

**Report to
Rapport au:**

**Agriculture and Rural Affairs Committee / Comité de l'agriculture et des affaires
rurales**

October 1, 2020 / 1er octobre 2020

and / et

Planning Committee / Comité de l'urbanisme

October 8, 2020 / 8 octobre 2020

and Council / et au Conseil

October 14, 2020 / 14 octobre 2020

Submitted on September 16, 2020

Soumis le 16 septembre 2020

Submitted by

Soumis par:

Don Herweyer,

**Director/Directeur, Economic Development and Long Range Planning/
Développement Économique et Planification à long terme,**

**Planning, Infrastructure and Economic Development Department / Direction
générale de la planification, de l'infrastructure et du développement économique**

générale de la planification, de l'infrastructure et du développement économique

Contact Person

Personne ressource:

Marika Atfield,

Planner / Urbaniste, Policy Planning / Politique de la planification

613-580-2424, 41488, marika.atfield@ottawa.ca

Ward: CITY WIDE / À L'ÉCHELLE DE LA VILLE File Number: ACS2020-PIE-EDP-0031

**SUBJECT: Zoning By-law Amendment to Permit Reduced Parking Rates for
Large-Scale Warehouse and Industrial Buildings**

OBJET: Modification du Règlement de zonage autorisant la réduction des taux de places de stationnement pour les grands entrepôts et les bâtiments industriels

REPORT RECOMMENDATIONS

That Agricultural and Rural Affairs Committee and Planning Committee recommend that Council:

- 1. Approve an amendment to Section 101 of Zoning By-law 2008-250 for Warehouse, Light Industrial, Heavy Industrial and Technology Industry minimum parking rates, as detailed in Document 1.**
- 2. Approve the Consultation Details Section of this report be included as part of the ‘brief explanation’ in the Summary of Written and Oral Public Submissions, to be prepared by the Office of the City Clerk and submitted to Council in the report titled, “Summary of Oral and Written Public Submissions for Items Subject to *the Planning Act* ‘Explanation Requirements’ at the City Council Meeting of October 14, 2020,” subject to submissions received between the publication of this report and the time of Council’s decision.**

RECOMMANDATIONS DU RAPPORT

Que le Comité de l’agriculture et des affaires rurales et le Comité de l’urbanisme :

- 1. recommandent au Conseil d’approuver une modification à l’article 101 du Règlement de zonage (n° 2008-250) concernant les taux minimaux de places de stationnement s’appliquant aux entrepôts, à l’industrie légère, à l’industrie lourde et à l’industrie de haute technologie, comme il est décrit dans le document 1.**
- 2. donnent leur approbation à ce que la section du présent rapport consacrée aux détails de la consultation soit incluse en tant que « brève explication » dans le résumé des observations écrites et orales du public, qui sera rédigé par le Bureau du greffier municipal et soumis au Conseil dans le rapport intitulé « Résumé des observations orales et écrites du public sur les questions assujetties aux “exigences d’explications” prévues par la Loi sur l’aménagement du territoire, à la réunion du Conseil municipal prévue le 14 octobre 2020 », à la condition que les observations aient été reçues entre le moment de la publication du présent rapport et le moment de la décision du Conseil.**

BACKGROUND

On May 27, 2020, City Council, proactively recognizing a growing trend in the use of automated technologies (robots) that aid in warehouse storage and retrieval systems, passed a motion directing staff to review minimum parking requirements for warehouse and light industrial uses in the city. To accommodate these robotic systems, an increase in floor area over what would otherwise be provided is often required. This increase in floor area does not however increase the employee base or, therefore, the necessary number of employee parking spaces.

Use of automated technologies are noted in many business journals as being on the rise across North America in multiple sectors including most recently those involved in e-commerce, such as online retailers and online grocers, and more traditionally in manufacturing, notably in the automotive industry and the food and beverage processing sector.

There are many types of automation available, each catering to a set of needs. Automation can take the form of either physical automation such as autonomous mobile robots, or process automation, such as the digitization of inventory data collection. Automated technologies in warehousing are often employed in systems of sorting, picking, and storing of goods, commonly referred to as 'automated storage and retrieval systems'.

