter is attached as Schedule C. As noted in the July 3<sup>rd</sup> letter, Bylaw Services staff met with Mr. Tony Weistock, a director of the corporate owner, Witmar Holdings Ltd., on March 27, 2018. At that time Mr. Weistock committed to demolishing the buildings and cleaning up the site within one week. While an excavator was moved onto the Property, the buildings remain.

#### **Cost Recovery**

If a remedial action requirement is not satisfied by the date specified for compliance, the City may act in default, under section 17 of the Community Charter, and fulfill the requirements at the expense of the person in default. If the amount expended to effect compliance remains unpaid as of December 31 in the year the expense was incurred, it is deemed to be taxes in arrear.

## Internal Circulation: L. Kayfish, Risk and Safety Manager

### **Legal/Statutory Authority:**

Council may impose remedial action requirements under the Community Charter, section 72(1)(a) in relation to hazardous/unsafe conditions referred to in s. 73 and section 72(1)(b) in relation to declared nuisances in respect of the subjects referred to in s. 74.

The remedial action requirement

- (a) may be imposed on one or more of
  - (ii) the owner or occupier of the land on which it is located, and
- (b) may require the person to
  - (i) remove or demolish the matter or thing,
  - (iii) bring it up to a standard specified by bylaw, or
  - (iv) otherwise deal with it in accordance with the directions of council or a person authorized by council.

#### **Declared nuisances**

- **74** (1) A council may declare that any of the following is a nuisance and may impose a remedial action requirement in relation to the declared nuisance:
  - (a) a building or other structure, an erection of any kind, or a similar matter or thing;
  - (d) a matter or thing that is in or about any matter or thing referred to in para. (a)

The authority to declare a matter or thing to be a nuisance is extended by subs. 74(2) beyond nuisances at common law to include a thing that council considers "is so dilapidated or unclean as to be offensive to the community."

### **Legal/Statutory Procedural Requirements:**

Notice of any remedial action requirement to be served on owner/person subject to requirement.

Time specified for carrying out remedial action must be no less than 30 days after notice provided.

Right to request reconsideration under s. 78 Community Charter.

Recovery of costs to achieve compliance in default under s. 17 and s. 258 Community Charter.

### **Existing Policy:**

## **Financial/Budgetary Considerations:**

Personnel Implications:				
External Agency/Public Comments:				
Communications Comments:				
Alternate Recommendation:				
Considerations not applicable to this report:				
Submitted by: David Gazley, Bylaw Services Manager				
Approved for inclusion Joe Creron, Deputy City Manager				
cc: L. Kayfish, Risk and Safety Manager				

#### Schedule A

July 3, 2018

Witmar Holdings Ltd. 100-3195 Walnut Street, Kelowna, BC V1W 3T6

Attention: Mr. Tony Weistock

Personal Service

Dear Sir:

RE: 1864 Harvey Avenue Kelowna (aka Ponderosa Motel)

Plan KAPP23634, Lot 1 Section 20, Township 26, Land District 41

\_\_\_\_\_

Kelowi

As you are aware, your property has been on ongoing concern to the City of Kelowna since 2008. Predominately, the issues have been the unsightly nature of the grounds and buildings which have been progressively deteriorating over time. This has cascaded to fire and safety issues with respect to structure fires, transient encampments and criminal activity answered by the RCMP inclusive of drugs, trespassing, disturbances, among an array of anti-social behaviors associated to your property.

I have made all reasonable attempts at working collaboratively with you in providing the opportunity to remedy the issues associated to this property via demolition. On March 27, 2018 you attended to the Bylaw Services Office and met with Bylaw Services Supervisor, Ken Hunter and Senior Officer, Dan Maja, where you undertook to have the demolition/site clean up completed within one (1) week of that date. You did move an excavator onto the site, however, to this date, your property remains in a hazardous/nuisance state with no demolition work commenced nor communication to my office that it can be expected in the foreseeable future.

Be advised I am now underway in seeking City Council's approval pursuant to the provisions of the *Community Charter* (section 74), to declare your property a hazard/nuisance, in taking the appropriate remedial actions. All associated costs in this remediation will be a debt owed to the city, which if unpaid will be transferred to your taxes as arrears. Additionally, our records indicate Witmar Holdings Ltd. currently has a balance of \$3,665.00 in outstanding fines associated to this property and we will be moving that amount to the court pursuant to the *Local Government Bylaw Enforcement Act* to be enforced as a debt under *Small Claims Rules* 11 & 12.

In addition, commencing immediately, pursuant to the Good Neighbour Bylaw NO. 11500, be advised Nuisance Abatement Fees respecting nuisance service calls will be applied to your property.

I trust you'll conduct your future actions accordingly.

Yours truly,

**David Gazley, C.I.M., PMgr** Bylaw Services Manager

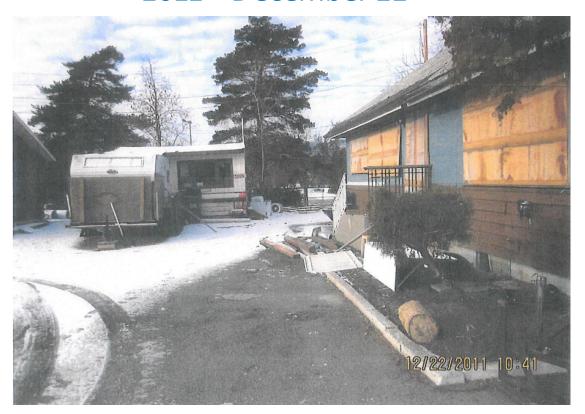
cc Stephen Fleming, City Clerk Joe Creron, Deputy City Manager Bylaw Services 100-1420 Ellis Street Kelowna, BC V1Y 2A5 TEL 250-469-8686 FAX 250-862-3340 kelowna.ca

# 2011



Photo #1

2011 – December 22



# 2014 – March 30

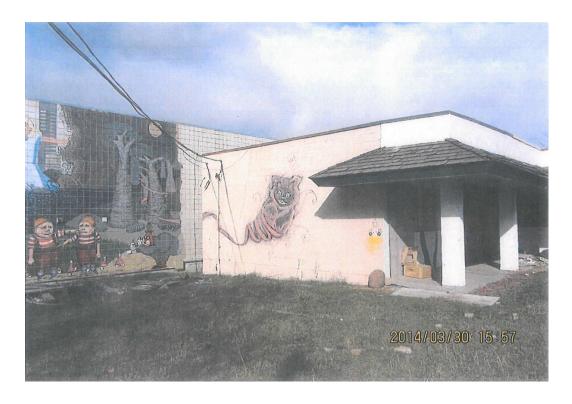


Photo #3

2014 – March 31



# 2015 – February 12



Photo #5



Photo #6



Photo #7



Photo #8

# 2015 -July 27



Photo #9

2015 – December 31

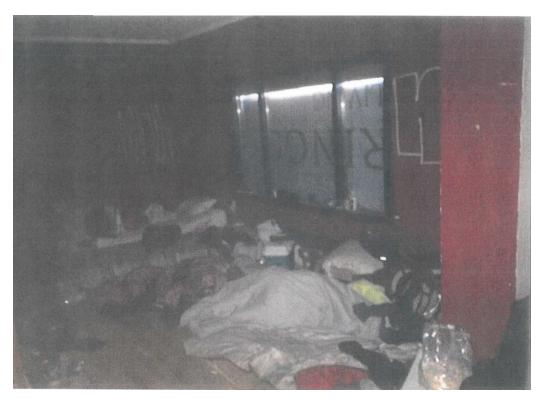




Photo #11

2016 – March 14



Photo #12



Photo #13

2016 – May 19





Photo #15



Photo #16



Photo #17



Photo #18

# 2016 – December 6



Photo #19

2017 – February 1



# 2017 – July 21



Photo #21



Photo #22

# 2017 – December 7



Photo #23



Photo #24

2018 – February 20

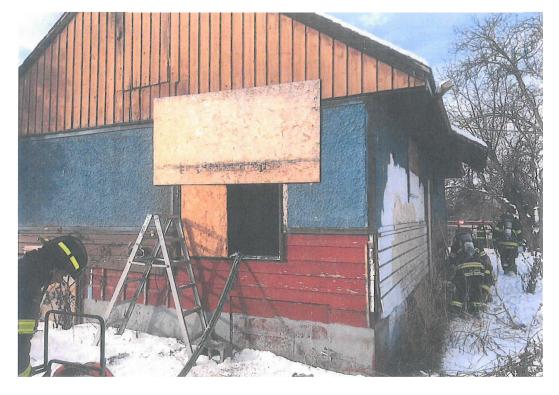


Photo #25





Photo #27



Photo #28



Photo #29

2018 – March 7



Photo #30



Photo #31



Photo #32

# 2018 – August 7



Photo #33

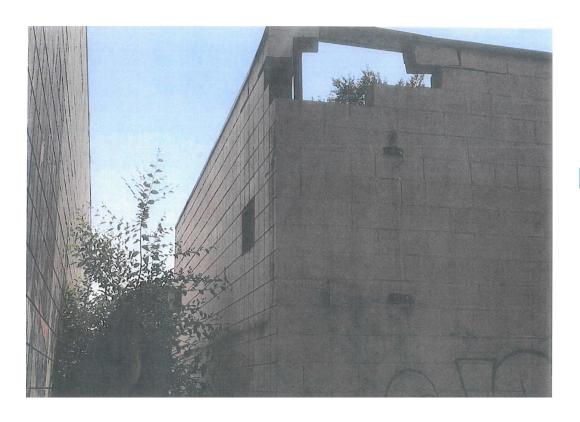


Photo #34



Photo #35



Photo #36

# 2018 – September 8

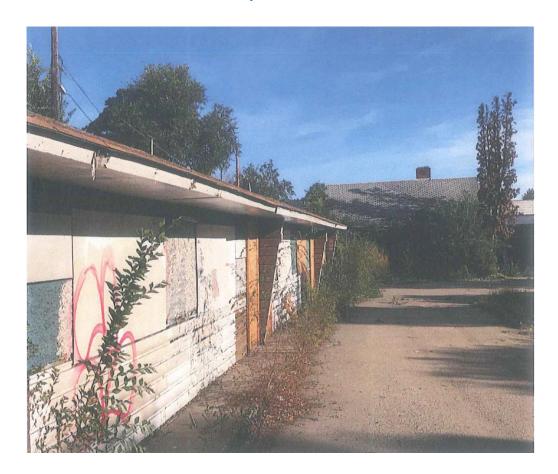


Photo #37





Photo #39



Photo #40



Photo #41



Photo #42



Photo #43



Photo #44

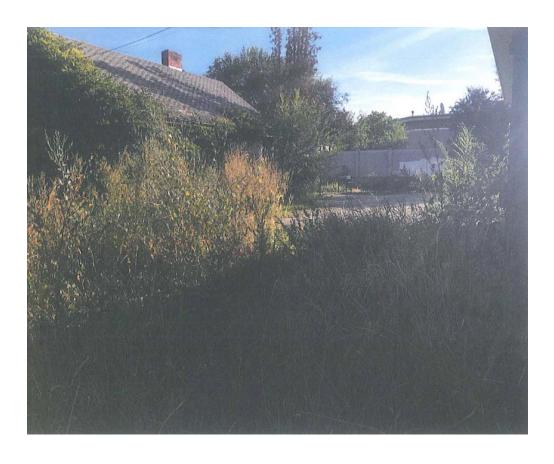


Photo #45



Photo #46

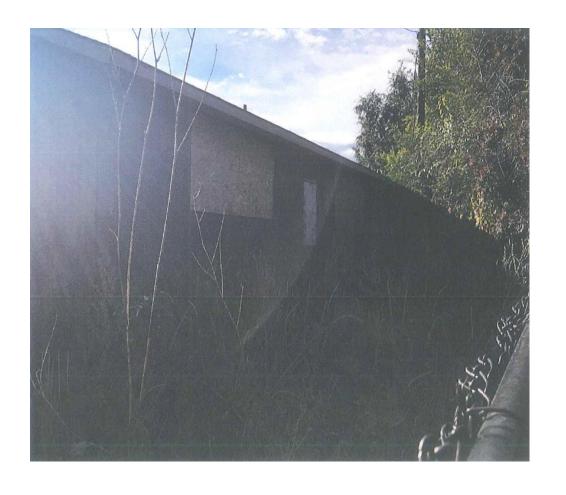


Photo #47

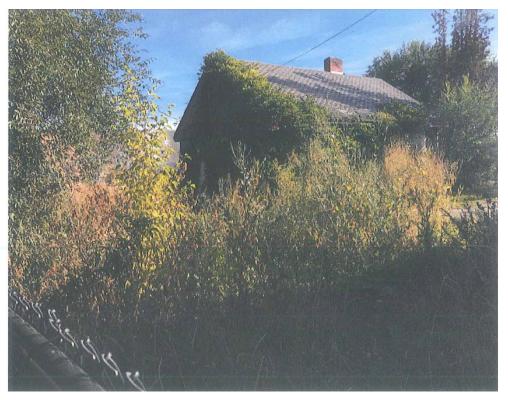


Photo #48



Photo #49



Photo #50

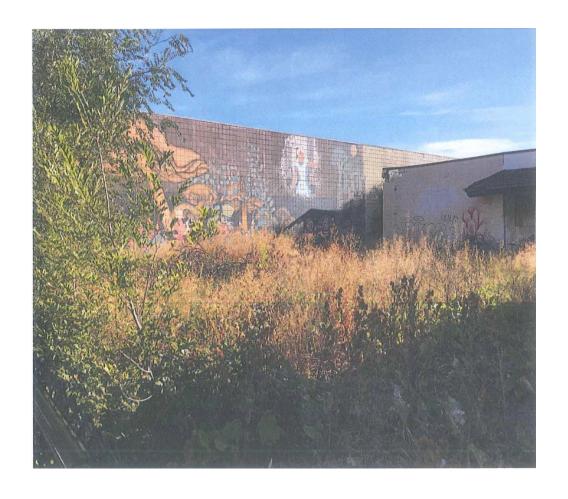


Photo #51



Photo #52

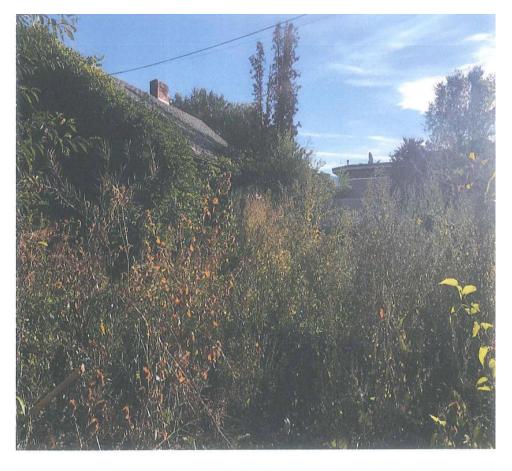


Photo #53



Photo #54

### Schedule B – Photographs of Property – 1864 Harvey Avenue

### 2011

- North facing view from near entrance on Harvey Avenue motel units to left, office in centre, with additional motel units in building to rear of Property to right of office building.
- 2. December 22, 2011 Office building now boarded-up

### 2014 - March 30

3. North-east facing view of west side of vacant motel unit building – garbage and discarded material at side and front of building

### 2014 - March 31

4. North facing view from Harvey Ave. entrance of vacant site and buildings

### 2015 – February 12

- 5. North facing view showing rear of boarded-up and vacant motel unit building at southern end of Property– Modu-lok fence not effective barrier to prevent access to rear of building
- 6. North-west facing view of front porch/entry at rear motel unit building Items on porch indicative of occupation by transients Mural in background is on rear of adjacent motel on property to north
- 7. North facing view from Harvey Ave. entrance
- Concrete building North area of property door insecure with transient belongings.

### 2015 - July 27

9. North-east facing view from approximately centre of Property – Collapsed tent and shopping cart consistent with transient occupation

### 2015 - December 31

- 10. Interior of motel unit Personal possessions, bedding and mattress indicating occupation by transients Boarding up and fencing not effective to prevent entry
- 11. Same unit, interior view

### 2016 - March 14

- 12. Plywood pulled back that had previously closed off access to basement/crawl space at the building in the center of the property.
- 13. East facing view of rear motel building garbage and debris scattered throughout

### 2016 - May 19

- 14. Garbage and discarded items on ground between the middle building and the concrete building located at the back of the property.
- 15. North facing view of rear motel building debris on porch of boarded-up units
- 16. Garbage and debris in space between rear of back motel unit on Property and adjacent operating motel on neighbouring property. The operating motel wall is on the left and the wall on the right is the concrete building at the back of the property located at 1864 Harvey Ave.
- 17. View of boarded-up entrance to eastern unit at rear motel building clothing and personal items apparently discarded
- 18. North facing view from Harvey Ave. entrance

### 2016 – December 6

19. East facing view of rear motel unit with make-shift screening of space for sleeping on patio/entrance

### 2017 – February 1

20. East facing view from east boundary of Parkinson Rec Centre of rear of front (south) motel building

### 2017 - July 21

- 21. Northeast view from Harvey Ave. entrance showing overgrown grass/vegetation
- 22. North facing view from Harvey Ave. entrance, again showing overgrown grass/vegetation

### 2017 - December 7

- 23. West facing view of south end of front motel building Parkinson Rec Centre parking lot in background tarpaulins mark off area used as sleeping space
- 24. North facing view of rear motel building garbage and personal items on patio/entrance make-shift screening of sleeping space just beyond wall on right edge of photo

### 2018 - February 20

- 25. Vacant former office building/manager residence near centre of property Fire Dept. personnel in attendance responding to fire in building
- 26. Interior of office building personal items/debris strewn about interior Fireplace brick visible at left edge of photo
- 27. Same
- 28. Fireplace in office building location of fire
- Interior of middle building, location of last structure fire— mattress and bedding indicating transient occupation.

#### 2018 - March 7

- 30. Exterior basement window of middle building on the property, location of last structure fire.
- 31. Back concrete building door insecure.
- 32. View of back property that runs along PRC property and next to middle building towards the back concrete building.

### 2018 - August 7

- 33. Vacant motel building that is at the entrance to the property and runs along PRC property.
- 34. North west corner of the concrete building. (Building blocks now missing becoming a structural issue).
- 35. Vacant motel building that runs along the PRC property, over-grown weeds.
- 36. West facing view of middle building on property.

### 2018 - September 8

- 37. Front of Old Motel as well middle building in the back ground graffiti and over grown weeds in front of both buildings.
- 38. Concrete, rear building front graffiti, over-grown weeds, bbq.
- 39. Front photo of Old Motel with Modu-lok fence and weeds.
- 40. Front of property yard area with backhoe.
- 41. Graffiti on old sign post at front of property facing Harvey Ave.
- 42. Old Motel boarded up graffiti on building.
- 43. Weeds over-grown on the boulevard area Harvey Ave.
- 44. Weeds over-grown and backhoe parked on property.
- 45. Weeds over-grown at the back between the Old Motel building and middle building on property. Photo taken from PRC parking lot area.

- 46. Over-grown shrubs at the front of property Harvey Ave impeding sidewalk.
- 47. Back of Old Motel building area facing PRC parking lot.
- 48. Weeds over-grown next to middle building on property facing PRC parking lot.
- 49. Weeds over-grown next to middle building and concrete building as well showing graffiti on concrete building.
- 50. Concrete building graffiti, boards set up, unsure why boards are outside.
- 51. Weeds over-grown next to concrete building.
- 52. Weeds at the back area of middle building on property, backhoe in the front area. Photo taken from PRC parking lot.
- 53. Weeds extremely over-grown next to middle building and Old Motel. Photo taken from PRC parking lot.
- 54. Concrete building graffiti as well bricks coming apart at the top corner of building, weeds over-grown.



September 6, 2018

### Report on 1864 Harvey Avenue – Former Ponderosa Motel

### History of Attendance to Property by Fire Department

Kelowna Fire Department personnel have attended to the Property to respond to fires in October 2011, January and February 2012, and more recently in February 2018. The Property is a former motel, the Ponderosa Motel, which has been vacant for several years.

The February 20, 2018 incident report records that a total of 15 Fire Department staff attended the Property in response to a report of a fire received just before 9 am. Smoke was observed on arrival coming from the chimney of one of the abandoned motel unit buildings. Inside one of the units there was smoke and open flame, as well as a single occupant, sleeping in the smoke-filled room. The occupant was escorted out while the attack crew extinguished the fire. The occupant attempted to flee the scene as the attending RCMP officer was about to interview him. The RCMP were able to catch up to the individual and determine that he did not require medical treatment.

It was determined that the fire had been caused by the occupant, a squatter, who had lit a fire in the fireplace to stay warm. He fell asleep on the floor and the fire spread from the fireplace to nearby rubbish. It was fortunate that the Fire Department units were able to respond promptly. Had the response time been longer, it is conceivable that the squatter occupying the fire-damaged unit could have suffered burn injuries or expired from smoke inhalation or burns.

### Insecurity of Buildings and Property

The Property has a modu-lok fence along the south entrance to Harvey Avenue, extending from the south wall at the end of the former motel unit to the east property boundary. On a site visit on August 7, 2018 I observed the modu-lok fencing was not secure and that it did not provide a sufficient barrier to prevent intrusion from would be squatters or others. There were clear signs of squatters living on the Property. I observed a blanket, clothing and a mattress pulled out for sleeping. On my arrival I could hear someone climbing over the rear fence to leave the Property. I assume this person was "spooked" by my presence. No one else, apart from Bylaw Officer Ingvarsson who was also present, was observed on the Property during the course of my August 7, 2018 inspection.

PJ/mb



City of Kelowna Station 1 2255 Enterprise Way Kelowna, BC V1Y 8B8 TEL 250 469-8801 FAX 250 862-3371 kelowna.ca



The motel unit building in the southwest quadrant of the Property had been secured with plywood but it had been removed at the rear of the building, revealing a broken window, providing access to the interior of the motel unit. There were two large dumpsters filled with construction materials and old furniture. The dumpsters were located in the centre portion of the Property. This appeared to be a relatively safe location in that it was located away from the buildings. However, the rear door of one of the bins had been opened and a number of mattresses had been pulled out and were strewn on the ground around the dumpster. The rear building on the north side of the Property appeared to have some structural damage to the upper north-west corner. There were several blocks missing from the upper parapet of the roof line. The cinder block had collapsed inwards and the roof line may have collapsed.

The insecure condition of the Property contravenes the British Columbia Fire Code and the City of Kelowna's Fire and Life Safety Bylaw No. 10760. Sentence 2.4.6(1) of the British Columbia Fire Code, 2012, requires that "vacant buildings shall be secured against unauthorized entry. Sentence 8.7.2(b) of Bylaw City of Kelowna, Fire and Life Safety Bylaw 10760 requires that "all openings in the premises are securely closed and fastened in a manner acceptable to the Fire Chief or designate so as to prevent fires and the entry of unauthorized persons."

In my assessment, the vacant condition of the Property, along with the lack of effective security to prevent entry by squatters and other unauthorized persons, makes the Property attractive as a site to squat. Provisions must be made to permanently secure the site in conformance with the regulation set forth in the BC Fire Code and Bylaw 10760 to prevent the abandoned structures from being damaged from fire as well as mitigate the consequent risk of injury or death to any transient occupants.

Respectfully submitted,

Paul Johnson, Fire Inspector, Local Assistant to Fire Commissioner

Kelowna Fire Department

PJ/mb



City of Kelowna Station 1 2255 Enterprise Way Kelowna, BC V1Y 8B8 TEL 250 469-8801 FAX 250 862-3371 kelowna.ca









# **OVERVIEW**



- Vacant motel property
- History of deteriorating conditions, frequent service calls
- No prospect of motel operating again
- Recommendation of demolition of buildings under Remedial Action Authority
- Recommendation to declare overgrown vegetation a nuisance

# **HISTORY**



- ► Kelowna Bylaw Services
  - ▶ 18 complaints since January 2016
  - Unsightly premises and property nuisance, graffiti, transient activity
- ► Kelowna Fire Department
  - ▶ 4 Structure Fires and 1 Minor Fire since 2011
- ► Kelowna RCMP
  - ▶ 110 complaint files since property vacated in 2011
  - 21 complaints related directly to property being vacant trespassing, vagrancy, drug use, mischief



# **Unsafe Condition**

- Modu-Lok fencing insecure
- ► Repeated need to secure
- Insecure condition violates Fire Code, City Fire & Life Safety Bylaw
- Vacant buildings attraction to transients
- ► Two chimney fires caused by transients in vacant office bldg.



# Nuisance -Unsightly/Dilapidated Condition

- ► Each of 3 buildings on property dilapidated
- Most of internal walls in front building removed
- Transient belongings and graffiti evident
- ► Buildings have minimal – ie. \$100 – assessed value





# **ENFORCEMENT**

- ▶ Property cleaned up 4 times since 2008
- Secured by City on 4 occasions
- Bylaw Offence Notices Issued for Fail to Secure,
   Permit Property to Become Unsightly





# **AUTHORIZATION**

- ► Section 72 Community Charter
  - Authority to impose remedial action remove or demolish building
- ➤ Section 74 Community Charter
  - ► Council power to declare a building or structure a nuisance
  - ▶ Power extends to include things "so dilapidated or unclean as to be offensive to community"
- ▶ Cost recovery Section 17 Community Charter
  - ▶ In default of owner complying with remedial action requirement, City may act and fulfill requirements at expense of person in default – recovery as unpaid taxes



# Notice to Property Owner

- ► Right of Reconsideration by Council given to person subject to Remedial Action Requirement under S. 77 Community Charter
- Case law establishes notice to owner not required before Council considers whether to impose Remedial Action Requirement
- Bylaw Services have met and corresponded with owner advising that request for Remedial Action would be made to Council



# Questions?

For more information, visit **kelowna.ca**.

## Report to Council



Date: September 24, 2018

**File:** 0710-40

To: City Manager

From: Ross Soward, Planner Specialist

**Subject:** Fall 2018 Rental Housing Agreement Bylaws

### Recommendation:

THAT Council, receives, for information, the Report from the Planner Specialist dated September 24, 2018 recommending that the City of Kelowna enter into three (3) Housing Agreements to secure 256 purpose-built rental housing units;

AND THAT Bylaw No. 11690 authorizing a Housing Agreement between the City of Kelowna and 1017476 B.C. Ltd. (Al Stober Construction Ltd), which requires the owners to designate 188 dwelling units in a purpose-built rental housing for Lot 1, District Lot 139 ODYD, Plan KAP92715 at 1730 and 1740 Richter Street, Kelowna, BC, be forwarded for reading consideration;

AND THAT Bylaw No. 11688 authorizing a Housing Agreement between the City of Kelowna and Ki-Low-Na Friendship Society, which requires the owners to designate 49 dwelling units in a purpose-built rental housing for Lot B, Section 18 Township 27, ODYD, Plan 29386 at 1759 Highway 33 East, Kelowna, BC, be forwarded for reading consideration.

AND FURTHER THAT Bylaw No. 11689 authorizing a Housing Agreement between the City of Kelowna and 554764 BC Ltd., which requires the owners to designate 19 dwelling units in a purpose-built rental housing for Lot 1 Section 27 Township 26 ODYD, Plan EPP73636 at 200 and 220 Nickel Road, Kelowna, BC, be forwarded for reading consideration.

### Purpose:

To authorize the City to enter into a Housing Agreement with 1017476 BC Ltd., Ki-Low-Na Friendship Society and 554764 BC Ltd. for purpose built rental housing projects that are pursuing Revitalization Tax Exemption Agreements in accordance with Bylaw No. 9561.

### Background:

In order to be eligible to receive a rental housing revitalization tax exemption, a housing agreement must be in place to secure the purpose-built rental housing units for a minimum of ten years. Each of the four rental housing projects are applying for a rental housing revitalization tax exemption. Accordingly, these four rental housing agreements are required for authorization to ensure the 256 purpose-built rental units are secured.

The housing agreements become bylaw upon approval from Council, ensuring the projects will operate purpose-built rental housing for a minimum of ten years. After ten years, if a landowner intends to lift an agreement, Council approval is required.

Because the Housing Agreement is a requirement for eligibility to receive the tax exemption, staff coordinated the housing agreement report with the forthcoming revitalization tax exemption agreement report as the two have a direct relationship.

Legal/Statutory Authority:	
Local Government Act, Section	on 483.
Existing Policy: 2030 Official Community Pla Support the creation	nn n of affordable and safe rental, non-market and /or special needs housing.
Submitted by: Ross Soward, Planner Specia	alist
Approved for inclusion:	James Moore, Manager of Long Range Planning

cc:

Divisional Director, Community Planning and Strategic Investments Department Manager, Policy and Planning Department Manager, Community Planning

### **CITY OF KELOWNA**

### **BYLAW NO. 11688**

# Housing Agreement Authorization Bylaw – KI-LOW-NA Friendship Society, Inc. No. S-10638 – 1759 Highway 33 E

Whereas pursuant to Section 483 of the *Local Government Act*, a local government may, by bylaw, enter into a housing agreement.

Therefore, the Municipal Council of the City of Kelowna, in open meeting assembled, enacts as follows:

- 1. The Municipal Council hereby authorizes the City of Kelowna to enter into a Housing Agreement with KI-LOW-NA Friendship Society, Inc. No. S-10638 for the lands known as Lot B, Section 18, Township 27, ODYD, Plan 29386 located on Highway 33 E, Kelowna, B.C., a true copy of which is attached to and forms part of this bylaw as Schedule "A".
- The Mayor and City Clerk are hereby authorized to execute the attached agreement as well as any conveyances, deeds, receipts or other documents in connection with the attached agreement.
- 3. This bylaw shall come into full force and effect and is binding on all persons as and from the date of adoption.

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

Adopted by the Municipal Council of the City of Kelowna this

Mayor
 City Clerk

Page 1 of 7

#### PURPOSE-BUILT RENTAL HOUSING AGREEMENT

THIS AGREEMENT dated for reference August 23, 2018 affects:

#### LEGAL DESCRIPTON OF PROPERTY SUBJECT TO THE AGREEMENT:

Parcel Identifier: 004-337-999, LOT B SECTION 18 TOWNSHIP 27 OSOYOOS DIVISION YALE DISTRICT PLAN 29386 ("Land")

And is

### BETWEEN:

KI-LOW-NA FRIENDSHIP SOCIETY, having its offices at 442 Leon Avenue, Kelowna, B.C. V1Y 6J3

("Owner")

### AND:

CITY OF KELOWNA, a local government incorporated pursuant to the *Community Charter* and having its offices at 1435 Water Street, Kelowna, B.C. V1Y 1J4

("City")

### GIVEN THAT:

- A. The Owner has applied to the City for rezoning of the Lands to permit the construction of a housing complex that will include Purpose-Built Rental Housing units, as defined in this Agreement, on certain lands more particularly described in this Agreement;
- B. The City may, pursuant to section 483 of the *Local Government Act*, enter into an agreement with an owner of land that includes terms and conditions regarding the occupancy, tenure, and availability of the housing units on the land or construction on land;
- C. The Owner and the City wish to enter into this Agreement to provide for Purpose-Built Rental Housing on the terms and conditions set out in this Agreement, and agree that this Agreement is a housing agreement under s. 483 of the *Local Government Act*; and
- The City has, by bylaw, authorized the execution of this Agreement and the Owner has duly authorized the execution of this Agreement;

This Agreement is evidence that in consideration of \$1.00 paid by the City to the Owner (the receipt of which is acknowledged by the Owner) and in consideration of the promises exchanged below, the City and Owner agree, as a housing agreement between the Owner and the City under s. 483 of the *Local Government Act*, as follows:

### ARTICLE 1 INTERPRETATION

#### 1.1 Definitions -

"Caregiver" means an individual who provides assistance with the performance of the personal functions and activities necessary for daily living that a person is unable to perform efficiently for himself or herself;

"City" means the City of Kelowna;

"Dwelling Unit" means accommodation providing sleeping rooms, washrooms, and no more than one kitchen, intended for domestic use, and used or intended to be used permanently or semi permanently for a Household. This use does not include a room in a hotel or a motel.

"Household" means

- (a) a person;
- (b) two or more persons related by blood, marriage, or adoption; or associated through foster care, all
  living together in one dwelling unit as a single household using common cooking facilities;
- a group of not more than five persons, including boarders, who are not related by blood, marriage, or adoption, or associated through foster care, all living together in one dwelling unit as a single household using common cooking facilities; or
- (d) a combination of (b) and (c), provided that the combined total does not include more than 3 persons unrelated by blood, marriage or adoption or associated through foster care; all living together in one dwelling unit as a single household using common cooking facilities.

In addition, a household may also include up to one Caregiver or nanny;

"Land" means the land described herein;

"LTO" means the Kamloops Land Title Office or its successor;

"Official Community Plan" means the City of Kelowna Official Community Plan Bylaw No. 10500, or its successor bylaw;

"Owner" means the registered owner of the Lands from time to time and any parcels into which the Lands are subdivided;

"Purpose-Built Rental Housing" means a self-contained building(s) containing five or more Dwelling Units that are intended to be used for rental housing

"Tenancy Agreement" means a tenancy agreement as defined in, and subject to, the Residential Tenancy Act.

### 1.2 Interpretation - In this Agreement:

(a) reference to the singular includes a reference to the plural, and vice versa, unless the context

#### requires otherwise;

- (b) article and section headings have been inserted for ease of reference only and are not to be used in interpreting this Agreement;
- (c) reference to a particular numbered section or article, or to a particular lettered Schedule, is a reference to the correspondingly numbered or lettered article, section or Schedule of this Agreement;
- if a word or expression is defined in this Agreement, other parts of speech and grammatical forms of the same word or expression have corresponding meanings;
- (e) the word "enactment" has the meaning given in the *Interpretation Act* on the reference date of this Agreement;
- reference to any enactment includes any regulations, orders or directives made under the authority of that enactment;
- reference to any enactment is a reference to that enactment as consolidated, revised, amended, reenacted or replaced, unless otherwise expressly provided;
- (h) the provisions of s. 25 of the *Interpretation Act* with respect to the calculation of time apply;
- (i) time is of the essence;
- (j) all provisions are to be interpreted as always speaking;
- reference to a "party" is a reference to a party to this Agreement and to their respective successors, assigns, trustees, administrators and receivers;
- (I) reference to a "day", "month", "quarter" or "year" is a reference to a calendar day, calendar month, calendar quarter or calendar year, as the case may be, unless otherwise expressly provided;
- (m) the definitions given in the City of Kelowna Zoning Bylaw No. 8000, or its successor bylaw, and the Official Community Plan apply for the purposes of this Agreement; and
- (n) any act, decision, determination, consideration, consent or exercise of discretion by a party, or other
  person, as provided in this Agreement must be performed, made or exercised acting reasonably.

#### 1.3 Purpose of Agreement - The Owner and the City agree that:

- this Agreement is intended to serve the public interest by providing for occupancy of a certain number
  of Dwelling Units, of the kinds provided for in this Agreement, that are in demand in the City of
  Kelowna but that are not readily available;
- (b) damages are not an adequate remedy to the City in respect of any breach of this Agreement by the Owner, such that the Owner agrees the City should be entitled to an order for specific performance, injunction or other specific relief respecting any breach of this Agreement by the Owner.

### ARTICLE 2 HOUSING AGREEMENT AND LAND USE RESTRICTIONS

- **2.0** Land Use Restrictions The Owner and the City herby covenant and agree as follows:
  - (a) The Land must be used only in accordance with this Agreement;
  - The Owner will design, construct and maintain a building or buildings providing 49 Dwelling Units as Purpose-Built Rental Housing;
  - (c) No building on the Land may be subdivided by means of a strata plan for a period of ten (10) years from the date of this agreement.
  - (d) Despite subsection (c), and with the prior approval of the City's Council under section 242 of the Strata Property Act in the case of a building that has been previously occupied, a building may be subdivided by a strata plan for the sole purpose of transferring the strata lots to the Provincial Rental Housing Corporation. Any such strata lot must be used and maintained as Purpose-Built Rental Housing in accordance with subsection (b)

### ARTICLE 3 HOUSING AGREEMENT AND TRANSFER RESTRICTIONS

- 3.0 Purchaser Qualifications The City and the Owner agree as follows:
  - (a) the Owner must not, other than as set out in section 2.0 (d) sell or transfer, or agree to sell or transfer, any interest in any building containing Purpose-Built Rental Dwelling Unit(s) on the Land other than a full interest in the fee simple title to an agency or individual that will continue to ensure that the identified Purpose-Built Rental Dwelling Unit(s) are available in accordance with this Agreement.

### ARTICLE 4 GENERAL

- 4.1 Notice of Housing Agreement For clarity, the Owner acknowledges and agrees that:
  - (c) this Agreement constitutes a housing agreement entered into under s. 483 of the *Local Government*
  - (d) the City is requiring the Owner to file a notice of housing agreement in the LTO against title to the
  - (c) once such a notice is filed, this Agreement binds all persons who acquire an interest in the Land; and the notice of housing agreement may not be released from title to the Land, and this Agreement may not be terminated, sooner than ten (10) years from the date of this Agreement;
  - (d) repayment of any rental grant received from the City will be required if this Agreement is terminated and the notice of housing agreement is released from title to the Lands. Funds received would be directed to the Housing Opportunities Reserve Fund.
- 4.2 No Effect On Laws or Powers This Agreement does not
  - affect or limit the discretion, rights, duties or powers of the City under any enactment or at common law, including in relation to the use or subdivision of land,

- (b) impose on the City any legal duty or obligation, including any duty of care or contractual or other legal duty or obligation, to enforce this Agreement,
- (c) affect or limit any enactment relating to the use or subdivision of land, or
- (d) relieve the Owner from complying with any enactment, including in relation to the use or subdivision of land.
- 4.3 Management –The Owner further covenants and agrees that it will maintain the Dwelling Units in a satisfactory state of repair and fit for habitation and will comply with all laws, including health and safety standards applicable to the Land.
- 4.4 Notice Any notice which may be or is required to be given under this Agreement must be in writing and either be delivered or sent by facsimile transmission. Any notice which is delivered is to be considered to have been given on the first day after it is dispatched for delivery. Any notice which is sent by fax transmission is to be considered to have been given on the first business day after it is sent. If a party changes its address or facsimile number, or both, it must promptly give notice of its new address or facsimile number, or both, to the other party as provided in this section.
- 4.5 Agreement Runs With the Land Every obligation and covenant of the Owner in this Agreement constitutes both a contractual obligation and a covenant granted by the Owner to the City in respect of the Land and this Agreement burdens the Land and runs with it and binds the Owner's successors in title and binds every parcel into which it is consolidated or subdivided by any means, including by subdivision or by strata plan under the Strata Property Act.
- 4.6 Limitation on Owner's Obligations The Owner is only liable for breaches of this Agreement that occur while the Owner is the registered owner of the Land.
- 4.7 Release The Owner by this Agreement releases and forever discharges the City and each of its elected officials, officers, directors, employees and agents, and its and their heirs, executors, administrators, personal representatives, successors, and assigns, from and against all claims, demands, damages, actions, or causes of action by reason of or arising out of advice or direction respecting the ownership, lease, operation or management of the Land or the Dwelling Units which has been or at any time after the commencement of this Agreement may be given to the Owner by all or any of them. This clause will survive the termination of this Agreement.
- 4.8 Joint Venture Nothing in this Agreement will constitute the Owner as the agent, joint venturer, or partner of the City or give the Owner any authority to bind the City in any way.
- 4.9 Waiver An alleged waiver of any breach of this Agreement is effective only if it is an express waiver in writing of the breach. A waiver of a breach of this Agreement does not operate as a waiver of any other breach of this Agreement.
- **4.10** Further Acts The Owner shall do everything reasonably necessary to give effect to the intent of this Agreement, including execution of further instruments.
- 4.11 Severance If any part of this Agreement is held to be invalid, illegal or unenforceable by a court having the jurisdiction to do so, that part is to be considered to have been severed from the rest of this Agreement and the rest of this Agreement remains in force unaffected by that holding or by the severance of that part.

- 4.12 Equitable Remedies The Owner acknowledges and agrees that damages would be an inadequate remedy for the City for breach of this Agreement and that the public interest strongly favours specific performance, injunctive relief (mandatory or otherwise), or other equitable relief, as the only adequate remedy for a default under this Agreement.
- **4.13 No Other Agreements** This Agreement is the entire agreement between the parties regarding its subject and it terminates and supersedes all other agreements and arrangements regarding its subject.
- **4.14** Amendment This Agreement may be discharged, amended or affected only by an instrument duly executed by both the Owner and the City.
- **4.15** Enurement This Agreement binds the parties to it and their respective successors, heirs, executors and administrators. Reference in this Agreement to the "City" is a reference also to the elected and appointed officials, employees and agents of the City.
- **Deed and Contract** By executing and delivering this Agreement each of the parties intends to create both a contract and a deed executed and delivered under seal.

**IN WITNESS WHEREOF** the parties hereunto have executed this Agreement on the date and year first above written.

SIGNED, SEALED & DELIVERED in ) the presence of:	"OWNER" by its authorized signatory/ies:
Signature of Witness	John m. Terbasles
Francis Lampreau )	Edna M Terbasket Print Name:
21-2127 Ethel Street, Kelowna BC	
Financial Controller Occupation	Print Name:

SIGNED, SEALED & DELIVERED in ) the presence of: )	CITY OF KELOWNA by its authorized signatory/ies:
Signature of Witness )	Mayo
Print Name )	City Cleri
Address )	
Occupation	

### **CITY OF KELOWNA**

### **BYLAW NO. 11689**

# Housing Agreement Authorization Bylaw — 554764 B.C. Ltd., Inc. No. BC554764 — 200-220 Nickel Road

Whereas pursuant to Section 483 of the *Local Government Act*, a local government may, by bylaw, enter into a housing agreement.

Therefore, the Municipal Council of the City of Kelowna, in open meeting assembled, enacts as follows:

- 1. The Municipal Council hereby authorizes the City of Kelowna to enter into a Housing Agreement with 554764 B.C. Ltd., Inc. No. BC554764 for the lands known as Lot 1, Section 27, Township 26, ODYD, Plan EPP73636 located on Nickel Road, Kelowna, B.C., a true copy of which is attached to and forms part of this bylaw as Schedule "A".
- 2. The Mayor and City Clerk are hereby authorized to execute the attached agreement as well as any conveyances, deeds, receipts or other documents in connection with the attached agreement.
- 3. This bylaw shall come into full force and effect and is binding on all persons as and from the date of adoption.

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

Adopted by the Municipal Council of the City of Kelowna this

Mayor
 City Clerk

Page 1

#### PURPOSE-BUILT RENTAL HOUSING AGREEMENT

THIS AGREEMENT dated for reference August 21, 2018 affects:

### LEGAL DESCRIPTION OF PROPERTY SUBJECT TO THE AGREEMENT:

Lot 1 Section 27 Township 26 ODYD Plan EPP73636

("Land")

And is

**BETWEEN:** 554764 B.C. LTD.

Residing at 2730 Lower Glenrosa Road. West Kelowna, B.C. V4T 1L7

("Owner")

AND:

CITY OF KELOWNA, a local government incorporated pursuant to the *Community Charter* and having its offices at 1435 Water Street, Kelowna, B.C. V1Y 1J4

("City")

### **GIVEN THAT:**

- A. The Owner has applied to the City for rezoning of the Lands to permit the construction of a housing complex that will include purpose-built rental housing units, as defined in this Agreement, on certain lands more particularly described in this Agreement;
- B. The City may, pursuant to section 483 of the Local Government Act, enter into an agreement with an owner of land that includes terms and conditions regarding the occupancy, tenure, and availability of the housing units on the land or construction on land:
- C. The Owner and the City wish to enter into this Agreement to provide for purpose-built rental housing on the terms and conditions set out in this Agreement, and agree that this Agreement is a housing agreement under s. 483 of the *Local Government Act*; and
- The City has, by bylaw, authorized the execution of this Agreement and the Owner has duly authorized the execution of this Agreement;

This Agreement is evidence that in consideration of \$1.00 paid by the City to the Owner (the receipt of which is acknowledged by the Owner) and in consideration of the promises exchanged below, the City and Owner agree, as a housing agreement between the Owner and the City under s. 483 of the *Local Government Act*, as follows:

### ARTICLE 1 INTERPRETATION

### 1.1 Definitions -

"Caregiver" means an individual who provides assistance with the performance of the personal functions and activities necessary for daily living that a person is unable to perform efficiently for himself or herself;

"City" means the City of Kelowna;

"Dwelling Unit" means accommodation providing sleeping rooms, washrooms, and no more than one kitchen, intended for domestic use, and used or intended to be used permanently or semi-permanently for a Household. This use does not include a room in a hotel or a motel.

"Household" means

- (a) a person;
- (b) two or more persons related by blood, marriage, or adoption; or associated through foster care, all living together in one dwelling unit as a single household using common cooking facilities;
- (c) a group of not more than five persons, including boarders, who are not related by blood, marriage, or adoption, or associated through foster care, all living together in one dwelling unit as a single household using common cooking facilities; or
- (d) a combination of (b) and (c), provided that the combined total does not include more than 3 persons unrelated by blood, marriage or adoption or associated through foster care; all living together in one dwelling unit as a single household using common cooking facilities.

In addition, a household may also include up to one Caregiver or nanny;

"Land" means the land described herein;

"LTO" means the Kamloops Land Title Office or its successor;

"Official Community Plan" means the City of Kelowna Official Community Plan Bylaw No. 10500, or its successor bylaw;

"Owner" means the registered owner of the Lands from time to time and any parcels into which the Lands are subdivided:

"Purpose-Built Rental Housing" means a Dwelling Unit that is intended to be used for rental housing; and

"Tenancy Agreement" means a tenancy agreement as defined in, and subject to, the Residential Tenancy

### **1.2** Interpretation - In this Agreement:

- (a) reference to the singular includes a reference to the plural, and vice versa, unless the context requires otherwise;
- (b) article and section headings have been inserted for ease of reference only and are not to be used in interpreting this Agreement;
- (c) reference to a particular numbered section or article, or to a particular lettered Schedule, is a reference to the correspondingly numbered or lettered article, section or Schedule of this Agreement;
- if a word or expression is defined in this Agreement, other parts of speech and grammatical forms of the same word or expression have corresponding meanings;
- (e) the word "enactment" has the meaning given in the Interpretation Act on the reference date of this Agreement;
- (f) reference to any enactment includes any regulations, orders or directives made under the authority of that enactment;
- reference to any enactment is a reference to that enactment as consolidated, revised, amended, reenacted or replaced, unless otherwise expressly provided;
- (h) the provisions of s. 25 of the Interpretation Act with respect to the calculation of time apply;
- (i) time is of the essence;
- (i) all provisions are to be interpreted as always speaking;
- (k) reference to a "party" is a reference to a party to this Agreement and to their respective successors, assigns, trustees, administrators and receivers;
- (I) reference to a "day", "month", "quarter" or "year" is a reference to a calendar day, calendar month, calendar quarter or calendar year, as the case may be, unless otherwise expressly provided;
- (m) the definitions given in the City of Kelowna Zoning Bylaw No. 8000, or its successor bylaw, and the Official Community Plan apply for the purposes of this Agreement; and
- (n) any act, decision, determination, consideration, consent or exercise of discretion by a party, or other
  person, as provided in this Agreement will be performed, made or exercised acting reasonably.

### 1.3 Purpose of Agreement - The Owner and the City agree that:

- (a) this Agreement is intended to serve the public interest by providing for occupancy of a certain number of Dwelling Units, of the kinds provided for in this Agreement, that are in demand in the City of Kelowna but that are not readily available;
- (b) damages are not an adequate remedy to the City in respect of any breach of this Agreement by the Owner, such that the Owner agrees the City should be entitled to an order for specific performance, injunction or other specific relief respecting any breach of this Agreement by the Owner.

### ARTICLE 2 HOUSING AGREEMENT AND LAND USE RESTRICTIONS

- 2.1 Land Use Restrictions The Owner and the City herby covenant and agree as follows:
  - (a) The Land will be used only in accordance with this Agreement;
  - (b) The Owner will design, construct and maintain one or more buildings providing 19 Dwelling Units as Purpose-Built Rental Housing
  - (c) The Owner acknowledges that the City will not support applications to stratify the building(s) on the Land, thereby allowing the identified Purpose-Built Rental Housing Dwelling Units to be sold independently of each other, for a period of ten (10) years from the date of this Agreement.

### ARTICLE 3 HOUSING AGREEMENT AND TRANSFER RESTRICTIONS

- 3.1 Purchaser Qualifications The City and the Owner agree as follows:
  - (a) the Owner will not sell or transfer, or agree to sell or transfer, any interest in any building containing Purpose-Built Rental Housing Dwelling Units on the Land other than a full interest in the fee simple title to an agency or individual that will continue to ensure that the Purpose-Built Rental Housing Dwelling Units are available in accordance with this Agreement.
- **3.2** Use and Occupancy of Purpose-Built Rental Housing Dwelling Unit The Owner agrees with the City as follows:
  - (a) the Owner will rent or lease each Purpose-Built Rental Housing Dwelling Unit on the Land in accordance with the Residential Tenancy Act, and in no event may the Owner itself occupy a Purpose-Built Rental Housing Dwelling Unit or use the Purpose-Built Rental Housing Dwelling Unit for short-term vacation accommodation; and
  - (b) the Owner will deliver a copy of the Tenancy Agreement for each Purpose-Built Rental Housing Dwelling Unit to the City upon demand.

### ARTICLE 4 GENERAL

- 4.1 Notice of Housing Agreement For clarity, the Owner acknowledges and agrees that:
  - this Agreement constitutes a housing agreement entered into under s. 483 of the Local Government Act;
  - (b) the City is requiring the Owner to file a notice of housing agreement in the LTO against title to the

Land:

- (c) once such a notice is filed, this Agreement binds all persons who acquire an interest in the Land;
- (d) in the event the parties agree to release this Agreement from the title of the Land, which may not occur before the tenth (10<sup>th</sup>) anniversary of the date of this Agreement, the Owner will repay the City for 100% of the amount of the rental grant received from the City. Such repaid funds will be directed to the City's Housing Opportunities Reserve Fund.

### 4.2 No Effect On Laws or Powers - This Agreement does not

- (a) affect or limit the discretion, rights, duties or powers of the City under any enactment or at common law, including in relation to the use or subdivision of land,
- impose on the City any legal duty or obligation, including any duty of care or contractual or other legal duty or obligation, to enforce this Agreement,
- (c) affect or limit any enactment relating to the use or subdivision of land, or
- (d) relieve the Owner from complying with any enactment, including in relation to the use or subdivision of land.
- 4.3 Management The Owner covenants and agrees that it will furnish good and efficient management of the Dwelling Units and will permit representatives of the City to inspect the Dwelling Units at any reasonable time, subject to the notice provisions of the Residential Tenancy Act. The Owner further covenants and agrees that it will maintain the Dwelling Units in a satisfactory state of repair and fit for habitation and will comply with all laws, including health and safety standards applicable to the Land. Notwithstanding the foregoing, the Owner acknowledges and agrees that the City, in its absolute discretion, may require the Owner, at the Owner's expense, to hire a person or company with the skill and expertise to manage the Dwelling Units.
- 4.4 Notice Any notice which may be or is required to be given under this Agreement will be in writing and either be delivered or sent by facsimile transmission. Any notice which is delivered is to be considered to have been given on the first day after it is dispatched for delivery. Any notice which is sent by fax transmission is to be considered to have been given on the first business day after it is sent. If a party changes its address or facsimile number, or both, it will promptly give notice of its new address or facsimile number, or both, to the other party as provided in this section.
- 4.5 Agreement Runs With the Land Every obligation and covenant of the Owner in this Agreement constitutes both a contractual obligation and a covenant granted by the Owner to the City in respect of the Land and this Agreement burdens the Land and runs with it and binds the Owner's successors in title and binds every parcel into which it is consolidated or subdivided by any means, including by subdivision or by strata plan under the Strata Property Act.
- **4.6 Limitation on Owner's Obligations** The Owner is only liable for breaches of this Agreement that occur while the Owner is the registered owner of the Land.
- 4.7 Release The Owner by this Agreement releases and forever discharges the City and each of its elected officials, officers, directors, employees and agents, and its and their heirs, executors, administrators, personal representatives, successors, and assigns, from and against all claims, demands, damages,

actions, or causes of action by reason of or arising out of advice or direction respecting the ownership, lease, operation or management of the Land or the Dwelling Units which has been or at any time after the commencement of this Agreement may be given to the Owner by all or any of them. This clause will survive the termination of this Agreement.

- **4.8 Joint Venture** Nothing in this Agreement will constitute the Owner as the agent, joint venturer, or partner of the City or give the Owner any authority to bind the City in any way.
- 4.9 Waiver An alleged waiver of any breach of this Agreement is effective only if it is an express waiver in writing of the breach. A waiver of a breach of this Agreement does not operate as a waiver of any other breach of this Agreement.
- **4.10** Further Acts The Owner will do everything reasonably necessary to give effect to the intent of this Agreement, including execution of further instruments.
- 4.11 Severance If any part of this Agreement is held to be invalid, illegal or unenforceable by a court having the jurisdiction to do so, that part is to be considered to have been severed from the rest of this Agreement and the rest of this Agreement remains in force unaffected by that holding or by the severance of that part.
- 4.12 Equitable Remedies The Owner acknowledges and agrees that damages would be an inadequate remedy for the City for breach of this Agreement and that the public interest strongly favours specific performance, injunctive relief (mandatory or otherwise), or other equitable relief, as the only adequate remedy for a default under this Agreement.
- **4.13 No Other Agreements** This Agreement is the entire agreement between the parties regarding its subject and it terminates and supersedes all other agreements and arrangements regarding its subject.
- **4.14** Amendment This Agreement may be discharged, amended or affected only by an instrument duly executed by both the Owner and the City.
- 4.15 Enurement This Agreement binds the parties to it and their respective successors, heirs, executors and administrators. Reference in this Agreement to the "City" is a reference also to the elected and appointed officials, employees and agents of the City.
- **Deed and Contract** By executing and delivering this Agreement each of the parties intends to create both a contract and a deed executed and delivered under seal.

**IN WITNESS WHEREOF** the parties hereunto have executed this Agreement on the date and year first above written.

SIGNED, SEALED & DELIVERED in ) the presence of:	"OWNER"
Signature of Witness  Twyla Haynes ) Print Name	James Zeleznk Print Name:
_# 8 3359 Cougar road West ) Kelowna ) Address	_2730 Lower Glenrosa road West Kelowna
Book Keeper Occupation	
SIGNED, SEALED & DELIVERED in ) the presence of:	CITY OF KELOWNA by its authorized signatories:
Signature of Witness )	Mayor
Print Name )	City Clerk
Address )	
Occupation	

#### CITY OF KELOWNA

### **BYLAW NO. 11690**

# Housing Agreement Authorization Bylaw – 1017476 B.C. Ltd., Inc. No. BC1017476 – 1730 and 1740 Richter Street

Whereas pursuant to Section 483 of the *Local Government Act*, a local government may, by bylaw, enter into a housing agreement.

Therefore, the Municipal Council of the City of Kelowna, in open meeting assembled, enacts as follows:

- 1. The Municipal Council hereby authorizes the City of Kelowna to enter into a Housing Agreement with 1017476, Inc. No. BC1017476 for the lands known as Lot 1, District Lot 139, ODYD, Plan KAP92715 located on Richter Street, Kelowna, B.C., a true copy of which is attached to and forms part of this bylaw as Schedule "A".
- 2. The Mayor and City Clerk are hereby authorized to execute the attached agreement as well as any conveyances, deeds, receipts or other documents in connection with the attached agreement.
- 3. This bylaw shall come into full force and effect and is binding on all persons as and from the date of adoption.

