

DATE: 2022
TO: Paul Simon, City of Revelstoke
CC: Matt Thomson, Urban Matters; Nancy Henderson, Urban Systems
FROM: Justin Barer, Urban Systems
FILE: 0543.0089.01
SUBJECT: **City of Revelstoke Employment Lands Review**

1.0 INTRODUCTION

1.1 OBJECTIVES

Urban Systems was retained to prepare a review of the City of Revelstoke's employment lands as part of a broader set of background studies being prepared to inform the City's new Official Community Plan (OCP). The term "employment lands" in the context of this work encompasses all lands that are either zoned or designated for **industrial or commercial** use. There is of course a sizeable amount of employment in the City that occurs on lands that are not designated or zoned for these uses (e.g., jobs on institutional lands, and home-based business). However, the purpose of this work is not to identify where the City's jobs are located, the types of jobs by land use class, or employment density levels. Rather, this work is intended to answer the following questions:

1. What is the extent of the employment lands "universe" in Revelstoke in terms of total land area?
2. Where are these employment lands located?
3. What uses are occurring on these lands today?
4. What is the nature of vacant or underutilized employment lands, in terms of location, sizes, and usability?
5. What is the level of alignment between land designation and zoning?

1.2 CHANGING NATURE OF COMMERCIAL AND INDUSTRIAL ACTIVITY

As the City embarks on a new OCP that includes consideration of the future employment land needs across the City, it is worth considering how the nature of commercial and industrial lands is evolving and may continue to evolve over the coming decades. The COVID-19 pandemic has in many ways accelerated some trends that were already apparent in terms of desired space needs and location preferences. These trends include new types of manufacturing, advanced technology, integrated workspaces, and an ever-blurrer line between commercial and industrial activity in sectors such as wholesale, retail and logistics.

New business models may not neatly fit within traditional categories of heavy and light industry, for instance. The types of industrial activity are evolving quickly and are becoming more diverse. Here are some of these new and emerging forms of industrial activity:

- **Industrial clusters or co-locations** related to operations that can support eco-industrial networks and circular systems.
 - Companies may collaborate to use each other's by-products (materials, energy, water) as feedstock for their production processes.
 - Companies may also share resources to increase efficiencies

- These industrial clusters can include emerging industrial sectors such as green / clean tech, but also more traditional operators in various manufacturing and production sub-sectors.¹
- Local **maker movements and localized production / distribution** are re-emerging, and the pace of this is likely to accelerate in the coming years as many regions and localities look to become more self-sufficient in the face of supply chain uncertainty and less (or more expensive) global movements of goods and people.
- **High tech and other new forms of industry** are going to accelerate, including rapid growth in e-commerce, direct-to-consumer deliveries and co-facilities pushing demand for logistics / distribution hubs in places where they may not have previously been needed.

1.3 ROLES OF INDUSTRIAL LAND

- Industrial lands will play a key role for local employment and the regional economy.
- There is a broad spectrum of employment activity that occurs on industrial lands; many of these businesses are unable to locate elsewhere.
- Industrial land users have specific spatial and infrastructure requirements that must be considered when designating industrial lands and envisioning how these types of clusters may evolve.
- Many users of industrial lands rely on dependable access to goods movement networks between suppliers and clients. For some, this means rail access. For others, proximity and exposure to highways.
- While industrial areas can benefit from a mix of complementary or secondary uses, many industry users struggle to compete when non-industrial uses are permitted to encroach and develop on industrial lands. Encroachment can create serious conflicts with certain types of industrial activity. Without sufficient buffering or other mitigation measures, encroachment can threaten operational and growth outlooks for industrial operators and clusters.
- Innovation and the changing nature of work in industrial businesses will require careful balancing between allowable uses and flexibility in the face of emerging economic opportunities.

¹ It is important to note that studies show limits beyond which it is environmentally preferable to avoid recycling of some types of waste, and to simply use them as fuels or to dispose of them directly into the natural environment as-is, rather than attempt to recover useful materials from them. Considerable energy consumption and emissions can occur in the process of extracting materials.

2.0 EMPLOYMENT LAND SUPPLY

Here we present a review of the employment land supply in Revelstoke as of early 2022. This includes not only the extent of zoned and designated commercial and industrial land, but a review of the extent of land utilization and the amount and types of vacant land available.

2.1 EMPLOYMENT LANDS UNIVERSE

The employment lands universe, for the purpose of this analysis, includes all **developed and / or underutilized industrial and commercial lands**. This includes lands that are *designated or zoned* for industrial or commercial purposes and either have active uses on them which align with their designated or zoned intent, or which are either vacant of any active use, or vacant of an employment use (e.g., contain residential, institutional uses).

Excluded from the employment lands universe are:

1. Lands that are both zoned and designated for non-industrial and non-commercial uses.
2. Vacant lands that are zoned and designated non-industrial and non-commercial
3. Institutional lands

2.2 DEFINING “DEVELOPED”, “VACANT” AND “UNDERUTILIZED”

The definitions of ‘developed’, ‘vacant’ and ‘underutilized’ in this supply review are as follows:

1. **Developed:** lands with an industrial or commercial use. These may include lands with some non-industrial uses that are developed or actively used in a way that makes redevelopment unlikely.
2. **Vacant:** lands that were flagged as ‘vacant’ by BC Assessment’s Actual Use codes, followed by a cross-check for vacancy through ortho-photo review.
3. **Underutilized:** lands that, through visual review, were deemed to have opportunity for intensive use or re-use.

