

Lord Tennyson Elementary School and Child Care  
1936 West 10th Avenue, Vancouver BC

# DESIGN RATIONALE

**issues / revisions**

Issued for Development Permit Application

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## 1. Overview

Lord Tennyson Elementary School is part of the Provincial Seismic Mitigation Program and has been identified as a high priority for seismic renewal. Following completion of a Project Definition Report, funding for a replacement school was approved by the BC Ministry of Education in November 2016. The project entails construction of a new VSB school and COV child care, as well as various site improvements on the existing school site, to be followed by demolition of the existing school and retention of two existing outbuildings.

The existing Lord Tennyson Elementary School is located at 1936 West 10<sup>th</sup> Avenue in the Kitsilano area of Vancouver. The school site is bounded by Maple Street to the west, Cypress Street to the east, West 10<sup>th</sup> Avenue to the north, and West 11<sup>th</sup> Avenue to the south.

The existing original school block was constructed in 1910 to 1912 and a gymnasium/change room addition was added in 1957. There are two existing outbuildings on the site: a wood building constructed in 1926 and a modular building added in 2011. The original school building is listed in the Vancouver Heritage Register as Category B; however, several modifications made over the years have diminished its overall character and heritage features. The building is past anticipated use expectancy, requires extensive seismic upgrades, does not meet current building code or access requirements, and its general layout and features are not in alignment with 21<sup>st</sup> century learning pedagogy.

A replacement school and child care is proposed to be constructed at the location of an existing play field at the west end of the site, fronting Maple Street. The building will contain three storeys, with the school occupying the first two floors and the child care facility occupying the third floor.

The existing school and play areas on the east side of the site will remain in use during construction of the new school and child care, after which the original school building will be demolished. Once demolition is complete, the site will be modified to accommodate play areas, a new play field, and a parking area.

This request for Development Permit is for phased construction of a new elementary school and child care to replace the existing elementary school on the same site.

## 2. Relevant City Guidelines and Policies

The existing school site is zoned RS-1. The proposed replacement elementary school and childcare is in general compliance with Zoning & Development Bylaw 3575, with two minor exceptions. Setback interpretation and rationale are described further below.

### 2.1. Land Use

The project is located at the existing Lord Tennyson Elementary School site at 1936 West 10<sup>th</sup> Avenue in Vancouver. The RS-1 District Schedule dated April 2014 permits an Elementary School and Child Day Care Facility as conditional approval uses.

### 2.2. Building Height

The height of the proposed building is 13.1m, measured above a hypothetical ground surface calculated using building grades along the property line as described in item 4.3.3 of the RS-1 District Schedule. This height exceeds the maximum permitted building height of 10.7 m, and a relaxation is requested to accommodate the height of the proposed new building.

### **2.3. Setbacks**

The proposed new building is in general compliance with setback requirements described in both the RS-1 District Schedule, and with the requirements noted in Section 11 – Additional Requirements, except for the north side yard setback for which a relaxation is requested. The Schedule indicates potential for setback variations, subject to approval by the Director of Planning.

Proposed setbacks are as follows:

#### **2.3.1. Front Yard (West, facing Maple Street)**

The proposed front yard setback is 5.1m, which is in general alignment with the setbacks of adjacent residential and commercial properties along Maple Street.

#### **2.3.2. Side Yard (North, facing West 10th Avenue)**

The proposed side yard setback is 3.1m, which is less than the minimum permitted side yard setback defined in Section 11 as 6.0m plus an additional 0.3m for every 0.6m by which the height of the building exceeds 10.7m. A relaxation is requested to accommodate the proposed north setback with the rationale that a reduced setback to the north will enable a larger setback to the south where outdoor play areas are proposed to be located to serve south-facing kindergartens.

#### **2.3.3. Side Yard (South, facing West 11th Avenue)**

The proposed side yard setback is 8.0m, which meets the minimum permitted side yard setback requirement described in Section 11. Outdoor play areas are proposed to be located in the south-facing side yard to serve south-facing kindergartens.

#### **2.3.4. Rear Yard (East, facing Cypress Street)**

The proposed rear yard setback is 101.0m, which exceeds the minimum permitted rear yard setback defined in the RS-1 District Schedule as 45% of the depth of the site.

### **2.4. Floor Space Ratio**

The site area is 12,548 m<sup>2</sup>. The gross floor area of the building is 5,060 m<sup>2</sup>, however a permitted child care exclusion of 506 m<sup>2</sup> results in a total floor area of 4,765 m<sup>2</sup> for the purpose of calculating the floor space ratio.

The maximum permitted FSR is 0.60; the proposed FSR is 0.38 including the existing outbuildings. FSR calculations do not factor in building envelope exclusions.

### **2.5. Site Coverage**

The site area is 12,548 m<sup>2</sup>. The combined footprint of the new building plus two existing outbuildings is 2,560 m<sup>2</sup>. The site coverage is therefore 20.4% of the site area, which is less than the maximum permitted site coverage of 40% as defined in the RS-1 District Schedule.