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

Adopted by the Municipal Council of the City of Kelowna this

Mayor
 City Clerk

Page 1

#### PURPOSE-BUILT RENTAL HOUSING AGREEMENT

THIS AGREEMENT dated for reference \_\_\_\_\_\_ affects:

under s. 483 of the Local Government Act; and

execution of this Agreement;

C.

D.

LEGA	L DES	CRIPTION OF PROPERTY SUBJECT TO THE AGREEMENT:
		LOT 1 PLAN 92715
		("Land")
And is		
BETW	EEN:	1017476 BC Ltd. 1700 – 1681 DICKSON AVE. KELOWNA, BC V1Y 0B5
		("Owner")
AND:		
		CITY OF KELOWNA, a local government incorporated pursuant to the <i>Community Charter</i> and having its offices at 1435 Water Street, Kelowna, B.C. V1Y 1J4
		("City")
GIVEN	I THAT	
A.	compl	Owner has applied to the City for rezoning of the Lands to permit the construction of a housing lex that will include purpose-built rental housing units, as defined in this Agreement, on certain lands particularly described in this Agreement;
B.	owner	City may, pursuant to section 483 of the <i>Local Government Act</i> , enter into an agreement with an of land that includes terms and conditions regarding the occupancy, tenure, and availability of the grant units on the land or construction on land;

This Agreement is evidence that in consideration of \$1.00 paid by the City to the Owner (the receipt of which is acknowledged by the Owner) and in consideration of the promises exchanged below, the City and Owner agree, as a housing agreement between the Owner and the City under s. 483 of the *Local Government Act*, as follows:

The Owner and the City wish to enter into this Agreement to provide for purpose-built rental housing on the

terms and conditions set out in this Agreement, and agree that this Agreement is a housing agreement

The City has, by bylaw, authorized the execution of this Agreement and the Owner has duly authorized the

### ARTICLE 1 INTERPRETATION

#### 1.1 Definitions -

"Caregiver" means an individual who provides assistance with the performance of the personal functions and activities necessary for daily living that a person is unable to perform efficiently for himself or herself;

"City" means the City of Kelowna;

"Dwelling Unit" means accommodation providing sleeping rooms, washrooms, and no more than one kitchen, intended for domestic use, and used or intended to be used permanently or semi-permanently for a Household. This use does not include a room in a hotel or a motel.

#### "Household" means

- (a) a person;
- two or more persons related by blood, marriage, or adoption; or associated through foster care, all
  living together in one dwelling unit as a single household using common cooking facilities;
- (c) a group of not more than five persons, including boarders, who are not related by blood, marriage, or adoption, or associated through foster care, all living together in one dwelling unit as a single household using common cooking facilities; or
- (d) a combination of (b) and (c), provided that the combined total does not include more than 3 persons unrelated by blood, marriage or adoption or associated through foster care; all living together in one dwelling unit as a single household using common cooking facilities.

In addition, a household may also include up to one Caregiver or nanny;

"Land" means the land described herein;

"LTO" means the Kamloops Land Title Office or its successor;

"Official Community Plan" means the City of Kelowna Official Community Plan Bylaw No. 10500, or its successor bylaw;

"Owner" means the registered owner of the Lands from time to time and any parcels into which the Lands are subdivided;

"Purpose-Built Rental Housing" means a Dwelling Unit that is intended to be used for rental housing; and

"Tenancy Agreement" means a tenancy agreement as defined in, and subject to, the Residential Tenancy Act

#### **1.2** Interpretation - In this Agreement:

- reference to the singular includes a reference to the plural, and vice versa, unless the context requires otherwise;
- (b) article and section headings have been inserted for ease of reference only and are not to be used in interpreting this Agreement;
- reference to a particular numbered section or article, or to a particular lettered Schedule, is a reference to the correspondingly numbered or lettered article, section or Schedule of this Agreement;
- if a word or expression is defined in this Agreement, other parts of speech and grammatical forms of the same word or expression have corresponding meanings;
- (e) the word "enactment" has the meaning given in the Interpretation Act on the reference date of this Agreement;
- reference to any enactment includes any regulations, orders or directives made under the authority of that enactment;
- reference to any enactment is a reference to that enactment as consolidated, revised, amended, re-enacted or replaced, unless otherwise expressly provided;
- (h) the provisions of s. 25 of the Interpretation Act with respect to the calculation of time apply;
- (i) time is of the essence;
- all provisions are to be interpreted as always speaking;
- (k) reference to a "party" is a reference to a party to this Agreement and to their respective successors, assigns, trustees, administrators and receivers;
- reference to a "day", "month", "quarter" or "year" is a reference to a calendar day, calendar month, calendar quarter or calendar year, as the case may be, unless otherwise expressly provided;
- (m) the definitions given in the City of Kelowna Zoning Bylaw No. 8000, or its successor bylaw, and the Official Community Plan apply for the purposes of this Agreement; and
- any act, decision, determination, consideration, consent or exercise of discretion by a party, or other person, as provided in this Agreement will be performed, made or exercised acting reasonably.

#### 1.3 Purpose of Agreement - The Owner and the City agree that:

- this Agreement is intended to serve the public interest by providing for occupancy of a certain number of Dwelling Units, of the kinds provided for in this Agreement, that are in demand in the City of Kelowna but that are not readily available;
- (b) damages are not an adequate remedy to the City in respect of any breach of this Agreement by the Owner, such that the Owner agrees the City should be entitled to an order for specific

performance, injunction or other specific relief respecting any breach of this Agreement by the Owner.

### ARTICLE 2 HOUSING AGREEMENT AND LAND USE RESTRICTIONS

- 2.1 Land Use Restrictions The Owner and the City herby covenant and agree as follows:
  - (a) The Land will be used only in accordance with this Agreement;
  - (b) The Owner will design, construct and maintain one or more buildings providing 108 Dwelling Units as Purpose-Built Rental Housing
  - (c) The Owner acknowledges that the City will not support applications to stratify the building(s) on the Land, thereby allowing the identified Purpose-Built Rental Housing Dwelling Units to be sold independently of each other, for a period of ten (10) years from the date of this Agreement.

### ARTICLE 3 HOUSING AGREEMENT AND TRANSFER RESTRICTIONS

- 3.1 Purchaser Qualifications The City and the Owner agree as follows:
  - (a) the Owner will not sell or transfer, or agree to sell or transfer, any interest in any building containing Purpose-Built Rental Housing Dwelling Units on the Land other than a full interest in the fee simple title to an agency or individual that will continue to ensure that the Purpose-Built Rental Housing Dwelling Units are available in accordance with this Agreement.
- 3.2 Use and Occupancy of Purpose-Built Rental Housing Dwelling Unit The Owner agrees with the City as follows:
  - (a) the Owner will rent or lease each Purpose-Built Rental Housing Dwelling Unit on the Land in accordance with the Residential Tenancy Act, and in no event may the Owner itself occupy a Purpose-Built Rental Housing Dwelling Unit or use the Purpose-Built Rental Housing Dwelling Unit for short-term vacation accommodation; and
  - (b) the Owner will deliver a copy of the Tenancy Agreement for each Purpose-Built Rental Housing Dwelling Unit to the City upon demand.

#### ARTICLE 4 GENERAL

4.1 Notice of Housing Agreement - For clarity, the Owner acknowledges and agrees that:

- this Agreement constitutes a housing agreement entered into under s. 483 of the Local Government Act;
- (b) the City is requiring the Owner to file a notice of housing agreement in the LTO against title to the Land:
- (c) once such a notice is filed, this Agreement binds all persons who acquire an interest in the Land;
- (d) in the event the parties agree to release this Agreement from the title of the Land, which may not occur before the tenth (10<sup>th</sup>) anniversary of the date of this Agreement, the Owner will repay the City for 100% of the amount of the rental grant received from the City. Such repaid funds will be directed to the City's Housing Opportunities Reserve Fund.

#### 4.2 No Effect On Laws or Powers - This Agreement does not

- affect or limit the discretion, rights, duties or powers of the City under any enactment or at common law, including in relation to the use or subdivision of land,
- impose on the City any legal duty or obligation, including any duty of care or contractual or other legal duty or obligation, to enforce this Agreement,
- (c) affect or limit any enactment relating to the use or subdivision of land, or
- (d) relieve the Owner from complying with any enactment, including in relation to the use or subdivision of land.
- 4.3 Management The Owner covenants and agrees that it will furnish good and efficient management of the Dwelling Units and will permit representatives of the City to inspect the Dwelling Units at any reasonable time, subject to the notice provisions of the Residential Tenancy Act. The Owner further covenants and agrees that it will maintain the Dwelling Units in a satisfactory state of repair and fit for habitation and will comply with all laws, including health and safety standards applicable to the Land. Notwithstanding the foregoing, the Owner acknowledges and agrees that the City, in its absolute discretion, may require the Owner, at the Owner's expense, to hire a person or company with the skill and expertise to manage the Dwelling Units.
- 4.4 Notice Any notice which may be or is required to be given under this Agreement will be in writing and either be delivered or sent by facsimile transmission. Any notice which is delivered is to be considered to have been given on the first day after it is dispatched for delivery. Any notice which is sent by fax transmission is to be considered to have been given on the first business day after it is sent. If a party changes its address or facsimile number, or both, it will promptly give notice of its new address or facsimile number, or both, to the other party as provided in this section.
- 4.5 Agreement Runs With the Land Every obligation and covenant of the Owner in this Agreement constitutes both a contractual obligation and a covenant granted by the Owner to the City in respect of the Land and this Agreement burdens the Land and runs with it and binds the Owner's successors in title and binds every parcel into which it is consolidated or subdivided by any means, including by subdivision or by strata plan under the Strata Property Act.
- 4.6 Limitation on Owner's Obligations The Owner is only liable for breaches of this Agreement that occur while the Owner is the registered owner of the Land.

- 4.7 Release The Owner by this Agreement releases and forever discharges the City and each of its elected officials, officers, directors, employees and agents, and its and their heirs, executors, administrators, personal representatives, successors, and assigns, from and against all claims, demands, damages, actions, or causes of action by reason of or arising out of advice or direction respecting the ownership, lease, operation or management of the Land or the Dwelling Units which has been or at any time after the commencement of this Agreement may be given to the Owner by all or any of them. This clause will survive the termination of this Agreement.
- 4.8 Joint Venture Nothing in this Agreement will constitute the Owner as the agent, joint venture, or partner of the City or give the Owner any authority to bind the City in any way.
- 4.9 Waiver An alleged waiver of any breach of this Agreement is effective only if it is an express waiver in writing of the breach. A waiver of a breach of this Agreement does not operate as a waiver of any other breach of this Agreement.
- 4.10 Further Acts The Owner will do everything reasonably necessary to give effect to the intent of this Agreement, including execution of further instruments.
- 4.11 Severance If any part of this Agreement is held to be invalid, illegal or unenforceable by a court having the jurisdiction to do so, that part is to be considered to have been severed from the rest of this Agreement and the rest of this Agreement remains in force unaffected by that holding or by the severance of that part.
- 4.12 Equitable Remedies The Owner acknowledges and agrees that damages would be an inadequate remedy for the City for breach of this Agreement and that the public interest strongly favours specific performance, injunctive relief (mandatory or otherwise), or other equitable relief, as the only adequate remedy for a default under this Agreement.
- 4.13 No Other Agreements This Agreement is the entire agreement between the parties regarding its subject and it terminates and supersedes all other agreements and arrangements regarding its subject.
- 4.14 Amendment This Agreement may be discharged, amended or affected only by an instrument duly executed by both the Owner and the City.
- 4.15 Enurement This Agreement binds the parties to it and their respective successors, heirs, executors and administrators. Reference in this Agreement to the "City" is a reference also to the elected and appointed officials, employees and agents of the City.
- 416 Deed and Contract By executing and delivering this Agreement each of the parties intends to create both a contract and a deed executed and delivered under seal.

**IN WITNESS WHEREOF** the parties hereunto have executed this Agreement on the date and year first above written.

SIGNED, SEALED & DELIVERED in ) the presence of:	"OWNER" by its authorized signatories:
Signature of Witness	James authorized signatories,
BOB DAGENAIS	HARRY ISSLER, GENERAL MANAGER
Print Name	Print Name:
1700 – 1631 Dickson Ave., Kelowna	
Address	
Project Development Manager	Print Name:
Occupation	
SIGNED, SEALED & DELIVERED in ) the presence of:	CITY OF KELOWNA by its authorized signatories:
Signature of Witness )	Mayor
Print Name )	City Clerk
Address )	
Occupation	

# Report to Council



Date: September 24, 2018

File: 1220-02

To: City Manager

From: Ross Soward, Planner Specialist

Subject: Rental Housing Revitalization Tax Exemption Agreements Fall 2018

#### Recommendation:

THAT Council, receives, for information, the Report from the Planner Specialist dated May 28, 2018 recommending that Council adopt the following Revitalization Tax Exemption Agreements for four purpose-built rental housing projects.

THAT Council approves the City of Kelowna entering into a Revitalization Tax Exemption Agreement with 1017476 B.C. Ltd., INC. NO. BC1017476 (ASC Construction LTD), for Lot 1 District Lot 139 ODYD PLAN 92715 at 1730 Richter Street, Kelowna, BC.

THAT Council approves the City of Kelowna entering into a Revitalization Tax Exemption Agreement with 1017476 B.C. Ltd., INC. NO. BC1017476 (ASC Construction LTD), for Lot 1 District Lot 139 ODYD PLAN 92715 at 1740 Richter Street, Kelowna, BC.

THAT Council approves the City of Kelowna entering into a Revitalization Tax Exemption Agreement with Ki-Low-Na Friendship Society for Lot B Section 18 Township 27 ODYD, Plan 29386 at 1759 Highway 33 East, Kelowna, BC.

THAT Council approves the City of Kelowna entering into a Revitalization Tax Exemption Agreement with 554764 Ltd, for Lot 1 Section 27 Township 26 ODYD, Plan EPP73636 at 200-220 Nickel Road, Kelowna, BC.

#### Purpose:

To bring forward four 10-year Revitalization Tax Exemption Agreements for approval to support the purpose-built rental housing projects identified in the report from the Planner Specialist, dated September 24, 2018 in accordance with Revitalization Tax Exemption Program Bylaw No. 9561

#### Background:

The recently adopted Healthy Housing Strategy identified the importance of an ongoing construction of purpose-built rental housing to maintain a balanced rental housing market in Kelowna. Through the strategy an annual target of 400 purpose-built rental units was established to encourage a healthy rental market. Also, given the low vacancy rates for rental housing in the Kelowna CMA over the last several years the development of purpose-built rental housing continues to be an important priority. In order to encourage the development of purpose-built rental housing the City provides a number of financial incentives.

One of the incentives is for 10-year revitalization tax exemptions for purpose-built rental housing where the proponent meets three requirements:

- 1. The vacancy rate is at or below 3%
- 2. The subject property has a Housing Agreement (for up to 10 years)
- 3. Development in compliance with the OCP Future Land Use designation.

All of the proposed projects meet the criteria for revitalization tax exemption applications. The four projects have Housing Agreements in place, subject to Council approval. The City's rental housing vacancy rate is currently below 3 per cent and all projects are in compliance with the OCP future land use designation. The proposed exemption will be valid for the ten years based on occupancy of each individual project. A draft copy of the Revitalization Tax Exemption Agreement for each project is attached for additional details.

Although there is a significant need and demand for rental housing the Revitalization Tax Exemption program does come at a financial cost. Staff estimate the total amount of tax revenue associated with the 10-year exemption for the 256 purpose-built rental units is \$1,280,000. The amount for each project is estimated in the table below.

Property	Project Details	Estimated Annual Revenue Impact
1730 Richter Street	8o rental units	\$40,000
1740 Richter Street	108 rental units	\$54,000
200-220 Nickel Road	19 rental units	\$9,500
1759 Highway 33 East	49 rental units	\$24,500

#### **Internal Circulation:**

Divisional Director, Community Planning & Real Estate Department Manager, Policy & Planning Supervisor, Revenue Manager, Urban Planning

#### Legal/Statutory Authority:

Revitalization Tax Exemption Program Bylaw No. 9561, 2006 Community Charter, Division, Section 226

#### **Legal/Statutory Procedural Requirements:**

The Revitalization Tax Exemption Bylaw No. 9561 supports municipal tax incentives for purpose-built rental housing when the vacancy rate for rental housing is at three per cent or lower.

#### **Existing Policy:**

Official Community Plan Bylaw No. 10500

Revitalization Tax Exemption Program Bylaw No. 9561 Policy 5.1.3

Submitted by: R. Soward, Planner Specialist

**Approved for inclusion:** J. Moore, Manager of Long Range Planning

#### Attachments:

- 1. Schedule A Draft RTE Agreement 1730 Richter Street
- 2. Schedule B Draft RTE Agreement 1740 Richter Street
- 3. Schedule C Draft RTE Agreement 1759 Highway 33 East
- 4. Schedule D- Draft RTE Agreement 200-220 Nickel Road

#### RTE18-0002

#### Consolidated Bylaw No. 9561 - Page 9

BL10566, BL10674 amended SCHEDULE "B" and BL10974 replaced SCHEUDLE "B":

# SCHEDULE "B" Revitalization Tax Exemption Agreement

THIS AGREEME	NT dated for reference the day of	, 20_	is
BETWEEN:			
	1017476 B.C. Ltd.		
	1700-1631 Dickson Ave.		
	Kelowna, BC V1Y 0B5		
	(the "Owner")		

#### AND:

CITY OF KELOWNA 1435 Water Street, Kelowna, B.C. V1Y 1J4 (the "City")

#### **GIVEN THAT:**

- A. The Owner is the registered owner in fee simple of lands in the City of Kelowna at 1730 Richter St. legally described as LOT 1 PLAN 92715 (the "Parcel");
- B. Council has established a revitalization tax exemption program and has included within the City of Kelowna Revitalization Tax Exemption Program Bylaw No. 9561 the designation of areas which include the Parcel as a revitalization area; and
- C. The Owner proposes to construct new improvements on the Parcel as described in Appendix "A" attached to and forming part of this agreement (the "Project") and has applied to the City to take part in the revitalization tax exemption program in respect of the Project and the City has agreed to accept the Project under the program;

THIS AGREEMENT is evidence that in consideration of the promises exchanged below, the Owner and the City covenant and agree each with the other as follows:

- 1. The Project the Owner will use its best efforts to ensure that the Project is constructed, maintained, operated and used in a fashion that will be consistent with and will foster the objectives of the revitalization tax exemption program, as outlined in the City of Kelowna Revitalization Tax Exemption Program Bylaw No. 9561. Without limiting the generality of the foregoing, the Owner covenants to use its best efforts to ensure that the Project will:
  - a. Provide 80 Units of purpose built rental apartments

- 2. **Operation and Maintenance of the Project** throughout the term of this agreement, the Owner shall operate, repair and maintain the Project and will keep the Project in a state of good repair as a prudent owner would do.
- 3. **Revitalization Amount** Refers to the municipal portion of property tax calculated in relation to the increase in the assessed value of improvements on the property resulting from the construction or alterations as outlined in section 1 of this agreement;
- 4. **Revitalization Tax Exemption** subject to fulfilment of the conditions set out in this agreement and in "City of Kelowna Revitalization Tax Exemption Program Bylaw No. 9561", the City shall issue a revitalization tax exemption certificate (the "Tax Exemption Certificate") to the British Columbia Assessment Authority entitling the Owner to a property tax exemption in respect of the property taxes due (not including local service taxes) in relation to the Revitalization Amount on the Parcel (the "Tax Exemption") for the calendar year(s) set out in this agreement.
- 5. **Conditions** the following conditions shall be fulfilled before the City will issue a Tax Exemption Certificate to the Owner in respect of the Project:
  - The Owner must obtain a building permit from the City for the Project on or before June, 2017;
  - b. The Owner must complete or cause to be completed construction of the Project in a good and workmanlike fashion and in strict compliance with the building permit and the plans and specifications attached hereto as Appendix "A" and the Project must be officially opened for use as *a rental apartment building* (the "Exempt Use") and for no other use, by no later than October 1, 2018;
  - c. The Owner must submit a copy of the Occupancy Permit and Revitalization Tax Exemption Agreement to the City of Kelowna's Revenue Branch before the City will issue the Tax Exemption Certificate.
  - d. The completed Project must substantially satisfy the performance criteria set out in Appendix "B" hereto, as determined by the City's Urban Planning Manager or designate, in their sole discretion, acting reasonably.
- **6. Calculation of Calculation of Revitalization Tax Exemption** the amount of the Tax Exemption shall be equal to:

For Purpose-Built Rental Housing Projects throughout the City, 100% of the Revitalization Amount on the Parcel where the project is subject to a Housing Agreement (for up to 10 years) and is in compliance with the OCP Future Land Use designation as at May 30, 2011. A tax incentive for rental housing will only be considered when the vacancy rate is at or below 3%;

- 7. **Term of Tax Exemption** provided the requirements of this agreement, and of the City of Kelowna Revitalization Tax Exemption Program Bylaw No. 9561, are met the Tax Exemption shall be for the taxation years 2019 to 2028, inclusive.
- 8. [deleted]
- 9. Compliance with Laws the Owner shall construct the Project and, at all times during the term of the Tax Exemption or any renewal term, use and occupy the Parcel and the Project in compliance with all statutes, laws, regulations and orders of any authority having jurisdiction and, without limiting the generality of the foregoing, all federal, provincial, or municipal laws or statutes or bylaws, including all the rules regulations policies guidelines criteria or the like made under or pursuant to any such laws.
- 10. **Effect of Stratification** if the Owner stratifies the Parcel under the Strata Property Act, then the Tax Exemption shall be prorated among the strata lots in accordance with the unit entitlement of each strata lot for:
  - a. the current and each subsequent tax year during the currency of this agreement if the strata plan is accepted for registration at the Land Title Office before May 1; or
  - for the next calendar year and each subsequent tax year during the currency of this
    agreement if the strata plan is accepted for registration at the Land Title Office after
    May 1;

so long as, if the Project is the subject of an operating agreement between the Owner and the Provincial Rental Housing Corporation, the Owner is in compliance with the operating agreement. The Owner agrees to provide written confirmation to the City regarding the Owner's compliance with the said operating agreement, satisfactory to the City, upon the City's reasonable inquiry.

- 11. **Cancellation** the City may in its sole discretion cancel the Tax Exemption Certificate at any time:
  - a. on the written request of the Owner; or
  - b. effective immediately upon delivery of a notice of cancellation to the Owner if at any time any of the conditions in the Tax Exemption Certificate are not met.
  - c. If the Owner is subject to an operating agreement with the Provincial Rental Housing Corporation and is not in compliance with the operating agreement.

If such cancellation occurs, the Owner of the Parcel for which the Tax Exemption Certificate was issued will remit to the City an amount equal to the value of any Tax Exemption received after the cancellation of the Tax Exemption Certificate.

- 12. **No Refund** for greater certainty, under no circumstances will the Owner be entitled under the City's revitalization tax exemption program to any cash credit, any carry forward tax exemption credit or any refund for any property taxes paid.
- 13. **Notices** any notice or other writing required or permitted to be given hereunder or for the purposes hereof to any party shall be sufficiently given if delivered by hand or posted on the Parcel, or if sent by prepaid registered mail (Express Post) or if transmitted by facsimile to such party:
  - a. in the case of a notice to the City, at:

THE CITY OF KELOWNA 1435 Water Street, Kelowna, B.C. V1Y 1J4

Attention:

Fax:

b. in the case of a notice to the Owner, at:

Al Stober Construction Ltd. 1700 - 1631 Dickson Ave. Kelowna, BC V1Y 0B5

Attention: Jason Kirychuk

Fax: 250-763-4244

Or at such other address as the party to whom such notice or other writing is to be given shall have last notified the party giving the same.

- 14. **No Assignment** the Owner shall not assign its interest in this agreement except to a subsequent owner in fee simple of the Parcel.
- 15. **Severance** if any portion of this agreement is held invalid by a court of competent jurisdiction, the invalid portion shall be severed and the decision that it is invalid shall not affect the validity of the remainder of this agreement.
- 16. **Interpretation** wherever the singular or masculine is used in this agreement, the same shall be construed as meaning the plural, the feminine or body corporate where the context or the parties thereto so require.
- 17. **Further Assurances** the parties hereto shall execute and do all such further deeds, acts, things and assurances that may be reasonably required to carry out the intent of this agreement.
- 18. **Waiver** waiver by the City of a default by the Owner shall be in writing and shall not be deemed to be a waiver of any subsequent or other default.

- 19. Powers Preserved this agreement does not:
  - a. Affect or limit the discretion, rights or powers of the City under any enactment or at common law, including in relation to the use or subdivision of the Parcel;
  - b. Affect or limit any enactment relating to the use or subdivision of the Parcel; or
  - c. Relieve the Owner from complying with any enactment, including in relation to the use or subdivision of the Parcel and without limitation shall not confer directly or indirectly any exemption or right of set-off from development cost charges, connection charges, application fees, user fees or other rates, levies or charges payable under any bylaw of the City.
- 20. **Reference** every reference to each party is deemed to include the heirs, executors, administrators, personal representatives, successors, assigns, servants, employees, agents, contractors, officers, licensees and invitees of such party, wherever the context so requires or allows.
- 21. **Enurement** this agreement shall ensure to the benefit of and be binding upon the parties hereto and their respective successors and permitted assigns.
- 22. Any construction of a new improvement or alteration of an existing improvement as of this bylaw undertaken prior to the application for a Revitalization Tax Exemption will not be eligible for consideration
- 23. The maximum Revitalization Tax Exemption authorized under this Bylaw must not exceed the Revitalization Amount on the Property between:
  - a. the calendar year before the construction or alteration began, as outlined under Section 1 of this agreement; and
  - a. the calendar year in which the construction or alteration, as outlined under Section 1 of this agreement, is completed.
- 24. The Property's assessed value of improvements must not be reduced below the amount assessed in the calendar year prior to construction or alteration, as a result of the Revitalization Tax Exemption.

IN WITNESS WHEREOF the parties hereto have executed this agreement as of the day and year first above written.

Executed by the CTTY OF RELOWNA by Its authorized signatories:	
Mayor	
 City Clerk	

Executed by AL STOBER CONSTRUCTION LTD. by its Authorized signatories:

Name: Harry Issler

Name:

Appendix "A": Plans and Specifications Appendix "B": Performance Criteria

#### Schedule "C"

#### **Tax Exemption Certificate**

In accordance with the City of Kelowna Revitalization Tax Exemption Program Bylaw No. 9561 (the "Bylaw"), and in accordance with a Revitalization Tax Exemption Agreement dated for reference the \_\_\_\_\_ day of \_\_\_\_\_\_\_, 20\_\_ (the "Agreement") entered into between the City of Kelowna (the "City") and AL STOBER CONSTRUCITON LTD. (the "Owner"), the registered owner(s) of LOT 1 PLAN 92715 (the "Parcel):

This certificate certifies that the Parcel is subject to a Revitalization Tax Exemption, for each of the taxation years 2019 to 2029 inclusive, equal to:

1. Purpose-Built Rental Housing Project, 100% of the Revitalization Amount attributed to Building Permit No BP55922 between 2016 (the calendar year before the commencement of construction of the project) and 2019 (the calendar year in which the Revitalization Tax Exemption Certificate is issued).

Any construction of a new improvement or alteration of an existing improvement, on the Parcel described above, undertaken prior to the application for a Revitalization Tax Exemption will not be eligible for consideration;

The maximum Revitalization Tax Exemption authorized must not exceed the increase in the assessed value of improvements on the property resulting from the construction or alterations attributed to Building Permit No BP55922 between 2016 (the calendar year before the commencement of construction of the project) and 2019 (the calendar year in which the Revitalization Tax Exemption Certificate is issued);

The Property's assessed value of improvements must not be reduced below the amount assessed in the calendar year prior to construction or alteration, as a result of the Revitalization Tax Exemption. The Revitalization Tax Exemption is provided under the following conditions:

- 1. The Owner does not breach any term, condition or provision of, and performs all obligations set out in, the Agreement and the Bylaw;
- 2. The Owner has not sold all or any portion of his or her equitable or legal fee simple interest in the Parcel without the transferee taking an assignment of the Agreement, and agreeing to be bound by it;
- 3. The Owner, or a successor in title to the Owner, has not allowed the property taxes for the Parcel to go into arrears or to become delinquent;
- 4. The Exempt Use (as defined in the Agreement) of the Project is not discontinued;

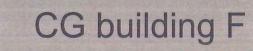
If any of these conditions are not met then the Council of the City of Kelowna may cancel this Revitalization Tax Exemption Certificate. If such cancellation occurs, the Owner of the Parcel, or a successor in title to the Owner as the case may be, shall remit to the City an amount equal to the value of the exemption received after the date of the cancellation of the certificate.

### RTE18-0002: "Appendix A"









#### RTE18-0002 "Appendix B"

#### PURPOSE-BUILT RENTAL HOUSING AGREEMENT

THIS AGREE	MENT dated for reference	affects:
LEGAL DESC	RIPTION OF PROPERTY SUBJECT TO THE AGR	EEMENT:
	LOT 1 PLAN 92715	
	("Land")	
And is		
BETWEEN:	1017476 BC Ltd. 1700 – 1681 DICKSON AVE. KELOWNA, BC V1Y 0B5	
	("Owner")	
AND:		
	<b>CITY OF KELOWNA</b> , a local government incorporation <i>Charter</i> and having its offices at 1435 Water Street,	
	("City")	

#### **GIVEN THAT:**

- A. The Owner has applied to the City for rezoning of the Lands to permit the construction of a housing complex that will include purpose-built rental housing units, as defined in this Agreement, on certain lands more particularly described in this Agreement;
- B. The City may, pursuant to section 483 of the *Local Government Act*, enter into an agreement with an owner of land that includes terms and conditions regarding the occupancy, tenure, and availability of the housing units on the land or construction on land;
- C. The Owner and the City wish to enter into this Agreement to provide for purpose-built rental housing on the terms and conditions set out in this Agreement, and agree that this Agreement is a housing agreement under s. 483 of the *Local Government Act*; and
- D. The City has, by bylaw, authorized the execution of this Agreement and the Owner has duly authorized the execution of this Agreement:

This Agreement is evidence that in consideration of \$1.00 paid by the City to the Owner (the receipt of which is acknowledged by the Owner) and in consideration of the promises exchanged below, the City and Owner agree, as a housing agreement between the Owner and the City under s. 483 of the *Local Government Act*, as follows:

# ARTICLE 1 INTERPRETATION

#### 1.1 Definitions -

"Caregiver" means an individual who provides assistance with the performance of the personal functions and activities necessary for daily living that a person is unable to perform efficiently for himself or herself;

"City" means the City of Kelowna;

"Dwelling Unit" means accommodation providing sleeping rooms, washrooms, and no more than one kitchen, intended for domestic use, and used or intended to be used permanently or semi-permanently for a Household. This use does not include a room in a hotel or a motel.

"Household" means

- (a) a person;
- (b) two or more persons related by blood, marriage, or adoption; or associated through foster care, all living together in one dwelling unit as a single household using common cooking facilities;
- (c) a group of not more than five persons, including boarders, who are not related by blood, marriage, or adoption, or associated through foster care, all living together in one dwelling unit as a single household using common cooking facilities; or
- (d) a combination of (b) and (c), provided that the combined total does not include more than 3 persons unrelated by blood, marriage or adoption or associated through foster care; all living together in one dwelling unit as a single household using common cooking facilities.

In addition, a household may also include up to one Caregiver or nanny;

"Land" means the land described herein;

"LTO" means the Kamloops Land Title Office or its successor;

"Official Community Plan" means the City of Kelowna Official Community Plan Bylaw No. 10500, or its successor bylaw;

"Owner" means the registered owner of the Lands from time to time and any parcels into which the Lands are subdivided:

"Purpose-Built Rental Housing" means a Dwelling Unit that is intended to be used for rental housing; and

"Tenancy Agreement" means a tenancy agreement as defined in, and subject to, the *Residential Tenancy Act*.

#### **1.2 Interpretation** - In this Agreement:

- (a) reference to the singular includes a reference to the plural, and vice versa, unless the context requires otherwise;
- (b) article and section headings have been inserted for ease of reference only and are not to be used in interpreting this Agreement;
- (c) reference to a particular numbered section or article, or to a particular lettered Schedule, is a reference to the correspondingly numbered or lettered article, section or Schedule of this Agreement;
- (d) if a word or expression is defined in this Agreement, other parts of speech and grammatical forms of the same word or expression have corresponding meanings;
- (e) the word "enactment" has the meaning given in the *Interpretation Act* on the reference date of this Agreement;
- (f) reference to any enactment includes any regulations, orders or directives made under the authority of that enactment;
- (g) reference to any enactment is a reference to that enactment as consolidated, revised, amended, re-enacted or replaced, unless otherwise expressly provided;
- (h) the provisions of s. 25 of the *Interpretation Act* with respect to the calculation of time apply;
- (i) time is of the essence;
- (j) all provisions are to be interpreted as always speaking;
- (k) reference to a "party" is a reference to a party to this Agreement and to their respective successors, assigns, trustees, administrators and receivers;
- (I) reference to a "day", "month", "quarter" or "year" is a reference to a calendar day, calendar month, calendar quarter or calendar year, as the case may be, unless otherwise expressly provided;
- (m) the definitions given in the City of Kelowna Zoning Bylaw No. 8000, or its successor bylaw, and the Official Community Plan apply for the purposes of this Agreement; and
- (n) any act, decision, determination, consideration, consent or exercise of discretion by a party, or other person, as provided in this Agreement will be performed, made or exercised acting reasonably.

### **1.3** Purpose of Agreement - The Owner and the City agree that:

- (a) this Agreement is intended to serve the public interest by providing for occupancy of a certain number of Dwelling Units, of the kinds provided for in this Agreement, that are in demand in the City of Kelowna but that are not readily available;
- (b) damages are not an adequate remedy to the City in respect of any breach of this Agreement by the Owner, such that the Owner agrees the City should be entitled to an order for specific

performance, injunction or other specific relief respecting any breach of this Agreement by the Owner.

## ARTICLE 2 HOUSING AGREEMENT AND LAND USE RESTRICTIONS

- **2.1** Land Use Restrictions The Owner and the City herby covenant and agree as follows:
  - (a) The Land will be used only in accordance with this Agreement;
  - (b) The Owner will design, construct and maintain one or more buildings providing 80 Dwelling Units as Purpose-Built Rental Housing
  - (c) The Owner acknowledges that the City will not support applications to stratify the building(s) on the Land, thereby allowing the identified Purpose-Built Rental Housing Dwelling Units to be sold independently of each other, for a period of ten (10) years from the date of this Agreement.

# ARTICLE 3 HOUSING AGREEMENT AND TRANSFER RESTRICTIONS

- **3.1** Purchaser Qualifications The City and the Owner agree as follows:
  - (a) the Owner will not sell or transfer, or agree to sell or transfer, any interest in any building containing Purpose-Built Rental Housing Dwelling Units on the Land other than a full interest in the fee simple title to an agency or individual that will continue to ensure that the Purpose-Built Rental Housing Dwelling Units are available in accordance with this Agreement.
- **3.2** Use and Occupancy of Purpose-Built Rental Housing Dwelling Unit The Owner agrees with the City as follows:
  - (a) the Owner will rent or lease each Purpose-Built Rental Housing Dwelling Unit on the Land in accordance with the *Residential Tenancy Act*, and in no event may the Owner itself occupy a Purpose-Built Rental Housing Dwelling Unit or use the Purpose-Built Rental Housing Dwelling Unit for short-term vacation accommodation; and
  - (b) the Owner will deliver a copy of the Tenancy Agreement for each Purpose-Built Rental Housing Dwelling Unit to the City upon demand.

### ARTICLE 4 GENERAL

**4.1 Notice of Housing Agreement** - For clarity, the Owner acknowledges and agrees that:

- (a) this Agreement constitutes a housing agreement entered into under s. 483 of the Local Government Act:
- (b) the City is requiring the Owner to file a notice of housing agreement in the LTO against title to the Land;
- (c) once such a notice is filed, this Agreement binds all persons who acquire an interest in the Land;
- (d) in the event the parties agree to release this Agreement from the title of the Land, which may not occur before the tenth (10<sup>th</sup>) anniversary of the date of this Agreement, the Owner will repay the City for 100% of the amount of the rental grant received from the City. Such repaid funds will be directed to the City's Housing Opportunities Reserve Fund.

#### **4.2** No Effect On Laws or Powers - This Agreement does not

- (a) affect or limit the discretion, rights, duties or powers of the City under any enactment or at common law, including in relation to the use or subdivision of land,
- (b) impose on the City any legal duty or obligation, including any duty of care or contractual or other legal duty or obligation, to enforce this Agreement,
- (c) affect or limit any enactment relating to the use or subdivision of land, or
- (d) relieve the Owner from complying with any enactment, including in relation to the use or subdivision of land.
- 4.3 Management The Owner covenants and agrees that it will furnish good and efficient management of the Dwelling Units and will permit representatives of the City to inspect the Dwelling Units at any reasonable time, subject to the notice provisions of the Residential Tenancy Act. The Owner further covenants and agrees that it will maintain the Dwelling Units in a satisfactory state of repair and fit for habitation and will comply with all laws, including health and safety standards applicable to the Land. Notwithstanding the foregoing, the Owner acknowledges and agrees that the City, in its absolute discretion, may require the Owner, at the Owner's expense, to hire a person or company with the skill and expertise to manage the Dwelling Units.
- 4.4 Notice Any notice which may be or is required to be given under this Agreement will be in writing and either be delivered or sent by facsimile transmission. Any notice which is delivered is to be considered to have been given on the first day after it is dispatched for delivery. Any notice which is sent by fax transmission is to be considered to have been given on the first business day after it is sent. If a party changes its address or facsimile number, or both, it will promptly give notice of its new address or facsimile number, or both, to the other party as provided in this section.
- **4.5 Agreement Runs With the Land** Every obligation and covenant of the Owner in this Agreement constitutes both a contractual obligation and a covenant granted by the Owner to the City in respect of the Land and this Agreement burdens the Land and runs with it and binds the Owner's successors in title and binds every parcel into which it is consolidated or subdivided by any means, including by subdivision or by strata plan under the *Strata Property Act*.
- **4.6 Limitation on Owner's Obligations** The Owner is only liable for breaches of this Agreement that occur while the Owner is the registered owner of the Land.

- 4.7 Release The Owner by this Agreement releases and forever discharges the City and each of its elected officials, officers, directors, employees and agents, and its and their heirs, executors, administrators, personal representatives, successors, and assigns, from and against all claims, demands, damages, actions, or causes of action by reason of or arising out of advice or direction respecting the ownership, lease, operation or management of the Land or the Dwelling Units which has been or at any time after the commencement of this Agreement may be given to the Owner by all or any of them. This clause will survive the termination of this Agreement.
- **Joint Venture** Nothing in this Agreement will constitute the Owner as the agent, joint venturer, or partner of the City or give the Owner any authority to bind the City in any way.
- **4.9 Waiver** An alleged waiver of any breach of this Agreement is effective only if it is an express waiver in writing of the breach. A waiver of a breach of this Agreement does not operate as a waiver of any other breach of this Agreement.
- **4.10 Further Acts** The Owner will do everything reasonably necessary to give effect to the intent of this Agreement, including execution of further instruments.
- **4.11 Severance** If any part of this Agreement is held to be invalid, illegal or unenforceable by a court having the jurisdiction to do so, that part is to be considered to have been severed from the rest of this Agreement and the rest of this Agreement remains in force unaffected by that holding or by the severance of that part.
- **4.12 Equitable Remedies** The Owner acknowledges and agrees that damages would be an inadequate remedy for the City for breach of this Agreement and that the public interest strongly favours specific performance, injunctive relief (mandatory or otherwise), or other equitable relief, as the only adequate remedy for a default under this Agreement.
- **4.13 No Other Agreements** This Agreement is the entire agreement between the parties regarding its subject and it terminates and supersedes all other agreements and arrangements regarding its subject.
- **4.14 Amendment** This Agreement may be discharged, amended or affected only by an instrument duly executed by both the Owner and the City.
- **4.15 Enurement** This Agreement binds the parties to it and their respective successors, heirs, executors and administrators. Reference in this Agreement to the "City" is a reference also to the elected and appointed officials, employees and agents of the City.
- **Deed and Contract** By executing and delivering this Agreement each of the parties intends to create both a contract and a deed executed and delivered under seal.

**IN WITNESS WHEREOF** the parties hereunto have executed this Agreement on the date and year first above written.

SIGNED, SEALED & DELIVERED in	) "OWNER"
the presence of:	) by its authorized signatories:
Signature of Witness	
BOB DAGENAIS	) HARRY ISSLER, GENERAL MANAGER
Print Name	) Print Name:
1700 – 1631 Dickson Ave., Kelowna	
Address	)
Project Development Manager	Print Name:
Occupation	
SIGNED, SEALED & DELIVERED in the presence of:	) CITY OF KELOWNA ) by its authorized signatories: )
Signature of Witness	) ) Mayor
	) )
Print Name	) City Clerk
Address	) ) )
Occupation	

#### RTE18-0003

Consolidated Bylaw No. 9561 - Page 9

BL10566, BL10674 amended SCHEDULE "B" and BL10974 replaced SCHEUDLE "B":

# SCHEDULE "B" Revitalization Tax Exemption Agreement

THIS AGREEME	NT dated for reference the day of	, 20	_ is
BETWEEN:			
	1017476 B.C. Ltd.		
	1700 1631 Dickson Ave.		
	Kelowna, BC V1Y 0B5		
	(the "Owner")		

#### AND:

CITY OF KELOWNA 1435 Water Street, Kelowna, B.C. V1Y 1J4

(the "City")

#### GIVEN THAT:

- A. The Owner is the registered owner in fee simple of lands in the City of Kelowna at 1740 Richter ST., Kelowna, BC legally described as Lot 1 Plan 92715 (the "Parcel");
- B. Council has established a revitalization tax exemption program and has included within the City of Kelowna Revitalization Tax Exemption Program Bylaw No. 9561 the designation of areas which include the Parcel as a revitalization area; and
- C. The Owner proposes to construct new improvements on the Parcel as described in Appendix "A" attached to and forming part of this agreement (the "Project") and has applied to the City to take part in the revitalization tax exemption program in respect of the Project and the City has agreed to accept the Project under the program;

THIS AGREEMENT is evidence that in consideration of the promises exchanged below, the Owner and the City covenant and agree each with the other as follows:

- 1. The Project the Owner will use its best efforts to ensure that the Project is constructed, maintained, operated and used in a fashion that will be consistent with and will foster the objectives of the revitalization tax exemption program, as outlined in the City of Kelowna Revitalization Tax Exemption Program Bylaw No. 9561. Without limiting the generality of the foregoing, the Owner covenants to use its best efforts to ensure that the Project will:
  - a. Provide 108 units of purpose built rental apartments

- 2. **Operation and Maintenance of the Project** throughout the term of this agreement, the Owner shall operate, repair and maintain the Project and will keep the Project in a state of good repair as a prudent owner would do.
- Revitalization Amount In this agreement, "Revitalization Amount" means the municipal portion of
  property tax calculated in relation to the increase in the assessed value of improvements on the Parcel
  resulting from the construction of the Project as described in section 1;
- 4. **Revitalization Tax Exemption** subject to fulfilment of the conditions set out in this agreement and in "City of Kelowna Revitalization Tax Exemption Program Bylaw No. 9561", the City shall issue a revitalization tax exemption certificate (the "Tax Exemption Certificate") to the British Columbia Assessment Authority entitling the Owner to a property tax exemption in respect of the property taxes due (not including local service taxes) in relation to the Revitalization Amount on the Parcel (the "Tax Exemption") for the calendar year(s) set out in this agreement.
- 5. **Conditions** the following conditions shall be fulfilled before the City will issue a Tax Exemption Certificate to the Owner in respect of the Project:
  - a. The Owner must obtain a building permit from the City for the Project on or before May 15, 2018;
  - b. The Owner must complete or cause to be completed construction of the Project in a good and workmanlike fashion and in strict compliance with the building permit and the plans and specifications attached hereto as Appendix "A" and the Project must be officially opened for use as *rental apartment building* (the "Exempt Use") and for no other use, by no later than October 1, 2019;
  - c. The Owner must submit a copy of the Occupancy Permit and Revitalization Tax Exemption Agreement to the City of Kelowna's Revenue Branch before the City will issue the Tax Exemption Certificate.
  - d. The completed Project must substantially satisfy the performance criteria set out in Appendix "B" hereto, as determined by the City's Urban Planning Manager or designate, in their sole discretion, acting reasonably.
- 6. **Calculation of Calculation of Revitalization Tax Exemption** the amount of the Tax Exemption shall be equal to
  - a) For Purpose-Built Rental Housing Projects throughout the City, 100% of the Revitalization Amount on the Parcel where the project is subject to a Housing Agreement (for up to 10 years) and is in compliance with the OCP Future Land Use designation as at May 30, 2011. A tax incentive for rental housing will only be considered when the vacancy rate is at or below 3%;
- 7. **Term of Tax Exemption** provided the requirements of this agreement, and of the City of Kelowna Revitalization Tax Exemption Program Bylaw No. 9561, are met the Tax Exemption shall be for the taxation years 2020 to 2029, inclusive.
- 8. [deleted]

- 2. **Operation and Maintenance of the Project** throughout the term of this agreement, the Owner shall operate, repair and maintain the Project and will keep the Project in a state of good repair as a prudent owner would do.
- 3. **Revitalization Amount** Refers to the municipal portion of property tax calculated in relation to the increase in the assessed value of improvements on the property resulting from the construction or alterations as outlined in section 1 of this agreement;
- 4. **Revitalization Tax Exemption** subject to fulfilment of the conditions set out in this agreement and in "City of Kelowna Revitalization Tax Exemption Program Bylaw No. 9561", the City shall issue a revitalization tax exemption certificate (the "Tax Exemption Certificate") to the British Columbia Assessment Authority entitling the Owner to a property tax exemption in respect of the property taxes due (not including local service taxes) in relation to the Revitalization Amount on the Parcel (the "Tax Exemption") for the calendar year(s) set out in this agreement.
- 5. **Conditions** the following conditions shall be fulfilled before the City will issue a Tax Exemption Certificate to the Owner in respect of the Project:
  - a. The Owner must obtain a building permit from the City for the Project on or before May 15, 2018;
  - b. The Owner must complete or cause to be completed construction of the Project in a good and workmanlike fashion and in strict compliance with the building permit and the plans and specifications attached hereto as Appendix "A" and the Project must be officially opened for use as a *rental apartment building* (the "Exempt Use") and for no other use, by no later than October 1, 2019;
  - c. The Owner must submit a copy of the Occupancy Permit and Revitalization Tax Exemption Agreement to the City of Kelowna's Revenue Branch before the City will issue the Tax Exemption Certificate.
  - d. The completed Project must substantially satisfy the performance criteria set out in Appendix "B" hereto, as determined by the City's Urban Planning Manager or designate, in their sole discretion, acting reasonably.
- 6. **Calculation of Calculation of Revitalization Tax Exemption** the amount of the Tax Exemption shall be equal to:
  - a) For Purpose-Built Rental Housing Projects throughout the City, 100% of the Revitalization Amount on the Parcel where the project is subject to a Housing Agreement (for up to 10 years) and is in compliance with the OCP Future Land Use designation as at May 30, 2011. A tax incentive for rental housing will only be considered when the vacancy rate is at or below 3%;
- 7. **Term of Tax Exemption** provided the requirements of this agreement, and of the City of Kelowna Revitalization Tax Exemption Program Bylaw No. 9561, are met the Tax Exemption shall be for the taxation years 2020 to 2030, inclusive.
- 8. {deleted}

- 9. **Compliance with Laws** the Owner shall construct the Project and, at all times during the term of the Tax Exemption or any renewal term, use and occupy the Parcel and the Project in compliance with all statutes, laws, regulations and orders of any authority having jurisdiction and, without limiting the generality of the foregoing, all federal, provincial, or municipal laws or statutes or bylaws, including all the rules regulations policies guidelines criteria or the like made under or pursuant to any such laws.
- 10. **Effect of Stratification** if the Owner stratifies the Parcel or the Project under the *Strata Property Act*, then the Tax Exemption shall be prorated among the strata lots in accordance with the unit entitlement of each strata lot for:
  - a. the current and each subsequent tax year during the currency of this agreement if the strata plan is accepted for registration at the Land Title Office before May 1; or
  - b. for the next calendar year and each subsequent tax year during the currency of this agreement if the strata plan is accepted for registration at the Land Title Office after May 1;

so long as, where a Housing Agreement exists in relation to the Parcel or the Project which limits ability to stratify, the Housing Agreement is still complied with.

- 11. Cancellation the City may in its sole discretion cancel the Tax Exemption Certificate at any time:
  - a. on the written request of the Owner; or
  - b. effective immediately upon delivery of a notice of cancellation to the Owner if at any time any of the conditions in the Tax Exemption Certificate are not met.

If such cancellation occurs, the Owner of the Parcel for which the Tax Exemption Certificate was issued will remit to the City an amount equal to the value of any Tax Exemption received after the cancellation of the Tax Exemption Certificate.

- 12. **No Refund** for greater certainty, under no circumstances will the Owner be entitled under the City's revitalization tax exemption program to any cash credit, any carry forward tax exemption credit or any refund for any property taxes paid.
- 13. **Notices** any notice or other writing required or permitted to be given hereunder or for the purposes hereof to any party shall be sufficiently given if delivered by hand or posted on the Parcel, or if sent by prepaid registered mail (Express Post) or if transmitted by facsimile to such party:
  - a. in the case of a notice to the City, at:

THE CITY OF KELOWNA 1435 Water Street, Kelowna, B.C. V1Y 1J4

Attention:

Fax:

b. in the case of a notice to the Owner, at:

Al Stober Construction Ltd. 1700-1631 Dickson Ave. Kelowna, BC V1Y 0B5

Attention: Jason Kirychuk Fax:250.763.4244

Or at such other address as the party to whom such notice or other writing is to be given shall have last notified the party giving the same.

- 14. **No Assignment** the Owner shall not assign its interest in this agreement except to a subsequent owner in fee simple of the Parcel.
- 15. **Severance** if any portion of this agreement is held invalid by a court of competent jurisdiction, the invalid portion shall be severed and the decision that it is invalid shall not affect the validity of the remainder of this agreement.
- 16. Interpretation wherever the singular or masculine is used in this agreement, the same shall be construed as meaning the plural, the feminine or body corporate where the context or the parties thereto so require.
- 17. **Further Assurances** the parties hereto shall execute and do all such further deeds, acts, things and assurances that may be reasonably required to carry out the intent of this agreement.
- 18. Waiver waiver by the City of a default by the Owner shall be in writing and shall not be deemed to be a waiver of any subsequent or other default.

- 19. **Powers Preserved** this agreement does not:
  - a. Affect or limit the discretion, rights or powers of the City under any enactment or at common law, including in relation to the use or subdivision of the Parcel;
  - b. Affect or limit any enactment relating to the use or subdivision of the Parcel; or
  - c. Relieve the Owner from complying with any enactment, including in relation to the use or subdivision of the Parcel and without limitation shall not confer directly or indirectly any exemption or right of set-off from development cost charges, connection charges, application fees, user fees or other rates, levies or charges payable under any bylaw of the City.
- 20. Reference every reference to each party is deemed to include the heirs, executors, administrators, personal representatives, successors, assigns, servants, employees, agents, contractors, officers, licensees and invitees of such party, wherever the context so requires or allows.
- 21. **Enurement** this agreement shall ensure to the benefit of and be binding upon the parties hereto and their respective successors and permitted assigns.
- 22. Any construction of a new improvement or alteration of an existing improvement as of this bylaw undertaken prior to the application for a Revitalization Tax Exemption will not be eligible for consideration
- 23. The maximum Revitalization Tax Exemption authorized under this Bylaw must not exceed the Revitalization Amount on the Property between:
  - a. the calendar year before the construction or alteration began, as outlined under Section 1 of this agreement; and
  - a. the calendar year in which the construction or alteration, as outlined under Section 1 of this agreement, is completed.
- 24. The Property's assessed value of improvements must not be reduced below the amount assessed in the calendar year prior to construction or alteration, as a result of the Revitalization Tax Exemption.

IN WITNESS WHEREOF the parties hereto have executed this agreement as of the day and year first above written.

Executed by the CITY OF KELOWNA by Its authorized signatories:			
res dathorized signato	1103.		
Mayor			
 City Clerk			

Authorized signatories:	
Authorized signatories.	
ML	
Name: Harry Issler	
Namos	
Name: Appendix "A": Plans and Specifications	

#### Schedule "C"

#### **Tax Exemption Certificate**

In accordance with the City of Kelowna Revitalization Tax Exemption Program Bylaw No. 9561 (the
"Bylaw"), and in accordance with a Revitalization Tax Exemption Agreement dated for reference
the day of, 20 (the "Agreement") entered into between the City of Kelowna
(the "City") and Al Stober Construction Ltd. (the "Owner"), the registered owner(s) of LOT 1 PLAN
92715 (the "Parcel):

This certificate certifies that the Parcel is subject to a Revitalization Tax Exemption, for each of the taxation years 2020 to 2030 inclusive, equal to:

 Purpose-Built Rental Housing Project, 100% of the Revitalization Amount attributed to Building Permit No BP57050 between 2017 (the calendar year before the commencement of construction of the project) and 20\_\_ (the calendar year in which the Revitalization Tax Exemption
 Certificate
 is issued).

Any construction of a new improvement or alteration of an existing improvement, on the Parcel described above, undertaken prior to the application for a Revitalization Tax Exemption will not be eligible for consideration;

The maximum Revitalization Tax Exemption authorized must not exceed the increase in the assessed value of improvements on the property resulting from the construction or alterations attributed to Building Permit No BP57050 between 2017 (the calendar year before the commencement of construction of the project) and 2020 (the calendar year in which the Revitalization Tax Exemption Certificate is issued);

The Property's assessed value of improvements must not be reduced below the amount assessed in the calendar year prior to construction or alteration, as a result of the Revitalization Tax Exemption. The Revitalization Tax Exemption is provided under the following conditions:

- 1. The Owner does not breach any term, condition or provision of, and performs all obligations set out in, the Agreement and the Bylaw;
- 2. The Owner has not sold all or any portion of his or her equitable or legal fee simple interest in the Parcel without the transferee taking an assignment of the Agreement, and agreeing to be bound by it;
- 3. The Owner, or a successor in title to the Owner, has not allowed the property taxes for the Parcel to go into arrears or to become delinquent;
- 4. The Exempt Use (as defined in the Agreement) of the Project is not discontinued;

If any of these conditions are not met then the Council of the City of Kelowna may cancel this Revitalization Tax Exemption Certificate. If such cancellation occurs, the Owner of the Parcel, or a successor in title to the Owner as the case may be, shall remit to the City an amount equal to the value of the exemption received after the date of the cancellation of the certificate.

