

EXHIBIT S 2-1

CD.05.PAR
(Parking Space)

DATE: July 18, 2000

TO: Chairman and Members of the Planning and Development Committee

FROM: Thomas S. Mokrzycki, Commissioner of Planning and Building

SUBJECT: **Response to Comments - Parking Space Dimensions**
MEETING DATE: August 8, 2000

ORIGIN: Recommendation PDC-0020-2000

BACKGROUND: The Planning and Development Committee (PDC) at its meeting on January 31, 2000 considered a report titled "*Parking Space Dimensions*" dated January 11, 2000 from the Commissioner of Planning and Building and adopted the following Recommendation PDC-0020-2000:

"That the report titled "Parking Space Dimensions" dated January 11, 2000 from the Commissioner of Planning and Building, be circulated to the Urban Development Institute (Peel Chapter), the Mississauga Board of Trade, the Building Industry Liaison Team (BILT), BIAs, and all ratepayer associations, for their comments by April 30, 2000."

Recommendation PDC-0020-2000 was adopted by City Council on February 9, 2000.

COMMENTS: In accordance with Recommendation PDC-0020-2000, the January 11, 2000 report (attached as Exhibit S-1) was circulated to the Urban Development Institute (Peel Chapter), the Mississauga Board of Trade, the Building Industry Liaison Team

(BILT), BIAs, and all ratepayer associations. At the January 31, 2000 PDC meeting, an issue with respect to private garages was raised and is addressed in this report.

1.0 Report Circulation

The January 11, 2000 report was presented to BILT on January 25, 2000. No comments arose from the meeting. A subcommittee of BILT was also set up to discuss the issue with respect to private garages as well as the report. The Urban Development Institute (UDI) and the Greater Toronto Home Builders Association (GTHBA) were invited to the meeting held on March 21, 2000. The UDI had no separate comments.

1.1 GTHBA Comments (Exhibit S-2)

The GTHBA is concerned that the proposed increase in the minimum width of a parking space standard would increase the cost of construction, specifically for underground parking garages for high density residential development. The GTHBA felt that the current parking space standard width of 2.6 m (8.5 ft.) is still the appropriate stall width.

It is acknowledged that, as in any increase in minimum requirement, an increase in the parking space standard would increase the cost of construction per parking space. As addressed in the report dated January 11, 2000 (see Exhibit S-1), under Section 3.6, Proposed Revised Definition of "PARKING SPACE", Sketch 2 demonstrates that there is a 6% reduction in the total number of parking spaces provided on a 0.4 ha (1 acre) lot should the parking space width standard be increased from 2.6 m (8.5 ft.) to 2.75 m (9.0 ft.).

In response to GTHBA's contention that the current parking space standard width of 2.6 m (8.5 ft.) is still the appropriate stall width, the report dated January 11, 2000 (see Exhibit S-1), under Section 3.3, Changes in Vehicle Dimensions, indicated that the average size of vehicles has increased gradually since 1987. The average vehicle width has increased from 1.75 m (5.74 ft.) in 1987 to 1.85 m (6.07 ft.) in 1998, a difference of 10 cm (4 in.),

while the average vehicle length has increased from 4.61 m (15.12 ft.) in 1987 to 4.95 m (16.24 ft.) in 1998, a difference of 34 cm (13.4 in.). Allowing for a side door clearance space of 0.75 m (2.5 ft.), it is concluded that the minimum width of a parking space as defined in the Zoning By-laws should be increased. Further comments on parking space width are addressed in Section 1.5, BA Consulting Group Limited Comments, of this report.

1.2 Board of Trade Comments (Exhibit S-3)

The Mississauga Board of Trade had no concerns.

1.3 Orlando Corporation Comments (Exhibit S-4)

Orlando Corporation indicated no objection with the overall principle of increasing the minimum parking space width from 2.6 m (8.5 ft.) to 2.75 m (9.0 ft.), but requested that this proposed parking space standard apply to entirely new development only upon implementation of the By-laws. Orlando Corporation also requested consideration of allowing the current parking space standard of 2.6 m (8.5 ft.) by 5.2 m (17.1 ft.) apply to expansions or new buildings on partially developed sites.