Existing minimum parking rates for warehouse and industrial uses in Ottawa's Zoning By-law are based on ratios that assume a direct link between floor area and number of employees. This approach is no longer relevant when robotics and other automated technologies are introduced. It is desirable to minimize parking for warehouse and light industrial uses since such parking is generally provided on a surface lot. Reducing a site's paved area is considered desirable as it minimizes stormwater runoff and increases tree cover and amenity area. To avoid paving large area of land for unnecessary parking spaces, it is therefore in the City's interest to adapt zoning provisions to account for this trend.

The proposed amendment is therefore to permit some recognition of situations that reduce the need for parking, while also ensuring adequate parking is provided where necessary.

DISCUSSION

Automated systems permit increased efficiency of employees and in some cases a reduction in employees. These systems also often also require and/or permit an

increase in the floor area of the building. Increased floor area, without an equal increase in employees, leads to an oversupply of parking under the City's current rates.

Large-scale warehousing is a more likely candidate for making use of robotic technologies, which require a large initial investment. It can therefore be argued that floor area, beyond an initial threshold, is no longer a good measure of parking need.

Additionally, in the urban core, due to increased demand for same-day delivery, a rise in nano distribution centres (small-scale urban warehouses) is also anticipated. Due to their urban context, such uses may implement alternative transportation such as bicycle or drone delivery systems, which would also reduce the need for large parking and loading areas, supporting the direction in our Official Plan to reduce dependence on automobile use and encourage alternative modes of transportation.

Since the widespread adoption of these technologies is still in early stages, there is little research available regarding parking impacts, which tend to be highly variable depending on the type of technology employed and the needs of the business.

Trip generation manuals used by the City's traffic engineers have very limited options regarding standardized estimates for traffic generation where automated technologies are employed. There is a definition for 'High-Cube Fulfillment Centre Warehouse', which refers to large-scale storage of manufactured goods with a high degree of automation. In order to be categorized as such a use, a good deal of company specific information regarding automation and employee base is required in order to substantiate. Were a zoning requirement to be based on a traffic generation standard per the above, the provision would need to include a requirement for similar reporting of anticipated number of employees with consideration of shift schedules.

Vancouver and New York City both have Zoning By-laws that take into consideration the number of employees proposed for a use, in addition to traditional rates based on floor area. In these cases, however, it is the higher of the two rates that must be provided. The New York City Zoning By-law for example requires a rate of:

“1 per 1,000 sq. ft. of floor area, or one per three employees, whichever will require a larger number of spaces”

The City of Vancouver similarly requires:

“A minimum of one space for each 93 square metres of gross floor area in the building, or one space for every five employees on a maximum work shift, whichever is the greater.”

These provisions stem from an approach to parking regulations that prioritizes the worst-case parking demand scenario above other considerations such as environmental impact. They continue to provide little practical flexibility and demand hardscaping where it may not be needed. On the other hand, were this approach to be revised to require the lesser of the two options, with no baseline minimum other than employee reporting, the applicant may choose to underreport number of staff and therefore undersupply parking. The above provisions are also ambiguous in terms of what standard of reporting will be considered acceptable and how it will be enforced.

In most of the development examples reviewed, parking rates were based on floor area, and a variance was required to address reduced parking needs associated with automated technologies. A recent example is the Walmart Warehouse and Distribution Centre in South Surrey, British Columbia, which requested a reduction in parking of 11 per cent from 299 spaces to 266 spaces.

Similarly, the Hudson's Bay Company distribution centre in Scarborough, Ontario, a facility of about 70,000 square metres with some 300 permanent employees, are noted as having reduced their temporary holiday employee hiring from 700 to 300 following adoption of robotics technologies. This facility also has access to public transportation. At 300 employees, a parking rate of about 0.4 per 100 square metres of floor area would be required to accommodate each employee having a personal vehicle on site. This example would be considered high cube fulfillment centre warehouses under current trip generation manuals, and the applicable parking rate in Ottawa would be 0.8 per 100 square metres.

The City of Richmond, British Columbia, provides some flexibility in their approach to minimum parking, permitting a small reduction where a parking study can substantiate the request:

7.4.4 The minimum on-site parking requirements contained in this by-law may be reduced by up to a maximum of 10 per cent where:

- a) The City implements transportation demand management measures, including the use of car co-operatives, transit passes, private shuttles, carpools or enhanced end-of-trip cycling facilities; and
- b) The minimum on-site parking requirements are substantiated by a parking study that is by a registered professional engineer and is subject to review and approval of the City.

