Glenbrook Elementary School Calgary Board of Education

School Facilities Evaluation Project April 16, 2000

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Building Science Specialists

Photo page 1

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 1959. A first addition was added in 1963. Another addition was made in 1967. Minor renovations have been made to the building, upgrading the Office and Staff Room.

The original school and first addition is constructed of concrete slab on grade and suspended slabs at the tunnels. Walls are wood frame with some interior concrete block and poured concrete bearing walls. Roofs are sloped or flat wood frame. The 1967 addition has slabs on grade and suspended slabs at the tunnels (below the corridors). Walls are concrete block with brick or stucco exterior. The roof is flat, steel deck on OWSJ, with a barreled wood roof over part of the library.

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, light ballasts 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 original building is finished in horizontal wood siding and/or wood paneling. The upper portion of the walls is finished in stucco. Both materials require painting. Handicapped accessibility must be addressed. Some floor finishes require upgrading. Some additional architectural work is required to accommodate the recommended mechanical and electrical renovations, a cash allowance of \$100,000 has been provided.

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Mechanical

The heating plant is original to the building and requires replacement. The ventilation system requires upgrading. Two new hot water tanks are required. Corridor exhaust requires upgrading.

Electrical

Additional exterior lighting and parking plugs are required. A new fire alarm system is necessary and emergency lighting requires upgrading. New lighting is necessary in the tunnels and boiler room. Upgrade fluorescent lighting to T-8's throughout.

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	\$5,000.00
2.	Building exterior	\$120,700.00
3.	Building interior	\$179,000.00
4.	Mechanical systems	\$118,800.00
5.	Electrical systems	\$180,000.00
6.	Portables – n/a	· ,
	Total Estimated Costs	\$603,500.00

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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) 5333.7 Projected required total gross area (square metres) <u>5510</u>

Overage / (Deficiency) (square metres) (176.3)

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. 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.