### **EXECUTIVE SUMMARY:**

On March 14, 2000, an eighth 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 Tittemore of Stantec Architecture Ltd., was used to document the condition of the Collingwood Elementary School, and make recommendations.

The original building was constructed in 1959. In 1963, another wing was added to the school, and in 1969 a large addition, which included classrooms and a library, was also added. The exterior of the 1959 and 1963 portions of the school consists of rough cedar siding panels, stucco and metal flashing. Roman brick veneer surrounds the front and rear entries. Corrugated asbestos panels are located above the windows at the front entry. The roof is constructed of built-up asphalt, wood joists and ½" gypsum plaster board on the inside face surface. T-bar ceilings exist in the 1969 areas of the school.

Steel I-beams and columns help support the roof. The interior of the school consists of plaster and concrete block walls. The floor is a concrete slab-on-grade with vinyl composite and asbestos tile. The 1969 addition has a brick exterior with sealed window units. Above and below the windows, metal cladding is fixed (between brick sections). A cap-like strip of metal cladding connects the brick wall veneer to the metal clad roof. The roofs on all portions of the school are flat, and are asphalt built-up roofs. The interior of the new addition is painted concrete block. The flooring material is concrete slab on grade with vinyl composite tile. The ceilings of the school are acoustic tile and plaster board. A t-bar ceiling system has been installed in the 1969 addition.

# **Summary of Observations and Recommendations**

#### Architectural:

Landscaping is required in the rear of the school where the existing asphalt paving dips downward. The retaining wall in the rear of the school needs to be repaired. The stairs by the parking area need to be replaced. The canopy over one of the rear doors must have screens installed so that children cannot climb on top and jump off. A fire lane access road is required. More parking stalls are required. A catch basin must be installed in the paved parking lot. An adjoining sidewalk to the barrier-free parking area is required with a curb cut. Barrier-free ramps need to be installed at the main and secondary entrances. The terrazzo flooring in the entry needs to be repaired. Carpet in the library and classrooms is showing wear and needs to be replaced. The plaster wall in the stage area is peeling. Patching and painting are required. The roof needs to be redone. It recently caught on fire and is leaking. The skylight in the corridor area adjacent to the 1969 addition leaks and needs to be replaced. Replacement work needs to be done to the stucco and cedar wood trim of the 1959 and 1964 portions of the school. Trim in some areas has broken off, and the interior portions of the wall are exposed. Exterior doors need to be repainted. Electronic door openers need to be installed. Windows in the 1959 and 1964 portions of the school need replacing. Repainting is required in all the classrooms in the basement. Interior doors

and frames need to be refinished. Millwork needs to be replaced and/or repaired. Additional millwork is to be added in some classrooms. Chalkboards in classrooms need to be replaced with tackboards and whiteboards. More electrical plugs and better ventilation is required in the CTS room. Barrier-free washrooms are required. Fire doors are required. Two chair lifts are required.

### Mechanical:

The core school is reaching 40 years old and, to date, has not received any major mechanical upgrades. The mechanical consists of steam unit ventilators combined with a central exhaust system. The mechanical system is working. However, it does require some upgrading as some components are reaching their life expectancy.

### **Electrical:**

The school electrical system requires considerable upgrading. The main service and distribution is in poor condition and at full capacity. Life safety systems are below Code and require upgrades.

# Costing:

**Total Estimated Costs** 

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, some unit costs supplied by Devitt and Forand Contractors Inc. were used.

1. Site Related Work	\$221,481.60
Building Exterior	235,607.00
3. Building Interior	334,132.90
4. Mechanical Systems	450,000.00
5. Electrical Systems	347,000.00
6. Portables	0.00

\$1,588,221.50

# **Space Adequacy:**

There is a surplus of area according to the <u>School Building Area Guidelines and Supplement</u> – <u>Maximum Gross Area of School Building Projects.</u>

Existing Total Gross Area (sm)	4,341.60
Projected Required Total Gross Area (sm)	3,983.00

Overage/Deficiency(sm) 358.60

## **Further Investigation**

No roof reports could be provided on the condition of the roof. Similarly, no reports were available suggesting that the school contains hazardous materials. Nevertheless, staff have mentioned that several audits have taken place to determine the amount of asbestos in the building. Moreover, the original drawings suggest that asbestos vinyl tile and asbestos panels (located above exterior windows) were used in the building. These materials were noted on site. If renovations do occur, hazardous materials will need to be dealt with as they arise through the construction process. Further investigation is necessary to evaluate the roof and roof accessories. Because of snow conditions, further investigation is required, in regards to sub-soil problems, surfacing and drainage of sidewalks. Further investigation is required to see if the building conforms to current Code standards in regards to Sections 3.3.1 to 3.3.4.

### **School Plan Data Information:**

The plan and area information for the building was supplied by Alberta Infrastructure. The information generally appears to be correct. Some minor room function revisions are noted on the attached plan. Because exterior site conditions were heavily covered with snow, it was difficult to assess all site conditions properly.