RECAPP Facility Evaluation Report

Edmonton School District No. 7

Dan Knott Junior High School

B3086A

Edmonton

Report run on: March 16, 2012 2:12 PM

Facility Details

Building Name:	Dan Knott Junior High Schoo
Address:	1434 - 80 Street
Location:	Edmonton
Building Id:	B3086A
Gross Area (sq. m):	5,909.60
Replacement Cost:	$12,383,000
Construction Year:	1980

Evaluation Details

Evaluation Company:	A&E Architectural & Engineering Group Inc.
Evaluation Date:	November 17 2011
Evaluator Name:	Vic Maybroda

Total Maintenance Events Next 5 years:	**$2,923,458**
5 year Facility Condition Index (FCI):	**23.61%**

General Summary:

The school is a single storey facility constructed in 1980 of 4406.7 sq. M. In 1981 two 4 classroom portable additions (pods) were added at the south and east end of school with a total area of 870.3 sq. M. In 1990, a six portable classroom pod addition of 542.5 sq. M was added to the east side of the facility.
The school including portables contains 15 classrooms, a computer room, 3 science rooms, an art room, a drama room, a music room, a home economics area, an industrial arts area, a weight training room, a library, 2 gymnasiums, administration and ancillary support spaces.
At the time of the site visit there were 440 enrolled students.

Structural Summary:

The roof is composed of metal deck on OWSJ supported by concrete block walls and steel columns. The foundations consist of concrete grade beams and concrete piles with concrete slab on grade.
Overall the elements appear to be in acceptable condition.

Envelope Summary:

Roofing consist of built-up roofing and SBS membrane with exterior walls of face brick cladding and textured stucco housing sealed fixed and opening aluminum framed windows with painted metal mesh screens installed over various units, painted steel storefront and painted steel utility doors in metal frames. Sealed fixed clerestorey glazing in aluminum frames is located over the library and main entry area.
Overall the elements appear to be in acceptable condition.

Interior Summary:

Flooring consists of quarry and ceramic tile, vinyl composite tile (VCT), sheet vinyl, carpeting, wood strip and painted concrete.
Walls are composed of painted concrete block, painted and vinyl covered gypsum wallboard, and stained and painted wood paneling. Doors are stained wood and painted metal in metal frames.
Ceilings consist of suspended acoustical tile, painted gypsum wallboard and painted structural elements.
Casework consists of painted and stained cabinetry with plastic laminated counter tops.
Prefinished metal toilet partitions and shower compartments are located in wash and shower rooms.
Prefinished metal lockers are located in corridors and change rooms.
Window covering consist of louvred blinds and fabric curtains.
Overall the elements appear to be in acceptable condition.

Mechanical Summary:

Heating is provided by two Raytherm atmospheric hot water boilers in mechanical penthouse. Heating water is pumped to heating coils, forced flow heaters, hot water baseboard radiators heaters and unit heaters. A shell and tube heat exchange provides heat from hot water to glycol solution to feed the glycol heating coil.

Ventilation for the building is provided by a built up air handling unit in mechanical penthouse. The unit is c/w a supply

and return air fans, glycol heating coil, stream humidifier (which is inoperative) a mixing section for return air and outside air. The supply air to the building is c/w with reheat coils for each zone.
The Gym and Lunch room have a separate supply air unit which is c/w supply air and return air fans, reheat coil and mixing section.
Special exhaust systems includes a dust collection system and fume extraction system in Industrial Arts Room and exhaust system for Science Lab in Classrooms 108 and 109.

A cast iron steam boiler in mechanical room which is to provide steam humidification to the air handling unit is inoperative and not being used.

The control system consists of a pneumatic air compressor and dryer, which operates the thermostats, and control valves. A Barbar Coleman Network Control system provides remote monitoring and controls of the heating system.

The plumbing fixtures include stainless steel sinks, stainless steel lavatories, porcelain lavatories, flush valve floor mounted water closets and urinals, flush tank floor mounted water closets, showers, janitor sinks, floor drains and wall mounted porcelain drinking fountains.
Both water and gas meters are located in the Exterior Storage room. The underground water main was replaced in 2004.

Fire protection system includes an elec. fire pump, standpipe and fire hose cabinets . The fire pump is feed by a gas-fired emergency generator. There is no sprinklers system installed in this building.

Overall the mechanical systems are in acceptable condition.

Electrical Summary:
The facility was originally built in 1980 and had portable classroom additions in 1981 and 1990. Since than there is no major renovation and/or modernization.

The main electrical service is 120/208V, 3-phase, 4-wire and rated 1200A; The service is underground fed from a pad mounted transformer.

A 50kW natural gas emergency generator is located in the main electrical room.

The fluorescent fixtures mostly were retro fitted to T-8 lamp fluorescent with electronics ballasts.

All fire alarm, intrusion, telephone and Public address and Music systems meet current facility requirements.

The overall rating for the facility electrical systems shall be "Good"

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*

The foundations consist of cast-in-place concrete grade beams and concrete piles.

Rating	Installed	Design Life	Updated
5 - Good	1980	0	MAR-12

A1030 Slab on Grade*

Cast-in-place concrete slabs-on-grade.

Rating	Installed	Design Life	Updated
5 - Good	1980	0	MAR-12

B1010.02 Structural Interior Walls Supporting Floors (or Roof)*

Concrete block walls and steel columns.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

B1010.05 Mezzanine Construction*

Concrete slab on metal deck on OWSJ supported by concrete block walls.

Rating	Installed	Design Life	Updated
5 - Good	1980	0	MAR-12

B1020.01 Roof Structural Frame*

Metal roof deck with steel structure supported by exterior & interior concrete walls and steel columns.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

S2 ENVELOPE

B2010.01.02.01 Brick Masonry: Ext. Wall Skin*

Face brick to all facades.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

B2010.01.06.03 Metal Siding**

The exterior walls of the library on the roof level have prefinished metal siding.

Rating	Installed	Design Life	Updated
5 - Good	1980	40	MAR-12

Event: Replace 40 sq. M Metal Siding

Type	Year	Cost	Priority
Lifecycle Replacement	2020	$11,600	Unassigned

Updated: MAR-12

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

Textured stucco fascias and upper gymnasium walls.

Rating	Installed	Design Life	Updated
5 - Good	1980	0	MAR-12

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

Sealant is located around all window, door and exterior cladding assemblies.

Rating	Installed	Design Life	Updated
3 - Marginal	1980	20	MAR-12

Event: Replace 335 L M Cauling

Concern:
Caulking has become hard, brittle and separating from substrate.
Recommendation:
Remove existing caulking and replace with recommended material.

