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# CITY OF KELOWNA

## MEMORANDUM

**Date:** October 22, 2018  
**File No.:** DP18-0209  
**To:** Community Planning (AC)  
**From:** Development Engineering Manager(JK)  
**Subject:** 2175-85 Optic Ct.

### ATTACHMENT A

This forms part of application  
# DP18-0209

Planner  
Initials

AC



Form & Character

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The Development Engineering Branch has the following comments and requirements associated with this Development Permit application. The road and utility upgrading requirements outlined in this report will be a requirement of this development. The Development Engineering Technologist for this project is Aaron Sangster.

#### 1. Domestic Water and Fire Protection

- a) This development is within the service area of the Glenmore-Ellison Irrigation District (GEID). The developer is required to make satisfactory arrangements with GEID for these items. All charges for service connection and upgrading costs, as well as any costs to decommission existing services are to be paid directly to GEID.
- b) Design drawings must be reviewed by GEID prior to the City issuing the drawings for construction. Confirmation of their review must be provided to the City.

#### 2. Sanitary Sewer

Our records indicate that this property is currently serviced with a 150mm-diameter sanitary sewer service but is missing an inspection chamber at property line. The developer's consulting mechanical engineer will determine the development requirements of this proposed development and establish the service needs. Only one service will be permitted for this development.

#### 3. Storm Drainage

- a) The developer must engage a consulting civil engineer to provide a storm water management plan for this site which meets the requirements of the City Subdivision Development and Servicing Bylaw 7900. The storm water management plan must also include provision of lot grading plans, minimum basement elevations (MBE), if applicable, and provision of a storm drainage service and recommendations for onsite drainage containment and disposal systems
- b) Provide the following drawings:
  - i. A detailed Stormwater Management Plan for this development; and,
  - ii. An Erosion and Sediment Control Plan.

**4. Road Improvements**

- a) Optic Ct. fronting this development has already been upgraded. No further upgrades are needed at this time.
- b) Landscaping drawings (offsite) are required to be submitted and reviewed.

**5. Development Permit and Site Related Issues**

- a) Direct the roof drains into onsite rock pits or splash pads
- b) Access is permitted from the lane only.
- c) Driveway must be reduced to onsite lane entrance width. Remove and replace existing letdown excess with curb/gutter, sidewalk, and landscaped boulevard.
- d) A MSU standard size vehicle must be able to manoeuvre onto and off the site without requiring a reverse movement onto public roadways. If the development plan intends to accommodate larger vehicles movements should also be illustrated on the site plan. Autoturn drawings are required in civil drawing submission.
- e) Developer must consolidate 2175 and 2185 Optic Ct. into one property.
- f) Retaining walls must confirm to City of Kelowna requirements.

**6. Electric Power and Telecommunication Services**

The electrical and telecommunication services to this building must be installed in an underground duct system, and the building must be connected by an underground service. It is the developer's responsibility to make a servicing application with the respective electric power, telephone and cable transmission companies to arrange for these services, which would be at the applicant's cost.

**7. Geotechnical Report**

Provide a comprehensive geotechnical report, prepared by a Professional Engineer competent in the field of geotechnical engineering to address the items below: NOTE: The City is relying on the Geotechnical Engineer's report to prevent any damage to property and/or injury to persons from occurring as a result of problems with soil slippage or soil instability related to this proposed subdivision.


The Geotechnical report must be submitted prior to submission of Engineering drawings or application for subdivision approval.

- (i) Area ground water characteristics, including any springs and overland surface drainage courses traversing the property. Identify any monitoring required.
- (ii) Site suitability for development.
- (iii) Site soil characteristics (i.e. fill areas, sulphate content, unsuitable soils such as organic material, etc.).
- (iv) Any special requirements for construction of roads, utilities and building structures.
- (v) Suitability of on-site disposal of storm water and sanitary waste, including effects upon adjoining lands.

- (vi) Slope stability, rock fall hazard and slippage including the effects of drainage and septic tank effluent on the site.
- (vii) Identify slopes greater than 30%.
- (viii) Top of bank assessment and location including recommendations for property line locations, septic field locations, building setbacks, and ground water disposal locations.
- viii) Recommendations for items that should be included in a Restrictive Covenant.
- ix) Any special requirements that the proposed subdivision should undertake so that it will not impact the bank(s). The report must consider erosion and structural requirements.
- x) Any items required in other sections of this document.
- xi) Recommendations for erosion and sedimentation controls for water and wind.
- xii) Recommendations for roof drains and perimeter drains.
- xiii) Recommendations for construction of detention or infiltration ponds if applicable.

## 8. **Charges and Fees**

- a) Development Cost Charges (DCC's) are payable.
- b) Fees per the "Development Application Fees Bylaw" include:
  - i) Survey Monument Fee: \$50.00 per newly created lot (HST exempt).
  - ii) Survey Monument, Replacement Fee: \$1,200.00 (GST exempt) – only if disturbed.
  - iii) Engineering and Inspection Fee: 3.5% of construction value (plus GST) for all Offsite works only.

  
James Kay, P. Eng.  
Development Engineering Manager

AS

<b>ATTACHMENT</b>		<b>A</b>
This forms part of application		
# DP18-0209		
Planner Initials	AC	 City of <b>Kelowna</b> COMMUNITY PLANNING

# Draft Development Permit

## DP18-0209



This permit relates to land in the City of Kelowna municipally known as

- Lot 11, District Lot 32 and Section 14, Township 23, ODYD, Plan EPP64961 located at 2175 Optic Ct, Kelowna, BC; and
- Lot 12, District Lot 32 and Section 14, Township 23, ODYD, Plan EPP64961 located at 2185 Optic Ct, Kelowna, BC;

The development has been approved subject to any attached terms and conditions, and to full compliance with the approved plans bearing the stamp of approval and the above described development permit number.

The present owner and any subsequent owner of the above described land must comply with any attached terms and conditions.

Date of Decision: \_\_\_\_\_, 2018

Decision By: CITY COUNCIL

Issued Date: **DATE**

Development Permit Area: Comprehensive Development Permit Area

File Manager: AC

**This permit will not be valid if development has not commenced within 2 years of the council approved Date of Decision.**

Existing Zone: CD15 – Airport Business Park (IND)

Future Land Use Designation: IND – Industrial

### **This is NOT a Building Permit.**

In addition to your Development Permit, a Building Permit may be required prior to any work commencing. For further information, contact the City of Kelowna, Development Services Branch.

### **NOTICE**

This permit does not relieve the owner or the owner's authorized agent from full compliance with the requirements of any federal, provincial or other municipal legislation, or the terms and conditions of any easement, covenant, building scheme or agreement affecting the building or land.

Owner: Birchwood Heights Holding Corp

Address:

City:

Phone: n/a

\_\_\_\_\_  
Ryan Smith, Community Planning Department Manager  
Community Planning & Strategic Investments

\_\_\_\_\_  
Date

#### **1. SCOPE OF APPROVAL**

This Development Permit applies to and only to those lands within the Municipality as described above, and any and all buildings, structures and other development thereon.



This Development Permit is issued subject to compliance with all of the Bylaws of the Municipality applicable thereto, except as specifically varied or supplemented by this permit, noted in the Terms and Conditions below.

The issuance of a permit limits the permit holder to be in strict compliance with regulations of the Zoning Bylaw and all other Bylaws unless specific variances have been authorized by the Development Permit. No implied variances from bylaw provisions shall be granted by virtue of drawing notations that are inconsistent with bylaw provisions and that may not have been identified as required Variances by the applicant or Municipal staff.

## **2. CONDITIONS OF APPROVAL**

- a) The dimensions and siting of the building to be constructed on the land be in accordance with Schedule "A";
- b) The exterior design and finish of the building to be constructed on the land be in accordance with Schedule "B";
- c) Landscaping to be provided on the land be in accordance with Schedule "C"; and
- d) The applicant be required to post with the City a Landscape Performance Security deposit in the form of a "Letter of Credit" in the amount of 125% of the estimated value of the landscaping, as determined by a Registered Landscape Architect.

This Development Permit is valid for two (2) years from the Council Date of Decision if applicable, or Community Planning Department Manager approval, with no opportunity to extend.

## **3. PERFORMANCE SECURITY**

As a condition of the issuance of this Permit, Council is holding the security set out below to ensure that development is carried out in accordance with the terms and conditions of this Permit. Should any interest be earned upon the security, it shall accrue to the Developer and be paid to the Developer or his or her designate if the security is returned. The condition of the posting of the security is that should the Developer fail to carry out the development hereby authorized, according to the terms and conditions of this Permit within the time provided, the Municipality may use enter into an agreement with the property owner of the day to have the work carried out, and any surplus shall be paid over to the property own of the day. Should the Developer carry out the development permitted by this Permit within the time set out above, the security shall be returned to the Developer or his or her designate. There is filed accordingly:

- a) A Certified Cheque in the amount of **\$131,151.25** OR
- b) An Irrevocable Letter of Credit in the amount of **\$131,151.25**

Before any bond or security required under this Permit is reduced or released, the Developer will provide the City with a statutory declaration certifying that all labour, material, workers' compensation and other taxes and costs have been paid.

## **4. Indemnification**

Upon commencement of the works authorized by this Permit the Developer covenants and agrees to save harmless and effectually indemnify the Municipality against:

- a) All actions and proceedings, costs, damages, expenses, claims, and demands whatsoever and by whomsoever brought, by reason of the Municipality said Permit.

All costs, expenses, claims that may be incurred by the Municipality where the construction, engineering or other types of works as called for by the Permit results in damages to any property owned in whole or in part by the Municipality or which the Municipality by duty or custom is obliged, directly or indirectly in any way or to any degree, to construct, repair, or maintain.

