

RECAPP Facility Evaluation Report

Edmonton School District No. 7



Dan Knott Junior High School

B3086A
Edmonton

Facility Details

Building Name: Dan Knott Junior High School
Address: 1434 - 80 Street
Location: Edmonton

Building Id: B3086A
Gross Area (sq. m): 5,909.60
Replacement Cost: \$12,879,811
Construction Year: 0

Evaluation Details

Evaluation Company: Asset Evolution Incorporated (AEI)
Evaluation Date: May 10 2006
Evaluator Name: Mario Plastina

Total Maintenance Events Next 5 years: **\$2,482,755**
5 year Facility Condition Index (FCI): **19.28%**

General Summary:

Dan Knott Junior High School is a one-storey school with a second floor mechanical room and a total building area is 5909.60m². The original school was built in 1980 with an area of 4406.0m². In 1982, two 4-classroom additions (Pods) were added at the north & south end of the school with a total building area of 870.3m². In 1990, a six classroom additions (Pod) was added at the north-west corner of the school with a total building area of 542.5m².

No Portables are located on site.

The one storey school is comprised of 18 classrooms, a gymnasium with an adjacent lunch-room, a library, an industrial arts room, home economics room, drama room, 3-science rooms, computer lab and music room.

The 2006 student enrollment is 435 children.

Structural Summary:

Original 1980 building - The foundations consist of cast-in-place concrete grade beams and spread footings. The original building has cast-in-place concrete slabs-on-grade with conventional steel reinforcement. The roof comprises of a metal roof deck with steel structure supported by exterior & interior concrete walls. The structural walls and columns are poured in place concrete.

1982 Pod Additions - Structure - Wood frame construction with structural steel & wood piers bearing on undisturbed soil.

1990 Pod Addition - Structure - Wood frame construction with structural steel & concrete piers bearing on undisturbed soil.

Overall the structural elements are in acceptable condition.

Envelope Summary:

Original 1980 school - The exterior cladding consists primarily of brick around the perimeter of the school. The exterior walls on the gymnasium and some of the accent walls are clad with prefinished textured stucco panels and prefinished metal siding. The exterior window units have a combination double glazed aluminum frame with single hung units & fixed glazed panels. Metal screens have been fastened to several of the windows for safety concerns. The majority of the exterior doors are painted steel doors & frames with glazed panels. The roof covering above the north end of the original school has a built-up roof assembly. The roof above the south end of the original school including the upper roof level was replaced in 2000 with a SBS assembly. A large sloped clear storey area is located above the library.

1982 POD Additions - The exterior cladding on the 1982 additions (PODS) have prefinished metal siding around the perimeter of the addition. Painted plywood is located directly below and above the window assembly. The windows are double glazed aluminum frame units with operable sliders. The roof has a built-up roof assembly. The majority of the exterior doors are painted steel doors & frames with glazed panels.

1990 POD Addition - The exterior cladding on the 1990 addition (POD) has an EFIS(Stucco) exterior wall assembly. A painted plywood skirt is located at the base of the wall assembly. The windows are double glazed aluminum frame units with operable sliders. The roof has an inverted built-up roof assembly. The majority of the exterior doors are painted steel doors & frames with glazed panels.

Recommendations include reroofing the remainder of the 1980 building and 1982 POD plus repairs to the 1982 POD wall assembly.

Overall, the envelope of the building is in acceptable to marginal condition.

Interior Summary:

Original - 1980 school

The main entrance vestibules & foyer has a quarry tile floor finish, The washrooms/change rooms have a ceramic tile floor finish. The music room, drama, computer room, staff room, administration area, and library have a carpet floor finish. VCT is located throughout the corridors and the majority of the classrooms. The gymnasium has a hardwood floor finish. The lunchroom has a sheet vinyl floor finish. The majority of the utility areas, second floor mechanical room and industrial arts room have a paint finish on the concrete slab.

The majority of the interior walls are painted masonry block walls and gypsum board with a vinyl wall covering. Wood paneling is located in the library and office area. The library and general office area have glazed walls with GWG panels.

The interior doors are either stained wood doors and/or painted steel doors in hollow metal frames. Several classroom doors have sidelights with GWG inserts.

