



City of  
**Kelowna**

# City of Kelowna Urban Tree Canopy Enhancement Strategy

May 27, 2024

# Strategy Purpose



- ▶ Address the impacts of development on the urban tree canopy and reduce encroachment into natural forests.
- ▶ Use opportunities provided by re-development to plant trees for the benefit of the public realm.
- ▶ Improve urban tree care.
- ▶ Achieve canopy coverage goals set out by the *Sustainable Urban Forest Strategy* and *OCP*.

# Progress Summary:

1. Increased tree planting requirements and improved tree planting standards in the Zoning Bylaw.
2. Established process to identify pre-development trees that could be retained successfully post-development and what protection measures are needed.
3. Updated the natural area tree protection bylaw to further limit tree removal.
4. Increased staff inspection capacity to monitor tree planting.
5. Developing tree care standards and bylaw requirements to maintain tree health.

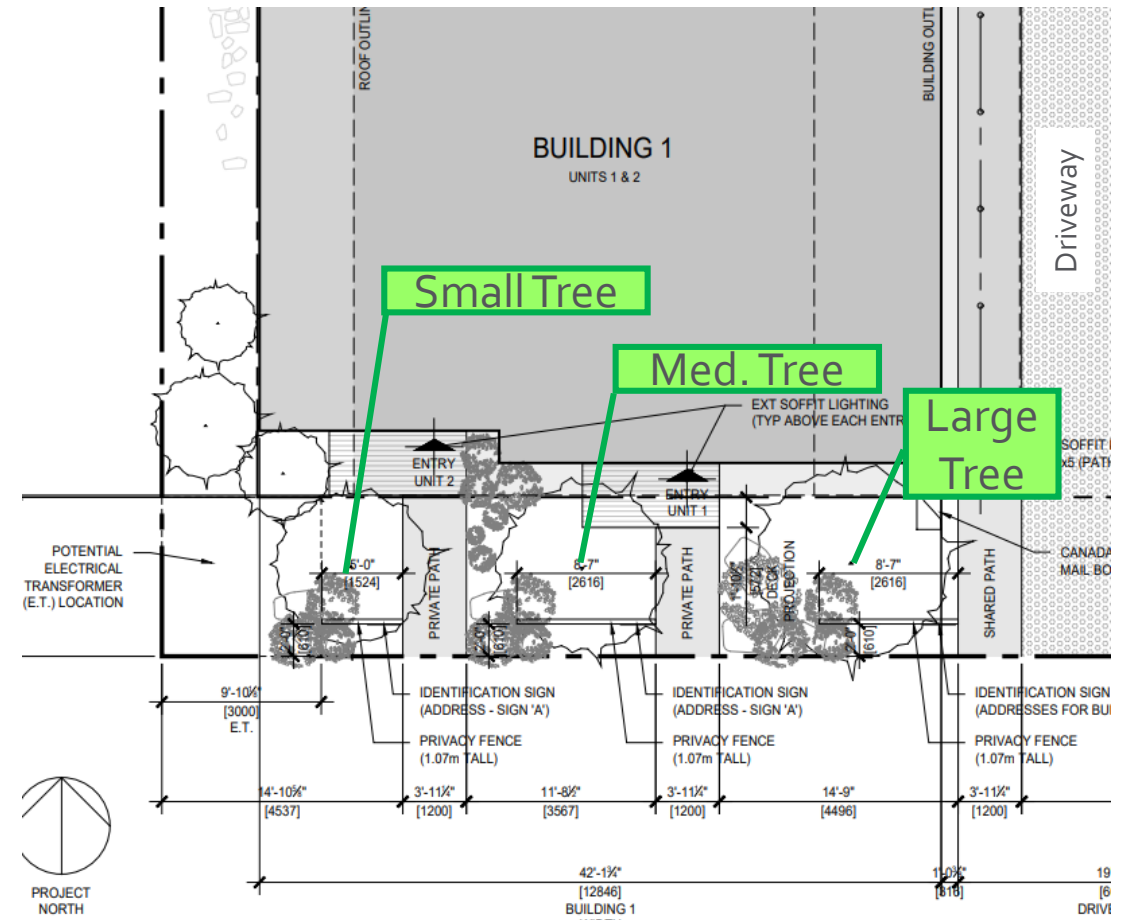
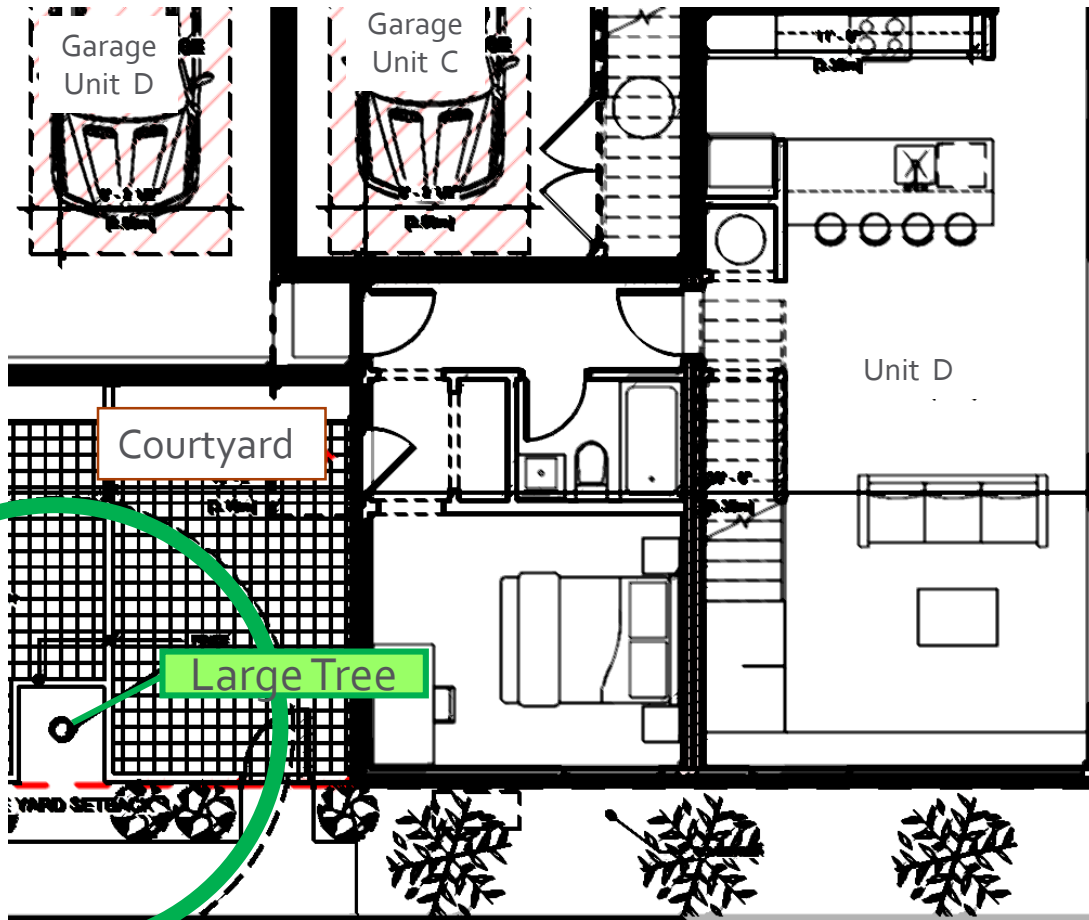
# Zoning Bylaw Updates (Sept. 2022, April 2024)

