Hillhurst Elementary School Calgary Board of Education

School Facilities Evaluation Project April 16, 2000

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Building Science Specialists

Executive Summary

In March 2000, Alberta Infrastructure engaged Building Science Specialists to evaluate the condition of 21 schools within the Calgary Board of Education. A standardized form, developed by Alberta Infrastructure and supplied to the evaluation team by the regional coordinator was used to document the condition and recommendations.

The original building was constructed in 1912. An addition, gymnasium was added in 1962. Minor renovations have been made to the building, upgrading the Office and Staff Room. The third floor has been reopened as classroom space.

The school is constructed of concrete slab on grade and suspended slabs at the floors. Walls are bearing masonry and sandstone. Roofs are flat wood frame; with BUR.

Summary of Observations and Recommendations

The school jurisdiction has a roof replacement program. No reports are available for the roof and further investigation is required. The presence of hazardous materials in the building is expected in piping insulation and some interior finishes. These issues are dealt with as the jurisdiction undertakes upgrading. The costs associated with removing hazardous materials have not been included in any of the costing.

Architectural

The exterior of the building is finished in sandstone. Some cracking is noted. The parking area needs to be resurfaced. Some minor repairs to exterior elements are required. Replace exterior windows and doors. The basement floor requires replacement. Washrooms require upgrading. Fire separations require repairs. Handicapped accessibility must be addressed. Some additional architectural work is required to accommodate the recommended mechanical and electrical renovations, and a cash allowance has been included.

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Mechanical

The heating plant has been replaced, piping and radiators should be replaced as well. A new ventilation system is required. Fire hoses and cabinets need to be upgraded and backflow prevention to the domestic system is required. **Electrical**

Additional exterior lighting and parking plugs are required. A new fire alarm system is necessary and emergency lighting and power requires upgrading. Upgrade all fluorescent fixtures to T-8's.

Costing

The estimated construction costs for the remedial work in the attached evaluation form has been based on the Costing Unit Rate Chart developed by Alberta Infrastructure. Where this data was incomplete or inappropriate to the recommended work, unit costs based on the local Calgary market were used.

1.	Site related work	\$12,300.00
2.	Building exterior	\$189,000.00
3.	Building interior	\$322,500.00
4.	Mechanical systems	\$265,200.00
5.	Electrical systems	\$115,500.00
6.	Portables – n/a	<u> </u>
	Total Estimated Costs	\$904,500.00

Space Adequacy

The existing area, according to the School Building Area Guidelines and Supplement – maximum Gross Area of School Building Projects is deficient.

Existing Total Gross Area (square metres)	
Projected required total gross area (square metres)	

Overage / (Deficiency) (square metres) 1228.4

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Further Investigation

Further investigation is required to determine the impact of the removal of hazardous material during any renovation work. Code related issues with respect to fire separations should be reviewed at the time of renovation. The roof requires a further review. Cracking of the exterior finish should be reviewed, as well as why the stair landings are buckling. The requirement for the exterior fire stairs from the second floor should be reviewed with the authorities having jurisdiction. There is no report on the roof; it requires further review, as do the roof accessories.

School Plan Data Information

The plan information for the building was supplied by the school jurisdiction. Area information was provided by Alberta Infrastructure. The information generally appears to be up to date with some minor room function revisions.