**The PERMIT HOLDER is the CURRENT LAND OWNER.  
Security shall ONLY be returned to the signatory of the  
Landscape Agreement or their designates.**

# SCHEDULE

**B**

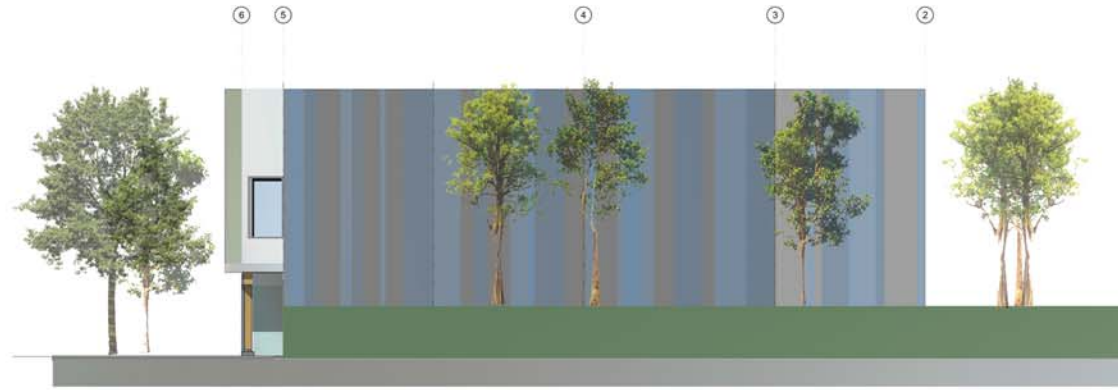
This forms part of application  
# **DP18-0209**

Planner  
Initials

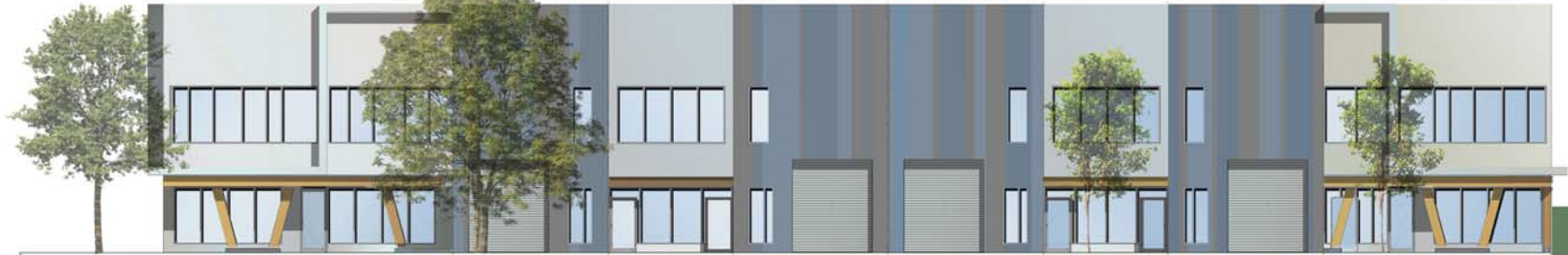
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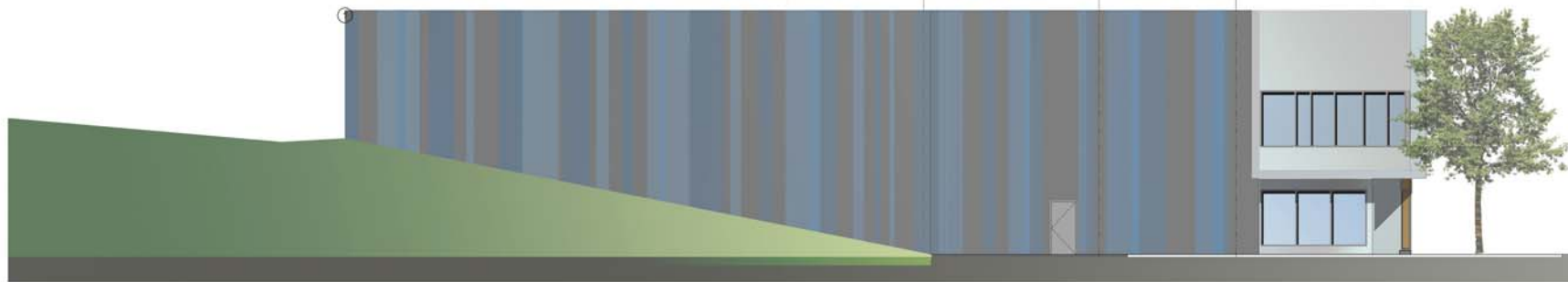
SITE SIGN - SOUTH ELEVATION



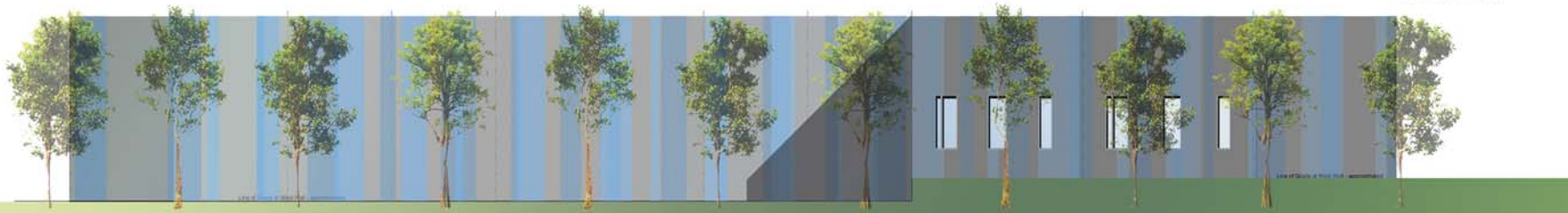
NORTH ELEVATION



EAST ELEVATION



SOUTH ELEVATION



WEST ELEVATION

Building 1 ELEVATIONS

SHEET **A5**

OPTIC COURT - OFFICE WAREHOUSE  
2175 + 2185 Optic Court Kelowna BC



HUCULAK






NORTH ELEVATION

SCHEDULE B

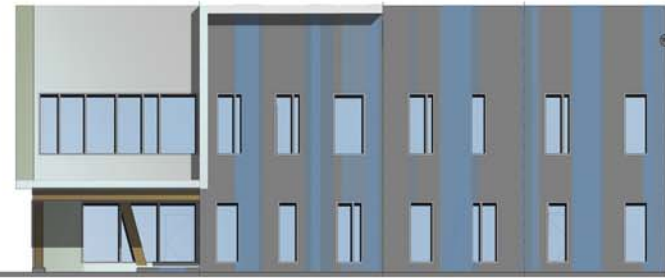
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**City of Kelowna**  
COMMUNITY PLANNING



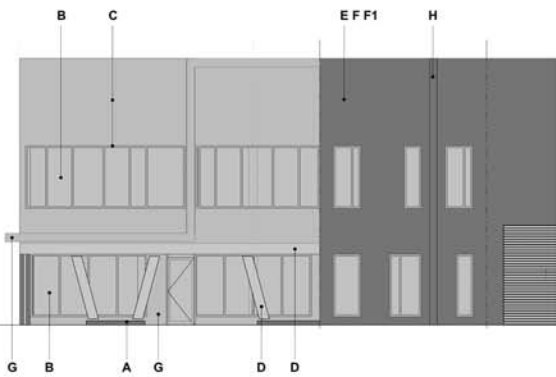
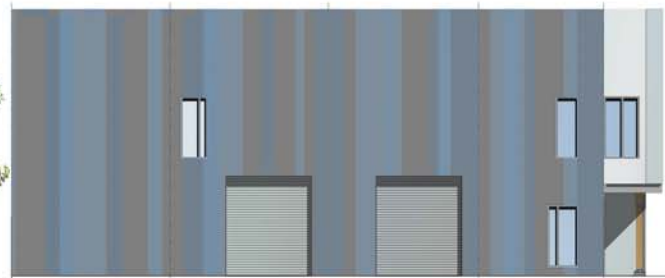
EAST ELEVATION



SOUTH ELEVATION



WEST ELEVATION



- 2185 + 2175 Optic Court Kelowna BC
- MATERIAL AND FINISHES
- A Concrete – Natural Finish w/ Sealer
  - B Glazing – Clear
  - C Aluminum Frame – Natural
  - D Timber or Glulam – Med Dark (reddish brown) Stain
  - E Paint – Warm Grey
  - F Paint – Light Warm Grey
  - G Aluminum Panel – Natural Clear
  - H Feature Light Fixture Steel Channel – Paint to match Aluminum Clear



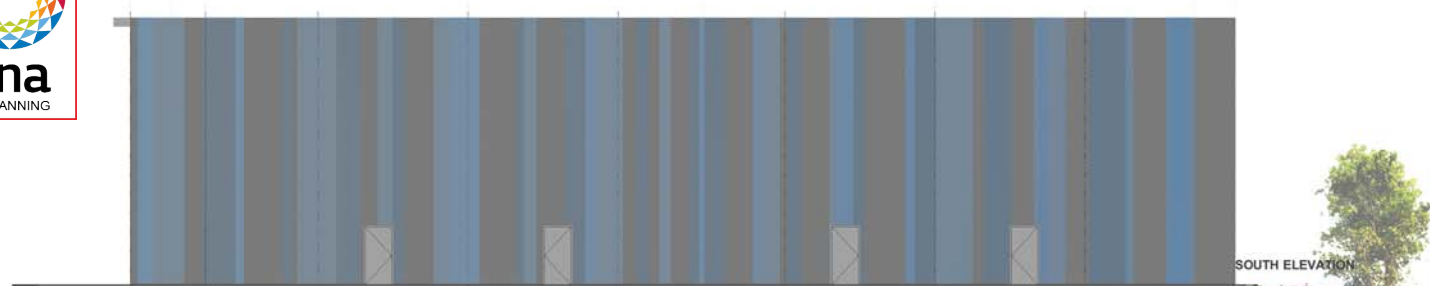




NORTH ELEVATION



EAST ELEVATION



SOUTH ELEVATION



WEST ELEVATION

**SCHEDULE B**

This forms part of application  
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Planner Initials AC

City of Kelowna  
COMMUNITY PLANNING

Building 3 ELEVATIONS

SHEET **A7**

OPTIC COURT - OFFICE WAREHOUSE  
2175 + 2185 Optic Court Kelowna BC

HUCULIAK

2018.11.13  
**MQN**  
ARCHITECTS

Building 3

Building 2



**SCHEDULE B**

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City of  
**Kelowna**  
COMMUNITY PLANNING

East Elevation of Site - View From Hwy 97



View from Optic Court



View from Optic Court



View from Courtyard Building 2 & 3



View from Optic Court



View from Hwy 97



View from Parking Lot



View from Parking Lot



View from Hwy 97

## SCHEDULE **B**

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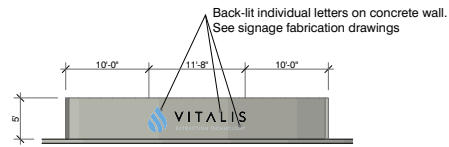
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Initials **AC**