2.3 REVIEW APPROACH

This analysis provides parcel-level information on lands that are developed for industrial and commercial activities, lands that are vacant, and the degree of utilization for non-vacant lands. The analysis also provides details on characteristics of available industrial and commercial parcels in terms of parcel sizes and other notable elements.

2.4 DATA SOURCES

- Cadastral GIS data
- City of Revelstoke parcel GIS layer, with BC Assessment Authority data
- Orthophotos
- Data layers for OCP and zoning
- Data layers for parcel ownership

2.5 INVENTORY RESULTS

The total City of Revelstoke industrial and commercial lands universe is comprised of 304 hectares of land designated for industrial use and 43 hectares designated for commercial use.

2.5.1 Industrial Lands Universe

Within the **industrial lands** universe (**304 hectares**):

- 77.4 hectares (25%) of the total land area is both zoned and designated for industrial use
- 227 hectares (75%) is designated but not zoned for industrial use
- 0 hectares that are zoned but not designated industrial
- Industrially designated lands are being used as follows:
 - 74 hectares across 55 parcels for various industrial-type activities
 - Neary 7 hectares for recreational use (1 parcel)
 - 121 hectares (44 parcels) for 'other' non-industrial uses (institutional, residential, airport, resource extraction)
 - 101.6 ha (27 parcels) vacant

Additional details on the nature of the industrial land base is found in subsequent sections of this report.

URBAN SYSTEMS MEMORANDUM

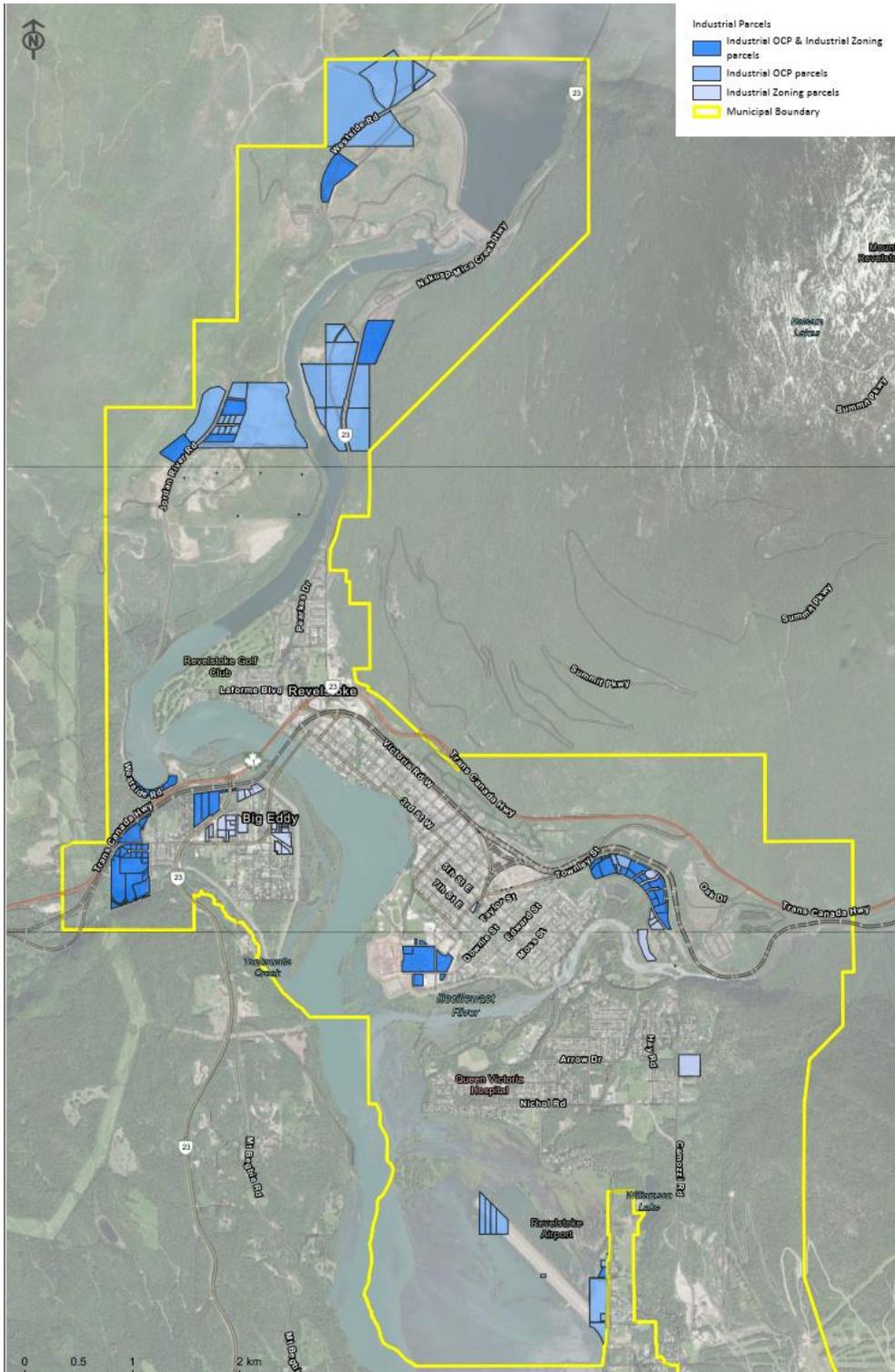
DATE: 2022

FILE: 0543.0089.01

PAGE: 5 of 17

SUBJECT: City of Revelstoke Employment Lands Review

Figure 1: Parcels with **Industrial** OCP Designation and/or Zoning



2.5.2 Commercial Lands Universe

Within the **commercial lands** universe (**43 hectares**)

