

## **EXECUTIVE SUMMARY**

### **MALCOLM TWEEDLE ELEMENTARY SCHOOL** **Edmonton School District No. 7**

In April 2000 Alberta Infrastructure engaged Bennett Architect Inc. to evaluate the condition of Malcolm Tweedle Elementary School. Keen Engineering Co. Ltd. (mechanical) and Beaubien Glover Engineering Inc. (electrical) assisted in the work, which was conducted using the standard format developed by Alberta Infrastructure.

#### **GENERAL DESCRIPTION:**

The Malcolm Tweedle Elementary School building was originally constructed in 1975, and has been modernized to enclose the formerly open classrooms. The building is one storey in height, of masonry construction, OWSJ, and slab on grade. There are currently two pods of portables (four classrooms each) and one self standing portable. Current gross floor area is 2279 m<sup>2</sup>, and the school has a capacity of 500 students.

#### **Site Conditions:**

The site size and condition generally good. The parking lot needs resurfacing.

#### **Building Exterior:**

The building exterior consists of brick veneer and wood soffits. The roof is original and is starting to deteriorate. Replacement should be scheduled within the next five years. Exterior soffits, doors and frames require painting.

#### **Building Interior:**

Generally the interior of the building consists of painted concrete block walls and demountable partitions, vinyl composite tile/carpet floors and suspended acoustic tile ceilings. The carpets in the classrooms are worn and need replacing. The millwork needs reconditioning. The corridor walls installed to close off the open concept classrooms do not extend to the underside of the structure which is a building code violation. They must be extended above the ceiling and the mechanical system adjusted accommodate full height partitions. Hazardous materials need to be removed from the building.

#### **Mechanical System:**

The mechanical system requires repair and replacement of some equipment. The following items need replacement: some plumbing fixtures and related trims, the domestic hot water heaters, heating and boiler pump systems, the control computer and the washroom exhaust systems. The gymnasium needs a new combustion air system and a hydronic unit heater. Asbestous mechanical insulation should be removed from the building.

#### **Electrical System:**

The electrical system is generally in good condition. Fluorescent luminaires should be retrofitted to implement energy efficiency throughout the school. Additional luminaires are required to obtain minimum lighting levels in the Gymnasium.

#### **Portable Buildings:**

The existing two 1976 portable pods are in good condition, but require a new roof. The doors need painting and there is a shortage of coat hanging space within the classrooms. The mechanical and electrical systems are in good condition. More duplex receptacles are required.

## SUMMARY OF OBSERVATIONS AND RECOMMENDATIONS

### Recommendations:

This report recommends the remedial work be undertaken on the Malcolm Tweddle Elementary School as generally described above and as rated 3 or less within this report. Further investigations should also be undertaken as described below.

The estimated construction cost for the remedial work identified in the attached evaluation forms has been based on the COSTING UNIT RATE CHART developed by Alberta Infrastructure. Items of unit costs not identified in the rate chart or individual items which were deemed more appropriate to estimate individually have been based on industry standard unit costs and allowances. All estimated values are based on Edmonton costs.

1. Site Conditions	\$ 5,500.00
2. Building Exterior	\$ 152,000.00
3. Building Interior	\$ 80,000.00
4. Mechanical Systems	\$ 128,000.00
5. Electrical Systems	\$ 112,000.00
6. Portable Buildings	<u>\$ 76,000.00</u>
Total Estimated Cost	\$ 553,500.00

### Space Adequacy Assessment:

With reference to the "School Building Area Guidelines and Supplement - Maximum Gross Area of School Building Projects", the school is undersized by approximately 826.0 m<sup>2</sup>  
Existing Facility Total Area (m<sup>2</sup>) 2,279.0 m<sup>2</sup>  
Guideline Area Requirements for an Equivalent New Facility(m<sup>2</sup>) 3,105.0 m<sup>2</sup>

### Further Investigation:

Detailed investigations reports should be undertaken for the following items:

1. Hazardous Material Audit (other than asbestos)	\$ 3,000.00
2. Outside air quantity	\$ 2,000.00
3. Air exchange rate and distribution	\$ 5,000.00
4. Surge protection investigation	<u>\$ 5,000.00</u>
Total Estimated Cost	\$15,000.00

### School Data Plan Information:

The mini-plan information of this building is generally good. However, the site plan is out of date, and the floor plan does not show the location of the permanent partitions between classrooms (installed when the open classroom concept was abandoned).