The majority of the school has a suspended 2'x4' acoustical tile ceiling. The structure is painted and exposed in the gymnasium & lunch room. Painted gypsum board ceilings are located in the library, washrooms and change rooms.

1982- Additions (Pods)

The classrooms & corridors have a VCT floor finish throughout.

The majority of the interior walls are gypsum board with a vinyl wall covering.

The interior doors are painted solid wood doors in hollow metal frames. Several classroom doors have sidelights with GWG inserts.

The additions have a suspended 2'x4' acoustical tile ceiling.

1990 - Addition (Pod)

The classrooms have a carpet floor finish. The corridor has a VCT floor finish.

The majority of the interior walls are gypsum board with a vinyl wall covering.

The interior doors are painted solid wood doors in hollow metal frames. Several classroom doors have sidelights with GWG inserts.

The addition has a suspended 2'x4' acoustical tile ceiling.

Overall, the interior finishes are in marginal to acceptable condition.

Mechanical Summary:

Space heating for the 1980 building is provided by two Raypak atmospheric hot water boilers in mechanical penthouse. Hot water is distributed to heating coils, ceiling forced flow heaters, hot water radiators and unit heaters. A shell and tube heat exchange transfers heat from hot water to glycol solution to feed the glycol heating coil. Mid-efficiency gas-fired furnaces provide space heating to the 1982 pods classrooms. Six gas-fired electric cooling roof top units provide space heating and cooling to the 1990 pods classrooms.

Ventilation for the 1980 building is provided by an air handling unit in mechanical penthouse. Fresh air is being heated by the glycol heating coil and mixed with return air inside the air handling unit. Air handling unit supplies the air throughout the building with reheat coils to control temperature at different spaces. A separate system includes supply air fan, return air fan and reheat coil is serving the Gymnasium and Lunch Room. Special ventilation system includes the dust collection system and fume extraction system in Industrial Arts Room and exhaust system for Science Lab in Classrooms 108 and 109. Exhaust system for Kilns furnace is required in Arts Classroom 118.

A steam cast iron boiler in mechanical room provides steam humidification to the air handling unit.

The pneumatic HVAC control system consists of air compressor, thermostats, control valves for unit ventilators and forced flow heaters. 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, flush tank floor mounted water closets, flush valve floor mounted urinals, showers, janitor sinks, floor drains and wall mounted porcelain drinking fountains. Most of the plumbing fixtures are original. Original lavatories in Boys and Girls washrooms were replaced with new stainless steel bowls and metering self-closing faucets in 1999.

Both water and gas meters are located in the Exterior Storage room beside Custodian Office. The underground water main was replaced in 2004.

Fire protection system includes standpipe system and duct smoke detectors. This building is not sprinkler protected. A dedicated fire main and fire pump 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.

Based on the age and condition of the mechanical systems, the following components are recommended for repair and replacement within the years 2006 to 2010.

- Replace original furnaces #1 to 6 in pods .
- Replace original hot water pumps #1 to 4

Overall the mechanical systems are in acceptable condition.

Electrical Summary:

Dan Knotts Junior High School is fed from an EPCOR padmounted transformer located on the school grounds. The main switchboard is rated at 1200A, 120/208V. There are individual motor starters for the major mechanical equipment. A 50kW natural gas emergency generator is located in the main electrical room.

The wiring in the building is typically standard wiring in conduit.

The interior fluorescent lighting fixtures have T-12 lamps and magnetic ballasts. The exit lighting in the building consists of metal units that have been retrofitted with LED lamps. The emergency lighting is fed from standard fluorescent fixtures fed from an emergency panel. The exterior lighting consists of wall mounted H.I.D fixtures and incandescent fixtures.

The building is equipped with an Edwards 6500 system. Detection and end devices include, smoke and heat detectors, bells and pull stations.

The various communications and security systems within the school include; an RX1608 security system that monitors motion detectors, a Bogen Multicom 2000 P.A. system and a Norstar/Meridian telephone system. Video surveillance and data systems are installed within the school.

It is recommended, as routine maintenance, that a program for annual examination of major electrical components be instituted. Maintenance should include thermographic scans for hot spots and power shut down to allow examination of interior components for accumulated debris and signs of corrosion.