### "Appendix A "





### RTE18-0003 "Appendix B"

#### PURPOSE-BUILT RENTAL HOUSING AGREEMENT

THIS AGREEI	MENT dated for reference	affects:		
LEGAL DESCRIPTION OF PROPERTY SUBJECT TO THE AGREEMENT:				
	LOT 1 PLAN 92715			
	("Land")			
And is				
BETWEEN:	1017476 BC Ltd. 1700 – 1681 DICKSON AVE. KELOWNA, BC V1Y 0B5			
	("Owner")			
AND:				
	CITY OF KELOWNA, a local government incorporation of the companies of the	•		
	("City")			

#### **GIVEN THAT:**

- A. The Owner has applied to the City for rezoning of the Lands to permit the construction of a housing complex that will include purpose-built rental housing units, as defined in this Agreement, on certain lands more particularly described in this Agreement;
- B. The City may, pursuant to section 483 of the *Local Government Act*, enter into an agreement with an owner of land that includes terms and conditions regarding the occupancy, tenure, and availability of the housing units on the land or construction on land;
- C. The Owner and the City wish to enter into this Agreement to provide for purpose-built rental housing on the terms and conditions set out in this Agreement, and agree that this Agreement is a housing agreement under s. 483 of the *Local Government Act*; and
- D. The City has, by bylaw, authorized the execution of this Agreement and the Owner has duly authorized the execution of this Agreement;

This Agreement is evidence that in consideration of \$1.00 paid by the City to the Owner (the receipt of which is acknowledged by the Owner) and in consideration of the promises exchanged below, the City and Owner agree, as a housing agreement between the Owner and the City under s. 483 of the *Local Government Act*, as follows:

### ARTICLE 1 INTERPRETATION

#### 1.1 Definitions -

"Caregiver" means an individual who provides assistance with the performance of the personal functions and activities necessary for daily living that a person is unable to perform efficiently for himself or herself;

"City" means the City of Kelowna;

"Dwelling Unit" means accommodation providing sleeping rooms, washrooms, and no more than one kitchen, intended for domestic use, and used or intended to be used permanently or semi-permanently for a Household. This use does not include a room in a hotel or a motel.

"Household" means

- (a) a person;
- (b) two or more persons related by blood, marriage, or adoption; or associated through foster care, all living together in one dwelling unit as a single household using common cooking facilities;
- (c) a group of not more than five persons, including boarders, who are not related by blood, marriage, or adoption, or associated through foster care, all living together in one dwelling unit as a single household using common cooking facilities; or
- (d) a combination of (b) and (c), provided that the combined total does not include more than 3 persons unrelated by blood, marriage or adoption or associated through foster care; all living together in one dwelling unit as a single household using common cooking facilities.

In addition, a household may also include up to one Caregiver or nanny;

"Land" means the land described herein;

"LTO" means the Kamloops Land Title Office or its successor;

"Official Community Plan" means the City of Kelowna Official Community Plan Bylaw No. 10500, or its successor bylaw;

"Owner" means the registered owner of the Lands from time to time and any parcels into which the Lands are subdivided:

"Purpose-Built Rental Housing" means a Dwelling Unit that is intended to be used for rental housing; and

"Tenancy Agreement" means a tenancy agreement as defined in, and subject to, the *Residential Tenancy Act*.

#### **1.2 Interpretation** - In this Agreement:

- (a) reference to the singular includes a reference to the plural, and vice versa, unless the context requires otherwise;
- (b) article and section headings have been inserted for ease of reference only and are not to be used in interpreting this Agreement;
- (c) reference to a particular numbered section or article, or to a particular lettered Schedule, is a reference to the correspondingly numbered or lettered article, section or Schedule of this Agreement;
- (d) if a word or expression is defined in this Agreement, other parts of speech and grammatical forms of the same word or expression have corresponding meanings;
- (e) the word "enactment" has the meaning given in the *Interpretation Act* on the reference date of this Agreement;
- (f) reference to any enactment includes any regulations, orders or directives made under the authority of that enactment;
- (g) reference to any enactment is a reference to that enactment as consolidated, revised, amended, re-enacted or replaced, unless otherwise expressly provided;
- (h) the provisions of s. 25 of the *Interpretation Act* with respect to the calculation of time apply;
- (i) time is of the essence;
- (j) all provisions are to be interpreted as always speaking;
- (k) reference to a "party" is a reference to a party to this Agreement and to their respective successors, assigns, trustees, administrators and receivers:
- (I) reference to a "day", "month", "quarter" or "year" is a reference to a calendar day, calendar month, calendar quarter or calendar year, as the case may be, unless otherwise expressly provided;
- (m) the definitions given in the City of Kelowna Zoning Bylaw No. 8000, or its successor bylaw, and the Official Community Plan apply for the purposes of this Agreement; and
- (n) any act, decision, determination, consideration, consent or exercise of discretion by a party, or other person, as provided in this Agreement will be performed, made or exercised acting reasonably.

#### **1.3** Purpose of Agreement - The Owner and the City agree that:

- (a) this Agreement is intended to serve the public interest by providing for occupancy of a certain number of Dwelling Units, of the kinds provided for in this Agreement, that are in demand in the City of Kelowna but that are not readily available;
- (b) damages are not an adequate remedy to the City in respect of any breach of this Agreement by the Owner, such that the Owner agrees the City should be entitled to an order for specific

performance, injunction or other specific relief respecting any breach of this Agreement by the Owner.

### ARTICLE 2 HOUSING AGREEMENT AND LAND USE RESTRICTIONS

- **2.1** Land Use Restrictions The Owner and the City herby covenant and agree as follows:
  - (a) The Land will be used only in accordance with this Agreement;
  - (b) The Owner will design, construct and maintain one or more buildings providing 108 Dwelling Units as Purpose-Built Rental Housing
  - (c) The Owner acknowledges that the City will not support applications to stratify the building(s) on the Land, thereby allowing the identified Purpose-Built Rental Housing Dwelling Units to be sold independently of each other, for a period of ten (10) years from the date of this Agreement.

## ARTICLE 3 HOUSING AGREEMENT AND TRANSFER RESTRICTIONS

- **3.1** Purchaser Qualifications The City and the Owner agree as follows:
  - (a) the Owner will not sell or transfer, or agree to sell or transfer, any interest in any building containing Purpose-Built Rental Housing Dwelling Units on the Land other than a full interest in the fee simple title to an agency or individual that will continue to ensure that the Purpose-Built Rental Housing Dwelling Units are available in accordance with this Agreement.
- **3.2** Use and Occupancy of Purpose-Built Rental Housing Dwelling Unit The Owner agrees with the City as follows:
  - (a) the Owner will rent or lease each Purpose-Built Rental Housing Dwelling Unit on the Land in accordance with the *Residential Tenancy Act*, and in no event may the Owner itself occupy a Purpose-Built Rental Housing Dwelling Unit or use the Purpose-Built Rental Housing Dwelling Unit for short-term vacation accommodation; and
  - (b) the Owner will deliver a copy of the Tenancy Agreement for each Purpose-Built Rental Housing Dwelling Unit to the City upon demand.

### ARTICLE 4 GENERAL

**4.1 Notice of Housing Agreement** - For clarity, the Owner acknowledges and agrees that:

- (a) this Agreement constitutes a housing agreement entered into under s. 483 of the *Local Government Act*;
- (b) the City is requiring the Owner to file a notice of housing agreement in the LTO against title to the Land:
- (c) once such a notice is filed, this Agreement binds all persons who acquire an interest in the Land;
- (d) in the event the parties agree to release this Agreement from the title of the Land, which may not occur before the tenth (10<sup>th</sup>) anniversary of the date of this Agreement, the Owner will repay the City for 100% of the amount of the rental grant received from the City. Such repaid funds will be directed to the City's Housing Opportunities Reserve Fund.

#### 4.2 No Effect On Laws or Powers - This Agreement does not

- (a) affect or limit the discretion, rights, duties or powers of the City under any enactment or at common law, including in relation to the use or subdivision of land,
- (b) impose on the City any legal duty or obligation, including any duty of care or contractual or other legal duty or obligation, to enforce this Agreement,
- (c) affect or limit any enactment relating to the use or subdivision of land, or
- (d) relieve the Owner from complying with any enactment, including in relation to the use or subdivision of land.
- **Management** The Owner covenants and agrees that it will furnish good and efficient management of the Dwelling Units and will permit representatives of the City to inspect the Dwelling Units at any reasonable time, subject to the notice provisions of the *Residential Tenancy Act*. The Owner further covenants and agrees that it will maintain the Dwelling Units in a satisfactory state of repair and fit for habitation and will comply with all laws, including health and safety standards applicable to the Land. Notwithstanding the foregoing, the Owner acknowledges and agrees that the City, in its absolute discretion, may require the Owner, at the Owner's expense, to hire a person or company with the skill and expertise to manage the Dwelling Units.
- 4.4 Notice Any notice which may be or is required to be given under this Agreement will be in writing and either be delivered or sent by facsimile transmission. Any notice which is delivered is to be considered to have been given on the first day after it is dispatched for delivery. Any notice which is sent by fax transmission is to be considered to have been given on the first business day after it is sent. If a party changes its address or facsimile number, or both, it will promptly give notice of its new address or facsimile number, or both, to the other party as provided in this section.
- **4.5 Agreement Runs With the Land** Every obligation and covenant of the Owner in this Agreement constitutes both a contractual obligation and a covenant granted by the Owner to the City in respect of the Land and this Agreement burdens the Land and runs with it and binds the Owner's successors in title and binds every parcel into which it is consolidated or subdivided by any means, including by subdivision or by strata plan under the *Strata Property Act*.
- **4.6 Limitation on Owner's Obligations** The Owner is only liable for breaches of this Agreement that occur while the Owner is the registered owner of the Land.

- 4.7 Release The Owner by this Agreement releases and forever discharges the City and each of its elected officials, officers, directors, employees and agents, and its and their heirs, executors, administrators, personal representatives, successors, and assigns, from and against all claims, demands, damages, actions, or causes of action by reason of or arising out of advice or direction respecting the ownership, lease, operation or management of the Land or the Dwelling Units which has been or at any time after the commencement of this Agreement may be given to the Owner by all or any of them. This clause will survive the termination of this Agreement.
- **Joint Venture** Nothing in this Agreement will constitute the Owner as the agent, joint venture, or partner of the City or give the Owner any authority to bind the City in any way.
- **4.9 Waiver** An alleged waiver of any breach of this Agreement is effective only if it is an express waiver in writing of the breach. A waiver of a breach of this Agreement does not operate as a waiver of any other breach of this Agreement.
- **4.10 Further Acts** The Owner will do everything reasonably necessary to give effect to the intent of this Agreement, including execution of further instruments.
- **4.11 Severance** If any part of this Agreement is held to be invalid, illegal or unenforceable by a court having the jurisdiction to do so, that part is to be considered to have been severed from the rest of this Agreement and the rest of this Agreement remains in force unaffected by that holding or by the severance of that part.
- **4.12 Equitable Remedies** The Owner acknowledges and agrees that damages would be an inadequate remedy for the City for breach of this Agreement and that the public interest strongly favours specific performance, injunctive relief (mandatory or otherwise), or other equitable relief, as the only adequate remedy for a default under this Agreement.
- **4.13 No Other Agreements** This Agreement is the entire agreement between the parties regarding its subject and it terminates and supersedes all other agreements and arrangements regarding its subject.
- **4.14 Amendment** This Agreement may be discharged, amended or affected only by an instrument duly executed by both the Owner and the City.
- **4.15 Enurement** This Agreement binds the parties to it and their respective successors, heirs, executors and administrators. Reference in this Agreement to the "City" is a reference also to the elected and appointed officials, employees and agents of the City.
- **Deed and Contract** By executing and delivering this Agreement each of the parties intends to create both a contract and a deed executed and delivered under seal.

**IN WITNESS WHEREOF** the parties hereunto have executed this Agreement on the date and year first above written.

SIGNED, SEALED & DELIVERED in	) "OWNER"
the presence of:	) by its authorized signatories:
Signature of Witness	
BOB DAGENAIS	) HARRY ISSLER, GENERAL MANAGER
Print Name	) Print Name:
1700 – 1631 Dickson Ave., Kelowna	
Address	ý ·
Project Development Manager	Print Name:
Occupation	
SIGNED, SEALED & DELIVERED in the presence of:	) CITY OF KELOWNA ) by its authorized signatories: )
Signature of Witness	) ) ) Mayor )
Print Name	) ) City Clerk )
Address	) ) )
Occupation	

BL10566, BL10674 & BL11457 amended SCHEDULE "B" and BL10974 replaced SCHEDULE "B":

## SCHEDULE "B" Revitalization Tax Exemption Agreement

THIS AGREEMENT dated for reference the 23<sup>rd</sup> day of August, 2018 is

#### BETWEEN:

KI-LOW-NA FRIENDSHIP SOCIETY

442 Leon Avenue, Kelowna, B.C. V1Y 6J3

(the "Owner")

#### AND:

CITY OF KELOWNA

1435 Water Street, Kelowna, B.C. V1Y 1J4

(the "City")

#### GIVEN THAT:

- A. The Owner is the registered owner in fee simple of lands in the City of Kelowna at 1759 Highway 33 East legally described as PID#: 004-337-999, LOT B SECTION 18 TOWNSHIP 27 OSOYOOS DIVISION YALE DISTRICT PLAN 29386 (the "Parcel");
- B. Council has established a revitalization tax exemption program and has included within the City of Kelowna Revitalization Tax Exemption Program Bylaw No. 9561 the designation of areas which include the Parcel as a revitalization area; and
- C. The Owner proposes to construct new improvements on the Parcel as described in Appendix "A" attached to and forming part of this agreement (the "Project") and has applied to the City to take part in the revitalization tax exemption program in respect of the Project and the City has agreed to accept the Project under the program;

THIS AGREEMENT is evidence that in consideration of the promises exchanged below, the Owner and the City covenant and agree each with the other as follows:

- 1. The Project the Owner will use its best efforts to ensure that the Project is constructed, maintained, operated and used in a fashion that will be consistent with and will foster the objectives of the revitalization tax exemption program, as outlined in the City of Kelowna Revitalization Tax Exemption Program Bylaw No. 9561. Without limiting the generality of the foregoing, the Owner covenants to use its best efforts to ensure that the Project will:
  - a. construct a three storey 35 apartment wood frame building and 14 townhouses, all with surface parking;

- b. have a mix of unit types, varying from one to four bedrooms;
- c. permanently operate the housing development on a non-profit affordable housing basis.
- 2. **Operation and Maintenance of the Project** throughout the term of this agreement, the Owner shall operate, repair and maintain the Project and will keep the Project in a state of good repair as a prudent owner would do.
- 3. **Revitalization Amount** In this agreement, "**Revitalization Amount**" means the municipal portion of property tax calculated in relation to the increase in the assessed value of improvements on the Parcel resulting from the construction of the Project as described in section 1;
- 4. Revitalization Tax Exemption subject to fulfilment of the conditions set out in this agreement and in "City of Kelowna Revitalization Tax Exemption Program Bylaw No. 9561", the City shall issue a revitalization tax exemption certificate (the "Tax Exemption Certificate") to the British Columbia Assessment Authority entitling the Owner to a property tax exemption in respect of the property taxes due (not including local service taxes) in relation to the Revitalization Amount on the Parcel (the "Tax Exemption") for the calendar year(s) set out in this agreement.
- 5. **Conditions** the following conditions shall be fulfilled before the City will issue a Tax Exemption Certificate to the Owner in respect of the Project:
  - a. The Owner must obtain a building permit from the City for the Project on or before July 31, 2019;
  - b. The Owner must complete or cause to be completed construction of the Project in a good and workmanlike fashion and in strict compliance with the building permit and the plans and specifications attached hereto as Appendix "A" and the Project must be officially opened for use as a purpose-built non-profit affordable rental housing development (the "Exempt Use") and for no other use, by no later than September 30, 2020;
  - c. The Owner must submit a copy of the Occupancy Permit and Revitalization Tax Exemption Agreement to the City of Kelowna's Revenue Branch before the City will issue the Tax Exemption Certificate.
  - d. The completed Project must substantially satisfy the performance criteria set out in Appendix "B" hereto, as determined by the City's Urban Planning Manager or designate, in their sole discretion, acting reasonably.
- 6. **Calculation of Calculation of Revitalization Tax Exemption** the amount of the Tax Exemption shall be equal to :
  - a) For Purpose-Built Rental Housing Projects throughout the City, 100% of the Revitalization Amount on the Parcel where the project is subject to a Housing Agreement (for up to 10 years) and is in compliance with the OCP Future Land Use designation as at May 30, 2011. A tax incentive for rental housing will only be considered when the vacancy rate is at or below 3%;
- 7. **Term of Tax Exemption** provided the requirements of this agreement, and of the City of Kelowna Revitalization Tax Exemption Program Bylaw No. 9561, are met the Tax Exemption shall be for the taxation years 2021 to 2030, inclusive.

- 8. **Compliance with Laws** the Owner shall construct the Project and, at all times during the term of the Tax Exemption or any renewal term, use and occupy the Parcel and the Project in compliance with all statutes, laws, regulations and orders of any authority having jurisdiction and, without limiting the generality of the foregoing, all federal, provincial, or municipal laws or statutes or bylaws, including all the rules regulations policies guidelines criteria or the like made under or pursuant to any such laws.
- 9. **Effect of Stratification** if the Owner stratifies the Parcel under the Strata Property Act, then the Tax Exemption shall be prorated among the strata lots in accordance with the unit entitlement of each strata lot for:
  - a. the current and each subsequent tax year during the currency of this agreement if the strata plan is accepted for registration at the Land Title Office before May 1; or
  - b. for the next calendar year and each subsequent tax year during the currency of this agreement if the strata plan is accepted for registration at the Land Title Office after May 1;

so long as, if the Project is the subject of an operating agreement between the Owner and the Provincial Rental Housing Corporation, the Owner is in compliance with the operating agreement. The Owner agrees to provide written confirmation to the City regarding the Owner's compliance with the said operating agreement, satisfactory to the City, upon the City's reasonable inquiry.

- 10. **Cancellation** the City may in its sole discretion cancel the Tax Exemption Certificate at any time:
  - a. on the written request of the Owner; or
  - b. effective immediately upon delivery of a notice of cancellation to the Owner if at any time any of the conditions in the Tax Exemption Certificate are not met.
  - c. If the Owner is subject to an operating agreement with the Provincial Rental Housing Corporation and is not in compliance with the operating agreement.

If such cancellation occurs, the Owner of the Parcel for which the Tax Exemption Certificate was issued will remit to the City an amount equal to the value of any Tax Exemption received after the cancellation of the Tax Exemption Certificate.

- 11. **No Refund** for greater certainty, under no circumstances will the Owner be entitled under the City's revitalization tax exemption program to any cash credit, any carry forward tax exemption credit or any refund for any property taxes paid.
- Notices any notice or other writing required or permitted to be given hereunder or for the purposes hereof to any party shall be sufficiently given if delivered by hand or posted on the Parcel, or if sent by prepaid registered mail (Express Post) or if transmitted by facsimile to such party:
  - a. in the case of a notice to the City, at:

THE CITY OF KELOWNA 1435 Water Street, Kelowna, B.C. V1Y 1J4

Attention: Revenue Branch Phone: 250-469-8757

b. in the case of a notice to the Owner, at:

Ki-Low-Na Friendship Society 442 Leon Avenue, Kelowna, B.C. V1Y 6J3

Attention: Edna Terbasket

Fax: 250-861-5514

Or at such other address as the party to whom such notice or other writing is to be given shall have last notified the party giving the same.

- 13. **No Assignment** the Owner shall not assign its interest in this agreement except to a subsequent owner in fee simple of the Parcel.
- 14. **Severance** if any portion of this agreement is held invalid by a court of competent jurisdiction, the invalid portion shall be severed and the decision that it is invalid shall not affect the validity of the remainder of this agreement.
- 15. **Interpretation** wherever the singular or masculine is used in this agreement, the same shall be construed as meaning the plural, the feminine or body corporate where the context or the parties thereto so require.
- 16. **Further Assurances** the parties hereto shall execute and do all such further deeds, acts, things and assurances that may be reasonably required to carry out the intent of this agreement.
- 17. **Waiver** waiver by the City of a default by the Owner shall be in writing and shall not be deemed to be a waiver of any subsequent or other default.
- 18. **Powers Preserved** this agreement does not:
  - a. Affect or limit the discretion, rights or powers of the City under any enactment or at common law, including in relation to the use or subdivision of the Parcel;
  - b. Affect or limit any enactment relating to the use or subdivision of the Parcel; or
  - c. Relieve the Owner from complying with any enactment, including in relation to the use or subdivision of the Parcel and without limitation shall not confer directly or indirectly any exemption or right of set-off from development cost charges, connection charges, application fees, user fees or other rates, levies or charges payable under any bylaw of the City.
- 19. **Reference** every reference to each party is deemed to include the heirs, executors, administrators, personal representatives, successors, assigns, servants, employees, agents, contractors, officers, licensees and invitees of such party, wherever the context so requires or allows.
- 20. **Enurement** this agreement shall ensure to the benefit of and be binding upon the parties hereto and their respective successors and permitted assigns.

- 21. Any construction of a new improvement or alteration of an existing improvement as of this bylaw undertaken prior to the application for a Revitalization Tax Exemption will not be eligible for consideration
- The maximum Revitalization Tax Exemption authorized under this Bylaw must not exceed the Revitalization Amount on the Property between:
  - a. the calendar year before the construction or alteration began, as outlined under Section 1 of this agreement; and
  - a. the calendar year in which the construction or alteration, as outlined under Section 1 of this agreement, is completed.
- 23. The Property's assessed value of improvements must not be reduced below the amount assessed in the calendar year prior to construction or alteration, as a result of the Revitalization Tax Exemption.

IN WITNESS WHEREOF the parties hereto have executed this agreement as of the day and year first above written.

layor	
ity Clerk	
xecuted by Ki-Low	
s authorized signa	tory(ies):
lame:	

Executed by the CITY OF KELOWNA by

Appendix "A": Plans and Specifications Appendix "B": Performance Criteria

### RTE18-0005

"Appendix A"



02 FRONT ENTRY
1/8" = 1'-0"



### MATERIAL LEGEND

FIBREGLASS LAMINATE SHINGLES

HORIZONTAL SIDING (HARDIE)



- DOUBLE GLAZED VINYL WINDOWS C/W 4" WOOD TRIM (COMBED SPRUCE)
- 2 EXTERIOR METAL RAILING
- 3 BUILT UP COLUMNS
- 4 ALUMINUM GUTTER AND FASCIA (COMBED SPRUCE)
- (5) WOOD BELT BOARD (COMBED SPRUCE)









CertainTeed (Silver Birch)

no. date description revisions

Contractors shall verify all dimensions prior to commencement of work.



PATRICK MCCUSKER ARCHITECTURE INC.

AAA MAIBC MRAIC

3430 BENYOULIN ROAD KELOWNA BC V1W 4M5 -Phono:778-484-0223 pat@pmccarch.com

project title

MARGARET'S LANDING

project no. 3362

1759 HIGHWAY 33 KELOWNA, BRITISH COLUME

crawing title
ELEVATIONS - APARTMENT
(COLOURED)

DP3.11

md 12/06/2017/42

#### RTE18-0005

### "Appendix B"

#### PURPOSE-BUILT RENTAL HOUSING AGREEMENT

THIS AGREEMENT dated for reference August 23, 2018 affects:

#### LEGAL DESCRIPTON OF PROPERTY SUBJECT TO THE AGREEMENT:

Parcel Identifier: 004-337-999, LOT B SECTION 18 TOWNSHIP 27 OSOYOOS DIVISION YALE DISTRICT PLAN 29386 ("Land")

And is

#### **BETWEEN:**

KI-LOW-NA FRIENDSHIP SOCIETY, having its offices at 442 Leon Avenue, Kelowna, B.C. V1Y 6J3

("Owner")

#### AND:

**CITY OF KELOWNA**, a local government incorporated pursuant to the *Community Charter* and having its offices at 1435 Water Street, Kelowna, B.C. V1Y 1J4

("City")

#### **GIVEN THAT:**

- A. The Owner has applied to the City for rezoning of the Lands to permit the construction of a housing complex that will include Purpose-Built Rental Housing units, as defined in this Agreement, on certain lands more particularly described in this Agreement;
- B. The City may, pursuant to section 483 of the *Local Government Act*, enter into an agreement with an owner of land that includes terms and conditions regarding the occupancy, tenure, and availability of the housing units on the land or construction on land;
- C. The Owner and the City wish to enter into this Agreement to provide for Purpose-Built Rental Housing on the terms and conditions set out in this Agreement, and agree that this Agreement is a housing agreement under s. 483 of the *Local Government Act*; and
- The City has, by bylaw, authorized the execution of this Agreement and the Owner has duly authorized the execution of this Agreement;

This Agreement is evidence that in consideration of \$1.00 paid by the City to the Owner (the receipt of which is acknowledged by the Owner) and in consideration of the promises exchanged below, the City and Owner agree, as a housing agreement between the Owner and the City under s. 483 of the *Local Government Act*, as follows:

### ARTICLE 1 INTERPRETATION

#### 1.1 Definitions -

"Caregiver" means an individual who provides assistance with the performance of the personal functions and activities necessary for daily living that a person is unable to perform efficiently for himself or herself;

"City" means the City of Kelowna;

"Dwelling Unit" means accommodation providing sleeping rooms, washrooms, and no more than one kitchen, intended for domestic use, and used or intended to be used permanently or semi permanently for a Household. This use does not include a room in a hotel or a motel.

"Household" means

- (a) a person;
- (b) two or more persons related by blood, marriage, or adoption; or associated through foster care, all living together in one dwelling unit as a single household using common cooking facilities;
- (c) a group of not more than five persons, including boarders, who are not related by blood, marriage, or adoption, or associated through foster care, all living together in one dwelling unit as a single household using common cooking facilities; or
- (d) a combination of (b) and (c), provided that the combined total does not include more than 3 persons unrelated by blood, marriage or adoption or associated through foster care; all living together in one dwelling unit as a single household using common cooking facilities.

In addition, a household may also include up to one Caregiver or nanny;

"Land" means the land described herein;

"LTO" means the Kamloops Land Title Office or its successor;

"Official Community Plan" means the City of Kelowna Official Community Plan Bylaw No. 10500, or its successor bylaw;

"Owner" means the registered owner of the Lands from time to time and any parcels into which the Lands are subdivided;

"Purpose-Built Rental Housing" means a self-contained building(s) containing five or more Dwelling Units that are intended to be used for rental housing

"Tenancy Agreement" means a tenancy agreement as defined in, and subject to, the *Residential Tenancy Act*.

#### **1.2 Interpretation** - In this Agreement:

(a) reference to the singular includes a reference to the plural, and vice versa, unless the context

requires otherwise;

- (b) article and section headings have been inserted for ease of reference only and are not to be used in interpreting this Agreement;
- reference to a particular numbered section or article, or to a particular lettered Schedule, is a reference to the correspondingly numbered or lettered article, section or Schedule of this Agreement;
- (d) if a word or expression is defined in this Agreement, other parts of speech and grammatical forms of the same word or expression have corresponding meanings;
- (e) the word "enactment" has the meaning given in the *Interpretation Act* on the reference date of this Agreement;
- (f) reference to any enactment includes any regulations, orders or directives made under the authority of that enactment;
- (g) reference to any enactment is a reference to that enactment as consolidated, revised, amended, reenacted or replaced, unless otherwise expressly provided;
- (h) the provisions of s. 25 of the *Interpretation Act* with respect to the calculation of time apply;
- (i) time is of the essence;
- (j) all provisions are to be interpreted as always speaking;
- (k) reference to a "party" is a reference to a party to this Agreement and to their respective successors, assigns, trustees, administrators and receivers;
- (l) reference to a "day", "month", "quarter" or "year" is a reference to a calendar day, calendar month, calendar guarter or calendar year, as the case may be, unless otherwise expressly provided;
- (m) the definitions given in the City of Kelowna Zoning Bylaw No. 8000, or its successor bylaw, and the Official Community Plan apply for the purposes of this Agreement; and
- (n) any act, decision, determination, consideration, consent or exercise of discretion by a party, or other person, as provided in this Agreement must be performed, made or exercised acting reasonably.

#### **1.3** Purpose of Agreement - The Owner and the City agree that:

- (a) this Agreement is intended to serve the public interest by providing for occupancy of a certain number of Dwelling Units, of the kinds provided for in this Agreement, that are in demand in the City of Kelowna but that are not readily available;
- (b) damages are not an adequate remedy to the City in respect of any breach of this Agreement by the Owner, such that the Owner agrees the City should be entitled to an order for specific performance, injunction or other specific relief respecting any breach of this Agreement by the Owner.

### ARTICLE 2 HOUSING AGREEMENT AND LAND USE RESTRICTIONS

- **2.0** Land Use Restrictions The Owner and the City herby covenant and agree as follows:
  - (a) The Land must be used only in accordance with this Agreement;
  - (b) The Owner will design, construct and maintain a building or buildings providing 49 Dwelling Units as Purpose-Built Rental Housing;
  - (c) No building on the Land may be subdivided by means of a strata plan for a period of ten (10) years from the date of this agreement.
  - (d) Despite subsection (c), and with the prior approval of the City's Council under section 242 of the Strata Property Act in the case of a building that has been previously occupied, a building may be subdivided by a strata plan for the sole purpose of transferring the strata lots to the Provincial Rental Housing Corporation. Any such strata lot must be used and maintained as Purpose-Built Rental Housing in accordance with subsection (b)

### ARTICLE 3 HOUSING AGREEMENT AND TRANSFER RESTRICTIONS

- 3.0 Purchaser Qualifications The City and the Owner agree as follows:
  - (a) the Owner must not, other than as set out in section 2.0 (d) sell or transfer, or agree to sell or transfer, any interest in any building containing Purpose-Built Rental Dwelling Unit(s) on the Land other than a full interest in the fee simple title to an agency or individual that will continue to ensure that the identified Purpose-Built Rental Dwelling Unit(s) are available in accordance with this Agreement.

## ARTICLE 4 GENERAL

- **4.1 Notice of Housing Agreement -** For clarity, the Owner acknowledges and agrees that:
  - (c) this Agreement constitutes a housing agreement entered into under s. 483 of the *Local Government Act*;
  - (d) the City is requiring the Owner to file a notice of housing agreement in the LTO against title to the Land:
  - (c) once such a notice is filed, this Agreement binds all persons who acquire an interest in the Land; and the notice of housing agreement may not be released from title to the Land, and this Agreement may not be terminated, sooner than ten (10) years from the date of this Agreement;
  - (d) repayment of any rental grant received from the City will be required if this Agreement is terminated and the notice of housing agreement is released from title to the Lands. Funds received would be directed to the Housing Opportunities Reserve Fund.
- 4.2 No Effect On Laws or Powers This Agreement does not
  - (a) affect or limit the discretion, rights, duties or powers of the City under any enactment or at common law, including in relation to the use or subdivision of land,

- (b) impose on the City any legal duty or obligation, including any duty of care or contractual or other legal duty or obligation, to enforce this Agreement,
- (c) affect or limit any enactment relating to the use or subdivision of land, or
- (d) relieve the Owner from complying with any enactment, including in relation to the use or subdivision of land.
- **4.3 Management** –The Owner further covenants and agrees that it will maintain the Dwelling Units in a satisfactory state of repair and fit for habitation and will comply with all laws, including health and safety standards applicable to the Land.
- 4.4 Notice Any notice which may be or is required to be given under this Agreement must be in writing and either be delivered or sent by facsimile transmission. Any notice which is delivered is to be considered to have been given on the first day after it is dispatched for delivery. Any notice which is sent by fax transmission is to be considered to have been given on the first business day after it is sent. If a party changes its address or facsimile number, or both, it must promptly give notice of its new address or facsimile number, or both, to the other party as provided in this section.
- **4.5 Agreement Runs With the Land** Every obligation and covenant of the Owner in this Agreement constitutes both a contractual obligation and a covenant granted by the Owner to the City in respect of the Land and this Agreement burdens the Land and runs with it and binds the Owner's successors in title and binds every parcel into which it is consolidated or subdivided by any means, including by subdivision or by strata plan under the *Strata Property Act*.
- **4.6 Limitation on Owner's Obligations** The Owner is only liable for breaches of this Agreement that occur while the Owner is the registered owner of the Land.
- 4.7 Release The Owner by this Agreement releases and forever discharges the City and each of its elected officials, officers, directors, employees and agents, and its and their heirs, executors, administrators, personal representatives, successors, and assigns, from and against all claims, demands, damages, actions, or causes of action by reason of or arising out of advice or direction respecting the ownership, lease, operation or management of the Land or the Dwelling Units which has been or at any time after the commencement of this Agreement may be given to the Owner by all or any of them. This clause will survive the termination of this Agreement.
- **Joint Venture** Nothing in this Agreement will constitute the Owner as the agent, joint venturer, or partner of the City or give the Owner any authority to bind the City in any way.
- **4.9 Waiver** An alleged waiver of any breach of this Agreement is effective only if it is an express waiver in writing of the breach. A waiver of a breach of this Agreement does not operate as a waiver of any other breach of this Agreement.
- **4.10 Further Acts** The Owner shall do everything reasonably necessary to give effect to the intent of this Agreement, including execution of further instruments.
- **4.11 Severance** If any part of this Agreement is held to be invalid, illegal or unenforceable by a court having the jurisdiction to do so, that part is to be considered to have been severed from the rest of this Agreement and the rest of this Agreement remains in force unaffected by that holding or by the severance of that part.

- **4.12 Equitable Remedies** The Owner acknowledges and agrees that damages would be an inadequate remedy for the City for breach of this Agreement and that the public interest strongly favours specific performance, injunctive relief (mandatory or otherwise), or other equitable relief, as the only adequate remedy for a default under this Agreement.
- **4.13 No Other Agreements** This Agreement is the entire agreement between the parties regarding its subject and it terminates and supersedes all other agreements and arrangements regarding its subject.
- **4.14 Amendment** This Agreement may be discharged, amended or affected only by an instrument duly executed by both the Owner and the City.
- **4.15 Enurement** This Agreement binds the parties to it and their respective successors, heirs, executors and administrators. Reference in this Agreement to the "City" is a reference also to the elected and appointed officials, employees and agents of the City.
- **Deed and Contract** By executing and delivering this Agreement each of the parties intends to create both a contract and a deed executed and delivered under seal.

IN WITNESS WHEREOF the parties hereunto have executed this Agreement on the date and year first above written.

SIGNED, SEALED & DELIVERED in ) the presence of:	"OWNER" by its authorized signatory/ies:
Thus Inpu Signature of Witness	Idra m. Terbasles
Francis Lampreau )	Edna M Terbasket Print Name:
21-2127 Ethel Street, Kelowna BC	
Financial Controller Occupation	Print Name:

signed, sealed & delivered in ) the presence of: )	CITY OF KELOWNA by its authorized signatory/ies:	
Signature of Witness )	Мауо	
Print Name )	City Cleri	
Address )		
Occupation		

#### RTE18-0004

BL10566, BL10674 & BL11457 amended SCHEDULE "B" and BL10974 replaced SCHEDULE "B":

### SCHEDULE "B" Revitalization Tax Exemption Agreement

THIS AGREEMENT dated for reference the 31th day of August, 2018 is

#### **BETWEEN:**

554764 B.C. LTD 2730 Lower Glenrosa road West Kelowna B.C. V4T 1L7 (the "Owner")

#### AND:

#### **CITY OF KELOWNA**

1435 Water Street, Kelowna, B.C. V1Y 1J4

(the "City")

#### GIVEN THAT:

- A. The Owner is the registered owner in fee simple of lands in the City of Kelowna at 200 and 220 Nickel Road legally described as Lot 1 Section 27 Township 26 ODYD Plan EPP73636 (the "Parcel");
- B. Council has established a revitalization tax exemption program and has included within the City of Kelowna Revitalization Tax Exemption Program Bylaw No. 9561 the designation of areas which include the Parcel as a revitalization area; and
- C. The Owner proposes to construct new improvements [or alter existing improvements] on the Parcel as described in Appendix "A" attached to and forming part of this agreement (the "Project") and has applied to the City to take part in the revitalization tax exemption program in respect of the Project and the City has agreed to accept the Project under the program;

THIS AGREEMENT is evidence that in consideration of the promises exchanged below, the Owner and the City covenant and agree each with the other as follows:

- The Project the Owner will use its best efforts to ensure that the Project is constructed, maintained, operated and used in a fashion that will be consistent with and will foster the objectives of the revitalization tax exemption program, as outlined in the City of Kelowna Revitalization Tax Exemption Program Bylaw No. 9561. Without limiting the generality of the foregoing, the Owner covenants to use its best efforts to ensure that the Project will:
  - a .construct 19 dwelling units that will remain as rental housing for a minmum of 10 years
- 2. **Operation and Maintenance of the Project** throughout the term of this agreement, the Owner shall operate, repair and maintain the Project and will keep the Project in a state of good repair as a prudent owner would do.

- 3. **Revitalization Amount** In this agreement, "**Revitalization Amount**" means the municipal portion of property tax calculated in relation to the increase in the assessed value of improvements on the Parcel resulting from the construction of the Project as described in section 1;
- 4. **Revitalization Tax Exemption** subject to fulfilment of the conditions set out in this agreement and in "City of Kelowna Revitalization Tax Exemption Program Bylaw No. 9561", the City shall issue a revitalization tax exemption certificate (the "Tax Exemption Certificate") to the British Columbia Assessment Authority entitling the Owner to a property tax exemption in respect of the property taxes due (not including local service taxes) in relation to the Revitalization Amount on the Parcel (the "Tax Exemption") for the calendar year(s) set out in this agreement.
- Conditions the following conditions shall be fulfilled before the City will issue a Tax Exemption Certificate to the Owner in respect of the Project:
  - a. The Owner must obtain a building permit from the City for the Project on or before July 31st, 2017
  - b. The Owner must complete or cause to be completed construction of the Project in a good and workmanlike fashion and in strict compliance with the building permit and the plans and specifications attached hereto as Appendix "A" and the Project must be officially opened for use as rental units (the "Exempt Use") and for no other use, by no later than July 15, 2019;
  - c. The Owner must submit a copy of the Occupancy Permit and Revitalization Tax Exemption Agreement to the City of Kelowna's Revenue Branch before the City will issue the Tax Exemption Certificate.
  - d. The completed Project must substantially satisfy the performance criteria set out in Appendix "B" hereto, as determined by the City's Urban Planning Manager or designate, in their sole discretion, acting reasonably.
- 6. **Calculation of Calculation of Revitalization Tax Exemption** the amount of the Tax Exemption shall be equal to
  - a) For Purpose-Built Rental Housing Projects throughout the City, 100% of the Revitalization Amount on the Parcel where the project is subject to a Housing Agreement (for up to 10 years) and is in compliance with the OCP Future Land Use designation as at May 30, 2011. A tax incentive for rental housing will only be considered when the vacancy rate is at or below 3%;
- 7. **Term of Tax Exemption** provided the requirements of this agreement, and of the City of Kelowna Revitalization Tax Exemption Program Bylaw No. 9561, are met the Tax Exemption shall be for the taxation years 2020 to 2029, inclusive.
- 8. [deleted]
- 9. Compliance with Laws the Owner shall construct the Project and, at all times during the term of the Tax Exemption or any renewal term, use and occupy the Parcel and the Project in compliance with all statutes, laws, regulations and orders of any authority having jurisdiction and, without limiting the generality of the foregoing, all federal, provincial, or municipal laws or statutes or bylaws, including all the rules regulations policies guidelines criteria or the like made under or pursuant to any such laws.
- Effect of Stratification if the Owner stratifies the Parcel under the Strata Property Act, then the Tax Exemption shall be prorated among the strata lots in accordance with the unit entitlement of each strata lot for:

- a. the current and each subsequent tax year during the currency of this agreement if the strata plan is accepted for registration at the Land Title Office before May 1; or
- b. for the next calendar year and each subsequent tax year during the currency of this agreement if the strata plan is accepted for registration at the Land Title Office after May 1;

so long as, if the Project is the subject of an operating agreement between the Owner and the Provincial Rental Housing Corporation, the Owner is in compliance with the operating agreement. The Owner agrees to provide written confirmation to the City regarding the Owner's compliance with the said operating agreement, satisfactory to the City, upon the City's reasonable inquiry.

- 11. **Cancellation** the City may in its sole discretion cancel the Tax Exemption Certificate at any time:
  - a. on the written request of the Owner; or
  - b. effective immediately upon delivery of a notice of cancellation to the Owner if at any time any of the conditions in the Tax Exemption Certificate are not met.
  - c. If the Owner is subject to an operating agreement with the Provincial Rental Housing Corporation and is not in compliance with the operating agreement.

If such cancellation occurs, the Owner of the Parcel for which the Tax Exemption Certificate was issued will remit to the City an amount equal to the value of any Tax Exemption received after the cancellation of the Tax Exemption Certificate.

- No Refund for greater certainty, under no circumstances will the Owner be entitled under the City's revitalization tax exemption program to any cash credit, any carry forward tax exemption credit or any refund for any property taxes paid.
- 13. **Notices** any notice or other writing required or permitted to be given hereunder or for the purposes hereof to any party shall be sufficiently given if delivered by hand or posted on the Parcel, or if sent by prepaid registered mail (Express Post) or if transmitted by facsimile to such party:
  - a. in the case of a notice to the City, at:

THE CITY OF KELOWNA 1435 Water Street, Kelowna, B.C. V1Y 1J4

b. in the case of a notice to the Owner, at:

James Zeleznik 2730 Lower Glenrosa Road West Kelowna BC V4T-1L7

Attention: James or Sandy Zeleznik Fax:250-768-5733 or email jazel@shaw.ca

Or at such other address as the party to whom such notice or other writing is to be given shall have last notified the party giving the same.

- 14. **No Assignment** the Owner shall not assign its interest in this agreement except to a subsequent owner in fee simple of the Parcel.
- 5. **Severance** if any portion of this agreement is held invalid by a court of competent jurisdiction, the invalid portion shall be severed and the decision that it is invalid shall not affect the validity of the remainder of this agreement.
- 16. **Interpretation** wherever the singular or masculine is used in this agreement, the same shall be construed as meaning the plural, the feminine or body corporate where the context or the parties thereto so require.
- 17. **Further Assurances** the parties hereto shall execute and do all such further deeds, acts, things and assurances that may be reasonably required to carry out the intent of this agreement.
- 18. **Waiver** waiver by the City of a default by the Owner shall be in writing and shall not be deemed to be a waiver of any subsequent or other default.
- 19. **Powers Preserved** this agreement does not:
  - a. Affect or limit the discretion, rights or powers of the City under any enactment or at common law, including in relation to the use or subdivision of the Parcel;
  - b. Affect or limit any enactment relating to the use or subdivision of the Parcel; or
  - c. Relieve the Owner from complying with any enactment, including in relation to the use or subdivision of the Parcel and without limitation shall not confer directly or indirectly any exemption or right of set-off from development cost charges, connection charges, application fees, user fees or other rates, levies or charges payable under any bylaw of the City.
- 20. **Reference** every reference to each party is deemed to include the heirs, executors, administrators, personal representatives, successors, assigns, servants, employees, agents, contractors, officers, licensees and invitees of such party, wherever the context so requires or allows.
- **Enurement** this agreement shall ensure to the benefit of and be binding upon the parties hereto and their respective successors and permitted assigns.
- Any construction of a new improvement or alteration of an existing improvement as of this bylaw undertaken prior to the application for a Revitalization Tax Exemption will not be eligible for consideration
- 23. The maximum Revitalization Tax Exemption authorized under this Bylaw must not exceed the Revitalization Amount on the Property between:
  - a. the calendar year before the construction or alteration began, as outlined under Section 1 of this agreement; and
  - a. the calendar year in which the construction or alteration, as outlined under Section 1 of this agreement, is completed.
- 24. The Property's assessed value of improvements must not be reduced below the amount assessed in the calendar year prior to construction or alteration, as a result of the Revitalization Tax Exemption.

Executed by the CITY OF KELOWNA by Its authorized signatories:

Mayor

IN WITNESS WHEREOF the parties hereto have executed this agreement as of the day and year first above

Executed by 554764 BCLTD by its Authorized signatories:

Name: James Zeleznik

JAMES ZETEZNIK

Name:

City Clerk

Appendix "A": Plans and Specifications Appendix "B": Performance Criteria

#### BL11269 & BL11457 amended SCHEDULE "C"

#### Schedule "C"

#### **Tax Exemption Certificate**

In accordance with the City of Kelowna Revitalization Tax Exemption Program Bylaw No. 9561 (the "Bylaw"), and in accordance with a Revitalization Tax Exemption Agreement dated for reference the 31<sup>st</sup> day of August, 2018 (the "Agreement") entered into between the City of Kelowna (the "City") and 554764 B.C. LTD (the "Owner"), the registered owner(s) of Lot 1 Section 27 Township 26 ODYD Plan EPP73636 (the "Parcel):

This certificate certifies that the Parcel is subject to a Revitalization Tax Exemption, for each of the taxation years 2020 to 2029 inclusive, equal to

1. Purpose-Built Rental Housing Project, 100% of the Revitalization Amount attributed to Building Permit No 57253 & 57252 between 2016 (the calendar year before the commencement of construction of the project) and 2019 (the calendar year in which the Revitalization Tax Exemption Certificate is issued).

Any construction of a new improvement or alteration of an existing improvement, on the Parcel described above, undertaken prior to the application for a Revitalization Tax Exemption will not be eligible for consideration;

The maximum Revitalization Tax Exemption authorized must not exceed the increase in the assessed value of improvements on the property resulting from the construction or alterations attributed to Building Permit No 57253 & 57252 between 2016 (the calendar year before the commencement of construction of the project) and 2019 (the calendar year in which the Revitalization Tax Exemption Certificate is issued);

The Property's assessed value of improvements must not be reduced below the amount assessed in the calendar year prior to construction or alteration, as a result of the Revitalization Tax Exemption.

The Revitalization Tax Exemption is provided under the following conditions:

- 1. The Owner does not breach any term, condition or provision of, and performs all obligations set out in, the Agreement and the Bylaw;
- 2. The Owner has not sold all or any portion of his or her equitable or legal fee simple interest in the Parcel without the transferee taking an assignment of the Agreement, and agreeing to be bound by it;
- The Owner, or a successor in title to the Owner, has not allowed the property taxes for the Parcel to go into arrears or to become delinquent;
- 4. The Exempt Use (as defined in the Agreement) of the Project is not discontinued.

If the Owner is subject to an operating agreement with the Provincial Rental Housing Corporation, it must be in compliance with the terms of the operating agreement with the Provincial Rental Housing Corporation.

If any of these conditions are not met then the Council of the City of Kelowna may cancel this Revitalization Tax Exemption Certificate. If such cancellation occurs, the Owner of the Parcel, or a successor in title to the Owner as the case may be, shall remit to the City an amount equal to the value of the exemption received after the date of the cancellation of the certificate.



# RTE18-0004 "Appendix B"

#### PURPOSE-BUILT RENTAL HOUSING AGREEMENT

THIS AGREEMENT dated for reference August 21, 2018 affects:

#### LEGAL DESCRIPTION OF PROPERTY SUBJECT TO THE AGREEMENT:

Lot 1 Section 27 Township 26 ODYD Plan EPP73636

("Land")

And is

**BETWEEN:** 554764 B.C. LTD.

Residing at 2730 Lower Glenrosa Road. West Kelowna, B.C. V4T 1L7

("Owner")

AND:

**CITY OF KELOWNA**, a local government incorporated pursuant to the *Community Charter* and having its offices at 1435 Water Street, Kelowna, B.C. V1Y 1J4

("City")

#### **GIVEN THAT:**

- A. The Owner has applied to the City for rezoning of the Lands to permit the construction of a housing complex that will include purpose-built rental housing units, as defined in this Agreement, on certain lands more particularly described in this Agreement;
- B. The City may, pursuant to section 483 of the *Local Government Act*, enter into an agreement with an owner of land that includes terms and conditions regarding the occupancy, tenure, and availability of the housing units on the land or construction on land:
- C. The Owner and the City wish to enter into this Agreement to provide for purpose-built rental housing on the terms and conditions set out in this Agreement, and agree that this Agreement is a housing agreement under s. 483 of the Local Government Act; and
- D. The City has, by bylaw, authorized the execution of this Agreement and the Owner has duly authorized the execution of this Agreement;

This Agreement is evidence that in consideration of \$1.00 paid by the City to the Owner (the receipt of which is acknowledged by the Owner) and in consideration of the promises exchanged below, the City and Owner agree, as a housing agreement between the Owner and the City under s. 483 of the *Local Government Act*, as follows:

## ARTICLE 1 INTERPRETATION

#### 1.1 Definitions -

"Caregiver" means an individual who provides assistance with the performance of the personal functions and activities necessary for daily living that a person is unable to perform efficiently for himself or herself;

"City" means the City of Kelowna;

"Dwelling Unit" means accommodation providing sleeping rooms, washrooms, and no more than one kitchen, intended for domestic use, and used or intended to be used permanently or semi-permanently for a Household. This use does not include a room in a hotel or a motel.

"Household" means

- (a) a person;
- (b) two or more persons related by blood, marriage, or adoption; or associated through foster care, all living together in one dwelling unit as a single household using common cooking facilities;
- (c) a group of not more than five persons, including boarders, who are not related by blood, marriage, or adoption, or associated through foster care, all living together in one dwelling unit as a single household using common cooking facilities; or
- (d) a combination of (b) and (c), provided that the combined total does not include more than 3 persons unrelated by blood, marriage or adoption or associated through foster care; all living together in one dwelling unit as a single household using common cooking facilities.

In addition, a household may also include up to one Caregiver or nanny;

"Land" means the land described herein;

"LTO" means the Kamloops Land Title Office or its successor:

"Official Community Plan" means the City of Kelowna Official Community Plan Bylaw No. 10500, or its successor bylaw;

"Owner" means the registered owner of the Lands from time to time and any parcels into which the Lands are subdivided:

"Purpose-Built Rental Housing" means a Dwelling Unit that is intended to be used for rental housing; and

"Tenancy Agreement" means a tenancy agreement as defined in, and subject to, the *Residential Tenancy Act*.

#### **1.2** Interpretation - In this Agreement:

- reference to the singular includes a reference to the plural, and vice versa, unless the context requires otherwise;
- (b) article and section headings have been inserted for ease of reference only and are not to be used in interpreting this Agreement;
- (c) reference to a particular numbered section or article, or to a particular lettered Schedule, is a reference to the correspondingly numbered or lettered article, section or Schedule of this Agreement;
- (d) if a word or expression is defined in this Agreement, other parts of speech and grammatical forms of the same word or expression have corresponding meanings;
- (e) the word "enactment" has the meaning given in the *Interpretation Act* on the reference date of this Agreement;
- (f) reference to any enactment includes any regulations, orders or directives made under the authority of that enactment:
- (g) reference to any enactment is a reference to that enactment as consolidated, revised, amended, reenacted or replaced, unless otherwise expressly provided;
- (h) the provisions of s. 25 of the *Interpretation Act* with respect to the calculation of time apply:
- (i) time is of the essence;
- (j) all provisions are to be interpreted as always speaking;
- (k) reference to a "party" is a reference to a party to this Agreement and to their respective successors, assigns, trustees, administrators and receivers;
- (I) reference to a "day", "month", "quarter" or "year" is a reference to a calendar day, calendar month, calendar quarter or calendar year, as the case may be, unless otherwise expressly provided;
- (m) the definitions given in the City of Kelowna Zoning Bylaw No. 8000, or its successor bylaw, and the Official Community Plan apply for the purposes of this Agreement; and
- (n) any act, decision, determination, consideration, consent or exercise of discretion by a party, or other person, as provided in this Agreement will be performed, made or exercised acting reasonably.

#### **1.3** Purpose of Agreement - The Owner and the City agree that:

- (a) this Agreement is intended to serve the public interest by providing for occupancy of a certain number of Dwelling Units, of the kinds provided for in this Agreement, that are in demand in the City of Kelowna but that are not readily available;
- (b) damages are not an adequate remedy to the City in respect of any breach of this Agreement by the Owner, such that the Owner agrees the City should be entitled to an order for specific performance, injunction or other specific relief respecting any breach of this Agreement by the Owner.

## ARTICLE 2 HOUSING AGREEMENT AND LAND USE RESTRICTIONS

- **2.1 Land Use Restrictions** The Owner and the City herby covenant and agree as follows:
  - (a) The Land will be used only in accordance with this Agreement;
  - (b) The Owner will design, construct and maintain one or more buildings providing 19 Dwelling Units as Purpose-Built Rental Housing
  - (c) The Owner acknowledges that the City will not support applications to stratify the building(s) on the Land, thereby allowing the identified Purpose-Built Rental Housing Dwelling Units to be sold independently of each other, for a period of ten (10) years from the date of this Agreement.

## ARTICLE 3 HOUSING AGREEMENT AND TRANSFER RESTRICTIONS

- **3.1** Purchaser Qualifications The City and the Owner agree as follows:
  - the Owner will not sell or transfer, or agree to sell or transfer, any interest in any building containing Purpose-Built Rental Housing Dwelling Units on the Land other than a full interest in the fee simple title to an agency or individual that will continue to ensure that the Purpose-Built Rental Housing Dwelling Units are available in accordance with this Agreement.
- **3.2** Use and Occupancy of Purpose-Built Rental Housing Dwelling Unit The Owner agrees with the City as follows:
  - (a) the Owner will rent or lease each Purpose-Built Rental Housing Dwelling Unit on the Land in accordance with the *Residential Tenancy Act*, and in no event may the Owner itself occupy a Purpose-Built Rental Housing Dwelling Unit or use the Purpose-Built Rental Housing Dwelling Unit for short-term vacation accommodation; and
  - (b) the Owner will deliver a copy of the Tenancy Agreement for each Purpose-Built Rental Housing Dwelling Unit to the City upon demand.

## ARTICLE 4 GENERAL

- **4.1 Notice of Housing Agreement** For clarity, the Owner acknowledges and agrees that:
  - (a) this Agreement constitutes a housing agreement entered into under s. 483 of the *Local Government Act*:
  - (b) the City is requiring the Owner to file a notice of housing agreement in the LTO against title to the

Land;

- (c) once such a notice is filed, this Agreement binds all persons who acquire an interest in the Land;
- (d) in the event the parties agree to release this Agreement from the title of the Land, which may not occur before the tenth (10<sup>th</sup>) anniversary of the date of this Agreement, the Owner will repay the City for 100% of the amount of the rental grant received from the City. Such repaid funds will be directed to the City's Housing Opportunities Reserve Fund.

#### 4.2 No Effect On Laws or Powers - This Agreement does not

- (a) affect or limit the discretion, rights, duties or powers of the City under any enactment or at common law, including in relation to the use or subdivision of land,
- (b) impose on the City any legal duty or obligation, including any duty of care or contractual or other legal duty or obligation, to enforce this Agreement,
- (c) affect or limit any enactment relating to the use or subdivision of land, or
- (d) relieve the Owner from complying with any enactment, including in relation to the use or subdivision of land.
- **Management** The Owner covenants and agrees that it will furnish good and efficient management of the Dwelling Units and will permit representatives of the City to inspect the Dwelling Units at any reasonable time, subject to the notice provisions of the *Residential Tenancy Act*. The Owner further covenants and agrees that it will maintain the Dwelling Units in a satisfactory state of repair and fit for habitation and will comply with all laws, including health and safety standards applicable to the Land. Notwithstanding the foregoing, the Owner acknowledges and agrees that the City, in its absolute discretion, may require the Owner, at the Owner's expense, to hire a person or company with the skill and expertise to manage the Dwelling Units.
- 4.4 Notice Any notice which may be or is required to be given under this Agreement will be in writing and either be delivered or sent by facsimile transmission. Any notice which is delivered is to be considered to have been given on the first day after it is dispatched for delivery. Any notice which is sent by fax transmission is to be considered to have been given on the first business day after it is sent. If a party changes its address or facsimile number, or both, it will promptly give notice of its new address or facsimile number, or both, to the other party as provided in this section.
- **Agreement Runs With the Land** Every obligation and covenant of the Owner in this Agreement constitutes both a contractual obligation and a covenant granted by the Owner to the City in respect of the Land and this Agreement burdens the Land and runs with it and binds the Owner's successors in title and binds every parcel into which it is consolidated or subdivided by any means, including by subdivision or by strata plan under the *Strata Property Act*.
- **Limitation on Owner's Obligations** The Owner is only liable for breaches of this Agreement that occur while the Owner is the registered owner of the Land.
- **4.7 Release** The Owner by this Agreement releases and forever discharges the City and each of its elected officials, officers, directors, employees and agents, and its and their heirs, executors, administrators, personal representatives, successors, and assigns, from and against all claims, demands, damages,

actions, or causes of action by reason of or arising out of advice or direction respecting the ownership, lease, operation or management of the Land or the Dwelling Units which has been or at any time after the commencement of this Agreement may be given to the Owner by all or any of them. This clause will survive the termination of this Agreement.

