

RECAPP Facility Evaluation Report

Calgary School District #19



Ogden Elementary School

B2733A

Calgary

Facility Details

Building Name: Ogden Elementary School
Address: 1919 - 76 Avenue S. E.
Location: Calgary

Building Id: B2733A
Gross Area (sq. m): 0.00
Replacement Cost: \$8,381,346
Construction Year: 0

Evaluation Details

Evaluation Company: Marshall Tittlemore Architect
Evaluation Date: November 4 2005
Evaluator Name: Mr. Tom Tittlemore

Total Maintenance Events Next 5 years: \$915,920
5 year Facility Condition Index (FCI): 10.93%

General Summary:

Ogden Elementary School is a 4,744 m2 one storey K-6 school located in the Ogden community of southeast Calgary. The original school was constructed in 1960 with a subsequent addition undertaken in 1972 (1,922 m2). A basement mechanical room is located in the 1960 section. The school was officially closed after the 2004/2005 school year.

Structural Summary:

The school's structural system is comprised of: cast in place concrete foundations and slab on grade; concrete masonry load bearing interior walls, exterior walls and firewalls; cast in place and concrete masonry walls to the basement mechanical room; concrete structural floor over the basement mechanical room and access tunnels; some wood framed door areas; glulam beams supporting T&G wood roof decking, OWSJ supporting metal roof decking.

Apart from evidence of structural failure along the masonry joints of the exterior masonry walls in the school's north west corner, the school's structural system is in good condition.

Envelope Summary:

Building exterior components are comprised of stucco, wood siding, brick and painted concrete block. Sections of the painted concrete block exhibit structural failure along the masonry joints and require refinishing (see above).

Exterior wood doors are painted in painted wood and metal frames. Some of the exterior doors and frames require repainting / refinishing.

All double glazed windows are in either PVC type or aluminum frames.

Repainting is also required to the school's exterior concrete masonry firewalls, some exterior doors, the plywood gym window infills, concrete foundation and grilles. Brick veneer is found on all three building phases.

The 1960 section of the school's roof was recently replaced with a new SBS insulated roofing system. The 1972 section has a built up roof. Plexiglas skylights are found in the main corridor of the 1960 section.

The school's building envelope is in good condition.

Interior Summary:

The school's interior is comprised of: sheet flooring and VAT to corridors and classrooms; carpeted areas in the library and administration; quarry tile flooring to the entry vestibules and washrooms; painted gypsum board walls and ceilings; painted concrete and concrete masonry; wood flooring to the gymnasium and stage; glue on acoustic ceiling tiles; suspended acoustic tile ceilings; painted wood and metal doors in wood and metal frames.

The classroom acoustic tile ceilings and metal casework require replacement in conjunction with the ventilation system replacement recommended in the mechanical section.

The school's interior is in good condition.

Mechanical Summary:

The 1960 original school is equipped with hot water heating and unit ventilators with general exhaust systems for ventilation and a pneumatic control system. These systems generally are in poor condition. The 1972 addition is in an acceptable condition with the exception of the heating which is supplied by the existing 1960 hot water boiler.

Electrical Summary:

The main distribution is 400A combination main breaker / CDP panelboard. The lighting is T-12 lamps and magnetic ballasts and should be upgraded to T-8 technology for improved operating and maintenance costs. The fire alarm system is a unsupervised 3 wire system and needs to be upgraded to a fully supervised system. The basic wiring for the phone and network system is in place, but would require all the head end equipment should the facility be put back into service. The school has been abandoned and is not in use at the time of this review. Generally this facility is in marginal condition.

Rating Guide	
Condition Rating	Performance
1 - Critical	Unsafe, high risk of injury or critical system failure.
2 - Poor	Does not meet requirements, has significant deficiencies. May have high operating/maintenance costs.
3 - Marginal	Meets minimum requirements, has significant deficiencies. May have above average operating maintenance costs.
4 - Acceptable	Meets present requirements, minor deficiencies. Average operating/maintenance costs.
5 - Good	Meets all present requirements. No deficiencies.
6 - Excellent	As new/state of the art, meets present and foreseeable requirements.

