




**City of Richmond**

**Report to Committee**

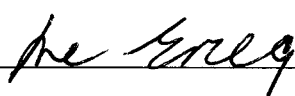
**To:** Planning Committee **Date:** February 28, 2006  
**From:** Victor Wei, P. Eng. **File:** 10-6455-00/Vol 01  
Acting Director, Transportation  
**Re:** **PARKING REQUIREMENTS FOR SECONDARY SCHOOLS IN RICHMOND**

**Staff Recommendation**

1. That the proposed revisions to the off-street parking requirements for public and private school use specified in Zoning and Development Bylaw No. 5300 be incorporated into the current review and update of the Bylaw.
2. That staff continue to work with the Richmond School District staff to promote and implement joint transportation demand management strategies to reduce vehicle traffic to/from schools.

  
Victor Wei, P. Eng.  
Acting Director, Transportation  
(4131)

Att. 1

FOR ORIGINATING DIVISION USE ONLY					
<b>ROUTED TO:</b>	<b>CONCURRENCE</b>		<b>CONCURRENCE OF GENERAL MANAGER</b>		
Development Applications.....	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>				
Policy Planning .....	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>				
<b>REVIEWED BY TAG</b>	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	<b>REVIEWED BY CAO</b>	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>

## Staff Report

### Origin

At the November 30, 2004 meeting of the Council / School Board Liaison Committee, Richmond School District (RSD) staff raised concerns regarding the off-street parking requirements for public schools as defined by the City's Zoning and Development Bylaw (see **Attachment 1** for the minutes of the meeting regarding the agenda item). RSD staff contend that bylaw requirements for off-street parking for public schools are greater than actual needs, which restricts the use of School District land for other applications, and are requesting that the bylaw be amended to reduce off-street parking requirements for schools. The matter was referred to staff for review and report to the Planning Committee. This report provides an analysis and recommendations with respect to the issue.

### Analysis

#### 1. Current Off-Street Parking Supply and Requirements for Secondary Schools

RSD staff have clarified that their primary concern with respect to off-street parking requirements for public schools is specifically related to secondary schools (Grades 8-12) and the requirement within the Zoning and Development Bylaw for public and private schools to provide additional parking for accessory recreation facilities (e.g., gymnasium) beyond that required for classroom uses. Specifically, Section 407 – Parking Space Required of the Bylaw states:

- Public & Private School Use:
  - 2 spaces for each classroom.

*Note: There are additional requirements for Recreation Facility and Commercial uses, if applicable.*
- Recreation Facility Use:
  - 2 spaces for each 100 m<sup>2</sup> (1,076.43 ft<sup>2</sup>) of gross floor area of building; plus
  - 1 space for each 4 spectator seats provided; plus
  - 3 spaces for each sheet of curling ice; plus
  - 3 spaces for each tennis, badminton or squash court.

Table 1 below lists the existing bylaw requirements for off-street parking for the 10 public secondary schools in Richmond<sup>1</sup>, the current on-site parking supply, the resulting over- or undersupply of on-site parking at the schools, and the number of parking spaces for staff and students.

**Table 1 Existing Parking Requirements and Supply at Richmond Public Secondary Schools**

Secondary School	Present Student Capacity	Total Number of Staff	Parking Spaces Required per Bylaw (School + Gym)	Existing Parking Spaces	Over or (Under) Supply	Parking Spaces for	
						Staff	Student
Boyd	900	75	88 + 274 = 362	170	(192)	75	95
Burnett	1200	84	108 + 119 = 227	196	(31)	106	90
Cambie	1000	100	110 + 186 = 296	300	4	100	200
London/Steveston	1375*	110	118 + 214 = 332	209*	(123)	110	99
McMath	1080	80	108 + 177 = 285	250	(35)	80	170

<sup>1</sup> Private secondary schools were not included in the analysis, as public secondary schools form the majority of secondary school facilities in Richmond.