- 30.4 hectares (71%) of the total land areas is both zoned and designated for commercial use
- 12.6 hectares (29%) is designated for commercial use but not zoned for commercial use
- 0 hectares are zoned for commercial but not designated for commercial.
- Commercially designated lands are being used as follows:
 - 1 parcel of 0.14 hectares is used for “General Industrial”
 - 9 parcels (17.6 ha) in use for hotel / motel
 - 2 parcels (12.4 ha) in use for recreation purposes
 - 3 parcels (0.5 ha) in use by restaurants
 - 1 parcel (0.5 ha) in use as residential
 - 5 parcels (4.6 ha) in use for non-industrial small-medium retail business
 - *11 parcels (7.26 ha) are vacant*
- Following is a breakdown of the 11 vacant commercial parcels:
 - Average parcel size of 0.66 ha, with low of 0.19 ha and high of 1.04 ha
 - All are designated for commercial use. Three are not zoned for commercial use
 - 9 parcels are located along the Highway corridor; 2 are in Johnson Heights.

URBAN SYSTEMS MEMORANDUM

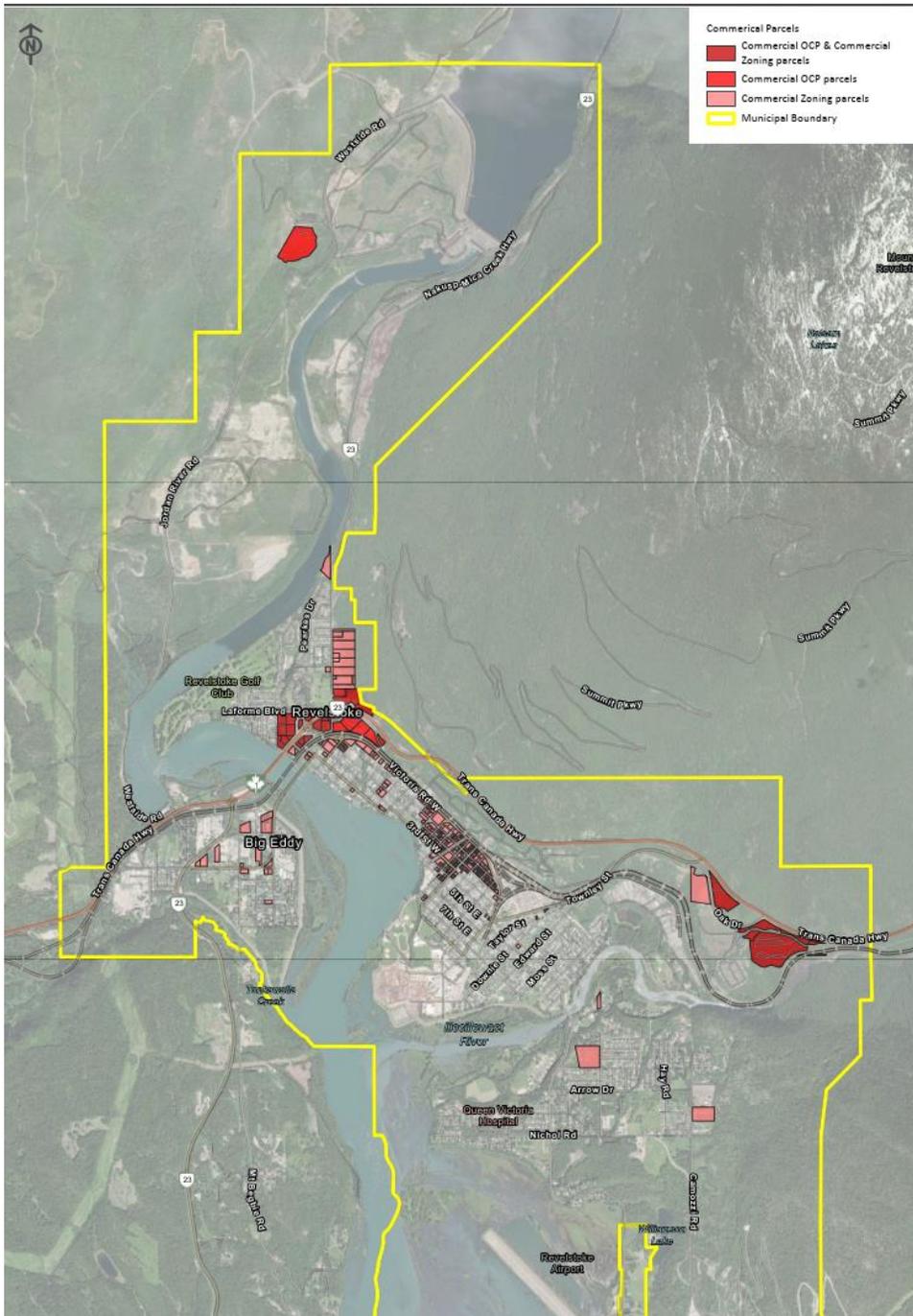
DATE: 2022

FILE: 0543.0089.01

PAGE: 7 of 17

SUBJECT: City of Revelstoke Employment Lands Review

Figure 2: Parcels with **Commercial** OCP Designation and /or Zoning



URBAN SYSTEMS MEMORANDUM