S1 STRUCTURAL**A1010 Standard Foundations***

(1960/1972) Cast in place concrete strip-footing foundations.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	100	NOV-05

A1030 Slab on Grade*

(1960/1972) Cast in place concrete floor slab.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	100	NOV-05

A2020 Basement Walls (& Crawl Space)*

(1960) Cast in place concrete and concrete masonry walls in basement mechanical room and access tunnels.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	100	NOV-05

B1010.01 Floor Structural Frame*(Building Frame)

(1960) Cast in place concrete floors to main floor corridors above basement service tunnels.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	100	NOV-05

B1010.02 Structural Interior Walls Supporting Floors*

(1960) Cast in place concrete basement walls supporting cast in place concrete floors above service tunnels.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	100	NOV-05

B1010.09 Floor Construction Fireproofing*

(1960) Fire rated concrete floors above basement service tunnels.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6 - Excellent	0	100	NOV-05

B1010.10 Floor Construction Firestopping*

(1960) Foam and batt types.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	100	NOV-05

B1010.11 Other Floor Construction*

(1960) Wood framed floors to gymnasium stage and staff workroom and some classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	100	NOV-05

B1020.01 Roof Structural Frame* (1960 Wing)

(1960 wing) Glulam beams supported on concrete masonry walls, supporting wood decking.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	100	NOV-05

B1020.01 Roof Structural Frame* (1972 Wing)

(1972 wing) OWSJ supporting metal deck; supported on concrete masonry walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	100	NOV-05

B1020.04 Canopies*

(1960, 1972) Painted steel columns supporting T&G wood decking/roofs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	NOV-05

B1020.06 Roof Construction Fireproofing*

(1960, 1972) Fire rated roof assemblies; non-sprinklered building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	NOV-05

S2 ENVELOPE

B2010.01.02.01 Brick Masonry: Ext. Wall Skin*

(1960, 1972) Brick veneer to portions of building exterior.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	75	NOV-05

B2010.01.06.04 Wood Siding**

(1960) Wood siding sections on west and south faces.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	NOV-05

B2010.01.08 Cement Plaster (Stucco): Ext. Wall*

(1960) Stucco finishes to west and south faces.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	75	NOV-05

B2010.01.11 Joint Sealers (caulking): Ext. Wall**

(1960, 1972) Polyurethane joint sealers at exterior material transition locations.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	15	NOV-05

B2010.01.13 Paints (& Stains): Exterior Wall**

(1960, 1972) Exterior concrete block firewalls, exit doors, concrete base.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	15	NOV-05

Event: Painted finish to exterior concrete block firewalls, grilles, concrete foundation base, some wood exit doors.

Concern:

Painted finishes to these exterior building components are peeling and require refinishing.

Recommendation:

Repaint these components.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$64,200	Medium

Updated: February 15 2006



B2010.02.03 Masonry Units: Ext. Wall Const.*

(1960) Concrete block firewalls and exterior veneer.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	100	NOV-05

Event: Concrete masonry veneer , 1960 Wing

Concern:

Deterioration of mortar joints in the concrete block veneer in the north west corner of the 1960 wing is evidence of some structural failure.

Recommendation:

Undertake remedial action to the concrete block veneer. A structural analysis is recommended beforehand.



<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2006	\$85,600	Medium

Updated: February 15 2006

B2010.02.05 Wood Framing*: Ext. Wall Const.