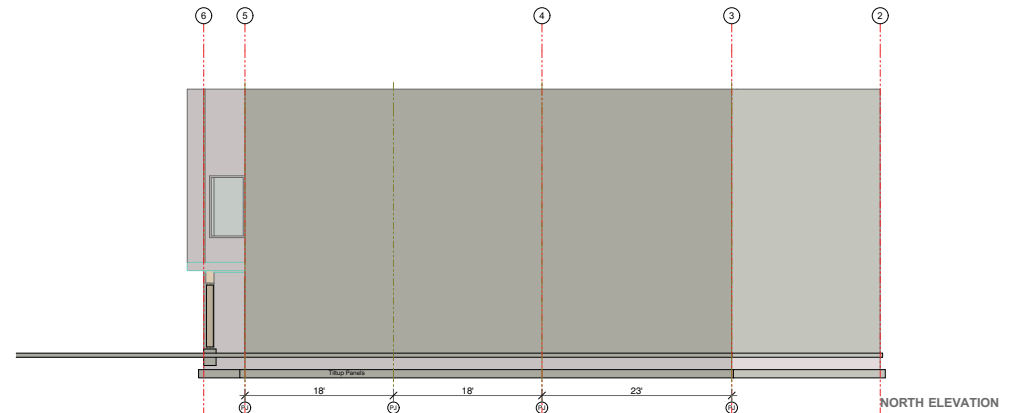
View from Parking Lot



View from Optic Court



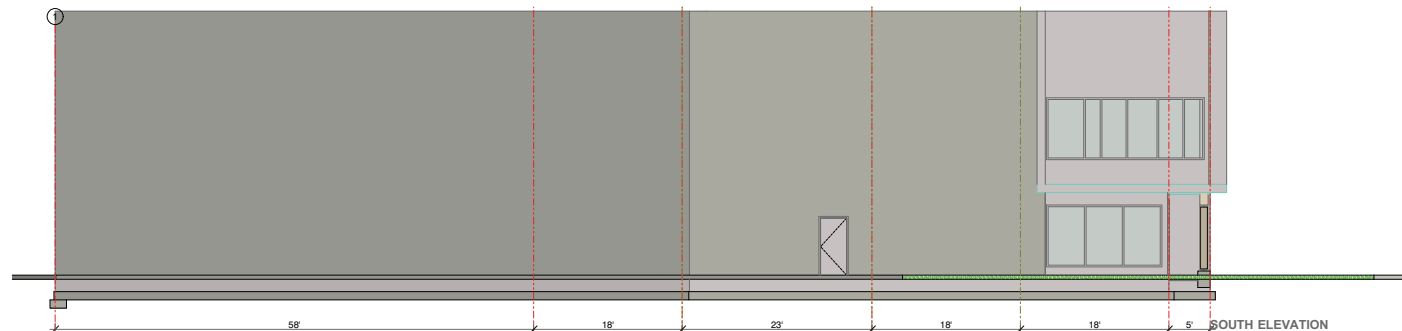
SITE SIGN - SOUTH ELEVATION



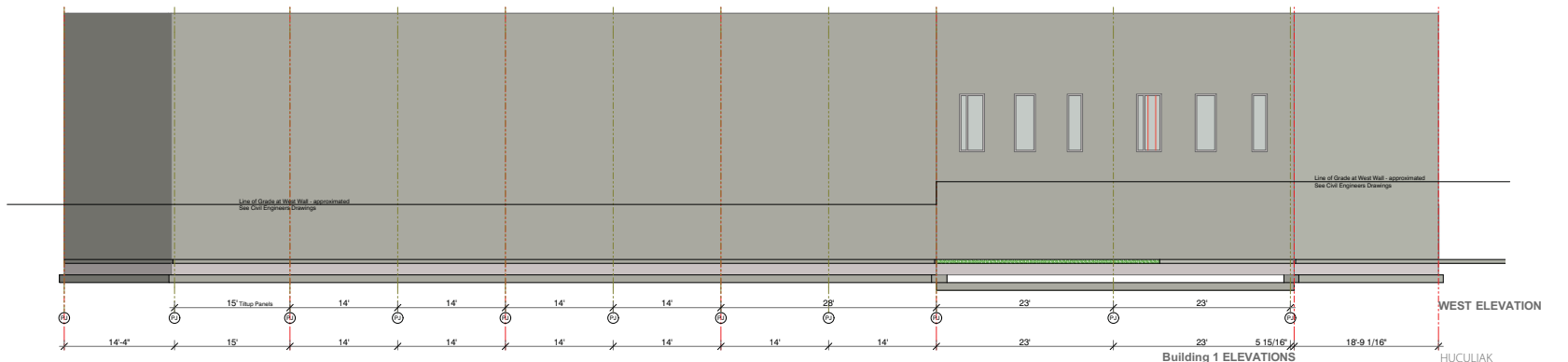
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OPTIC COURT - OFFICE WAREHOUSE  
2175 + 2185 Optic Court Kelowna BC

Building 1 ELEVATIONS

HUCULIAK

SHEET **A5**

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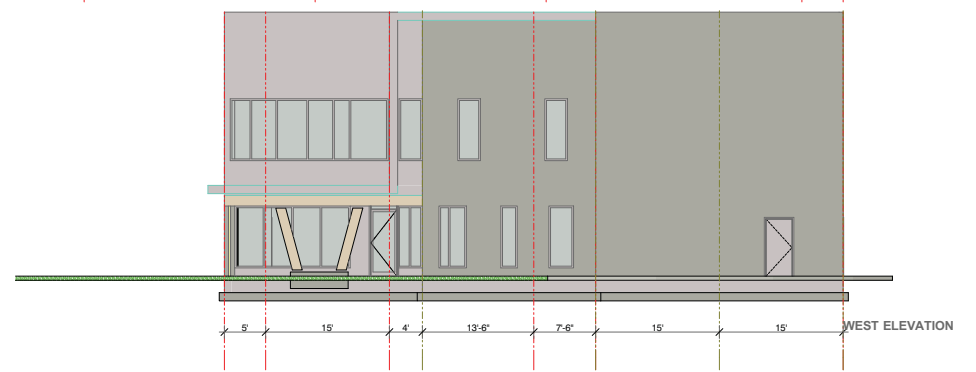
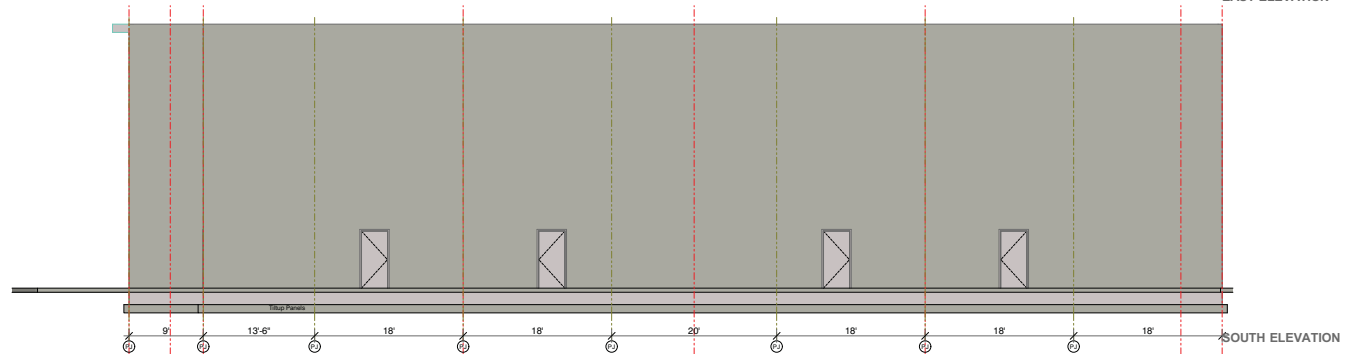
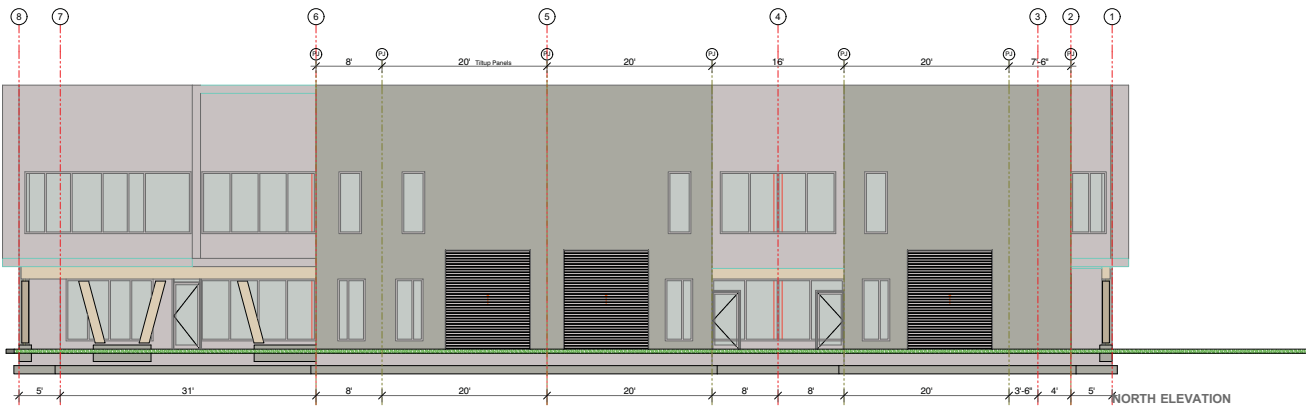
Planner Initials **AC**

City of Kelowna  
COMMUNITY PLANNING









Building 3 ELEVATIONS

HUCULIAK

SHEET **A7**

## SCHEDULE **B**

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Initials **AC**

City of  
**Kelowna**  
COMMUNITY PLANNING



# SCHEDULE

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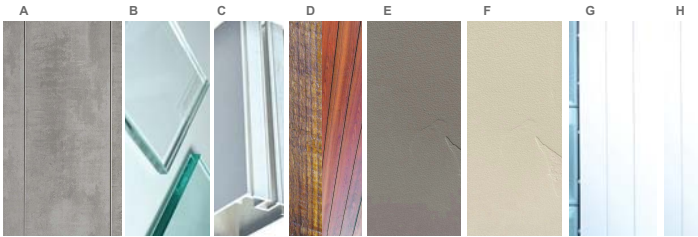
Planner Initials

AC

# A



City of  
**Kelowna**  
COMMUNITY PLANNING



- 2185 + 2175 Optic Court Kelowna BC
- MATERIAL AND FINISHES
- A Concrete – Natural Finish w Sealer
  - B Glazing – Clear
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  - E Paint – Warm Grey
  - F Paint – Light Warm Grey
  - G Aluminum Panel – Natural Clear
  - H Feature Light Fixture Steel Channel – Paint to match Aluminum Clear