DATE: 2022

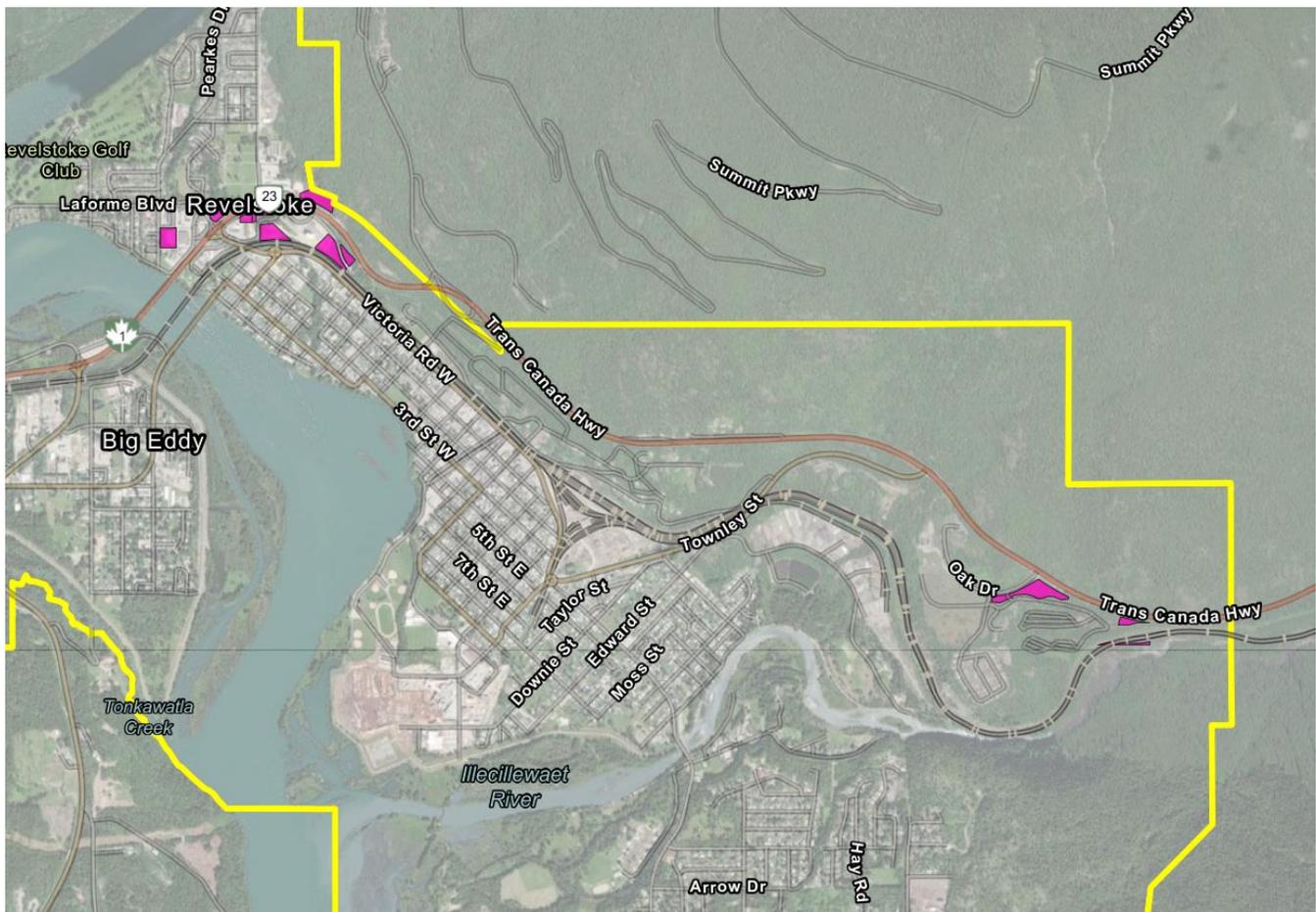
FILE: 0543.0089.01

PAGE: 8 of 17

SUBJECT: City of Revelstoke Employment Lands Review

- Following is a breakdown of the 11 vacant commercial parcels:
 - Average parcel size of 0.66 ha, with low of 0.19 ha and high of 1.04 ha
 - All are designated for commercial use. Three are not zoned for commercial use
 - 9 parcels are located along the Highway corridor; 2 are in Johnson Heights.

Figure 3: Vacant Land with **Commercial** OCP Designation



2.6 VACANT INDUSTRIAL LANDS

The 101.6 hectares of lands that are designated for industrial but **vacant of any active use** can be characterized as follows:

- Mostly comprised of <1 ha parcels, with the following notable exceptions:
 - 59 ha parcel located on Westside Road
 - 15 ha parcel in Kelly Flats
 - 10.5 ha parcel along Westside Road
 - 3.5 ha parcel along Kelly Flats
 - 3.4 ha parcel at big Eddy
- The median vacant parcel size is 0.4 ha

There are 8 vacant parcels that are both zoned and designated for industrial use, totalling 6.2 hectares, with an average parcel size of 0.77 hectares. Five of these parcels are located in Big Eddy, with the balance located in Downie Mill, South Revelstoke, and Westside Road.