Alternatively, the City of Oakville, Ontario, acknowledging that larger warehouses may require fewer employees per floor area than smaller ones, base their parking requirements on the overall size of the building:

(18) Industrial warehouse:	
a. with a leasable floor area of less than 5,000 sq. m.	1 parking space per 100 square metres of leasable floor area minimum.
b. with a leasable floor area of 5,000 sq. m. or greater	1 parking space per 200 square metres of leasable floor area minimum

This approach, while acknowledging that employee base may not grow in size at the same rate as floor area, does not address potential adoption of automated technologies by smaller companies, or reduced dependence on cars where warehouse and light industrial uses are located in proximity to an urban centre where alternate forms of transportation are available. With current trends in e-commerce, and the emergence of new technologies, business journals anticipate an uptake in the use of automated technologies by distributors of all kinds. None of the municipalities reviewed employed an exemption for floor area occupied by robotics.

In general, warehouse and light industrial uses tend to oversupply parking and loading areas, according to the data presented in the Burlington City-Wide Parking Standards Review (IBI Group, 2017). That same study also reviewed variance applications for reduced parking and noted a 10-33 per cent reduction being requested. These variances are in keeping with the small parking reductions permitted in the above noted City of Richmond Zoning By-law.

Current and proposed provisions

Ottawa's new Official Plan is proceeding in accordance with the Council-adopted Five Big Moves, which point to a policy framework that will reduce dependence on cars and the hardscaping of land to facilitate that dependence. The City's parking rates outside of transit oriented development areas for warehouse and light industrial uses have not been updated since prior to the current 2008 Zoning By-law consolidation, and do not account for robotic technologies. Given the direction forward and given that warehouse and light industrial uses typically aim to provide more than minimum parking, alternatives to the current car-centric rates are appropriate. To recognize that the uptake in automated technologies has been fast for large-scale warehouse uses, and

because these uses tend to be located outside of the urban centre, where land is more affordable, it is proposed to permit varying parking requirements depending on size, similar to the example provided by the City of Oakville.

The current minimum parking rate for warehouse and industrial uses in Ottawa is 0.4 per 100 square metres in the urban core, and 0.8 per 100 square metres in the outer urban and suburban areas. In addition, an oversized vehicle parking space is required for every 5000 square metres of floor area. It is proposed to reduce the existing rate where the floor area exceeds 5000 square metres to a rate of 0.4 per 100 square metres. For a building the size of the above noted Hudson Bay Company distribution centre of about 70,000 square metres, this would result in a required 300 parking spaces. At the current rate of 0.8 per 100 square metres, a building of that size would require 560 parking spaces, typically provided as surface parking.

In addition, and to recognize the potential for automated technology uptake in more accessible urban areas with smaller-scale warehouse and light industrial uses, it is proposed to permit a maximum reduction in required parking of 20 per cent where the proposed reduction can be substantiated by a traffic report approved by the City.

RURAL IMPLICATIONS

The reduction in parking requirements to reflect actual parking needs where automated technologies are employed will not impact rural lands in proximity to warehouse and light industrial uses.

CONSULTATION

Public notification was undertaken in accordance with the Council-approved Public Notification and Public Consultation Policy for Zoning By-law amendments. Staff did not receive any public comments on this matter.

COMMENTS BY THE WARD COUNCILLORS

This is a City-wide report – not applicable.

LEGAL IMPLICATIONS

There are no legal implications associated with implementing the recommendations within this report.

RISK MANAGEMENT IMPLICATIONS

There are no risk management implications associated with this report.

ASSET MANAGEMENT IMPLICATIONS

There are no direct asset management implications associated with the recommendations of this report.

FINANCIAL IMPLICATIONS

There are no direct financial implications.

ACCESSIBILITY IMPACTS

There are no direct accessibility impacts.

ENVIRONMENTAL IMPLICATIONS

Since parking areas for warehouse and industrial uses are typically surface parking, a reduction in the minimum parking rates may permit larger areas of greenspace and better on-site stormwater management.

TERM OF COUNCIL PRIORITIES

This report has no direct impact on the Term of Council Priorities.

SUPPORTING DOCUMENTATION

Document 1 Details of the Recommended Zoning

DISPOSITION

Legislative Services, Office of the City Clerk, to notify the owner; applicant; Ottawa Scene Canada Signs, 415 Legget Drive, Kanata, ON K2K 3R1; Krista O'Brien, Program Manager, Tax Billing and Control, Finance Services department (Mail Code: 26-76) of City Council's decision.