Several building systems such as the fire alarm, lighting and original panels appear to be in acceptable condition but are reaching the end of their theoretical life in 2010.

Overall the electrical components for Dan Knotts Junior High School are in acceptable 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*

Original 1980 building - The foundations consist of cast-in-place concrete grade beams and spread footings.

1982 Pod Additions - Structural steel & wood piers bearing on undisturbed soil.

1990 Pod Addition - Structural steel & concrete piers bearing on undisturbed soil.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	AUG-06

A1030 Slab on Grade*

Original 1980 building - The building has cast-in-place concrete slabs-on-grade with conventional steel reinforcement.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	AUG-06

B1010.01 Floor Structural Frame (Building Frame)*

Original 1980 building - Concrete structural flat slab supported by steel joists spanning between steel beams & column and foundation walls.

1982 Pod Additions - Structure - Wood frame construction with structural steel & wood piers bearing on undisturbed soil.

1990 Pod Addition - Structure - Wood frame construction with structural steel & concrete piers bearing on undisturbed soil.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	AUG-06

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

Original 1980 building - Structural reinforced concrete block walls

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	AUG-06

B1010.09 Floor Construction Fireproofing*

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	AUG-06

B1010.10 Floor Construction Firestopping*

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	AUG-06

B1020.01 Roof Structural Frame*

1980 Original school - Metal roof deck with steel structure supported by exterior & interior concrete walls.

1982 Pod Additions - Roof Structure - Wood frame construction assembly

1990 Pod Addition - Roof Structure - Wood frame construction assembly

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	AUG-06

B1020.06 Roof Construction Fireproofing*

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	AUG-06

S2 ENVELOPE

B2010.01.02.01 Brick Masonry: Ext. Wall Skin*

1980 Original building - The exterior cladding consists primarily of exterior brick.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	75	AUG-06

B2010.01.05 Exterior Insulation and Finish Systems (EIFS)*

1980 Original building - The exterior walls of the gymnasium and some accent walls have a aggregate stucco panel assembly.

1990 Addition - The exterior cladding on the (POD) has an EFIS(Stucco) exterior wall assembly.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	75	AUG-06

B2010.01.06.03 Metal Siding**

1980 Original building - The exterior walls of the library on the roof level have prefinished metal siding.

The exterior cladding on the 1982 additions (PODS) have prefinished metal siding around the perimeter of the addition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1980	40	AUG-06

B2010.01.06.04 Wood Siding**

1982 POD additions - Painted plywood panels are located above & below the window assembly.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
2 - Poor	1982	40	AUG-06

Event: Replace Wood Siding

Concern:

The wood panels are rotted and water has penetrated the exterior wall assembly. Currently one of the classrooms in the Pod addition at the south end of the school is being renovated due to evidence of mould based on an earlier study conducted in 2003. A budget is being provided for potential repairs to the remaining exterior walls on the 1982 Pod additions.

Recommendation:

Replace and repair all exterior walls in the 1982 Pod additions as per the repairs conducted in classroom 102 - South Pod addition. (an estimate of \$10,000/per exterior wall with windows is recommended).



<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2007	\$86,100	High

Updated: APR-07

B2010.01.09 Expansion Control: Exterior Wall Skin*

Expansion/control joints are located throughout the brick and stucco cladding assembly.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	75	AUG-06

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

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

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	20	AUG-06

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

An EFIS(Stucco) assembly on the 1990 addition has a paint finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1990	15	AUG-06

Event: Replace Exterior Stucco**Concern:**

Exceeded theoretical life expectancy

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$14,760	Unassigned

Updated: AUG-06

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

1980 Original building - Interior concrete block construction on the exterior wall assembly.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	AUG-06

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

1982 & 1990 Additions - Wood frame construction assembly. See B2010.01.06.04 Wood Siding** for details.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	100	AUG-06

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

1982 & 1990 Additions - Wood frame construction assembly. See B2010.01.06.04 Wood Siding** for details.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	AUG-06

B2010.06 Exterior Louvers, Grilles, and Screens*

Prefinished metal security screens are present on several classroom windows.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	AUG-06

B2010.09 Exterior Soffits*

Exterior soffits consist of a prefinished stucco finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	AUG-06

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

1980 Original building - The exterior window units are double glazed aluminum frame with operable awning units above fixed glazed panels. Metal screens have been fastened to several of the windows for safety concerns.