Type	Year	Cost	Priority
Failure Replacement	2012	$10,500	Low

Updated: MAR-12

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

Painted metal clad doors and frames and metal mesh window covers.

Rating	Installed	Design Life	Updated
4 - Acceptable	1990	15	MAR-12

Event: Replace 40 sq. M Painted Surfaces

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$1,000	Unassigned

Updated: MAR-12

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

Concrete block.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

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

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

B2010.06 Exterior Louvers, Grilles, and Screens*

Prefinished metal louvres with prefinished metal security screens on several classroom windows.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

B2010.09 Exterior Soffits*

Exterior soffits consist of a stucco finish.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

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

Sealed fixed and opening units in aluminum frames.
Sealed fixed clerestorey units in aluminum frames.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	40	MAR-12

Event: Replace 75 sq. M Window Units

Type	Year	Cost	Priority
Lifecycle Replacement	2020	$75,000	Unassigned

Updated: MAR-12

B2030.01.02 Steel-Framed Storefronts: Doors**

Entry doors are painted steel doors with painted steel frames with GWG inserts and sealed upper glazing units.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	30	MAR-12

Event: Replace 13 Steel-Framed Storefronts

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$28,600	Unassigned

Updated: MAR-12

B2030.02 Exterior Utility Doors**

Painted metal clad insulated doors and frames.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	40	MAR-12

Event: Replace 7 Utility Doors

Type	Year	Cost	Priority
Lifecycle Replacement	2020	$7,000	Unassigned

Updated: MAR-12

B3010.01 Deck Vapour Retarder and Insulation*

Not viewable. No concerns observed or reported.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

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

South east roof section.

Rating	Installed	Design Life	Updated
4 - Acceptable	2000	25	MAR-12

Event: Replace 2427 sq. M SBS Roofing

Type	Year	Cost	Priority
Lifecycle Replacement	2025	$412,590	Unassigned

Updated: MAR-12

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

SBS membrane.

Rating	Installed	Design Life	Updated
5 - Good	2007	25	MAR-12

Event: Replace 1958 Sq. M SBS Roofing

Type	Year	Cost	Priority
Lifecycle Replacement	2032	$332,900	Unassigned

Updated: MAR-12

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

Chimney, exhaust and plumbing vents and roof drains.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

S3 INTERIOR

C1010.01 Interior Fixed Partitions*

Concrete block and metal stud.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

C1010.02 Interior Demountable Partitions*

Vinyl covered gypsum wallboard.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

C1010.05 Interior Windows*

Interior glazed windows with GWG are located in the library and main office area.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	AUG-06

C1020.01 Interior Swinging Doors (& Hardware)*

Solid core painted and/or clear finished wood doors in painted steel frames.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

C1020.03 Interior Fire Doors*

Fire doors are located in the common area corridors between the original building and each addition and to mechanical and service rooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

C1020.04 Interior Sliding and Folding Doors*

Fire rated overhead mounted metal shutter between food preparation area and small gymnasium.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

C1030.01 Visual Display Boards**

Tackboards, chalkboards and whiteboards are located in teaching areas.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	20	MAR-12

Event: Replace 18 Visual Display Boards

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$23,400	Unassigned

Updated: MAR-12

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

7 - Metal shower compartments.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	30	MAR-12

Event: Repalce 7 Shower Compartments

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$14,700	Unassigned

Updated: MAR-12

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

20 - Metal toilet partitions.

Rating	Installed	Design Life	Updated
3 - Marginal	1980	30	MAR-12

Event: Replace 20 Toilet Paritions

Concern:
Doors, pilasters and finishes worn.
Recommendation:
Replace prefinished metal partitions.

Type	Year	Cost	Priority
Failure Replacement	2012	$24,000	Medium

Updated: MAR-12

C1030.05 Wall and Corner Guards*

1.2M high stainless steel corner guards installed in various locations.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

C1030.08 Interior Identifying Devices*

The room number or room name are applied to interior doors.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

C1030.10 Lockers**

278 two tier lockers located in Change Rooms.
445 single tier lockers located in Corridors.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	30	MAR-12

Event: Replace Lockers

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$274,480	Unassigned

Updated: MAR-12

C1030.12 Storage Shelving*

Clear finish plywood storage shelving throughout.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	AUG-06

C1030.14 Toilet, Bath, and Laundry Accessories*

Paper towel dispensers, toilet paper dispensers, hand-soap dispensers, waste bins and mirrors.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

C2010 Stair Construction*

The stairs to the upper mechanical penthouse are open steel stairs with a paint finish.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	AUG-06

C2020.08 Stair Railings and Balustrades*

Painted steel handrails on the stairwell stairs to the mechanical penthouse.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	AUG-06

C3010.02 Wall Paneling**

Painted wood paneling located in Drama Room, Small Gymnasium and Large Gymnasium.
Stained wood paneling located in Library and Music Room.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	30	MAR-12

Event: Replace 438 sq. M Wall Paneling

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$87,600	Unassigned

Updated: MAR-12

C3010.02 Wall Paneling**

Stained horizontal wood strip cladding located in main entry corridor space walls.

Rating	Installed	Design Life	Updated
3 - Marginal	1980	30	MAR-12

Event: Replace/ Repair 30 sq. M Wall Paneling

Concern:
Material badly worn and chipped. Finish deteriorated and unsightly.
Recommendation:
Sand existing finish to cladding, replace damaged pieces and restain.

Type	Year	Cost	Priority
Failure Replacement	2012	$3,000	Medium

Updated: MAR-12

C3010.06 Tile Wall Finishes**

Wash and Shower Rooms have a 4"x4" ceramic tile wall finish.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	40	MAR-12

Event: Replace 138 sq. M Wall Tile

Type	Year	Cost	Priority
Lifecycle Replacement	2020	$33,120	Unassigned

Updated: MAR-12

C3010.11 Interior Wall Painting*

Painted concrete block and gypsum wallboard.

Rating	Installed	Design Life	Updated
4 - Acceptable	1995	0	MAR-12

C3020.01.02 Painted Concrete Floor Finishes*

Painted/sealed concrete floors are located in the industrial arts room, mechanical room and custodial rooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	1990	0	MAR-12

C3020.02 Tile Floor Finishes**

116 sq. M Quarry tile located in main entry corridor.
172 sq. M Ceramic tile flooring is located in the entrance vestibules, wash and change rooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	50	MAR-12

Event: Replace Floor Tile

Type	Year	Cost	Priority
Lifecycle Replacement	2030	$53,660	Unassigned

Updated: MAR-12

C3020.04 Wood Flooring**

Hardwood flooring is located in the large gymnasium refinished in 2006.