2185 + 2175 Optic Court Kelowna BC			
Zoning Summary		CD15IN	
Current Zoning			
Description	Permitted/Required/Allowable	Provided	
Site			
Lot address 2185	4,000.83 m <sup>2</sup>	43,064.56 sf	
Lot address 2175	4,123.1 m <sup>2</sup>	44,381.74 sf	
Total	8,123.8 m <sup>2</sup>	87,446.3 sf	
Building 1 Lot address 2185			
Main Floor	1,588.0 m <sup>2</sup>	17,095 sf	
Second Floor Mezzanine	34 m <sup>2</sup>	369 sf	
Building 2 Lot address 2175			
Main Floor	1,335.0 m <sup>2</sup>	14,367 sf	
Second Floor	537 m <sup>2</sup>	5,789 sf	
Building 3 Lot address 2175			
Main Floor	855.9 m <sup>2</sup>	9,213 sf	
Second Floor	0 m <sup>2</sup>	0 sf	
Main Floor Total	3,778.9 m <sup>2</sup>	40,875 sf	
Total Net Main and Second Floors (approx.)	4,092.0 m <sup>2</sup>	44,048 sf	
Total Gross	4,350.0 m <sup>2</sup>	46,824 sf	
F.A.R.	1:1.5	1:0.54	
Height	18.0m or 4 storeys	8m	27 / 2 storeys
Front Yard	6.0m	6.0m	20'
Side Yard	0.0m 5.0m adjacent corner 4.5m housing event	0.0m 6.0m adjacent corner 4.5m housing event	4.5m housing event
Rear Yard	0.0m 6.0m adjacent corner 4.5m housing event	0.0m 6.0m adjacent corner 4.5m housing event	4.5m housing event
Side Yard @ HWY 97	7.0m 23'	7.0m	23'
Parking 2.0 cars per space	87	87	
Bicycle	Class I 8	8	
	Class II 23	23	
Loading	2	0	

DESIGN RATIONALE

2175 & 2185 Optic Court

Three office warehouse buildings around a landscaped parking courtyard located at the terminus of Optic Court will support office/warehouse commercial tenants).

Timber concrete construction at approx. 20m / 8m in height at the parapet will feature glazed areas at prominent corners and business entry's to enhance the industrial nature of the development.

Metal panel canopies with incorporated signage supported by wood columns provide cover and architectural interest.

Exterior vertical bands of subtle coloration and materials, wood and metal, add an elegant look to an otherwise utilitarian purpose building type. Panels vary in width and arrangement to express an organic look and feel. All project fenestration will also vary in width for interest.

This contemporary and organic arrangement of varying thicknesses will provide tenant expression opportunities re: windows signage and CRU bay demising. The variety of patterns mitigate the monolithic aspects of the form.

Buildings 1 & 2 main floor will be predominantly warehouse manufacture and storage as per the current CD15 Zoning.

Building 3 main floor will be office use for the main tenant of the entire development as per the current CD15 Zoning.

All buildings will contain some second floor office and mezzanines.

As tenant particulars are established some areas will be owner operated and others leased to currently undetermined tenants.

A central courtyard will include larger trees intended to mature and provide shade to the parking lot asphalt. The sidewalk on the east property line adjacent Hwy 97 will be generously landscaped as required in City of Kelowna Hwy 97 Zoning Requirements.

Planters, flush with sidewalks, of flowering native drought tolerant species accent parking stall adjacencies.

Each Building provides adjacent outdoor landscaped patio seating areas for tenants and visitors.

Main entry access to the site will be extensively landscaped, with freestanding site signage, designed to create a visually pleasing terminus to Optic Court.

Site Access - Two drive aisle entries ease flow to and from the property.

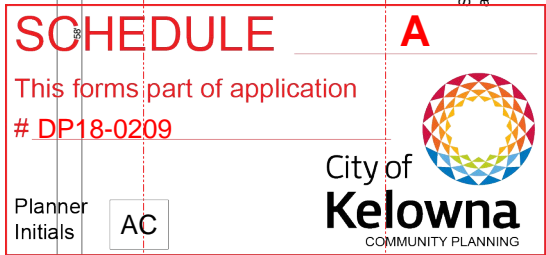


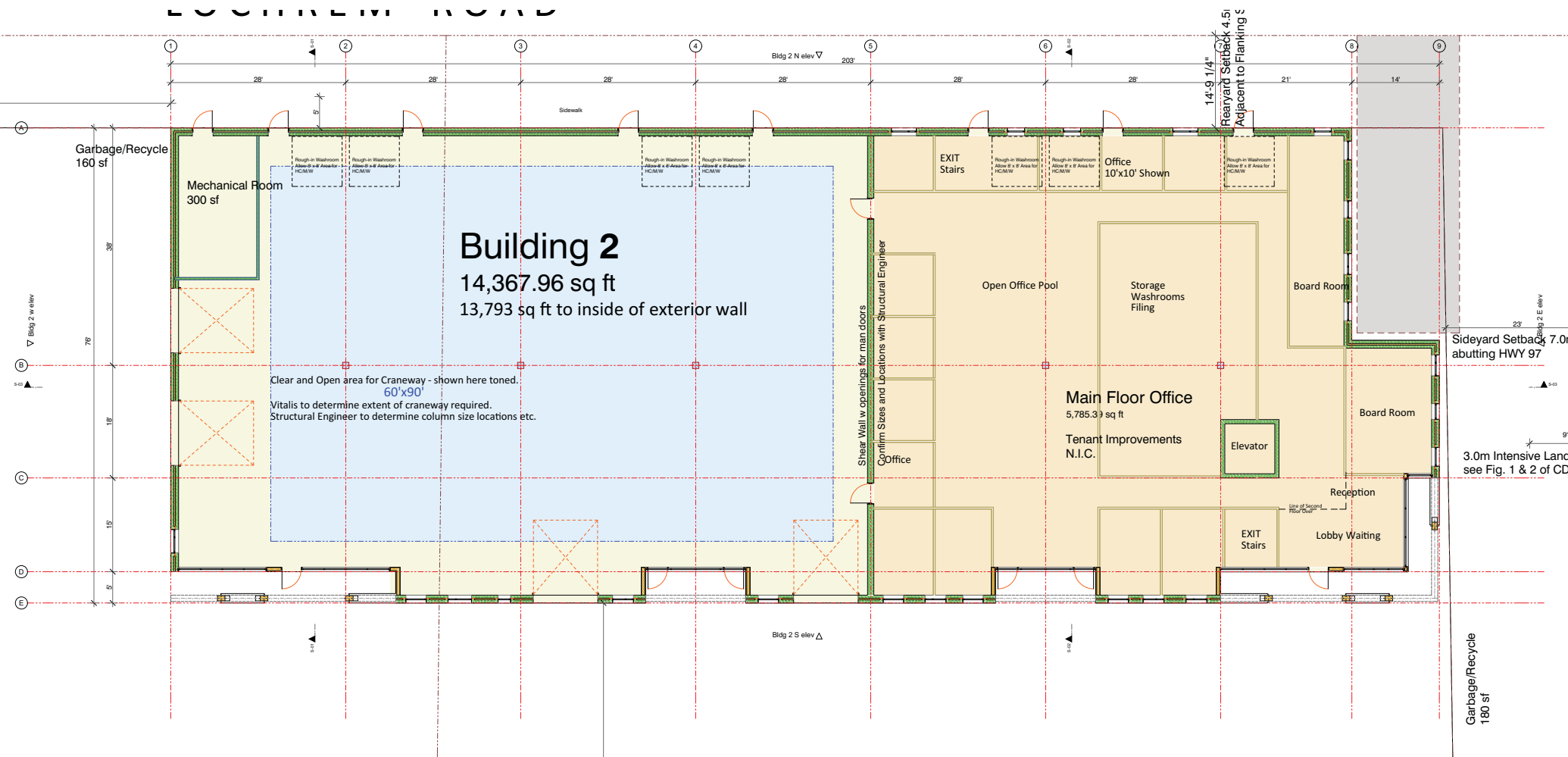
Google Satellite Image of Subject Property

## HWY 97



**MQN**  
ARCHITECTS





## SCHEDULE A

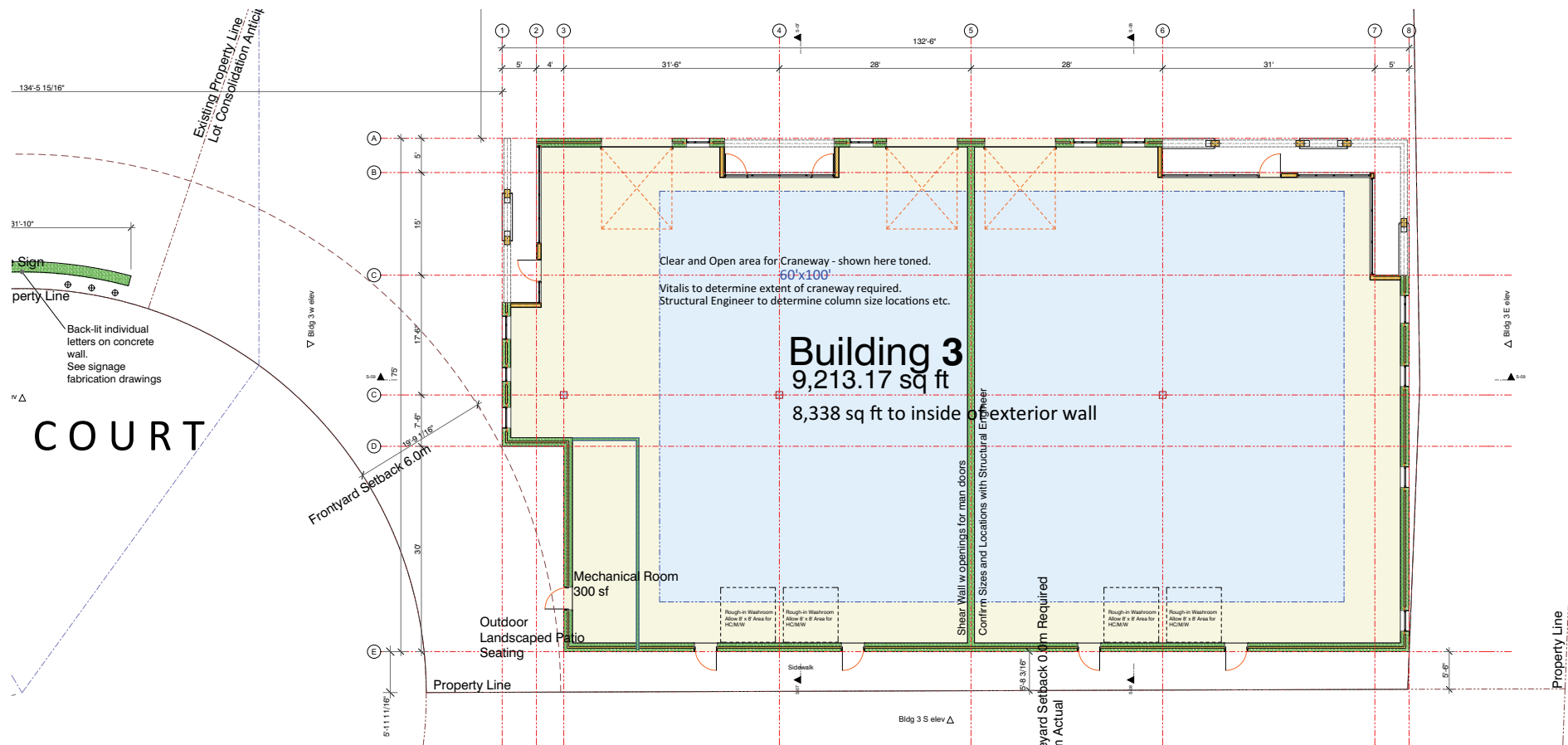
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## SCHEDULE