1982 & 1990 Additions - The windows are double glazed aluminum frame units with operable sliders. See B2010.01.06.04 Wood Siding** for details.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	JAN-07

B2030.01.02 Steel-Framed Storefronts**

The entrance doors are painted steel doors with painted steel frames and GWG inserts . There are approximately a total of 40 exterior exit doors throughout the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	30	AUG-06

Event: Replace Steel-Framed Storefronts**Concern:**

Original 1980 building - Exceeded theoretical useful life.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$36,900	Unassigned

Updated: AUG-06

B3010.01 Deck Vapor Retarder and Insulation*

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	AUG-06

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

Original 1980 building - The roof covering above the north end has a built-up roof assembly.

1982 Pod Addition - The roof has a built-up roof assembly on both pods.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1980	25	AUG-06

Event: Replace roof**Concern:**

Exceeded theoretical useful life - 1982 Pod addition

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$98,400	Unassigned

Updated: AUG-06

Event: Replace roof**Concern:**

Several blister and moss growth was observed on the original built up roof assembly. Excessive ponding was evident.

Recommendation:

Replace built-up roof above the original 1980 building

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2008	\$184,500	Medium

Updated: AUG-06

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

The roof above the south end of the original school including the upper roof level was replaced in 2000 with a SBS assembly. A large sloped clear storey area is located above the library.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2000	25	AUG-06

B3010.04.08 Membrane Roofing (Inverted/ Protected)**

1990 Pod Addition - The roof has an inverted roof assembly.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1990	30	AUG-06

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

There is one metal roof hatch in the boiler room that provides access to the roof.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	AUG-06

S3 INTERIOR

C1010.01 Interior Fixed Partitions

Interior partitions typically consist of painted masonry block walls and painted gypsum board walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	AUG-06

C1010.05 Interior Windows*

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

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	80	AUG-06

C1010.07 Interior Partition Firestopping*

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	AUG-06

C1020.01 Interior Swinging Doors*

The interior swing doors generally consist of solid core painted and/or clear finished wood doors in painted steel frames.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	40	AUG-06

C1020.03 Interior Fire Doors*

Fire doors are located in the common area corridors between the original building and each addition. The doors are rated and labeled.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	AUG-06

C1030.01 Visual Display Boards**

Tackboards, chalkboards and whiteboards are located in each classroom area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	20	AUG-06

Event: Replace Visual Display Boards

Concern:

1980 Original building - Exceeded theoretical useful life.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$43,050	Unassigned

Updated: AUG-06

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

1980 Original building - Painted metal washroom stall partitions are located in each boy's & girls washroom.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	30	AUG-06

Event: Replace Toilet Partitions**Concern:**

Reached theoretical useful life

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$24,600	Unassigned

Updated: AUG-06

C1030.08 Interior Identifying Devices*

The room number or room name is painted on the interior doors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	AUG-06

C1030.10 Lockers**

Prefinished metal lockers are located throughout the school corridors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	30	AUG-06

C1030.12 Storage Shelving*

Clear finish plywood storage shelving throughout.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	AUG-06

C1030.14 Toilet, Bath, and Laundry Accessories*

The washrooms are equipped with typical washroom accessories: Paper towel dispensers, toilet paper dispensers, hand-soap dispensers, waste bins and mirrors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	AUG-06

C2010 Stair Construction*

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

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	AUG-06

C2020.08 Stair Railings and Balustrades*

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

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	40	AUG-06

C2030.01 Ramp Construction*

1990 addition - The ramp is constructed with a wood frame assembly.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1990	100	AUG-06

C2030.02 Ramp Finishes*

1990 Addition - A ramp with a rubber floor finish from the original 1980 school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1990	30	AUG-06

C2030.03 Ramp Railings*

Stained wood railing is located along the ramp wall in corridor.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1990	50	AUG-06

C3010.04 Gypsum Board Wall Finishes*

Several of the demising walls in the building consist of painted gypsum walls.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	60	AUG-06

C3010.06 Tile Wall Finishes**

The interior walls in the washrooms have a 4"x4" ceramic tile wall finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	40	AUG-06