## Section 7 – Site Layout:

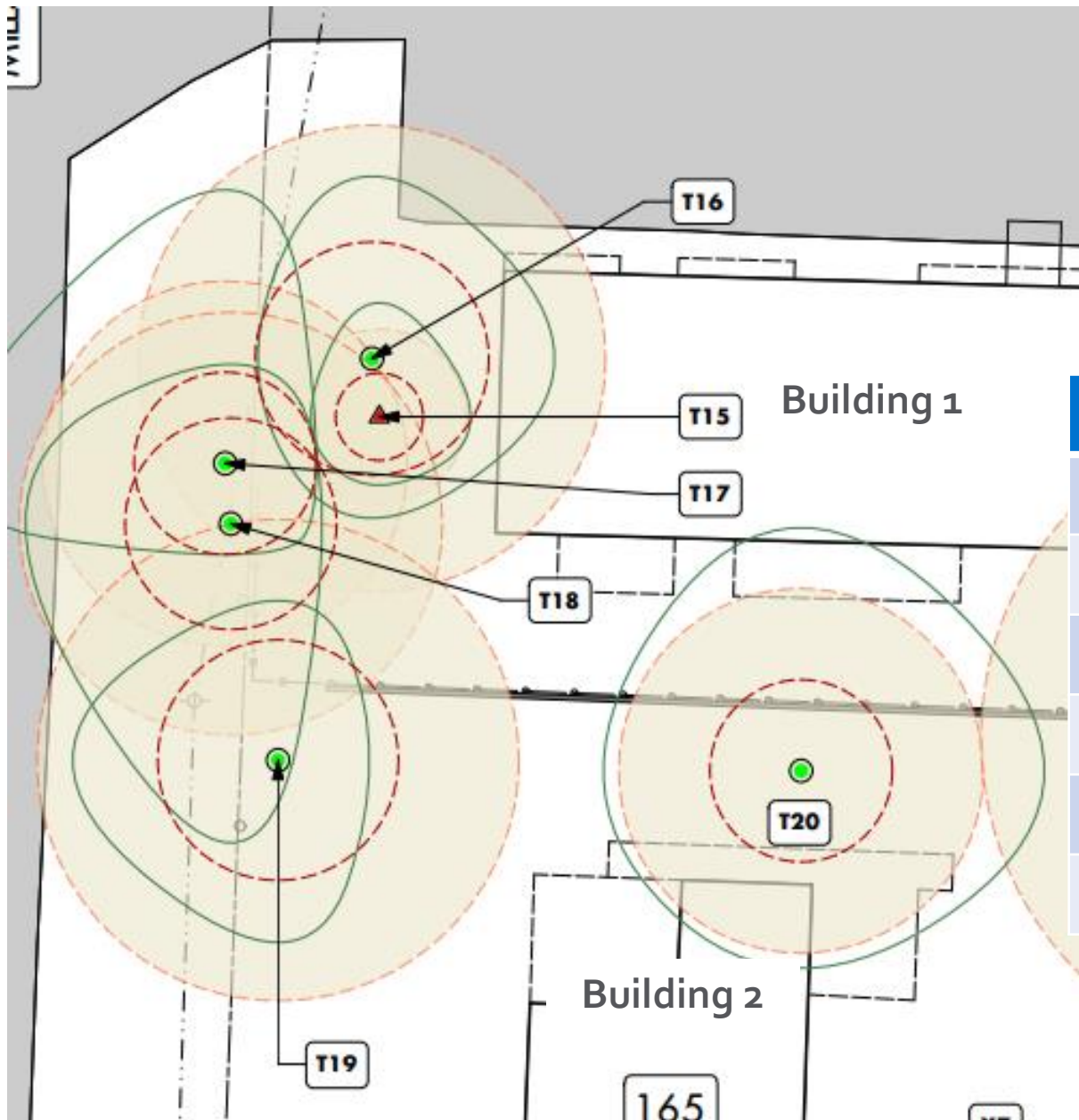
- ▶ Create better planting conditions for trees (soil volume, parkade setbacks, and soil cell requirements).
- ▶ Increase the number of required new trees planted in parking lots.
- ▶ Require at least one large tree planted (in addition to other trees).
- ▶ If planting area is impacted by utilities or other constraints, offer accommodations to ensure trees are planted elsewhere on site (delegated variances).