Table 1: Vacant Lands both Designated and Zoned Industrial

Neighbourhood	Parcel Count	Total Parcel Area (ha)	Average Parcel Area (ha)
Big Eddy	5	4.7	0.94
Downie Mill	1	0.1	0.1
South Revelstoke	1	0.5	0.5
Westside Road	1	0.9	0.9
Total	8	6.2	0.8

There are an additional 19 vacant parcels that are designated industrial but currently zoned for other uses.

The table below shows all vacant land parcels with industrial designation, regardless of zoning, by neighbourhood.

Table 2: Vacant Lands with Industrial Land Use Designation

Neighbourhood	Parcel Count	Total Parcel Area (ha)	Average Parcel Area (ha)	Min Parcel Area (ha)	Max Parcel Area (ha)
Big Eddy	5	4.7	0.94	0.23	3.44
Downie Mill	1	0.1	0.09	0.9	0.9
Kelly Flats / Dalles	3	19.8	6.59	1.19	15.05

URBAN SYSTEMS MEMORANDUM

DATE: 2022

FILE: 0543.0089.01

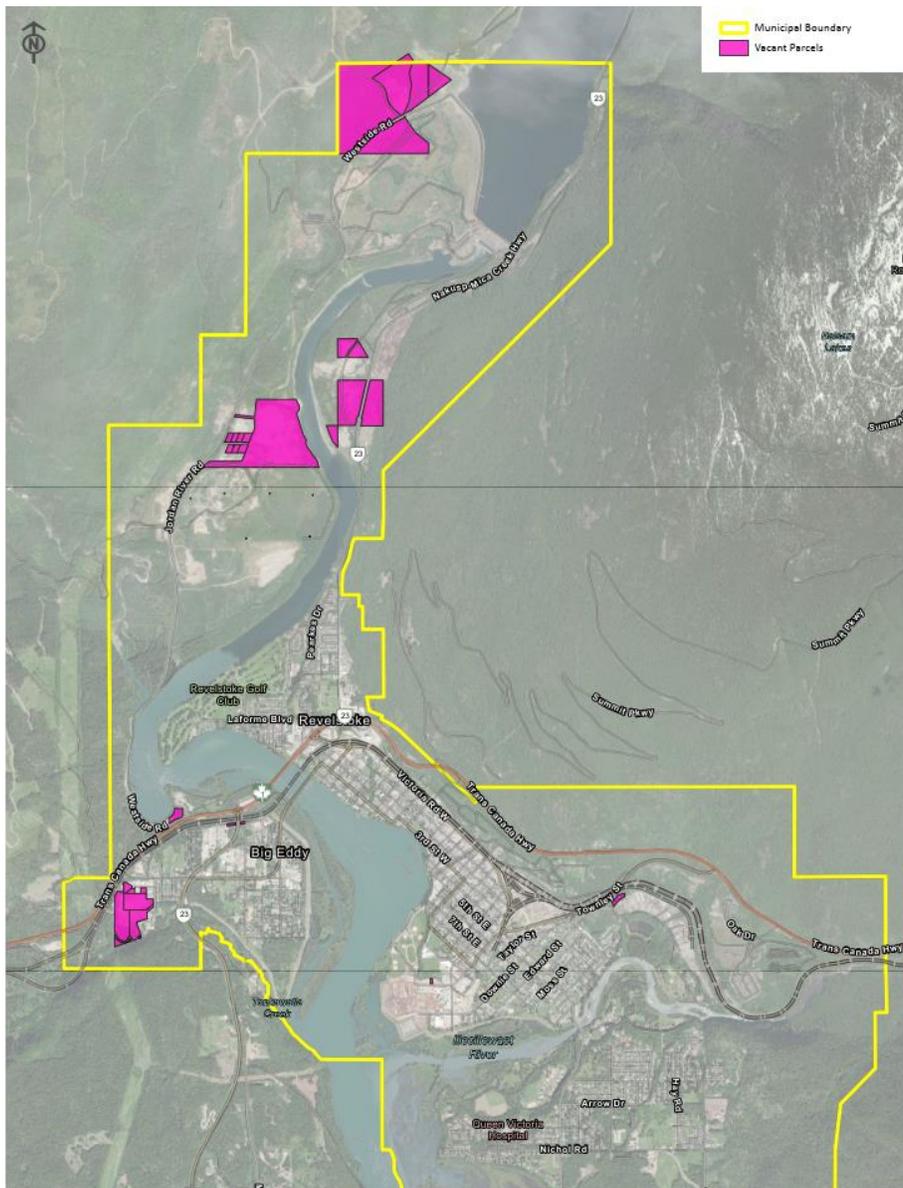
PAGE: 10 of 17

SUBJECT: City of Revelstoke Employment Lands Review

South Revelstoke	1	0.5	0.48	0.48	0.48
Westside Road	17	76.6	4.5	0.01	59.0
Total	27	101.6	3.76		

The map below depicts the vacant parcels with an industrial land use designation.

Figure 4: Vacant Lands with **Industrial** OCP Designation



URBAN SYSTEMS MEMORANDUM

DATE: 2022

FILE: 0543.0089.01

PAGE: 11 of 17

SUBJECT: City of Revelstoke Employment Lands Review

In addition to the lands that are vacant of any use (per the tables above), there is also a sub-set of lands that are being **actively used, but not for industrial purposes**. These lands are listed in the table below, including associated total land areas. Note that these are not part of the vacant land base depicted in the table above.

