

EXECUTIVE SUMMARY:

On March 13, 2000, a tenth evaluation of a Calgary School was completed by Paul T. Becher of Boucock Craig and Partners and by Jeff Swart and Gary Korenicki of Wiebe Forest Engineering. Alberta Infrastructure engaged the two firms to evaluate the condition of 19 schools within the Calgary School District #19. A standardized form, developed by Alberta Infrastructure and supplied to the Evaluation Team by the Regional Coordinator, Tom Tittermore of Stantec Architecture Ltd., was used to document the condition of the Dalhousie Elementary School, and make recommendations.

The original building was built in 1971. The exterior of the building consists of brick with a concrete foundation and a precast concrete parapet band. The school contains very few windows. Above and below the windows are painted panels. (They appear to be plywood.) The exterior windows themselves are sealed units and have blinds integrated between the panes of glass. The roof is a built-up asphalt roof, which has recently been redone (last year) with a roll roofing application. The interior of the building is concrete slab-on-grade with vinyl composite tile. The stage floor has a sheet vinyl surface. The library and surrounding classrooms have carpet flooring. Fluorescent lighting exists in all spaces. The walls within the school are painted concrete block. Classrooms within the library are partitioned off with vinyl-covered partitions. The school has an acoustic tile ceiling system throughout all classrooms and corridors.

The exterior of the three portables, which are detached from the school, consist of an exterior wooden base, rough cedar siding, vertical metal cladding, and an asphalt roof. Stairs are necessary to enter all portables. Two of the portables have an acousti-tile and glulam beam ceiling. The third portable has a suspended t-bar ceiling system. The interior walls of the portables are painted plywood, and the rooms are lit with fluorescent light fixtures. The heating units of all the portables are located by the only exit door of each portable. The second exit door of each portable has been sealed off. The rooms are equipped with sheet vinyl flooring, tackboards at the rear of the room, and a whiteboard at the front of the classroom.

Summary of Observations and Recommendations

Architectural:

Generally, the school is in good shape. However, some problem areas were discovered. The parking area needs to be repaved and pot holes filled. Some brickwork needs to be done at one of the school's secondary entrances. In one area, the concrete foundation has a large gap between itself and the brickwork above. The gap should be properly insulated and covered. Within the school, coat hooks within the corridors need to be relocated into the classrooms or lockers must be provided. The crack in one of the gym walls should be reviewed by a structural engineer and repaired. Barrier-free washrooms should be created in the school. Retrofitting the existing washrooms may not meet barrier-free standards of entry and exit. An elevator and chair lift need to be installed, as well as electronic door openers. In regards to the portables, the exterior wood base and stairs need paint. Barrier-free access is also required. Because the heating units are directly by the only exit, the second exit doorway of each portable should be unsealed.

Stairways from these new exit points need to be provided. The floor in one portable needs to be repaired. The portable has a hole in its floor and is temporarily covered with a metal plate.

Mechanical:

The school is almost 30 years old. It is operating acceptably with marginal mechanical problems. The gas-fired units, however, have all received new heat exchangers within the past 5 years. When they fail, or other components fail, parts will no longer be stocked and repair will not be an option. System replacement will have to be considered.

Electrical:

The electrical system is generally in good condition. Building distribution and branch panel capacity is near full and needs upgrading. Life safety system will require upgrades.

Costing:

The estimated construction costs for the remedial work in the attached evaluation form have 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. More specifically, unit costs provided by Devitt and Forand Contractors Inc. were used at times.

1. Site Related Work	\$129,000.00
2. Building Exterior	5,000.00
3. Building Interior	256,560.60
4. Mechanical Systems	17,000.00
5. Electrical Systems	90,500.00
6. Portables	<u>75,020.00</u>

Total Estimated Costs	\$573,080.60
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Space Adequacy:

There is a deficiency of area according to the School Building Area Guidelines and Supplement – Maximum Gross Area of School Building Projects. The deficiency in some areas such as science and art areas, is a misconception, since these subjects are taught within the classrooms, along with other subjects. Nevertheless, given the school capacity (supplied by Alberta Infrastructure), the school is overall deficient in space.

Existing Total Gross Area (sm)	3,993.50	(Portables not included in total area)
Projected Required Total Gross Area (sm)	<u>4,254.00</u>	
Overage/ (Deficiency) (sm)	(260.50)	

Further Investigation:

No roof reports could be provided on the condition of the roof or on the existing roof accessories. However, school staff claims that the roof was redone one year ago, and no problems have since been reported. The roof and roof accessories of the portables need further investigation. Similarly, no reports were available suggesting that the school contains hazardous material. Given the age of the school, and the fact that no asbestos products were observed, it is unlikely that the school contains great quantities of materials that could pose as a health risk if disturbed. Further structural investigation is required in regards to the wall in the gym, which is cracked. Further investigation is also required to determine whether the ceiling of the first floor has a 45-minute fire rating. After all snow melts, further investigation is required to evaluate the interface of the roof drainage and ground drainage systems. Further investigation is required in regards to Sections 3.3.1 to 3.3.4 to see if the building meets current Code standards.

School Plan Data Information:

The plan and area information for the building was supplied by Alberta Infrastructure. The information generally appears to be up-to-date. Some minor room function revisions are noted on the attached plan. All estimates of areas and costs in regards to space adequacy are based on sizes provided by Alberta Infrastructure on the given mini-plans.