A

This forms part of application

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## APPLICATION IDENTIFICATION

Planner  
Initials AC

Owner:	
Agent if applicable:	Brian Quiring
Title:	Coordinating Professional
Company:	BENCH Site Design Inc.
City:	Kelowna

Subject Address:	2175 & 2185 Optic Court	
Telephone:	(250) 860-6778	
Fax No:		
Email:	keith@benchsitedesign.com	
Mailing Address:	4 -1562 Water Street, Kelowna BC	
Province:	BC	Postal Code: V1Y 1J7

## LANDSCAPE WATER CONSERVATION CHECKLIST

Note: all boxes are to be checked - see instruction page

- ☒ Install Backflow prevention devices to meet City of Kelowna standards to isolate the outdoor irrigation system from the potable water system.
- ☒ Group planting into 'hydrozones' of high, medium and low water-use plants or unirrigated/unwatered areas.
- ☒ Minimize mown turf areas that are high water use areas - ideally to 50% of the landscape area or less - substitute with areas of lower water use treatments like unwatered native woods or meadow, mulch, spaced wood deck, pervious paving.
- ☒ Provide adequate topsoil or growing medium of depth and quality to meet the BC Landscape Standard, published by the BC Society of Landscape Architects and the BC Landscape and Nursery Association. General minimum depths over poor subsoils are 150mm for lawn and 300mm for shrubs groundcover.
- ☒ Group irrigation circuits/zones into 'hydrozones' of high, medium, and low or unirrigated areas consistent with the landscape planting plan. Provide a separate irrigation valve for each irrigated hydrozone.
- ☒ Minimize use of high-volume spray heads, and employ drip or low volume irrigation where practical.
- ☒ When spray or rotor irrigation is used, design and install head to head coverage in accordance with manufacturer's specifications, and avoid overspray outside landscape areas.
- ☒ Ensure matched precipitation rates within all irrigation circuits.
- ☒ Design and install pipe and head layout so flow velocity does not exceed 1.5 m/s, and to minimize elevation change or pressure variation in circuits. Provide check valves to stop low head drainage.
- ☒ Ensure irrigation mainlines are proved leak-free with hydrostatic tests.
- ☒ Provide pressure regulating devices to ensure Irrigation outlets are operating at the manufacturer's optimum pressure range.
- ☒ Install - and program to minimize water use - 'Smart Controllers' to meet standards of the City of Kelowna Water Regulation Bylaw.
- ☒ Install an irrigation master shut-off valve (isolation valve) located outside the building in a location accessible to the City that when closed shall stop the supply of water from the potable water supply to the outdoor irrigation system and shall be capable of being closed and locked off by the City.

Applicant Notes on the Landscape Water Conservation Checklist:





## LANDSCAPE WATER CONSERVATION TABLE

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Applicant: **BENCH Site Design Inc.**

Address: **4-1562 Water Street, Kelowna BC V1Y 1J7**

### Step 1: Measure Total Landscape Area (LA)

Area of site that will absorb water:

**2106** sq.m.

Note: INCLUDE BOULEVARD, and proposed lawn, plants, mulch, PERVIOUS decks or paving. Do not include building areas, driveways, patios, decks or walks unless pervious.

### Step 2: Divide Into Landscape Treatments\*

		Plant Factor	Irrig Efficiency	Hydrozone Area (Sq.m.)	% of Total LA	Estimated Water Use (cu.m.)
Note: each of the areas below are a 'HYDROZONE'		(PF)	(IE)	(HA)		(WU)
<b>Unwatered Pervious Areas (not impervious paving)</b>						
Mulch (Stone, bark or sand)		N/A	N/A	97	5%	N/A
Pervious deck (Spaced wood deck)		N/A	N/A	0	0%	N/A
Pervious paving (Permeable Pavers)		N/A	N/A	621	29%	N/A
Naturalized meadow (wildflowers)		N/A	N/A	0	0%	N/A
Naturalized area (Existing natural area)		N/A	N/A	0	0%	N/A
Other: Restoration Area		N/A	N/A	808	38%	N/A
Swimming or ornamental pool		1	1	0	0%	0
<b>Watered Planting Beds (shrubs or groundcover)</b>						
<i>Planting Type</i>	<i>Irrig Efficiency</i>					
Low water use plants	High (Drip or Bubbler)	0.3	0.9	0	0%	0
Low water use plants	Low (Spray or Rotor)	0.3	0.7	0	0%	0
Moderate water use plants	High (Drip or Bubbler)	0.5	0.9	580	28%	322
Moderate water use plants	Low (Spray or Rotor)	0.5	0.7	0	0%	0
High water use plants	High (Drip or Bubbler)	0.7	0.9	0	0%	0
High water use plants	Low (Spray or Rotor)	0.7	0.7	0	0%	0
<b>Watered Mown Lawn Areas</b>						
Low		1	0.7	0	0%	0
<b>Special Landscape Areas (SLA)</b>						
Vegetable Garden	High (Drip or Bubbler)	1	0.9	0	0%	0
Vegetable Garden	Low (Spray or Rotor)	1	0.7	0	0%	0
Sports Lawn	Low (Spray or Rotor)	1	0.7	0	0%	0
Rainwater or Recycled Water Use		0.3	1	0	0%	0
Totals				2106	100%	322
Special Landscape Area (SLA) Sub total				0		

\*If proposed design conditions are not shown on the form please contact Water Smart at 250-868-3339




## CALCULATE & COMPARE WATER BUDGET TO ESTIMATED WATER USE

Note: For Evapotranspiration (ET<sub>o</sub>) in Kelowna use 1000mm/yr

	Amount	Units
Total Landscape Area	2106	sq.m.
Landscape Maximum Water Budget (WB)	2106	cu.m./yr.
Estimated Landscape Water Use (WU)	322	cu.m./yr.
<span style="color: blue;">Under (-OVER) Budget (Must be under Water Budget WB)</span>	<span style="color: blue;">1,784</span> OK	cu.m./yr.

I have identified and confirmed, by completing the attached 'Landscape Water Conservation Checklist' above, that the project will conform to current landscape and irrigation water conservation practices listed in the checklist. I also acknowledge that the landscape treatments of the project will conform to the Hydrozone areas identified by me in the 'Landscape Water Conservation Calculation Table' above.



\_\_\_\_\_  
Signature of Applicant

Date: 17-Oct-18

## FOR CITY OF KELOWNA OFFICE USE ONLY

The Irrigation Application and calculations above satisfy the requirements of the Water Regulation Bylaw 10480 Section 4.4.2 and 4.4.3. and is hereby APPROVED with the signature of the Water Manager or designate.

\_\_\_\_\_  
Signature of Kelowna Water Smart designate  
For Water Manager

Date: \_\_\_\_\_

\_\_\_\_\_  
Print Name

**NOTE:** Post Signed and approved application at Smart Controller for future reference


Page 3 of 3

SCHEDULE C

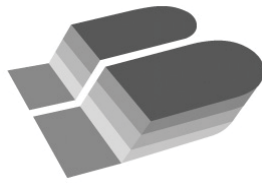
This forms part of application  
# DP18-0209

Planner  
Initials

AC



**City of  
Kelowna**  
COMMUNITY PLANNING



October 17, 2018

City of Kelowna  
1435 Water Street  
Kelowna, B.C.  
V1J 1J4

<b>SCHEDULE</b>		<b>C</b>
This forms part of application # <b>DP18-0209</b>		
Planner Initials	AC	 <b>City of Kelowna</b> COMMUNITY PLANNING

Attention: Community Planning & Real Estate Division

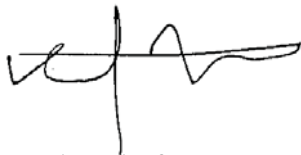
**Project:** Optic Court Office Warehouse

---

Please be advised that a landscape security bond of **\$131,151.25** will be required for the Optic Court Office Warehouse project. This sum is equal to 125% of the estimated installed cost for all soft landscape. As per City of Kelowna requirements, the estimate includes trees, shrubs, grasses, perennials, restoration planting, topsoil, mulch, irrigation and bike racks. Please see the attached Estimate of Probable Costs for a detailed breakdown of these costs.

Should you require any additional information, please do not hesitate to contact me.