As addressed in the report dated January 11, 2000 (see Exhibit S-1), under Section 3.8, Legal Non-Conforming Parking Spaces, many developments that existed prior to 1987 could contain two different parking space standards. If the size of a parking space were to increase from 2.6 m (8.5 ft.) by 5.2 m (17.1 ft.) to 2.75 m (9.0 ft.) by 5.2 m (17.1 ft.), the existing parking area provided at the current standard would become legal non-conforming. Should the proposed revised parking space standard be adopted, the new parking area provided would be subject to the new standard. Any variance to this proposed new standard will require an application to the Committee of Adjustment, and the variance will be considered based on its individual merits.

1.4 Rockwood Homeowners' Association Comments (Exhibit S-5)

Rockwood Homeowners' Association requested clarification with respect to the minimum 1% of the total required parking to be designated for the disabled. As an example, if the total required parking is 201 spaces, a 1% requirement means that mathematically the required parking spaces to be designated for the disabled would be 2.01 spaces. As no fractional parking space will be allowed in any development, and by virtue of the minimum 1% requirement in the Zoning By-laws, the parking spaces required to be designated for the disabled on a 201 parking space development would be 3 parking spaces.

1.5 BA Consulting Group Limited Comments (Exhibit S-6)

BA Consulting Group Limited provided comments on behalf of Omers Realty Management Corporation, GWL Realty Advisors, City Centre Plaza Limited, Monarch Construction Limited and Orlando Corporation Limited. They indicated support for the adoption of more detailed information regarding the use of angled parking, however, BA Consulting contend that the current 2.6 m (8.5 ft.) wide parking space should be retained. Their rationale for retaining this width is based on the actual size of the vehicle population; future trends in vehicle sizes; side door clearance requirements; and comparison to standards in other municipalities.

Actual Size of the Vehicle Population

The staff study used data from Transport Canada which provided the average width of models on the market between 1985 and 1998. While BA Consulting does not dispute this data, they suggest that it is more appropriate to use statistics that reflect the actual size distribution of vehicles sold or the actual vehicle population in parking lots.

BA Consulting contended that, from an economic and environmental standpoint, it is not desirable to design parking facilities to provide a high level of service for a small percentage

of large vehicles. BA Consulting used the 85th percentile width and length of the vehicle population or sales in assessing the parking design.

At the request of staff, BA Consulting provided 1998 vehicle sales information for Canada in support of their comments. Exhibits S-7 and S-8 show these sales data sorted by vehicle width. Exhibit S-7 includes all sales, while Exhibit S-8 excludes all pick up trucks, Dodge Ram Wagon and Van, and Ford Clubwagon, which BA Consulting suggested should be excluded in the analysis for predominately non-rural areas. BA Consulting suggested the use of the 85th percentile as an appropriate measurement on which to base a standard. Staff use a range of percentiles depending on the use and in this instance suggest that the 95th percentile should also be considered. The 85th percentile width of all 1998 vehicle sales as shown on Exhibit S-7 is 1.97 m (6.5 ft.), and the 95th percentile is 2.00 m (6.6 ft.). If the sales data exclude all pick up trucks, Dodge Ram Wagon and Van, and Ford Clubwagon, as shown on Exhibit S-8, the 85th percentile is 1.95 m (6.4 ft.) and the 95th percentile is 1.97 m (6.5 ft.). Adding to these dimensions a side door clearance space of 0.75 m (2.5 ft.), a parking space width of 2.7 m (8.9 ft.) to 2.75 m (9.0 ft.) can be supported.

Future Trends in Vehicle Sizes

BA Consulting contends that recent sales information suggests that the sales of light trucks, vans and sports utility vehicles have peaked and are starting to decline modestly. This is a matter of conjecture and opposing opinions do exist (eg. press release dated May 30, 2000 by Scotia Economics - see Exhibit S-9). A comparison of 1998 vehicle models and 2000 vehicle models (Exhibit S-10) indicates that the average size of vehicles has increased in width by 0.01 m (0.4 in.) and in length by 0.02 m (0.8 in.).

Side Door Clearance Requirements

BA Consulting suggest that a door opening clearance of 0.55 to 0.65 m (1.8 to 2.1 ft.) is sufficient and that the clearance space of 0.75 m (2.5 ft.) used in the staff study is overly generous. While 0.55 to 0.65 m (1.8 to 2.1 ft.) may be the range used by BA

Consulting, this is not consistent amongst all consulting firms. In a recent study prepared by Proctor and Redfern for the Town of Oakville, a 0.75 m (2.5 ft.) clearance space between vehicles was used.