Table 3: Non-Industrial Land Uses on Lands Designated for Industrial

Land Use	Parcel Count	Total Parcel Area (ha)	Average Parcel Area (ha)
Airport	28	35.7	1.3
Institutional	2	3.1	1.5
Mixed Industrial / Commercial	4	0.2	0.4
Non-Industrial Small-Medium Retail	4	1.4	0.4
Recreation	1	6.7	6.7
Residential	10	40.9	4.1
Resource Extraction	4	40.9	10.2
Total	53	129.1	2.4

The map below shows all of the industrially designated lands that are being used for non-industrial purposes, broken out by the type of active use on each site (per BC Assessment).

URBAN SYSTEMS MEMORANDUM

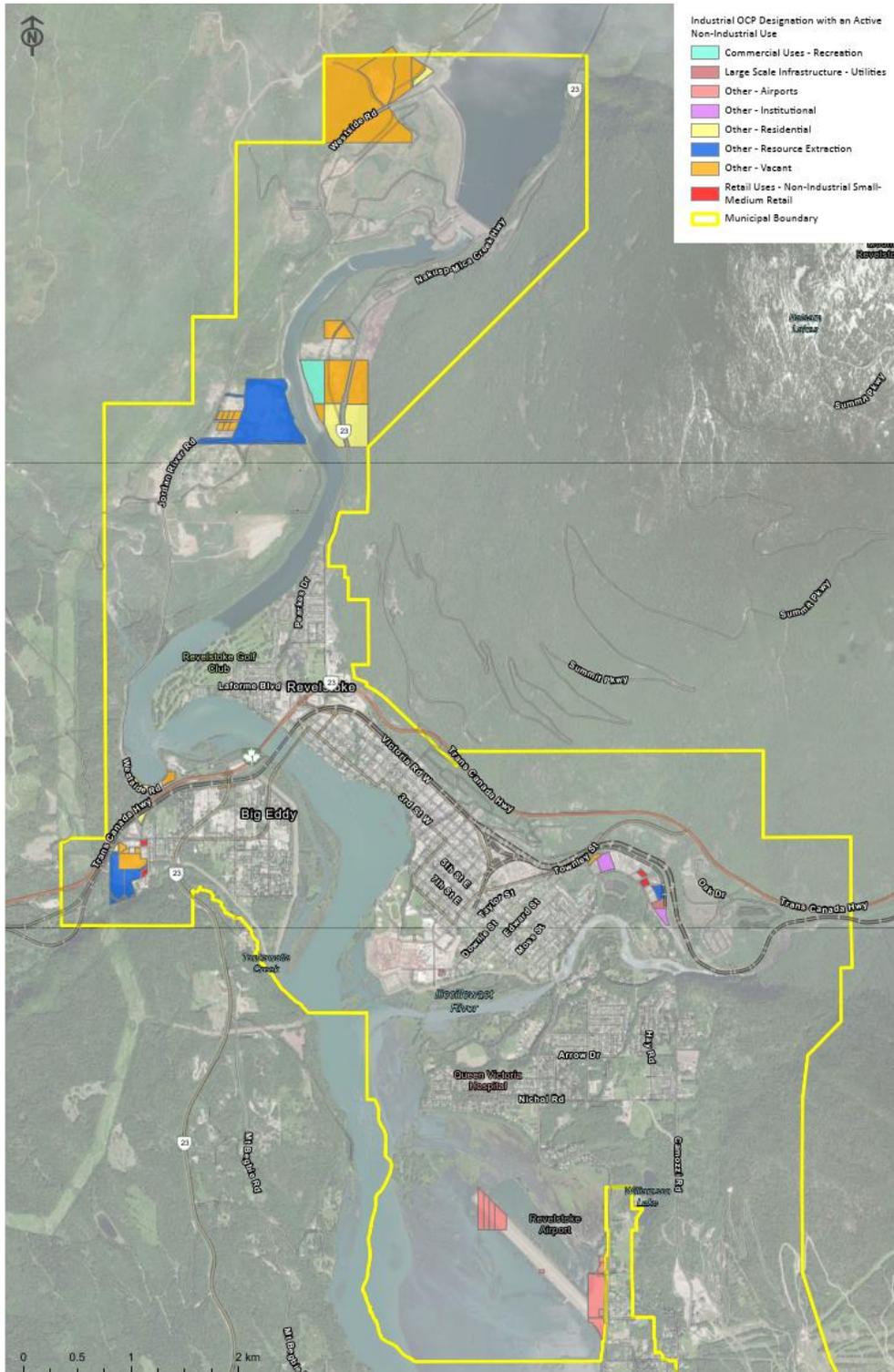
DATE: 2022

FILE: 0543.0089.01

PAGE: 12 of 17

SUBJECT: City of Revelstoke Employment Lands Review

Figure 5: Land with Industrial Land Use Designation per OCP, with non-industrial active use



2.7 LAND USE CLASSIFICATIONS AND UNDERUTILIZED INDUSTRIAL LANDS

The distribution of the entire industrial land universe (304 ha) can be broken out into a variety of classification groups or schemas. For this assignment, we have amalgamated BC Assessment codes into the following land use classes and subclasses