(1960, 1972) Wood framed exterior walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	NOV-05

B2010.03 Exterior Wall Vapor Retarders, Air Barriers, and Insulation*

(1960, 1972) Exact composition and condition of exterior walls unknown.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	NOV-05

B2010.06 Exterior Louvers, Grilles, and Screens*

(1960, 1972) Painted metal grilles.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	NOV-05

B2010.09 Exterior Soffits*

(1960, 1972) Painted plywood soffits.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	NOV-05

B2020.01.01.02 Aluminum Windows (Glass & Frame)**

(1972) Double glazed units

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	35	NOV-05

B2020.01.01.06 Vinyl, Fibreglass & Plastic Windows**

(1960) Double glazed units

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

B2030.01.10 Wood Entrance Door**

(1960, 1972) Wood main entry vestibule doors in painted wood and metal frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

B2030.05 Other Exterior Doors**

(1960, 1972) Wood exit doors in painted metal and wood frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

B3010.01 Deck Vapor Retarder and Insulation*

(1960) New rigid insulation as part of recent roofing replacement.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6 - Excellent	0	50	NOV-05

B3010.04.01 Built-up Bituminous Roofing (Asphalt & Gravel)**

(1972)

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	NOV-05

B3010.04.04 Modified Bituminous Membrane Roofing (SBS)**

(1960) Recent SBS roofing replacement (2002).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6 - Excellent	0	25	NOV-05

B3020.01 Skylights**

(1960) Plexiglass skylights in corridor.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	NOV-05

B3020.02 Other Roofing Openings (Hatch, Vent, etc)*

(1960) Metal access ladder and roof hatch.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

S3 INTERIOR

C1010.01 Interior Fixed Partitions*

(1960, 1972) Concrete masonry partitions.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	50	NOV-05

C1010.02 Interior Demountable Partitions*

(1972) Library area and entire 1972 wing.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	NOV-05

C1010.05 Interior Windows*

(1960) GWG glazing to corridor transoms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	NOV-05

C1010.07 Interior Partition Firestopping*

(1960, 1972) Foam and batt type.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	NOV-05

C1020.01 Interior Swinging Doors**

(1960, 1972) Painted/stained wood doors in painted wood/metal frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	NOV-05

C1020.03 Interior Fire Doors*

(1960, 1972) Fire rated wood and metal doors in metal frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	NOV-05

C1030.01 Visual Display Boards**

(1960, 1972) Chalkboards, whiteboards, tackboards.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	10	NOV-05

C1030.02 Fabricated Compartments(Toilets/Showers)**

(1960, 1972) Prefinished metal toilet partitions.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	NOV-05

C1030.08 Interior Identifying Devices*

(1960, 1972) Interior signage.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	10	NOV-05

C1030.12 Storage Shelving*

(1960, 1972) Metal and painted wood storage shelving.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	NOV-05

C1030.14 Toilet, Bath, and Laundry Accessories*

(1960, 1972) Mirrors and toilet paper, napkin and paper towel dispensers.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	NOV-05

C2010 Stair Construction*

(1960) Metal grate stairs to basement mechanical room; wood stairs to storage areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	NOV-05

C2020.08 Stair Railings and Balustrades*

(1960) Painted metal and wood railings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	NOV-05

C2020.11 Other Stair Finishes*

(1960) Painted/wood stairs.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

C3010.01 Concrete Wall Finishes*

(1960, 1972) Painted concrete walls on main floor and portions of basement mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	NOV-05

C3010.02 Wall Paneling**

(1960) Sections of painted/stained plywood panelling in gym.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

C3010.04 Gypsum Board Wall Finishes*

(1960, 1972)

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	NOV-05

C3010.06 Tile Wall Finishes**

(1960, 1972) Ceramic tile to some washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	NOV-05

C3010.11 Interior Wall Painting**

(1960, 1972)

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	5	NOV-05

C3010.14 Other Wall Finishes**

(1960) Spratex wall finishes to sections of gym.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

C3020.01 Concrete Floor Finishes (Paint)*

(1960) Painted concrete floor to basement mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	75	NOV-05

C3020.02 Tile Floor Finishes**

(1960, 1972) Quarry tile to vestibules and washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

C3020.03 Terrazzo Floor Finishes*

(1960) Terrazzo flooring in corridor to student washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	70	NOV-05