Furthermore, a slightly larger side door clearance allowance can compensate for situations where vehicles are not parked precisely in the centre of the parking space. A slightly wider parking space width would also increase visibility for manoeuvring out of a space when parked next to a van or sport utility vehicle. It is more difficult to see past these types of vehicles for oncoming traffic.

Standards of Other Municipalities

BA Consulting indicated that there are many municipalities which have parking space width of 2.6 m (8.5 ft.) or less. In our analysis of the parking space dimensions, 12 municipalities/districts within the GTA were contacted. Only two municipalities (17%) have the minimum parking space width standard of 2.6 m (8.5 ft.) or less. Seven municipalities (58%) have the minimum width standard of 2.7 m (8.9 ft.) and three municipalities (25%) have the minimum width standard of 2.75 m (9.0 ft.). A parking report submitted by Proctor and Redfern to the Town of Oakville for a specific development surveyed the parking space standard of 34 municipalities in Ontario (see Exhibit S-11). The results showed that eight municipalities (24%) have the parking space width standard of 2.6 m (8.5 ft.) or less, while 13 municipalities (38%) have the width standard of 2.7 m (8.9 ft.), nine municipalities (26%) have the width standard of 2.75 m (9.0 ft.), and four municipalities have the width standard of 2.8 m (8.2 ft.) or more. The number of municipalities with the minimum parking width standard of 2.6 m (8.5 ft.) or less are in the minority. Most municipalities have the minimum parking width standard of 2.7 m (8.9 ft.) or more.

1.6 Summary

In view that the average size of vehicles has increased, although slightly, since the staff study initiated in 1998, and using the 85th and 95th percentile widths of 1998 vehicle sales information

supplied by BA Consulting at 1.95 m (6.4 ft.) to 2.00 m (6.6 ft.), with a side door clearance space of 0.75 m (2.5 ft.), a minimum parking space width standard of 2.7 to 2.75 m (8.9 to 9.0 ft.) can be supported.

As the parking space standard applies to all types of development (residential, commercial, industrial and other non-residential), a 95th percentile width of all vehicle sales should be used. Although pickup trucks and large vans, which BA Consulting suggested be excluded from the analysis, may not be commonly seen in commercial parking lots, these vehicles still need to be accommodated, and may be more prevalent in non-retail or non-office areas, such as parking lots for industrial uses.

The proposed minimum parking space width standard of 2.75 m (9.0 ft.) is maintained. This proposed parking space width standard is also widely used by many of the municipalities surveyed.

2.0 Comments Received at the PDC Meeting of January 31, 2000

The PDC raised a concern related to the existing provisions in the Zoning By-laws regarding the size of a private garage for townhouse developments. The present provisions in the Zoning By-laws regarding the minimum size of a private garage for residential development vary by the types of dwellings: 16.5 m² (180 sq. ft.) for detached and semi-detached dwellings; and 13.5 m² (145 sq. ft.) for townhouses, apartments and other multiple-family dwellings. The provisions for the minimum size of a private garage for multiple-family dwellings were amended along with the amended parking space standard of 2.6 m (8.5 ft.) by 5.2 m (17.1 ft.) in 1987. In view of the concern raised at the PDC meeting, it is proposed that the minimum size of a private garage for multiple-family dwellings be increased to have an unobstructed rectangular area having a minimum width of 2.75 m (9.0 ft.) and a minimum length of 6.0 m (19.7 ft.). This would allow for adequate space for side door clearance and closing of the garage door. This proposed amendment would be similar to

the minimum size of a private garage for detached and semi-detached dwellings. It is also proposed that the private garage provisions in the By-laws for detached and semi-detached dwellings be amended to measure it by a minimum width of 2.75 m (9.0 ft.) and a minimum length of 6.0 m (19.7 ft.), and not by the area.