### **2.6. Off-Street Parking and Loading**

A dedicated staff parking area with twenty-six (26) parking spaces plus three (3) disability parking spaces will be located between the existing outbuildings on the south side of the school site, accessed from West 11<sup>th</sup> Avenue. Driveway access on West 11<sup>th</sup> Avenue will require a new curb cut.

An existing vehicle crossing on West 11<sup>th</sup> Avenue will be removed. The new parking area will be constructed following completion of the new school and after demolition of the existing school.

A dedicated loading area with two (2) Class B loading spaces and screened garbage and recycling enclosures, as well as an earthquake emergency supply structure, will be constructed as part of the new parking area, on the west end of parking zone closest to the new school. The number of Class B loading spaces provided is in accordance with City of Vancouver Parking By-Law requirements.

Student pick-up and drop-off activity for the new school will take place primarily on Maple Street, with additional pick-up and drop-off activity along West 10<sup>th</sup> Avenue and West 11<sup>th</sup> Avenue, north and south of the new school. Nine (9) short-term childcare pickup and drop-off spaces are proposed on the east side of Maple Street near the front entry to the new childcare and school.

A traffic study of existing and future school traffic patterns of the school and surrounding area was prepared by Bunt & Associates in May 2017. The study finds that the strategies planned to manage traffic generated by the redevelopment are satisfactory.

## **2.7. Bicycle Facilities**

A minimum of thirty (30) Class B bicycle parking spaces will be provided near the main school entrances at Maple Street, West 10<sup>th</sup> Avenue and West 11<sup>th</sup> Avenue. Three (3) Class A bicycle parking spaces and end-of-trip facilities, including a shower and change facilities, will be provided in the school.

## **2.8. Child Care Design Guidelines**

The child care will be designed to meet the City of Vancouver Child Care Design Guidelines (1993) with spaces for four age groups including; 12 spaces for Infant (0-18 months); 12 spaces for Toddler (18 months – 3 years); 25 spaces for Preschooler (3-5 years); and 20 spaces for Preschool (part-time enrolment, 3-5 years).

The child care will be located on the third storey of the school building, accessible via a common lobby and elevator. Interior spaces include dedicated play areas, quiet rooms, storage cubbies, kitchens, washrooms and storage. Each child care age group will have direct access to rooftop outdoor play areas, enclosed by 2.4m high glass guards. The outdoor play areas are divided into four separate play spaces, distinct to each corresponding child care age group. Covered outdoor play areas are provided.

## **3. Design Rationale**

The new school and child care is located near the corner of Maple Street and West 10<sup>th</sup> Avenue, at the northwest corner of the full-block site.

The form and massing of the new school reflects 21<sup>st</sup> century learning principles and pedagogy. Two blocks of four classrooms each are gathered into learning neighbourhoods that share a learning commons. Adjacent to the learning neighbourhoods are educational support spaces, which run alongside a

circulation spine. On the opposite side of the circulation spine are larger spaces that include a gymnasium, library, multipurpose room, kindergartens, administration and a staff room.

The learning neighbourhood classroom blocks are located to the east, face the new playground and reflect the scale and massing of single-family residences that surround the site on the north, east and south. The two classroom blocks are separated by a courtyard that further breaks down the massing of the building into smaller-scale components. The form of the third storey childcare follows that of the school below. Generous glazing on north and south classroom walls and east-facing classroom common areas is balanced with east-facing walls that serve as “ball walls” for outdoor play.

The larger, community-oriented spaces to the west—including the two-storey high gym and multipurpose room—reflect the scale and massing of existing commercial and multifamily residential buildings along Maple Street. A strategically-located vertical window at the corner of the gymnasium addresses the corner of Maple Street and W. 11<sup>th</sup> Avenue. A low-slung horizontal window and doors offer views into the gymnasium to further break down its massing and to signal activities within. The multipurpose room is highly glazed, signaling its civic presence to both the school and surrounding Kitsilano community. A series of outdoor rooms provide opportunities for indoor activities, which include after-school care for children, to extend out into exterior landscaped areas along the street, further reinforcing the civic presence of the multipurpose room.

The main entrance of the school is accessed from Maple Street and is delineated with a canopy, extensive glazing and a landscaped entry plaza. Each of the entry points to the new school—including the main Maple Street entrance and the secondary entrances at West 10<sup>th</sup> Avenue and West 11<sup>th</sup> Avenue—are marked by low landscape walls constructed from salvaged brick and/or stone from the existing school.

The building is clad in red-brick masonry, coloured spandrel, and clear glazing. Play platforms at the base of ground floor classroom, gym and multipurpose room windows—proposed to be constructed from salvaged masonry, similar in character to the landscape walls—extend from the base of the building out into the landscape to offer children opportunities to play and engage with remnants of the original school building.

#### **4. Sustainability**

The school and child care will be designed to LEED Gold equivalent standard and will meet applicable ASHRAE requirements.