- **Joint Venture** Nothing in this Agreement will constitute the Owner as the agent, joint venturer, or partner of the City or give the Owner any authority to bind the City in any way.
- **4.9 Waiver** An alleged waiver of any breach of this Agreement is effective only if it is an express waiver in writing of the breach. A waiver of a breach of this Agreement does not operate as a waiver of any other breach of this Agreement.
- **4.10 Further Acts** The Owner will do everything reasonably necessary to give effect to the intent of this Agreement, including execution of further instruments.
- **4.11 Severance** If any part of this Agreement is held to be invalid, illegal or unenforceable by a court having the jurisdiction to do so, that part is to be considered to have been severed from the rest of this Agreement and the rest of this Agreement remains in force unaffected by that holding or by the severance of that part.
- **4.12 Equitable Remedies** The Owner acknowledges and agrees that damages would be an inadequate remedy for the City for breach of this Agreement and that the public interest strongly favours specific performance, injunctive relief (mandatory or otherwise), or other equitable relief, as the only adequate remedy for a default under this Agreement.
- **4.13 No Other Agreements** This Agreement is the entire agreement between the parties regarding its subject and it terminates and supersedes all other agreements and arrangements regarding its subject.
- **4.14 Amendment** This Agreement may be discharged, amended or affected only by an instrument duly executed by both the Owner and the City.
- **4.15 Enurement** This Agreement binds the parties to it and their respective successors, heirs, executors and administrators. Reference in this Agreement to the "City" is a reference also to the elected and appointed officials, employees and agents of the City.
- **Deed and Contract** By executing and delivering this Agreement each of the parties intends to create both a contract and a deed executed and delivered under seal.

**IN WITNESS WHEREOF** the parties hereunto have executed this Agreement on the date and year first above written.

SIGNED, SEALED & DELIVERED in ) the presence of:	"OWNER" by its authorized signatories:
Luyla Haynes	by its authorized signaturies.
Signature of Witness )	( ) The same of th
Twyla Haynes ) Print Name )	James Zeleznik Print Name:
# 8 3359 Cougar road West kelowna ) Address )	
Secretary Occupation	Print Name:
SIGNED, SEALED & DELIVERED in ) the presence of: )	CITY OF KELOWNA by its authorized signatories:
Signature of Witness )	Mayor
Print Name )	City Clerk
Address )	
Occupation	

## Report to Council



Date: September 24, 2018

File: 1840-20

To: City Manager

**From:** James Kay, Development Engineering Manager

Michelle Kam, Sustainability Coordinator

**Subject:** Okanagan Rail Trail – Grand Opening and Status Report

Report Prepared by: Andrew Gibbs

#### Recommendation:

THAT Council receives for information the report from the Development Engineering Manager and the Sustainability Coordinator dated September 24, 2018 regarding the Okanagan Rail Trail – Grand Opening and Status Report.

### Purpose:

To provide Council information on the Grand Opening and updated status of the Okanagan Rail Trail.

#### Background:

### OPENING CEREMONY FOR PHASE 1 OF THE RAIL TRAIL

An opening ceremony marking completion of the first 35.2 kilometres of the rail trail is scheduled for September 27, 2018, at 11:00 am. In keeping with the partnership approach to this entire initiative, there will be one opening ceremony held for the entire corridor - it will be held in the District of Lake Country, at the northeast corner of Wood Lake, commonly known as the Oyama boat launch, at 15455 Oyama Road.

### The ceremony will include:

- Aboriginal drummer and storyteller
- Dignitary comments from each of the owner jurisdictions (Mayors, Board Chair and Chief)
- Ribbon cutting
- Acknowledgement of donors and granting agencies
- Displays, music refreshments and media photo op
- Opportunity to explore some of the trail

#### STATUS OF TRAIL DEVELOPMENT BY JURISDICTION

The Councils/Board-approved objective for the initial phase of trail development is development of a continuous, compacted aggregate trail, approximately 4.0m wide, from Coldstream to Kelowna. In addition to the trail itself, and depending on location, construction also includes the development of safe road crossings, pedestrianization of railway bridges, rock fall stabilization, erosion control, ALR fencing and trail signage. In addition, beyond the scope of these works and funded for 2019 installation by additional private donations, is an interpretive program and facilities that communicates some of the natural and cultural history of the region.

The status of construction work the on the initial phase of rail trail development is as follows:

## Regional District of North Okanagan (RDNO)

- Construction of the 12.0 km trail is 95 per cent complete. It extends from Hofer Drive to the boundary with Lake Country.
- Estimated total value of the works in the Regional District is \$2.0 million, funded by public donations and federal grants from the Canada 150 and New Building Canada programs.
- Remaining work includes:
  - The north extension, from Hofer Dr to College Way
  - Shoreline erosion protection
  - Wayfinding and signage

This remaining work is scheduled to be complete by June 2019.

## District of Lake Country (DLC)

- Construction of the 16.2 km trail is 95 per cent complete. It extends from the boundary with the North Okanagan to the boundary with Kelowna.
- Estimated total value of the works in Lake Country is \$2.47 million, funded by public donations, a Rural Dividend grant from the province and federal grants from the Canada 150 and New Building Canada programs.
- Remaining work includes:
  - Connection of the rail trail with Pelmewash Parkway
  - Agricultural fencing
  - Wayfinding and signage

This remaining work is scheduled to be complete by June 2019.

## Okanagan Indian Band IR#7 (OKIB)

- Design of this section of the rail trail is complete.
- Development of this 2.3 km section of trail is on hold pending successful completion of the federally administered Addition to Reserve (ATR) process underway, and approval by Band Council for public use of the corridor and construction of the trail.
- As yet there is no firm schedule for construction of this section of trail, but the grant program calls for completion of this section by March 2020 in order to be funded. From a

- seasonal construction standpoint, this means that the construction of this section needs to be completed by the end of 2019.
- Estimated total value of the works in Indian Band No 7 is \$265,000, funded by public donations and a grant from the federal New Building Canada program.

### City of Kelowna (CoK)

- The first phase of trail construction, the 7.0 km from Airport Way to Dilworth Drive, is 90 per cent complete.
- The next stages of trail development in Kelowna (12.7 km), north of the airport and the recently acquired section from Gordon Drive to Manhattan Drive, have been designed and budgeted, but construction has not started yet.
- The section from Gordon to Manhattan is planned to be completed by the end of 2018.
- Construction timing on the section north of the airport is tied to development of the IR 7 section, with the goal that both of these currently undeveloped sections of trail be completed and opened at the same time.
- Estimated total value of the works in Kelowna is \$2.93 million, funded by public donations, a BikeBC grant from the province and federal grants from the Canada 150 and New Building Canada programs.

### **FINANCES**

In July 2018, the Okanagan Rail Trail Initiative announced that the fundraising target of \$7,688,800 had been met. The projected funding for the project is as follows:

		PUBLIC	TOTAL
PROJECT FUNDING	GRANTS	DONATIONS	FUNDING
New Building Canada*	\$876,921	\$1,753,842	\$2,630,763
BikeBC	\$ 777,435	\$ 777,435	\$ <b>1,</b> 554 <b>,</b> 870
Canada 150	\$ 471 <b>,</b> 500	\$ 471,500	\$ 943,000
BC Rural Dividend	\$500 <b>,</b> 000	\$1,011,250	\$ 1,511,250
Non-grant Work		\$1,048,917	\$1,048,917
TOTALS	\$2,625,856	\$5,062,944	\$7,688,800

<sup>\*</sup> Note: the New Building Canada program has a maximum total value of \$4,089,600. Per above, only \$2,630,763 is accessible at this time as there exists a matching \$1,753,842 (2/3) in public donations available to access \$876,921 (1/3) of the grant. The Committee will identify opportunities for the owner jurisdictions to allocate their own funding if desired in order to take advantage of the un-funded capacity of the New Building Canada grant.

It is important to recognize that the funding for the development of the rail trail did not come from traditional local government or band council funding mechanisms. Rather, it came in from federal and provincial grants in the amount of \$2.6 million and, most notably, in the form of donations from 5089 members of the public who contributed \$5 million in total.

The projected expenditures to develop the trail, including completed and yet to be completed work, is as follows:

	BUDGETED
JURISDICTION	EXPENDITURES
City of Kelowna	\$2,928,800
District of Lake Country	\$2,475,000
Regional District of North Okanagan	\$2,020,000
Okanagan Indian Band	\$265,000
TOTALS	\$7,688,800

## **COMMITTEE ACTIVITIES**

Subsequent to endorsement of the Terms of Reference for the Okanagan Rail Trail Committee (ORTC) by the partnering Councils and Board this past spring, the Committee held its inaugural meeting in July 2018. The Committee meets monthly to collaborate on the development, maintenance and use of the Okanagan Rail Trail corridor.

Each jurisdiction has appointed a representative(s) to sit on the Committee, as follows:

•	City of Kelowna	James Kay, Development Engineering Manager
		Michelle Kam, Sustainability Coordinator
•	District of Lake Country	Matt Vader, Manager, Strategic & Support Services
•	Regional District of North Okanagan	Mike Fox, General Manager, Community Services
•	Okanagan Indian Band	Victor Rumbolt, Executive Director
•	District of Coldstream	Trevor Seibel, Chief Administrative Officer
•	City of Vernon	Kim Flick, Director, Community Infrastructure and
		Development

To conclude, staff will keep Council informed of important updates to the Okanagan Rail Trail, as necessary.

### **Internal Circulation:**

Divisional Director, Community Planning & Strategic Investments Divisional Director, Infrastructure Divisional Director, Financial Services Integrated Transportation Department Manager Department Manager, Infrastructure Delivery Manager, Grants & Special Projects

Submitted by:	
J. Kay, Development Engii	neering Manager and M. Kam, Sustainability Coordinator
Approved for inclusion:	Danielle Noble-Brandt, Policy and Planning Department Manager

CC:

Senior Project Manager Senior Airport Development Manager Community Communications Manager Communications Advisor **Event Development Supervisor** Community & Neighbourhood Services Manager Suburban and Rural Planning Manager Community Planning Department Manager Project Manager Integrated Transportation Term Appointment **Urban Forestry Supervisor** Parks, Beaches & Sportsfields Supervisor Parks Services Manager Parks & Buildings Planning Manager Park and Landscape Planner Roadways Operations Supervisor



## **Opening Ceremony**

- ► Completion of construction for Phase 1 (35.2km)
- ➤ Officially open for public use
  - Collective celebration
  - ► Thursday, September 27, 2018
  - Oyama Boat Launch, District of Lake Country

► Regional District of North Okanagan



▶ District of Lake Country



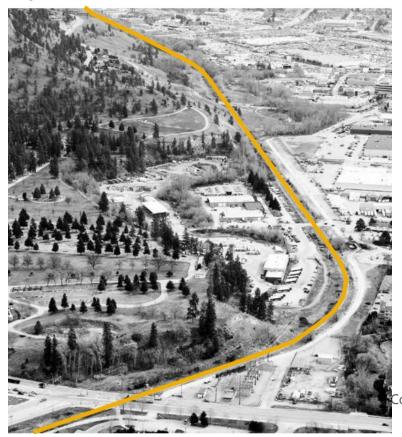




- ▶ Okanagan Indian Band
  - Design complete
  - 2.3km of construction to follow ATR process
    - Same standard as remainder of trail
  - Timing to be determined
    - Subject to ATR
  - ▶ Value = \$265,000



► City of Kelowna





City of Kelowna

## Project Finances

## ► Revenue

FUNDING	GRANTS	DONATE	TOTAL
New Building Canada BikeBC Canada 150 BC Rural Dividend Non-grant work	\$876,921 \$777,435 \$471,500 \$500,000	\$1,753,842 \$777,435 \$471,500 \$1,011,250 \$1,048,917	\$2,630,763 \$1,554,870 \$943,000 \$1,511,250 \$1,048,917
TOTALS	\$2,625,856	\$5,062,944	\$7,688,800

## **Project Finances**

## ► Expenditures

JURISDICTION	TOTAL
City of Kelowna District of Lake Country Regional District of North Okanagan Okanagan Indian Band	\$2,928,800 \$2,475,000 \$2,020,000 \$265,000
TOTALS	\$7,688,800

## Okanagan Rail Trail Committee

- ► Commissioned by Councils and Board, spring 2018
- ▶ Mandate is to collaborate on the corridor's:
  - Use
  - Development
  - Maintenance
  - Operation
- Representative from each jurisdiction
  - ▶ Liaison between the Committee and the staff/political leadership
  - Meet monthly



## Report to Council

Date: September 24, 2018

File: 1840-10

**To:** City Manager

**From:** Senior Project Manager

**Subject:** 2018 Budget Amendment – Laurel Packinghouse Museum Courtyard

### Recommendation:

THAT Council receives for information the report from the Senior Project Manager dated September 24, 2018 regarding the 2018 Budget Amendment for the Laurel Packinghouse Museum Courtyard project;

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AND THAT the 2018 Financial Plan be amended to increase the budget for the Laurel Packinghouse Museum Courtyard project by \$235,000, funded from an approved BC Gaming Grant.

## Purpose:

To change the source of funding for the development of the Laurel Packinghouse Courtyard project to using \$235,000 in BC Gaming Grant funding received.

### Background:

The City of Kelowna has a partnership with the Kelowna Museum Society to develop the vacant space south of the Laurel Packinghouse Museum as an interpretive courtyard for public use and museum programs.

The original Council-approved budget for the project included \$165,000 from the City (funded from taxation) and \$150,000 from the Museum Society, with the remainder to come from grants. On October 2, 2017, after an attempt to secure a federal cultural spaces grant had failed, and in the interest of moving the project forward, Council approved increasing the project budget by a maximum of \$200,000 (funded from the Capital Opportunities and Partnership Program). Since then the Museum Society has been notified that it was successful in securing a \$235,000 Capital Project Grant from the Gaming Branch for the project. With the increase in budget afforded by the grant it will be possible for the project to move ahead. Construction would be complete by June 2019.

## Financial/Budgetary Considerations:

The 2018 Financial Plan will need to be amended to include the \$235,000 in BC Gaming Grant funding received for the Laurel Packinghouse Museum Courtyard Capital project. Furthermore, due to

anticipated cost increases, staff are recommending that up to \$80,000 of the \$200,000 originally approved by Council on October 2, 2017 continue to be made available to cover bid & construction contingency for this \$630,000 project. The remaining \$120,000 of the \$200,000 currently being held in reserve would not be used.

#### Internal Circulation:

Divisional Director, Infrastructure Financial Planning Manager Infrastructure Delivery Department Manager Community Communications Manager Parks & Buildings Planning Manager

~ 'I .'				
Considerations	not and	MICANIA	to thi	c ranort:
Constactations	mot app	<i>m</i> cabic	CO CITI	3 i Cpoi c.

Legal/Statutory Authority: Legal/Statutory Procedural Requirements: **Existing Policy:** Personnel Implications: External Agency/Public Comments: **Communications Comments:** Alternate Recommendation: Submitted by:

Δ	Gibbs	Senior	Project	Manager
Α.	Gibbs,	Sellioi	rioject	Manager

Approved for inclusion:	Alan, Newcombe, Divisional Director, Infrastructure

Divisional Director, Infrastructure CC: Divisional Director, Financial Services Divisional Director, Corporate Strategic Services

## Report to Council

Date: September 24, 2018

File: 1840-10

To: City Manager

**From:** Senior Project Manager

Subject: Budget Amendment for the Park Improvement & Shoreline Stabilization works at

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Strathcona Park

### Recommendation:

THAT Council receives, for information, this report from the Senior Project Manager dated September 24, 2018, with respect to the Budget Amendment for the Park Improvement & Shoreline Stabilization works at Strathcona Park;

AND THAT the 2018 Financial Plan be amended to include up to \$69,000 from the Strathcona Park funds currently being held in reserve.

### Purpose:

To amend the 2018 Financial Plan in order to proceed with the consulting work for the shoreline stabilization and park development project between Strathcona Park and Royal Avenue.

## **Background:**

This project has a long history, beginning in 2012 with Council's approval of the Waterfront Walkway Concept Plan, which provided the direction for the City to secure waterfront land between Strathcona Park and Royal Avenue for use as a public park. In order to protect this asset, the City undertook to prepare a preliminary design and obtain provincial approval to stabilize the slowly eroding shoreline here before implementing further improvements

On September 13, 2018, staff received approval from the provincial Ministry of Fisheries, Lands and Natural Resource Operations (MFLNRO) for the City's Section 11 application for the required works. There now follows a statutory 30-day period for any objectors to appeal. The Section 11 approval allows for the undertaking of shoreline stabilizations works at low water, between now and August 2020. Staff are planning on doing the work in March 2019, subject to approved funding. Before any construction begins however, it is necessary to have preparatory consulting work undertaken to meet the requirements of the Section 11 approval and to prepare a reliable cost estimate for the required construction work. The required consulting work includes site surveying, detail design, cost estimating and construction monitoring.

### Financial/Budgetary Considerations:

The funds required for consulting work for the shoreline stabilization and park development project between Strathcona Park and Royal Avenue is currently not included in the City's budget. The 2018 Financial Plan will require an addition of up to \$69,000 from the Strathcona Park funds currently being held in reserve. Once the total construction costs are estimated, staff will report back to Council to seek approval for the funding required to undertake the construction.

#### Internal Circulation:

Divisional Director, Infrastructure
Community Engagement Manager
Infrastructure Delivery Department Manager
Parks and Buildings Planning Manager
Parks Services Manager
Financial Planning Manager

## Considerations not applicable to this report:

Legal/Statutory Authority
Legal/Statutory Procedural Requirements
Existing Policy
Personnel Implications
External Agency/Public Comments
Communications Comments
Alternate Recommendation

Divisional Director, Infrastructure

Aitei	mate Recommendation
Subr	mitted by:
Andr	rew Gibbs, Senior Project Manager
Аррі	Alan Newcombe, Divisional Director, Infrastructure
CC:	City Clerk Divisional Director, Corporate Strategic Services Divisional Director, Financial Services

## Report to Council



Date: September 24, 2018

**File:** 0610-01

To: City Manager

From: Mariko Siggers, Community & Neighbourhood Services Manager

**Subject:** Canyon Falls Neighbourhood Learning Centre

#### Recommendation:

THAT Council receives, for information, the report from the Community & Neighbourhood Services Manager dated September 24, 2018 regarding the Neighbourhood Learning Centre at Canyon Falls Middle School;

AND THAT Council direct staff to proceed with developing an agreement with School District #23 to operate the Neighbourhood Learning Centre at Canyon Falls Middle School based on the principles outlined in the report dated September 24, 2018;

AND THAT Council considers the City's portion of the operating costs for the Neighbourhood Learning Centre in the 2019 provisional budget;

AND FURTHER THAT staff report back with a joint-use agreement to operate the Neighbourhood Learning Centre at Canyon Falls Middle School for Council approval in 2019.

#### Purpose:

To provide Council with an update on the Neighbourhood Learning Centre at Canyon Falls Middle School and to seek Councils approval to develop a joint-use agreement with School District #23.

#### Background:

On May 15, 2017, Council received a report on the opportunity to operate a Neighbourhood Learning Centre (NLC) at the future Canyon Falls Middle School, opening September, 2019. The NLC program is provincially funded and provides up to 15 per cent additional floor area in a new school or addition, for use by a recognized community partner of good standing with the purpose of providing community related programs. The 15 per cent area may be dedicated for sole use by the partner or combined with the school area to create a larger space, such as a larger gymnasium, for shared use by both organizations. The province provides the capital funding for the NLC space, and the community partner is responsible to the School District for the operating and maintenance costs.

In June, 2017, Council provided a letter of intent to partner with School District #23 (SD 23) in the design and development of the NLC component in order to provide community program space in this neighbourhood. The letter of intent was non-binding but indicated the City's interest in exploring the opportunity further. A formal joint-use agreement is required prior to beginning operations.

Operating the NLC space will provide many benefits to the City:

- Expanded reach of neighbourhood programming
- A new community hub
- The addition of indoor recreation facilities with no capital investment, immediately adjacent to a proposed community park and recreation sports field
- Provision of year round washrooms to serve the community park
- Expanded programs and services to a growing neighbourhood
- Enhanced partnership and collaborative relationship with the School District

The school is currently under construction and will open in the fall of 2019. Staff have worked with SD 23 and their architects to design a multi-purpose space for community use in the new school. The proposed NLC space is a combination of the two models described previously in this report: dedicated multi-function spaces for City community programming and a larger gymnasium for shared use by the community and the school.

There are two large multi-functional spaces, each of which can be divided into two smaller spaces, allowing for a variety of community programs to take place. In addition, there are dedicated washrooms, circulation area, storage and kitchen. There is also an externally accessed washroom for year-round use to serve the adjacent community park. In addition to the designated community space, the City will have some access to the gymnasium outside of school hours in addition to other rooms such as art/drama rooms subject to agreement with the school.

### **Community Engagement**

During the summer of 2018, an online survey was conducted to gauge interest in the new facility and to provide insight into how well the NLC space would be utilized. There were 135 respondents to the survey who were mainly residents of South Kelowna. Close to 80 per cent of respondents said they would be interested in using this facility in some capacity. The survey results indicated that people are most interested in fitness classes, summer camps and general interest programs for all ages.

## **Operating Model**

Based on what was learned through the survey and observed through programs at other facilities around the community, an operating model which reflects diverse community needs is proposed which will include many of the following:

- Licensed pre-school
- Adult/senior fitness programs with child minding opportunities
- Youth after school programs
- Preschool and children's programs
- Adult sport leagues
- Adult general interest
- Community rentals

In addition, full day camps will be offered during spring break and summer holidays.

When a smaller program centre opens, it often takes time to establish program patterns and a participant base. In 2019 and 2020, programs will be introduced gradually and built up as awareness of the new facility increases. The first two years will be a piloting and learning period to engage the community and create the foundation for the space. Trends in registration and user feedback will be observed to better understand programming opportunities and maximize usage. The budget will reflect this with lower revenues projected during the initial operating years.

### **Joint Use Principles**

The City currently has joint-use agreements in place with four schools where various programs are offered:

- Watson Road Elementary licensed preschool, licensed before and after school care, community programs, birthday parties and sport leagues
- Bankhead Elementary Licensed after school care and community programs
- South Kelowna Elementary Community programs
- Okanagan Mission Secondary School (NLC arrangement) Community programs, adult sport leagues

The agreements outline the roles, responsibilities and financial obligations of each party and also provide parameters for space allocation. These agreements have proven to be effective in providing community services and programs to outlying areas.

It is anticipated the new NLC joint-use agreement would have a five-year term and reflect a partnership based on a mutual understanding that the NLC space will provide benefit to the school and to the community as a whole. The goal is to create an inclusive and welcoming space for all.

With Council's endorsement, a Joint-Use Agreement will be created which will have the following outcomes for the City:

- A collaborative, reciprocal partnership aimed at maximizing space usage and benefit to the community and the school
- Dedicated use of the designated NLC spaces
- Opportunities for community groups to rent space within the NLC portion of the school (including the gymnasium)
- Dedicated use of the gym outside of school use times (i.e. before 8:00 am, after 4:00 pm, weekends and school holidays, exact times to be finalized)
- Opportunities for the school and City to collaborate and utilize spaces when not in use by either party (ie. City use of the drama space out of hours or school use of non-programmed NLC space during the school day)
- Responsibility to the School District for the operating and maintenance costs for the designated and City portion of shared spaces on an annual basis.

#### **Budget**

There is no capital requirement from the City for the initial construction of the NLC space; however, to maximize function, a budget request for upgrades such as durable, multi-purpose sports flooring will be brought forward in the 2019 Provisional Budget, capital program. In addition, in 2019 an initial purchase

of equipment will be required for essential items such as tables, chairs, mats and fitness equipment. In future years, equipment needs will be covered through existing budget.

Programming expenses will be offset by revenues as per the cost recovery rates implemented throughout City programs. Staff will work with the school and community to maximize program and revenue opportunities in order to meet budget expectations.

In the NLC arrangement, the City pays a proportionate amount of the operating costs relative to the size of the NLC space. At Canyon Falls, the City's portion of the operating costs (including custodial, utilities and maintenance) will be approximately \$24,000 annually. This is based on 550 square metres of NLC space at \$43 per square metre. This is in alignment with other joint-use agreements with SD 23 and recognizes that the new building will be more energy efficient. This amount may be adjusted depending on the final details of the agreement. There will be an operating request in the 2019 Provisional Budget for these costs.

## Financial/Budgetary Considerations:

Annual Budget		2019	2020	2021
	NLC Rent	\$8000	\$25,000	\$26,000
Expenses	Equipment	\$7500	\$0	\$0
	Program expenses \$13,000		\$35,000	\$36,750
Total Expenses		\$28,500	\$60,000	\$62,750
Total Program R	evenue	(\$16,500)	(\$50,000)	(\$53,000)
<b>Budget impact</b>		\$12,000	\$10,000	\$9750

#### Internal Circulation:

Divisional Director, Active Living & Culture; Communications Advisor; Parks and Buildings Planning Manager; Payroll & Internal Controls Manager; Property Management Manager

### Considerations not applicable to this report:

External Agency/Public Comments
Existing Policy:
Legal/Statutory Authority
Legal/Statutory Procedural Requirements
Personnel Implications
Communications Comments
Alternate Recommendation

### Submitted by:

M. Siggers, Community & Neighbourhood Services Manager

Approved for inclusion: J. Gabriel, Divisional Director, Active Living & Culture

Attachments: Attachment 1 - Presentation - Canyon Falls Neighbourhood Learning Centre

Cc: Divisional Director, Corporate Strategic Services

Divisional Director, Financial Services



# Canyon Falls Neighbourhood Learning Centre

September 24, 2018





## Background

- Joint-use agreements with schools have proven to be effective
- Neighbourhood Learning Centres are a partnership between a school and a community organization
  - ▶ No capital cost to organization
  - Shared operating/maintenance costs
- ▶ Benefits to NLC
  - Reduce transportation barriers
  - ► Facilitate neighbourhood connection
  - Access to facilities
  - Direct programming for neighbourhood needs



## Background

- ▶ In June, 2017, Council provided a Letter of Intent to the School District to operate Canyon Falls NLC
  - Non-binding expression of interest to explore the opportunity
- ► City and SD 23 jointly designed NLC space within future school

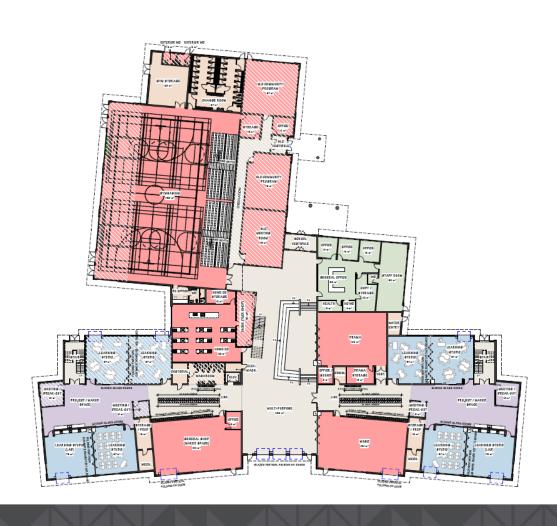


## Canyon Falls Middle School





## Canyon Falls Floor Plan





## **NLC Space**





## Community engagement

- Survey conducted
  - ▶ 80% are interested in using the new facility
  - Programs for all ages, including preschool and older adult
    - Camps
    - Leagues
    - General interest
    - ► Fitness
    - Youth programs
    - ► Rentals



## Joint Use Principles

- ▶ Outlines roles, responsibilities, costs and allocation
  - ► Reciprocal partnership to maximize community benefit
  - Designated year-round access to NLC space
  - Opportunity for community rentals in NLC space
  - Access to gym outside of school use time
  - Responsibility to SD 23 for shared operating and maintenance costs



## Budget

- One time request for upgrades to facility (floor, moveable walls etc)
- One time equipment request (tables, chairs, fitness equipment etc)
- ► Revenues expected to increase over time

Annual Budget		2019	2020	2021
Expenses	NLC Rent	\$8000	\$25,000	\$26,000
	Equipment	\$7500	\$0	\$0
	Program	\$13,000	\$35,000	\$36,750
	expenses			
Total Expenses		\$28,500	\$60,000	\$62,750
Total Program Revenue		(\$16,500)	(\$50,000)	(\$53,000)
Budget impact		\$12,000	\$10,000	\$9750



## Next steps

# Council approval to proceed

 Commence discussions with SD 23

## Budget submission

 Based on operating for 4 months in 2019 and 12 months on-going

## Joint Use Agreement

 To be agreed on and signed by SD 23 and City Council in Q1

## Program planning

- Purchase equipment
- Schedule programs
- Hire instructors

## Canyon Falls opens

• September 2019



## Questions?

For more information, visit **kelowna.ca**.

## **CITY OF KELOWNA**

## **BYLAW NO. 11657**

## 2019 Permissive Tax Exemption Bylaw

A bylaw pursuant to Sections 220, 224 and 225 of the Community Charter, to exempt from taxation certain lands and improvements situated in the City of Kelowna

The M	unicipal Council of the City of Kelowna, in open meeting assembled, enacts as follows:		
1.	Those certain parcels or tracts of land and improvements, situated, lying and being in the City of Kelowna, as described in Schedules "A" to "J" attached hereto and forming part of this bylaw, shall be exempt from taxation.		
2.	This bylaw shall come into full force and effect and is binding on all persons during the 2019 taxation year.		
3.	This bylaw may be cited as "2019 PermissiveTax Exemption Bylaw No. 11657".		
Read a	first, second and third time by the Municipal Council this 17 <sup>th</sup> day of September, 2018.		
Adopte	ed by 2/3 of the Municipal Council of the City of Kelowna this		
	Mayor		
	City Clerk		

Schedule A – Public Worship			
FOLIO	LEGAL DESCRIPTION	REGISTERED OWNER/LESSEE	COMMENTS
	Lot 1, Blk 13, Plan 202,	The Union of Slavic Churches of	
1230	DL138	Evangelical Christians c/o Trustees	
	Lots 2 and 3, Blk 15,		
1350	Plan 202, DL 138	Trustees of First United Church	
	Lot 4,Blk 15,Plan 202,		
	DL 138 In Trust - DD		
1360	197582F	Trustees of First United Church	Note: Parking Lot
	Lot 5,Blk 15,Plan 202,		<u> </u>
	DL 138 In Trust - DD		
1370	197582F	Trustees of First United Church	Note: Parking Lot
	Lot 25, Plan 578, DL		
	138, Except Plan		
6911	H16278, & Lot A PL	Kelowna Buddhist Society	
	Lot 2, Plan KAP1319,	Truth Now Tabernacle United	
18380	DL 138	Pentecostal Church	
	Lot 19-20, Plan 2085,	Unitarian Fellowship of Kelowna	Criteria #5: 1462 sq ft taxable for
21300	District Lot 139	Society	lease/rental to Serendipity Daycare
	Lot 6, Plan 2271, DL	Kelowna Tabernacle Congregation	. , ,
22500	139	- Trustees	
	Lot 1, Plan 11332, DL	Governing Council of the Salvation	
51070	137	Army in Canada	Note: Parking Lot
		,	Criteria #5: 3096 sq ft taxable for
		Ray Chase, Emsley Hunter, and	lease/rental to L'Escale daycare and
57010	Lot 1, Plan 15741	Cyril Nash (Trustees)	Music School
	Lot A, Plan 16013, DL	,	
57510	137	Convention Baptist Churches of BC	
		The Trustees of Congregation of	
62110	Lot A, KAP65650	Kelowna Bible Chapel	
		Congregation of Kelowna Bible	
62120	Lot 2, Plan 17933	Chapel	Note: Parking Lot
		Trustees Congregation - Grace	Criteria #3: Thrive daycare on avg.
68680	Lot 3, Plan 25524	Baptist Church	below market
			Criteria #9: Residences excluded
69380	Lot A, Plan 27070	Roman Catholic Bishop Of Nelson	(Church Manse/Rectory)
		Governing Council of the Salvation	
	Lot 1, Plan 30180,	Army in Canada (Community	
71130	DL137	Church)	
		BC Corp of the Seventh-Day	
71680	Lot 4, Plan 30824	Adventist Church	
	Lot A, Plan 33076,		Criteria #9: Residences excluded
74502	DL138	Roman Catholic Bishop of Nelson	(Church Manse/Rectory)
		Trustees of The Congregation of	
		the Christ Evangelical Lutheran	
75210	Lot 1, Plan 34637	Church	
	Lot C, Plan 40170,	The Congregation of the First	
76394	DL137	Mennonite Church	
		Ukrainian Catholic Eparchy of New	Criteria #9: Residences excluded
78266	Lot 1, Plan KAP47242	Westminster	(Church Manse/Rectory)

Schedule A – Public Worship			
FOLIO	LEGAL DESCRIPTION	REGISTERED OWNER/LESSEE	COMMENTS
	Lot A, Plan KAP91385,	,	
83239	DL 14	Synod of the Diocese of Kootenay	
3255224	Lot 1, Plan KAP56294	Trust Cong St David's Presb Church	
		Kelowna Christian Reformed	Criteria #5: 2,974 sq ft taxable for
3337370	Lot A, Plan 23927	Church	lease/rental to GRASP
			Criteria #5: 1,200 sq ft taxable for
		Okanagan Jewish Community	lease/rental to North Glenmore
3337769	Lot A, Plan KAP83760	Association	Daycare
		Trustees of the Glenmore	
		Congregation of Jehovah's	
3378102	Lot A, Plan 44041	Witnesses	
		BC Association of Seventh Day	
3922000	Lot A, Plan 5223	Adventists	
		Seventh-Day Adventist Church (BC	
4310442	Lot A, Plan 31085	Conference)	
	Lot PT 26, Plan 187		
	Except Plan 3067, That		
	PT of L 25 PL 187 S/O		
4423888	PL B130	Synod of the Diocese of Kootenay	
			Criteria #3: Thrive daycare on avg.
			below market. Criteria #9:
/ 574 500	Lot 1, Sec 19, Twp 26,	Kelowna Full Gospel Church	Residences excluded (Note: Housing
4571592	Plan 37842	Society	Society)
/ ( / 5000	Lat 7 Dlan 2727	Church of the Nazarene - Canada	
4645000	Lot 7, Plan 3727	Pacific	Criteria #9: 680 sq. ft taxable as
		Serbian Orthodox Par-Holy	residences excluded (Note: Church
4660000	Lot 1, Plan 4877	Prophet St Ilija (Parish)	Manse/Rectory)
400000	Lot A, Sec 22, Twp 26,	Seventh-Day Adventist Church (BC	WallseyNectory)
4803157	Plan 71145	Conference)	
1003137	1 1011 / 11 13	Comercinesy	Criteria #9: 240 sq ft taxable as
		Gurdwara Guru Amardas Darbar	residences excluded (Note: Church
4804250	Lot A, Plan 29696	Sikh Society	Manse/Rectory)
	Lot Pcl Z, Sec 23, Twp	,	, ,,
	26, Plan 24426, Except		
	Plan KAP69971, DD	Evangelical Missionary Church of	
5475931	J53659	Canada	
		BC Conference of Mennonite	Criteria #9: Residences excluded
5476791	Lot B, Plan 41234	Brethren Churches	(Note: Housing Society)
		Okanagan Sikh Temple & Cultural	Criteria #9: Residences excluded
5606001	Lot A, Plan KAP76650	Society	(Note: Church Manse/Rectory)
			Criteria #9: Residences excluded
5611000	Lot PT 2, Plan 2166	Roman Catholic Bishop of Nelson	(Note: Church Manse/Rectory)
5669001	Lot A, Plan 51686	Okanagan Buddhist Cultural Centre	
5752000	Lot A, Plan 4841	Okanagan Chinese Baptist Church	
	Lots 78,79&80, Sec 26,		
6198870	Twp 26, Plan 22239	Pentecostal Assemblies of Canada	
6198872	Parcel A, Plan 22239	Synod of the Diocese of Kootenay	

Schedule A – Public Worship			
FOLIO	LEGAL DESCRIPTION	REGISTERED OWNER/LESSEE	COMMENTS
			Criteria #5: 800 sq ft taxable for
	Lot H, Sec 26, Twp		lease/rental to Imagination Way
6199358	26,Plan 26182	Faith Lutheran Church of Kelowna	Preschool
	Lot 1, Sec 27, Twp 26		
6337001	Plan 63747	BC Muslim Association	
		Trustees of Spring Valley	
	Lot A, Plan 19465, DL	Congregation of Jehovah's	
6370120	143, Sec 27, Twp 26	Witnesses	
	, , ,	Kelowna Christian Centre Society	Property assessed 50% each under
6372497	Lot 1, Plan KAP55460	Inc	categories A & B
	,	New Apostolic Church of Canada	
6372506	Lot A, Plan KAP56177	Inc	
	Lot 1, Sec 29 & 32,	The Church of Jesus Christ of	
6496742	Plan KAP64073	Latter-Day Saints	
		Trustees Rutland United Church	
		Pastoral Charge of the United	Criteria #5: 1645 sq ft taxable for
6735000	Lot A, Plan 11320	Church	lease/rental to Green Gables Daycare
7212492	Lot 1, Plan 37256	Synod of the Diocese of Kootenay	
	Lot A, Plan 20452, DL	Christian & Missionary Alliance -	
10407200	128	Canadian Pacific District	
	Lot 2, Plan 9491, DL	St. Peter & Paul Ukrainian Greek	Criteria #9: Residences excluded
10468000	129	Orthodox Church of Kelowna	(Note: Housing Society)
	Lot A, Plan 37351		Criteria #5: 8896 sq ft taxable for
10519844	(Portion of Lot)	Apostolic Resource Centre Society	Commercial Class 06
	EPP64708, Lot A, DI		
10519903	129, LD 41	Kelowna Trinity Baptist Church	
			Criteria #3: Church daycare on avg.
	Lot 2, Plan KAP44292,		below market. Property assessed
10738366	DL 131	Evangel Tabernacle of Kelowna	50% each under categories A & B
			Criteria #9: Residences excluded
10768002	Lot 2, Plan KAP81588	Roman Catholic Bishop of Nelson	(Note: Church Manse/Rectory)
10936348	Lot 1, Plan 35917	Kelowna Gospel Fellowship Church	
		Canadian Mission Board of the	
		German Church of God Dominion	Criteria #9: Residences excluded
10936653	Lot 1, Plan 41844	of Canada	(Note: Housing Society)
		First Lutheran Church of Kelowna	Property assessed 50% each under
10937443	Lot A, Plan KAP76720	BC	categories A & B
		Trustees of The Lakeshore	
4465	Lot 1, Plan 25466, DL	Congregation of Jehovah's	
11025140	135	Witnesses	6 1 1 10 100
4400=4==	Lot 7, Plan 25798, DL	Congregation of Bethel Church of	Criteria #3: Village daycare on avg.
11025172	135	Kelowna	below market
4405000	Lot 1, Plan 12441, DL		
11059000	136 Trustees	Providence Baptist Church	
1100707	Lot 1, Plan KAP52447,	62.61	
11097073	DL 136	C3 Church	

	Schedule B – Private Schools			
	LEGAL			
FOLIO	DESCRIPTION	REGISTERED OWNER/LESSEE	COMMENTS	
	Lot C, Plan			
52700	12546, DL 138	Roman Catholic Bishop of Nelson		
	Lot A, Plan		Criteria #9: Residences excluded	
74502	33076, DL 138	Roman Catholic Bishop of Nelson	(Note: Church Manse/Rectory)	
			Criteria #5: 2 parcels amalgamated	
3458033	Lot 1, KAP86356	Aberdeen Hall Senior School Society	w/prop. in 2014 taxable as Class 01	
	Lot A, Plan	Okanagan Montessori Elementary	Criteria #3: Daycare on avg. below	
4417000	KAP1725	School Society	market	
		Seventh-Day Adventist Church - BC		
5122000	Lot 2, KAP3849	Conference		
	Lot 1, Plan		Property assessed 50% each under	
6372497	KAP55460	Kelowna Christian Centre Society Inc	categories A & B	
	Lot A, Plan			
6372527	KAP71175	Vedanta Educational Society Inc		
	Lot A, Plan		Criteria #3: Daycare on avg. below	
7212595	KAP48732	Waldorf School Association of Kelowna	market.	
	Lot B, Plan			
7212596	KAP48732	Waldorf School Association of Kelowna		
	Lot 1, Plan		Criteria #3: Daycare on avg. below	
10589111	KAP59724	Kelowna Society for Christian Education	market.	
	Lot2, Plan		Property assessed 50% each under	
10738366	KAP44292, L131	Evangel Tabernacle of Kelowna	categories A & B	
	LotA, Plan	The Catholic Independent Schools of		
10738378	KAP54674,DL131	Nelson Diocese		
	Lot A, Plan		Property assessed 50% each under	
10937443	KAP76720	First Lutheran Church of Kelowna	categories A & B	

	Schedule C – Hospitals				
		LEGAL			
	FOLIO	DESCRIPTION	REGISTERED OWNER/LESSEE	COMMENTS	
ſ		Lot A, Plan			
	79392	KAP60581, DL 14	Canadian Cancer Society		

	Schedule D – Special Needs Housing			
	LEGAL			
FOLIO	DESCRIPTION	REGISTERED OWNER/LESSEE	COMMENTS	
	Lot 15, Plan 462,			
004340	DL 139	Kelowna Gospel Mission Society		
	Lot 4, Plan 635,	The Bridge Youth & Family Services		
007270	DL 14	Society		
	Lot 10, Plan			
023390	2498, DL 137	Bridges to New Life Society		
		New Opportunities for Women (NOW)		
033110	Lot 2, Plan 3929	Canada Society		
046240	Lot 20, Plan 9138	Kelowna Gospel Mission Society		
046250	Lot 21, Plan 9138	Kelowna Gospel Mission Society		
048500	Lot 8, Plan 10011	Okanagan Halfway House Society Inc		
	Lot 33, Plan			
048750	10011, D.L. 137	Resurrection Recovery Resource Society		
	Lot 35, Plan			
048770	10011	Okanagan Halfway House Society		
	Lot 22, Plan			
050050	KAP10689	Resurrection Recovery Resource Society		
050000	Lot 23, Plan			
050060	10689	Resurrection Recovery Resource Society		
050070	Plan 10689, Lot			
050070	24	Resurrection Recovery Resource Society		
050000	Lot 25, Plan	Description Description Description		
050080	10689	Resurrection Recovery Resource Society		
050650	Lot A DI 11010	Society of St. Vincent De Paul of Central Okanagan		
050650	Lot A, PL 11018	3		
055030	Lot / Dlan 1/7/1	Central Okanagan Emergency Shelter Society		
033030	Lot 4, Plan 14741	Central Okanagan Emergency Shelter		
055040	Lot 5, Plan 14741	Society		
055150	Lot A, Plan 14836	Okanagan Halfway House Society		
033130	2007,1101114050	Adult Integrated Mental Health Services		
071805	Lot 1, Plan 31133	Society		
0,1003	Plan KAS2634,	Okanagan Mental Health Services		
080873	Lot 1	Society		
	Plan KAP33003,	The Bridge Youth & Family Services		
05476630	Lot A	Society		
	Plan KAP22268,	The Bridge Youth & Family Services		
06370241	Lot D	Society		
	Lot 4, Plan	,		
10519958	KAS1717	Kelowna Child Care Society		
	PCL A, Plan	,		
	KAP52447, DL	National Society of Hope /Provincial		
11097075	136	Rental Housing Corp		

Schedule E – Social Services			
	LEGAL		
FOLIO	DESCRIPTION	REGISTERED OWNER/LESSEE	COMMENTS
	Lot 14, Plan 462		
004330	Block 5	Kelowna Gospel Mission Society	
	Lots 3 and 4, Blk		
004580	8, DL 139, Pl 462	Ki-Low-Na Friendship Society	
	Plan 830, Lot 2,		
000000	DL 14, Blk 21 exc	Canadian Mental Health Association	
009900	Parcel 2A, B1750 Lot 11, Plan 922		
010470 016740	·	Kelowna & District S.H.A.R.E. Society	
016/40	Lot A, Plan46222	Pathways Abilities Society	Critaria #2 Danasa and Indian
026190	Lot 138, Plan 3163	Okanagan Boys & Girls Clubs/City of Kelowna	Criteria #3: Daycare on avg. below market.
020190	2102	Okanagan Boys & Girls Clubs/City of	Criteria #3: Daycare on avg. below
045862	Lot A, Plan 9012	Kelowna	market.
043802	Plan EPP11464	Relowiid	market.
055261	Lot A	Daycare Connection Childcare Society	New applicant
057060	Plan 15778, Lot B	Ki-Low-Na Friendship Society	Thew applicant
037000	Lot A, Plan	Okanagan Boys & Girls Clubs/City of	Criteria #3: Daycare on avg. below
059530	16898	Kelowna	market.
033330	10030	Relowiid	Criteria #7: 1,786 sq ft (32%) taxable
066250	Lot 1, Plan 22678	Kelowna (#26) Royal Canadian Legion	for dining and cooler areas
000200	Lot A, Plan	Central Okanagan Community Food	_ rer anning and econor areas
070175	28500	Bank Society	
_	Lot 1, Blk 6, Sec	,	
	20, Twp 26,	Central Okanagan Child Development	
076262	ODYD, PI 39580	Association	
	Lot A, FL 139, LD		
	41, Plan		
079078	KAP58056	Kelowna Community Resources Society	
083933	Lot A Plan	Pathways Abilities Society / City of	
(082144)	KAP86241	Kelowna	
	Lot A Plan	Governing Council of the Salvation Army	
04918002	KAP90062	in Canada	
05/77055	Lot 5 Plan		
05477053	KAS2126	MADAY Society for Seniors	C ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '
06100707	Lot 1, Plan	David Chila Chila (City of Malaysia	Criteria #3: Daycare on avg. below
06198704	KAP91112	Boys & Girls Clubs/City of Kelowna	market.
06270272	Lot 19, Plan	Ki Low Na Friendship Society	
06370273	23749 Lot 2, Plan	Ki-Low-Na Friendship Society	
06371030	KAP30323	Pathways Abilities Society	
003/1030	Lot 2 Plan:	Big Brothers Big Sisters of the Okanagan	
06774486	KAS2048	Society	
00777700	Lot:7 Plan	Big Brothers Big Sisters of the Okanagan	
06774491	KAS2048	Society	
10508002	Lot 2, Plan 15777	Kalano Club of Kelowna	
	Lot A, Plan	Reach Out Youth Counselling & Services	
10519925	KAP54261	Society	
	=	<u> - /                                  </u>	

	Schedule E – Social Services				
Ī		LEGAL			
	FOLIO	DESCRIPTION	REGISTERED OWNER/LESSEE	COMMENTS	
		Lot 1, Plan			
		15596, Except			
	10707000	Plan KAP73753	BHF Building Healthy Families Society		

	Schedule F – Public Park or Recreation Ground, Public Athletic or Recreational			
	LEGAL			
FOLIO	DESCRIPTION	REGISTERED OWNER/LESSEE	COMMENTS	
	Part DL 14 (.727			
	Acres) Lot A,	Kelowna Lawn Bowling Club /City of		
000571	Plan 5352	Kelowna		
027220	/ DI /021	Kelowna Badminton Club/City of		
037220	Lot 4, Plan 4921	Kelowna		
073507	Lot 2, Plan 32159	Kelowna Cricket Club/City of Kelowna		
000000	Lot B, Plan	Kelowna Major Men's Fastball		
080966	KAP76448	Association / City of Kelowna	Cuitavia #7 2 000 as fit tovable for	
080967	Lot A, Plan KAP76448	Kalawaa Curling Club / City of Kalawaa	Criteria #7: 2,000 sq ft taxable for liquor/food services.	
080967		Kelowna Curling Club / City of Kelowna	Criteria #6: 21,168 sq ft (88%) taxable	
002521	Lot 1, Plan EPP29214	Kalawaa Vasht Club	·	
083521	Plan 2020, Parcel	Kelowna Yacht Club	for rental/lease/restaurant	
	A, PCL A		Exempting non-commercial and non-	
04009000	(KG34204)	Kelowna & District Fish & Game Club	residential class only	
04003000	(KG34204)	Relowing & District Fish & Gaine Clob	H2O Centre exempted except for	
04078511	Lot 2, KAP80134	City of Kelowna	Jugo Juice taxed under folio 4078513	
040/0311	LOC 2, NAI 00154	Kelowna United Football Club/City of	Jogo Joice taxed offder Tollo 40/0313	
04078511	Lot 2, KAP80134	Kelowna Officed Football ClobyCity of		
040/0311	Lot 1 & 2, Plan	East Kelowna Community Hall	Criteria#9: Caretaker Agreement in	
04453000	3067	Association	place	
01133000	3007	Central Okanagan Land Trust / Central	piace	
04525505	Lot 1, KAP61083	Okanagan (Regional District)	Land Conservation (Parkland)	
0.02000	Lot 1, Plan	Okanagan Gymnastic Centre / City of		
06198705	KAP91112	Kelowna		
			Criteria #5: 1,200 sq ft taxable for	
	Lot B, Plan		lease/rental to Little Bloomers	
06225585	KAP53836	Rutland Park Society	Daycare	
	Part S 1/2 of SW	Central Okanagan Land Trust / Central		
06935000	1/4	Okanagan (Regional District)	Land Conservation (Parkland)	
	Part N 1/2 of SW	Central Okanagan Land Trust / Central		
06936000	1/4	Okanagan (Regional District)	Land Conservation (Parkland)	
	Lot Fr E 1/2 Sec			
	17, Twp 28 exc			
06961000	Plan B4553	Nature Trust of BC	Land Conservation (Parkland)	
	Fr NE 1/4 Sec 17,			
	Twp 28 SDYD,			
	shown Amended			
	Plan B4553, exc			
06962004	Plan 26911	Crown Provincial/ Nature Trust of BC	Land Conservation (Parkland)	
	Lot A, Sec 17,			
00000000	Twp 28, Plan	N . T . (55		
06962006	41403	Nature Trust of BC	Land Conservation (Parkland)	
06962008	Lot B, Plan 41403	Nature Trust of BC	Land Conservation (Parkland)	
06974000-	Lot 11, Sec. 22,	Court Brown and CDCOV 1 2221		
06974001	Plan 4080	Scout Properties (BC/Yukon) Ltd		
0.007.000	Lot 11, Sec. 22,	S . D	Criteria #9: Caretaker Agreement in	
06976000	Plan 4080	Scout Properties (BC/Yukon) Ltd	place	

	Schedule F – Public Park or Recreation Ground, Public Athletic or Recreational			
	LEGAL			
FOLIO	DESCRIPTION	REGISTERED OWNER/LESSEE	COMMENTS	
	Lot B, DL 14, LD	Kelowna Outrigger Racing Canoe Club		
09461001	41, KAP 10727	Society/City of Kelowna		
	Lot 2, DL 14, LD	Kelowna Outrigger Racing Canoe Club	Criteria #9: Caretaker Agreement in	
09472588	41, KAP53240	Society/City of Kelowna	place	
			Criteria #9: Caretaker Agreement in	
10776000	Plan 9359, Lot 2	Kelowna Riding Club	place	
11501989		Central Okanagan Small Boat	Criteria #9: Caretaker Agreement in	
/11501979	Lot 1, Plan 35229	Association / City of Kelowna	place	
		Kelowna Minor Fastball Society/City of		
11151004	Lot 1, Plan 11796	Kelowna		
	Lot 1, Plan	Okanagan Mission Community Hall		
12184556	KAP69898	Association		

	Schedule G – Cultural			
FOLIO	LEGAL DESCRIPTION	REGISTERED OWNER/LESSEE	COMMENTS	
000950	Lot 1, Block 12, Plan 202	Centre Cultural François De L' Okanagan		
001830	Lot 49, Plan 262, Blk 15	Kelowna Canadian Italian Club		
038641	Lot A, Plan 5438	Kelowna Museums Society / City of Kelowna		
038644	Plan 5438, D.L. 139	Kelowna Museums Society / City of Kelowna		
075959	Lot 2, Plan 37880	Kelowna Music Society		
077062	Lot 1, Plan 42511	City of Kelowna/Kelowna Museums Society	Criteria #3: 200 sq ft (1.8%) taxable for gift shop	
079932	Lot A, Plan KAP67454	Kelowna Art Gallery/City of Kelowna		
080250	Lot A, KAP67454	Kelowna Visual & Performing Arts Centre Society / City of Kelowna		
080252	Lot A, KAP67454	Kelowna Visual & Performing Arts Centre Society / City of Kelowna		
080259	Lot A, KAP67456	Kelowna Visual & Performing Arts Centre Society / City of Kelowna		
083355	Lot 1, KAP92254	Okanagan Symphony Society/City of Kelowna		
083731	Lot 3, Plan KAP 57837, DL 139	Okanagan Regional Library / City of Kelowna Library Society		
07212624	Lot 10, KAP72245	Westbank First Nation		
10349220	Lot B, Plan 28112	German - Canadian Harmonie Club	Criteria #7: 4,413 sq ft taxable for liquor/meal services	
10388000	Lots 15 and 16, Blk. 7, Plan 415B	Central Okanagan Heritage Society	Criteria #9: Caretaker agreement in place.	
10768001	Lot A, Plan 6710	Roman Catholic Bishop of Nelson Pandosy Mission		

	Schedule H – Other Non-Profit Societies			
	LEGAL			
FOLIO	DESCRIPTION	REGISTERED OWNER/LESSEE	COMMENTS	
	Plan EPP 74060,			
000641	Lot 1527	Tourism Kelowna Society	New applicant	
	Plan KAP 1303,	BC Conference of Mennonite Brethren		
016620	Lot 8, DL 139	Church (Metro Community Church)	New applicant	
		BC Conference of Mennonite Brethren	New applicant – partial as 48%	
	Plan KAP 1303,	Church & Chronos Properties Ltd.	ownership (property utilized 100% by	
016680	Lot 17, DL 139	(Metro Community Church)	Church)	
			Criteria #4: residence on property	
			used by society & similar programs	
016670	Lot 16, Plan 1303	Kelowna Yoga House Society	offered at Sport & Rec.	
		Kelowna Centre for Positive Living		
028740	Lot 8, Plan 3398	Society		
			Criteria #9: Caretaker agreement in	
077364	Lot A, Plan 43658	Kelowna Sr. Citizens Society of BC	place.	
	Lot A, Plan			
05763001	KAP82536	Kelowna General Hospital Foundation		
	PL KAP91112, LT	Kelowna & District Safety Council		
06198706	1, SEC26, TWP26	Society / City of Kelowna		
		Father DeLestre Columbus (2009)		
06199682	Lot 2, Plan 39917	Society		
	Lot 11, Plan 515,	BC Society for Prevention of Cruelty to		
10759011	Blk 1	Animals		
			Partial Exemption based on	
06371365-	Lot 1-39, Plan	The Society of Housing Opportunities	difference - one parcel vs. individual	
06371403	KAS384	and Progressive Employment	strata units	

Schedule	J – Proposed Bylaw #11657, Munic	ipal Tax impact fo	r the years 2019-2	2021:
Schedule	Property Classification	2019	2020	2021
A - Places of Worshi	p			
	Class 01 - Residential	0	0	0
	Class 06 - Business	16,089	16,492	16,864
	Class 08 - Recreation/Non-Profit	282,558	289,625	296,172
	Total Municipal Taxes	\$298,647	\$306,117	\$313,036
B - Private Schools				
	Class 01 - Residential	0	0	0
	Class 06 - Business	189,651	194,392	198,784
	Class 08 - Recreation/Non-Profit	11,434	11,720	11,985
	Total Municipal Taxes	\$201,085	\$206,112	\$210,769
C - Hospitals				
	Class 01 - Residential	0	0	0
	Class 06 - Business	18,889	19,361	19,799
	Class 08 - Recreation/Non-Profit	0	0	0
	Total Municipal Taxes	\$18,889	\$19,361	<b>\$19,799</b>
D - Special Needs Ho	ousing			
	Class 01 - Residential	56,858	58,278	59,595
	Class 06 - Business	6,905	7,077	7,237
	Class 08 - Recreation/Non-Profit	0	0	0
	Total Municipal Taxes	\$63,763	\$65,355	\$66,832
E - Social Services				
	Class 01 - Residential	11,990	12,290	12,569
	Class 06 - Business	247,112	253,290	259,015
	Class 08 - Recreation/Non-Profit	3,800	3,895	3,983
	Total Municipal Taxes	\$262,902	\$269,475	\$275,567
F - Public Park or Re	creation Ground, Public Athletic or I	Recreational	<u>,                                      </u>	
	Class 01 - Residential	66,866	68 <b>,5</b> 37	70,085
	Class 06 - Business	91,729	94,024	96,149
	Class 08 - Recreation/Non-Profit	283,840	290,933	297,508
	Total Municipal Taxes	\$442,435	\$453,494	\$463,742
G - Cultural			<u>,                                      </u>	
	Class 01 - Residential	94	96	98
	Class 06 - Business	385,348	394,983	403,910
	Class 08 - Recreation/Non-Profit	10,207	10,462	10,698
	Total Municipal Taxes	\$395,649	\$405,541	\$414,706
H - Other			<u>,                                      </u>	
	Class 01 - Residential	4,130	4,233	4,328
	Class 06 - Business	74,051	75,903	77 <b>,</b> 618
	Class 08 - Recreation/Non-Profit	4,352	4,461	<b>4,5</b> 62
	Total Municipal Taxes	\$82,533	\$84,597	\$86,508
Total Impact		<u>,                                      </u>	Т	
	Class 01 - Residential	139,938	143,434	146,675
	Class 06 - Business	1,029,774	1,055,522	1,079,376
	Class 08 - Recreation/Non-Profit	596,191	611,096	624,908
	Total Municipal Taxes	\$1,765,903	\$1,810,052	\$1,850,959

# CITY OF KELOWNA

# **BYLAW NO. 11692**

# Amendment No. 18 to Subdivision, Development and Servicing Bylaw No. 7900

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

- 1. THAT **SCHEDULE 4 CITY OF KELOWNA DESIGN STANDARDS** be amended by deleting it in its entirety and replacing it with a new **SCHEDULE 4 CITY OF KELOWNA DESIGN STANDARDS** as attached to and forming part of this Bylaw as Attachment "A";
- 2. AND THAT **SCHEDULE 5 CONSTRUCTION STANDARDS 2. STANDARD DRAWINGS** be amended by:
  - a) deleting Standard Detailed Drawings, Hydrant, SS-W4 in its entirety and replacing it with a new Standard Detailed Drawings, Hydrant, SS-W4 as attached to and forming part of this Bylaw as Attachment "B";
  - b) adding new Standard Detailed Drawings in their appropriate location as follows:
    - i. AC Watermain Crossings, SS-W52;
    - ii. Pressure Reducing Station, SS-W53a; and
    - iii. Pressure Reducing Station, SS-W53b;

as attached to and forming part of this Bylaw as Attachment "C";

- c) deleting the the following Standard Detailed Drawings:
  - i. Manholes, SS-S1a;
  - ii. Manhole Frame and Cover, SS-S1b;
  - iii. Inside Drop Manhole, SS-S4;
  - iv. Sanitary and Storm Sewer Service Connection, SS-S7;
  - v. Inspection Chamber for 100 to 200 Sanitary Sewer or Storm Drain Connection, SS-S9;
  - vi. Storm Drain Outlet with Safety Grillage, SS-S13B; and
  - vii. Flow Control Chamber (with Sediment & Grease Trap), SS-S55;

and replacing them with the new Standard Detailed Drawing in their appropriate Icoation as attached to and forming part of this Bylaw as Attachment "D"; and

- d) adding a new Standard Detailed Drawings, Adjustable Manhole Frame and Cover, SS-S1c, in its appropriate location, as attached to and forming part of this Bylaw as Attachment "E".
- 3. This bylaw may be cited for all purposes as "Bylaw No.11692, being Amendment No. 18 to Subdivision, Development and Servicing Bylaw No. 7900."