CONCLUSION:

The report titled "*Parking Space Dimensions*" dated January 11, 2000 from the Commissioner of Planning and Building was circulated to the Urban Development Institute (Peel Chapter), the Mississauga Board of Trade, the Building Industry Liaison Team (BILT), BIAs, and all ratepayer associations. Comments were received regarding increasing costs should the minimum parking space width be increased from 2.6 m (8.5 ft.) to 2.75 m (9.0 ft.), and requesting clarification of minimum 1% of the total parking spaces designated for the disabled. BA Consulting Group Limited, on behalf of a several developers, commented that the existing parking space width of 2.6 m (8.5 ft.) will accommodate the dimensional requirements of the current vehicle population in a reasonable manner. In response to the comments, it is concluded that a minimum 2.75 m (9.0 ft.) parking space width standard as recommended in the report titled "*Parking Space Dimensions*" dated January 11, 2000 remain valid.

With respect to the minimum size of a private garage for residential development, it is proposed that the provisions in the Zoning By-laws be amended by requiring a private garage to be a minimum width of 2.75 m (9.0 ft.) and a minimum length of 6.0 m (19.7 ft.). This proposed amendment is additional to those recommended in the report titled "*Parking Space Dimensions*" dated January 11, 2000.

A public meeting is required to consider the proposed amendments to the Zoning By-laws.

RECOMMENDATIONS:

1. That a public meeting be held at the Planning and Development Committee to consider the following as recommended in the report titled "*Response to Comments - Parking Space Dimensions*" dated July 18, 2000 from the Commissioner of Planning and Building:

(1) That Zoning By-law 5500 (former Town of Mississauga) be amended as follows:

a. That subsections 2(24) and (46) be deleted and the following be substituted therefor:

(24) "*PARKING SPACE*" means an unobstructed rectangular area for the temporary parking or storage of a motor vehicle, having a minimum width of 2.75 m (9.0 ft.) and a minimum length of 5.2 m (17.1 ft.), exclusive of any aisle or driveway.

(46) "*AISLE*" means an internal roadway adjacent to a parking and loading space which provides vehicular ingress and egress to and from the parking or loading space.

b. That section 2 be amended by adding the following definitions:

"*PARKING ANGLE*" means the angle not exceeding 90° formed by the intersection of the side of a parking space and a line parallel to the adjacent aisle or driveway.

"*PARALLEL PARKING SPACE*" means an unobstructed rectangular area for the temporary parking or storage of a motor vehicle, having a parking angle not exceeding 15°, and having a minimum width of 2.75 m (9.0 ft.) and a minimum length of 7.25 m (23.8 ft.), exclusive of any aisle or driveway.

"*PARKING SPACE - DISABLED*" means an unobstructed rectangular area for the temporary parking or storage of a motor vehicle, having a minimum width of

4.6 m (15.1 ft.) and a minimum length of 5.2 m (17.1 ft.), exclusive of any aisle or driveway, designated in accordance with The Corporation of the City of Mississauga's Disabled Persons Parking By-law.

- c. That subsection 22C(2) be deleted and the following be substituted therefor:

(2) Where land is used for a purpose set forth in Column 1 and/or Column 2 in Schedule "A" of this section, parking and loading spaces shall be provided and maintained on the same lot in accordance with the minimum requirement prescribed in Column 3 for each such use.

- d. That subsection 22C(3) be deleted and the following be substituted therefor:

(3) Parking spaces - disabled shall be provided and maintained on the same lot in proximity to the main entrances to a building or structure in accordance with the minimum requirement prescribed in the following table, which spaces shall be included in the total required parking spaces:

<i><u>Total Number of Required Parking Spaces</u></i>	<i><u>Minimum Requirement Parking Spaces - Disabled</u></i>
<i>0 - 9</i>	<i>Nil</i>
<i>10 - 100</i>	<i>1 space</i>
<i>101 - 2 500</i>	<i>1% of the total required parking spaces</i>
<i>2 501 and greater</i>	<i>25 spaces</i>

- e. That subsection 22C(6) be deleted.
- f. That By-law 5500 be amended by adding the following section:

Aisle Width.