Rating	Installed	Design Life	Updated
5 - Good	1980	30	MAR-12

Event: Replace 490 sq. M Wood Flooring

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$122,500	Unassigned

Updated: MAR-12

C3020.07 Resilient Flooring**

Sheet Vinyl is located in the small gymnasium

Rating	Installed	Design Life	Updated
5 - Good	2005	20	MAR-12

Event: Replace 184 sq. M Sheet Vinyl Flooring

Type	Year	Cost	Priority
Lifecycle Replacement	2025	$16,560	Unassigned

Updated: MAR-12

C3020.07 Resilient Flooring**

VCT is located throughout the classrooms, ancillary rooms, science rooms and corridors replaced in 2010.

Rating	Installed	Design Life	Updated
5 - Good	2010	20	MAR-12

Event: Replaced 1530 sq. M VCT flooring,

Type	Year	Cost	Priority
Lifecycle Replacement	2030	$84,150	Unassigned

Updated: MAR-12

Event: flooring replacement

Type	Year	Cost	Priority
Failure Replacement	2011	$67,677	Low

Updated: MAR-12

C3020.08 Carpet Flooring**

Carpeting is located in the all the classrooms.

Rating	Installed	Design Life	Updated
5 - Good	2000	15	MAR-12

Event: Replace 792 sq. M Carpeting

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$51,480	Unassigned

Updated: MAR-12

Event: Replace Carpet Flooring - 1990 Addition

Concern:
Exceeded theoretical useful life.

Type	Year	Cost	Priority
Failure Replacement	2011	$22,558	Unassigned

Updated: MAR-12

Event: flooring replacement

Type	Year	Cost	Priority
Failure Replacement	2011	$45,118	Unassigned

Updated: MAR-12

Event: library and music/drama

Type	Year	Cost	Priority
Failure Replacement	2011	$52,499	Unassigned

Updated: MAR-12

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

Located in teaching areas, library, corridors and administration areas.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	25	MAR-12

Event: Replace 2352 sq. M Acoustic Ceiling Tiles

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$329,308	Unassigned

Updated: MAR-12

C3030.07 Interior Ceiling Painting*

All gypsum board ceilings & exposed steel structures have a paint finish.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

S4 MECHANICAL

D2010.04 Sinks**

Stainless steel single and double -compartment kitchen and lab sinks, oversized stainless steel sink in Industrial Arts room.
Floor mounted service sink.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	30	MAR-12

Event: Replace 44 sinks

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$62,000	Unassigned

Updated: MAR-12

D2010.05 Showers**

Shower heads are installed in ceramic tile shower rooms The water temperature is controlled by a mixing valve.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	30	MAR-12

Event: Replace 13 Showers

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$15,000	Unassigned

Updated: MAR-12

D2010.08 Drinking Fountains/Coolers**

Vitreous china wall mounted porcelain drinking fountains.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	35	MAR-12

Event: Replace 4 Drinking Fountains.

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$6,000	Unassigned

Updated: MAR-12

D2010.10 Washroom Fixtures (WC, Lav, Urnl)** - 1980

Floor mounted water closets with flush valves and flush tanks in Staff Washrooms.
Floor mounted urinals with flush valves.
Vitreous china wall and counter top lavatories.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	35	MAR-12

Event: Replace Washroom Fixtures (WC=25, Lav=13, Urn=8)

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$66,000	Unassigned

Updated: MAR-12

D2010.10 Washroom Fixtures (WC, Lav, Urnl)** - 1999

stainless steel counter top lavatories

Rating	Installed	Design Life	Updated
4 - Acceptable	1999	35	MAR-12

Event: Replace 12 lavs

Type	Year	Cost	Priority
Lifecycle Replacement	2034	$14,000	Unassigned

Updated: MAR-12

D2020.01.01 Pipes and Tubes: Domestic Water*

water pipes are copper pipes.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

D2020.01.02 Valves: Domestic Water**

Plumbing fixtures are equipped with isolating valves.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	40	MAR-12

Event: Replace 211 Domestic Water Valves

Type	Year	Cost	Priority
Lifecycle Replacement	2020	$43,000	Unassigned

Updated: MAR-12

D2020.01.03 Piping Specialties (Backflow Preventers)**

Boilers and steam boiler are c/w back flow preventers as well as sprinkler system

Rating	Installed	Design Life	Updated
4 - Acceptable	1999	20	MAR-12

Event: Replace 2 Backflow Preventors

Type	Year	Cost	Priority
Lifecycle Replacement	2019	$9,000	Unassigned

Updated: MAR-12

D2020.02.02 Plumbing Pumps: Domestic Water**

Domestic hot water recirculating pump located in boiler room, and has exceeded its life expectancy. Replace pump with new.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	20	MAR-12

Event: Replace 1 Domestic Hot Water Recirculating Pump

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$2,000	Unassigned

Updated: MAR-12

D2020.02.06 Domestic Water Heaters**

A.O. Smith BTRC120-110 268.7 l storage, 31.6 Kw input.

Rating	Installed	Design Life	Updated
4 - Acceptable	2003	20	MAR-12

Event: Replace 2 Domestic Water Heaters

Type	Year	Cost	Priority
Lifecycle Replacement	2023	$5,000	Unassigned

Updated: MAR-12

D2020.03 Water Supply Insulation: Domestic*

Domestic water pipe insulation in the building.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

D2030.01 Waste and Vent Piping*

Cast iron and copper piping

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

D2030.02.04 Floor Drains*

Floor drains are installed in mech room, washrooms, and showers.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

D2040.01 Rain Water Drainage Piping Systems*

The storm water system is made up of cast iron pipes connected into the municipal storm system.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

D2040.02.04 Roof Drains*

Cast iron roof drains with domes.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

D3010.02 Gas Supply Systems*

150 mm steel piping installed from meter to equipment.
The science classrooms are c/w with a main shut-off valve locates in each Science Lab Classroom to control the gas valves in each laboratory station.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

D3020.01.01 Heating Boilers & Accessories: Steam** - Boiler #3

Gas-fired cast iron seam boiler H.B. Smith G-400 586 Kw input and 468.8 Kw output. Is not being used.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	35	MAR-12

Capacity Size	Capacity Unit
586	kW

Event: Repair - Boiler #3]

Type	Year	Cost	Priority
Repair	2011	$19,506	Unassigned

Updated: JUN-11

Event: Replace 1 steam boiler

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$50,000	Unassigned

Updated: MAR-12

D3020.01.03 Chimneys (& Comb. Air): Steam Boilers**

B-vent chimney is serving the steam boiler system.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	35	MAR-12