4.	This bylaw shall come into full force and effect and is bin adoption.	ding on all persons as and from the date of
Read a	a first, second and third time by the Municipal Council this 17	<sup>th</sup> day of September, 2018.
Adopt	oted by the Municipal Council of the City of Kelowna this	
		Mayor
		City Cloub
		City Clerk

# **SCHEDULE 4**

# OF BYLAW 7900

# **CITY OF KELOWNA**

# **DESIGN STANDARDS**

# **INTRODUCTION**

- o. GENERAL DESIGN CONSIDERATIONS
- 1. WATER DISTRIBUTION
- 2. SANITARY SEWER
- 3. DRAINAGE
- 4. HIGHWAY
- 5. ELECTRICAL, STREET LIGHTING AND COMMUNICATION WIRING
- 6. LANDSCAPE AND IRRIGATION

**6A – LANDSCAPE AND IRRIGATION WATER CONSERVATION** 

6B-LANDSCAPE

**6C - IRRIGATION** 

7. HILLSIDE DEVELOPMENT STREET STANDARDS

#### **GENERAL**

This latest update of Schedule 4 of Bylaw 7900 - City of Kelowna Design Standards is based on the Municipal Infrastructure Design Guidelines 2014 as prepared under the auspices of the Master Municipal Construction Document Association (MMCDA), which is an association of British Columbia Municipalities, Regional Districts, Contractors and Consultants. The purpose of the Design Standards is to provide a standardized set of guidelines to be utilized by consultants and City staff involved with design and construction of municipal infrastructure. Users of this Schedule should note the following:

- These Standards are considered a "living document" and will be updated on a regular basis to reflect evolving industry advancements, new materials, improved methods and best practices.
- The contents of this manual are intended to complement the following documents:
  - o MMCD Specifications and Standard Detailed Drawings.
  - City of Kelowna Schedule 5 Supplementary Specifications and Supplementary Standard Detailed Drawings.
  - o Policy 265 (Engineering Drawing Submission Requirements).
  - Policy 266 (Approved Products List).
- Links to other documents have been provided to augment the material included in these Design Standards.

This manual is not intended to be a substitute for sound engineering knowledge and experience. It is the designer's responsibility to exercise professional judgment on technical matters in the best interests of the owners and users of the infrastructure. Standards contained herein are provided to assist in making these judgments, but should not be used as a substitute. Since the standards are general, they do not, and cannot, cover all particular cases.

#### **DISCLAIMER**

This manual is not intended to be used as a basis for establishing civil liability.

Page 1

#### **General Design Considerations** 0.0

#### Sustainability and Asset Management 0.1

Development of appropriate design guidelines for municipal infrastructure involves consideration of the principles of sustainability and asset management. These principles include the following:

- Improve and enhance quality of life.
- Minimize negative impacts on health, safety and the environment.
- Investigate the impacts of potential actions to manage and mitigate risk.
- Consistently make informed long-term infrastructure decisions.
- Minimize overall life cycle investment.

Some of the above principles involve conflicting priorities, for example, undue concentration on financial economies may have adverse impacts on environmental protection and life cycle costs of infrastructure.

A balanced approach to design of municipal infrastructure requires careful consideration of all of the above principles.

#### **Independent Utilities** 0.2

Independent utilities are those not normally supplied by municipal or regional authorities and are not included in these guidelines. Independent utilities include:

- Electrical power
- Communications (telephone, data, fibre optics and cable)
- Gas

Design of municipal infrastructure must include consideration of the above utilities. Design of these utilities is normally carried out by the utility owner and coordinated for conflicts by the municipal designer and/or the local authority.

In new urban developments, all wiring is generally to be underground as per Policy 101 – Conversion of Overhead Power Lines to Underground Installation. This excludes electrical transmission lines, which are normally located in separate rights-of-way.

#### Utility Rights-of-Way 0.3

Utility right-of-way locations should be selected to avoid environmentally sensitive areas, such as, watercourses, wetlands, wildlife migration corridors and forested areas, as outlined in the Official Community Plan (OCP).

Where the location of a municipal utility in a right-of-way is approved by the City, the minimum desirable right-ofway widths are as follows:

Table o.3 Right-of-Way Widths

Service Type	Right-of-Way Width
Single service	Twice the depth from surface to the crown of the pipe plus trench width (4.5 m minimum width).
Two services within the same trench	Twice the depth from surface to the crown of the deeper pipe PLUS trench width (5.5 m minimum width).
Two or more services adjacent to one another but in separate trenches	Cumulative widths for single services (noted above) PLUS any difference to provide the required separation (6 m minimum width).

When the service is within a road allowance, and the distance from the property line to the centre of the service is less than one half of the width indicated above for a single service, the difference should be provided as right-of-way on the adjacent property.

The rights-of-way noted are desirable but in some cases may not be practical and alternative combined right-of-way corridors may be required as approved by the City Engineer.

In all cases, the width of rights-of-way should be sufficient to permit an open excavation with side slopes in accordance with the WorkSafeBC Requirements for excavation and trenching safety, without impacting on or endangering adjacent structures.

Where required, sanitary trunk and interceptor sewers should have rights-of-way wide enough for future widening and/or twinning. The width of the right-of-way should be the required separation between pipe centrelines plus 2 times the depth to the crown of the deeper sewer.

The designer should provide cross sections indicating the minimum safe distances to adjacent building footings based on a safe angle of repose from the limits of the excavation.

Where a utility is located within a right-of-way, and valves, valve chambers, manholes, or other appurtenances which require maintenance are located within a right-of-way, maintenance road access from a public road must be provided. The maintenance access must be sufficiently wide and structurally adequate to support the maintenance vehicles for which the access is intended.

#### o.4 Utility Separation

Requirements for separation of sanitary or storm sewers from water mains are as follows, unless otherwise indicated by Interior Health (IH).

#### o.4.1 Horizontal Separation

At least three (3) metre horizontal separation (pipe wall to pipe wall) should be maintained between a water main and either a sanitary sewer or a storm sewer.

In special circumstances where 3.0 m separation is not possible, a smaller separation than 3.0 m may be permitted upon approval from Interior Health.

The designer shall obtain Interior Health approval for all water main designs prior to commencement of construction.

#### o.4.2 Vertical Separation

Where a water main crosses a sanitary sewer or storm sewer, the water main should be above the sewer with a minimum clearance of 0.45 m and installed in accordance with Interior Health requirements.

#### o.4.3 Sewers in Common Trench

In special circumstances when typical separation cannot be reasonably achieved (i.e. hill side development, rock excavation), storm and sanitary sewers may be installed in a common trench provided that the design has taken into account:

- Interference with service connections,
- Stability of the benched portion of the trench,
- Conflict with manholes and appurtenances.

The horizontal clearance between sewer pipes should be not less than 1.0 m. Separation between manholes should be not less than 0.3 m.

## 0.5 Trenchless Technologies

Installation or rehabilitation of pipelines using trenchless methods may be indicated. The MMCD Specifications Section 33.05.23 Trenchless Sewer Pipe Bursting; and MMCD Specifications Section 33.05.24 Cured in Place Pipe Liners are two examples of trenchless applications.

Circumstances favouring trenchless installation include:

- Installation or rehabilitation in heavily built-up areas,
- Stream crossings,
- Railway crossings,
- Highway crossings.

Available technologies include the following:

- Slip-lining
- Cured-in-place pipe (CIPP)
- Pipe bursting
- Horizontal directional drilling (HDD)
- Micro-tunnelling
- Pipe jacking

#### o.6 Seismic and Geo-hazard Design Standards

Underground utilities are at risk of damage caused by seismic events, soil liquefaction and land slides. The most significant seismically-triggered geo-hazard that underground utilities are exposed to is horizontal ground displacement from landslides and soil liquefaction induced lateral ground displacement. Seismic design standards must be considered in seismically active zones with a potential for landslide or soil liquefaction. This becomes even more critical when considering a shared fire flow and potable water distribution system, which, during a severe seismic event, is required to remain functional if it is to be relied upon to provide fire suppression throughout the community.

Page 4

#### **General Design Considerations**

The design shall consider the stability of the soils present, as well as establishing the site's susceptibility to lateral ground displacement during seismic activity.

This section does not cover seismic design considerations of larger size chambers (typically in excess of 10 m<sup>2</sup> in footprint), pump station structures, storage tanks, reservoirs and similar large components of the water and sanitary systems. These structures, along with seismically resistant pipe connections, shall be individually assessed by civil, geotechnical and structural engineers using the latest edition of BC Building Code and Application of the Seismic Guidelines for Government to meet post-disaster requirements and other specialty seismic standards applicable to buried and above ground structures.

#### **Referenced Standards** 0.7

All referenced standards contained within (i.e. AWWA, BC Building Code, Water Supply for Public Fire Protection, etc.) are to be the most recent version unless specifically noted otherwise.

#### 0.8 Record Drawings and Operation and Maintenance Manuals

Record drawings are to be prepared and submitted in accordance with Policy 265 (Engineering Drawing Submission Requirements).

Operation and Maintenance Manuals are to be prepared and submitted for pump stations, lift stations, PRVs, reservoirs, valves, air valves and appurtenances as described below:

Supply two (2) paper copies and one (1) electronic copy of operating and maintenance manuals prior to substantial completion.

Bind contents in a three-ring, hard covered, plastic jacketed binder with the name of the facility to be embossed onto binder cover and spine.

Each section shall be separated from the preceding section with a plasticized cardboard divider with a tab denoting contents of the section.

#### Contents to include:

- Title sheet, labelled "Operation and Maintenance Instructions", and containing project name and date.
- List of contents.
- Reviewed shop drawings of all equipment.
- Equipment list showing all model and serial numbers.
- All equipment manufacturers manuals.
- Record drawings of all mechanical, electrical, control and alarm installations.

## **General Design Considerations**

- Full description of system operations including: design points, designed pump and system curves, ultimate capacity, area served and any relevant design criteria relevant to the operation of the system.
- Full description of entire mechanical, electrical and alarm system operation.
- Names, addresses and telephone numbers of all major sub-contractors and suppliers.
- Commissioning report showing pressures, flows, current drawings for all possible operating conditions.

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## o.9 Interpretation

If there is any inconsistency or conflict between the provisions of these Design Standards and the Standard Drawings the Design Standards shall govern.

#### 1. WATER DISTRIBUTION

#### **CONTENTS**

- 1.1 General
- 1.2 Metering
- 1.3 Per Capita Demand
- 1.4 Non-Residential Demand
- 1.5 Fire Flows
- 1.6 Design Flows
- 1.7 Water Pressure
- 1.8 Hydraulic Design
- 1.9 Minimum Pipe Diameter
- 1.10 Dead Ends
- 1.11 Minimum Depth of Cover
- 1.12 Grade
- 1.13 Corrosion Protection
- 1.14 Valves
- 1.15 Hydrants
- 1.16 Blow Offs and Blow Downs
- 1.17 Test Points
- 1.18 Air Valves
- 1.19 Thrust Restraint
- 1.20 Chambers
- 1.21 Service Connections
- 1.22 Alignments and Corridors
- 1.23 Reservoirs
- 1.24 Pump Stations
- 1.25 Pressure Reducing Valve (PRV) Stations
- 1.26 Facility Site Requirements

#### 1.1 General

These guidelines are not intended to be a substitute for sound engineering knowledge and experience. Water distribution system designs should be prepared under the direction of a design professional who has the appropriate experience and is registered with Engineers and Geoscientists British Columbia.

Water for Kelowna is provided by the City of Kelowna Water Utility and four major water purveyors.

- Black Mountain Irrigation District
- Glenmore Ellison Improvement District
- Rutland Water Works

These design standards apply to the City of Kelowna Water Utility and are in general conformance with the four major water purveyors. The Purveyors requirements may differ in some instances so it is the responsibility of the designer to confirm with the independent water purveyors regarding their specific requirements. The location of water infrastructure within roadways shall be in accordance with these standards.

## 1.2 Metering

Water meters tend to reduce per capita water demand and are required as per the City of Kelowna Plumbing Bylaw, Water Use Regulation Bylaw and Water Purveyors bylaw(s).

#### 1.3 Per Capita Demand

Use the following per capita demands for future residential requirements:

Average annual daily demand (ADD): 900 litres per capita per day (L/c/d)
 Maximum day demand (MDD): 1800 litres per capita per day

Peak hour demand (PHD): 4000 litres per capita per day

Design population density:

Single Family 3.0 people/dwelling Multi-Family 2.0 people/dwelling

## 1.4 Non-Residential Demand

Commercial, industrial and institutional demands should be determined using specific data related to the development or zoning. In the absence of such data, or municipal regulations, use the following for maximum day demands for single story buildings (MDD):

Commercial or institutional: 22,500 litres per hectare per day Industrial: 100,000 litres per hectare per day

Note that the above rates do not include outdoor irrigation and assume that all connections are metered.

#### 1.5 Fire Flows

Fire flows shall be determined in accordance with the requirements of the current edition of "Water Supply for Public Fire Protection - A Guide to Recommended Practice", published by Fire Underwriters Survey.

The following minimum fire flows must be met for the noted zones under peak daily flow conditions (Table 1.5):

Table 1.5 Minimum Fire Flow Requirements

Developments (without sprinklers)	Minimum Fire Flow	
Single Family &Two Dwelling Residential	6o L/s	
Modular / Mobile Home	6o L/s	

Three & Four Plex Housing	90 L/s
Apartments, Townhouses	150 L/s
Commercial	150 L/s
Institutional	150L/s
Industrial	225 L/s

The Design shall not use a fire flow greater than those listed in Table 1.5 to design their onsite fire protection systems. The maximum available fire flow for site development is the lesser of the actual available fire flow at the service connection or the fire flows in Table 1.5.

Subdivisions and main extensions may utilize hydraulic information from water model as provided by the City.

Actual required fire flows shall be determined for all new developments.

#### 1.6 Design Flows

Unless otherwise indicated by the City Engineer, system design flows should be based on the ultimate population and fully developed non-residential land as anticipated in the Official Community Plan (OCP).

Total design flows (Q<sub>design</sub>) are to be the greater of the following:

Q<sub>design</sub> = MDD+FF Maximum Day Demand <u>plus</u> the Fire Flow, or

 $Q_{design} = PHD$  Peak Hour Demand

#### 1.7 Water Pressure

The water system must be designed to provide domestic water at the building main floor elevation on each Parcel as follows:

Maximum allowable static pressure830 kPa (120 psi)Minimum static pressure275 kPa (40 psi)Minimum system pressure at Peak Hour Demand (PHD)275 kPa (40 psi)

Minimum pressure in system during design

Maximum Day Demand and Fire Flow (MDD+FF) 140 kPa (20 psi)

For large lot and hill side development the designer shall be responsible to identify suitable building elevations for all buildings based on available hydraulic pressure. Determination of pressure limits should include consideration of property elevations relative to street level. Designer to note properties on service cards and record drawings where pressure at service connection exceeds 75 psi.

Where the maximum pressure exceeds 515 kPa (75 psi), design must identify service connections that must be individually protected by pressure reducing valves located in the buildings being served.

### 1.8 Hydraulic Design

Where there is an existing hydraulic network in place, the City will provide any available information for assistance in designing changes to the network. Depending on the complexity and extent of the proposed distribution system, the City may require a hydraulic analysis design showing flows and pressures.

Use a proven network analysis computer model based on the Hazen-Williams formula:

Q = 
$$\frac{CD^{2.63} S^{0.54}}{278,780}$$
 Where:

Q = Rate of flow in L/s

D = Internal pipe diameter in mm

S = Slope of hydraulic grade line in m/m

C = Roughness coefficient (Table 1.8)

Table 1.8 Roughness Coefficients for Various Pipe Materials

Pipe Material	C Factor
PVC	130
Cement Lined Ductile Iron, Cement Lined Steel, Asbestos Cement	120
Cast Iron	100

It should be noted that the values listed in the above table are for pipe losses only and do not include losses associated with fittings, tees and valves which also require design consideration.

The maximum allowable design velocity shall not exceed the following:

Pump Supply, Reservoirs and Trunk Mains	2.0 m/s
Distribution Lines	
- At Peak Hour Demand (PHD)	2.0 m/s
- At Maximum Day Demand (MDD) plus Fire Flow (FF)	4.0 m/s

Designers are responsible for assuring that surge and transients pressures are accounted for in their design.

When water mains cross railroads, major regional roads including Provincial highways, or watercourses, a steel casing pipe must be provided and must be designed to all applicable static, dynamic and seismic loadings and all other requirements of the authority having jurisdiction. The water main must be constructed with the appropriate spacers to support the pipe and prevent sagging or uplift (floating) inside the casing pipe. The water main inside the casing must be joint restrained. Service connections crossing highways and railroads are not recommended and require approval from the City Engineer.

#### 1.9 Minimum Pipe Diameter

Distribution mains: 200 mm\*

Fire hydrant connections: 150 mm

Service connections: 19 mm CU / 25 mm PE

Service diameter for buildings with sprinklers to be determined on a case by case basis based on fire flow demand.

- \* For looped distribution mains with lengths less than 500 m in residential subdivisions, the diameter can be reduced to 150 mm, providing that fire flow requirements can be met.
- \* Subject to approval of the City Engineer, distribution main minimum diameter in residential areas may be reduced to 100 mm provided that the main terminates in a short residential cul-de-sac, has a length less than 80 m, serves no fire hydrants or fire sprinkler systems and where no further extension is planned.
- \* In separated water systems where irrigation and fire flow are separated from domestic (potable) water, the minimum pipe size for the domestic water system may be 100 mm.

For commercial/industrial/institutional areas, the minimum allowable water main size shall be 200 mm diameter.

#### 1.10 Dead Ends

Water mains must be looped wherever possible. Where dead ends are unavoidable, and approved by the City Engineer, blow-offs shall be provided (see Section 1.16 for sizing).

The maximum length of any permanent non-interconnected water main is 200 m. All mains exceeding 200 m in length, unless it is a temporary situation, must be looped.

Where the water system network is deficient, installation of additional water main capacity may be required and may necessitate the provision of rights-of-way in favour of the City.

#### 1.11 Minimum Depth of Cover

The cover over any water main must not be less than 1.5 m from pipe crown to surface. U-bends should be used to avoid conflict and maintain minimum depth of cover. Rigid insulation may be used to provide protection to the water main from freezing for short sections of water main (< 4 m) with approval from the City Engineer, as per manufacturer's recommended guidelines for Utility line insulation (ex. DOW Tech Solutions 602.0 Styrofoam Brand Highload Insulation for Buried Utility lines).

#### 1.12 Grade

Water mains must be designed with a rising grade wherever possible, to minimize high points in the main. Grades should be straight lines between defined deflection points. Elevations should be recorded on record drawings.

The minimum grade of water mains shall be 0.1%. Grading should be designed to minimize the number of high points and maintain continuous grade.

When the slope exceeds 15%, provide anchorage, joint restraints, trench dams and trench drainage as per standard MMCD drawing G8. Provide geotechnical engineering report where appropriate that assesses slope stability.

#### 1.13 Corrosion Protection

Where there is a potential for encountering corrosive soils, a geotechnical corrosion analysis on the alignment of any proposed metallic water main or metallic appurtenances shall be conducted to determine the corrosiveness of the native soils and the suitability of metallic pipe and appropriate corrosion protection measures. One example is MMCD Specification Section 26 42 13, Cathodic Protection.

Regardless of soil condition, all metallic pipe shall be installed with poly-wrap as per the manufacturers recommended procedures.

Petrolatum tape and paste shall be used to wrap all nuts and bolts on buried metallic fittings and joint restraint fasteners.

Metallic water main with less than 400 mm diameter are not permitted.

#### 1.14 Valves

In general, valves should be located as follows:

- In intersections, either in a cluster at the pipe intersection or at projected property lines to avoid conflicts with curbs and sidewalks:
  - 3 valves at "X" intersection;
  - 2 valves at "T" intersection;
  - Or as directed by the City Engineer, in order to allow for the isolation of specific sections of the main, minimize service disruption and/or facilitate network operation and maintenance.
- Not more than 200 m apart (except on trunk mains greater than 300 mm diameter, where spacing can be increased upon approval of the City Engineer). Where possible avoid the use of inline valves.
- In locations and at a frequency so that not more than two hydrants are out of service when a section of the main is turned off. An isolation valve is required for each hydrant, typically flanged to the hydrant tee.
- Not more than 20 service connections isolated.

In order to permit the use of pigging cleaning methods the valve sizing and type selection should be as follows:

- The valves shall be the same diameter as the water main.
- All valves shall be gate valves. Butterfly valves with appropriate chamber sized for maintenance and replacement may be used in special circumstances for water mains greater than 400 mm with approval from the City Engineer.

#### 1.15 Hydrants

Fire hydrants should be located in general at street intersections and as follows:

- Not more than 150 m apart in single family residential areas measured along road centre line.
- Not more than 100 m apart in higher density residential, commercial, industrial and institutional areas.
- Hydrant locations as per BC Building Code for all buildings.
- In accordance with "Water Supply for Public Fire Protection A Guide to Recommended Practice" (latest edition), published by Fire Underwriters Survey.
- 1.5 m back from curb or 0.5 m back of sidewalk to centre line of hydrant.
- Minimum 1.0 m clear of any other utility structure in all directions.

- Minimum 3.0 m clear in direct line with hose connections.
- At property lines in mid-block locations.
- SRW required where open cut excavation to base of hydrant assembly extends into private property.
- Bollards or concrete barriers for hydrant protection may be required at the City Engineer's discretion.

Hydrants shall not be located on sidewalks. Where this is not possible and with approval from the City Engineer, a minimum distance of 1.5 m must be maintained between the front of the pumper port and the back of curb, in accordance with the Transportation Association of Canada Manual for Canadian Roads.

On arterial highways with, or designated to be constructed with, a raised median, fire hydrants shall be installed on both sides of the highway with each side treated exclusively for spacing requirements.

#### 1.16 Blow Offs and Blow Downs

Blow-offs shall be provided at the terminal ends of all water mains whether permanent or temporary to facilitate scouring velocities during flushing. Blow-off sizes are:

- 50 mm dia. for 100 mm dia. water mains (see Drawing SS-W8A)
- 100 mm dia. for 150 mm dia. and larger water mains (see Drawing SS-W8B)

Where practical, and approved by the City Engineer, a hydrant may serve a secondary role as a blow-off.

On all mains greater than 300 mm diameter, install blow downs at the lowest point in the water main profile between the line valves.

#### 1.17 Test Points

Test points shall be installed on all water mains in order to provide for the ability to collect water samples in accordance with AWWA C651 – Disinfecting Water Mains.

#### 1.18 Air Valves

Combination air valves shall be installed at the summits of all mains. Air valves may not be required on water mains 200 mm diameter and smaller upon approval by the City Engineer for the following:

- Where active service connections are suitably located to dissipate entrapped air,
- Where the difference in elevation between the summit and valley is less than 600 mm and it can be shown that air pockets will be carried by typical flows.

Air valve sizes, subject to design analysis, are as follows (Table 1.18):

Table 1.18 Typical Air Valve Sizes

Water Main Size	Valve Size
100 mm to 300 mm	25 mm

350 mm to 600 mm	50 mm
Larger than 600 mm	Special design

Air valves must be vented to an appropriate secured above-grade location to eliminate any potential for cross connection in a flooded or contaminated chamber.

#### 1.19 Thrust Restraint

Cast in place concrete thrust blocking and/or adequate joint restraining devices must be provided at bends, tees, wyes, reducers, plugs, caps, valves, hydrants and blow-offs. Bends at 5-degrees may not require thrust blocking and/or joint restraining devices provided they are properly engineered.

The restraint system must take into account potential future excavations in the vicinity of the water main. Design calculations must be based on fitting type, water pressure and soil conditions.

Precast thrust blocks are not permitted except in combination with joint restraints as approved by the City Engineer.

When required, provide the City Engineer with calculations for the thrust block/joint restraint design.

#### 1.20 Chambers

Chambers or manholes should allow adequate room for maintenance, including headroom and side room. Access openings must be suitable for removing valves and equipment and permitting inspection cameras and pigging equipment. The chamber is to be provided with a drain to a storm sewer or ditch, complete with backflow prevention, to prevent flooding of the chamber. Rock pits may be considered subject to suitable soil and groundwater conditions and subject to approval by the City Engineer. A pumping system may be required for drainage.

Adequate venting should be provided. The City Engineer may require provision of forced ventilation, lighting, heating and dehumidification. Access and ventilation details must comply with WorkSafeBC requirements.

Insulation to prevent freezing should be provided where necessary.

#### 1.21 Service Connections

Service connection size should be calculated on the basis of the designated land use including sprinkler systems and/or on-site hydrants, where applicable. The minimum size is outlined in 1.9 - Minimum Pipe Diameter.

All service connections to be made with service saddles at water main.

Multiple corporation stops must have a minimum spacing of 1.0 m.

The curb stop at the end of each service pipe must be located as per SS-W2. Where such locations will conflict with other services, the location may be revised with the approval of the City Engineer.

Each connection of 100 mm or larger shall be installed with tee and isolation gate valve on the service at the water main. The designer may choose to add an additional valve at property line to facilitate testing and tie-in procedures.

Page 9

Services and curb stops must have a minimum depth of cover of 1.5 m and curb stops must be no deeper than 2.0 m. Valve boxes shall be used for curb stops greater than 50 mm diameter.

#### Alignments and Corridors 1.22

On straight roads, water mains should have straight alignments with uniform offsets between intersections.

For curved roads and alignments, where approved by the City Engineer, design joint deflections shall be limited to half the maximum deflection specified by the pipe manufacturer or through the use of 5-degree bends. Pipe alignment to be at a parallel offset with an established road right-of-way or property line.

Metallic marking tape labeled WATERWORKS is to be placed above all pipes at a depth of 0.45 m below finished grade in statutory rights-of-way or irregular alignments.

Water mains on new roads must be located as indicated in the applicable Standard Drawing typical cross-section.

Where a water main crosses private land, right-of-way requirements are as indicated in Section 0.3, General Design Considerations – Utility Rights-of-Way.

Clearance from sewer is as indicated in Section o.4, General Design Considerations – Utility Separation.

#### Reservoirs 1.23

The following reservoir design standards apply to the City of Kelowna Water Utility and are in general agreement with the other four water purveyors in Kelowna. The designer should consult with the applicable water purveyor for specific design details.

#### 1.23.1 Preliminary Design

Reservoir design shall include a preliminary design which is to be approved by the City Engineer before the detail design begins. Preliminary designs should cover the following issues:

- Site layout,
- Design standards,
- Volume,
- Shape,
- Number of cells,
- Geotechnical report on foundation conditions,
- Appearance.

#### 1.23.2 Reservoir Capacity

Reservoir capacity must not be less than the greater of the following:

- One-day average annual consumption for the service area.
- Total Storage Volume = A + B + CWhere:

A = Fire Storage (from Fire Underwriters Survey guide)

B = Equalization Storage (25% of Maximum Day Demand)

C = Emergency Storage 25% of (A + B).

#### 1.23.3 Reservoir Structural Design Codes

Design in accordance with the latest edition of the BC Building Code and one of the following specialty codes:

- ACI 350/350R: Code Requirements for Environmental Engineering Concrete Structures, and Commentary.
- PCA: Circular Concrete Tanks Without Prestressing.
- ACI 350.3/350.3R: Seismic Design of Liquid Containing Concrete Structures, and Commentary.
- AWWA D11O: Wire and Strand-Wound Circular Prestressed-Concrete Water Tanks.
- AWWA D115-06 Tendon-Prestressed Concrete Water Tanks.
- AWWA 0100-11 Welded Carbon Steel Tanks for Water Storage.
- AWWA D103: Factory-Coated Bolted Steel Tanks for Water Storage.

#### 1.23.4 Reservoir Design Features

- 1. Seismic Loading: Design for the following:
  - Watertight structure and fully operational mechanical equipment, following a 475 year return period earthquake.
  - Repairable damage and no uncontrolled release of water following a 2475-year return period earthquake.
- 2. Two cells, each containing one-half of total required volume and capable of being drained and filled independently.
- 3. Reservoir to be below ground, unless approved by the City Engineer.
- 4. Each cell is to have an access opening and hatch in the roof for cleaning and maintenance with minimum dimension 900 mm x 900 mm. Opening to be located so that the overflow pipe is clearly visible inside the reservoir, when viewed from the opening.
- 5. For all access hatches, a survey mark inlaid inside showing the geodetic elevation is to be provided.
- 6. Finished elevation of the top of the hatch when closed to be 0.6 m above the finished elevation of the reservoir roof.
- 7. Access hatch(es) to have the following:
  - Aluminium 1/4" tread plate
  - Perimeter drain
  - Perimeter sealing gasket
  - Slam lock with aluminium removable sealing plug and opening tool
  - Flush lift handle
  - Gas spring assist cylinder
  - 90-degree hard open arm
  - Flush fitting padlock tang
- 8. The hatch must be reinforced for 1,465 kg/m² (300 lbs./sq.ft.) complete with hatch alarm.
- 9. All fasteners for the hatch to be made of 316 stainless steel.
- 10. Ventilation pipes or openings sized to handle appropriate intake and exhausting volumes of air for filling and drawing the reservoir. Ventilation pipes outlets to be screened.
- 11. Reservoir floor to slope to drain sump.

Page 11

- 12. Drain sump to be a minimum of 1000 mm X 1000 mm X 400 mm, invert of drain pipe to be flush with sump floor, grating to be installed over sump.
- 13. Sub-drain under floor to collect and drain any leakage (may be connected to overflow pipe provided suitable measures are incorporated to prevent surcharging).
- 14. Overflow drain to be provided and sized to transmit the maximum pump discharge with all pumps running.
- 15. A stainless steel interior wall ladder is required from roof access to floor. All ladders to meet WCB regulations, supply attachment points for fall arrest equipment.
- 16. Top rung of the ladder to be the same elevation as the finished elevation of the reservoir roof.
- 17. Where public access could be gained to reservoir, install appropriate fall prevention railings.
- 18. Re-chlorination may be required based on demand forecasts. Chlorine residual analyser required.
- 19. All pipework within the reservoir to be PVC or fiberglass except overflow fitting which may be stainless steel to AWWA standards.
- 20. All metal parts within the reservoir including bolts, nuts, screws, anchors, ladders etc. to be 316 stainless steel. All welded stainless steel components located in the reservoir to be appropriately passivated.
- 21. Reservoir inlet pipe to terminate with a diffuser positioned opposite the reservoir outlet and a distance of ¾ the length of the reservoir from the outlet. Diffuser to cover ¾ the wall length.
- 22. Ports in diffuser pipe to be engineered to produce circulation within the reservoir during fill cycle.
- 23. Diffuser to incorporate removable end caps.
- 24. Backup high and low level control balls for each cell set at 40% and 95% levels, (not to contain lead or mercury).
- 25. The reservoir must be cleaned, disinfected and leak tested to AWWA and local authority requirements.
- 26. Gated black chain link perimeter fencing is required to address security and safety issues.
- 27. Landscaping acceptable to the City is to be provided including irrigation.
- 28. In special circumstances, at the request of the City Engineer, vehicle access road to the top of the reservoir roof to be provided.
- 29. Manuals to be supplied as per Section o.8.

#### 1.23.5 Reservoir Valve Chamber

Reservoir to incorporate valve chamber containing:

- 1. Chamber to include all valves associated with the reservoir operations.
- 2. Design in accordance with seismic codes noted above.
- 3. Entrance at grade large enough to permit safe removal of largest single piece of equipment.
- 4. Lifting beams and hoists where necessary to enable removal of equipment or components.
- 5. Floor drains and drainage system.
- 6. Separate inlet and outlet piping including check valves to separate inlet and outlet flows.

- 7. All inlet and outlet piping to incorporate a ¾ inch sampling port with isolating ball valve.
- 8. A 19 mm Schedule 80 PVC sample line with isolating ball valve for each cell terminating in the middle of a cell wall at the 50% level and extending 25% towards the centre of the reservoir.
- 9. A 50 mm 316 stainless steel schedule 80 pipe with isolating ball valve extending into each cell for connection of cleaning hoses.
- 10. A 19 mm stainless steel pipe with isolating ball valve extending into each cell connected to a pressure transmitter for level sensing.
- 11. Minimum 30 amp, 120 VAC electrical service.
- 12. Heat, light and ventilation to meet WCB requirements and to maintain minimum 5-degree C on coldest day. Insulate interior walls and ceiling as required.
- 13. All control wiring junction boxes.
- 14. A PLC control system to current Pump Operations standards.
- 15. Chlorine residual analyzer.
- 16. Interior and exterior of all steel piping to be coated to AWWA standards, or use 316 stainless steel.
  - Inlet piping Mid Blue
  - Outlet piping Dark Green
  - Drain piping Gull Grey
  - All other piping Mid Blue
  - Include flow direction arrows where appropriate.
- 17. Check valves to show direction of flow with white painted arrows.
- 18. PLC controlled modulating inlet valve where more than one reservoir serves a single zone.
- 19. PLC control to City of Kelowna SCADA system, including:
  - Security switches
  - Discharge and suction pressure transmitters
  - Temperature sensor
  - Flowmeter
  - Uninterruptable power supply
  - Radio or hard wire modem
  - External antenna
  - Operator interface panel
- 20. The modulating inlet valve shall:
  - Have non-contact o 100% valve position indicator with 4-20 mA output.
  - Be hydraulically operated with pressure tank (minimum 40 psi) sized to operate valve for 3 cycles during power failure.
  - Be complete with a hydraulically operated diaphragm actuated globe or angle.
  - Pattern valve of 'Powertrol type'.
  - Pilot system to be protected by single continuous flow 100 micron filter.
  - Space for safe and convenient operating and maintenance access to all valves, piping, equipment and instrumentation.
  - Manuals to be supplied as per Section o.8.

#### 1.24 Pump Stations

The following Pump Station design standards apply to the City of Kelowna Water Utility. The designer should consult with the applicable water purveyor for specific design details.

#### 1.24.1 Preliminary Design

Pump station design must include a preliminary design report which is to be approved by the City Engineer before detailed design proceeds. Preliminary designs should include the following issues:

- Location
- Capacity
- Number and type of pumps
- Preliminary piping layout
- Type and appearance of structure
- Foundation conditions
- Maintenance requirements and access
- Energy requirements
- Standby power
- HVAC
- Controls and monitoring

#### 1.24.2 Capacity

Pumping capacity should be designed to suit the particular circumstances. In general, capacity should meet maximum day demand with the largest pump out of service and balancing storage online. If balancing storage is not on line, pumping capacity should meet peak hour demand with the largest pump out of service. Stand-by power should be provided, where sufficient reservoir storage does not exist, to allow the greater of maximum day demand plus fire flow or peak hour demand (MDDD+FF, or PHH) during a power outage.

#### 1.24.3 Design Features

- 1. Structure, piping and mechanical systems designed in accordance with seismic codes for postdisaster structures.
- 2. Located above 200-year flood level or 1.0 m above highest recorded flood elevation.
- 3. Reinforced concrete, blockwork or brick construction, aesthetically pleasing.
- 4. Access doorways sized so that the largest single piece of equipment may be safely removed and replaced. Lifting hooks or rails with pulley blocks as required.
- Adequate HVAC with filtered air inlet.
- 6. Standby power.
- 7. Adequate lighting.
- 8. Housekeeping pads for MCC's.
- 9. Electric motors to be-premium efficiency.
- 10. Motors to have thermal protection.
- 11. Motors 200 hp and above to have analogue vibration recording and protection.
- 12. All pilot, air relief discharge to be piped to floor drains to avoid standing water.
- 13. Air relief valves and pilot lines to be piped to floor drains.

- 14. Hydraulically operated pump control valves with isolation valves.
- 15. Flow meter and totalizers.
- 16. Spring return 'silent" check valves.
- 17. High pressure and surge relief valves with isolation valves.
- 18. Suction and discharge pressure gauges for each pump with isolation valves.
- 19. Mechanical pump seals.
- 20. Lockable roof hatches for motor and pump removal.
- 21. Water quality sampling ports.
- 22. Off road vehicle parking.
- 23. Landscaping to City Parks Department specifications.
- 24. Interior and exterior of pipework to be coated to AWWA standards. Exterior colours to be:
  - Inlet piping Mid Blue
  - Outlet piping Mid Blue
  - Drain piping Gull Grey
  - All other piping Mid Blue
  - Include flow direction arrows where appropriate.
  - Check valves to show direction of flow with white painted arrows
- 25. Pump system to be PLC controlled and connected to City of Kelowna Pump Operations SCADA system.
- 26. Control system to include but not limited to:
  - Security switches
  - Discharge and suction pressure transmitters
  - Temperature sensor
  - Uninterruptable power supply
  - Radio or hard wire modem
  - External antenna
  - Operator interface panel
  - Power meter without outputs to PLC
  - Phase loss protection
  - 5 spare fuses for all fuse holders
  - Current copy of PLC and MMI program to be left in control enclosure
  - (see Pump Operations Department for current standards).
- 23. Motors to be 600volt, 3 phase.
- 24. Hour meters and ammeters for each pump.
- 25. Power factor correction if required by Power Authority.
- 26. MCC, breaker boxes, receptacles to be labelled.
- 27. Station to be cleaned and dust free.
- 28. Separate or isolated room required for electrical.
- 29. Noise attenuation to suit the location and local authority.

#### **Water Distribution**

30. Manuals to be provided as per Section o.8.

#### 1.25 Pressure Reducing Valve (PRV) Stations

The following PRV design standards apply to the City of Kelowna Water Utility. Designer should consult with the applicable water purveyor for specific design details.

PRV station design parameters should be reviewed and approved by the City Engineer before detailed design proceeds. PRVs are to be above ground stations housed in a suitable kiosk. Above ground installation to be located outside of road ROW or in approved location.

#### 1.25.1 Preliminary Design Parameters

- Design Flows: peak hour, maximum day plus fire.
- Continuous, emergency or fire flow operation.
- Location.
- Kiosk details: structure and access, controls and monitoring, HVAC.

#### 1.25.2 Design Features

- PRV to be above ground including electrical kiosk.
- Minimum chamber size: 4 m x 2 m x 2 m (inside dimensions).
- Minimum 30 amp, 120 VAC service.
- External kiosk and antenna.
- Forced air ventilation, heat and light.
- Isolating valves.
- Parallel pressure reducing valves sized for peak hour and maximum day plus fire flows.
- Air release valves.
- Water quality sample points.
- Sump drain to storm.
- Hatch as per Reservoir section.
- Off road vehicle parking.
- Manuals to be provided as per Section o.8.
- Landscaping.
- Basket strainers upstream of each control valve.
- Upstream and downstream pressure gauges.
- Flowmeter.
- Interior and exterior of pipework coated to AWWA standards, or use stainless steel.
- PLC-controlled with connection to City SCADA system, including:
  - Security switches
  - o Discharge and suction pressure transmitters
  - o Temperature sensor
  - Flow meter and transmitter
  - Uninterruptible power supply (UPS)
  - o Radio or hard wire modem
  - o External antenna, height designed for communication connection (min. 6 m)
  - o Operator interface panel.

# 1.26 Facility Site Requirements

Paved vehicular access must be provided to all reservoirs and pump stations. The minimum standard must be for an emergency access road as shown in the Standard Drawings, with drainage provisions as may be required.

Provision shall be made for vehicle turn-around and crane access.

Provide site grading and landscaping plans that identifies drainage issues, retaining walls and site safety issues.

#### 2.0 Sanitary Sewers

#### **CONTENTS**

- 2.1 General
- 2.2 Per Capita Flow
- 2.3 Non-Residential Flows
- 2.4 Peaking Factor
- 2.5 Infiltration
- 2.6 Design Flow
- 2.7 Pipe Flow Formulas
- 2.8 Flow Velocities
- 2.9 Alianment
- 2.10 Minimum Pipe Diameter
- 2.11 Minimum Grade
- 2.12 Curved Sewers
- 2.13 Depth
- 2.14 Manholes
- 2.15 Odour Control
- 2.16 Service Connections
- 2.17 Locations and Corridors
- 2.18Lift stations
- 2.19 Force Main
- 2.20Noise Control
- 2.21On-site Sewage Disposal (Septic Systems)
- 2.22Low Pressure Sewers

#### 2.1 General

These guidelines are not intended to be a substitute for sound engineering knowledge and experience. Sanitary sewer system designs shall be prepared under the direction of a design professional who has the appropriate experience and is registered with Engineers and Geoscientists British Columbia.

Sanitary sewers are intended to convey wastewater only as specified in the Sanitary Sewer/Storm Drain Regulation Bylaw.

These guidelines apply to City of Kelowna sewage collection system only.

# 2.2 Per Capita Flow

In absence of sanitary sewer flow data, sanitary sewer design shall be based on an average daily dry weather flow (ADWF) of 300 litres/capita/day, except when used for the analysis of older areas (pre-1980), where a ADWF = 420 litres/capita/day shall be used.

For system design in undeveloped areas, ADWF shall be estimated based on current zoning as follows: (Table 2.2):

Table 2.2 Flow Values for Undeveloped Residential Areas

Zoning	Population/ Hectare (gross)	Population/Unit
Single Family	24-30	3
Multi-Family Low	65	2
Multi-Family Medium	120 (3 storey)	2
Multi-Family High	320-960 (4-12 storey)	2
Mobile Home	40	2

#### 2.3 Non-Residential Flows

Average dry weather flows (ADWF) for non-residential areas should be based on specific data related to the development. In the absence of such data, use the following flow values which are based on zoning designations (Table 2.3):

Table 2.3 Flow Values for Non-Residential Areas

Land Use	Equivalent Population/Hectare (gross)	ADWF* (L/ha/day)
Commercial	83	25,000
Institutional	83	25,000
Industrial	83	25,000

<sup>\*</sup>ADWF calculated at 300 Litres per day per capita

#### 2.4 Peaking Factor

The peaking factor is the ratio of peak dry weather flow (PDWF) to the average dry weather flow (ADWF). Where possible, the peaking factor should be based on locally recorded flow data from similar developments. It is recommended that if possible residential equivalents not be used but that each customer type calculates peak flows independently. When using hydraulic modelling software it is recommended that diurnal patterns be used that reflect varying time of day flows from each customer class. In the absence of such data, the peaking factor is to be calculated using the design residential population and non-residential equivalent population, with the formula indicated below:

The ADWF is multiplied by the Peaking Factor to determine PDWF The Peaking factor is calculated as follows:

Peaking Factor = 
$$f \times \left( \begin{array}{ccc} 1 + & \underline{14} \\ 4 + \sqrt{P} \end{array} \right)$$

where: P = Population in Thousands

f = Reduction factor, applied as follows:

- New residential areas = 0.75

- Old residential areas = 0.85

- Commercial and Industrial area = 1.00

#### 2.5 Infiltration

Design flow should include an infiltration allowance to cover groundwater infiltration and system inflows. For urban, suburban or commercial areas, the allowance should be based on the gross tributary area and the following:

- New system with pipes above groundwater table: 0.06 L/s/ha (5,184 L/d/ha)
- Old system (pre-1980) and/or pipes below groundwater table: 0.12 L/s/ha (10,368 L/d/ha)

The above values are based on systems where roof leaders and foundation drains are not connected to the sanitary sewer.

For older systems it is recommended that the above value be confirmed with flow monitoring since, in some systems, this value can be substantially higher.

For low density areas with large lots (>90 m frontage), or spaces between developed areas, the infiltration allowance should be based on the total sewer system pipe sizes and lengths, including sewer mains, service connections and building sewers, and the following:

- New system with pipes above groundwater table: 0.45 L/mm dia./100m length/hour
- Old system (pre-1980) and/or pipes below groundwater table: 1.0 L/mm dia./100m length/hour

#### 2.6 Design Flow

Design flow Q (=PWWF) = (population and equivalent) x (per capita flow) x (peaking factor) + (infiltration allowance).

## 2.7 Pipe Flow Formulas

For Gravity Sewers use Manning's Formula:  $Q = AR^{0.667}S^{0.5}$ 

n

Where:  $Q = Design flow in m^3/s$ 

A = Cross sectional area in m<sup>2</sup>

R = Hydraulic radius (area/wetted perimeter) in m

n = Roughness coefficient, where:

 $n_{concrete} = 0.013$   $n_{PVC} = 0.011$ 

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

For Sewage Force Mains use Hazen-Williams formula:  $Q = CD^{2.63}S^{0.54}$ 

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Where: Q = Rate of flow in L/s

D = Internal pipe dia. in mm

S = Slope of hydraulic grade line in m/m C = Friction coefficient = 120 for all pipe

#### 2.8 Flow Velocities

Minimum design velocities:

Gravity sewers: 0.60 m/sForce mains: 0.75 m/s

Where steep grades result in velocities exceeding 6.0 m/s, sewer design must consider measures to prevent pipe and manhole erosion, movement and the effects of dynamic loading. Pipe anchors shall be installed on steeper grades in accordance with MMCD standard drawings.

#### 2.9 Alignment

Except as indicated for Curved Sewers (Section 2.12), horizontal and vertical alignments should be straight lines between manholes for gravity sewers, and between defined deflection points for force mains.

Force main line and grade requirements are as indicated for water mains. Air release valves are required at high points.

## 2.10 Minimum Pipe Diameter

• Residential: 200 mm except for the upstream section where future extension is not possible, in which case 150 mm is acceptable provided it has a grade of 1% or greater.

• Commercial and Industrial: 250 mm except for the upstream section where future extension is not possible, in which case 200 mm is acceptable provided it has a grade of 0.6% or greater.

• Service connections: 100 mm

• Sewage force mains: 100 mm.

Gravity sewer mains shall be designed so that the sewer flow does not exceed d/D = 0.67 for pipe diameters of 250 mm and less, or d/D = 0.75 for pipe diameters greater than 250 mm. (where d = flow depth and D = pipe diameter).

#### 2.11 Minimum Grade

Minimum grades of gravity sewers are as required to obtain the minimum velocity of o.60 m/s. If the calculated design flow is not expected to produce a velocity of at least o.6 m/sec., then the minimum grade shall be calculated on the basis of the pipe flowing 35% full at a theoretical velocity of o.6 m/sec.

Force main grades are as indicated for Water section of these design standards.

#### 2.12 Curved Sewers

Where permitted by the City Engineer, horizontal and vertical curves may be formed using pipe joint deflections as follows (no deflection along the pipe barrel permitted):

- Minimum radius = 60 m.
- Constant radius throughout curve and constant offset to road centreline where possible.
- Joint deflection not to exceed 75% of maximum recommended by pipe manufacturer.
- Minimum design velocity = 0.9 m/s.
- Only one horizontal and/or vertical curve allowed between manholes.
- Curve locations to be accurately recorded on record drawings.

#### 2.13 Depth

Sewers should be of sufficient depth to:

- Permit gravity service connections to basements on both sides of the road.
- The minimum depth of the sewer main (from the surface of the road or ground to the top of pipe) is normally 2.0 m.
- Prevent freezing. Minimum depth is 1.2m (measured from the surface to the top of pipe).
- Allow for future extension(s) to properly service all of the upstream tributary lands for ultimate development.
- Clear other underground utilities.
- Prevent damage from surface loading.
- Maximum cover depth: 4.5 m, except under special circumstances and with the City Engineer's approval.

Pump services shall be used on low side where maximum cover would be exceeded.

## 2.14 Manholes

- 2.14.1 Manholes are required at the following locations:
  - Every change of pipe size.
  - Every change in grade, except as indicated in the Curved Sewers section.
  - Every change in direction, except as indicated in the Curved Sewers section.
  - Upstream and downstream end of curvilinear sewer mains.
  - Every pipe intersection except for 100 mm and 150 mm service connections (see Section 2.16).
  - Upstream end of every sewer line.
  - Every future pipe intersection.
  - All terminal ends, except as noted in section 2.14.3.
  - 150 m maximum spacing.

Sanitary manhole rim elevation shall not be located in a low point that may be subject to ponding or storm water infiltration and shall be designed to be:

- Above the adjacent storm manhole rim and catch basin elevations.
- Above the surrounding ground elevation when the manhole is located off road to prevent inflow from ponding.

#### 2.14.2 Hydraulic Details

Crown elevations of inlet sewers not lower than crown elevation of outlet sewer. When connecting a collector sewer main to a trunk sewer 300 mm or greater, the invert of the collector main must not connect lower than 0.75D (34 of the pipe diameter).

Minimum drop in invert elevations across manholes:

- Straight run: 10 mm drop
- Deflections up to 45-degrees:-25 mm drop
- Deflections 45 to 90-degrees: 50 mm drop.

Drop manhole and ramp structures should be avoided where possible by steepening inlet sewers. Where necessary, provide drop structures as follows (table 2.14):

Table 2.14 Drop Structures

Invert Difference	Structure

Up to 0.45 m	Inside Ramp	
o.45 to o.90 m	Outside Ramp	
Greater than 0.90 m Outside Drop*		
*Inside drop may be used if specifically approved by the City Engineer.		

Drop manholes and outside ramps must be installed in accordance with standard drawings.

The maximum deflection angle created in a junction is 90°.

Force main discharges should be directed into the receiving manhole outflow pipe. Manhole benching should be extended a minimum 200 mm above the force main crown. If a manhole drop cannot be avoided, an inside drop pipe is required as approved by City Engineer.

#### 2.14.3 Temporary Clean-Outs

Temporary clean-outs may be provided at terminal sections of a main provided that all of the following conditions are met:

- Future extension of the main is proposed or anticipated within 3-years.
- The length of sewer to the downstream manhole does not exceed 45.0 m.
- The depth of the pipe does not exceed 2.0 m at the terminal point.

#### 2.15Odour Control

Odour control shall be considered in all sanitary sewer systems designs. Of particular importance are areas where sewage has the potential to go septic. This typically occurs within pump station wet wells or sanitary force mains where sewage age exceeds 4 hours. Once the sewage has gone septic odours can be released not only from the pump station but also from the air release valves on sanitary force mains and the discharge manhole. In this situation odour gasses can be released and cause a significant public nuisance. Hydrogen sulphide is also toxic and explosive and can pose a risk to human health.

By properly designing a sewer system, odours can be reduced and where they can't be avoided technologies exist to reduce or eliminate odour and dangerous gases.

The following criteria must be met in all sanitary sewer systems

- Dissolved sulphide maximum limit at any point in the system is to be 0.5 mg/l.
- Odour Criteria:
  - At 10 m from any gravity main, force main, manhole and lift station or other sewer facility (summer conditions, winds between 2-10 km/h), 1.0 odour units.
  - Where sewer facilities are close to houses, parks or walkways, o.o odour units.
- Analysis for odour and sulphides may be required.