C3020.04 Wood Flooring**

(1960) Stage and gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	NOV-05

C3020.07 Resilient Flooring**

(1960) Sheet flooring and VCT to some classrooms/corridors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	NOV-05

C3020.08 Carpet Flooring**

(1960, 1972) Library, administration, some classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	10	NOV-05

C3030.01 Concrete Ceiling Finishes*

(1960) Painted concrete ceiling in basement mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	NOV-05

C3030.04 Gypsum Board Ceiling Finishes*

(1960, 1972)

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	NOV-05

C3030.06 Acoustic Ceiling Treatment (Susp.T-Bar)**

(1960, 1972) New acoustic tile ceilings in classrooms to be installed in conjunction with unit ventilator upgrades described in Section D3050.05.07.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	NOV-05

C3030.07 Interior Ceiling Painting**

(1960, 1972) Painted gypsum board ceilings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	10	NOV-05

C3030.09 Other Ceiling Finishes*

(1960) Glue on acoustic ceiling tiles to classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	10	NOV-05

S4 MECHANICAL**D2010.01 Water Closets****

1998 new floor mounted vitreous china flush valve type water closets.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

D2010.02 Urinals**

Original recessed vitreous china tank type urinals.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

D2010.03 Lavatories**

1998 new wall hung vitreous china lavatories.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	30	NOV-05

D2010.04 Sinks**

Original enamelled steel counter top sinks(classroom sinks general purpose).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

D2010.08 Drinking Fountains / Coolers**

1998 new vitreous china drinking fountains.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

D2020.01.01 Pipes and Tubes: Domestic Water*

All domestic water piping is copper pipe.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	NOV-05

D2020.01.03 Piping Specialties (Backflow Preventors)**

Incoming water service and boiler makeup water line are equipped with backflow preventors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

D2020.02.02 Plumbing Pumps: Domestic Water**

Original domestic hot water recirculation pump.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	NOV-05

D2020.02.04 Domestic Water Conditioning Equipment**

Original water softener for the humidification steam boiler.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	NOV-05

D2020.02.06 Domestic Water Heaters**

1998 36MBH,40GAL residential water heater.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	NOV-05

D2020.03 Water Supply Insulation*: Domestic

All domestic water piping is insulated with fiberglass pipe insulation.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

D2030.01 Waste and Vent Piping*

Original bell and spigot cast iron waste and vent piping.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	NOV-05

D2040.01 Rain Water Drainage Piping Systems*

Original bell and spigot cast iron rain water piping.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	NOV-05

D2040.02.04 Roof Drains**

All roof drain are original cast iron and steel roof drains.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	NOV-05

D3010.02 Gas Supply Systems*

Natural gas piping is original scheduled steel pipe.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	NOV-05

D3020.02.01 Heating Boilers and Accessories: H.W.**

Original Liberty hot water heating boiler.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

Event: Replacement of heating boiler, mechanical room piping and valves.

Concern:

Existing boiler is energy inefficient and cannot provide heating back up. It is also past its life cycle.

Recommendation:

Replace the single boiler with multiple boilers, and mechanical room hot water piping and valves.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2009	\$240,750	Unassigned

Updated: February 15 2006

D3020.02.02 Chimneys (&Comb. Air): H.W. Boiler**

Original chimmney and combustion air intake.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

D3020.02.03 Water Treatment: H. W. Boiler*

Manual water treatment system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

D3040.01.01 Air Handling Units: Air Distribution1972 Addition.**

Original Trane T50U cabinet fan with glycol coil, filter section and steam grid humidifier.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

D3040.01.03 Air Cleaning Devices:Air Distribution*

Low efficiecy fiberglass filtersare provided in the air handling unit and in the unit ventilators.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

D3040.01.04 Ducts: Air Distribution*

All supply and return ductwork is galvanized sheet metal.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	NOV-05