Event: Replace 3m of flue

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$2,000	Unassigned

Updated: MAR-12

D3020.01.04 Water Treatment: Steam Boilers*

Chemical treatment system consists of a chemical barrel and a feeding pump

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

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

Hot Water heating boilers Raytherm Model 1353-WTD; input=396.4 Kw.
Pumps Taco BB2008-7.70, 3.6 l/s @ 18.2m

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	35	MAR-12

Event: Replace 2 heating boilers & accessories

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$120,000	Unassigned

Updated: MAR-12

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

B-vent chimneys and combustion air duct and louver.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	35	MAR-12

Event: Replace 6m of chimneys and comb air

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$5,000	Unassigned

Updated: MAR-12

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

Side stream strainers and chemical pot feeder.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

D3040.01.01 Air Handling Units: Air Distribution**

AS-1 built up air unit with supply air and return air fans, glycol heating coil, humidifier, which is inoperative, filters and mixing box. The supply air fan delivers 10,435 L/S at 1,060 Pa. Return air fan delivers 9,100 L/S at 250 Pa.
AS-2 packaged unit supply air and return air fans, glycol heating coil, humidifier, filters and mixing box serving Gymnasium, Lunch room. The supply air fan delivers 4,040L/S at 435 Pa. Return air fan delivers 3,270 L/S at 250 Pa.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	30	MAR-12

Event: Replace 2 Air Handling Units

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$127,000	Unassigned

Updated: MAR-12

D3040.01.03 Air Cleaning Devices: Air Distribution*

Air filters in the Air Handling Units and furnaces.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

D3040.01.04 Ducts: Air Distribution*

Galvanized metal low velocity ductwork in ceiling space.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

D3040.01.07 Air Outlets & Inlets: Air Distribution*

Air outlets and inlets includes ceiling mounted or wall mounted linear diffusers, eggcrates return air grille, door grilles, square ceiling diffusers.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

D3040.02 Steam Distribution Systems: Piping/Pumps**

Steel piping with insulation and steam condensate return sump and pumps. (system in inoperative)

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	40	MAR-12

Event: Replace 30m of steam distribution piping

Type	Year	Cost	Priority
Lifecycle Replacement	2020	$2,000	Unassigned

Updated: MAR-12

D3040.03.01 Hot Water Distribution Systems**

Heating water piping schedule 40 steel piping thuout building to baseboard heating cabinets and reheat coils in classrooms and offices.
glycol heating pumps, P-3 and P-4 serve heating coils in air handling units.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	40	MAR-12

Event: Replace Hot Water Distribution Systems BOE=5909 sq.m.

Type	Year	Cost	Priority
Lifecycle Replacement	2020	$355,000	Unassigned

Updated: MAR-12

D3040.04.01 Fans: Exhaust**

Roof mounted centrifugal exhaust fan service the industrial art kiln, washrooms and kitchen range hoods.
Dust collect Murphy CN-2 is located in the industrial art room

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	30	MAR-12

Event: Replace 19 exhaust fans

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$96,000	Unassigned

Updated: MAR-12

D3040.04.03 Ducts: Exhaust*

Standard galvanized ducting.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

D3040.04.05 Air Outlets and Inlets: Exhaust*

Exhaust inlets include aluminum wall mounted exhaust air grilles and eggcrate.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

D3040.05 Heat Exchangers**

A shell and tube heat exchanger in the mechanical room provides glycol to the heating coils in the air units.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	30	MAR-12

Event: Replace 1 Heat Exchangers

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$16,000	Unassigned

Updated: MAR-12

D3050.03 Humidifiers**

Steam humidifiers are serving the Air Handling Unit, AHU-1 and AHU-2 are not being used.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	25	MAR-12

Event: Replace 2 Humidifier

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$14,000	Unassigned

Updated: MAR-12

D3050.05.01 Convectors**

Hot water convectors are located in washrooms and change rooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	40	MAR-12

Event: Replace 10 convectors

Type	Year	Cost	Priority
Lifecycle Replacement	2020	$4,000	Unassigned

Updated: MAR-12

D3050.05.02 Fan Coil Units**

Hot water force flow heaters are installed in each vestibule

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	30	MAR-12

Event: Replace 3 Fan Coil Units

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$15,000	Unassigned

Updated: MAR-12

D3050.05.03 Finned Tube Radiation**

Hot water perimeter finned tube radiators are located in classrooms, washrooms, offices, water meter room and generator room.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	40	MAR-12

Event: Replace Finned Tube Radiation BOE=5909 sq.m.

Type	Year	Cost	Priority
Lifecycle Replacement	2020	$178,000	Unassigned

Updated: MAR-12

D3050.05.06 Unit Heaters**

A hot water unit heater is located in mechanical penthouse and other utility area.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	30	MAR-12

Event: Replace 6 unit heaters

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$13,000	Unassigned

Updated: MAR-12

D3060.02.01 Electric and Electronic Controls**

Force flow and unit heaters are controlled by line voltage thermostats

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	30	MAR-12

Event: Replace Electric and Electronic Controls BOE=5909 sq.m.

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$6,000	Unassigned

Updated: MAR-12

D3060.02.02 Pneumatic Controls**

Pneumatic room thermostats control wall finned tube radiation.
System includes control air compressor and refrigerated drier to serve the building.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	40	MAR-12

Event: Replace Pneumatic Controls BOE= 5909 sq.m.

Type	Year	Cost	Priority
Lifecycle Replacement	2020	$24,000	Unassigned

Updated: MAR-12

D3060.02.05 Building Systems Controls (BMCS, EMCS)**

A Barber Colman control system is connected to the boilers and pumps

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	20	MAR-12

Event: Replace Building Systems Controls BMCS BOE= 5909 sq.m.

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$82,000	Unassigned

Updated: MAR-12

D3090 Other Special HVAC Systems and Equipment*

Paint booth in Industrial Arts Room and exhaust hoods for Science Lab in Classrooms 108 and 109.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

D4020 Standpipes*

Fire hose cabinets are located around the school.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

D4030.01 Fire Extinguisher, Cabinets and Accessories*

ABC type fire extinguishers locate in corridors and mech rooms. Most of the fire extinguishers are housed in a recessed wall mounted cabinet with fire hoses.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

D4090.07 Fire Pumps & Water Storage Tanks*

A dedicated fire main and fire pump, Aurora 80-65673 31.5 l/s @ 28 m, in Storage room beside the Electrical room is serving the fire protection system. The fire pump is backed up by the gas-fired emergency generator.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

S5 ELECTRICAL

D5010.01.02 Main Electrical Transformers (Utility Owned)*

A pad mounted transformer were installed and is located on east side of school. It is serviced by a utility company.