# Infill Templates – planning for trees



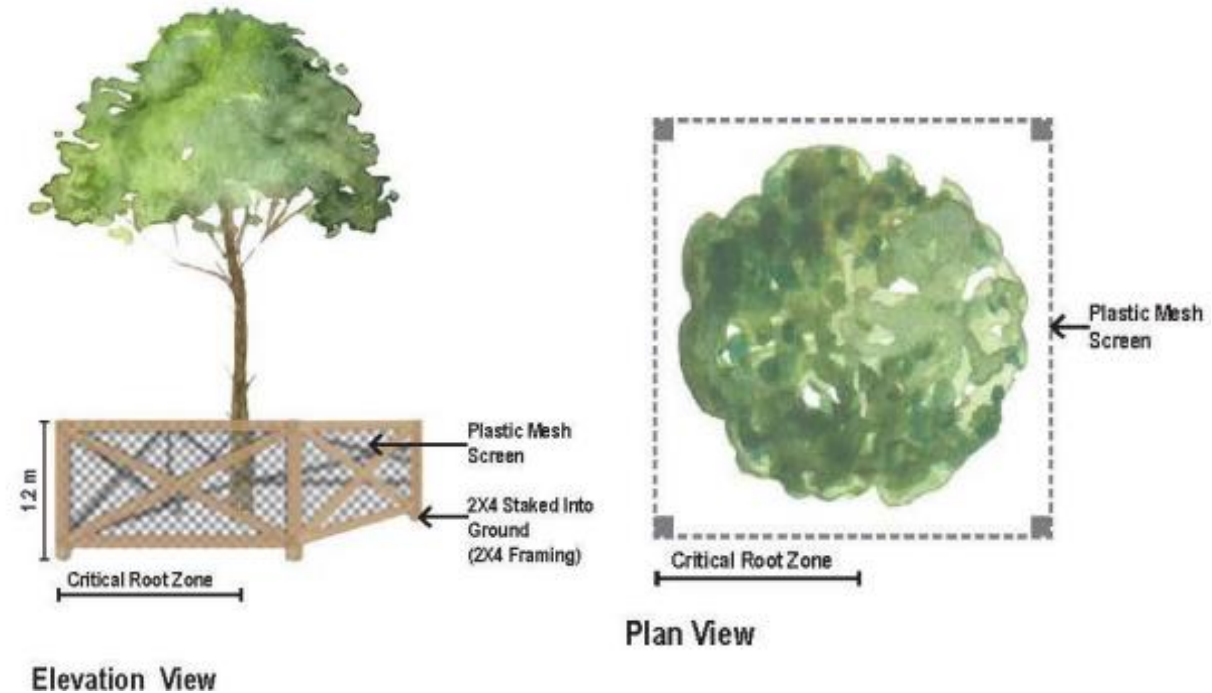
# Pre-Development Tree Inventory



Tree Code	Common Name	Category
T15 ▲	Siberian elm	Remove
T16 ●	Scots pine	Retain
T17 ●	Scots pine	Retain
T18 ●	Norway maple	Retain
T19 ●	Douglas fir	Retain
T20 ●	Norway maple	Retain

# Tree Protection Zone Installation Standards

- Must be installed prior to any work commencing
- Must remain in place (original location) throughout construction process
- No incursions are permitted inside or against the protection zone