- Odour Control provision shall be designed to accommodate both at 25% buildout and at 100% buildout.
- All lift station designs to include odour control or the provision for future odour control facilities.

When selecting the appropriate odour control technologies, the designer shall consider operating variables such as flow rates, power and consumables. It should be recognized that estimating the pre-treatment hydrogen sulfide gas concentrations is critical in evaluating the various technologies. All Odour Control treatment designs to be approved by the City Engineer.

#### 2.16 Service Connections

Every legal lot and each unit of a residential duplex shall be provided with a separate service connection.

Lots are allowed one service connection per property. In special circumstances where the servicing of all buildings on existing Industrial or Commercial properties is not feasible, two services may be permitted if authorized by the City Engineer.

Service connections shall not be extended at an angle that exceeds 45° from perpendicular to the main, and in no case shall a service connection be placed so that it extends in front of any property other than the one being serviced.

Unless otherwise approved by the City Engineer, connections are to service all plumbing by gravity. Building elevations should be established accordingly. Pumped connections may be permitted if approved by the City Engineer prior to sewer design. Pumped connections shall be considered as an option to eliminate mains in rear yard rights-of-way.

#### 2.16.1 Size

- Pipe size is to accommodate peak design flow.
- Minimum pipe size is 100 mm diameter for residential services and 150 mm for all other services.

## 2.16.2 Location and Depth

Connections to large lots are to be located at the lower portion of each lot. For urban developments, locate connections in accordance with standard drawings. Service connections must be installed at least 0.5 m horizontally from the water service and a minimum of 1.5 m from any side lot line.

Service connections shall not be extended at an angle that exceeds 45° from perpendicular to the main, and in no case shall a service connection be placed so that it extends in front of any property other than the one being serviced.

The minimum depth of a service at the property line must be 1.5 m provided that gravity service to the Minimum Building Elevation is available.

#### 2.16.3 Grade

Minimum grade from property line to sewer main:

• 100 mm diameter pipe: 2.0%

- 150 mm diameter pipe: 1.0%
- Larger sizes: Grade based on minimum velocity of 0.75 m/s.

#### 2.16.4 Details

Use standard wye fittings for connections to new mains. For connections to existing mains, use wye saddles or, where approved by the City Engineer, insertable tees may be used. The service connection centreline must not be below the sewer main centreline.

Service connections may be permitted into manholes provided:

- The connection is not oriented against the flow in the main.
- The connection enters the manhole so the service invert is no lower than the sewer main crown.
- Manhole hydraulic requirements are met.

Inspection chambers (IC) are required for all service connections unless the service is less than 2.5 m long and ties into a manhole. Service boxes are to be installed on every inspection chamber.

Inspection manholes are required on all industrial connections. Inspection manholes will be required for commercial connections at the discretion of the City Engineer. Inspection manholes shall be installed on private property as close to property line as practical to allow for access by the City.

Manholes are required at the main on service connections in accordance with standard drawing.

The maximum length of any service connection is 30 m. Connections exceeding 30 m in length will be treated as mains.

#### 2.17 Locations and Corridors

Sanitary sewers to be located within roadways, preferably along the centerline, as shown in the applicable standard road cross-section drawings. Manhole covers to be located outside of wheel path.

For curved roads and alignments, where approved by the City Engineer, pipe alignment to be at a parallel offset with an established road right-of-way or property line.

Servicing from roadways is required unless a depth of greater than 4.5 m would be required to provide gravity service. Rear yard sewers are to be avoided, and advance approval is required from the City Engineer.

Where the main may exceed 4.5 m depth of cover to provide a gravity service, the City Engineer may permit a design based on sewer pumps. Ideally, main floors should be designed for gravity service.

Where a sewer crosses private land, right-of-way requirements are as indicated in Section 0.3 - Utility Rights-of-Way.

Clearance from water mains as detailed in General Design Considerations Section o.4.

Common trench with storm sewer per General Design Considerations Section o.4, may be approved at the discretion of the City Engineer.

#### 2.18 Lift Stations

The use of sanitary lift stations is to be discouraged. Any proposed use of lift stations must receive prior approval from the City Engineer. Sanitary lift stations should normally be located within a right-of-way outside the required road dedication.

This section covers both dry well and submersible sewage lift stations. Larger capacity sewage lift stations or lift stations with special design or siting requirements may require additional assessment and review of criteria.

Preliminary design must be approved by the City Engineer before detailed design proceeds.

#### 2.18.1 Preliminary Design Requirements

System layout: Select location(s) to minimize the number of sewage lift stations and avoid lift stations wherever practical.

Capacity: The lift station must be designed to handle the ultimate flows of the designated catchment. Design must consider short, intermediate and long-term future flows.

Location and Layout: The location and layout of a lift station must include an assessment of the following basic design considerations:

- Type of station and impact on neighbours.
- Construction dewatering requirements.
- Access for construction.
- Access for maintenance.
- Aesthetics, noise, odour control and landscaping requirements.
- Security against vandalism and theft.
- Flood elevations. Station uplift design must be based on maximum load level.
- Proximity of receiving sewers, water mains, and adequate power supply.
- Minimizing energy requirements.
- Standby power and its compatibility.
- Soils. Geotechnical investigations must be undertaken prior to site approval.
- Convenience of operation and maintenance.
- Safety for operators and public.
- Capital and operation and maintenance costs.
- Radio Path assessment on existing and proposed building line of sight.
- Off street Parking (5 m x 7 m) shall be provided for pump maintenance.
- Fenced perimeter with 1.8 m high black chain link fencing. Fencing to MMCD standards.

- Above ground valve chamber with no ladder or platform requirement for maintenance access.

#### 2.18.2 Design Features

Lift stations should be designed with a minimum of two pumps, each capable of handling the maximum flow condition. A mixer should be provided, or one pump equipped with an automatic flush valve.

Where the design flow exceeds the capacity of a single, commonly available pump, use three or more pumps with capacities such that there is always one pump available for standby.

- (1) Pump requirements:
  - Capable of passing solids up to 75 mm in size.
  - Equipped with appropriately rated stainless steel chain and connecting rings.
  - Equipped with hour meters.
  - Easily removed for maintenance.
  - Maximum motor speed: 1750 RPM.
  - Explosion proof.
  - Operate on a 347/600 volt electrical source (pump motors between 5 hp and 75 hp (max) and to be 600 volt 3 phase type).
  - Able to operate alternately and independently of each other.
  - Able to meet maximum flow condition with one pump in failure mode.
  - Designed so that each motor does not cycle more than 4 times in one hour under normal operating conditions. For example, in a duplex pump station that is designed to alternate the pump starts, each motor can have a maximum of 4 starts in an hour which could result in a total of 8 motor starts per hour for this station.
  - All pumps must be factory tested prior to installation.
  - Wet well storage shall be sized assuming pump is fully submersed and will accommodate design flow with no storage in the pipe network.
  - All internal piping and fittings shall be 316 stainless steel (Victaulic style) as per Approved Products List.
  - Pump start water level to be set above the top of the pump casing to prevent buildup on pump and reduce level monitoring issues.
- (2) Motor cables, power cables, etc., must be continuous from within the pump station to within the kiosk unless an adequate exterior pull pit and junction box is installed.

- (3) Levels to be controlled by ultrasonic level transmitter with emergency high and low level balls. A radar level transmitter is required when lift station service is in an area that produces large amounts of "foam" or "steam" e.g. a laundry facility. Level transmitters to be accessible at the top of the wet well to be serviced without entering into the lift station.
- (4) All auxiliary equipment and control panels must be mounted in a suitable kiosk adjacent to the station. The kiosk must be located a minimum of 3.0 m from the station lid.
- (5) The control kiosk must be designed to contain all control and telemetry equipment on the front panel and all power equipment on the rear panel.
- (6) Check valves must be ball lift check valves. All valving to be installed in an above ground kiosk.
- (7) All stations require an explosion-proof exhaust fan which can be activated by manual switch, and which meets WCB requirements for ventilation in a confined space.
- (8) The entrances to all stations must be waterproof and be provided with a suitable lock. The access must be a minimum 900 mm x 900 mm in size. The access hatch shall have:
  - An aluminum 1/4" tread plate
  - A perimeter drain
  - A perimeter sealing gasket
  - A slam lock with an aluminum removable sealing plug and opening tool
  - A flush lift handle
  - A gas spring assist cylinder
  - A 90-degree hold open arm
  - A flush fitting padlock tang.

The hatch must be reinforced for 1465 kgs/m² (300 lbs./sq.ft.). All fasteners to be made of 316 stainless steel.

The entrance must be above ground level where feasible but, in no case, more than 300 mm above the ground.

- (9) All wiring must be explosion-proof, Class 1, Division 2, and electrical design and installation is subject to the acceptance of the Provincial Safety Inspector. Metal stations must be protected by impressed current cathodic protection.
- (11) All stations must provide an automatic generator for standby power in case of power failure.

  Provision for a telemetry system must be included for connection into the Municipality's Telemetry

  System. For small lift stations with an ultimate capacity less than 100 units, emergency storage may

- be considered in place of standby power; emergency storage is to be based on 8 hours of average day flows.
- (12) All equipment must be CSA approved and have at least a one year quarantee for parts and labour.
- (13) Designer is to provide three copies of Operating and Maintenance Manuals (see Section 0.8).
- (14) Wet well to have above ground valve chamber that houses the ball check and isolation plug valves for each pump as well as the air relief valve and flow meter. Valve chamber to have at a minimum 50 mm of insulation, 1000W intrinsically safe baseboard heater, door seals, floor drain back to the wet well with p-trap and the air relief drain ports piped to the Valve Chamber floor drain. A plug valve is required on the influent line and on each pump discharge. The valves must be outside the station and be complete with square operating nut and nelson box. Gear box on plug valves in the ground to be designed for submersion.
  - Mixer to be provided only when required for the purposes of odour control (no automatic flush valves).
- (15) If a lift station is authorized, by the City Engineer, to be constructed in an area that may be subject to vehicle loads, the roof and cover of the pump station should be designed to withstand a loading of H-20 (highways standard). Roof design to also allow for fall arrest assembly on the roof (2X's the max arresting force, typically 1800 lbs).
- (16) Provision(s) must be made for standby pumping from an external source. An adaptor flange ("Kamlock") complete with a quick coupling and lockable cap will be required.
- (17) The area around the station and all associated equipment or building must be asphalted. The size of the area to be determined by the requirements for maintenance.
- (18) Stations to be fiberglass unless otherwise approved by the City Engineer The surfaces of all steel components and fibreglass stations must receive at least two coats of two component white epoxy enamel. Concrete wet wells are discouraged but where approved, must be designed and constructed to prevent sulphide corrosion, and the concrete surface must be coated with at least 2 coats of blue epoxy and then an additional 2 coats of white epoxy. All steel piping and components to be 316 stainless steel.
- (19) The wet well bottom must be sloped to direct all solids into the pump suction. The influent line must be located tangent to the wet well to encourage scouring of the wet well.
- (20) The station shall be complete with an Uninterruptable Power Supply (UPS) to serve all alarms and controls.
- (21) Separate starter enclosures must be provided for each pump.
- (22) PLC control to be based on City of Kelowna standards.

- (23) Station communication to be provided via radio transmission compliant with the City's telemetry system, and an antenna must be installed on a suitable mast or pole to ensure reliable transmission.
- (24) An hour meter must be built into the panel for each pump.
- (25) An amp meter must be provided for each pump.
- (26) Minimum storage between the high level alarm and the start of overflow under the more critical of:
  - Minimum 1 hour in wet well at average wet weather flow.
  - Minimum 1 hour in wet well and influent pipes at peak wet weather flow.

Ensure operating level is above the top of the pumps to keep the pumps submerged (Minimum 1 m separation between the inlet pipe invert and pump stop level).

- (27) Station to have a magnetic flow meter located in above ground valve chamber.
- (28) Station to allow removal of pumps using hoist truck with 1.8 m (6') boom.
- (29) Perimeter fencing is to be provided. The fence must be made of black chain link and installed with privacy slats. Fence to be minimum 1.8 m high with minimum 5 m wide opening for vac truck access.
- (30) Landscaping, acceptable to the City, is to be provided including irrigation.
- (31) Noise control may be required when criteria in Section 2.16 is exceeded.
- (32) Odour control may be required when criteria in Section 2.17 is exceeded.
- (33) Minimum barrel size must be 2440 mm (8') in diameter.

#### 2.19 Force Main

As part of the lift station design, the following criteria must be noted in the design of force main systems: Design computations for force mains must be made using a 'C' factor of 120 (for PVC pipe) and then re-calculating the system curve using a 'C' factor of 145 to ensure adequate motor horsepower and pump characteristics. Show pump and system curves on design drawings.

## 2.19.1 Velocity

At the lowest pump delivery rate anticipated to occur at least once per day, a minimum cleansing velocity of 0.75 m/sec should be maintained. Maximum velocity should not exceed 4.0 m/s.

#### 2.19.2 Air Relief Valve

An automatic air relief valve must be placed at high points in the force main to prevent air locking when the difference in elevation between the invert of the summit and the invert of the valley is greater than the diameter of the pipe. The air relief valve must be located in a chamber, complete with adequate and environmentally safe drainage and odour control, unless a suitable injected odour control agent is used at the Lift Station. Air valve must be vented and drained into the gravity sanitary sewer system at a manhole, where possible.

#### 2.19.3 Termination

Force mains should enter the gravity sewer system so that the force main invert is not more than 200 mm above the crown of the pipe in the receiving manhole. A smooth, turbulent free transition must be incorporated. If the receiving manhole design does not allow this, then a manhole drop structure in accordance with the standard drawings is required.

#### 2.19.4 Size

The minimum size for force mains is 100 mm diameter.

#### 2.19.5 Materials

Force mains must generally meet the standards specified for water mains and in accordance with Schedule 5, however there are specific requirements for force mains that may supersede water main standards, as follows:

- Force main pipe must be identifiably different than water main pipe. Refer to supplemental specifications 5.1 Section 33 34 o1S.
- Valves used on force mains, pigging ports or cleanouts shall be lubricated full port plug valves size on size sufficient for long term use in a corrosive environment. Plug valve gear boxes installed in the ground must be designed for submersion conditions.

## 2.19.6 Loads and Transient Pressures

All force mains must be designed to prevent damage from superimposed loads. Must also be designed to prevent damage from water hammer or column separation phenomena. Transient surge and cyclic surge analysis must provide at least a 75-year life of the pipe.

## 2.19.7 Corrosion and Odour

Corrosion and odour control is required when limited daytime flows, or long force main lengths cause the pumped sewage to remain in the force main for longer than 45 minutes.

#### 2.19.8 Pigging Port

A "size on size" pigging port that is convenient for the City Operations to use and maintain must be incorporated in the force main outside of the Lift Station.

#### 2.20 Noise Control

Noise levels for facilities must not exceed 65 dB at property line or 20 m away whichever is closer.

#### 2.21On-site Sewage Disposal (Septic systems)

On-site sewage disposal systems will only be considered for properties that are:

- Not near or adjacent to the City's sanitary sewer system, and
- Greater than 1 ha in size.

Where permitted, site conditions and on-site sewage disposal systems shall meet the BC Public Health Act "Sewerage System Regulation" and Ministry of Health Special Conditions for placing septic systems with Environmental Control Zones. The City Engineer' approval is required for on-site sewage disposal systems.

#### 2.22Low Pressure Sewers

Low pressure sanitary sewer systems servicing a group of properties is discouraged and requires approval from the City Engineer. Preliminary design must be approved by the City Engineer before detailed design proceeds.

#### BL8847 replaced Part 3 Drainage

# DESIGN STANDARDS 3. DRAINAGE

#### 3. Drainage

#### 3.1 Run-Off Analysis

This section describes the methods acceptable to the City of Kelowna for use in the determination of the rate and amount of stormwater run-off for the design of storm drainage conveyance and storage facilities.

Hydrologic aspects of urban drainage (peak flows, volume and durations) directly affect the success of the design. Errors in analysis may result in under designing of facilities, oversizing them and incurring unnecessary expenditures, or both. In the interest of the public good, a conservative approach to all designs is warranted.

The hydrologic criteria needed to calculate basin runoff are rainfall, soil types, vegetation and ground cover, extent of development and land slope and shape. It is expected that the design consultant will use criteria that is justifiable for the location of the development.

Application of computer simulation models is recommended for all analysis and detailed design, however, the rational method may be used for pre-design analysis and for detailed design of minor systems with contributing areas less than 10 ha.

#### Rational Method

The Rational Method may be used for pre-design system analysis and for detailed design of minor system components with contributing areas less than 10 ha. The Rational Method shall not be used for the design of major system components or storage facilities.

The Rational Formula is expressed as:

Q = CIA/360

where;  $Q = peak runoff, m^3/s$ 

C = runoff coefficient

A = area, hectares

I = rainfall intensity, mm/hr

Runoff Coefficient, (C).

C values should be established based on the proposed land uses, proposed developments and hydrogeological information. Calculations and justification for the determination of C values are to accompany development submissions. Developers and consultants are encouraged to look for ways to reduce the amount of Effective Impervious Area within their developments to reduce the amount of runoff generated and the costs associated with stormwater infrastructure. "Default" C values, as shown on Table 1 can also be used.

In a case of applying the Rational Method to a mixed land use in a drainage area, a weighted average C value should be used and can be calculated from the following formula:

$$C_{avg} = \sum \underline{A_i C_i}$$

where;  $A_i$  is the area with the same type of land use correlated to run-off coefficient  $R_i$ , and A is the sum total of all areas,  $A_i$ .

Rainfall Intensity, (I).

The value of the design rainfall intensity (I) for the Rational Formula is selected from the appropriate Intensity Duration Frequency (IDF) curve, with a duration chosen to coincide with the Time of Concentration. The Time of Concentration is the time required for run-off flow to become established and reach the design location from the furthest point within the contributing basin.

Time of concentration is the sum of two components, the "inlet time" and the "travel time".

The inlet time is the overland flow time for run-off to enter the conveyance system. It varies with size of the catchment area and surface imperviousness. In developed urban areas where paved surfaces drain directly to catch basins, an inlet time of 10 minutes shall be utilized for assessment of 5 year and smaller design storms. Inlet times for higher intensity design storm events are as follows:

<u>Event</u>	<u>Inlet Time (min.)</u>
5	10
10	9
25	8
50	7
100	5

For inlet times in rural areas, the overland flow time must be calculated using appropriate formulas.

The travel time is the length of time required for flow to travel within the conveyance system from the point of inflow to the location being analyzed.

#### Rainfall

Standard Drawing SS-S56 shows the rainfall intensity-duration-frequency (IDF) curve for the City of Kelowna which was developed from the Atmospheric Environment Service recording station located at the Kelowna International Airport. The IDF curve in tabular format up to one hour duration is show on Table 2. Design Storm Hyetographs are shown on Table 3.

# **Computer Simulation of Run-off**

All minor storm drainage components draining areas larger than 10 ha. and all major storm drainage systems and storage facilities must be designed using computer modelling techniques. The selection and the proper application of computer models is the responsibility of the Developer and the

Consultant. It is necessary to utilize computer models which have the capability to generate hydrographs and which can route these hydrographs through a network of open channels, conduits and storage facilities showing volumes, hydraulic grade lines, the ability to simulate the minor and major system and their interrelation and the ability to simulate submerged and/or surcharged conditions.

#### 3.2 MINOR SYSTEM DESIGN

An urbanized area will have two separate and distinct drainage systems, whether these systems are planned and designed or not. The "minor system" includes street gutters, catch basin inlets and the network of underground pipes and facilities associated with the collection, conveyance and water quality treatment of minor, or frequently occurring rainfall events.

## Service Level

The storm mains shall be designed for free-flow conditions for the 1:5 year storm (the rainfall that has a 20% probability of occurrence in any given year). The interception capacity of the system of street gutters and catch basins must be compatible with the design capacity of the storm mains.

# Streets, Gutters and Ditches

# **Urban Cross-Sections**

The flooding depths for a 1:5 year storm, which will be permitted on streets, while the streets are acting as part of the minor drainage system, are as follows:

- There shall be no curb overtopping.
- Maximum depth of ponding at sag locations or inlets will be 150 mm.
- On local roads, the flow may spread to the crown except where curb over-topping will occur.
- On collector roads, the flow spread must leave one lane or a road surface equivalent free of water to ensure access for emergency vehicles (fire, ambulance).
- On arterial roads, the flow spread must leave one lane in each direction free of water.

Flow across urban road intersections shall not be permitted for storms with a return frequency of 5 years or less.

## **Rural Cross-Sections**

Rural roads, gravel or paved, shall be constructed with swales or ditches that ensure adequate road subgrade drainage (in compliance with standard road design). Where ditching for minor drainage is provided, ditch design shall consider the following:

- Rip-rap as necessary to eliminate incising and erosion.
- Freeboard of 0.3 m.
- Free surface elevations permitting agricultural tile drainage where required.
- Stable side slopes.

- Road subgrade.

## Catch Basins

To ensure that the capture or inlet capacity matches the storm main capacity, the spacing of catch basins on streets may be varied; however, they shall generally meet the following criteria:

- Spacing
  - Road grades less or equal to 3%, space 150 m maximum or 675 m<sup>2</sup> of paved area.
  - Road grades greater than 3%, space 100 m maximum or 450 m<sup>2</sup> of total area.
- Space catch basins to ensure no overflows to driveways, boulevards, sidewalks, or private property.
- Space at intersection so as not to interfere with cross walks.
- Side inlet catch basins are required for all curbed roads.

All catch basin leads are to be a minimum diameter of 200 mm and sized to convey the design inlet capacity.

All catch basin leads are to discharge into a manhole.

# **Storm Mains**

#### Capacity

Hydraulic capacity shall be calculated using Manning's formula. A roughness coefficient of 0.013 shall be used for concrete and 0.011 shall be used for smooth plastic pipe.

## **Velocity**

Minimum velocity shall be 0.75 m/s at the design flow rate.

# Minimum Sizes

#### 250 mmø

#### Location, Alignment and Grade

Storm mains must be located within the road right-of-way as noted in the applicable Standard Drawing Typical Cross-Section for that road.

When the storm main is required to cross private land(s), the right-of-way must be a minimum of 4.5 m wide, however, the width must be suitable to accommodate excavations based on WCB regulations for side slopes.

When a storm main is located within a statutory right-of-way and appurtenances which require maintenance are located within the right-of-way, the landowner/developer must ensure that maintenance access is available. For large structures or structures requiring an enhanced maintenance level such as oil/sediment chambers, control structures and pond inlet/outlet chambers, an access route adequate to support the maintenance vehicles is to be provided. The surface of the route may be gravel, pavers or asphalt depending on the location and the context of the site.

## **Depth of Cover**

Provide 1.2 m in travelled areas and 1.0 m otherwise. However, these minimum's are to be used only when conflicts with other utilities will not occur and all upstream catchment areas are serviceable by gravity.

For Catch basin leads 0.9 m minimum cover shall be used. If 0.9 m is not available, design to protect from freezing and traffic loads, design calculations must be provided.

## **Curvilinear Mains**

If horizontal or vertical curves are used to maintain a constant offset, the radius of the curve is to be no less than 1.5 times the recommended manufacturer's minimum radius of curvature. The design velocity must exceed 0.91 m/sec. and the curve midpoint and two quarter points are to be located by survey and shown on the as-constructed drawings with an elevation and offset of the invert at each point.

## Manholes

Storm manhole spacing is to be related to pipe main size as follows:

250 and 300 mm diameter - 135 m maximum spacing; over 300 mm to 600 mm diameter - 120 m maximum spacing, and over 600 mm diameter - 100 m maximum spacing.

#### Manholes are required at:

- all grade or alignment changes (except curved sections)
- pipe size changes
- all intersecting mains
- all upstream ends of mains
- upstream and downstream end of all curvilinear mains unless a constant offset is maintained from the curb
- all catch basin connections
- outfalls to the major system (i.e. creeks, channels, lake) in order to isolate the upstream main to facilitate cleaning. The manhole is to be located as close as possible to the point of discharge.

Manhole sizing shall be in accordance with City of Kelowna supplemental "Standard Detail Drawing SS-S1a".

To ensure manhole construction will not cause a loss in hydraulic capacity, the design gradient shall be continuous through the manhole; otherwise, where the inlet is not at 180° to the outlet, a minimum drop of 30 mm shall be provided;

#### BL10640 added the following:

Placement of manholes in existing or future wheel paths is to be avoided.

## **Ground Water Recharge Systems**

To promote interception of pollutants and reduction in downstream impacts, ground water recharge systems must be utilized to the maximum extent possible as determined by a qualified professional experienced in this field.

Mains may be sized according to the required capacity taking 50% or the groundwater recharge capability into consideration. The groundwater recharge component must be calculated and justified by a qualified hydrogeologist/engineer experienced in this field. Minimum sizes of mains must still be utilized.

# **Storm Services**

Minimum diameter of storm services shall be 100 mm.

Minimum Grades for storm sewer services shall be 2%.

Storm services to properties shall not be permitted from storm drains located in rights-of-way unless a clean-out is provided and the nature of the development will permit access to the right-of-way for inspection, maintenance and repair, as necessary.

#### **Roof Leaders**

Roof drainage leaders are to be connected to the storm service connection only where geotechnical requirements dictate the need. The evaluation of this requirement is to be included in the scope of the Hydrogeotechnical Study. Otherwise, roof leaders are to be directed to a splash pad for dispersal to the ground. Roof leaders shall not be directed onto driveways which drain directly onto city right-of-way or areas draining directly onto neighboring properties.

#### Foundation Perimeter Drains

Perimeter drains for buildings are required as per the British Columbia Building Code.

Foundation perimeter drains shall be connected by gravity via a storm service to the storm main provided that the elevation of the basement/crawlspace floor is at least 600 mm above the elevation of the storm main obvert, 600 mm above the anticipated or known high ground water table, or 600 mm above the 100 year hydraulic grade line within the main at that point, whichever is higher.

When the above provisions regarding the elevation of the storm main obvert or 100 year hydraulic grade line for gravity connection of foundation perimeter drains cannot be met, a backflow prevention device and sump pump system inside the building discharging to the storm main via a storm service shall be installed. A backwater or check valve and a siphon break must be installed in the sump pump discharge

line to prevent backflow into the basement. Discharge may be to the surface or a soak away pit, if geotechnical conditions permit.

As an alternative, the perimeter drains may be connected to a "Foundation Drainage Pipe". The "Foundation Drainage Pipe" is a small diameter pipe installed within the road right-of-way with connections from foundation perimeter drains only. This system will eliminate the potential of long term pumping due to fluctuations in groundwater table. Its point of discharge to the storm system shall be far enough downstream so that the basement floors it protects are 600 mm above the 1:100 year hydraulic grade line at the discharge point. In general, the design criteria will follow that as laid out in this document, however, minimum size is reduced to 150 mm.

Where hydrogeotechnical studies justify their use, dry wells or ground infiltration systems may be used as the storm water disposal method for connection of perimeter drains. These systems are to be designed and supervised by a Geotechnical Engineer.

## **Water Quality Treatment**

Water quality treatment is required for frequently occurring events. All flows up to 50% of the 2-year (1 hour duration) post-development flow must be routed through some form of water quality treatment facility utilizing "best management practices" to remove suspended solids and floatables. The facility can be an in-ground structure which passes flow through or an above ground facility such as a treatment wetland. Wetlands can be incorporated into larger stormwater management facilities for the attenuation of large events. Allowable discharge criteria are identified in the City of Kelowna Sanitary Sewer/Storm Drain Regulation Bylaw number 6618-90.

Any form of water quality treatment must be designed to allow for future maintenance activities associated with the removal of the collected material and access to incoming and/or outgoing piping.

## Lot Grading/Swales and Driveways

Lot grading shall be carried out in accordance with the BC Building Code, City Policy 265 and the following:

- 1. Swales shall have a minimum slope of 1 percent. Swales shall be lined with turf on a minimum 100mm topsoil or lined with a non-erodable hard surface. All such swales serving two or more parcels of property shall be designed to accommodate the anticipated flows and the right of way shall be sized accordingly (3.0 m minimum).
- 2. To ensure flooding is avoided, carports or garages attached to residential buildings shall not be constructed with their floor level below the adjacent curb of City street or crown of pavement of City street, unless:
  - the drainage of the driveway serving the carport or garage is connected by gravity to a City storm sewer meeting the connection criteria, or

- is above the 100 year floodline, or
- the runoff water from the driveway may flow past the carport/garage without accumulating and entering. Properties utilizing this method must have an Engineer seal the design. All other relevant criteria of this document must also be met.

## 3.3 MAJOR SYSTEM DESIGN

Storm runoff generated by less frequent, higher intensity rainstorms may exceed the capacity of the minor system. Runoff from these events will pond in depressions and follow whatever overflow route is available. This network of ponding and overland flows is called the "major system". If the major system is properly planned, it can alleviate the potential inconvenience and property damage caused by large rainfall events.

## **MAJOR SYSTEM**

The major system includes all drainage infrastructure which convey, detain, divert and intercept the 100 year design storm runoff. In general, all components of the major system must be designed to accommodate the flows generated by the upstream contributing area. The following section describes the major system provisions and technical requirements for use in planning and design of the major drainage system.

The depth of flooding permitted for the major event is as follows:

- For all classes of roads, the depth shall not exceed 0.3 m.
- One lane, or a 3.5 m width at the crown shall be free from flooding.
- Flooding is not permitted on private property

To meet the criteria for major storm runoff, sags or low points in roads or subdivisions must be designed with a safe overland outlet flow route.

## Outfalls

Ministry of Environment approval is required on all storm water outfalls to natural watercourses or waterbodies.

Outfalls into lakes are to be constructed to have minimum bury according to the following:

- soft bottom, 0.6 metres to allow for seasonal sand erosion and deposition
- rock bottom, criteria to be confirmed by Coast Guard
- exposed pipes must be a minimum of 2.4 metres deep during lake "low water" to allow safe passage of deep keel vessels

Lake outfalls require approval from the Canadian Coast Guard.

## **Control Structures**

Control structures, such as the one shown on Standard Drawing SS-S55 shall be used to provide consistent control for design storm flows of different return periods. These can be modified to include multi-stage inlets. For example, three orifices located vertically on a control structure are normally designed such that the lower, smaller orifice restricts frequent storms and the larger upper orifices control less frequent larger storms. Safe overflow must still be available above the highest orifice.

Considerations shall be given for the design of smaller sediment trap basins at the points of discharge to the detention/retention facilities. Normally, basin inlets shall be designed to provide sediment containment. Build up of sediment shall not restrict inflows and suitable designs shall be provided to allow ease of sediment removals.

## BL10696 amended the following:

Culvert and Bridge Capacity

The following service levels are to be used for design:

Design Flood Frequency

Road Class Bridges, Culverts

Arterial and Collector 1:200 year flood

Local 1:100 year storm plus

provision for overflow if on major channel

All culverts (or pipes with inlets or outlets), unless specified in table below, shall be constructed with headwalls & endwalls. The headwalls & endwalls shall be constructed with a free swinging, weighted grating. To protect against unauthorized entry, a locking mechanism which limits the range of movement of the grating is required.

Pipe & Culvert Table

Pipe Length	Pipe Diameter	Headwall	Endwall <sup>2</sup>	Grillage <sup>1</sup>	Reinforced Concrete Collar <sup>2</sup>
<20m	=<450mm				✓
<20m	>450mm	✓	✓	Inlet	
>20m	<450mm	✓	✓	Inlet	
>20m	=>450mm	✓	✓	Inlet & Outlet	
Any	=>450mm with intersections	<b>✓</b>	<b>✓</b>	Inlet & Outlet	

<sup>&</sup>lt;sup>1</sup> Grillage, as per, MMCD S13

<sup>&</sup>lt;sup>2</sup> Endwalls and collars, as per, MMCD S14 & S15.

Culverts (or pipes) discharging perpendicular to a watercourse may use alternatives methods to protect the end of pipe; provided, they are approved by the City Engineer.

# Down Slope Cul-de-Sacs

Major flood routes must be provided on down slope cul-de-sacs.

## **Ground Recharge Systems**

Ground recharge systems are not normally considered for major flood routing. However, given the soil conditions in the Kelowna area, geotechnical investigations may support the retention and ground infiltration of major events in some areas. Further details are provided in Section 4.

# **Ditch and Swale Construction**

Velocity of flow in ditches and/or swales is not to exceed the limits given below for the various types of materials used as the conveyance surface.

<u>Lining Materials</u>	Maximum Permissible <u>Velocity m/s</u>
Fine sand	0.45
Fine gravel	0.75
Stiff clay	1.00

For velocities higher than the above maximums, the Rip Rap Design Chart Standard Drawing SS-S57 is to be used.

#### 3.4 STORMWATER STORAGE

This section identifies the general design parameters and requirements that must be considered by development proponents in the planning and design of stormwater storage facilities.

#### Peak Flow Control

Control on peak flow rates and volumes in the City are necessary:

- 1. To minimize impacts on watercourses and downstream developments from flow increases which will result from land development, and
- 2. To maintain or lessen flows in watercourses so that creek channels and existing structures, such as bridges and culverts, will continue to operate without being flooded or damaged.

In consideration of the above, the City has the following objectives and requirements:

- (a) Impact and expenditures to existing downstream users shall not be increased.
- (b) Increases in peak storm flows and volumes to the watercourses and receiving waters shall be limited.
  - (c) The number of storage facilities shall be minimized. (Permanent detention will not be permitted under private ownership, unless incorporated on-site within a private development).
  - (d) Permanent storage facilities are to be owned and maintained by the City.
  - (e) Where land developments occur in advance of permanent detention facilities, the City may consider temporary storage facilities on an individual basis. Maintenance charges and responsibility for temporary storage facilities will be borne by the developer.
  - (f) Storage facilities may be surface or underground. Rooftop or parking lot storage may be considered, where appropriate.
  - (g) Private property owners are to indemnify the City from liability arising out of private facilities.

# BASIS FOR DETAILED DESIGN Level of Service

Developments near the lake and/or downstream of the Mill Creek diversion are required to provide water quality treatment for flows up to 50% of the 2 year event. Flows generated from rainfall events greater than this can be discharged directly to a receiving body of water provided the required minor and major systems exist and approval from the City of Kelowna and the Ministry of Environment is obtained.

Developments within other areas of the City of Kelowna are required to provide water quality treatment for flows up to 50% of the 2 year event and to provide storage up to the 100 year (plus 10% volumetric safety factor) event with a maximum outlet rate based upon the 5 year pre-development rate generated by the catchment area. The release rate is to be based upon the post-development outlet hydrograph mirroring the pre-development runoff hydrograph up to the 5 year level. Release rates not based on this criteria may be allowed by the City of Kelowna based on downstream conveyance system protection, stream protection, flood protection or water quality.

An overflow shall be provided to route any excess water to the designated one hundred 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 as the designer may devise.

# Geotechnical Considerations

Special geotechnical investigations to address issues related to the design of all stormwater management lakes and dry ponds are to be undertaken as part of the planning and design studies, and are a prerequisite to the final design of such facilities.

Wherever possible, the stormwater storage facility shall be excavated in natural, stable ground. Should topography dictate that a berm be constructed along one or more sides of the basin, the berm shall be designed by a qualified professional engineer registered to practice in the Province of British Columbia and with relevant training and experience.

# Staged Construction - Standards for Interim Facilities

When stormwater management storage facilities are to be implemented in stages, the standards applicable to the design and construction of the interim facilities are to be generally in accordance with the standards set out herein for permanent facilities of that type. (e.g. Where an interim dry pond facility is proposed as a preliminary stage in the implementation of a stormwater lake, it shall be designed and constructed in accordance with the criteria and standards applicable to a permanent dry pond.)

# DESIGN REQUIREMENTS COMMON TO

#### STORMWATER MANAGEMENT STORAGE FACILITIES

## Land Dedication

Generally, the area of land covered by water when the basin is at the 5-year water level will be dedicated to the City. This dedication will also apply to all accesses to inlets/outlets, any structures and maintenance access routes to the facility.

Land that is adjacent to a basin which is subject to flooding as per the design standard established, but which is part of a privately owned developed parcel, will be required to carry rights-of-way, to allow for encroachment of water onto the affected land. The right-of-way documents shall be prepared by the development proponent, naming the City as grantee.

A restrictive covenant will be placed on lots abutting the facility to control lot development so as not to compromise design requirements at the HWL. This is to ensure an adequate freeboard is maintained.

# Maintenance Access Requirements

An all-weather access for maintenance vehicles must be provided to all facility works. A vehicle access route shall also be provided to the edge of all SWM lakes suitable to carry maintenance vehicles and for use as a boat launch point. The access surface shall be a minimum of 4.5 m wide, shall extend into the

lake beyond the lake edge at normal water depth to a point where the normal water depth is 1.0 m, and shall be accessible from and extend to a public road. Sharp bends are to be avoided, and it shall have a straight run of 12 m or more leading to the lake edge (to permit a straight run in for launching of boats).

## **Emergency Overflow Provisions**

The feasibility of an emergency overflow spillway is to be evaluated for each storage facility design and, where feasible, such provisions are to be incorporated in the facility design. The consultant is to identify the probable frequency of operation of the emergency spillway. Where provision of an emergency spillway or overflow route is found to be unfeasible, the design is to include an analysis of the impact of overtopping of the storage facility and the probable frequency of occurrence of overtopping. The functional requirements of the spillway, and the impact analysis for the absence of one, are to consider the possible consequences of blockage of the system outlet or overloading due to consecutive runoff events, such that the storage capacity of the facility may be partially or completely unavailable at the beginning of a runoff event.

## <u>Landscaping Requirements</u>

Landscaping plans for areas bounding the facility shall be submitted as part of the Engineering Drawings. Landscaping of all proposed public lands included for purposes of the facility and of all proposed rights-of-way on proposed private property up to the design high water level, is to be part of the lake construction requirement and be dependant on the location and the context of the facility. The requirement for landscaping may be irrigated turf, constructed to the satisfaction of the Parks Department.

## Sediment Removal Provisions

The facility design shall incorporate the ability for sediment capture and efficient removal for the control of solids which may be washed to the facility.

## Maintenance and Service Manual

As part of the responsibility for design of a stormwater management storage facility the development proponent shall prepare and provide a maintenance and service manual for the facility.

Six complete copies of the manual are to be provided to the City of Kelowna prior to the time when the operation responsibility of the facility is transferred to the City of Kelowna, which will generally be at the time of substantial completion. The manual shall include complete equipment manufacturer's operation, maintenance, service and repair instructions, and complete parts lists for any mechanized or electrical equipment incorporated in the design.

The manual is to include, at a minimum, the following information:

- (a) A copy of the approved Engineering Drawings relating to the Stormwater Storage Facility and appurtenances, updated to "As-Constructed".
- (b) Schematic diagrams of the inlet and outlet arrangements, connections to and arrangement of upstream and downstream systems, including all controls, shutoff valves, bypasses, overflows, and any other operation or control features.
- (c) Location plans for all operating devices and controls, access points and routes, planned overflow routes, or likely point of overlapping in the case of exceedance of the design containment volume.
- (d) Stage Discharge Curves with clear relationships of the stages relative to surrounding features.

# Signage for Safety

The design for SWM Facilities shall include the installation of signage to warn of anticipated water level fluctuations, with demarcation of maximum water levels to be expected for design conditions. Warning signs will be provided and installed by the development proponent.

# **Engineering Drawing Requirements**

The engineering drawings for any SWM Facility are to include the following information, in addition to the physical dimensions:

- (a) Stage-Volume and Stage-Area Curves;
- (b) elevations at Normal Water Level (NWL), 5 Year Level and High Water Level (HWL);
- (c) volumes at NWL, 5 year Level and HWL;
- (d) freeboard elevation;
- (e) notation indicating the lowest allowable building elevation for lots abutting the lake;
- (f) contributing basin size (ha);
- (g) measurements to locate submerged inlet(s), outlet(s) and sediment traps referenced to identifiable, permanent features which are not submerged at NWL.

## DESIGN DETAILS FOR STORMWATER MANAGEMENT LAKES (WET PONDS)

## Side Slopes

Areas normally or infrequently covered by water, from the design high water level down to a point 1.0 m below the normal water level shall have a maximum slope of 5 (horizontal) to 1 (vertical).

A slope of 3 (horizontal) to 1 (vertical) may be required from the 1.0 m depth point (below normal water level) to the pond bottom. The requirement for maximized slopes below water is an attempt to discourage the growth of unwanted vegetation.

In the case of constructed wetlands, benched areas above and below the NWL to encourage growth of aquatic and riparian plants is desirable.

#### Lake Bottom Material

For areas where the groundwater table is below the NWL, the lake bottom and side slopes are to be composed of impervious material with a suitably low permeability (e.g. with a permeability coefficient in the order of  $1 \times 10^{-6}$  cm/s).

For areas where the groundwater table is expected to be near or above the NWL, the lake bottom may be of a pervious material as dictated by geotechnical considerations.

## Circulation Requirements

Narrow or dead bay areas where floating debris may accumulate are to be avoided. Inlets and outlets should be located with consideration of the need to maximize detention time and circulation within the lake water body.

The length of the wet pond relative to the width should not be less than 3:1 or greater than 6:1 so as to promote natural water circulation and avoid water quality deterioration associated with stagnant reaches within the facility.

#### **Outflow Control Works**

The outlet from a stormwater management storage system must incorporate appropriate means for control of outflow. In addition, the outlet works must include provisions for operational flexibility, and to address unintentional blockage of the outlet and the possible need to either stop outflow or increase the rate of outflow.

## **Drawdown Provisions**

The means should be provided to permit discharge from storage facilities at the maximum rate of flow which the downstream system can accommodate after storm runoff peak flows have passed and the flows from other contributing areas have decreased or ended. The rate of discharge to be provided for drawdown purposes is to be sufficient to restore availability of storage capacity of facilities sufficiently to accommodate subsequent runoff events within a reasonable time frame. To achieve this purpose, drawdown of facilities is to be possible at rates to satisfy the following relationship of available volume to the time from commencing drawdown with the facility at the design high level.

Time After Commencing Drawdown From Full	Available Volume Required Below Design Full
Level	Level
24 hours	Volume equivalent of 1 in 10 year run-off
72 hours	100% of total storage volume

### Submergence of Inlets and Outlets

Inlets and outlets are to be fully submerged, with the crown of the pipe at least 0.5 m below normal water level. Inlet and outlet pipe inverts are to be a minimum 0.1 m above the lake bottom.

#### Provision for Free Outfall from Inlets to Lakes

The invert elevation at the first manhole upstream from the lake in a minor system shall be at or above the normal water level of the lake to avoid deposition of sediments in the inlet pipe. To avoid backwater effects on the upstream sewers leading to the lake, the obvert of the inlet sewer at the first manhole upstream from the lake shall be at or above the lake level for the 1 in 5 year storm. A drop structure upstream from the lake will generally be required to achieve this. "Inlet" and "outlet" control calculations are required to verify the mode of operation of the lake inlets.

# Provisions for Lowering the Lake Level

The provision of the means to drain the lake completely by gravity drainage is desirable. The incorporation of this provision with the outlet control bypass should be considered. Where a gravity drain is not feasible, provisions are to be made in association with the outlet works or otherwise, so that mobile pumping equipment may be installed and used to drain the lake.

## Lake Edge Treatment

Edge treatment or shore protection is required and shall be compatible with the adjacent land use. The treatment used shall meet criteria for low maintenance, safety, and ease of access to the waters edge.

The edge treatment is to cover ground surfaces exposed or covered by water during a lake level fluctuation to 0.3 m below or above the normal water elevation, and shall be adequate to prevent erosion of the lake edge due to wave action. The typical acceptable edge treatment shall be, but is not limited to, a 250 mm deep layer of well graded washed rock with a 75 mm minimum size or vegetated strip consisting of hardy materials suitable for this application.

The proposal of variations to the edge treatment minimum is encouraged. The final selection of edge treatment being subject to the approval of the City.

#### DESIGN STANDARDS FOR DRY PONDS

#### **Outflow Control Works**

The outlet from a stormwater management storage system must incorporate appropriate means for control of outflow. In addition, the outlet works must include provisions for operational flexibility, and to address unintentional blockage of the outlet and the possible need to either stop outflow or increase the rate of outflow.

# **Drawdown Provisions**

The means should be provided to permit discharge from storage facilities at the maximum rate of flow which the downstream system can accommodate after storm runoff peak flows have passed and the flows from other contributing areas have decreased or ended. The rate of discharge to be provided for drawdown purposes is to be sufficient to restore availability of storage capacity of facilities sufficiently to accommodate subsequent runoff events within a reasonable time frame. To achieve this purpose, drawdown of facilities is to be possible at rates to satisfy the following relationship of available volume to the time from commencing drawdown with the facility at the design high level.

Time After Commencing Drawdown From Full	Available Volume Required Below Design Full
Level	Level
24 hours	Volume equivalent of 1 in 10 year run-off
72 hours	100% of total storage volume

## Frequency of Operation

All dry ponds shall be designed to temporarily detain excess runoff and thereby reduce the peak outflow rates to the connected downstream system. They shall not detain runoff for storms with post-development return periods of less than 2 years except where special provisions are made to facilitate clean up (i.e. paved bottom areas, etc.).

## Depth of Ponding

The maximum live storage limit in a dry pond is 3.0 m, as measured from the invert elevation of the outlet pipe.

## Dry Pond Bottom Grading and Drainage

The dry pond shall be graded to properly drain all areas after its operation. The dry pond bottom shall have a slope of 1.0% or greater. Sub-surface drains or similar means may be required where it is anticipated that these slopes will not properly drain the dry pond bottom, or where dictated by multiple use or other special considerations.

## Side Slopes

25% of the side slopes subject to inundation upon filling of the dry pond shall have a maximum slope of 5 (horizontal) to 1 (vertical). An alternate method of egress (eg stairs) may be required in steep areas.

## Safety Provisions at Inlets and Outlets

All inlet and outlet structures associated with dry ponds shall have grates provided over their openings to restrict access and prevent entry into sewers by children or other persons. A maximum clear bar spacing of 0.15 m shall be used for gratings.

Grated outlet structures are to be designed with a hydraulic capacity of at least twice the required capacity to allow for possible plugging. Further, the arrangement of the structures and the location of the grating shall be such that the velocity of the flow passing through the grating will not exceed 1.0 m/s. Appropriate fencing and guard-rails are to be provided to restrict access and reduce the hazard presented by the structure headwalls and wingwalls.

## Other Considerations

An on-stream dry pond may be constructed upstream of a road crossing as long as geotechnical evaluations conclude that construction is appropriate. Facilities must be constructed to allow overtopping without causing undue erosion or damage. All facilities on fish bearing streams shall be designed to pass fish.

## DESIGN STANDARDS FOR INFILTRATION BASINS

## Outlet Design

Infiltration basins do not have a formal outlet structure. As such, the storage volume must be based upon the complete runoff generated by the 1:100 year storm with no provision for outlet during the event, plus a 50% safety factor.

## Depth of Ponding

The maximum live storage limit in a basin is 3.0 m.

## Side Slopes

Side slopes subject to inundation upon filling of the basin shall have a maximum slope of 5 (horizontal) to 1 (vertical).

# Safety Provisions at Inlets

All inlet structures associated with infiltration basins shall have grates provided over their openings to restrict access and prevent entry into sewers by children or other persons. A maximum clear bar spacing of 0.15 m shall be used for gratings.

Appropriate fencing and guard-rails are to be provided to restrict access and reduce the hazard presented by the structure headwalls and wingwalls.

# **Other Considerations**

- (a) A detailed hydrogeological investigation must be conducted to support the proposed infiltration basin. The investigation must assess impacts to upstream and downstream properties and identify measures to alleviate impacts, if necessary.
- (b) To address the issue of sediment plugging during development in the catchment area, the basin is to be constructed to 90% of its ultimate depth and volume. When development in the catchment reaches 90%, the infiltration basin is to be completed.

#### 3.5 EROSION AND SEDIMENTATION CONTROL

All proposed projects must provide erosion and sedimentation controls to prevent the displacement of soil and the transport of sediment from the project site resulting from land-disturbing activities. To prevent the displacement of soil and the sediment transport during land-disturbing activities, Erosion and Sedimentation Control (ESC) measures are required and shall be performed as described below. Both temporary and permanent erosion and sedimentation controls shall be implemented.

The objective of erosion and sedimentation control is to prevent the displacement of soil and the transport of sediment to streams, wetlands, lakes, drainage systems, and adjacent properties. Erosion on construction sites can result in excessive sediment transport to adjacent properties and to surface waters. Sediment transport can result in adverse impacts such as flooding due to obstructed drainage systems, smothering of aquatic habitat and the creation of algal blooms in lakes, among others.

#### **ESC**

The following ESC documents detail methods of control:

- Best Management Practices for Erosion & Sediment Control Upland Works, City of Kelowna (1998)
- Land Development Guidelines for the Protection of Aquatic Habitat, Department of Fisheries and Oceans and the BC Ministry of Environment (1992)

In general, erosion and sedimentation controls shall address the following:

Clearing Limits: Prior to any site clearing or grading, areas to remain undisturbed during project construction shall be delineated and marked on-site by flagging or other method. At a minimum, clearing limit delineation shall be installed at the edges of all sensitive area buffers.

Retain existing vegetation, as much as possible.

Cover Measures: Temporary and permanent cover measures shall be provided when necessary to protect disturbed areas as detailed in the ESC Documents. Temporary cover shall be installed if an area is to remain unworked for more than seven days, unless otherwise determined by the City. Any area to remain unworked for more than 30 days shall be seeded or sodded, unless the City determines that winter weather makes vegetation establishment infeasible. Slopes and stockpiles 3H:1V or steeper and with more than 3 metres of vertical relief shall be covered if they are to remain unworked for more than 12 hours. The intent of these measures is to have as much area as possible covered during any period of precipitation.

Perimeter Protection: Perimeter protection to contain sediment from sheet flow shall be provided downslope of all disturbed areas when necessary as detailed in the ESC Documents. Such protection shall be installed prior to upslope grading. Perimeter protection includes the use of vegetated strips, as well as more conventional constructed measures such as silt fences.

Traffic Area Stabilization: Unsurfaced entrances, roads, and parking areas used by construction traffic shall be stabilized to minimize erosion and tracking of sediment offsite as detailed in the ESC Documents.

Sediment Retention: Surface water collected from disturbed areas of the site shall be routed through a sediment pond or trap prior to release from the site as detailed in the ESC Documents, except areas at the perimeter of the site small enough to be treated solely with perimeter protection. Sediment retention facilities shall be installed prior to grading of any contributing area.

Surface Water Controls: Surface water controls shall be installed to intercept and convey all surface water from disturbed areas to a sediment pond or trap and discharge it downslope of any disturbed areas as detailed in the ESC Documents, except areas at the perimeter of the site small enough to be treated solely with perimeter protection. Significant sources of upslope surface water that drain onto disturbed areas shall be intercepted and conveyed to a stabilized discharge point downslope of the disturbed areas.

# Implementation requirements

#### ESC Plan

All proposed projects must submit a plan for providing ESC measures as specified in City Policy 265. All ESC measures shall conform to the details and specifications in the ESC documents unless an alternative is approved by the City.

Construction within Sensitive Areas and Buffers

Any construction that will result in disturbed areas on or within a stream or associated buffer, within a wetland or associated buffer, or within 15 metres of a lake shall be subject to the Best Management Practices for Erosion & Sediment Control - In-stream Works (1998). These provisions include phasing the project whenever possible so that construction in these areas is limited to the dry season.

## Maintenance

All ESC measures shall be maintained as per the Erosion and Sedimentation Control Plans. The consulting engineer shall be responsible for maintenance and review of ESC and for compliance with all conditions relating to ESC.

# Final Stabilization

Prior to obtaining total performance, the site shall be stabilized and the structural ESC measures (such as silt fences and sediment traps) shall be removed and drainage facilities cleaned as specified.