Zoning and Interpretations Unit, Policy Planning Branch, Economic Development and Long Range Planning Services to prepare the implementing By-law and forward to Legal Services.

Legal Services, Innovative Client Services Department, to forward the implementing by-law to City Council.

Planning Operations Branch, Planning Services to undertake the statutory notification.

Document 1 – Details of the Recommended Zoning

The proposed change to the City of Ottawa Zoning By-law No. 2008-250:

1. Amend Table 101 – Minimum Parking Space Rates, Rows N42, N49, N89, and N95 for Heavy Industrial, Light Industrial, Technology Industry and Warehouse uses, by adding new provisions for gross floor areas above 5000 square metres, as well as a new endnote 1 under the column Land Use, so that the table reads as follows:

Table 101- Minimum parking space rates					
	I	II	III	IV	V
Row	Land Use	Area X and Y on Schedule 1A	Area B on Schedule 1A	Area C on Schedule 1A	Area D on Schedule 1A
N42	Heavy Industrial Use ¹	0.4 per 100 m ² for the first 5000 m ² of gross floor area	0.8 per 100 m ² for the first 5000 m ² of gross floor area	0.8 per 100 m ² for the first 5000 m ² of gross floor area	0.8 per 100 m ² for the first 5000 m ² of gross floor area
		0.4 per 100 m ² above 5000 m ² of gross floor area	0.4 per 100 m ² above 5000 m ² of gross floor area	0.4 per 100 m ² above 5000 m ² of gross floor area	0.4 per 100 m ² above 5000 m ² of gross floor area
N49	Light Industrial Use ¹	0.4 per 100 m ² for the first 5000 m ² of gross floor area	0.8 per 100 m ² for the first 5000 m ² of gross floor area	0.8 per 100 m ² for the first 5000 m ² of gross floor area	0.8 per 100 m ² for the first 5000 m ² of gross floor area
		0.4 per 100 m ² above 5000 m ² of	0.4 per 100 m ² above 5000 m ² of gross floor	0.4 per 100 m ² above 5000 m ² of gross floor	0.4 per 100 m ² above 5000 m ² of gross floor

Table 101- Minimum parking space rates					
	I	II	III	IV	V
Row	Land Use	Area X and Y on Schedule 1A	Area B on Schedule 1A	Area C on Schedule 1A	Area D on Schedule 1A
		gross floor area	area	area	area
N89	Technology Industry ¹	0.4 per 100 m ² for the first 5000 m ² of gross floor area	0.8 per 100 m ² for the first 5000 m ² of gross floor area	0.8 per 100 m ² for the first 5000 m ² of gross floor area	0.8 per 100 m ² for the first 5000 m ² of gross floor area
		0.4 per 100 m ² above 5000 m ² of gross floor area	0.4 per 100 m ² above 5000 m ² of gross floor area	0.4 per 100 m ² above 5000 m ² of gross floor area	0.4 per 100 m ² above 5000 m ² of gross floor area
N95	Warehouse ¹	0.4 per 100 m ² for the first 5000 m ² of gross floor area	0.8 per 100 m ² for the first 5000 m ² of gross floor area	0.8 per 100 m ² for the first 5000 m ² of gross floor area	0.8 per 100 m ² for the first 5000 m ² of gross floor area
		0.4 per 100 m ² above 5000 m ² of gross floor area	0.4 per 100 m ² above 5000 m ² of gross floor area	0.4 per 100 m ² above 5000 m ² of gross floor area	0.4 per 100 m ² above 5000 m ² of gross floor area

2. Amend Section 101 by adding a new Table 101B – Additional Zoning Provisions with provisions similar in effect to the following:

Table 101B – Additional zoning provisions	
I Endnote Number	II Additional Zoning Provisions
1	<p>The minimum number of parking spaces may be reduced by a maximum of 20 per cent where:</p> <ul style="list-style-type: none"> a. transportation demand management measures are employed, including the use of car co-operatives and car sharing spaces, transit passes, or enhanced end-of-trip cycling facilities; and b. the minimum on-site parking requirements are substantiated by a parking study that is by a registered professional engineer and is subject to review and approval by the City.