# Does the built landscape...

# Match the proposal...







Items Description	Units	Qty.	Price	Item Total
<b>1.0 Plant Material</b>				
<b>1.1 Trees</b>				
1.1.1 6cm Cal.: Deciduous Tree	ea.	7	\$550.00	\$3,850.00
			<i>Sub-Total</i>	<i>\$3,850.00</i>
<b>1.2 Ornamental Shrubs, Perennials, Ground Covers</b>				
1.2.1 #3 Pot: Shrubs (1.2m Spacing)	ea.	49	\$45.00	\$2,205.00
1.2.2 #1 Pot: Grasses (0.6m Spacing)	ea.	86	\$15.00	\$1,290.00
1.2.3 #1 Pot: Perennials & Herbs (0.6m Spacing)	ea.	81	\$15.00	\$1,215.00
			<i>Sub-Total</i>	<i>\$4,710.00</i>
<b>1.3 Lawn</b>				
1.3.1 Sodded Lawn	m <sup>2</sup>	26	\$8.00	\$208.00
			<i>Sub-Total</i>	<i>\$208.00</i>
				<b>1.0 Total</b>
				<b>\$8,768.00</b>
<b>2.0 Topsoil &amp; Mulch</b>				
<b>2.1 Topsoil</b>				
2.1.1 Shrub Bed Topsoil (450mm Depth)	m <sup>3</sup>	45	\$50.00	\$2,250.00
2.1.2 Tree Pit Topsoil (1000mm Depth)	m <sup>3</sup>	7	\$50.00	\$350.00
			<i>Sub-Total</i>	<i>\$2,600.00</i>
<b>2.2 Mulch</b>				
2.2.1 Odogrow Mulch (75mm Depth)	m <sup>3</sup>	7.5	\$65.00	\$487.50
			<i>Sub-Total</i>	<i>\$487.50</i>
				<b>2.0 Total</b>
				<b>\$3,087.50</b>
<b>3.0 Servicing</b>				
<b>3.1 Irrigation</b>				
3.1.1 Sleeving	l.s.	1	\$1,000.00	\$1,000.00
3.1.2 Point of Connection to Water Service	l.s.	1	\$1,500.00	\$1,500.00
3.1.3 Point of Connection to Electrical Service	l.s.	1	\$500.00	\$500.00
3.1.4 Control System	l.s.	1	\$1,500.00	\$1,500.00
3.1.5 Irrigation system (heads, pipes, valves)	m <sup>2</sup>	126	\$15.00	\$1,890.00
			<i>Sub-Total</i>	<i>\$6,390.00</i>
				<b>3.0 Total</b>
				<b>\$6,390.00</b>
				<b>TOTAL</b>
				<b>\$18,245.50</b>
				<b>Security Total (125%)</b>
				<b>\$22,806.88</b>




# 2040 OCP

## [-] Natural Environment DPA


-  Water Courses
-  Sensitive Ecosystems
-  Sensitive Drainage Areas
-  Vulnerable Groundwater Aquifers

Place Holder 0

## [+] Wetlands (WIM)

-  Streams (SHIM)