Rating	Installed	Design Life	Updated
5 - Good	1980	40	MAR-12

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

A General Electric 120/208V, 3-phase 4-wire, 1200A rated main distribution panel were installed, and completed with a 1200A main incoming breaker. Breakers are adequately marked in the distribution section. There is some spare space for future advancement.

Rating	Installed	Design Life	Updated
5 - Good	1980	40	MAR-12

Event: Replace Main Electrical Switchboards (Main Distribution)

Type	Year	Cost	Priority
Lifecycle Replacement	2020	$45,000	Unassigned

Updated: MAR-12

D5010.05 Electrical Branch Circuit Panelboards (Secondary Distribution)**-1980

General Electric branch circuit panel boards have been provided throughout the school, and are located in corridors and storage rooms. The shop panels are equipped with contactors and emergency shut-off buttons. There are enough spare spaces available in most of the panel.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	30	MAR-12

Event: Replace 10 Electrical Branch Circuit Panelboards (Secondary Distribution)

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$50,000	Unassigned

Updated: MAR-12

D5010.05 Electrical Branch Circuit Panelboards (Secondary Distribution)**-1990

Federal Pioneer branch circuit panel boards have been provided throughout the school, and are located in corridors and storage rooms. There are enough spare spaces available in most of the panel.

Rating	Installed	Design Life	Updated
5 - Good	1990	30	MAR-12

Event: Replace 4 Electrical Branch Circuit Panelboards (Secondary Distribution)

Type	Year	Cost	Priority
Lifecycle Replacement	2020	$20,000	Unassigned

Updated: MAR-12

D5010.07.02 Motor Starters and Accessories**

Individual motor starters and load switches are used major mechanical ventilation units and some small water pumps. Starters are complete pilot lights and hand-off-auto selector switches.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	30	MAR-12

Event: Replace 20 Motor Starters and Accessories

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$12,000	Unassigned

Updated: MAR-12

D5020.01 Electrical Branch Wiring*

the wires are either installed in conduits. or the BX wires are used for final connections to mechanical and miscellaneous equipment in the facility.

Rating	Installed	Design Life	Updated
5 - Good	1980	0	MAR-12

D5020.02.01 Lighting Accessories: Interior (Lighting Controls)*

Line voltage switching are provided for the facility. Line voltage switches typically provided in each room.

Rating	Installed	Design Life	Updated
4 - Acceptable	1990	0	MAR-12

D5020.02.02.01 Interior Incandescent Fixtures*

Incandescent track lighting fixtures and globe-type fixtures have been provided in the library area.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	AUG-06

D5020.02.02.02 Interior Fluorescent Fixtures**

Generally all lighting fixtures have been retro fitted to T8 lamps completed with electronic ballast.

Rating	Installed	Design Life	Updated
5 - Good	2008	30	MAR-12

Event: Replace 880 Interior Fluorescent Fixtures

Type	Year	Cost	Priority
Lifecycle Replacement	2038	$176,000	Unassigned

Updated: MAR-12

D5020.02.03.01 Emergency Lighting Built-in*

Some of the fluorescent lighting fixtures fed from emergency panels.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

D5020.02.03.02 Emergency Lighting Battery Packs**

Wall mounted battery packs completed with integral and remote lamps and remote batteries throughout facility. All paths and points of egress are well covered. The units are regularly tested.

Rating	Installed	Design Life	Updated
5 - Good	2010	20	MAR-12

Event: Replace 60 Emergency Lighting Battery Packs

Type	Year	Cost	Priority
Lifecycle Replacement	2030	$24,000	Unassigned

Updated: MAR-12

D5020.02.03.03 Exit Signs*

Exit signs are located at required locations and exits. Fixtures are upgraded to LED type.

Rating	Installed	Design Life	Updated
4 - Acceptable	1995	0	MAR-12

D5020.03.01.01 Exterior Incandescent Fixtures*

Incandescent surface mounted fixtures are mounted on the exterior walls of the school.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

D5020.03.02 Lighting Accessories: Exterior (Lighting Controls)*

Timers have been provided for exterior lighting control.

Rating	Installed	Design Life	Updated
4 - Acceptable	1990	0	AUG-06

D5030.01 Detection and Fire Alarm**

Simplex 4100U Control Panel is provided, and a Simplex 4602 annunciator panel is provided at the main entrance for Fire alarm System; and The system is completed with bell,horn/strobe, pull station, detectors.

Rating	Installed	Design Life	Updated
5 - Good	2010	25	MAR-12

Event: Replace Detection and Fire Alarm

Type	Year	Cost	Priority
Lifecycle Replacement	2035	$88,000	Unassigned

Updated: MAR-12

Event: life safety Upgrade

Type	Year	Cost	Priority
Code Upgrade	2011	$16,937	Unassigned

Updated: NOV-11

D5030.02.02 Intrusion Detection**

DCS Maxy PC4020 panels is installed security system is provided for intrusion detection system and completed with motion detectors, door contacts at the outside access door and alarm keypads. System is monitored by externally.

Rating	Installed	Design Life	Updated
5 - Good	2007	25	MAR-12

Event: Replace Intrusion Detection

Type	Year	Cost	Priority
Lifecycle Replacement	2032	$44,000	Unassigned

Updated: MAR-12

D5030.02.04 Video Surveillance**

A monitoring and recording devices were installed for CCTV system with monitoring in General Office and video cameras located throughout in and outside of the school .

Rating	Installed	Design Life	Updated
5 - Good	2008	25	MAR-12

Event: Replace Video Surveillance

Type	Year	Cost	Priority
Lifecycle Replacement	2033	$22,000	Unassigned

Updated: MAR-12

D5030.03 Clock and Program Systems*

Individual battery clocks were installed in classrooms.

Rating	Installed	Design Life	Updated
4 - Acceptable	1990	0	MAR-12

D5030.04.01 Telephone Systems*

The telephone system is a Norstar Meridian system. Meridian handsets are located in the classrooms and selected areas such as the general office. The main telephone equipment is located in the Compactor room. A voice mail system is integrated to the system in 2007

Rating	Installed	Design Life	Updated
4 - Acceptable	1998	0	MAR-12

D5030.04.04 Data Systems*

Cat 5 data wiring system were installed with data outlets in each classroom.

Rating	Installed	Design Life	Updated
4 - Acceptable	1996	0	MAR-12

D5030.04.05 Local Area Network Systems*

One server, and patch panels are installed in the facility and through supernet connected to regional school board.

Rating	Installed	Design Life	Updated
4 - Acceptable	1996	0	MAR-12

D5030.05 Public Address and Music Systems**

The public address system is a Bogen Multicom 2000 system. Speakers are typically round, recessed ceiling mounted units. The Bogen unit is located in the Audio Visual storage room. A separate sound system has been provided for the gymnasium and music room with wall mounted speakers. The program bells are initiated from the Bogen P.A. system.

