#### **EXECUTIVE SUMMARY:**

On March 22, 2000, a fiftteenth 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 Colonel Walker Community School, and make recommendations.

The original building was built in 1912 out of sandstone. The original windows are still intact and some are covered with metal screens. The roof is flat and is a built-up asphalt roof. The structure of the floors and roof is wood, and the basement floor structure is slab-on-grade with vinyl composite tiles on top. Throughout the 1912 portion of the school, new metal doors have been installed in the corridors leading into classrooms. However, much of the original millwork and architectural paneling and trim is still in place throughout the building. A combination of vinyl tile and sheet vinyl flooring is used, as well as carpet. The 1952 addition added to the back of the school is one-storey and is constructed out of concrete block. The windows of the school in this portion need replacing, and the exterior paint is peeling. Structural cracks can be found in the interior portion of the walls of the addition. Asphalt tiles can be found in the corridor with the original acousti-tile ceiling. The ceilings in the classrooms, however, are t-bar, like the ceilings in the 1912 portion of the school. Again, the floor material in the classrooms is sheet vinyl. This portion of the building is being currently used for daycare purposes. The 1965 addition and the 1982 addition are constructed of brick on the exterior. The 1982 addition is currently the main entry of the school, while the 1965 addition is the gymnasium and stage area. Entry into the school is level and, therefore, barrier-free. Electronic door openers are required at all entrances that are barrier-free accessible. Similarly, because the school is four stories high, an elevator is required.

### **Summary of Observations and Recommendations**

#### Architectural:

The existing flagpoles need repainting. The parking lot needs to be paved and a catch basin installed. A fire lane needs to be built. The parking lot needs to be redesigned to accommodate a proper drop-off area. Two handicap stalls are required with appropriate signage. Cracks in the surrounding sidewalks need to be filled. The wall construction at the 1952 entrance on the building's west side is severely cracked. Structural investigation is necessary. That portion of the exterior needs to be replaced. New gutters, downspouts, and splash pads are needed. Paint on the exterior of the 1965 and 1952 additions needs to be redone. The sandstone exterior of the 1912 portion of the school needs repair, where cracks have appeared. Fascias, soffits and parapets need repair. Basement walls of the 1912 portion of the school should be insulated. Doors and frames need paint on the exterior of the school. Electronic door openers are required at barrier-free entrances. Original windows in the 1912 portion of the building need to be repainted. Original latches of the 1912 windows need to be restored. Carpet in the library needs replacing. New t-bar is required throughout the school because of mechanical upgrading that needs to occur. One layer of Type "X" gypsum board needs to be

applied to the underside of the existing ceilings to create a 2 hour fire separation. Washrooms need to be made barrier-free accessible. The building may need to be sprinklered. Fire doors are required. An elevator and chair lift are required. Fresh air needs to be brought into the Boys' and Girls' Change Rooms in the basement. A 3% contingency fund needs to be created for architectural changes related to barrier-free access and mechanical/electrical changes. All proposed changes to the 1912 building need to be reviewed by the City of Calgary Heritage Advisory Board.

#### Mechanical:

The mechanical system in the core school is almost 100 years old. It has exceeded its life expectancy and a complete mechanical upgrade is required. It has received very few upgrades in the past. General maintenance may extend the systems somewhat, but failure is imminent.

#### **Electrical:**

The school electrical system is in good condition. Exit lighting requires some upgrading. Branch panel capacity and wiring devices could be upgraded.

# 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.

Site Related Work	\$224,000.00
Building Exterior	501,198.03
Building Interior	438,848.26
Mechanical Systems	1,009,320.00
Electrical Systems	98,500.00
Portables	n/a

Total Estimated Cost \$2,271,866.29

## **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) 6,008.90 (expansions and additions included in total)

Projected Required Total Gross Area (sm) 3,983.00

Overage/ (Deficiency) (sm) 2,025.90

### **Further Investigation:**

The wall construction at the 1952 entrance on the building's west side is severely cracked. Structural investigation is necessary. The parapet is pulling away from an adjacent 1912 sandstone wall. Further investigation is required to determine if the roof structure is related to the problem. The condition of the roof needs to be further investigated. Further investigation is necessary to confirm what kind of fire rating the ceiling construction can provide. Further investigation is also required as to the composition of the corridor walls in the 1912 portion of the building. If any renovations take place, further investigation is necessary to determine if the existing construction materials contain hazardous materials, such as asbestos. Further investigation is required with 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 correct. Some minor room function revisions are noted on the attached plan.