D3040.01.07 Air Outlets & Inlets:Air Distribution*

All air inlets and outlets are steel diffusers or grilles.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

D3040.03.01 Hot Water Distribution Systems**

Hot water distribution system is original scheduled steel pipe and with five distribution zones all each with a Grundfos Series 80-80 UMC inline pump.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	NOV-05

D3040.04.01 Fans: Exhaust**

General exhaust fans which provide exhaust for washrooms, classrooms and storage areas. A separate exhaust fan exhaust the gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

D3040.04.03 Ducts: Exhaust*

All exhaust ductwork is galvanized sheet metal.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

D3040.04.05 Air Outlets and Inlets: Exhaust*

All exhaust inlets and outlets are original steel diffusers or grilles.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

D3040.05 Heat Exchangers**

Water to glycol heat exchanger for the 1972 airhandling unit coil.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

D3050.03 Humidifiers**

Original for the 1972 addition a Wiel Mclain steam boiler for a humidification grid located in the airhandling unit for the 1972 addition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	NOV-05

D3050.05.02 Fan Coil Units**

Original located in entrance vestibules.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

D3050.05.03 Finned Tube Radiation**

Copper / aluminum finn tube radiation for perimeter heating throughout the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	NOV-05

D3050.05.06 Unit Heaters**

Original hot water unit heater in the mechanical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

D3050.05.07 Unit Ventilators**

Original hot water unit ventilators in the original 1960 school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	30	NOV-05

Event: Replacement of unit ventilators.

Concern:

Unit ventilators are obsolete(repaire parts are not available)

Recommendation:

Replace the units with a new central ventilation unit and perimeter hot water heating

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2007	\$449,400	High

Updated: February 15 2006

D3060.02.02 Pneumatic Controls**

All heating and ventilation equipment control as well as temperature controls are pneumatic.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	NOV-05

Event: Control system replacement.

Concern:

Control system is past its life cycle and energy inefficient.

Recommendation:

Replace existing control system with a new DDC control system.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2010	\$69,550	Medium

Updated: February 15 2006

D4020 Standpipes*

Original 40mm hose and reel standpipe system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	NOV-05

D4030.01 Fire Extinguisher, Cabinets and Accessories**

Fire extinguishers are located throughout the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

S5 ELECTRICAL

D5010.03 Main Electrical Switchboards (Main Distribution)**

FPE 400A, 120/208V, 3 Phase main breaker combination CDP service entrance panelboard.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	NOV-05

D5010.05 Electrical Branch Circuit Panelboards (Secondary Distribution)**

FPE Panelboards through out, most near capacity.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	NOV-05

D5010.07.02 Motor Starters and Accessories**

Loose motor starters are old G.E. contactors with remote push button controls. Newer starters are Allen Bradley, Klockner Moller and Square "D".

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

Event: Replace the G.E. loose motor starters.

Concern:

The old original G.E. motor starters are at the end of their life cycle.

Recommendation:

Replace the G.E. starters with new.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2010	\$3,210	Low

Updated: January 18 2006

D5020.01 Electrical Branch Wiring*

Original branch circuit wiring and devices through out. Most devices are in good working condition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	NOV-05

D5020.02.02.01 Interior Incandescent Fixtures*

Incandescent fixtures in small storage rooms and closets.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	NOV-05

D5020.02.02 Interior Florescent Fixtures**

Surface mounted 1X4 fixtures in the corridors, Suspended row mounted egg crate type fixtures in the calssrooms, row mounted 1X4 fixtures in the gym. All fixtures are t-12 lamps with electronic ballasts.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	30	NOV-05

Event: **Replace T-12 type light fixtures with T-8 lamps and electronic ballasts.**

Concern:

All the existing florescent fixtures are T-12 lamp and magnetic ballast fixtures, generally producing poor light levels.