Secondary School	Present Student Capacity	Total Number of Staff	Parking Spaces Required per Bylaw (School + Gym)	Existing Parking Spaces	Over or (Under) Supply	Parking Spaces for	
						Staff	Student
McNair	1200	96	102 + 156 = 258	159	(99)	96	63
MacNeill	1200	90	98 + 177 = 275	216	(59)	90	126
McRoberts	950	72	86 + 271 = 357	128	(229)	72	56
Palmer	1000	95	108 + 178 = 286	162	(124)	95	67
Richmond	1200	91	108 + 165 = 273	162	(111)	91	71

\* - proposed.

As indicated in the table, the majority of public secondary schools currently provide fewer parking spaces than required per the bylaw. These reductions were granted by the City via the development variance process on a case-by-case basis. The schools typically assign sufficient parking to accommodate the number of staff at the school with the balance of parking spaces available for students. In general, the existing off-street parking supply at secondary schools appears to be adequate.

## 2. Off-Street Parking Requirements for Schools – Other Municipalities

Staff researched the zoning and development bylaws of other Lower Mainland municipalities with respect to off-street parking requirements for public schools. Table 2 below compares the requirements of selected municipalities with those of Richmond and indicates the total number of parking spaces required by each jurisdiction (last column) using the specifications of McMath Secondary School as a sample secondary school. If specified in the bylaw, the table also shows the number of parking spaces required for staff and students.

**Table 2 Various Municipal Parking Rates Applied to McMath Secondary School**

Municipality	Bylaw Requirement for Parking Spaces	Parking Spaces Required		
		Staff	Students	Total
Vancouver	• minimum of 1.25 spaces per employee	100	N/A	100
North Vancouver	• 1.25 spaces for every classroom; and • 1 space for every 12 students in Grade 10 or over	N/A	45	103
West Vancouver	• 1 space for every employee; and • 1 space for every 10 students in Grades 11 & 12	80	37	117
Burnaby	• 1 space per staff member; and • 1 space per 10 students	80	108	188
Port Moody	• 1 space per teacher; and • 1 space for every 10 students	80	108	188
Coquitlam	• 1 space for every 4.44 students	N/A	N/A	243
Port Coquitlam	• staff: 1 space for every 10 students; and • students: 1 space for every 8 students	108	138	246
Richmond	• 2 spaces for every classroom; • 2 spaces for every 100m <sup>2</sup> of gymnasium; and • 1 space for every 4 spectator seats	N/A	N/A	285
Surrey	• 3 spaces for every classroom; • 11 spaces for every 100m <sup>2</sup> of gymnasium; and • 2 spaces for loading/unloading of buses	N/A	N/A	314

As shown in the table, local municipalities typically determine off-street parking requirements for public schools based on either: (1) a specific ratio per staff and/or student population; or (2) a

specific ratio per number of classrooms and/or gymnasium size. These two methods produce a fairly wide range of off-street parking requirements for secondary schools across municipalities with those municipalities calculating the requirement based on the number of classrooms and gymnasium size (i.e., Richmond and Surrey) having a significantly higher number of required parking spaces.

### 3. Proposed Amendment to Zoning and Development Bylaw re On-Site Parking Requirements

To date, the City has worked collaboratively with the School District to address requested reductions to the off-street parking requirements for public schools via the development variance process. This consistent relaxation of on-site parking requirements for secondary schools as well as the high baseline requirement vis-à-vis other municipalities suggests that the City's current specifications are excessive and should be revised.

Staff propose to adopt the methodology of calculating off-street parking requirements based on staff and student population, which is more directly linked to typical traffic volume generation than the number of classrooms and/or gymnasium size. The proposed on-site parking requirements would be based on a formula of:

- one parking space per staff; plus
- one parking space per 10 student capacity.

This method would produce an on-site parking requirement more consistent with not only the existing parking supply at secondary schools but also other municipalities in the Lower Mainland. Table 3 below indicates the existing on-site parking spaces at secondary schools and compares these figures with the current versus proposed parking requirements.