Rating	Installed	Design Life	Updated
5 - Good	2002	20	MAR-12

Event: Replace Public Address and Music Systems

Type	Year	Cost	Priority
Lifecycle Replacement	2022	$22,000	Unassigned

Updated: MAR-12

D5090.01 Uninterruptible Power Supply Systems**

There are three UPS provided. One for phone system, two for computer system.

Rating	Installed	Design Life	Updated
5 - Good	2005	30	MAR-12

Event: Replace 3 Uninterruptible Power Supply Systems

Type	Year	Cost	Priority
Lifecycle Replacement	2035	$12,000	Unassigned

Updated: MAR-12

D5090.02 Packaged Engine Generator Systems (Emergency Power System)**

A Kohler natural gas emergency generator is located in the main electrical room. The generator is rated 50kW, 62.5kVA at 120/208V. A Westinghouse Robonic transfer switch has been installed for the emergency power distribution system.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	35	MAR-12

Capacity Size	Capacity Unit
50W	kVA

Event: Replace Packaged Engine Generator Systems (Emergency Power System)

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$100,000	Unassigned

Updated: MAR-12

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1020.03 Theatre and Stage Equipment*

Stage lighting and wood framed platform stage.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

E1090.04 Residential Equipment*

Home Economics area contains 4 electric ranges with range hoods, 3 refrigerators and 3 microwaves.
Confectionary/kitchen area contains a refrigerator and 2 counter mounted coolers.
Staff area contains a refrigerator, dish washer and microwave.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

Basketball hoops are located in the gymnasium.
A stair climber, treadmill and other therapeutic accessories are located in a classroom that was converted to an exercise/weight training room.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

E2010.02 Fixed Casework**

In 2011 the Estimated Replacement Costs are as follows:
Painted and stained upper and lower cabinetry with plastic laminated counter tops
$150/GSM = $ 70,625.00
Classroom shelving/cabinetry with plastic laminated counter tops
$100/GSM = $ 38, 800.00
Plastic laminated vanity counter tops
$50/GSM = $ 6,000.00
Administration and Library Reception Counters = $ 4,000.00

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	35	MAR-12

Event: Replace Casework

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$119,425	Unassigned

Updated: MAR-12

E2010.02 Fixed Casework**

Science Rooms counter tops.

Rating	Installed	Design Life	Updated
3 - Marginal	1980	35	MAR-12

Event: Replace Counter Tops

Concern:
Science room counter tops worn and delaminated in various areas.

Recommendation:
Replace Science Rooms counter tops.
Replacement Cost = $ 60/GSM = $ 20,760.00

Type	Year	Cost	Priority
Failure Replacement	2012	$20,760	Medium

Updated: MAR-12

E2010.03.01 Blinds**

Louvred blinds located over administration windows.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	30	MAR-12

Event: Replace 12 sq. M Blinds

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$1,200	Unassigned

Updated: MAR-12

E2010.03.06 Curtains and Drapes**

Curtains are located over window units in the library, staff room and classrooms.
Curtain located in gymnasium.

Rating	Installed	Design Life	Updated
4 - Acceptable	2004	30	MAR-12

Event: Replace 86 sq. M Curtains

Type	Year	Cost	Priority
Lifecycle Replacement	2034	$8,600	Unassigned

Updated: MAR-12

F1010.02.04 Portable and Mobile Buildings** - 1981 Portables

Four portable classrooms and storage room with link to west side of school added in 1981 of 419.2 sq. M.
The portables are wood framed supported on wood pads with a crawl space with SBS roofing, prefinished metal clad siding housing sealed fixed and opening PVC framed window units with painted plywood panels above and below window units and painted metal mesh window covering, painted metal clad entry and utility doors and prefinished metal louvres.
Interiors consist of rubber tile and carpeted flooring, vinyl covered gypsum wallboard, ceilings of suspended acoustical tile, visual display boards, painted wood doors and metal frames, painted wood cabinetry with plastic laminated counter top, louvred blinds and metal lockers.
In 2011 the estimated replacement costs are:

Envelope
420 sq. M SBS Roofing = $ 71,400.00
240 sq. M Prefinished Metal Cladding = $ 69,600
10 sq. M PVC Windows = $ 7.500.00
6 Painted Metal Clad Doors = $ 6,000.00

Interior
110 sq. M Rubber Tile Flooring = $ 6,050.00
300 sq. M Carpeting = $ 19,500.00
410 sq. M Acoustical Tile = $ 22,550.00
Millwork @ $100/sq. M = $ 41,000.00
10 sq. M Blinds = $ 1,000.00
16 Visual Display Boards = $ 10,000.00
26 Metal Lockers = $ 12,220.00

Mechanical
Each portable is c/w a gas fired counter flow Carrier model 58CTA070 (3@) and 58TMA105-16 (1@) furnaces with ductwork and sill mounted grilles. The furnaces were installed in 2000 and 2006.
Replacement cost for 4 furnaces = $14,000.00
There is a roof mounted exhaust fan with ductwork for each portable group.
Replacement cost for 4 exhaust fan = $8,000.00
A hot water force flow heater is installed in each of the vestibule. Cost for 4 forces flow heater = $ 12,000.00

Electrical
1. Electrical Branch Circuit Panels: four single phase, 4 wire 120/240V and rated 125A with 2P-50A incoming breaker service panels were installed in portable sections of the building . Lifecycle replacement shall be occurred in 2015 and the cost will be $12,000
2. Motor Starters and Accessories: four load switches for these portable furnaces, lifecycle replacement shall be occurred in 2015 and the cost will be $2,000
3. Interior Fluorescent lights: Fixtures was upgraded to T-8 fixtures completed with electromagnetic ballast in 2009. Lifecycle replacement shall be occurred in 2039 and the cost will be $17,400.
4. The Incandescent wall packs were installed above the exit doors.
5. The emergency battery packs are installed for emergency lighting system in 2006. The lifecycle replacement shall be occurred in 2026 and the cost will be $1,800.
6. The fire alarm system devices were connected to main building fire alarm panel in 2010, Lifecycle replacement shall be occurred in 2035 and the cost will be $9,200.
7. The intrusion system devices were connected to main school security panel in 2007 and Lifecycle replacement shall be occurred in 2032 and the cost will be $2,500.
8. The PA system devices were wired to main school systems and lifecycle replacement shall be occurred in 2022 and the cost will be $2,000.
9. The data system outlets were installed in each class room.
10. Local area network system is provided by hard wired, and WI-FI wireless system.

