

## **EXECUTIVE SUMMARY:**

On March 13, 2000, a sixth 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 Connaught Elementary School, and make recommendations.

The original building was built in 1911. In 1952, an addition to the building was made, namely a gymnasium and stage. The original school exterior consists of sandstone with wooden windows and an asphalt built-up roof. The exterior of the addition consists of brick and painted concrete block. The entry doors on both buildings are worn and need paint. The sandstone is discolored at the building base, and the brick and blockwork on the addition is spalling. The interior of the buildings consists of plaster walls with wood paneling, sheet vinyl as asbestos vinyl tile flooring, maple hardwood in the gym and stage, and carpet in the library. The ceilings have been reduced in height with the addition of a t-bar acoustic tile ceiling. Nevertheless, the ceiling height still is in the range of 12 ft. or more in some areas.

## **Summary of Observations and Recommendations**

### **Architectural:**

The parking area is to be enlarged and drained properly. Catch basins are required in the parking area. A fire lane is to be provided. The parking area is to be paved and barrier-free parking stalls with an adjoining sidewalk and curb cut are required. Barrier-free ramps and electronic door openers are required. The roof needs to be redone due to reported leaks. The sandstone base of the 1911 portion of the building needs cleaning, and the spalling brick needs repair. The basement exterior walls need to be insulated. Fascias, soffits, and parapets need repair and/or replacement. Exterior doors need repainting. Windows need repainting or replacement. The library carpet needs to be replaced. Wood paneling, door frames, and baseboards need to be refinished. Paneling in the gym should be replaced or refinished. New paint is required throughout the school. New t-bar ceilings are to be installed throughout the school due to expected mechanical upgrading. One layer of Type "X" 5/8" gypsum board may need to be added to the existing ceilings of the building to provide a 45 minute fire rated assembly. Interior doors and hardware need to be restored. Existing millwork needs to be restored. The wooden trim around original chalkboards needs to be repaired or replaced. Barrier-free washrooms are required. Fire doors are required. Additional coat hooks are needed in classrooms so that no temporary coat storage takes place in the corridors. One elevator and two chair lifts are required. All proposed changes to the 1911 building must be presented to the City of Calgary Heritage Advisory Board for review.

### **Mechanical**

The original school is 90 years old and has received very little mechanical upgrades. It is housed with a steam boiler for heating and a central ventilation unit, both systems are fast approaching their anticipated life expectancy. Plumbing fixtures are also deteriorated and in need of complete replacement.

### **Electrical**

School electrical system appears to be in good condition, however is near full capacity. Addition power and distribution space is required. Emergency and exit lighting will require upgrading.

### **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. In some areas, unit costs provided by Devitt and Forand Contractors Inc. were used.

1. Site Related Work	\$168,500.00
2. Building Exterior	\$421,077.70
3. Building Interior	\$787,410.84
4. Mechanical Systems	\$649,150.00
5. Electrical Systems	\$321,000.00
5. Portables	<u>n/a</u>
Total Estimated Costs	\$2,347,138.54

### **Space Adequacy:**

There is a surplus of area according to the School Building Area Guidelines and Supplement – Maximum Gross Area of School Building Projects. Much of this surplus of space is, unfortunately, found in non-instructional areas.

Existing Total Gross Area (sm)	4,664.80
Projected Required Total Gross Area (sm)	<u>3,317.00</u>
Overage/ Surplus (sm)	1,347.80

### **Further Investigation**

No roof report could be provided on the condition of the roof. Further investigation is required. Similarly, no reports were available suggesting that the school contains hazardous materials. However, because of the age of the school and visible signs such as the asbestos vinyl tile flooring in some areas, one may suggest that hazardous materials such as asbestos are present in the school. Hazardous material shall be dealt with as any upgrading occurs. Further investigation is required to determine if a fire separation exists between the gym addition and the original school, and to determine if all load bearing walls, columns and arches are of non-combustible construction. Further investigation is also required in regards to Section 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 provided 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 in regards to space adequacy are based on sizes provided by Alberta Infrastructure on the given mini-plans.