Table 4: Industrial Land Use Classifications and Business Types

Use Classification	Components	Parcel Count	Total Area (ha)
Building Intensive Industrial	<ul style="list-style-type: none"> • Distribution Warehouse / • General Industrial • Manufacturing Production / • Mixed Industrial / Commercial 	43	27.7
Land Intensive Industrial	<ul style="list-style-type: none"> • Outdoor storage • Processing / Handling Natural Resources 	12	45.1
Large Scale Infrastructure	<ul style="list-style-type: none"> • Utilities 	3	1.2
Commercial / Retail Uses	<ul style="list-style-type: none"> • Retail • Recreation 	5	8.2
Other	<ul style="list-style-type: none"> • Airport • Institutional • Residential • Resource Extraction 	44	120.7
Vacant		27	101.6
TOTALS		134	304.6

Within the Building Intensive industrial classification, an additional layer of analysis was conducted to assess each parcel for its current level of utilization. Utilization, or land use intensity, is a somewhat subjective concept. While in principle it is about determining if a site is being well used from an economic standpoint, in practice it is difficult to know whether a site is truly being used ‘intensively’ without understanding the precise business needs and operating patterns of users of each parcel. With that caveat, we prepared a preliminary assessment of land utilization for parcels that are classified by BC Assessment as containing businesses which fall into the “Building

Intensive Industrial overarching classification. This utilization assessment is based on a visual review of orthophotos for each of these land parcels, with estimates made through simple proxy metrics such as:

- Presence or absence of buildings
- Size and scale of buildings
- Age and appearance of buildings

Altogether, of the 43 parcels and 27.7 hectares of Building Intensive industrial land, 10 were deemed to have 50% or below levels of utilization and 4 were deemed to have 25% or lower levels of utilization. The distribution of these parcels of industrial sub-class is shown in the table below.

Table 5: Building Intensive Industrial – Levels of Parcel Utilization

	0-25% Utilization	25-50% Utilization	50-75% utilization	75-100% utilization
Distribution / Warehouse	3 parcels / 8.9 ha	3 parcels / 9.9 ha	2 parcels / 2.3 ha	4 parcels / 1.9 ha
General Industrial	1 parcel / 2.0 ha	3 parcels / 2.8 ha	18 parcels / 1.3 ha	4 parcels / 1.0 ha
Manufacturing / Production			1 parcel / 0.3 ha	
Mixed Industrial / Commercial			4 parcels / 0.2 ha	
Totals	4 parcels / 10.9 ha	6 parcels / 24.4 ha	25 parcels / 4.1 ha	8 parcels / 2.8 ha

There are 10 land parcels with an industrial land use designation and a BC Assessment classification that falls into the “Building Intensive Industrial” category, which we have deemed ‘underutilized’ in this assessment. These parcels are found in four neighbourhoods: Big Eddy, Kelly Flats, South Revelstoke, and Westside Road.

Table 6: Locations of Underutilized Industrial Lands with active “Building Intensive Industrial” Uses

Neighbourhood	0-25% utilization	25-50% utilization
Big Eddy	2 parcels / 4 ha	1 parcel / 1.7 ha
Kelly Flats / Dalles	1 parcel / 5.7 ha	
South Revelstoke	1 parcel / 1.2 ha	1 parcel / 0.5 ha
Westside Road		4 parcels / 7.7 ha