Rating	Installed	Design Life	Updated
4 - Acceptable	1981	30	MAR-12

Partial View.

Event: Replace Building Envelope

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$154,500	Unassigned

Updated: MAR-12

Event: Replace Electrical

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$46,900	Unassigned

Updated: MAR-12

Event: Replace Interiors

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$106,270	Unassigned

Updated: MAR-12

Event: Replace Mechanical

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$34,000	Unassigned

Updated: MAR-12

F1010.02.04 Portable and Mobile Buildings** - 1981 Portables

Four portable classrooms and storage room with link to north side of school added in 1981 of 419.2 sq. M.
The portables are wood framed supported on wood pads with a crawl space with SBS roofing, prefinished metal clad siding housing sealed fixed and opening PVC framed window units with painted plywood panels above and below window units and painted metal mesh window covering, painted metal clad entry and utility doors and prefinished metal louvres.
Interiors consist of rubber tile and carpeted flooring, vinyl covered gypsum wallboard, ceilings of suspended acoustical tile, visual display boards, painted wood doors and metal frames, painted wood cabinetry with plastic laminated counter tops, louvred blinds and metal lockers
In 2011 the estimated replacement costs are:

Envelope
420 sq. M SBS Roofing = $ 71,400.00
240 sq. M Prefinished Metal Cladding = $ 69,600
10 sq. M PVC Windows = $ 7.500.00
6 Painted Metal Clad Doors = $ 6,000.00

Interior
110 sq. M Rubber Tile Flooring = $ 6,050.00
300 sq. M Carpeting = $ 19,500.00
410 sq. M Acoustical Tile = $ 22,550.00
Millwork @ $100/sq. M = $ 41,000.00
10 sq. M Blinds = $ 1,000.00
16 Visual Display Boards = $ 10,000.00
58 Metal Lockers = $ 27,260.00

Mechanical
Each portable is c/w a gas fired counter flow Carrier model 58CTA070 (1@), 58TMA105-16 (1@) and 58CTA09010114 (2@) furnaces with ductwork and sill mounted grilles.
The furnaces were installed in 1990, 2003 and 2006.
Replacement cost for 4 furnaces = $14,000.00
There is a roof mounted exhaust fan with ductwork for each portable group.
Replacement cost for exhaust fans = $8,000.00
A hot water force flow heater is installed in each of the vestibules.
Replacement cost for 4 forces flow heaters = $ 12,000.00

Electrical
1. Electrical Branch Circuit Panels: eight single phase, 4 wire 120/240V and rated 125A with 2P-50A incoming breaker service panels were installed in portable sections of the building . Lifecycle replacement shall be occurred in 2015 and the cost will be $12,000
2. Motor Starters and Accessories: eight load switches for these portable furnaces, lifecycle replacement shall be occurred in 2015 and the cost will be $2,000
3. Interior Fluorescent lights: Fixtures was upgraded to T-8 fixtures completed with electromagnetic ballast in 2009. Lifecycle replacement shall be occurred in 2039 and the cost will be $17,400.
4. The Incandescent wall packs were installed above the exit doors.
5. The emergency battery packs are installed for emergency lighting system in 2006. The lifecycle replacement shall be occurred in 2026 and the cost will be $1,800..
6. The fire alarm system devices were connected to main building fire alarm panel in 2010, Lifecycle replacement shall be occurred in 2035 and the cost will be $8,700.
7. The intrusion system devices were connected to main school security panel in 2007 and Lifecycle replacement shall be occurred in 2032 and the cost will be $2,500.
8. The PA system devices were wired to main school systems and lifecycle replacement shall be occurred in 2022 and the cost will be $2,000.
9. The data system outlets were installed in each class room.
10. Local area network system is provided by hard wired, and WI-FI wireless system.

Rating	Installed	Design Life	Updated
4 - Acceptable	1981	30	MAR-12

Partial View.

Event: **Indoor Air Quality Upgrade**

Type	Year	Cost	Priority
Indoor Air Quality Upgrade	2011	$12,146	Unassigned

Updated: AUG-11

Event: **Replace Building Envelope**

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$154,500	Unassigned

Updated: MAR-12

Event: **Replace Electrical**

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$46,400	Unassigned

Updated: MAR-12

Event: **Replace Interiors**

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$127,360	Unassigned

Updated: MAR-12

Event: **Replace Mechanical**

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$34,000	Unassigned

Updated: MAR-12

F1010.02.04 Portable and Mobile Buildings** - 1990 Portables

Six portable classrooms with storage room and corridor with link to north side of school added in 1990 of 542.5 sq. M.
The portables are wood framed supported on concrete piles with a crawl space with built-up asphalt roofing, acrylic stucco cladding housing sealed fixed and opening PVC framed window units with painted metal mesh window covering, painted metal clad entry and utility doors , prefinished metal louvres and wood stairs with painted metal railings supported on concrete piles.
Interiors consist of carpeted flooring, rubber tile, vinyl covered gypsum wallboard walls, ceilings of suspended acoustical tile, visual display boards, painted wood doors and metal frames, single tier prefinished metal lockers, painted wood cabinetry with plastic laminated counter tops and louvred blinds.
In 2011 the estimated replacement costs are:

Envelope
542 sq. M Built-up Roofing = $ 70,460.00
380 sq. M EIFS Cladding = $ 54,000.00
20 sq. M PVC Windows = $ 20,000.00
8 Painted Metal Clad Doors = $ 8,000.00

Interior
118 sq. M Rubber Tile Flooring = $ 10,620.00
432 sq. M Carpeting = $ 20,080.00
540 sq. M Acoustical Tile = $ 29,700.00
Millwork @ $100/sq. M = $ 43,200.00
20 sq. M Blinds = $ 1,000.00
24 Visual Display Boards = $ 15,000.00
111 Metal Lockers = $ 52,275.00

Mechanical
Each portable is c/w a gas fired roof top unit Carrier 48TFF004-30-1G 33.7 Kw input, 26.4 Kw output with air conditioning and ductwork. The roof top units were installed in 2001.
Replacement cost for 6 roof top units = $42,000.00
There is a roof mounted exhaust fan with ductwork for each portable group.
Replacement cost for 6 exhaust fan = $ 12,000.00
A hot water force flow heater is installed in each of the vestibule. Cost for 6 forces flow heater = $ 18,000.00