TABLE 1

Rational Method "C" Coefficients for Design

Descri	ption of Area	Minor Storm	Major Storm
Commercial		0.85	0.90
Residential	Single-Family areas Multi-units, detached Multi-units, attached	0.40 0.50 0.60	0.50 0.60 0.70
Apartments		0.75	0.80
Industrial		0.75	0.80
Parks		0.20	0.25
Natural Areas		*	*
Streets	Asphaltic Concrete	0.85 0.85	0.95 0.95
Drives and walks		0.80	0.90
Roofs		0.80	0.90

<sup>\* -</sup> to be determined by site specific conditions

# BL10640 replaced Table 2:

TABLE 2
IDF CURVE VALUES for 1 HOUR STORM

Kel	owna Airport					
	2 yr	5 yr	10 yr	25 yr	50 yr	100 yr
a=	8.8	12.2	14.4	17.2	19.3	21.3
b=	0.685	0.723	0.738	0.753	0.761	0.767

STORM INTENSITY (mm/hr)

	STORM									
T (min)	2	5	10	25	50	100				
5						143				
6						125				
7					99	111				
8				78	89	100				
9			58	72	82	91				
10	30	45	54	66	75	84				
11	28	42	50	62	70	78				
12	27	39	47	58	66	73				
13	25	37	45	54	62	69				
14	24	35	42	51	58	65				
15	23	33	40	49	55	62				
16	22	32	38	47	53	59				
17	21	30	37	44	50	56				
18	20	29	35	43	48	54				
19	19	28	34	41	46	51				
20	19	27	32	39	45	49				
21	18	26	31	38	43	48				
22	17	25	30	37	41	46				
23	17	24	29	35	40	44				
24	16	24	28	34	39	43				
25	16	23	27	33	38	42				
26	16	22	27	32	36	40				
27	15	22	26	31	35	39				
28	15	21	25	31	34	38				
29	14	21	25	30	34	37				
30	14	20	24	29	33	36				
35	13	18	21	26	29	32				
40	12	16	19	23	26	29				
45	11	15	18	21	24	27				
50	10	14	16	20	22	24				
55	9	13	15	18	21	23				
60	9	12	14	17	19	21				

Based on 2004 Airport IDF values

# SCHEDULE 4 DRAINAGE, TABLE 3 - HYETOGRAPHS

	Rainfal	l Depth	าร				
Duration	Duration	2 yr	5 yr	10 yr	25 yr	50 yr	100 yr
1.00	60	8.8	12.2	14.4	17.2	19.3	21.3
3.00	180	12.4	16.5	19.2	22.6	25.1	27.5
6.00	360	15.5	20.0	23.0	26.8	29.6	32.3
12.00	720	19.2	24.3	27.6	31.8	35.0	38.0
24.00	1440	23.9	29.4	33.1	37.7	41.3	44.7

Ke	lowna Ai	rport				
	2 yr	5 yr	10 yr	25 yr	50 yr	100 yr
a=	8.8	12.2	14.4	17.2	19.3	21.3
b=	0.685	0.723	0.738	0.753	0.761	0.767

	t<= 6 hr	t> 6 hr		2 year				5 year				10 year					
Time	Dist	Dist	1 hr	3 hr	6 hr	12 hr	24 hr	1 hr	3 hr	6 hr	12 hr	24 hr	1 hr	3 hr	6 hr	12 hr	24 hr
0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.08	0.08	0.08	0.7	1.0	1.2	1.5	1.9	1.0	1.3	1.6	1.9	2.4	1.2	1.5	1.8	2.2	2.6
0.17	0.10	0.09	0.9	1.2	1.5	1.7	2.2	1.2	1.7	2.0	2.2	2.6	1.4	1.9	2.3	2.5	3.0
0.25	0.19	0.10	1.7	2.4	2.9	1.9	2.4	2.3	3.1	3.8	2.4	2.9	2.7	3.6	4.4	2.8	3.3
0.33	0.20	0.10	1.8	2.5	3.1	1.9	2.4	2.4	3.3	4.0	2.4	2.9	2.9	3.8	4.6	2.8	3.3
0.42	0.09	0.10	0.8	1.1	1.4	1.9	2.4	1.1	1.5	1.8	2.4	2.9	1.3	1.7	2.1	2.8	3.3
0.50	0.08	0.11	0.7	1.0	1.2	2.1	2.6	1.0	1.3	1.6	2.7	3.2	1.2	1.5	1.8	3.0	3.6
0.58	0.07	0.11	0.6	0.9	1.1	2.1	2.6	0.9	1.2	1.4	2.7	3.2	1.0	1.3	1.6	3.0	3.6
0.67	0.06	0.11	0.5	0.7	0.9	2.1	2.6	0.7	1.0	1.2	2.7	3.2	0.9	1.2	1.4	3.0	3.6
0.75	0.05	0.08	0.4	0.6	0.8	1.5	1.9	0.6	0.8	1.0	1.9	2.4	0.7	1.0	1.2	2.2	2.6
0.83	0.04	0.07	0.4	0.5	0.6	1.3	1.7	0.5	0.7	0.8	1.7	2.1	0.6	0.8	0.9	1.9	2.3
0.92	0.03	0.03	0.3	0.4	0.5	0.6	0.7	0.4	0.5	0.6	0.7	0.9	0.4	0.6	0.7	0.8	1.0
1.00	0.01	0.02	0.1	0.1	0.2	0.4	0.5	0.1	0.2	0.2	0.5	0.6	0.1	0.2	0.2	0.6	0.7

	t<= 6 hr	t> 6 hr		25 year						50 yea	ır			10	00 year		
Time	Dist	Dist	1 hr	3 hr	6 hr	12 hr	24 hr	1 hr	3 hr	6 hr	12 hr	24 hr	1 hr	3 hr	6 hr	12 hr	24 hr
0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.08	0.08	0.08	1.4	1.8	2.1	2.5	3.0	1.5	2.0	2.4	2.8	3.3	1.7	2.2	2.6	3.0	3.6
0.17	0.10	0.09	1.7	2.3	2.7	2.9	3.4	1.9	2.5	3.0	3.1	3.7	2.1	2.8	3.2	3.4	4.0
0.25	0.19	0.10	3.3	4.3	5.1	3.2	3.8	3.7	4.8	5.6	3.5	4.1	4.0	5.2	6.1	3.8	4.5
0.33	0.20	0.10	3.4	4.5	5.4	3.2	3.8	3.9	5.0	5.9	3.5	4.1	4.3	5.5	6.5	3.8	4.5
0.42	0.09	0.10	1.5	2.0	2.4	3.2	3.8	1.7	2.3	2.7	3.5	4.1	1.9	2.5	2.9	3.8	4.5
0.50	0.08	0.11	1.4	1.8	2.1	3.5	4.1	1.5	2.0	2.4	3.8	4.5	1.7	2.2	2.6	4.2	4.9
0.58	0.07	0.11	1.2	1.6	1.9	3.5	4.1	1.4	1.8	2.1	3.8	4.5	1.5	1.9	2.3	4.2	4.9
0.67	0.06	0.11	1.0	1.4	1.6	3.5	4.1	1.2	1.5	1.8	3.8	4.5	1.3	1.7	1.9	4.2	4.9
0.75	0.05	0.08	0.9	1.1	1.3	2.5	3.0	1.0	1.3	1.5	2.8	3.3	1.1	1.4	1.6	3.0	3.6
0.83	0.04	0.07	0.7	0.9	1.1	2.2	2.6	8.0	1.0	1.2	2.4	2.9	0.9	1.1	1.3	2.7	3.1
0.92	0.03	0.03	0.5	0.7	0.8	1.0	1.1	0.6	0.8	0.9	1.0	1.2	0.6	0.8	1.0	1.1	1.3
1.00	0.01	0.02	0.2	0.2	0.3	0.6	0.8	0.2	0.3	0.3	0.7	8.0	0.2	0.3	0.3	0.8	0.9

#### 4. HIGHWAY

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4.1	l 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

#### LIST OF TABLES

<u>NO</u> .	<u>TITLE</u>	<u>PAGE</u>
Table 1	Roadway Classification	3
Table 2	Geometric Standards	5
Table 3	Asphalt Depth vs. Design Traffic	9
Table 4	Base Quality Requirements	
Table 5	Minimum Standard Pavement Structures	
Table 6	Benkleman Beam Criteria for Overlays	

#### 4. Highway

#### 4.1 General

Developments may require Frontage Roads, double Frontage lots, deep lots with rear service Lanes, or such other treatment as may be necessary in the public interest for the adequate protection of residential properties and to afford separation of through and local traffic.

In reviewing engineering plans, the Approving Officer or Building Inspector must consider the sufficiency and suitability of the proposed Road system, the arrangement, width, grade and location of all Roads in relation to existing and planned Roads, to topographical features, to public convenience and safety, and to the proposed uses of the land to be served by such Roads.

The arrangement of Highways in a Subdivision must either:

- (a) provide for the continuation or appropriate projection of existing Roads in surrounding areas; or
- (b) where topographic or other conditions make continuation or projection of existing Roads impractical, provide an adequate and suitable Highway system having regard to the uses of the land to be served.

The dimensions, locations and standard of all Roads in a proposed Subdivision must conform substantially to any applicable community plan.

Local residential Roads must be aligned so that their use by through traffic will be discouraged.

Cul-de-sac Roads, designed to be permanent, must be provided at the closed end with an area designed to permit safe and adequate space for the turning of motor vehicles.

Walkways must be provided where they are deemed desirable to provide access through the Subdivision to schools, playgrounds, shopping centres, transit, beaches and other community facilities or for proper circulation of pedestrian traffic.

Jogs in Highway alignment at intersections may be allowed provided that the distance between centre lines is sufficient to maintain traffic safety.

Intersections are to be designed and located within a range of angles between 70° and 110°.

In the design of all street intersections, including those with lanes and walkways, the Consulting Engineer must give consideration to providing adequate sight and stopping distances for conflicting traffic streams involving pedestrians, bicycles and/or vehicles. The City of Kelowna Traffic Regulation Bylaw No. 8120 prohibits sight obstruction greater than 1 m in height within 8 m of intersections.

If reversed curves are required in a Highway alignment, the City Engineer may require that they be separated by means of tangents of sufficient length.

Where angular deflections occur in a Highway alignment, the City Engineer may require that the angle be replaced by a curve of suitable radius.

Road name signs and traffic signs required as a result of constructing or improving Roads must be provided by the City of Kelowna at the expense of the Owner.

Transit bays must be provided where required by the City Engineer.

#### 4.2 Road Classification

The roadway classification applicable to the Road under consideration will be determined from Table 1. Where topographical or other conditions make continuation or projection of an existing street impractical, the City Engineer will review the Developer's proposal and may approve the alternative.

NOTE: All vertical and horizontal alignment elements will be designed utilizing information from Tables 1 and 2 and in accordance with:

1. Transportation Association of Canada - Geometric Design Guide for Canadian Roads, 1999 Edition

**TABLE 1 - ROADWAY CLASSIFICATION** 

Road Class/R.O.W. Improvements	Road Allowance Width (min.)	Surface Width (min.)	Curb Type	Standard (Dwg. No.)
<u>LANES</u>				
Residential and Emergency and Private Access Roads	6.0	6.0	N/A	SS-R2
Commercial	7.6	7.6	N/A	SS-R2
LOCAL STREET				
Class -1, 2 Lane - ULU - RLU	18 18	10.3 7.0	Rollover N/A	SS-R3 SS-R3
Class -2, 2 Lane - ULU - RLU	15 15	9.1 7.0	Rollover N/A	SS-R4 SS-R4
COLLECTOR STREETS				
Class -1, 2 Lane - UCU RCU -	20 20	13.1 10.0	Barrier N/A	SS-R5
Class -1, 2 Lane - UCU - with Bike Lanes - RCU - with Bike Lanes	22 22	14.5 10.0	Barrier N/A	SS-R6
Class -2, 2 Lane - UCU RCU -	18 18	11.3 10.0	Rollover N/A	SS-R7
ARTERIAL STREETS				
Class -1, 4 (6) Lane - UAD - Parkway	35	21.5	Barrier	SS-R8
Class -1, 4 Lane (Ult.) - UAD - Parkway Class -1, 2 Lane (Stage I) -UAD - Parkway	30 30	21.5 21.5	Barrier Barrier	SS-R9
Class -1, 2(4) Lane - RAD -	30	20.6	N/A	SS-R10
Class -2, 4 Lane - UAD- Residential	30	20.9	Barrier	SS-R11
Class -2, 3 Lane (one way) -UAU - Residential	20	12.3	Barrier	SS-R12
Class -2, 2 Lane - RAU - Residential	20	10.3	N/A	SS-R13
Class -3, 4 Lane - UAU - TwnCntre	28	20.9	Barrier	SS-R14
Class -3, 3 Lane (one way) - UAU - TwnCntre	25	17.7	Barrier	SS-R15

# Note the following definitions:

ULU	-	Urban/Local/Undivided	RCU-	Rural/Collector/Undivided
RLU	-	Rural/Local/Undivided	UAU	<ul> <li>Urban/Arterial/Undivided</li> </ul>
UCU	-	Urban/Collector/Undivided	UAD	<ul> <li>Urban/Arterial/Divided</li> </ul>
RAU	-	Rural/Arterial/Undivided	RAD-	Rural/Arterial/Divided

Surface Width

on urban section, this measures from back of curb to back of curbon rural section, it measures from the edge of asphalt to edge of asphalt.

# 4.3 Vertical Alignment

The vertical alignment of roads must be set so the grades of driveway to adjacent properties will conform to MMCD Drawing C7. Where it is impractical to meet this criteria, the City Engineer may approve the use of private access roads.

The minimum and maximum road centreline grades allowed on various classes of roads must be as per Table 2.

TABLE 2
GEOMETRIC STANDARDS

Facility Classification	Design Speed (km/h)	% Super. Elevation	Radius (metres)	% Grade		K-Value		Sight Distance		
	(min.)	(max.)	(min.)				(min.)		(m	in.)
				Min.	Max.	Crest	Sá	ag	Stopping (metres)	Decision (metres)
						-	No Illum.	Illum.		
Walkway				1.0	15					
Emergency Access	30			1.0	15					
Driveway Single Fam.				1.0	15					
Driveway Multi-Fam.	30			1.0	12					
Rear Laneway	40	*I.C.	18	1.0	12	4	7	4	45	
See Notes Below					(10)					110 - 160
Local Roadway	50	*N.C.	100	0.5	12	7	11	6	65	
See Notes Below					(10)					140 - 190
Collector Roadway	50	6	115	0.5	10	7	11	6	65	
See Notes Below		(4)	(500)		(8)					140 - 190
Arterial Roadway	70	6	190	0.5	8	22	25	15	110	
See Notes Below		(4)	(1,000)		(6)					200 - 270

Notes: 6% super-elevation only permitted on collector roads in segments without intersecting roads or private access.

Notes: Through roads at an intersection are governed by the numbers shown in brackets, with the reduced grades on each side of the intersection for a distance equivalent to the "stopping sight distance".

<sup>\*</sup>Inverted Crowns (I.C.) and Normal Crowns (N.C.) shall be built with 2% crossfall.

At road intersections, the minor road and/or cul-de-sac must be constructed with an approach grade of not greater than 3% for a distance of not less than 15 m from the adjacent edge of asphalt of the major road.

The draining grade around the outside curb of a cul-de-sac must be not less than 0.50% and not greater than 5.00%. Longitudinal gradients of cul-de-sac bulbs shall not exceed 5.00%.

When a cul-de-sac is at the bottom of a hill, the longitudinal gradient of the first 50m of roadway uphill from the cul-de-sac bulb shall not exceed 5.00%. The maximum longitudinal gradient for the rest of the hill shall not exceed 8.00%.

When a cul-de-sac is at the top of a hill, the longitudinal gradient for the roadway downhill from the cul-de-sac must not exceed 12.00%.

All changes in gradient over 1.00% on arterial and collector Roads and over 2.00% on all other road classifications must be connected by vertical curves. Vertical curves must be designed in accordance with the latest edition of the Geometric Design Guide for Canadian Roads as published by the Transportation Association of Canada.

Standard cross slopes (normal crown) must be 2.00% on all road classifications unless specified otherwise by the City Engineer. Design road elevations must give due consideration to flood-proofing requirements of adjacent properties. Full road crossfall (reverse crown) may be considered in special circumstances, as a means of more closely matching property grade adversity on either side of the highway.

The length of a transition from a normal cross-sectioned road to a section of road where there is superelevation or crossfall must, in no case, be less than 70 m for a 50 kmh designed road or 110 m for a 70 kmh designed road. In selecting the length of the transition, care and consideration must be given to draining all of the pavement. Typically, if no horizontal spiral curve is used, 60% of the super-elevation is introduced prior to the beginning of the curve, and the balance is developed in the curve.

Gutter elevations on curb returns and cul-de-sacs must be shown on the drawings at the beginning, one-quarter points and end of curb returns and at 7.50 m intervals around cul-de-sacs.

#### 4.4 Horizontal Alignment

The horizontal centreline alignment of the road will be located on the centreline of the right-of-way, unless approved otherwise by the City Engineer. Typical locations of works and utilities in Roads are shown on Standard Drawings.

Centreline chainage stations must be fully referenced and dimensioned from property lines.

Minimum radius of curve and maximum super-elevation normally allowed are shown in Table 2 (Geometric Standards). The Minimum radius of curb return at intersections must be 7.50 m. Transitions in road widths, tapers, etc., must be formed with smooth curves and tangents, including no less than 30:1 for 50 km/h design speeds and preferably 40:1 tapers.

A horizontal curve must be fully described showing internal angle, radius, tangent length and arc.

Curb returns located on roads within industrial and commercial districts may require a larger radius to facilitate truck traffic and bus traffic, and will be as specified by the City Engineer.

When a new road with curbs intersects an existing road without curbs, only half the curb returns must be constructed unless the road design for the uncurbed road is available and will allow construction of the full curb returns. Full curb returns must be constructed at the intersection of two curbed roads.

A turn-around or a second point of access is required on roads longer than 100 m. The maximum length of a permanent cul-de-sac shall be 200 m. Where it is part of a temporary and/or staged development, this maximum length may be 400 m. Cul-de-sac lengths greater than 200 m may be considered by the Approving Officer.

#### 4.5 Road Cross-Section

The standard Road cross-section shall be as detailed in Table 1.

Note that the objectives of the standard road cross-sections as detailed in Table 1 and the Standard Drawings are the clear and intended goals on all roadways within the City of Kelowna. It is recognized, however, that ambient conditions may require variance from these standards in existing and substantially "built-up" areas, where provisions to accommodate the required roadway modification may not have been anticipated. A variance to these standards may be considered by the City Engineer.

#### 4.6 Curb and Gutter, Sidewalks and Bike Lanes

The standards for curbs, gutters, sidewalks and bike lanes shall be as detailed in Table 1 and in the MMCD standard drawings and City of Kelowna supplemental drawings to the MMCD.

Each property shall only have one (1) driveway access per road frontage. Upon demonstrated need and approval from the City Engineer, more than one (1) driveway access may be granted to service stations, major commercial and other developments. Where a lot abuts a lane or road of different classification, the driveway shall be located to access the lane or road of the lower classification.

Residential driveway access onto an arterial or Class 1 collector road, is not permitted unless alternate access is impossible. Wherever physically possible, alternate local road or lane access shall be dedicated to preclude residential driveways accessing directly onto major roads.

Residential driveway accesses serving corner lots shall be a minimum of 7 m from the lot corner nearest the intersection. All residential driveway accesses shall have a minimum width of 4 m and a maximum width of 6 m.

Driveway accesses to commercial and industrial corner lots shall be a minimum of 15 m from the property line of the adjoining road. The maximum width of a driveway to a commercial or industrial property having only one access shall be 11 m. The maximum width of each driveway to a commercial or industrial property having more than one access shall be 9 m.

At the discretion of the City Engineer, access to large parking areas shall be by curb returns rather than a driveway letdown. The City Engineer may require deceleration and acceleration lanes for access off major roads for safety reasons and to minimize disruption to traffic flows. Design of such access shall follow the recommendations in the Ministry of Transportation & Highways, Highway Engineering Branch "Design Manual".

Wheelchair ramps must be provided at all intersections as an integral part of the sidewalk.

#### 4.7 Appurtenances

All proposed traffic islands, retaining walls, guard-rails, and permanent barricades must be designed in keeping with good engineering practices.

Traffic control devices shall be designed and installed in accordance with applicable and current City of Kelowna requirements.

For all utility poles and tie-downs which require re-locating prior to road construction, the utility must confirm the feasibility of their re-location prior to design completion.

#### 4.8 Pavement Structure

#### 4.8.1 Subgrade Preparation

Subgrade preparation shall be considered integral for construction of new roads.

Frost Susceptible Soils (ML):

The susceptibility of soils to frost heave is commonly classified using the US Corp of Army Engineers four categories, as shown in Table 15.2 of the "Canadian Foundation Engineering Manual", 3rd edition, 1992. All geotechnical reports shall address the frost susceptibility of the subgrade soil.

Swelling Soils (CH):

Pockets of soils known to change volume with variation of moisture content are known to exist in several locations within the limits of the City of Kelowna. These soils are typically identified as high plastic clays (CH) using the Unified Soil Classification System and Atterberg Limits index test (ASTM D4318). Where these soils are encountered as subgrade, special subgrade preparation considerations are required, as outlined below.

Scarification should render the subgrade to cohesive pieces of a maximum size of 20 mm to allow adequate moisture conditioning of the soil. The soil should be moisture conditioned to achieve a homogeneous moisture content between 0 and 3% over optimum. Following moisture conditioning, the subgrade soil should be compacted to a minimum of 95% of Modified Proctor density, as determined by ASTM D1557. The subgrade should be covered with granular sub-base as soon as practical to minimize the variation of the moisture content in the subgrade. The contractor should be aware that additional moisture condition and compaction may be required, at the contractor's expense, should the moisture content be allowed to vary significantly from optimum prior to placing the sub-base.

#### 4.8.2 New Pavement Design

Designers of pavement structures shall consider four primary factors in undertaking a specific design. These are:

Subgrade support quality (geotechnical report)

Design life (20 years)
Traffic loading (expressed in ESALs)
Climate

New pavement structures shall be designed in accordance with the methodologies presented in "AASHTO Guide for Design of Pavement Structures", 1993. The pavement structure shall be designed for a twenty (20) year design life.

The AASHTO design method is based on a Structural Number (SN) for the entire pavement structure (i.e. hot mix asphalt, granular base and granular sub-base). The method incorporates the subgrade strength expressed as the Subgrade Resilient Modulus (Mr), and design loading (ESALs). Each component of the pavement structure is assigned a layer coefficient.

Subgrade strength is frequently characterized utilizing the California Bearing Ratio (CBR) test procedure (ASTM D1883). This test should be performed on soaked subgrade soil specimens compacted to 95% of Modified Proctor density as determined by ASTM D1557. The Resilient Modulus may be approximated from the soaked CBR test values using the following relationships:

$$Mr (MPa) = 10.3 CBR, or Mr (psi) = 1500 CBR$$

The soaked CBR properties of subgrade soil should be determined at a frequency of at least one test per every 150 lineal metres, or a portion there of, and for each major soil type encountered. Where more than one test is required, the tests should be evenly spaced.

The required SN for the pavement structure is the sum of the product of the layer coefficient, the component thickness, and a drainage coefficient for each component:

eq'n (1) 
$$SN = a_{ac}D_{ac} + a_bD_bM_b + a_{sb}D_{sb}M_{sb}$$

where:

SN = Structural Number for pavement structure

a<sub>ac</sub> = layer coefficient for hot mix asphalt (0.4)

a<sub>b</sub> = layer coefficient for granular base (0.14)

a<sub>sb</sub> = layer coefficient for granular sub-base (0.10)

D<sub>ac</sub> = Thickness of hot mix asphalt (mm)

D<sub>b</sub> = Thickness of granular base (mm)

D<sub>sb</sub> = Thickness of granular sub-base (mm)

M<sub>b</sub> & M<sub>sb</sub> = layer drainage coefficient (1.0 for Kelowna)

Road classifications, design traffic values and minimum depths of hot mix asphalt and granular base components of the total pavement structure are defined in Table 3.

Table 3
Minimum Asphalt & Granular Base Depth vs Design Traffic

Road Classification Design Traffic (ESALs) (1)		Minimum Depth of	Minimum Depth of	
		Hot Mix Asphalt	Granular Base	

Walkways	n/a	50	75
Local, Lanes & Access	2.8 x 10 <sup>4</sup> (28,000)	50	75
Roads			
Collector	2.8 x 10 <sup>5</sup> (280,000)	100	75
Arterial <sup>(2)</sup>	1.0 x 10 <sup>6</sup> (1,000,000)	100	75

#### Notes:

- (1) See Part 1 Chapter 1 of AASHTO for definition of an Equivalent Single Axle Load (ESAL).
- (2) Special design reviews may be requested by the City Engineer.

Standard pavement structures, including required SN values, are provided on Table 4 for three strengths of subgrade. The standard pavement structures incorporate the minimum depths of hot mix asphalt and granular base shown in Table 3.

Table 4
Standard Pavement Structures

Street	Structure Component	Component Thickness in mm for Soaked CBR (1) of		
Classification		3.0 <sup>(4)</sup> <cbr≤5< td=""><td>5.0<cbr≤10< td=""><td>CBR&gt;10</td></cbr≤10<></td></cbr≤5<>	5.0 <cbr≤10< td=""><td>CBR&gt;10</td></cbr≤10<>	CBR>10
Walkways	Asphalt - Surface Course	50	50	50
	Granular Base	75	75	75
	Granular Sub-base (3)	150	150	150
	Required SN Value	n/a	n/a	n/a
Local, Lanes &	Asphalt - Surface Course	50	50	50
Access Roads	Granular Base	75	75	110 <sup>(2)</sup>
	Granular Sub-base (3)	275	165	0
	Required SN Value	58	47	35
Collector	Asphalt - Surface Course	40	40	40
	Asphalt - Base Course	60	60	60
	Granular Base	75	75	100 (2)
	Granular Sub-base	335	185 <sup>(3)</sup>	0
	Required SN Value	84	69	53
Arterial	Asphalt - Surface Course	40	40	40
	Asphalt - Base Course	60	60	60
	Granular Base	75	75	75
	Granular Sub-base	535	355	155 <sup>(3)</sup>
	Required SN Value	104	86	66

#### Notes:

- (1) Soaked CBR value shall be at 95% of Modified Proctor maximum dry density and optimum moisture content, as determined by ASTM D1557.
- (2) Placement of equivalent sub-base layer is not practical and shall be replaced with additional granular base.
- (3) Maximum aggregate size of sub-base material to be no more than 50% of total depth of sub-base.
- (4) Where the top 1 m of subgrade has a soaked CBR value of less than 3, then the subgrade strength should be supplemented with an additional thickness of granular subbase material in order to achieve a soaked CBR value of 3 or greater. The thickness of the supplemental sub-base and the corresponding composite CBR value for the top 1 m of composite subgrade can be determined by the following formula:

CBR Composite = 
$$((t_{ssb} \times CBR_{ssb}^{0.33} + (100-t_{ssb}) \times CBR_{sg}^{0.33})/100)^3$$

Where CBR Composite is 3 or greater.

 $t_{ssb}$  = thickness of supplemental sub-base (cm).

CBR<sub>ssb</sub> = CBR value of supplemental sub-base.

 $CBR_{sg} = CBR$  value of subgrade soil.

Design pavement structure to be placed on a prepared subgrade or adequately compacted fill embankment. Refer to Section 4.8.1 and 02226 of the MMCD.

Granular base and granular sub-base to have a minimum soaked CBR value of 80 and 20, respectively (refer to City Supplemental S02226).

For design purposes, the maximum subgrade soaked CBR value shall not exceed 10.

Required physical properties for granular base and granular sub-base are given in Schedule 5, Section S02226.

Staged construction may be considered by the City Engineer when a road is to be constructed and to be widened at a later date.

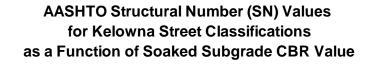
Table 4 provides standard pavement structures for roads constructed on only three strengths of subgrade. Alternate pavement structures may be designed based on the SN determined using Figure 1. For example, for a Collector Road with soaked subgrade CBR value of 4, then the corresponding pavement structure requires a SN of 75. Using eq'n (1), and the specified layer coefficients, a suitable pavement structure alternative may be determined as shown on Table 5:

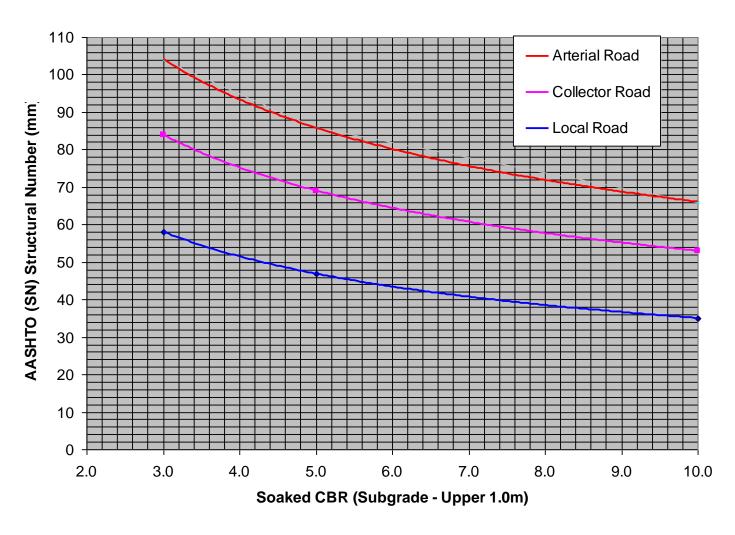
Table 5
Example Pavement Structure

Pavement Structure Component	Thickness, D (mm)	Layer Coefficient, a	SN
Hot Mix Asphalt	100	0.40	40
Granular Base	100	0.14	14
Granular Sub-base	210	0.10	21
Total SN			75

Note that the minimum depths of hot mix asphalt and granular base shown on Table 3, and the required SN have been met.

The curves shown on Figure 1 are derived from the methodologies presented in AASHTO. A description of all variables used to derive the curves is presented in the MoT Technical Circular T - 9/95, "Pavement Design Standards".





# 4.8.3 Design of Overlays for Existing Pavements

Overlay designs for existing pavements are to be performed in accordance with "Technical Publication No. 12" published by the Roads & Transportation Association of Canada. The design criteria for overlays are based on limiting Benkelman Beam deflections as follows in Table 6:

Table 6
Benkelman Beam Criteria for Overlays

Road Classification	Maximum Deflection (mm)		
Arterial Roads	1.00		
Collector Roads	1.25		
All Other Road Classifications	1.50		

#### Notes:

- (1) The design Benkelman Beam rebound  $(x + 2\sigma)$  should be determined on the basis of at least 10 uniformly spaced readings per two-lane kilometre (one half in each lane).
- (2) The summary rebound statistic for a pavement section should be seasonally adjusted to the spring peak rebound value.

#### 5. ELECTRICAL, STREET LIGHTING AND COMMUNICATION WIRING

#### BL10696 amended the following:

- 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

#### 5.1 General

The electrical systems must be installed at the Owner's expense, in accordance with the requirements of the appropriate utility company.

Where overhead distribution is permitted, pole and anchor locations must be approved by both the City Engineer and the appropriate utility company. Care must be taken to avoid aerial trespass.

Plans and agreements for rights of way for anchors, pad-mounted transformers, etc., must be provided and registered at the expense of the Owner.

#### 5.1.1 Rules and Regulations

Equipment, installation, wiring methods, and materials used must be in accordance with the Rules and Regulations for the Installation and maintenance of Electrical Equipment as issued by the Ministry of Transportation & Highways, Province of British Columbia. Work must also be in accordance with all applicable Municipal codes and regulations, Provincial statutes or regulations in effect at the site.

#### 5.1.2 Conduits

Conduits must be installed, as nearly as possible, at a constant depth and on the alignment shown on the Standard Drawings. Conduits under existing paved roads, driveways, or sidewalks must be installed by tunnelling unless the City Engineer gives his express written consent for open trenching prior to the commencement of the work.

#### 5.2 Electrical

Schedule 4 5. Electrical Page 2 of 3

Electrical systems must be provided to serve each lot within the Subdivision. The location of all facilities and structures must be in accordance with the engineering drawings as approved by the City Engineer, and must be clearly indicated on the plans.

# 5.3 Street Lighting

#### 5.3.1 Design Levels

(a) **Level of Illumination:** The "Maintained illuminance Uniformity Levels" as recommended by the Illumination Engineering Society (IES) shall be as follows:

TABLE 1

		Average Maintained	Illuminance
Road Classification	Area Classification	Illuminance in Lux	Uniformity Ratio
	Commercial	17	
Arterial	Intermediate	13	3 to 1
	Residential	9	
	Commercial	12	
Collector	Intermediate	9	4 to 1
	Residential	6	
	Commercial	9	
Local	Intermediate	7	6 to 1
	Residential	4	

#### (b) Roadway Classification:

Arterial: A Roadway that serves as a continuous route primarily for inter community through traffic.

Collector: A Roadway that performs the dual function for traffic of land access and traffic movement between arterial and local roads.

Local: A Roadway that provides direct land access and is not intended to carry through traffic.

#### (c) Area Classification:

Commercial: All areas that are zoned as Commercial. Examples are Roadways adjacent to shopping centres, central business districts, Village town centres, Motels and Hotels.

Schedule 4 5. Electrical Page 3 of 3

Intermediate: Areas that are zoned as High Density Multi-Family, Local Commercial, Industrial, and Public. Transportation area between commercial and residential areas of up to 500 m in length.

Residential: Areas that are zoned as Rural-Residential, and Single Family Residential to Medium Density Multi-Family Residential.

**Notes:** Lux is defined as illuminance and is expressed in lumens per square metres. Foot Candles has been the previous measurement term. For conversion purposes 1 Lux = .09 Foot Candle.

#### 5.3.2 Pole Locations

In general, the layout for pole installation must be as follows:

- (a) Divided Arterial Roadways:
- Four (4) Lane road width< 22 m staggered spacing.</li>
  - Six (6) Lane road width > 22 m. Treat each three Lane portion of divided Roadway as two separate roads. One sided or staggered spacing.
  - (b) Undivided Arterial Roadways two (2) to four (4) Lanes. Staggered spacing.
  - (c) Collector Roadways staggered spacing.
  - (d) Local Roadways staggered or one sided spacing.

Poles must be located within 0.6 m of the property corners where possible and must not conflict with driveways and underground utilities. Pole layout must be based from the intersections.

#### 5.4 Communication Wiring

The owner must make arrangements with the appropriate communication and cable T.V. company for installation of services in accordance with the requirements of these utilities.

Underground Telephone and Cable TV, where installed, must be sufficiently complete prior to construction of sidewalks, curbs and gutters and Street paving, to avoid damage to these improvements.

### 5.7 Overhead/Underground Requirements

The City's requirements for allowing overhead or underground wires is as follows:

Schedule 4 5. Electrical Page 4 of 3

- a) In all Town Center and Village Center areas as identified by the Official Community Plan all wires shall be buried and installed in conduits.
- b) All streets and highways that are created as a result of new development shall have all wires buried underground.
- c) Outside of these areas where existing overhead wires parallel the existing road the developer shall have the option to bury or to leave overhead the wires.
- d) On roadways identified in the City's 20 Year Servicing Plan for upgrade and urbanization, all service wires crossing the roadway must be buried.

#### BL10640 added a new sub-secion 5.6:

#### 5.6 Kiosks/Laminate Wrapping Requirements

All kiosks to be wrapped with anti graffiti vinyl wrapping. Wrap material shall be a cast vinyl then laminated with a high gloss laminate. The wrap is to be visually pleasing and compliment the area it would be situated in considering the landscape, geography, or general theme of the specific area. Artwork to have a high degree of contrast so as to be more impervious to graffiti vandalism and not to be for commercial advertising. All artwork to be approved before installation.

BL10481 added 6A: Landscape and Irrigation Water Conservation.

DESIGN STANDARDS

6. LANDSCAPE AND IRRIGATION

# 6A. LANDSCAPE AND IRRIGATION WATER CONSERVATION

	Genera
Application	
Qualifications	
Water Conservation Requirements and Report	
Landscape Design	
	Qualifications Water Conservation Requirements and Report

#### 6A.1 General

6A.2.2

# 6A.1.1 Application

For purposes of this bylaw, an automatic irrigation system means any outdoor watering device that includes a timeclock, connected valves opened by the timeclock, and underground distribution pipe to water outlets used for watering plant materials.

These landscape standards and specifications shall apply:

Irrigation Design

- (a) To all landscape areas within highway limits in the City of Kelowna including: medians, soft landscape areas between the curbs and the highway limits, and plantings in urban plaza and sidewalk areas.
- (b) To new construction and rehabilitated landscapes for City projects including all utilities and facilities for water, sanitary sewer, drainage, electrical and communication Works and Services infrastructure.
- ▶ The following exemptions to the requirements of Section 6 apply:
  - (a) Projects where the sum of all new or renovated landscape areas does not exceed 100 square metres in area are exempt from the requirement for landscape and irrigation plan and detail submittals set out in these requirements.
  - (b) Projects without an automatic irrigation system are exempt from the irrigation system design guidelines, but the landscape, grading and soil management requirements and related drawing submittals other than irrigation drawings still apply;

Landscape and irrigation shall be designed, installed and operated to meet the requirements of the City of Kelowna Water Regulation Bylaw No. 10480, including the requirement to not exceed the Landscape Water Budget for landscape areas of the project and to calculate the Estimated Landscape Water Use.

The standards specified herein reflect the City's minimum expectations and are intended for most applications. These standards may be enhanced or revised by the City or the Owner at the discretion of the City Engineer where the Works and Services are intended for large, complex, unusual and innovative applications and provided they meet the intent and objectives of the requirements herein.

#### 6A.1.2 Qualifications

The Owner, at their expense, shall retain as a Qualified Professional a Landscape Architect registered with the British Columbia Society of Landscape Architects (BCSLA) to design, inspect and certify all landscape Works and Services covered by this section.

The Owner, at their expense, shall retain as a Qualified Professional a Certified Irrigation Designer registered with the Irrigation Industry Association of British Columbia (IIABC) to design, inspect and certify all irrigation Works and Services covered by this section.

With proper qualifications from both BCSLA and IIABC, one individual may serve as both the Landscape Architect and Certified Irrigation Designer.

For the Works and Services covered by this section the Landscape Architect(s) and/or Certified Irrigation Designer(s) shall have the powers and responsibilities prescribed elsewhere in this bylaw to the Contract Administrator.

#### 6A.2 Water Conservation Requirements and Report

All subject applications shall include a Landscape Water Conservation Report - either as a set of drawings or a bound report - that defines how the development will meet the design requirements for water conservation. The report shall meet the requirements of the City prior to "Issued for Construction" Documents or Building Permits under this bylaw. The Landscape Water Conservation Report shall:

- (a) Include the calculations for the proposed landscape area of Landscape Water Budget and Estimated Landscape Water Use in the format as required by the City of Kelowna (equivalent to Schedule C in the City of Kelowna Water Use Bylaw No. 10480).
- (b) Indicate by drawings, notes, specifications and if necessary other written materials how the application complies with or varies from the Design Criteria 6A.2.1 and 6A.2.2 below.
- (c) The City may, at its discretion, accept the information in two stages: Stage One requires the report and a conceptual landscape drawing with corresponding hydrozone and Landscape Water Conservation Report and may be submitted at the Preliminary Layout Review or Application for Subdivision Approval stage for Subdivision Projects, or Building Permit application stage for Works and Services in Development Projects. Stage Two requires detailed landscape and irrigation drawings and specifications, and update to the report and calculations, to be generally consistent with and substituting for the earlier design concept submission Stage Two must be submitted and approved prior to City Engineer's "Issued for Construction' documents in both Subdivision and Building Permit processes.

#### 6A.2.1 Landscape Design

The Applicant shall appoint a Qualified Professional to create and submit a Landscape Plan and supervise installation to produce a landscape installation that:

- (a) Groups planting areas into 'hydrozones' of high, medium and low or unirrigated/unwatered areas. Submit a plan diagram and table showing the extent and area of hydrozones in the project.
- (b) Shows appropriate use of plant material with similar water demand within hydrozones.
- (c) Maximizes the percentage of landscape area that is unirrigated/unwatered area, commensurate with landscape aesthetics and plant survival e.g. using pervious paving, unplanted stone or organic mulch, pervious deck (strive for a minimum of 25% of the total landscape area).
- (d) Maximizes retention or replanting of vegetation with low water-use requirements after the establishment period e.g. existing native vegetation to remain, wildflower meadow, rough grass, xeriscape plant species (strive for a minimum of 25% of the total landscape area).
- ▶ (e) Designs to minimize mown turf areas that are high water use areas (strive for 25% of total landscape area, and consider a maximum of 50% of the total landscape area) substitute with areas of lower water use treatments.
- (f) Provides mulch cover to shrub and groundcover areas, to reduce evaporation from soil
  - (g) Uses recirculated water systems for any water features such as pools and fountains.
  - (h) Ensures landscape installation standards including growing medium depth and quality to meet the requirements of this bylaw. A submitted soils report or notes on the plans shall indicate proposed growing medium depth, amendments, and shall refer to appropriate sections of the reference or supplementary specifications, or the qualified professional shall supply a custom specification of similar detail.
  - (i) Includes the following written declarations signed by a licensed Landscape Architect qualified by the British Columbia Society of Landscape Architects (BCSLA):
    - At the time of application: "This landscape plan is subject to and complies with the Landscape Water Conservation Design requirements of the City of Kelowna for the efficient use of water".
    - ▶ At the time of substantial performance of the construction: "This landscape installation complies substantially with the submitted water conservation and landscape plans, specifications and reports."

#### 6A.2.2 Irrigation Design

If irrigation is to be installed, the Applicant shall appoint a Qualified Professional to create and submit an Irrigation Plan and supervise installation to produce an irrigation system that:

(a) Groups irrigation circuits/ zones into 'hydrozones' of high, medium and low or unirrigated areas consistent with the landscape planting plan.

- (b) Uses reclaimed or recycled water or rainwater capture from roofs or rain barrels for outdoor water use when such is available, as a substitute for use of potable water.
- (c) Minimizes use of high-volume spray heads, and employs drip or low volume irrigation where practical to meet the watering needs of hydrozones.
- (d) Uses surface or subsurface drip irrigation or low volume irrigation technology to water long, narrow or irregularly shaped areas including turf areas less than 2.4m in width.
- (e) Keeps drip, spray and rotor heads (different precipitation rates) on different irrigation circuits.
- (f) Designs with irrigation head-to-head coverage in accordance with manufacturer's specifications.
- (g) Ensures matched precipitation rates on each irrigation circuit.
- (h) Minimizes the elevation change in each irrigation circuit and where required provides pressure compensating devices to minimize pressure variations or check valves to stop low head drainage.
- (i) Ensures irrigation mainlines are proved leak-free with hydrostatic tests, as a part of the construction quality assurance review. Re-test irrigation mainlines after major repair or nearby excavation work.
- (j) Provides pressure regulating devices to ensure irrigation outlets are operating at the manufacturer's optimum pressure range.
- (k) Designs head placement and type, and adjusts head radius, arc and alignment to avoid overspray of paved surfaces or buildings.
- (l) If irrigating slopes greater than 25%, designs an irrigation system with a precipitation rate not greater than 20mm/hour.
- (m) Provides automatic shut off devices that shut off the system in cases of pipe leak or breakage, and that shut off the system when rain is present.
- (n) Installs and programs to minimize water use one or more 'Smart Controllers' with water-conserving functions. Acceptable Smart Controllers are identified in the City of Kelowna Water Regulation Bylaw 10480. Includes a written Irrigation Schedule or equivalent instructions for operation of the Smart Controller, with a copy stored with the controller cabinet, that adjusts the amount of applied water scheduled to be applied on a daily basis schedule different run-times as weather changes, by using the weather-sensitive features of a Smart Controller. In cases where manual irrigation
- (o) program adjustment is temporarily required, adjust water programming at least once per month to recognize that highest water need is in July and lower water needs exist in other months of the growing season.
- (p) Ensures irrigation design and installation standards including adjustments and scheduling meet the requirements of the Supplementary Specifications in , Schedule 5

Construction Standards, or a custom or alternate irrigation specification at a similar level of detail provided by the Qualified Professional.

- (q) Includes the following written declarations signed by a Certified Irrigation Designer qualified by the Irrigation Industry Association of BC (IIABC):
  - ▶ At the time of application: "This irrigation plan is subject to and complies with the Irrigation Water Conservation Design requirements of the City of Kelowna for the efficient use of water."
  - At the time of substantial performance of the construction: "This irrigation installation complies substantially with the submitted water conservation and irrigation plans, specifications and reports".

# DESIGN STANDARDS 6. LANDSCAPE AND IRRIGATION

# 6B. Landscape

6B.1		General
6B.1.1 6B.1.2 6B.1.3	General Landscape Requirements Landscape Plan Requirements for Works and Services Landscape Construction	
6B.2		Boulevard Landscape
6B.3 6B.4 6B.5 6B.5.1 6B.5.2 6B.5.3 6B.5.4 6B.5.4.1 6B.5.4.2 6B.5.4.3 6B.5.5 6B.5.6 6B.5.7	Median Landscape Utilities Coordination with Planning Plant Material Urban Trees in Pavement Planting Details and Procedures Planting Timing Provisions in Single Family Subdivision Plant Material Selection Plant Materials Lawns/Fine Grass, Rough Grass and Wildflowers Trees Street Tree Size, Spacing and Location Street Tree Selections and Soil Volumes Setbacks for Trees Landscape Maintenance Schedule	

#### 6B.1 General

#### 6B.1.1 General Landscape Requirements

The general design and construction of the landscape shall be in accordance with the standards set out in this section.

Street Tree plantings shall be required on streets and highways in all subdivisions where new roads (including cul-de-sacs) or road extensions are required.

All soft Boulevard and Median Areas within the highway limits shall be landscaped to the standards of Section 6B.2 Boulevard and Section 6B.3 Medians.

Rough grass or wildflower mixture may be used on all or part of boulevards visually backed by areas of woodland or rural appearance - subject to the approval of the City Engineer.

The Landscape Maintenance Period for landscape establishment shall be one year from the date of Substantial Performance of the landscape components of the work. All landscape areas shall be provided establishment maintenance which shall include irrigation maintenance and watering, mowing, weeding, pruning and supplemental fertilization until the end of the Landscape Maintenance Period. The Landscape Maintenance Period shall continue until a Certificate of Acceptance of all

Landscape Works and Services is issued by the City upon the expiration of the Landscape Maintenance Period.

Plants or other materials that fail in the Landscape Maintenance Period shall be replaced at no cost to the City. Replacement trees shall be guaranteed for a further year after planting, with maintenance and replacements repeated until trees are provided that are acceptable to the City at the end of the Landscape Maintenance Period.

The use of Naturescape or similar wildlife habitat principles in landscape development is encouraged. Refer to Naturescape Kit Southern Interior, available from Naturescape British Columbia.

Site and planting design shall co-ordinate with watering 'hydrozones' and irrigation plans in accordance with Sub-Section 6C - Irrigation.

All landscape and irrigation products, installation and operations shall be completed in accordance with the requirements of Schedule 5 of this Bylaw.

# 6B.1.2 Landscape Plan Requirements for Works and Services

For landscape Works and Services that will be owned by the City of Kelowna, the Owner's Qualified Professional is required to submit the following plans, gain City 'Issued for Construction' documents, and certify construction quality assurance. Landscape plan and design submittals required are:

- (a) Landscape Plan
- (b) Landscape Grading Plan
- (c) Landscape Water Conservation Report as required by the Water Regulation Bylaw.

The following information shall be shown on the Landscape Plan:

- (a) property lines and easements.
- (b) buildings, edge of pavement, curb lines and curbs, sidewalks, lighting fixture locations, surface utilities and related service boxes or other elements that would affect the landscape and street tree location.
- (c) Location of all existing vegetation to remain.
- (d) Location of retaining walls and existing or proposed slopes that exceed 3:1 vertical.
- (e) Location of all proposed trees, shrubs, ground cover and lawn areas.
- (f) Indication of which areas will be seeded grass vs sodded lawn.
- (g) Plant list showing botanical name, common name, size at planting, quantity, typical spacing, and root zone volume of supplied growing medium for trees.
- (h) Location of all proposed trees, shrubs, ground cover and lawn areas.
- (i) Hydrozone information table for the project.

- (j) Planting hydrozones delineate and label each hydrozone by number, letter or other method and identify each area of similar water requirement e.g. high, medium, low, or no supplemental water after establishment. Hydrozones may be shown on a separate drawing if required for clarity.
- (k) Water features, if applicable.
- (l) Type of mulch and application depth.
- (m) Growing medium depths for each planting type.

The following information shall be shown on the Landscape Grading Plan:

- (a) Spot elevations of top and bottom of retaining walls and at top and bottom of any slopes exceeding 3:1
- (b) Drainage patterns by slope arrow and percent slope. Drain inlets or culvert inlet elevations.
- (c) Finished floor elevations if applicable.
- (d) General shaping of finished grades by a combination of proposed contour, spot elevations and slope arrows for landscape areas that are bermed, dished, or that have noteworthy grading constraints or design intents.
- (e) Stormwater retention or infiltration facilities if applicable.
- (f) Rain harvesting or catchment technologies if applicable.

The general requirements used by the City for review of the Landscape and Grading Plan is specific to the site and use thereof. The landscape design shall:

- (a) respond functionally and aesthetically to existing and proposed land uses, utilities, terrain and flood patterns, drainage facilities, roads, driveways, cycle, transit and pedestrian facilities;
- (b) promote accessibility as it relates to pedestrians, cyclists and people with limited physical or visual abilities
- (c) consider appearance of the proposed plant material and site landscape, including appropriateness, aesthetics, visual screening, sight lines and functionality
- (d) provide access for maintenance equipment and personnel;
- (e) allow for cost effective maintenance methods and practices;
- (f) provide access to park, recreation or environmental opportunities;
- (g) incorporate protection of existing trees where feasible;

- (h) consider protection of the natural environment and restoration or enhancement of natural habitat;
- (i) coordinate with engineering site drainage, water levels, ponding and overland flow;
- (j) consider design features that minimize the opportunity for crime and undesirable behavior;
- (k) provide for weed control;
- (l) coordinate with sediment and erosion control practices;
- (m) follow fire hazard reduction principles.

The completed Landscape and Grading Plan(s) shall be considered part of the package that forms the "issued for Construction" documents.

### **6B.1.3 Landscape Construction**

Prior to the start of construction the Owner shall provide the City with a schedule of construction of the landscape and irrigation Works and Services and Related Work. In addition, the Owner shall provide the City with the name and contact information for the Consulting Landscape Architect and Engineer, Certified Irrigation Designer, the general Contractor and the Landscape Contractor of the site, as well as the designated Contract Administrator for each of the Landscape and Irrigation works.

Proposed changes to the landscaping from that shown on the "Issued for Construction" Landscape Drawings or related documents shall be submitted to the City for review and approval at least five (5) working days prior to anticipated construction of the change. Submission of a proposed change in no way implies or suggests approval of the proposed change by the City.

Changes to the landscaping performed without approval from the City will not be accepted at the time of Substantial Performance or Total Performance. Changes to the landscaping performed without approval from the City will be corrected by the Owner at the Owner's expense or the cost of making the corrections will be held back by the City upon release of the Performance Bond.

#### 6B.2 Boulevard Landscape

Unless specified otherwise herein boulevards shall be vegetated with sodded lawn or densely planted groundcover. Rough grass and/or wildflower seeding may be used on boulevards and side slopes that are visually backing onto natural or rural areas, or for temporary boulevard treatments, subject to the approval of the City Engineer.

For the boulevards of arterial and collector roads within Urban and Village Centre DP areas, the treatment shall be as per the streetscape improvement plan for that area.

For boulevards adjacent to commercial property and locations outside Urban/Village Centre DP areas, or where no plan is in place, the boulevard treatment shall generally be turf or hard-surfaced, and (April 4, 2011)

shall include street trees and irrigation. Acceptable hard surface materials for the boulevard may include:

- (a) unit pavers
- (b) exposed aggregate concrete;
- (c) stamped and coloured concrete;
- (d) irrigated turf; or
- (e) xeriscape or dryland landscaping

For boulevards where the land use of the adjacent property is industrial, institutional or multi-family the boulevard treatment shall generally be street trees and turf or dryland landscaping, serviced and maintained by the Owner of the parcel with the boulevard frontage.

For boulevards where the land use of the adjacent property is one, two or four-family residential or park, and where the boulevard is accessible for maintenance mowing and watering from the adjacent property, the boulevard treatment shall generally be street trees and turf,

For boulevards where it is unlikely that the adjacent property owner will be able to adequately maintain the boulevard, the boulevard treatment shall generally be hard surfaced and may include street trees. Acceptable boulevard materials in these cases may include:

- (a) unit pavers; or
- (b) exposed aggregate concrete

### 6B.3 Median Landscape

The landscaping of medians shall be designed and constructed generally as follows:

- (a) for Highway 97 and Highway 33 with sloped aprons of concrete unit pavers with irrigated street trees and irrigated landscaping;
- (b) in Urban Centre and Village Centre DP Areas except as described above or per the approved streetscape improvement plan for that area, with sloped aprons of concrete unit pavers and irrigated street trees; or
- (c) elsewhere with sloped aprons of exposed aggregate concrete, concrete unit pavers or stamped and coloured concrete and irrigated street trees..

The landscaping of roundabouts and cul-de-sac islands shall have a hard surface material or landscaping with low shrubs or groundcovers, and should feature:

- (a) a single specimen tree;
- (b) a group of like trees; or
- (c) public art if the roundabout or cul-de-sac is in an Urban or Village Centre. The selection, design and placement of public art shall be made in cooperation with the Public Art Committee.

Lighting of trees or public art in a median shall be provided as required by the Parks Division or the Public Art Committee.

# 6B.4 Utilities Coordination with Planning

Underground utilities shall be aligned and buried to provide a continuous 1.0m deep utility-free trench beneath tree planting locations.

Planting and paving design shall be co-coordinated with the design and construction of surface utility boxes, such that boxes fall entirely within either a paved surface or entirely within a planted surface but not partly in paving and partly in planting and that grades and alignment of boxes match the final design and construction of all elements to create a co-coordinated and orderly appearance, free of trips and hazards.

#### 6B.5 Plant Material

#### 6B.5.1 Urban Trees in Pavement

Select urban trees in pavement in accordance with Section 6B.5.6.

Select and site urban trees in pavement to eliminate long term above-ground and below ground conflicts with utilities, buildings and structures, and pedestrian and vehicular traffic.

# 6B.5.2 Planting Details and Procedures

Landscape Drawings shall specify the appropriate planting detail standard from the City of Kelowna Standard Details.

All planting shall meet the City of Kelowna Specifications in Schedule 5.

#### 6B.5.3 Planting Provisions in Single Family Subdivisions

Street trees and landscape finish of the public highway fronting occupied homes shall be completed no later than the date that 85% of the homes in a single family development are completed and occupied. Earlier completion dates are encouraged provided that landscape maintenance and repair is provided at no cost to the City until such time as units are occupied.

Planting of street trees in the hot dry summer period of June, July and August is discouraged, due to the risk of failure of the planting caused by heat and drought.

Minimum number of boulevard trees shall be calculated as follows:

- (a) Medium Trees (± 10 20m ht. at maturity) Greater of 1 per lot or 15m.
- (b) Small Trees (Under 10m ht. at maturity) Greater of 1 per lot or 10m.
- (c) Plantings of trees closer than 6m on centre shall require the written concurrence of the City Engineer.
- (d) Locate trees fronting on single family lots in locations that avoid all utility service alignments and driveways. Generally this will lead to tree placement in the half of the lot frontage away from the driveway side, and not at either the lot centerline or at a lot line.

#### 6B.5.4 Plant Material Selection

#### 6B.5.4.1 Plant Materials:

- (a) Plants shall have the ability to withstand adverse conditions such as airborne pollutants, maximum sun exposure and reflected heat from pavements, high winds and abrasive forces, occasional snow loading and exposure to salt from road clearing operations, and limited root zone soil volumes.
- (b) Plant hardiness requirements vary by elevation. Plants shall be hardy to Canadian Plant Hardiness Zone 5A to 1A as site conditions dictate.
- (c) Plants shall be capable of reduced water demand following a one year establishment period.
- (d) Plants shall have relatively low maintenance attributes including: fine to medium leaf size and canopy density; non-fruit bearing or having only berry-sized non-staining and non-toxic fruits; low susceptibility to disfiguring or fatal diseases and infestations; infrequent demands for pruning, fertilizing and other cultural requirements.
- (e) Plants shall be of appropriate size and form at maturity to meet criteria in Section 6B.5.6 Street Tree Selections and Soil volumes.

# 6B.5.4.2 Lawns/Fine Grass, Rough Grass and Wildflowers:

- (a) Sod shall be used on all lawn/fine grass areas. Seeding, as an alternate, shall require approval of the City Engineer.
- (b) Rough grass and wildflower areas shall be seeded. Seeding method shall be noted on drawings.
- (c) Areas to be seeded with grades greater than 3:1 and/or highly erodible soils shall be hydroseeded with a nurse crop seed mix, a hydraulically applied erosion control mulch, or erosion control blanket. Erosion control method to be noted on drawings.

#### 6B.5.4.3 Trees:

- (a) Boulevard or 'street' trees shall be of a single species/cultivar on either side of the street within a given block. Median tree species may vary.
- (b) Street tree species shall vary between intersecting streets. Street tree selection will be made with consideration of maintaining a diverse and varied street tree distribution across a neighbourhood to minimize disease risks.
- (c) All street trees shall have:
  - i. A compact or upward branching structure.
  - ii. Ability to withstand pruning for pedestrian, vehicle and/or building clearance without compromise to tree health or form.
- iii. Absence of species/varietal characteristics of structural weakness, susceptibility to wind damage, or thin, easily damaged bark.

#### 6B.5.5 Street Tree Size, Spacing and Location

Trees shall be minimum 5 cm caliper measured at 300mm above the rootball at the time of planting, and of uniform size if planted in a boulevard row.

Tree branch clearance requirements are 5m over the traveled portion of road and 2.25m over the sidewalk.

#### 6B.5.6 Street Tree Selections and Soil Volumes

Refer to City of Kelowna website for requirements for tree species selections: <a href="http://www.kelowna.ca/CM/Page292.aspx">http://www.kelowna.ca/CM/Page292.aspx</a>

Trees for directly under Hydro lines

- (a) Minimum allowable soil volume per tree is 4 cu.m. with 1m depth pit.
- (b) Mature height not greater than 7.62m.

Trees for beside hydro lines

- (a) Minimum lateral distance from nearest line 2.75m.
- (b) Minimum allowable soil volume per tree is 4 cu.m. with 1m depth pit.
- (c) Mature spread not greater than 5m.

Trees for limited available soil volume

- (a) Minimum allowable soil volume per tree is 4 cu.m. with 1m depth pit.
- (b) Mature height not greater than 10m.