Sincerely,



Keith Nyhof, BCSLA, CSLA  
Registered Landscape Architect

cc

Brian Quiring – MQN Architects  
Steve Huculiak – Huculiak Artist Designer



**SCHEDULE**
**C**

This forms part of application  
# DP18-0209

Planner Initials AC

City of  
**Kelowna**  
COMMUNITY PLANNING

## Optic Court Office Warehouse

### Estimate of Probable Costs of Construction for Bonding

Prepared on: October 17, 2018

Items Description	Units	Qty.	Price	Item Total
<b>1.0 Plant Material</b>				
1.1 Trees				
1.1.1 6cm Cal.: Deciduous Shade Tree	ea.	23	\$550.00	\$12,650.00
1.1.2 1.8m Ht.: Coniferous Ornamental Tree	ea.	2	\$450.00	\$900.00
1.1.3 1.2m Ht.: Deciduous Ornamental Tree	ea.	8	\$400.00	\$3,200.00
1.1.4 1.2m Ht.: Coniferous Restoration Tree	ea.	11	\$250.00	\$2,750.00
			<i>Sub-Total</i>	<i>\$19,500.00</i>
1.2 Shrubs, Perennials, Ground Covers				
1.2.1 #2 Pot: Shrubs (1.2m O.C.)	ea.	232	\$35.00	\$8,120.00
1.2.2 #1 Pot: Grasses (0.6m O.C.)	ea.	484	\$20.00	\$9,680.00
1.2.3 #1 Pot: Perennials (0.75m O.C.)	ea.	297	\$15.00	\$4,455.00
			<i>Sub-Total</i>	<i>\$22,255.00</i>
1.3 Restoration Shrubs, Perennials, Grasses				
1.3.1 Plugs: Shrubs, Perennials & Grasses (1 Plug/3m <sup>2</sup> )	ea.	269	\$5.00	\$1,345.00
			<i>Sub-Total</i>	<i>\$1,345.00</i>
1.4 Hydroseed				
1.4.1 Hydroseed	m <sup>2</sup>	808	\$2.00	\$1,616.00
			<i>Sub-Total</i>	<i>\$1,616.00</i>
			<b>1.0 Total</b>	<b>\$44,716.00</b>
<b>2.0 Topsoil &amp; Mulch</b>				
2.1 Topsoil				
2.1.1 Shrub Bed + Planter Topsoil (450mm Depth)	m <sup>3</sup>	261	\$55.00	\$14,355.00
2.1.2 Tree Topsoil (1m <sup>3</sup> /Tree)	m <sup>3</sup>	33	\$55.00	\$1,815.00
2.1.3 Restoration Planting Area Topsoil (50mm Depth)	m <sup>3</sup>	40	\$45.00	\$1,800.00
2.1.4 Restoration Area Tree Topsoil (1m <sup>3</sup> /Tree)	m <sup>3</sup>	11	\$45.00	\$495.00
			<i>Sub-Total</i>	<i>\$18,465.00</i>
2.2 Mulch & Rock				
2.2.1 Ogogrow Mulch (75mm Depth)	m <sup>3</sup>	43	\$65.00	\$2,795.00
2.2.2 Cobble Mulch Maintenance Strip (100mm Depth)	m <sup>3</sup>	10	\$75.00	\$750.00
			<i>Sub-Total</i>	<i>\$3,545.00</i>
			<b>2.0 Total</b>	<b>\$22,010.00</b>
<b>3.0 Servicing</b>				
3.1 Irrigation				
3.1.1 Sleeving	l.s.	1	\$2,500.00	\$2,500.00
3.1.2 Point of Connection (Water + Electrical)	l.s.	1	\$2,000.00	\$2,000.00
3.1.3 Control System	l.s.	1	\$1,500.00	\$1,500.00
3.1.4 Irrigation system (heads, pipes, valves)	m <sup>2</sup>	613	\$15.00	\$9,195.00
3.1.5 Establishment irrigation (heads, pipes, valves)	l.s.	1	\$5,000.00	\$5,000.00
			<i>Sub-Total</i>	<i>\$20,195.00</i>
			<b>3.0 Total</b>	<b>\$20,195.00</b>



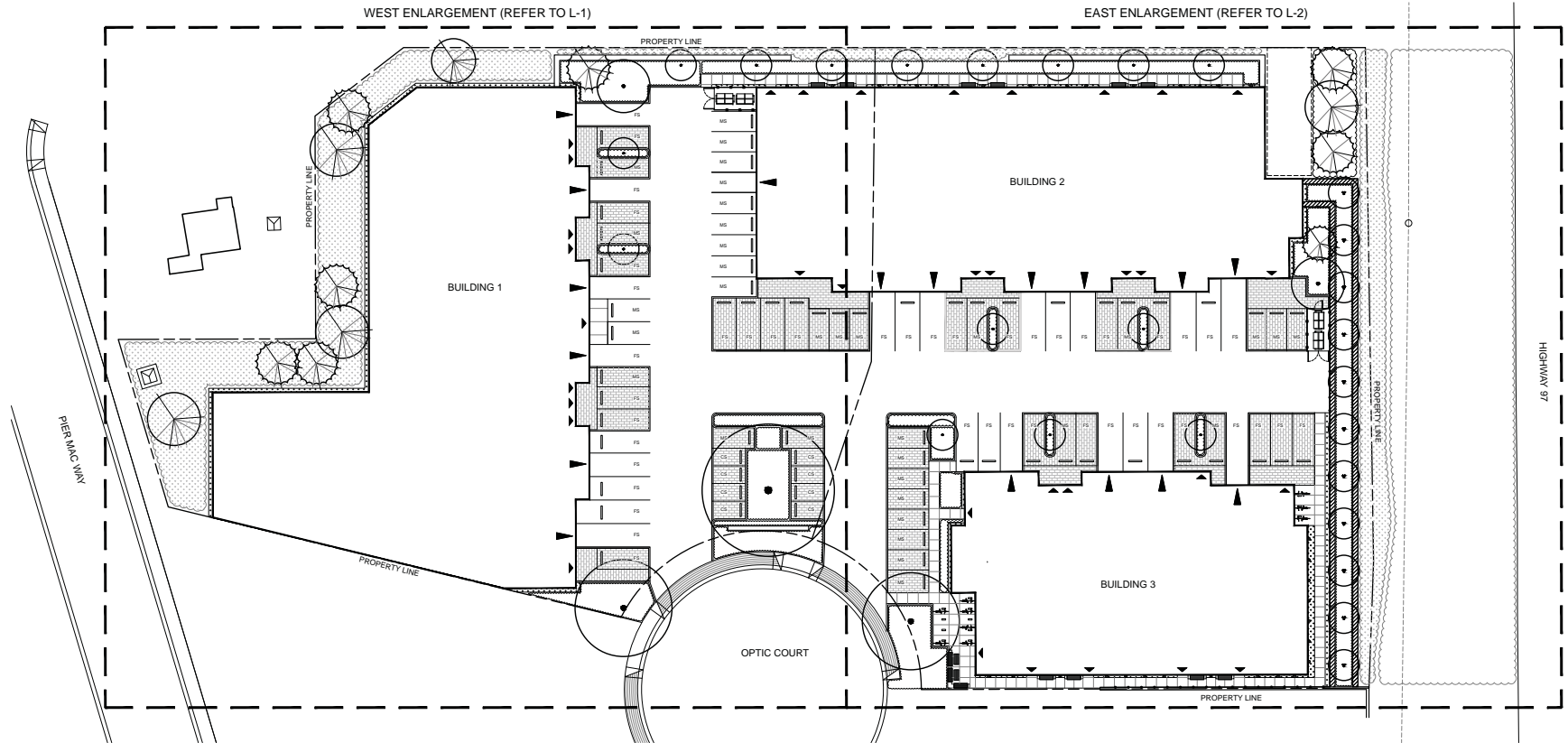
#### 4.0 Site Construction

##### 4.1 Site Furniture

4.1.1 Bike Racks	ea.	12	\$1,500.00	\$18,000.00
			<i>Sub-Total</i>	<i>\$18,000.00</i>
			<b>4.0 Total</b>	<b>\$18,000.00</b>

<i>Subtotal</i>	<b>\$104,921.00</b>
<b>Security Total (125%)</b>	<b>\$131,151.25</b>

<b>SCHEDULE</b>		<b>C</b>
This forms part of application		
# <b>DP18-0209</b>		
Planner Initials	<b>AC</b>	 City of <b>Kelowna</b> COMMUNITY PLANNING



## 2175 & 2185 OPTIC COURT OFFICE WAREHOUSE

KELOWNA, BC

### LANDSCAPE DRAWING LIST:

L-0	CONTEXT PLAN
L-1	WEST ENLARGEMENT
L-2	EAST ENLARGEMENT
L-3	HYDROZONE PLAN

### DEVELOPMENT PERMIT NOTES:

- PLANT MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO MINIMUM STANDARDS ESTABLISHED IN THE LATEST EDITION OF THE CANADIAN LANDSCAPE STANDARDS, PUBLISHED BY C.L.N.A. AND C.S.L.A. AS WELL AS THE CITY OF KELOWNA FORM AND CHARACTER REQUIREMENTS.
- THE LANDSCAPE DESIGN DESIGNATED HEREIN IS CONCEPTUAL BUT REFLECTS THE MINIMUM CITY OF KELOWNA FORM AND CHARACTER REQUIREMENTS.
- PLANT MATERIAL SELECTIONS ARE CONCEPTUAL ONLY. FINAL PLANTING SELECTIONS MAY VARY DEPENDING UPON AVAILABILITY AT THE TIME OF CONSTRUCTION.
- TREES SHALL BE INSTALLED IN DEFINED SOIL PITS OR PLANTING BED AREAS. ADEQUATE SOIL VOLUME SHALL BE PROVIDED BASED ON THE SPECIFIED TREE SPECIES AND LOCATION.
- ORNAMENTAL SHRUB, GRASS AND PERENNIAL CLUSTERS ARE TO BE PLACED WITHIN DEFINED PLANTING BEDS. ALL PLANTING BEDS SHALL HAVE A MIN. OF 450mm (18") IMPORTED GROWING MEDIUM AND 75mm (3") OF COMPOSTED MULCH OR APPROVED EQUAL.
- DECORATIVE ROCK AREAS SHALL HAVE A MIN. OF 75mm (3") OF DECORATIVE ROUND, COMMERCIAL GRADE LANDSCAPE FABRIC SHALL BE INSTALLED BELOW ALL DECORATIVE ROCK AREAS.
- NATIVE SHRUBS, GRASSES AND PERENNIALS ARE TO BE POCKET PLANTED AND INSTALLED DURING THE SPRING OR FALL WEATHER WINDOWS (SPRING: MARCH TO MAY, FALL: OCTOBER TO NOVEMBER) TO ALLOW FOR ESTABLISHMENT AND LIMIT THE REQUIREMENT OF CONTINUOUS IRRIGATION. ALL POCKETS SHALL BE DUG TO TWICE THE ROOTBALL SIZE TO ALLOW FOR ADDITIONAL GROWING MEDIUM.
- HYDRAULIC SEEDING SHALL BE GRADE 'A' PREMIUM SEED. SEED SHALL BE INSTALLED DURING THE SPRING OR FALL WEATHER WINDOWS (SPRING: MARCH TO MAY, FALL: OCTOBER TO NOVEMBER) TO ALLOW FOR ESTABLISHMENT AND LIMIT THE REQUIREMENT OF CONTINUOUS IRRIGATION.

SEED MIX: POCKETED INTERIOR NATIVE DRYLAND			
BOTANICAL NAME	COMMON NAME	SEED WEIGHT (%)	SEED COUNT(%)
ELYNIUS TRACHYCAULUS	SLENDER WHEATGRASS	50%	30%
FESTUCA OVINA	SHEEP FESCUE	20%	31.5
LOLUM PERENNIS VAR. FIESTA 4	FIESTA 4 PERENNIAL RYEGRASS	10%	9.5%
PSEUDOCYRUS SPICATA	BLUEBUNCH WHEATGRASS	20%	9%
BROADCAST DATE: 30 KG/HA OF COVER/NURSE CROP: LOLUM MULTIFLORUM (ANNUAL RYEGRASS)			

- A HIGH EFFICIENCY IRRIGATION SYSTEM SHALL BE INSTALLED FOR ALL ORNAMENTAL LANDSCAPE AREAS AND SHALL CONFORM TO THE CITY OF KELOWNA'S IRRIGATION STANDARDS IN BYLAW 7900.
- A TEMPORARY IRRIGATION SYSTEM SHALL BE REQUIRED IF NATIVE PLANTING AND/OR HYDRAULIC SEEDING INSTALLATION IS NOT COMPLETED WITHIN THE SPECIFIED WEATHER WINDOWS. THE SYSTEM SHALL CONFORM TO THE CITY OF KELOWNA'S IRRIGATION STANDARDS IN BYLAW 7900.