Electrical
1. Electrical Branch Circuit Panels: one 120/2083-phase, 4 wire, 225A; and six single phase, 4 wire 120/240V and rated 125A with 2P-50A incoming breaker service panels were installed in portable sections of the building . Lifecycle replacement shall be occurred in 2025 and the cost will be $23,000
2. Motor Starters and Accessories: six load switches for these portable furnaces, lifecycle replacement shall be occurred in 2025 and the cost will be $3,000
3. Interior Fluorescent lights: Fixtures was upgraded to T-8 fixtures completed with electromagnetic ballast in 2009. Lifecycle replacement shall be occurred in 2039 and the cost will be $22,000.
4. The Incandescent wall packs were installed above the exit doors.
5. The emergency battery packs are installed for emergency lighting system in 2006. The lifecycle replacement shall be occurred in 2026 and the cost will be $2,400.
6. The fire alarm system devices were connected to main building fire alarm panel in 2010, Lifecycle replacement shall be occurred in 2035 and the cost will be $11,000.
7. The intrusion system devices were connected to main school security panel in 2007 and Lifecycle replacement shall be occurred in 2032 and the cost will be $4,000.
8. The PA system devices were wired to main school systems and lifecycle replacement shall be occurred in 2022 and the cost will be $3,000.
9. The data system outlets were installed in each class room.
10. Local area network system is provided by hard wired, and WI-FI wireless system.

Rating	Installed	Design Life	Updated
4 - Acceptable	1990	30	MAR-12

Elevation View.

Event: Repair 6 Exit Stairs

Concern:
Existing exit stairs lack balustrades.
Recommendation:
Install balustrades and/or painted metal mesh screening to railings to meet ABC.

Type	Year	Cost	Priority
Code Repair	2012	$4,250	Medium

Updated: MAR-12

Event: Replace Building Enelope

Type	Year	Cost	Priority
Lifecycle Replacement	2020	$144,468	Unassigned

Updated: MAR-12

Event: Replace Electrical

Type	Year	Cost	Priority
Lifecycle Replacement	2020	$68,400	Unassigned

Updated: MAR-12

Event: Replace Interiors

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$172,325	Unassigned

Updated: MAR-12

Event: Replace Mechanical

Type	Year	Cost	Priority
Lifecycle Replacement	2015	$72,000	Unassigned

Updated: MAR-12

F1040.06 Other Special Facilities*

Electric kiln located in Art Room.

Rating	Installed	Design Life	Updated
4 - Acceptable	2005	0	MAR-12

S8 SPECIAL ASSESSMENT

K4010.01 Barrier Free Route: Parking to Entrance*

Barrier free access from the parking area to the building entrance is available on the south elevation (front of school).

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

K4010.02 Barrier Free Entrances*

Power actuated door opener.

Rating	Installed	Design Life	Updated
4 - Acceptable	2006	0	MAR-12

K4010.03 Barrier Free Interior Circulation*

Barrier free access is provided to all areas of the school.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	MAR-12

K4010.04 Barrier Free Washrooms*

Barrier free washrooms are provided opposite the library.

Rating	Installed	Design Life	Updated
4 - Acceptable	1980	0	AUG-06

K4030.01 Asbestos*

An asbestos abatement was conducted in three phase in 2001, 2002 and 2003.

Rating	Installed	Design Life	Updated
5 - Good	1980	0	MAR-12

K4030.04 Mould*

Mould abatement to Pod units completed in 2006.
No mould observed or reported in original school.

Rating	Installed	Design Life	Updated
5 - Good	1980	0	MAR-12

K4030.09 Other Hazardous Materials*

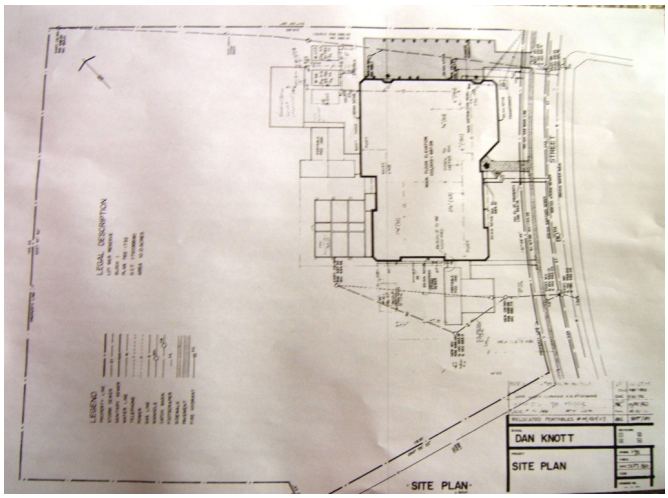
No other hazardous material known or reported

Rating	Installed	Design Life	Updated
5 - Good	1980	0	MAR-12

K5010.01 Site Documentation*

Site Plan

Rating	Installed	Design Life	Updated
4 - Acceptable	2011	0	MAR-12

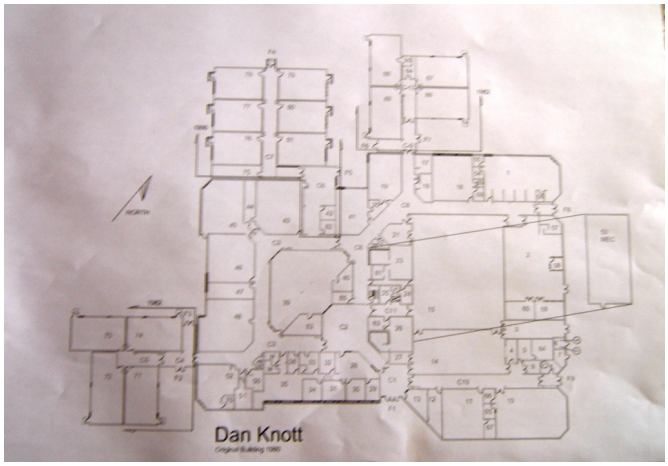


Site Plan

K5010.02 Building Documentation*

On 04 November 2011, Vic Maybroda of A&E Architectural & Engineering Group Inc. Supported by Neil Folkins of bacz Engineering Ltd. And Erol Seymen of Acuity Engineering & Consulting Services Ltd. Accompanied by Maintenance Supervisors of the Edmonton School Division No. 7 undertook an on site review of existing building and site conditions of the Dan Knott Elementary School.
The school is a single storey facility constructed in 1980 of 4406.7 sq. M. In 1982 two 4 classroom portable additions (pods) were added at the south and east end of school with a total area of 870.3 sq. M. In 1990, a six portable classroom pod addition of 542.5 sq. M was added to the east side of the facility.
The school including portables contains 15 classrooms, a computer room, 3 science rooms, an art room, a drama room, a music room, a home economics area, an industrial arts area, a weight training room, a library, 2 gymnasiums, administration and ancillary support spaces.
At the time of the site visit there were 440 enrolled students.

Rating	Installed	Design Life	Updated
4 - Acceptable	2011	0	MAR-12



Floor Plan