URBAN SYSTEMS MEMORANDUM

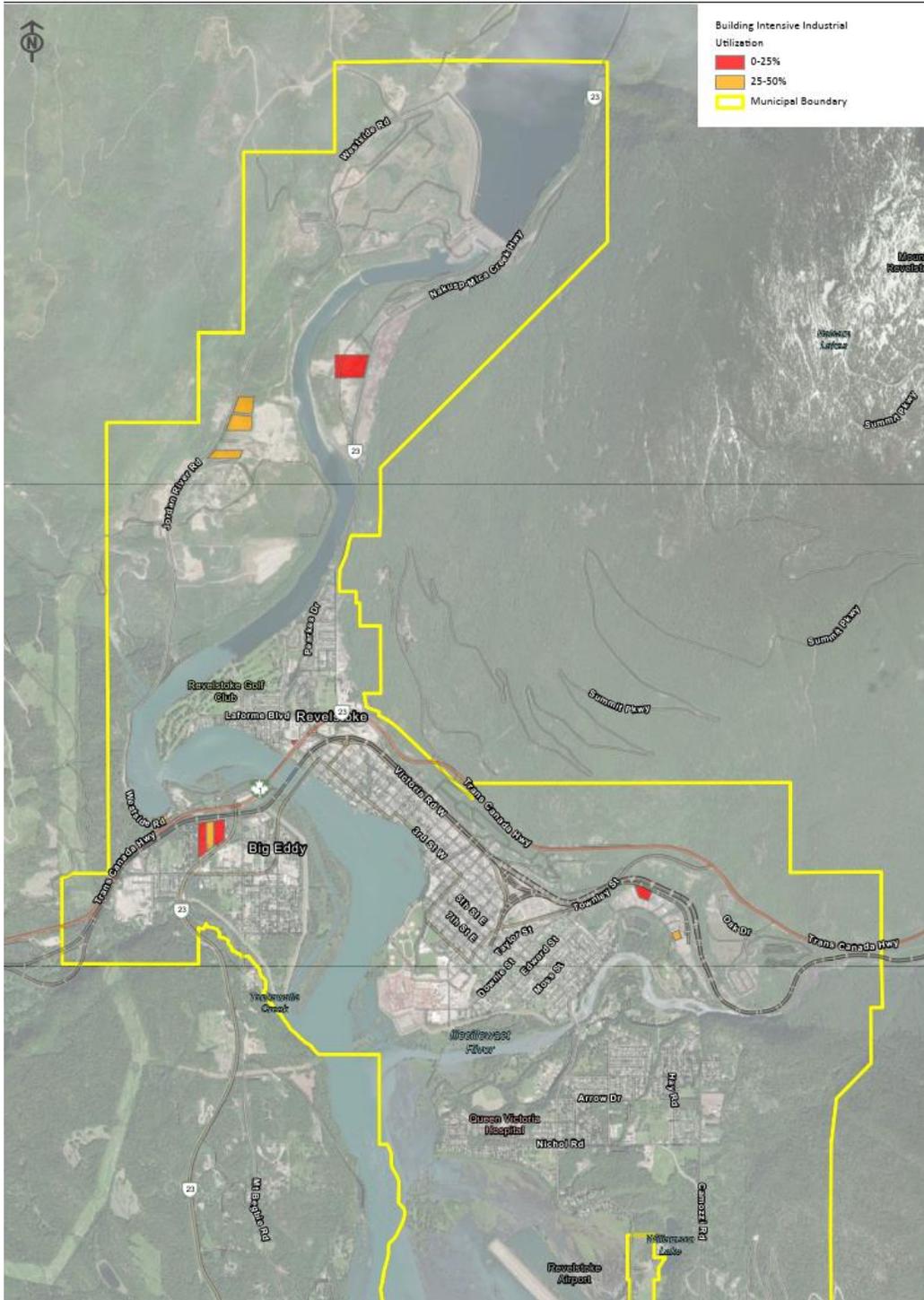
DATE: 2022

FILE: 0543.0089.01

PAGE: 15 of 17

SUBJECT: City of Revelstoke Employment Lands Review

Figure 6: Underutilized Parcels with Active "Building Intensive" Industrial Use



Sincerely,

3.0 CONCLUSIONS AND NEXT STEPS

The above review of the employment lands inventory paints a clear picture of the extent of the employment lands universe across the City and how it is being used. It provides information on the location and nature of vacant land opportunities, and identifies areas where infill and intensification may be best suited.

- Most of the vacant industrial lands are located along Westside Road, with a few smaller parcels located in Big Eddy.
- Of the industrial lands with more building intensive active users, there are 10 parcels which are deemed to be under 50% utilized, and would be considered candidates for redevelopment or intensification of use. Those parcels are located in Big Eddy, Kelly Flats, South Revelstoke and most notably along Westside Road.

With this inventory work now complete, the next logical step would be to undertake an analysis of **employment land demand and opportunity**, to determine both alignment between existing land supply and market need, and optimal locations for land re-designation for employment purposes (if applicable). A projection of land need would likely begin at the regional level, examining both historical growth and projections of future employment growth by industry sector. Connections could then be drawn between regional level growth and local level employment, by modelling local level 'capture' of regional employment in 'base' and 'non-base' industry sectors.

- **Base industry** employment growth would be modelled based on a capture rate relating to regional labour force growth projections. This capture rate would describe the proportion of labour force growth within the broader region that may be captured within the City. To some extent, the degree of capture will be dependent on the availability of appropriately sized and located lands. As part of this research, we would determine the specific land needs of different sectors, both in terms of parcel size, configuration, and location.
- **Non-base industry** employment is based on a measure of historical non-base employment per measure of base labour income.

In the end, the model would estimate employment in Revelstoke by industry sector at different levels of regional capture and translate that into specific estimates of land need.

Following (or concurrent to) the completion of employment land demand and opportunity analysis, the City may also undertake work to identify **optimal locations for additions to the industrial land base** (based on employment demand projections and industry-specific land needs criteria), and development of clear policy tools to ensure that industrial lands are sufficiently preserved and protected from encroachment over the long term. The loss of industrial lands is a long-term risk as in many cases other uses can outcompete industrial from an economics standpoint (e.g., residential, mixed-use). Some ideas in this regard may include:

- Policies setting 'no net loss' (or some other threshold) provisions for industrial land conversions, possibly in partnership with neighbouring jurisdictions. This would recognize that perhaps some lands in the industrial land universe in Revelstoke and neighbouring areas are not optimally located and may well be better used as residential, commercial or some other use, but that there is a regional benefit of conversions that are offset by land swaps in suitable locations.
- Clarity of definitions around permitted uses on industrial and employment lands. This may include appropriate principal and accessory uses by type and scale and making an effort to minimize encroachment into industrial lands from non-industrial commercial or institutional uses.

URBAN SYSTEMS MEMORANDUM

DATE: 2022

FILE: 0543.0089.01

PAGE: 17 of 17

SUBJECT: City of Revelstoke Employment Lands Review

- o Being open to possible mixed-use including residential on industrial / employment lands, particularly where those lands are located in closer proximity to services, provided that this does not hinder the ability for industrial lands to accommodate their primary intended uses.

URBAN SYSTEMS LTD.



Justin Barer, M.Pl., RPP, MCIP
Lead – Land Economics

cc: Nancy Henderson, Urban Systems

/JB