Recommendation:

Replace the T-12 fixtures with T-8 lamps and electric ballasts for improved light level and reduced operating and maintenance costs.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Program Functional Upgrade	2009	\$139,100	Low

Updated: January 18 2006

D5020.02.03 Emergency Lighting*

Emergency battery packs and remote heads.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	NOV-05

Event: **Replace the emergency battery packs and add addition remote heads, connect DC power source to the exit lights.**

Concern:

Additional remote heads need to be added in the corridors, washrooms, library and the large open areas on the South side of the school. The battery packs are nearing the end of their lifecycle and would require upgrading to accommodate the additional remote heads.

Recommendation:

Install new and addition battery packs and remote heads.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Code Upgrade	2008	\$4,280	Low

Updated: January 18 2006

D5020.02.03.03 Exit Signs

Original incandescent type exit lights through out most of the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	NOV-05

Event: Replace the original exit lights

Concern:

The exit lights are incandescent type, offering poor illumination of the egress routes and require high maintenance.

Recommendation:

Replace the original exit lights with LED type exit lights for improved visibility and decreased operating and maintenance costs. Connect to the exist emergency battery packs.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Program Functional Upgrade	2008	\$11,770	Low

Updated: January 18 2006

D5020.03.01.03 Exterior Metal Halide Fixtures*

HID lighting are a combination of wall packs and under eave fixtures.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	0	NOV-05

Event: Replace damaged exterior light fixtures.

Concern:

Many of the exterior fixture are damaged, broken lenses and lamps.

Recommendation:

Replace the exterior light fixtures with vandal resistant type fixtures.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2006	\$3,210	Low

Updated: January 18 2006

D5030.01 Detection and Fire Alarm**

The fire alarm system is a 120V, 3 wire system with no supervision capabilities.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	0	25	NOV-05

Event: Install a fully supervised fire alarm system

Concern:

The existing 120V, 3 wire fire alarm system is a unsupervised system. There is no way of knowing if there are any deficiencies on the system.

Recommendation:

Install a fully supervised fire alarm system complete with bell/strobe signalling devices. Connect to the monitoring agent.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Code Upgrade	2007	\$48,150	High

Updated: January 18 2006

D5030.02.02 Intrusion Detection**

Silent Knight security system with motion sensors in the corridors, office area and in the computer lab.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	NOV-05

D5030.03 Clock and Program Systems**

Simplex master clock system in the main office area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	NOV-05

D5030.04.01 Telephone Systems**

Wiring and outlet to each classroom and staff areas. The phone switch and hand sets have been removed

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	NOV-05

D5030.04.04 Data Systems**

Cat 5 cabling to the administration areas. No data outlets in the class room. Wall mounted data rack located in the library. All the network hubs and patch panels have been removed.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	NOV-05

D5030.05 Public Address and Music Systems**

Bogen P.A. system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	NOV-05

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION**E1020.03 Theater and Stage Equipment***

(1960) Stage curtains.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	NOV-05

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

(1960) Gym climbers, basketball backstops.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	15	NOV-05

E2010.02.05 Educational Facility Casework*

(1960, 1972) Painted plywood, plastic laminate millwork in administration and some classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	35	NOV-05

E2010.02.09 Library Casework*

(1972) Birch veneer and plastic laminate units.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	35	NOV-05

E2010.02.99 Other Casework*

(1960, 1972) Metal shelving with original unit ventilators; new casework is required in all classrooms to coordinate with the recommended ventilations system upgrades described in D3050.05.07.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	NOV-05

E2010.03.01 Blinds**

(1960, 1972) Roller blinds in staff room; venetian blinds in classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	35	NOV-05

E2010.03.06 Curtains and Drapes**

(1960) Divider accordion in gymnasium.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	35	NOV-05

E2020 Moveable Furnishings*

(1960, 1972) Classroom and administration furnishings.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	NOV-05

S8 FUNCTIONAL ASSESSMENT**K4010.01 Barrier Free Route: Parking to Entrance**

Access to the school is only via steps.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	NOV-05

Event: Provide barrier free access to entrance**Concern:**

No barrier free access to entrance.