Trees for available soil volumes of 9 cu. m. or greater

- (a) 1m pit depth
- (b) Mature height not greater than 20m.

Trees for a wide boulevard or wide median use only

- (a) Minimum available root zone of 20 cu. m. per tree
- (b) Minimum boulevard or median width of 3.5m

#### 6B.5.7 - Setbacks for Trees

(April 4, 2011)

Minimum setbacks for trees to objects in new developments shall be as follows:

Underground street light conduit or irrigation	0.6m
main	
Other underground utilities	3.0m
Lamp standards	6.0m
Steel and wooden utility poles	3.0m
Driveways	1.5m
Catch basins	1.5m
Manholes, valve boxes, services	3.0m
Sewer service boxes	3.0m
Fire hydrants	2.0m
Road intersection	7.0m
Curb face (see SS-L3 for Root Barriers required)	0.5m
Sidewalk	0.85m
Curb face and sidewalk with root barrier	0.60m
Buildings - fastigiate (columnar) tree	2.0m
Buildings - regular crown tree	3.0-5.0m

The City Engineer may consider custom setbacks where trees are being installed in existing streets with established utilities.

#### 6B.6 Landscape Maintenance Schedule

The Owner's qualified professional shall submit a maintenance schedule with the Certificate of Substantial Performance. It shall include timing and arrangements for:

- (a) Routine inspection
- (b) Aerating and dethatching turf areas
- (c) Replenishing mulch
- (d) Fertilizing
- (e) Pruning
- (f) Weeding

The project applicant is encouraged to implement sustainable or environmentally-friendly practices for overall landscape maintenance.

#### Schedule 4 6C Irrigation. Page 1 of 6

BL10481 added 6C. Irrigation

# DESIGN STANDARDS 6. LANDSCAPE AND IRRIGATION

## 6C. Irrigation

- 6C.1 General Irrigation Requirements
- 6C.2 Irrigation Plan and Irrigation Desgn Report Requirements for Works and Services
- 6C.3 Establishment Watering Provisions in Single Family Subdivision
- 6C.4 Irrigation Service Connections

#### 6C.1 General Irrigation Requirements

- (a) A complete and working automatic irrigation system shall be provided for all landscaped areas within a high, medium or low hydrozone of a Highway, utility parcel or utility facility. Temporary watering provisions shall also be made for planted areas of a 'nonirrigated' hydrozone - to allow for watering through a maximum 1 year establishment period or in severe drought.
- (b) Boulevard trees, shrubs and ground covers shall be watered from an automatic irrigation system.
- (c) Urban trees in pavement shall be irrigated with an automatic irrigation system that may include bubblers or drip elements.
- (d) Sleeves shall be provided under sidewalks and driveways, and to medians / islands, as required for installation and maintenance of the irrigation system without removing surface paving.
- (e) Provide a flow sensor and master valve, both connected to the controller, that will stop flow to the system or irrigation circuit in cases of an irrigation water leak. Provide an isolation gate valve upstream of all automatic sprinkler valves.
- (f) Design to water plant materials with different watering requirements (e.g. grass vs. shrub areas and high vs medium vs low water use shrub areas) on different valve circuits.
- (g) Where surface sprinklers are used, ensure unobstructed sprinkler coverage to tree bases from at least two sides.
- (h) Every drip system shall be designed with a filter, pressure regulator, flush valve and air relief valve. The drip component manufacturer's instructions for installation and maintenance shall be included in the project specifications.

Schedule 4 6C Irrigation. Page 2 of 6

- (i) The Irrigation System shall perform to within 15% of the targeted application efficiency standards for irrigation systems, as determined by the Irrigation Association and the Irrigation Industry Association of British Columia, as follows:
  - i. Spray Zones: 75% or higher;
  - ii. Rotor Zones: 80% or higher;
  - iii. Microjet Irrigation Zones: 85% or higher.
  - iv. Drip Irrigation Zones: 90% or higher.
- (j) Sprays and rotors shall be designed with head to head coverage to meet the application efficiency standards.
- (k) It is the responsibility of the Certified Irrigation Designer to identify to the Owner and to the City of Kelowna any landscape impediments, existing or planned, that will impede reaching the targeted efficiencies. At the discretion of the City of Kelowna, irrigation system design audits may be performed to ensure design efficiency has been met.
- (l) The Irrigation System shall be designed with minimal pressure losses where possible. Pressure losses between any two sprinklers on the same zone shall be less than 10%.
- (m) Pipes shall be sized to allow for a maximum flow of 1.5m/sec.
- (n) The Irrigation System shall be sized and designed to 80% of Point of Connection available flow and pressure; allowing for 20% growth of system or 20% reduction in operating pressure while retaining targeted operational efficiencies.
- (o) Locate Point of Connection or Pedestal to meet the following requirements:
  - i. No Pedestal or Point of Connection locations will be permitted with medians without the explicit written consent of the City of Kelowna.
  - ii. No Pedestal location shall be subject to application of irrigation watering.
  - iii. No Point of Connections shall be placed within a sidewalk without the explicit written consent of the City of Kelowna.
- (p) The irrigation design shall include voltage loss calculations to the electrical control valve furthest from the controller. The drawings are to include:
  - i. A chart comparing the actual voltage drop to the allowable voltage drop on common and zone signal wires;
  - ii. Voltage loss shall not exceed the maximum voltage loss as specified by the manufacturer of the irrigation controller;
  - iii. Indicate wire locations, wire gauge required, spare wires and necessary splice box locations on the Contract Drawing.
- (q) Install one spare control wire for every five (5) electric control valves connected to the controller;

#### Schedule 4 6C Irrigation. Page 3 of 6

- (r) Install one spare common wire for every ten (10) electric control valves connected to the controller.
- (s) Irrigation sleeves shall be installed to route irrigation lines under hard surfaces and features. Non-metallic CSA approved electrical conduit shall be installed adjacent to irrigation sleeves.
- (t) Electric control valves used in the design of the Irrigation System are to remain consistent in size and manufacturer, where possible. Renovations or additions to the Irrigation System shall use the same manufacturer, model and size that exist on site. It is permissible to use an electric control valve from a different manufacturer for specialized applications. In general:
  - i. Electric control valves must be sized to the design flow;
  - ii. Drip and Micro irrigation zones must include filtration and pressure regulation to manufacturers' specifications. Drip and Micro zones must have an isolation valve prior to zone valve for maintenance of filtration.
  - iii. Unless it has deemed not possible, valves are to be located on the periphery of green spaces and where available, within planting beds.
  - iv. Design approval will be required to insert valve locations within hardscape surfaces.
- (u) Sprinklers used in the design of the Irrigation System are to remain consistent in size, nozzling and manufacturer. Renovations or additions to the existing Irrigation System shall use the same manufacturer, model and size that exist on site. Sprinkler choice is based upon:
  - i. Available operating pressure at the base of the sprinkler;
  - ii. Desired radius;
  - iii. Type of landscape/plant material to be irrigated.
  - iv. Preference will be given to sprinklers incorporating pressure compensating devices.
  - v. Preference will be given to sprinklers incorporating check valves to reduce low head drainage.
- (v) Sprinkler arcs, radius and alignment are to be designed and capable of adjustment to minimize overspray onto adjacent surfaces outside of landscape areas.
- (w) Drip line and emitters must incorporate technology to limit root intrusion.
- (x) Specify all irrigation components from a coordinated manufacturer's line listed in the Subdivision, Development & Servicing Approved Products List Policy 266.
- (y) All irrigation products, installation and operations shall be completed in accordance with the requirements of Schedule 5.
- (z) The Landscape Maintenance Period for landscape establishment shall be one year from the date of Substantial Performance of the landscape components of the work. All landscape areas shall be provided establishment maintenance which shall include irrigation maintenance and watering.

#### Schedule 4 6C Irrigation. Page 4 of 6

## 6C.2 Irrigation Plan and Irrigation Design Report Requirements for Works and Servies

For irrigation Works and Services that will be owned by the City of Kelowna, the Owner's Qualified Professional is required to submit the following plans and reports, gain City "Issued for Construction" status, and certify construction quality assurance:

- a) Irrigation Plan
- b) Landscape Water Conservation Report (in accordance with Water Use Regulation Bylaw 10480)
- c) Irrigation Design Report
- d) Maintenance Schedule

The following information shall be shown on the Irrigation Plans and Landscape Water Conservation Report

- (a) Name and contact information for the IIABC Certified Designer.
- (b) Name and contact information for the water utility provider and the electrical utility provider.
- (c) property lines
- (d) buildings, edge of pavement, curb lines and curbs, sidewalks, lighting fixture locations, surface utilities and related service boxes or other elements that would affect the irrigation system but with an objective of minimizing drawing clutter.
- (e) Location of all existing vegetation to remain.
- (f) Location of retaining walls and slopes that exceed 3:1 vertical.
- (g) Landscape Water Budget, and Estimated Landscape Water Use and calculations (in accordance with Schedule C of the Water Regulation Bylaw No. 10480 may be a separate Landscape Water Conservation Report).
- (h) Hydrozones shall be designated by number, letter or other designation.
- (i) Designate the areas irrigated by each valve (irrigation zones) and assign a number to each valve.
- (j) Indication of which irrigation zones will be automatic vs manual watering systems. Clearly identify any 'temporary zones': those zones which are intended to operate for less than a two (2) year grow in period.
- (k) Schematic layout showing all points of connection, backflow prevention, water meters, electrical supply and meters, winterization facilities, timeclocks, heads, valves, piping, sleeves, sensors and other elements critical to construction and maintenance of the irrigation system.

- (l) Irrigation legend describing brand, model and size of timeclocks, heads, valves, piping, sleeves, sensors and all other elements shown on the irrigation plan.
- (m) Any details specific to the project that are not included in Schedule 5.

The Irrigation Design Report shall be submitted with the Irrigation Plans, in booklet form on  $8.5 \times 11$  paper and shall include:

- (a) Static water pressure obtained either by pressure gauge reading from the site; or from the City of Kelowna.
- (b) Design flow calculations indicating maximum water flows required to irrigate the proposed site in the desired water window;
- (c) Water utility jurisdiction; inclusive of any regulations or restrictions imposed by the said water utility that will affect the operation of the Irrigation System.
- (d) The electrical requirements necessary to operate the proposed Irrigation System. Verification from the applicable electrical utility that the service is available and what is required to route it to the necessary location(s);
- (e) Identification of the micro-climates throughout the proposed site;
- (f) A chart illustrating a zone by zone breakdown of the following items;
  - i. Type of plant material
  - ii. Product Type (micro, spray, rotor); and area based calculated precipitation rates.
  - iii. Required operating pressure
  - iv. Required zone flow
  - v. Zone valve size
- (g) Scheduling data utilizing a maximum ET value of 7"/month (Kelowna July ET); taking into consideration soil type, slope and micro-climate. Show the cumulative watering time required to water all circuits in the project. Except where otherwise required or approved, the irrigation water window shall not be greater than 6 hours per day on an odd or even scheduling format.

#### 6C.3 Establishment Watering Provisions in Single Family Subdivisions

Watering provisions are required for establishment of all street tree planting. Automatic irrigation systems to be provided to the boulevard area as an extension of privately held irrigation systems on the fronting lot. Provide irrigation sleeves across the sidewalk at the lot centerline and across the driveway as necessary to accommodate the irrigation pipe connecting all landscape areas and the fronting boulevard and medians.

In cases where boulevard landscape and related irrigation is being installed in advance of single family lots being occupied, the developer is to install a temporary irrigation system to water the boulevard. When private homes are constructed and occupied, within 6 months of occupancy the developer must arrange to have the boulevard irrigation fronting each lotremoved from the temporary irrigation system and attached permanently to the irrigation system of the fronting lot. Design of the temporary irrigation system may follow one of two general arrangements:

<u>FULL LANDSCAPED BOULEVARD</u>: generally in accordance with Schedule 5 Standard Drawing "Temporary Boulevard Irrigation", based on a spray or drip irrigation system to serve grass, groundcover, shrubs and trees in the boulevard, OR

- ▶ TREES ONLY BOULEVARD: if trees only are being planted, with dryland or paved landscape in between, a Root Watering System (Double) on public property shall be provided that meets the requirements Schedule 5 Standard Drawings.
  - (a) For temporary boulevard irrigation systems, and/or for permanent median irrigation systems, water supply, backflow prevention and irrigation smart controller shall be provided in central location(s) in the subdivision, with valves and distribution piping designed in accordance with Section 6C Irrigation. Water supply may be obtained from the services of the new lots. A water billing account must be established prior to use.
  - (b) Irrigation sleeves for the temporary or permanent boulevard and median systems shall be provided under all driveways or other paved areas to provide pipe access to all landscape areas within the highway for installation and maintenance of the irrigation system without removing surface paving.
  - (c) The City will withhold part of the maintenance bond at a value of 140% of the cost of connecting temporary irrigation in boulevards to permanent irrigation systems on fronting private lots, and abandonment of any temporary irrigation system. If this conversion is not completed by the Developer within 6 months of home occupancy, the City may if necessary at the Developer's expense undertake the connection of the boulevard irrigation system to the adjacent private lot system and decommission the temporary irrigation with its own forces.

#### **6C.4** Irrigation Service Connections

Except as required otherwise all landscaped areas of a Highway or Utility Facility shall be serviced with a metered water service (50mm diameter, and a metered electrical service (120/240 volts, 60 amps minimum). Provision of water and electrical services by the Owner shall include the establishment of service accounts with the utility providers, all necessary permits, testing and certification, and all materials, labour, fees and utility costs necessary to provide the service until the end of the Landscape Maintenance Period.

# BL10640 amended Hillside Street Standards to Hillside Development Street Standards" DESIGN STANDARDS

#### 7. HILLSIDE DEVELOPMENT STREET STANDARDS

#### BL10696 amended the following section:

- 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

#### LIST OF TABLES (located at back of section)

NO.	TITLE
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Table 1 Hillside Street Standards
Table 2 Alignment Design Criteria

Bylaw 9051 added the following drawings:

#### LIST OF DRAWINGS (located at back of section)

NO.	TITLE

TYP-1 Local Road

TYP-01SW Local Road - Optional Sidewalk

TYP-02 Minor Collector - No Parking - No Access)

TYP-03 Minor Collector - Parking - Access One Side)

TYP-04 Minor Collector - Parking - Access Both Sides)

#### HILLSIDE DEVELOPMENT STREET STANDARDS

#### 7.1 General

#### BL10640 amended the following:

Where development lands receive hillside zoning (Residential Hillside (RH) zone or "h" designation to parent RU1 zone), these standards may be utilized in place of the specific sections in the HIGHWAY DESIGN STANDARDS (Section 4 of this Schedule). The Hillside Street Standard drawings are included in Schedule 5, Section 2 (Drawings) of this Bylaw.

The hillside standards have been designed for environmental sensitivity with reduced physical impacts in mind. Generally, the street standards proposed herein have been drawn from the following principles:

- The public interest requires safe, liveable and attractive streets that contribute to the urban fabric;
- Streets should be designed to suit their function. Many streets, especially local ones, have purposes other than vehicular traffic;
- A hierarchical street network should have a rich variety of types, including bicycle, pedestrian and transit routes; and
- Standards should be developed to enhance local streets' contributions to urban design. Issues such as sense of enclosure, landscaping, parking, building setbacks, surface materials, street furniture, signs and street lighting are vital determinants of liveability in neighbourhoods.

These street standards have largely been designed for application under specific traffic volumes and development densities. Traffic volume determines which general street type (Arterial, Collector, Minor Collector, Local, etc.) is required to service an area and, in most cases, density of fronting development determines which specific street condition ("Condition A", "Condition B", "Condition C", etc.) will be applied. In the case of Collector Streets, whether or not the street acts as a village centre "main street" is also a factor. For Arterial Streets, proximity to a village centre and local environmental conditions are the determinants of "condition" application.

Development that has direct public street access is defined as "fronting" the street. In other words, only those units that are oriented to the street are considered to "front" on it. This will most often occur in areas of fee-simple single family, mixed-use, or apartment development. Circumstances where strata units "front" onto a public street may also arise; however, strata and bareland strata developments will primarily be serviced by Private Streets. Standards for Public Lanes, Cul-de-sac Streets and Hillside Emergency Accesses are also included.

#### 7.2 Street Trees

Street trees contribute to the liveability of a street. Trees modify the microclimate and foster a sense of comfort and safety for drivers and pedestrians by creating an edge between the sidewalk and the moving traffic. In hillside areas it is desired that the natural landscape be more prominent. While in some instances, such as along Arterials and Collectors and in a village centre, street trees are thought to be appropriate, even necessary, in other areas a more natural approach is desired, and the retention of natural vegetation is encouraged.

#### BL10640 amended the following:

Therefore, those hillside street standards that will be applied to areas that will have a tighter "fit" to the natural landscape will not be required to incorporate street trees. For Minor Collector Streets and Local Streets street trees are considered optional. The planting of stands of native trees and vegetation is encouraged in these areas to contribute some of the elements of liveability that would otherwise be missed with the elimination of formal street tree plantings. Street trees and landscaping are to be to the satisfaction of the City's Development Services Department/Subdivision Approval Branch and a landscape plan showing proposed

planting on private property are required. The City's Development Services
Department/Subdivision Approval Branch will require a performance bond for landscaping on private property.

A discussion of each class of street follows.

#### 7.3 Hillside Street Classification - See Table 1

An overall plan is required allocating the location of each street type and its relationship to adjacent land uses proposed.

A discussion of each class of street follows.

#### 7.3.1 Arterial Streets

Arterial streets provide a continuos drive path for inter-community through traffic. The Arterial corridors of hillside areas will be different in that, while they will continue to provide a throughway for automobiles, the experience will take on qualities of a scenic drive.

#### 7.3.2 Village Collector Streets ("Main Street")

Collector streets perform the dual function of land access and traffic movement between arterial and local roads. In the village centre the unique and very social function of this more localized type of street will be reflected in a more urban feel than will be found on collectors elsewhere throughout the site.

#### 7.3.3 Collector Streets

Collector streets perform the dual function of land access and traffic movement between arterial and local roads; however, this more localized type of street plays a social as well as a functional role in the neighbourhood. Street design, therefore, must balance all objectives including, but not limited to, the need to provide a driving path for automobiles to access the neighbourhood.

#### 7.3.4 Minor Collector Streets

There is the potential for some portions of Collector streets to experience lower traffic volumes. In these instances, Minor Collector streets will be utilized. Toward reducing the street section, a sidewalk will be provided on only one side of the street for all Minor Collectors.

#### 7.3.5 Village Local Streets

The residential areas of the village centre will be more urban than those that will be found elsewhere within the Hillside areas. Narrow local streets with on-street parking and framed by street trees and sidewalks on both sides will provide a comfortable environment for all users in

Schedule 4 7. Hillside Street Standards Page 3 of 5

the neighbourhood. This condition is for use where development fronts at least one side of the street.

#### 7.3.6 Local Streets

Local streets serve a multitude of functions that are important in the day-to-day lives of residents: residents walk their dogs on the street, they wash their cars on the street and they meet and talk to their neighbours on the street. Children play on the street, they learn to ride their bicycles on the street; they treat the street as an extension of the local neighbourhood park system. At this level, the street plays a very social role. Local street design, therefore, should continue to be sensitive to the needs of non-vehicle street users as well as seeking the best fit between street and landscape.

#### 7.3.7 Public Lanes

Public Lanes are also used by the residents of a community as a venue for social interaction and play and they can contribute greatly to the fabric of a liveable community. One opportunity for their use, however, is in areas such as the village centre. Such higher density development is generally located in more gently sloping areas where steeply sloping terrain is not an issue. The inclusion of Public Lanes in these neighbourhoods will contribute to the more urban feel envisioned as well as provide an alternate route for bikes and pedestrians.

#### BL10696 amended title:

#### 7.3.8 Cul-de-Sac Streets Hillside Emergency Accesses and Hillside Private Lanes

Some of the Local streets within complex topographic areas will take the form of a cul-de-sac. Generally, cul-de-sac streets are used where street connectivity is not possible (i.e. steep terrain) or not warranted (i.e. serves very few homes). Although the appropriate Local street standard will also apply to cul-de-sac streets, there are two additional street specifications unique to this street form that must be addressed in relation to liveability: permitted length and the design of the street turnaround.

In complex topographic areas long streets may be required to access developable pockets within areas of steep terrain. Due to the complex topography it will often not be advisable, or even possible, for connectivity to be achieved at both ends of a street.

Longer cul-de-sac streets will result and systems of branching cul-de-sacs will be established to access some areas of extremely difficult terrain. In response to public safety issues, it is desirable that emergency access routes to such areas are available - Hillside Emergency Access standards are included below. This is considered more acceptable from a liveability stance than requiring street connectivity in all situations as the lower standards required for an emergency access will result in a lesser impact to the hillside. Maintaining street connectivity wherever possible will remain a priority.

The radius of a cul-de-sac also plays a role in the liveability of a street. Laying a cul-de-sac requires a relatively large flat area. The larger this area is, the greater the impact to the landscape, particularly in complex topographic areas. Large cul-de-sacs can also decrease the social quality of a street by terminating the public corridor with a large, barren paved surface. A reduction of the cul-de-sac radius is feasible if parking is restricted in the cul-de-sac, which will ensure a large enough circumference for car turning. It is noted that provision must be made on a case by case basis for emergency vehicle turning.

#### Cul-de-sac

- ROW: min 13.0m radius;
- Radius to edge of paved surface: min 12.0m radius;
- Alternative types of street turnarounds will be considered for use based on site specific topographic conditions. In certain circumstances reduced cul-de-sac radii or hammer head type turnarounds will be permitted.
- Cul-de-sac streets may exceed the maximum length as specified by the City of Kelowna mid-block turnarounds should be considered in this situation;

#### BL10640 amended the following:

 A secondary emergency access must be provided for any public cul-de-sac streets that are in excess of the maximum length as specified by the City of Kelowna. This requirement may be modified with the written approval of the City's Development Engineering Manager or Subdivision Approving Officer.

#### Hillside Emergency Access

- Maximum grade: 15%;
- 4.5m ROW; 4.5m roadway;
- Restrict non-emergency vehicles access through the use of removable bollards or gates;
- Shared use with pedestrian trails.

#### BL10640 added the following:

#### Hillside Private Lanes/Emergency Access Lanes/Maintenance Roads

Maximum grade: 15%;

Private Lanes must have a turn-around at or near their terminus. Acceptable turn-around types include cul-de-sac, evebrow or hammerhead.

6.0m ROW; 6.0m roadway.

#### BL10640 added the following:

#### 7.3.9 Lighting Standards

Allow for reduced light pollution where street lighting may be visually prominent.

#### BL10640 added the following:

#### 7.3.10 Sanitary Sewer Location and Corridors

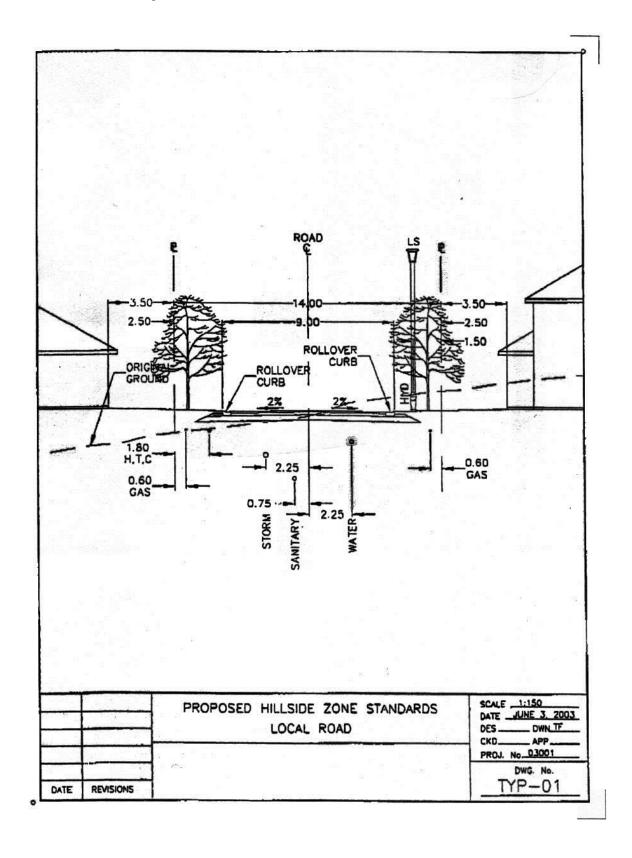
Where rear yard sewers are necessary, ROW of for rear yard serviced lots must be constructed in a manner which allows for practical and unencumbered access by maintenance equipment with a minimum width of 4.5m with a grade of less than 15%.

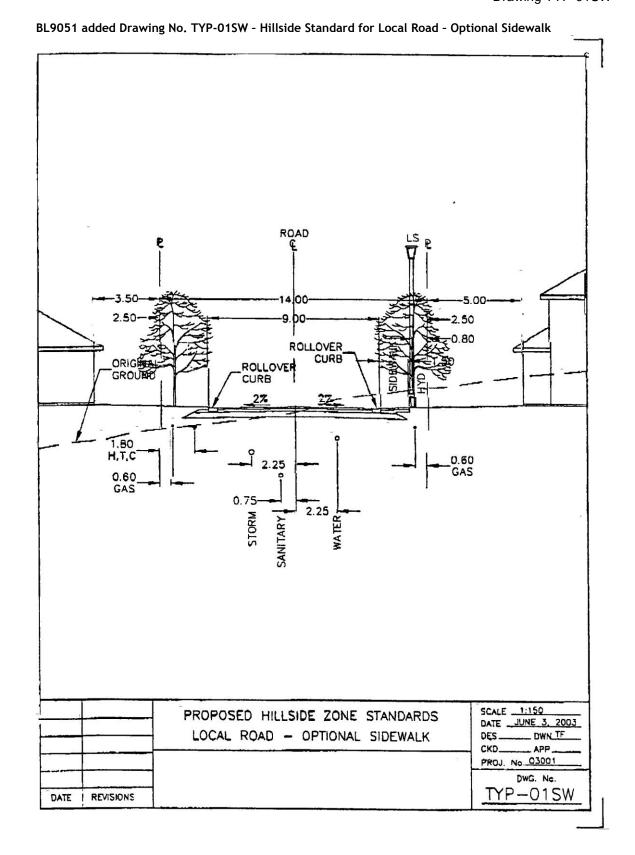
Vehicle access to manholes is required and these accesses are to be protected by a right-of-way which would be perpendicular to the road.

In order to help reduce the number of required manholes around a curve, manufactured long radius bends may be used to achieve curves, if approved by the City Engineer. The following standards should apply:

- 1. Maximum of 3 bends between manholes.
- 2. Minimum of 1 full pipe length (4m) between each bend.
- 3. All bends shall be supplied by an approved pipe manufacturer as listed in the City's approved products list.
- 4. All bends shall be a 'long radius bend'.
- 5. Maximum bend angle of 11.25 degrees.
- 6. Minimum pipe diameter of 200mm.
- 7. The resulting pipe alignment shall have a constant radius (i.e. no compound or reverse curves) which shall be noted on the design & as-built drawings. If bends are to be installed within a roadway, the radius for the pipe alignment shall have a constant offset from the road centreline or edge of curb.
- 8. Manholes must be installed within 10m of each end of the resulting equivalent radius.
- 9. The minimum pipe grade shall be governed by a minimum design velocity of 0.9 m/s. If flows of 0.9m/s are not expected, than the minimum grade shall be calculated based on the pipe flowing 35% full at 0.9m/s. However, in any case, the minimum grade shall not be less than 1%.
- 10. The as-built drawings shall detail the co-ordinates of each bend location.

BL9051 added Drawing No. TYP-01 Hillside Standard for a Local Road

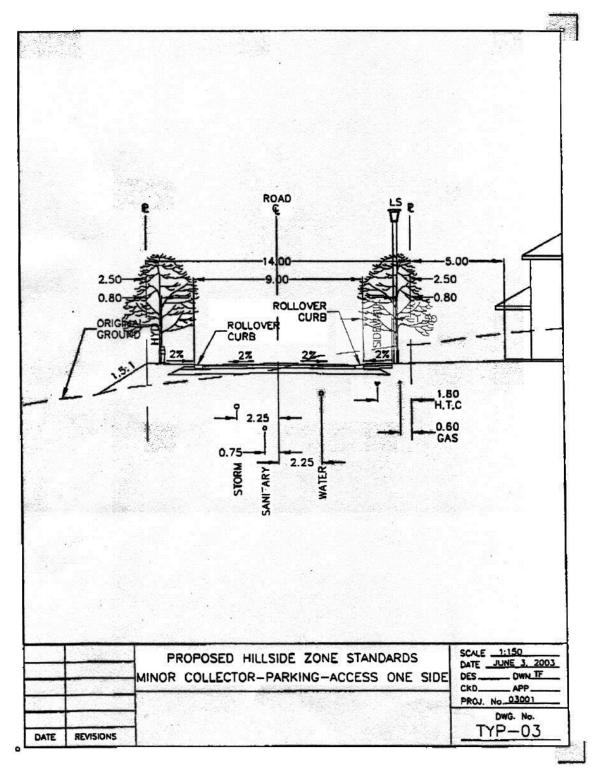


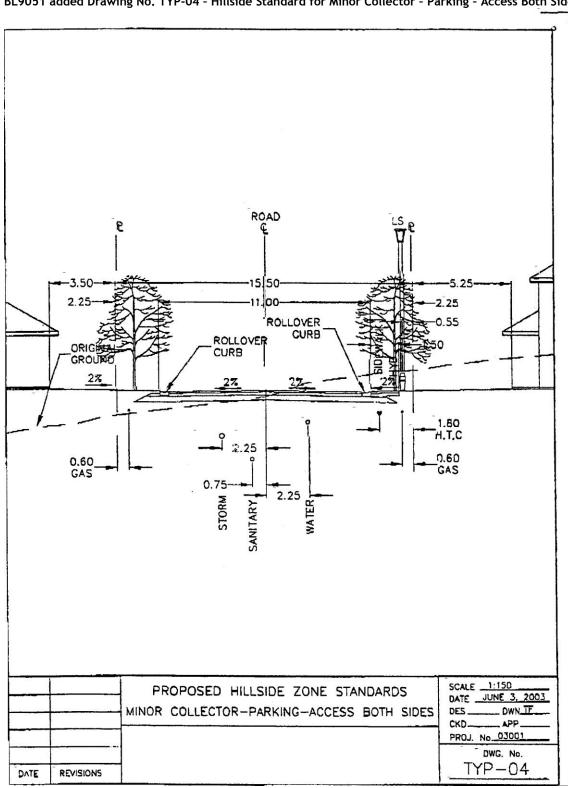


ROAD ROLLOVER CURB ORIGINAD GROUND ROLLOVER 2.25 0.60 GAS 2.25 STORM 1:150 PROPOSED HILLSIDE ZONE STANDARDS DATE MINOR COLLECTOR-NO PARKING-NO ACCESS DES DWN TF CKD. PROJ. No. 03001 DWG. No. TYP-02 REVISIONS DATE

BL9051 added Drawing No. TYP-02 - Hillside Standard for Minor Collector - No Parking - No Access

BL9051 added Drawing No. TYP-03 - Hillside Standard for Minor Collector - Parking - Access One Side





BL9051 added Drawing No. TYP-04 - Hillside Standard for Minor Collector - Parking - Access Both Sides

BL10696 Amended Table 1:

# TABLE 1

# Hillside Street Standards

Street Conditions						Stre	et Section Sp	ecifications		
	e and Condition ng number)	Max. Units Served	Design Speed <sup>1</sup> (km/h)	Max. Grade (%)	• R O W (m)	Street Width (m)	• Parki	Curb & Gutter	Sidewalk 3	Street Trees
Arterial St	reets	>600								
Condition A (median) (SS-H1)	within village centre where environmental cond permit	litions	60 (50) <sup>4</sup>	8 (10) <sup>11</sup>	23.0	16.05	none permitted	barrier curb required	required both sides <sup>6</sup>	required both sides and in median
Condition B (SS-H2)	within village centre where environmental conditions do		60 (50)⁴	8 (10) <sup>11</sup>	17.08	10.08	none permitted	barrier curb required	Required both sides <sup>6</sup>	required both sides
Condition C (SS-H3)			60 (50) <sup>4</sup>	8 (10) <sup>11</sup>	15.0 <sup>8</sup>	10.08	none permitted	barrier curb required	Required one side <sup>6</sup>	required both sides
Village Col	lector Streets (main street)	600								
Condition A (SS-H4)	where commercial development fronts stre	et	50	10	20.0	12.8	required on-street both sides	barrier curb required	required both sides	required both sides
Condition B (SS-H5)	1-11-11		50	10	20.0	12.8	required on-street both sides	barrier curb required	required both sides	required both sides
Collector S	streets	600								
Condition A (SS-H6)	development <sup>9</sup> fronts both sides		50 (40) <sup>4</sup>	10 (12) <sup>11</sup>	18.28	8.68	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>	14.98	8.68	required above curb one side	rollover curb required <sup>12</sup>	required one side <sup>6</sup>	required both sides

Schedule 4
7. Hillside Street Standards – TABLE 1
Page 1 of 3

Condition C (SS-H8)	no development <sup>9</sup> fronts street		50 (40) <sup>4</sup>	10 (12) <sup>11</sup>	14.08	8.68	none permitted <sup>10</sup>	rollover curb required <sup>12</sup>	required one side <sup>6</sup>	required both sides
Minor Coll	ector Streets	500								
Condition A (SS-H9)	<ul> <li>development<sup>9</sup> fronts both sides; or,</li> <li>development<sup>9</sup> fronts one side only</li> </ul>		50 (40) <sup>4</sup>	10 (12) <sup>11</sup>	13.38	7.08	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>	12.48	7.08	none permitted <sup>10</sup>	rollover curb required	required one side <sup>6</sup>	required on one side

# TABLE 1 (continued)

# **Hillside Street Standards**

Street Conditions						Stre	et Section Sp	ecifications		
	pe and Condition ing number)	Max. Units Served	Design Speed <sup>1</sup> (km/h)	Max. Grade (%)	• R O W (m)	Street Width <sup>2</sup> (m)	• Parki	Curb & Gutter	Sidewalk 3	Street Trees
Village Lo	cal Streets	200								
Village Local (SS-H11)	development <sup>9</sup> fronts at least on side		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
Local Stre	ets	200								
Condition A (SS-H12)	development <sup>9</sup> fronts both sides		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)	development <sup>9</sup> fronts one side only		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)	no development <sup>9</sup> fronts street		30	15	10.5	6.0	none permitted <sup>10</sup>	rollover curb required	optional one side <sup>6</sup>	required on one side
Public Lan	ne	10								
(SS-H15)	all cases	1	20	12 (15) <sup>11</sup>	6.0	5.7	on edge of paved surface	rollover curb required	none	
Hillside En	nergency and Utility Vehicle Access									
	e a secondary access route, if possible, where a s maximum street length as specified by the City of			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.

# Table 2 Alignment Design Criteria

#### BL10640 amended the following:

## 1. Horizontal Curve Radii

Criteria	60 km/h	50 km/h	40 km/h	30 km/h
Roadway Crossfall				
normal crown (-2%)	260m	165m	90m	25m
2% superelevation	205m	120m	65m	25m
4% superelevation	150m	80m	45m	22m
6% superelevation	120m	-	-	-
Through Intersections	200m	120m	70m	40m

## 2. Superelevation

Criteria	60 km/h	50 km/h	40 km/h	30 km/h
Maximum Superelevation	6%	4%	4%	4%
Maximum Superelevation at Intersections	4%	4%	4%	4%

## 3. Superelevation Transition Lengths

Criteria	60 km/h	50 km/h	40 km/h	30 km/h
Transition Lengths (2 / 4-lane roadways)				
normal crown to +2%	24m / 36m	22m / 34m	20m	20m
normal crown to +4%	38m / 54m	33m / 50m	30m	30m
normal crown to +6%	48m / 72m	-	-	-
Min Tangent Length between reversing				
2% superelevation (2 / 4-lane roadways)	15m / 22m	13m / 20m	12m	12m
4% superelevation	28m / 42m	26m / 40m	24m	22m
6% superelevation	42m / 64m	-	-	-

<sup>1</sup> Values for transition lengths include tangent runout applied at the same rate as superelevation runoff.

# Table 2 (continued) Alignment Design Criteria

## 4. Gradients

Criteria	60 km/h	50 km/h	40 km/h	30 km/h
Minimum Grade	0.5%	0.5%	0.5%	0.5%

<sup>60%</sup> of superelevation runoff occurs on the tangent approach and 40% on the curve, resulting in a minimum length of tangent between reversing curves of 120% of the superelevation runoff length.

# Table 2 (continued) Alignment Design Criteria

## 4. Gradients

Criteria	60 km/h	50 km/h	40 km/h	30 km/h
Maximum Grades				
on horizontal tangents	8%1	10% <sup>2</sup>	12%	12%
on minimum radius horizontal curves <sup>3</sup>	8%	9%	10%	10%
Grades Through Intersections				
with design speed on major road	8%	8%	8%	-
approach distance for major road <sup>4</sup>	15 / 5m <sup>5</sup>	5m	0m	-
with design speed on minor road	5% <sup>6</sup>	5%	6%	6%
approach distance for minor road <sup>7</sup>	20m	15m	5m	5m

- 1 Under special circumstances, grades up to 10% may be permitted.
- 2 Under special circumstances, grades up to 12% may be permitted.
- 3 Applies where radius is less than 1.5 times minimum allowable radius.
- 4 Minimum distance back from the gutter line of the minor road that the specified grade may not be exceeded.
- 5 Distances for design road approach to intersection with collector road / local road.
- 6. 4% desirable.
- 7 Minimum distance back from the gutter line of the major road that the specified grade may not be exceeded.

## 5. Vertical Curve K Values

Criteria	60 km/h	50 km/h	40 km/h	30 km/h
Minimum Crest	15	8	4	2
Minimum Sag	10	7	4	2
Crest / Sag on approach to stop condition	4	3	2	2

K values listed assume that new roadways will be illuminated

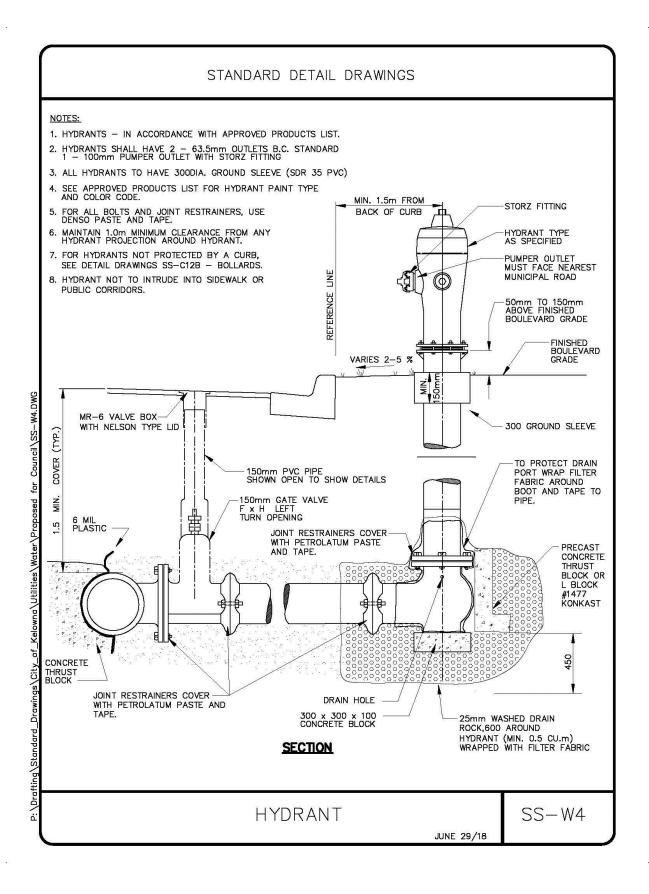
# 6. Stopping Sight Distances

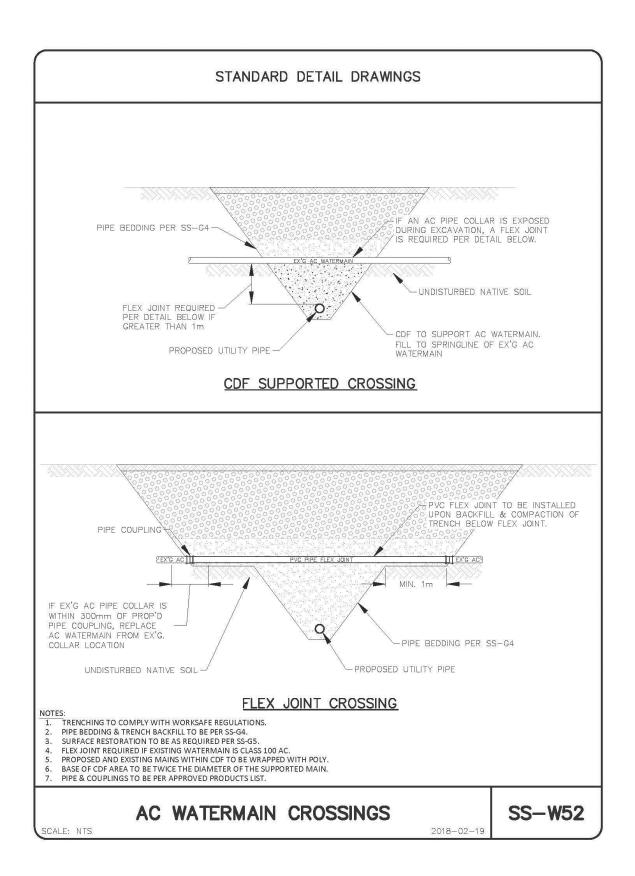
Criteria	60 km/h	50 km/h	40 km/h	30 km/h
Down grades: 12%	109	78	52	34
9%	101	73	50	32
6%	94	69	48	31
3%	89	66	46	30
0%	85	63	45	30
Up grades: 3%	81	61	44	29
6%	78	59	42	29
9%	76	57	41	28
12%	73	56	40	28

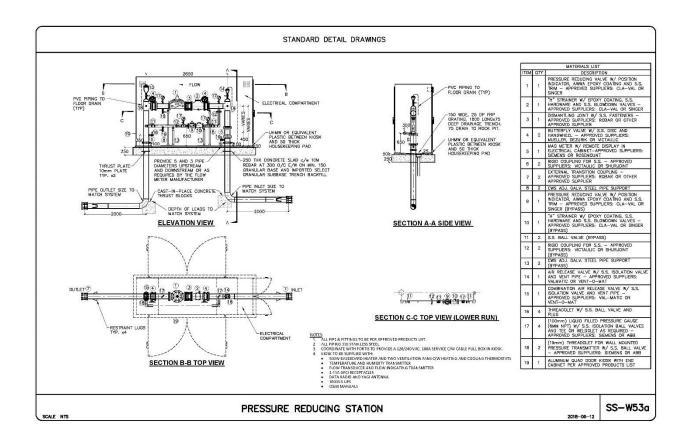
## 7. Decision Sight Distance

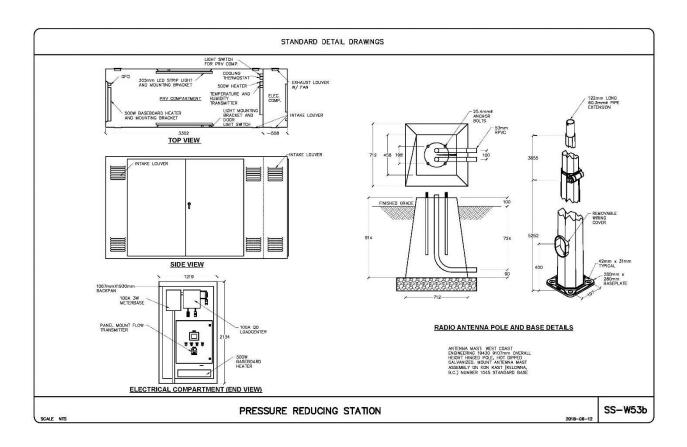
Minimum decision sight distance for 60 km/h: 175m - 235m.

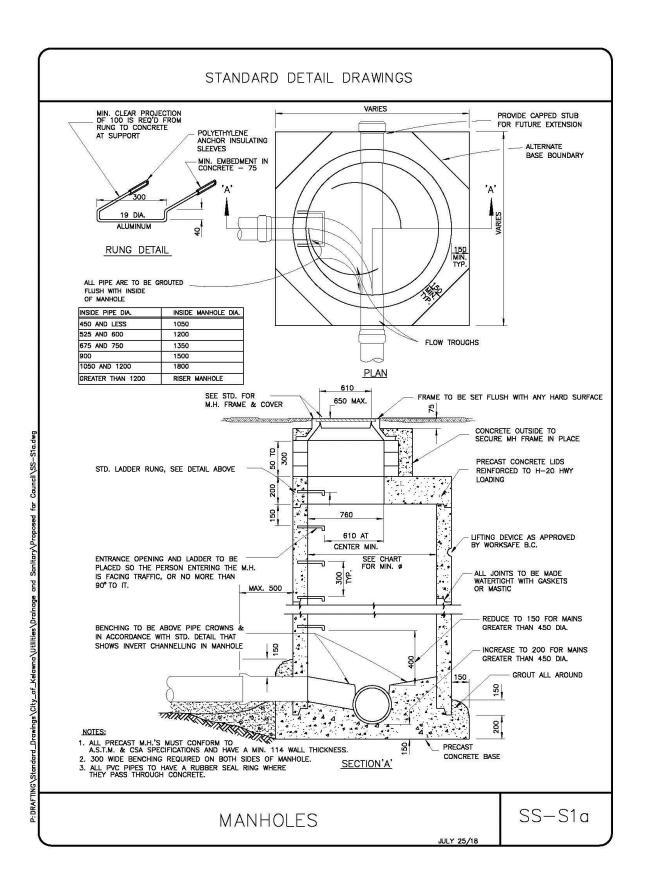
- 1. Note that decision sight distance applies only to multi-lane roads at intersections.
- The range of values recognizes the variation in complexity that occurs at various sites. For less complex situations, values towards the lower end of the range are appropriate and for more complexity, values at the upper end are used.

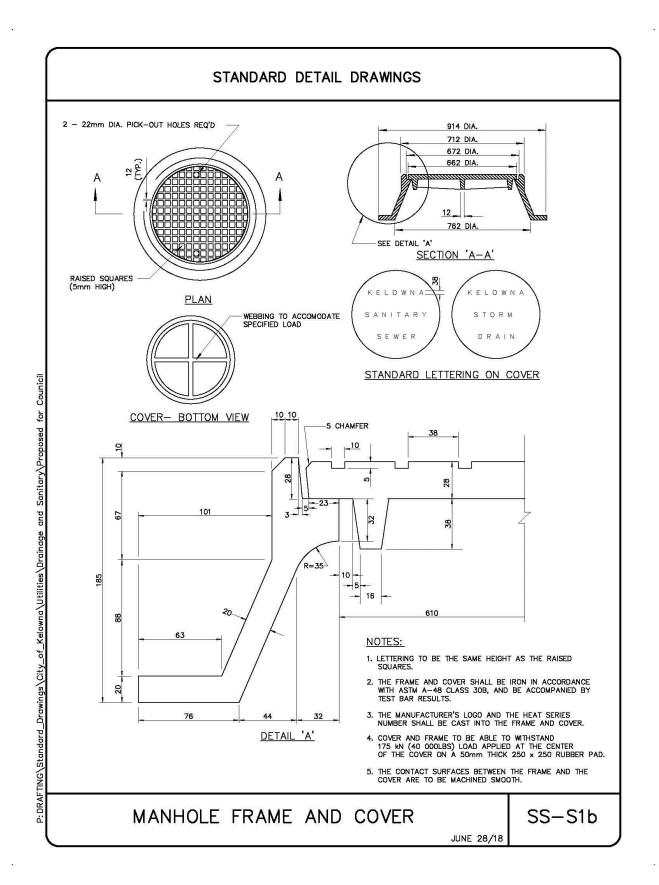


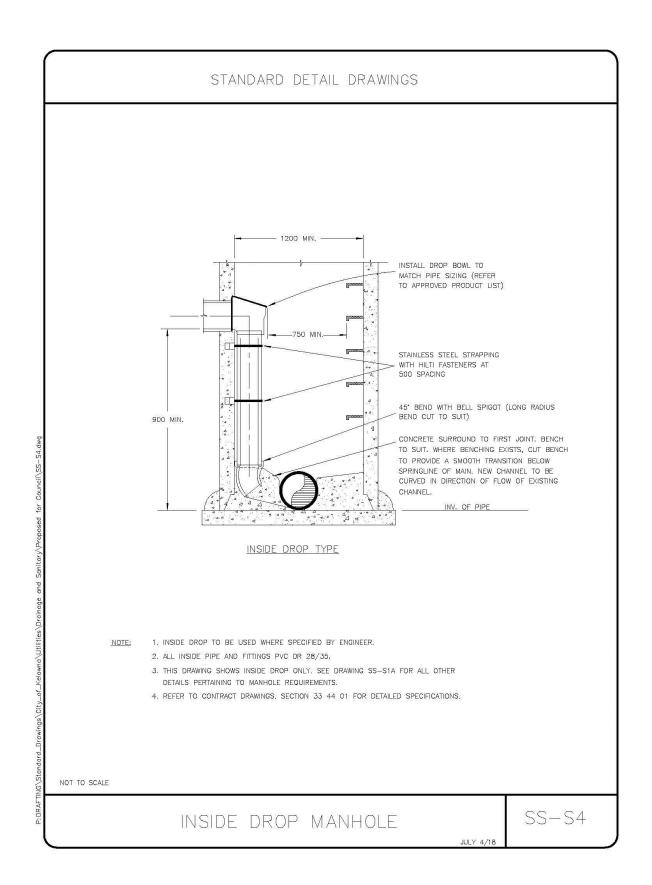


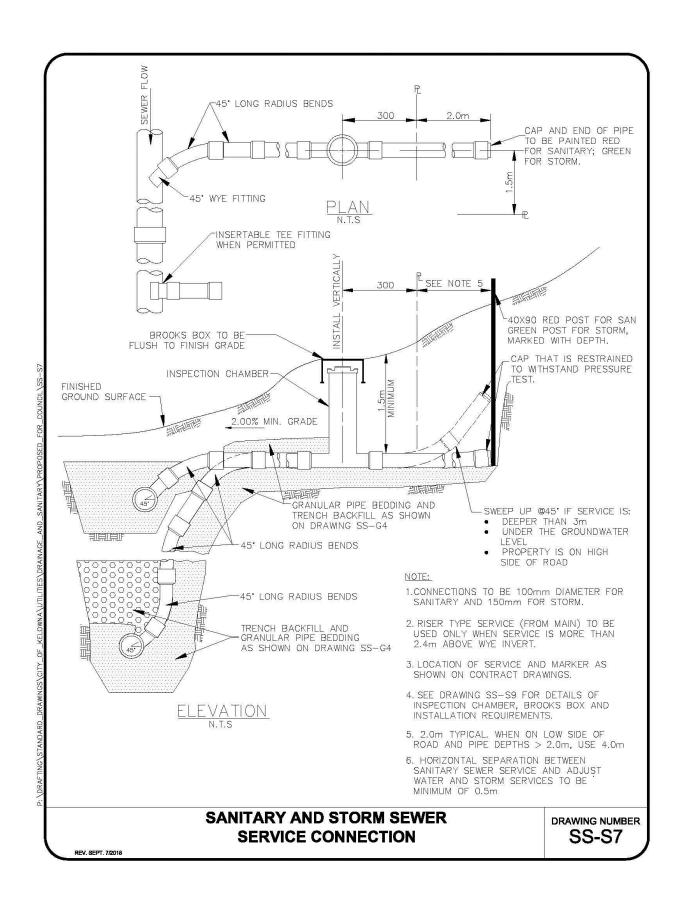


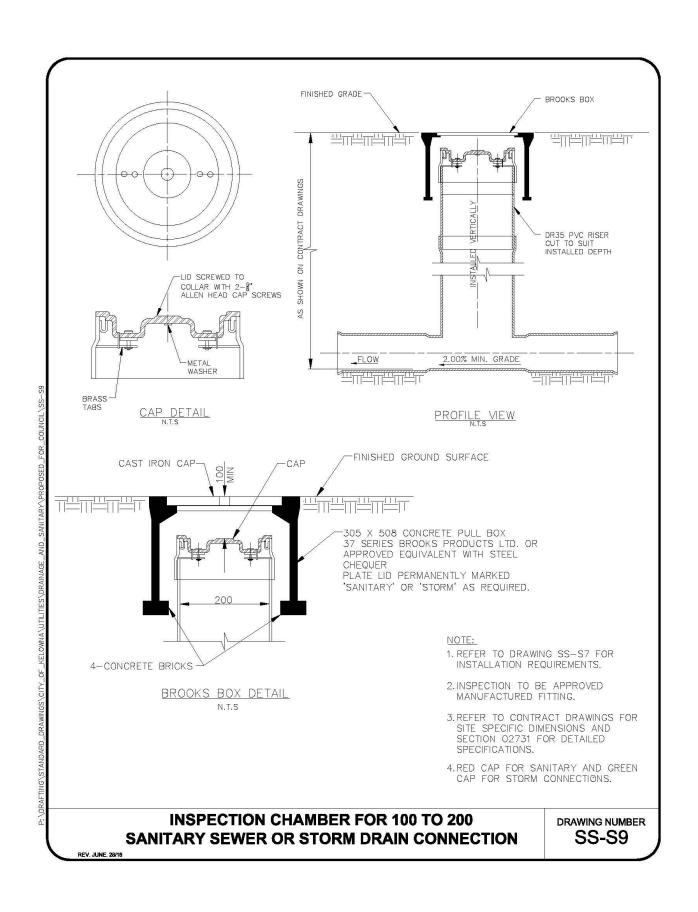












## STANDARD DETAIL DRAWINGS -20M BAR @ 150 300 FLOW 2D Sanitary\Proposed for Council\SS-S13B -EQUIDISTANT 300 ± SPACING WELDED-(TYPICAL) 30 WIDE SLOTS TO CLEAR ANCHORS 10 X 50 STRAP **PLAN** SAFETY RAIL WHERE SPECIFIED 1000 1000 MIN MIN -HINDGED 600 JOINT 10 X 50-STRAP -WINGWALL -100 P:DRAFTING\Standard\_Drawings\City\_of\_Kelowna\Utilities\Drainage and 150-20M BAR WELDED 10 X 50 STRAP FLOW-RIPRAP 300 300 CONCRETE APRON-20 DIA. X 200 X 200 LONG GALVANIZED MINIMUM 100 GRANULAR ANCHOR SECTION A-A BASE COMPACTED TO 95% MODIFIED PROCTOR DENSITY **NOTES** 1. INSTALL SAFETY HANDRAIL IF SPECIFIED ON CONTRACT DRAWINGS 2. PRECAST UNIT MAY BE PROVIDED AS ALTERNATIVE WITH CONTRACT ADMINISTRATOR'S APPROVAL. 3. ALL STEEL COMPONENTS TO BE HOT DIPPED GALVANIZED AFTER FABRICATION. 4. SAFETY GRILLAGE TO BE WELDED AT ALL JOINTS AND CONNECTIONS EXCEPT AT ANCHOR BOLTS 5, REFER TO CONTRACT DRAWINGS FOR LOCATIONS AND SITE SPECIFIC DIMENSIONS, REFER TO SECTIONS 03200 AND FOR DETAILED SPECIFICATIONS. DRAWING NUMBER: STORM DRAIN OUTLET WITH SAFETY GRILLAGE SS-S13B

JUNE 28/18