### CHARACTER IMAGES:



FLEX MSE RETAINING WALL



GABION RETAINING WALL WITH TERRACE PLANTING



PERMEABLE PAVERS WITH FLUSH CURB



CONCRETE BASE WITH WOOD BENCH



METAL GUARDRAIL

## SCHEDULE

This forms part of application

# DP18-0209

Planner  
Initials

AC

City of  
**Kelowna**  
COMMUNITY PLANNING



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### REVISIONS / ISSUED:

NO.	DATE	DESCRIPTION
2	02/11/18	ISSUED FOR DP APPLICATION
1	02/11/18	ISSUED FOR REVIEW



### CLIENT:

MGN ARCHITECTS  
VERNON, B.C.

### PROJECT:

OPTIC COURT  
OFFICE WAREHOUSE  
KELOWNA, B.C.

### SHEET TITLE:

CONTEXT  
PLAN

### DESIGN BY:

L.S.

### DRAWN BY:

L.S.

### CHECKED BY:

K.M.

### PROJECT NO.:

18-035

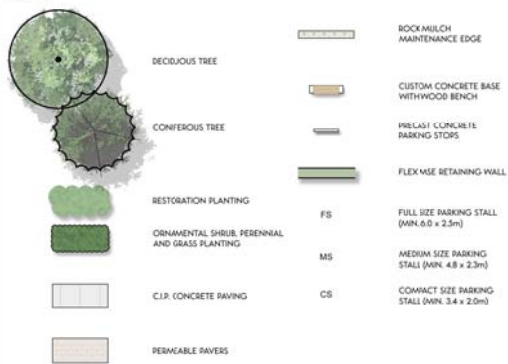
### SCALE:

1:250

### SHEET NO.:

L-0

LEGEND:



ORNAMENTAL PLANT LIST:

TREES			
Botanical Name	Common Name	Size	Root
Amelanchier alnifolia 'Snowcloud'	Snowcloud serviceberry	1.2m HL	B&B
Carpinus caroliniana 'Palisade'	Palisade American hornbeam	6cm Cal.	B&B
Fraxinus americana 'Autumn Purple'	Autumn Purple white ash	6cm Cal.	B&B
Gleditsia inaequalis 'Draves'	Shademaster honeylocust	6cm Cal.	B&B
Gleditsia inaequalis 'Shademaster'	Shademaster honeylocust	1.8m HL	B&B
Pinus contorta	Santa stone pine	1.8m HL	B&B
Springa reticulata 'Ivory Silk'	Ivory Silk Japanese tree lilac	6cm Cal.	B&B

SHRUBS			
Botanical Name	Common Name	Size/Spacing	Root
Berberis thunbergii 'Gentry'	Royal Burgundy barberry	#02 Cont./1.0m O.C.	Potted
Berberis thunbergii 'Bladon'	Ruby Caravel barberry	#02 Cont./1.0m O.C.	Potted
Mahonia aquifolium	Oregon grape holly	#02 Cont./1.25m O.C.	Potted
Picea alba 'Little Gem'	Little Gem Norway spruce	#02 Cont./0.6m O.C.	Potted
Abies alba	Alpine cypress	#02 Cont./1.5m O.C.	Potted

PERENNIALS			
Botanical Name	Common Name	Size/Spacing	Root
Alcea Russini 'Walker's Low'	Walker's Low catmint	#01 Cont./0.6m O.C.	Potted
Perovskia atrorubra 'Blue Spire'	Blue Spire Russian sage	#01 Cont./0.4m O.C.	Potted
Rudbeckia fulgida 'Goldstrum'	Goldstrum coneflower	#01 Cont./0.6m O.C.	Potted
Salvia nemorosa 'May Night'	May Night salvia	#01 Cont./0.6m O.C.	Potted

GRASSES			
Botanical Name	Common Name	Size/Spacing	Root
Melilotus officinalis	Blue oat grass	#01 Cont./0.75m O.C.	Potted
Schizanthus luteus 'Prairie Blue'	Prairie Blue little blue stem	#01 Cont./0.6m O.C.	Potted

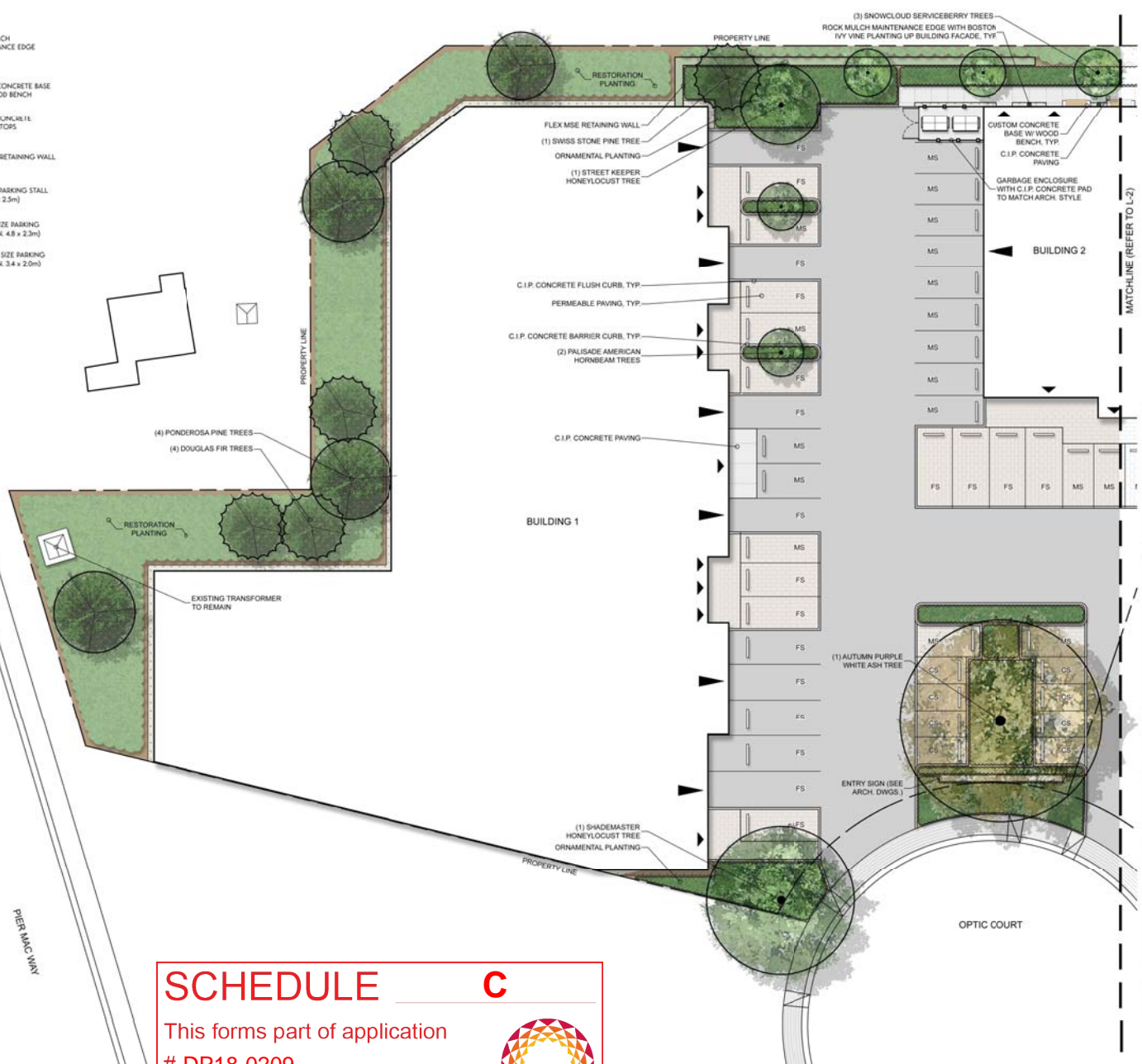
RESTORATION PLANT LIST:

TREES			
Botanical Name	Common Name	Size/Spacing	Root
Amelanchier alnifolia	Serviceberry	1.2m HL, Multi-Stem	B&B
Pinus ponderosa	Ponderosa pine	1.2m HL	B&B
Pseudotsuga menziesii var. glauca	Interior Douglas fir	1.2m HL	B&B

SHRUBS			
Botanical Name	Common Name	Size/Spacing	Root
Amelanchier alnifolia	Serviceberry	24 Tray	Plugs
Artemisia tridentata	Big sagebrush	24 Tray	Plugs
Philadelphus lewisii	Hick orange	24 Tray	Plugs
Symphoricarpos albus	Snowberry	24 Tray	Plugs

PERENNIALS			
Botanical Name	Common Name	Size/Spacing	Root
Achillea millefolium	Yarrow	24 Tray	Plugs
Eriogonum medium	Snow buckwheat	24 Tray	Plugs
Lithospermum ruderale	Limonweed	24 Tray	Plugs
Plantago patagonica	Indian-wheat	24 Tray	Plugs

GRASSES			
Botanical Name	Common Name	Size/Spacing	Root
Anisodon longistylis	Red three-awn	24 Tray	Plugs
Festuca idahoensis	Idaho fescue	24 Tray	Plugs
Festuca scabrella	Rough fescue	24 Tray	Plugs
Koeleria macrantha	Junegrass	24 Tray	Plugs
Poa secunda	Sandberg's bluegrass	24 Tray	Plugs
Pseudopennis spicata	Bluebunch wheatgrass	24 Tray	Plugs



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CONCEPT DESIGN - NO DIMENSIONS GIVEN TO IT AS THIS THE PROPERTY OF ARCH. FIRM AND NOT TO BE USED WITHOUT THE ARCHITECT'S WRITTEN CONSENT

REVISIONS / ISSUES	
2	ISSUED FOR APPLICATION
1	ISSUED FOR REVIEW
NO.	DATE
	DESCRIPTION



BENCH  
SITE DESIGN  
(4-1000 water street, Kelowna BC V1Y 1P7)  
(250.860.9791)

CLIENT:  
MGN ARCHITECTS  
VERNON, B.C.

PROJECT:  
OPTIC COURT  
OFFICE WAREHOUSE  
KELOWNA, B.C.