- (1) *The minimum aisle width shall be 7.0 m (23.0 ft.).*
 - (2) *Notwithstanding subsection (1) of this section, where a one-way aisle is provided for ingress and egress to and from parking spaces with a parking angle not exceeding 60°, the minimum aisle width may be 5.5 m (18.0 ft.).*
- g. That subsection 30(5) be amended by deleting the words "*an opened and unobstructed minimum area measuring 16.5 m² (180 sq. ft.)*" and substituting therefor the words "*shall have an unobstructed rectangular area having a minimum width of 2.75 m (9.0 ft.) and a minimum length of 6.0 m (19.7 ft.)*".
 - h. That subclause 43A(1)(a)(x), subsection 43C(8) and clauses 45(2)(q) and 45A(1)(n) be amended by deleting the words "*comprising an area of at least 16.5 m² (180 sq. ft.)*" and substituting therefor the words "*having an unobstructed rectangular area with a minimum width of 2.75 m (9.0 ft.) and a minimum length of 6.0 m (19.7 ft.)*".
 - i. That clause 44(17)(c) be deleted.
 - j. That clauses 44(17)(g) and 49(3)(o) be amended by deleting the words "*comprising an area of at least 13.5 m² (145 sq. ft.)*" and substituting therefor the words "*having an unobstructed rectangular area with a minimum width of 2.75 m (9.0 ft.) and a minimum length of 6.0 m (19.7 ft.)*".
- (2) That Zoning By-law 65-30 (former Town of Streetsville) be amended as follows:
 - a. That subsections 2(45) and (79) be deleted and the following be substituted therefor:
 - (45) "*PARKING SPACE*" means an unobstructed rectangular area for the temporary parking or

storage of a motor vehicle, having a minimum width of 2.75 m (9.0 ft.) and a minimum length of 5.2 m (17.1 ft.), exclusive of any aisle or driveway.

(79) *“AISLE” means an internal roadway adjacent to a parking or loading space which provides vehicular ingress and egress to and from the parking or loading space.*

- b. That section 2 be amended by adding the following definitions:

“PARKING ANGLE” means the angle not exceeding 90° formed by the intersection of the side of a parking space and a line parallel to the adjacent aisle or driveway.

“PARALLEL PARKING SPACE” means an unobstructed rectangular area for the temporary parking or storage of a motor vehicle, having a parking not exceeding 15°, and having a minimum width of 2.75 m (9.0 ft.) and a minimum length of 7.25 m (23.8 ft.), exclusive of any aisle or driveway.

“PARKING SPACE - DISABLED” means an unobstructed rectangular area for the temporary parking or storage of a motor vehicle, having a minimum width of 4.6 m (15.1 ft.) and a minimum length of 5.2 m (17.1 ft.), exclusive of any aisle or driveway, designated in accordance with The Corporation of the City of Mississauga’s Disabled Persons Parking By-law.

- c. That clause 6(2)(e) be amended by deleting the words *"an opened and unobstructed minimum area measuring 16.5 m² (180 sq. ft.)"* and substituting therefor the words *"shall have an unobstructed rectangular area having a minimum width of 2.75 m (9.0 ft.) and a minimum length of 6.0 m (19.7 ft.)"*.
- d. That clause 6(26)(2) be deleted and the following be substituted therefor:

(2) *Where land is used for a purpose set forth in Column 1 and/or Column 2 in Schedule "I" of this section, parking and loading spaces shall be provided and maintained on the same lot in accordance with the prescribed minimum requirement in Column 3 for each such use.*

e. That clause 6(26)(3) be deleted and the following be substituted therefor:

(3) *Parking spaces - disabled shall be provided and maintained on the same lot in proximity to the main entrances to a building or structure in accordance with the minimum requirement prescribed in the following table, which spaces shall be included in the total number of required parking spaces:*

<i><u>Total Number of Required Parking Spaces</u></i>	<i><u>Minimum Requirement Parking Spaces - Disabled</u></i>
<i>0 - 9</i>	<i>Nil</i>
<i>10 - 100</i>	<i>1 space</i>
<i>101 - 2 500</i>	<i>1% of the total required parking spaces</i>
<i>2 501 and greater</i>	<i>25 spaces</i>

f. That clause 6(26)(6) be deleted.

g. That section 6 be amended by adding the following subsection:

AISLE WIDTH

(1) *The minimum aisle width shall be 7.0 m (23.0 ft.).*

(2) *Notwithstanding clause (1) of this subsection, where a one-way aisle is provided for ingress and egress to and from parking spaces with a parking angle not exceeding 60°, the minimum aisle width may be 5.5 m (18.0 ft.).*