## [-] Kelowna\_OCP2040

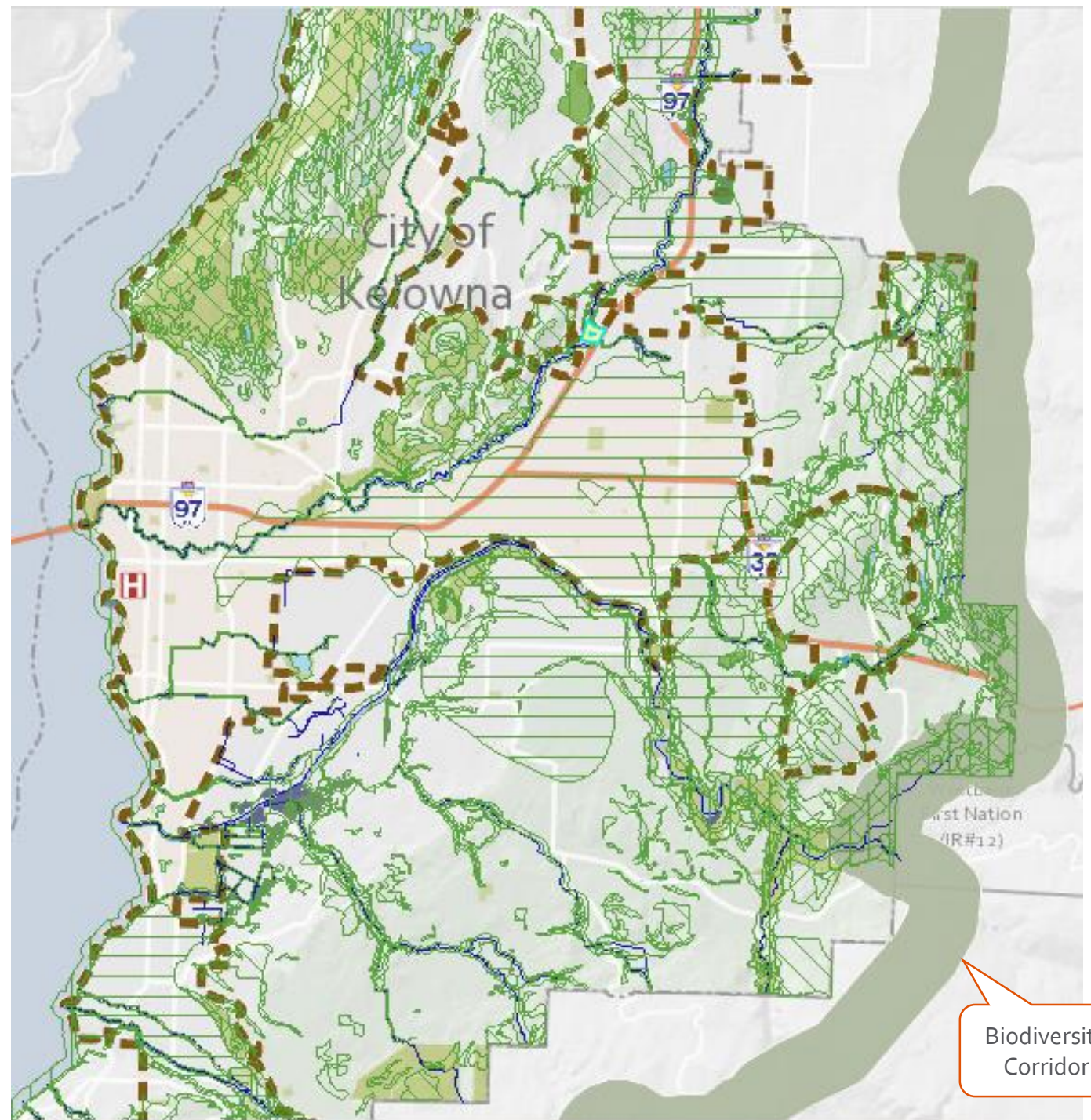
-  OCP 2040 Permanent Growth Boundary

## [-] Ecosystem Connective Corridor

-  Knox Mountain Ridge Ecosystem Connectivity Corridor
-  Okanagan Ecosystem Connectivity Corridor

Natural Environment DPA Tree Canopy = **28%**

Urban Areas Tree Canopy = **15%**



Biodiversity  
Corridor



# What's Next?

Encourage better tree care to support tree longevity after development occurs:

- ▶ Make room for roots, good soil.
- ▶ Protect trunks and roots – installation guidance.
- ▶ Require irrigation.
- ▶ Include **Climate Resiliency Assessment:**
  - ▶ Shading of amenity space and/or buildings
  - ▶ Irrigation efficiency standards (as per current water supply bylaw) and on-site water harvesting through permeable surface/stormwater infiltration requirements.
  - ▶ Mulching standards
  - ▶ Species recommendations

▶ *Plant the right tree in the right place!*

# What's Next?



Updates to the following bylaws:

- Subdivision and Development Servicing Bylaw No. 7900, which governs tree installation in boulevards and similar right-of-way areas.
- Boulevard Maintenance Bylaw No. 10425, which sets responsibilities for vegetation management in boulevards.
- A new Landscape Standards Bylaw is needed to set maintenance standards on private property.

# Staff Recommendation

THAT Council direct staff to prepare amendments to **Bylaw No. 10425**, to align street tree care and boulevard maintenance standards with other City Bylaws, prior to July 2024.





*Questions?*

For more information, visit [kelowna.ca](http://kelowna.ca).