SHEET TITLE:  
LANDSCAPE PLAN -  
WEST ENLARGEMENT

DESIGN BY	LS
DRAWN BY	LS
CHECKED BY	MS
PROJECT NO.	10-030
SCALE	1:150

SHEET NO.

L-1

# SCHEDULE C

This forms part of application  
# DP18-0209

Planner Initials

AC

City of Kelowna

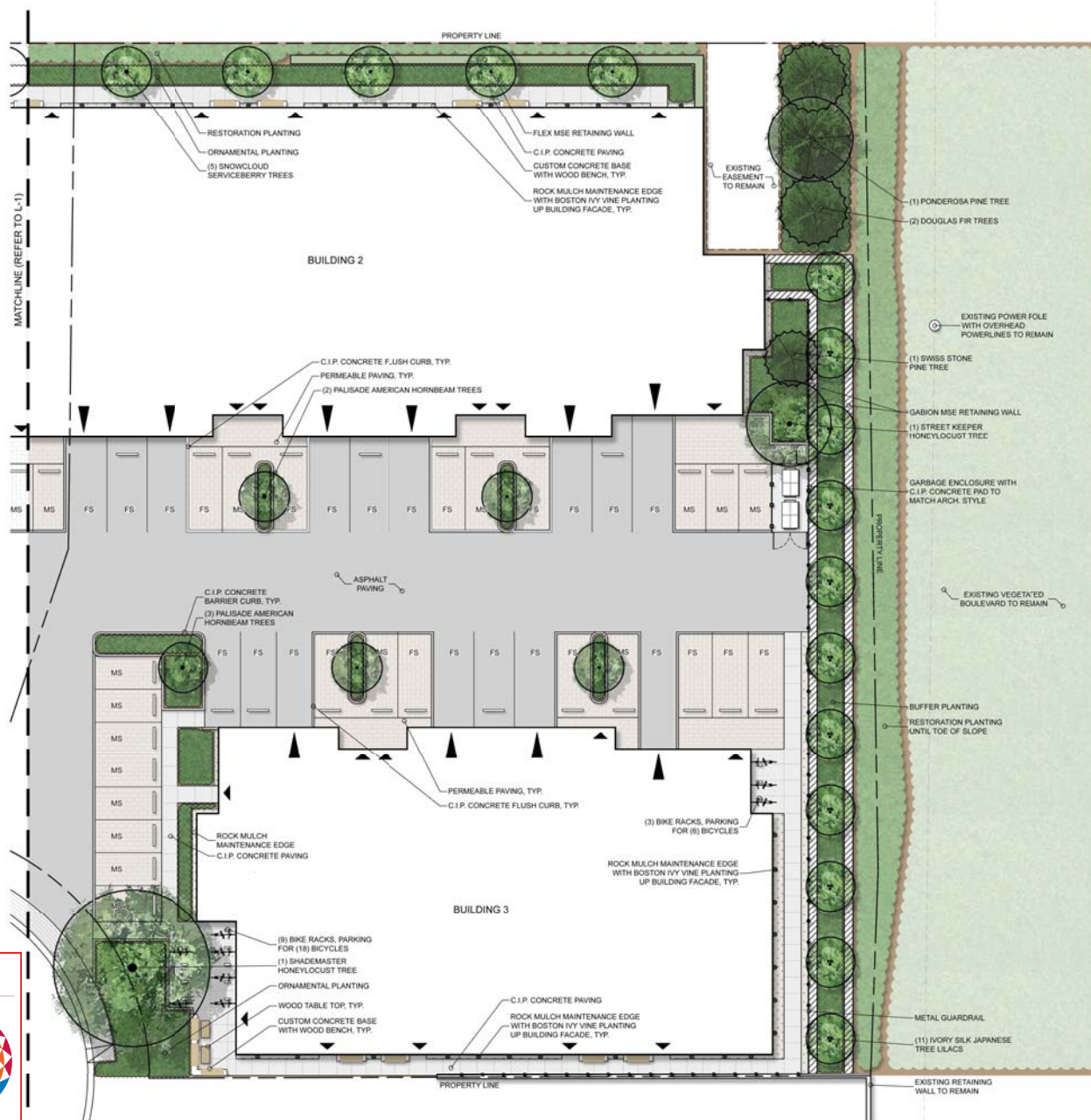
COMMUNITY PLANNING



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LEGEND:

- DECIDUOUS TREE
- CONIFEROUS TREE
- RESTORATION PLANTING
- ORNAMENTAL SHRUB, PERENNIAL AND GRASS PLANTING
- C.I.P. CONCRETE PAVING
- PERMEABLE PAVERS
- ROCK MULCH MAINTENANCE EDGE
- CUSTOM CONCRETE BASE WITH WOOD BENCH
- PRECAST CONCRETE PARKING STOPS
- BIKE RACK
- METAL GUARDRAIL
- FLEX MSE RETAINING WALL
- GABION MSE RETAINING WALL
- FS FULL SIZE PARKING STALL (MIN. 6.0 x 2.3m)
- MS MEDIUM SIZE PARKING STALL (MIN. 4.8 x 2.3m)
- CS COMPACT SIZE PARKING STALL (MIN. 3.4 x 2.0m)



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REVISIONS / ISSUES

NO.	DATE	DESCRIPTION
2	05/11/2018	ISSUED FOR OP APPLICATION
1	05/11/2018	ISSUED FOR REVIEW



PROJECT:  
MGN ARCHITECTS  
VERNON, B.C.

PROJECT:  
OPTIC COURT  
OFFICE WAREHOUSE  
KELOWNA, B.C.

SHEET TITLE:  
LANDSCAPE PLAN -  
EAST ENLARGEMENT

DESIGN BY	U.S.
DRAWN BY	U.S.
CHECKED BY	AN
PROJECT NO.	18-030
SCALE	1:150

SHEET NO.

L-2

HIGHWAY 97

SCHEDULE

C

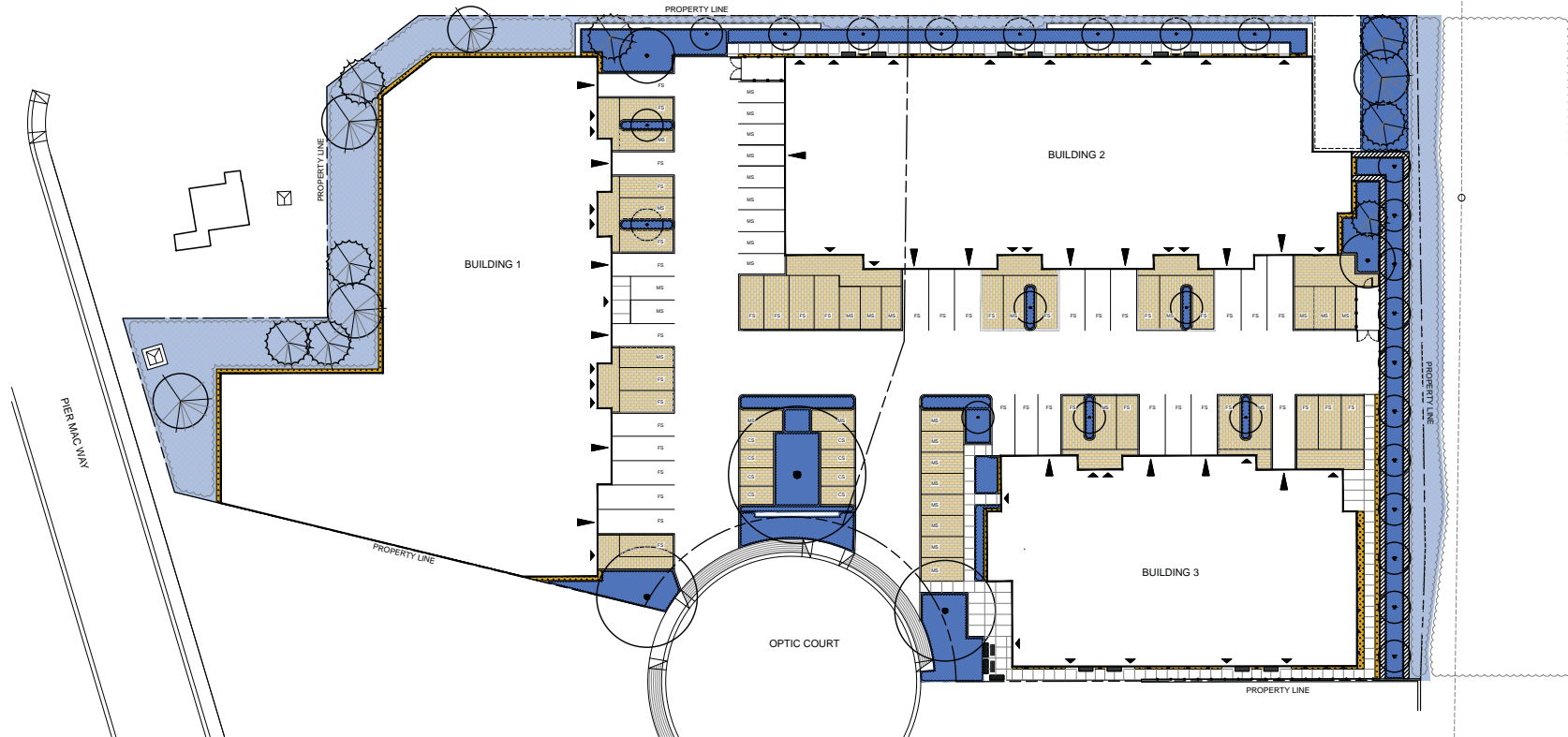
This forms part of application  
# DP18-0209



City of  
**Kelowna**  
COMMUNITY PLANNING

Planner  
Initials

AC



LEGEND:

- MEDIUM WATER USE
- LOW WATER USE - ESTABLISHMENT IRRIGATION ONLY
- NO WATER USE (PERMEABLE PAVERS)
- NO WATER USE (ROCK MULCH MAINTENANCE EDGE)

## SCHEDULE C

This forms part of application  
# DP18-0209

Planner  
Initials

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City of  
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HIGHWAY 97

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REVISIONS / ISSUED		
2	COST 17718	ISSUED FOR DP APPLICATION
1	COST 12518	ISSUED FOR REVIEW
NO.	DATE	DESCRIPTION



CLIENT:  
MQN ARCHITECTS  
VERNON, B.C.

PROJECT:  
OPTIC COURT  
OFFICE WAREHOUSE  
KELOWNA, B.C.

SHEET TITLE  
HYDROZONE  
PLAN

DESIGN BY	LS
DRAWN BY	LS
CHECKED BY	KIN
PROJECT NO.	18-035
SCALE	1:250

SHEET NO.  
**L-3**