**Table 3 Comparison of Existing and Proposed Parking Requirements for Richmond Public Secondary Schools**

Secondary School	Present Student Capacity	Total Number of Staff	Parking Spaces Required per Existing Bylaw	Parking Spaces Required per Amended Bylaw	Existing Parking Spaces
Boyd	900	75	362	165	170
Burnett	1200	84	227	204	196
Cambie	1000	100	296	200	300
London/Steveston	1375*	110	332	248	214*
McMath	1300	110	285	240	250
McNair	1200	96	258	216	159
MacNeill	1200	90	275	210	216
McRoberts	950	72	357	167	128
Palmer	1000	95	286	195	162
Richmond	1200	91	273	201	162

\* - proposed.

Together with the proposed amended Bylaw requirements, staff would still fully consider site-specific conditions (e.g., adjacent land use, availability of on-street parking, public transit access, etc) that may affect off-street parking requirements for each school during the application process. Given that there are only 10 secondary schools in Richmond, this process is manageable for staff.

#### 4. Pick-Up and Drop-Off Areas at Secondary Schools

The Zoning and Development Bylaw stipulates on-site parking requirements but does not specifically consider the area/spaces required for passenger pick-up and drop-off. However, defining a standard for these areas for inclusion in the Bylaw would be difficult, as these areas are influenced by site-specific conditions such as the layout of the entire school site and the surrounding road network. Therefore, as the size and layout of pick-up and drop-off areas can contribute to traffic congestion and safety issues around schools, staff recommend that as part of the development application process for a new school:

- a traffic/parking study be conducted by the applicant to determine passenger pick-up and drop-off requirements and parking lot layout; and
- the study be submitted for the City's review and approval.

#### 5. Transportation Demand Management Strategies

Transportation demand management (TDM) seeks to reduce the demand for private vehicle travel by influencing when people travel (i.e., peak versus non-peak), how people travel (e.g., car versus transit) and how far people travel to access desired destination points. Vehicle trips and congestion can be reduced by:

- *Shifting the Mode of Transportation*: measures that attempt to influence a modal shift from private auto travel to public transit, carpools/vanpools, bicycles, walking, and other non-motorized modes;
- *Eliminating Trips*: measures that attempt to reduce either the total number of person-trips made (e.g., telecommuting) or vehicle trips made (e.g., integrating mixed-use zoning into a community to enable citizens to walk to local grocery stores); and
- *Lowering Peak Demand*: measures that attempt to influence the time at which people travel, to reduce peak-hour travel and congestion.

As a complementary measure to the proposed reduced requirement for the number of off-street parking spaces at schools, staff recommend that the City continue to work with Richmond School District staff to jointly promote and implement TDM strategies to reduce vehicle traffic to/from schools. These initiatives, including the STARS (Safer Traffic Around Richmond Schools) program, would be aimed at parents, students, teachers, and other school employees and could include increased encouragement and support of year-round walk/bike to school programs (e.g., continue momentum of single day events such as I-Walk), formation of employee carpools and enrolment in the TransLink Employer Bus Pass Program.

#### 6. Consultation

Staff reviewed the proposed revised off-street parking requirements for schools with both Richmond School District staff and the Board of School Trustees. Both staff and the trustees concur that an on-site school parking requirement based on staff and student numbers rather than the number of classrooms and size of gymnasium space seems more logical and support the retention by City staff of the ability to consider site specific factors during the application process.

**Financial Impact**

No impact to the City at this time.

**Conclusion**

Staff recommend that the City's Zoning and Development Bylaw be amended with respect to off-street parking requirements for schools and that City staff and Richmond School District staff jointly work together to promote and implement transportation demand management strategies to reduce vehicle traffic to/from schools.



Joan Caravan  
Transportation Planner  
(4035)

JC:lce

## **Council / School Board Liaison Committee**

November 30, 2004

### **MINUTES**

#### 4.3 City's Requirement for Specific Number of Parking Spaces at Schools

The Manager, Facilities, Garry McLean, provided information on a problem which was being experienced by the School District with respect to the number of parking spaces to be provided for educational facilities as required in the City's Zoning & Development Bylaw, and the number actually needed. He stated that this requirement restricted the use of the land for other applications.

A brief discussion ensued, as a result of which, the Chair referred the matter to staff for review and report to the Planning Committee. The Chair further requested that the School Board be advised when this matter would be on a Planning Committee agenda as it was important that a School Trustee speak to this matter at that meeting.