(3) That Zoning By-law 1227 (former Town of Port Credit) be amended as follows:

a. That subsections 4(45) and (47) be deleted and the following be substituted therefor:

(45) *“AISLE” means an internal roadway adjacent to a parking and loading space which provides vehicular ingress and egress to and from the parking or loading space.*

(47) *“PARKING SPACE” means an unobstructed rectangular area for the temporary parking or storage of a motor vehicle, having a minimum width of 2.75 m (9.0 ft.) and a minimum length of 5.2 m (17.1 ft.), exclusive of any aisle or driveway.*

b. That section 4 be amended by adding the following definitions:

“PARKING ANGLE” means the angle not exceeding 90° formed by the intersection of the side of a parking space and a line parallel to the adjacent aisle or driveway.

“PARALLEL PARKING SPACE” means an unobstructed rectangular area for the temporary parking or storage of a motor vehicle, having a parking angle not exceeding 15°, and having a minimum width of 2.75 m (9.0 ft.) and a minimum length of 7.25 m (23.8 ft.), exclusive of any aisle or driveway.

“PARKING SPACE - DISABLED” means an unobstructed rectangular area for the temporary parking or storage of a motor vehicle, having a minimum width of 4.6 m (15.1 ft.) and a minimum length of 5.2 m (17.1 ft.), exclusive of any aisle or driveway, designated in accordance with The Corporation of the City of Mississauga’s Disabled Persons Parking By-law.

c. That clause 6(7)(b) be amended by deleting the words "*an opened and unobstructed minimum area measuring 16.5 m² (180 sq. ft.)*" and substituting therefor the words "*shall have an unobstructed rectangular area having a minimum width of 2.75 m (9.0 ft.) and a minimum length of 6.0 m (19.7 ft.)*".

d. That clause 6(21)(2) be deleted and the following be substituted therefor:

(2) *Where land is used for a purpose set forth in Column 1 and/or Column 2 in Schedule "A", which is part of this By-law, parking and loading spaces shall be provided and maintained on the same lot in accordance with the minimum requirement prescribed in Column 3 for each such use.*

e. That clause 6(21)(3) be deleted and the following be substituted therefor:

(3) *Parking spaces - disabled shall be provided and maintained on the same lot in proximity to the main entrances to a building or structure in accordance with the minimum requirement prescribed in the following table, which spaces shall be included in the total number of required parking spaces:*

<i><u>Total Number of Required Parking Spaces</u></i>	<i><u>Minimum Requirement Parking Spaces - Disabled</u></i>
<i>0 - 9</i>	<i>Nil</i>
<i>10 - 100</i>	<i>1 space</i>
<i>101 - 2 500</i>	<i>1% of the total required parking spaces</i>
<i>2 501 and greater</i>	<i>25 spaces</i>

f. That clause 6(21)(6) be deleted.

g. That section 6 be amended by adding the following subsection:

AISLE WIDTH

- (1) *The minimum aisle width shall be 7.0 m (23.0 ft.).*
 - (2) *Notwithstanding clause (1) of this subsection, where a one-way aisle is provided for ingress and egress to and from parking spaces with a parking angle not exceeding 60°, the minimum aisle width may be 5.5 m (18.0 ft.).*
- h. That subclause 8(1)(1A)(m) be amended by deleting the words "*comprising an area of at least 16.5 m² (180 sq. ft.)*" and substituting therefor the words "*having an unobstructed rectangular area with a minimum width of 2.75 m (9.0 ft.) and a minimum length of 6.0 m (19.7 ft.)*".
 - i. That clause 10C(2)(n) be amended by deleting the words "*comprising an area of at least 13.5 m² (145 sq. ft.)*" and substituting therefor the words "*having an unobstructed rectangular area with a minimum width of 2.75 m (9.0 ft.) and a minimum length of 6.0 m (19.7 ft.)*".
2. That the By-law Enforcement Division of the Corporate Services Department prepare amendments to Disabled Persons Parking By-law 134-83, as amended, regarding the width and the total number of parking spaces designated for the disabled in accordance and concurrently with the proposed amendments to the Zoning By-laws.

Original Signed By: _____
Thomas S. Mokrzycki
Commissioner of Planning and Building