Recommendation:

Provide barrier free ramp to main entrance.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2006	\$16,050	Medium

Updated: February 15 2006

K4010.02 Barrier Free Entrances

The main entrance is not provided with barrier free door hardware.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	NOV-05

Event: Provide barrier free main entrance.**Concern:**

The school has no barrier free entrance.

Recommendation:

Provide barrier free door operators to main entrance.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2006	\$3,210	Medium

Updated: February 15 2006

K4010.03 Barrier Free Interior Circulation

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	0	0	NOV-05

K4010.04 Barrier Free Washrooms

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
6 - Excellent	0	0	NOV-05

RECAPP Facility Evaluation Report

Ogden Elementary School

S2733
Calgary

Facility Details

Building Name: Ogden Elementary School
Address:
Location: Calgary

Building Id: S2733
Gross Area (sq. m): 0.00
Replacement Cost: \$0
Construction Year: 0

Evaluation Details

Evaluation Company:
Evaluation Date:
Evaluator Name:

Total Maintenance Events Next 5 years: \$2,675
5 year Facility Condition Index (FCI): 0%

General Summary:

The school site is relatively flat and all site-related components - lawns, parking lots, playground equipment, sidewalks - are in good to acceptable condition.

Structural Summary:

Envelope Summary:

Interior Summary:

Mechanical Summary:

Electrical Summary:

Rating Guide

Condition Rating	Performance
1 - Critical	Unsafe, high risk of injury or critical system failure.
2 - Poor	Does not meet requirements, has significant deficiencies. May have high operating/maintenance costs.
3 - Marginal	Meets minimum requirements, has significant deficiencies. May have above average operating maintenance costs.
4 - Acceptable	Meets present requirements, minor deficiencies. Average operating/maintenance costs.
5 - Good	Meets all present requirements. No deficiencies.
6 - Excellent	As new/state of the art, meets present and foreseeable requirements.

S7 SITE

G2020.02.02 Flexible Paving Parking Lots(Asphalt)**

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G2020.05 Parking Lot Curbs and Gutters*

Cast in place concrete

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G2020.06.03 Parking Lot Signs*

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G2020.06.04 Pavement Markings*

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G2030.02.02 Asphalt Pedestrian Pavement**

Student playground area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G2030.04 Rigid Pedestrian Pavement (Concrete)**

Concrete sidewalks at streetside and to main / secondary entries

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G2030.06 Exterior Steps and Ramps*

Concrete steps on the south side of the school will require replacement in the near future.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G2040.02 Fences and Gates**

Frost fencing to parking lot and playgrounds

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G2040.03 Athletic and Recreational Surfaces**

Grassed play areas.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G2040.06 Exterior Signs*

Building face sign.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G2040.08 Flagpoles*

Wood type

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G2050.04 Lawns and Grasses*

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G2050.05 Trees, Plants and Ground Covers*

Various shrubs, deciduous and coniferous trees at front of school

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G3010.02 Site Domestic Water Distribution*

Original 50mm water service with new backflow preventor installed (1998).

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G3020.01 Sanitary Sewage Collection*

Sanitary main is connected to City sanitary service.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G3030.01 Storm Water Collection*

Storm water from the building and parking lot are connected to the City storm service.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G3060.01 Gas Distribution*

Natural gas service is connected to utility main.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G4010.02 Electrical Power Distribution Lines*

Underground utility line from the pad mounted utility transformer.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	

G4010.04 Car Plugs-ins*

Car plugs are surface mounted conduit onto a wood railing that separated the parking area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	

Event: **Add control for the parking lot car plug-ins.**

Concern:

There is no time clock and/or temperature control for the car plugs. The wood railing supporting the surface mounted conduit is in disrepair.

Recommendation:

Add a time clock and temperature sensor to control the car plug-ins. Replace the wood structure supporting the car plugs and conduit with steel railing.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2009	\$2,675	High

Updated: February 22 2006