# MAYLAND HEIGHTS SCHOOL CALGARY SCHOOL DIVISION #19

# **EXECUTIVE SUMMARY**

In March 2000 Alberta Infrastructure engaged Norman Dobell Associates Architects to evaluate the condition of twentytwo schools within the Calgary School District #19. A standardized form, developed by Alberta Infrastructure and supplied to the evaluation team by the regional coordinator was used to document the condition and recommendations.

The two portable units from 1966 and 1979 were removed in the summer of 1999, leaving the main building, constructed of slab on grade poured concrete walls and a steel-framed roof in 1967. The total area of the school is 4418.5 sq. m.

# **Summary of Observations and Recommendations**

The school jurisdiction have expressed their concerns and hope that all investigations will lead to the improvement of health, safety and accessibility to all their buildings. The presence of hazardous material in some buildings is expected in all piping insulation, light ballasts, and some interior finishes. The jurisdiction deals with this issue as they undertake upgrading. The additional cost for removal of hazardous material has not been included in any of the costing.

#### Architectural

Recommended work would include providing barrier to roof and the construction of two handicap washrooms and the provision of an elevator.

# Mechanical

Heating is provided from a hot water heating system. Ventilation is provided from central low velocity air systems. While systems are generally in good working order, base equipment is 35 years old and past life expectancy.

#### Electrical

The electrical systems are in fair to good condition. Main service conductors need to be protected with a cover on junction box. Additional lighting required. More power outlets needed for staff parking stalls. Life safety systems require upgrades to meet the current codes. Some corridors require more lighting to meet acceptable levels.

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Install surge protection on the electrical system. Retrofit lighting throughout to improve color rendition and efficiency. Ventilation for computer equipment in library storage room was a concern by on site personnel. Door contacts should be installed on all exterior doors.

# Costing

The estimated construction cost for the remedial work in the attached evaluation form has been based on the Costing Unit Rate Chart developed by Alberta Infrastructure. Where this data is incomplete or inappropriate to the recommend work, unit cost based on the local Calgary market were used

1.	Site Related Work	1,000.00
2.	Building Exterior	10,000.00
3.	Building Interior	115,000.00
4.	Mechanical Systems	525,000.00
5.	Electrical Systems	169,700.00
6.	Portables	0.00
	Total Estimated Costs	\$820,700.00

# **Space Adequacy**

The existing area, according to the <u>School Building Guidelines</u> and <u>Supplement - Gross Area of School Building Projects</u> is deficient.

Existing Total Gross Area (sq. m.)	3915
Projected required total gross area (sq. m.)	4709
Overage (Deficiency) – sq. m.	(794)

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# Further Investigation

Further Investigation is required to:

- 1. Assess the impact of the removal of hazardous material during any renovation work.
- 2. Assess the problem of rainwater coursing through parking lot and into school.
- 3. Review condition of roof problems and accessories.
- 4. Examine conditions for heaving at southeast corner.
- 5. Provide additional distribution, control and wiring for any proposed mechanical upgrades.
- 6. Assess if a possible code violation may be present through the use of combustible ceilings, exit corridors and unprotected shafts for return air.
- 7. Review the fan rooms use of the concrete walls for the air unit plenum. The spray humidification cannot operate at cold temperatures due to frost built-up on walls.

# **School Plan Data Information**

School plan information for the building was supplied by the school jurisdiction. Area information was provided by Alberta Infrastructure. The information generally appears to be up to date with some minor room function revisions.