C3010.09 Acoustical Wall Treatment**

Acoustical wood wall panels are located throughout the gymnasium, library & in the music room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	20	AUG-06

C3010.11 Interior Wall Painting*

The interior partitions throughout the school have a paint finish.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1995	15	AUG-06

Event: Repaint Interior Walls**Concern:**

Exceeded theoretical life

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$43,050	Unassigned

Updated: AUG-06

C3010.12 Wall Coverings*

1980 Original Building, 1982 Additions & 1990 Addition - A majority of the interior demising walls in the building consist of gypsum walls with a vinyl and/or fabric wall covering.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1990	15	AUG-06

Event: Replace vinyl wall coverings

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$24,600	Unassigned

Updated: AUG-06

C3020.01.02 Paint Concrete Floor Finishes*

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

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1990	10	AUG-06

Event: Repaint Concrete Floors**Concern:**

Exceeded theoretical useful life.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$9,840	Unassigned

Updated: AUG-06

C3020.02 Tile Floor Finishes**

Quarry tile & ceramic tile flooring is located in the entrance vestibules, washrooms and change rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	50	AUG-06

C3020.04 Wood Flooring**

Hardwood flooring is located in the gymnasium

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	30	AUG-06

C3020.07 Resilient Flooring - Sheet Vinyl**

(2005) - Sheet Vinyl is located in the main lunchroom.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2005	20	AUG-06

C3020.07 Resilient Flooring -VCT**

1980 Original Building - VCT is located throughout the classrooms, ancillary rooms, science rooms and corridors

1982 Additions - VCT is located throughout the classrooms and corridor.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	20	AUG-06

Event: Replaced VCT flooring**Concern:**

Exceed theoretical useful life. Original 1980 & 1982 Additions only.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$307,500	Unassigned

Updated: AUG-06

C3020.08 Carpet Flooring - 1990 Addition**

Carpeting is located in the all the classrooms of the 1990 Addition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1990	15	AUG-06

Event: Replace Carpet Flooring - 1990 Addition**Concern:**

Exceeded theoretical useful life.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$29,520	Unassigned

Updated: AUG-06

C3020.08 Carpet Flooring -Original building**

(2000 & 2001) - Carpeting is located in few classrooms, office area, music room and library.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2000	15	JAN-07

C3030.04 Gypsum Board Ceiling Finishes*

Gypsum board ceilings are located in the washrooms & change rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	AUG-06

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

The majority of the ceilings have a 2'-0"x4'-0"suspended acoustical tile assembly.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	25	AUG-06

Event: Replace Acoustic Ceiling Tiles**Concern:**

Exceeded theoretical useful life.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$307,500	Unassigned

Updated: AUG-06

C3030.07 Interior Ceiling Painting*

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

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	20	AUG-06

Event: Repaint Interior Ceilings**Concern:**

Exceeded theoretical useful life.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$30,750	Unassigned

Updated: AUG-06

S4 MECHANICAL

D2010.01 Water Closets

Original floor mounted water closets with flushometers in the Boys and Girls Washrooms and Change Rooms; flush tanks units in the Staff Washrooms and other small washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	35	AUG-06

D2010.02 Urinals

Original floor mounted urinals with flushometers in Boy's Washrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	35	AUG-06

D2010.03 Lavatories

All original lavatories in Boys and Girls Washrooms were replaced with stainless steel, counter top lavatories and metering self-closing faucets in 1999. Stainless steel and porcelain lavatories with hot and cold water faucets are serving the staff washrooms and Gymnasium instructor's washroom.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1999	35	AUG-06

D2010.04 Sinks**

Sinks includes floor mounted mop receptor type service sink in Custodian Storage Room, stainless steel single-compartment kitchen sink in Staff Room, stainless steel lab sinks in Science classrooms, oversized stainless steel sink in Industrial Arts room, double compartment stainless steel kitchen sinks in Home Economics Classroom and single compartment stainless steel sinks in Arts Classroom.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	30	AUG-06

Event: Replace original sinks

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$49,200	Unassigned

Updated: OCT-06

D2010.05 Showers**

Shower heads and metered faucets are located in Boys and Girls Change Room. The shower rooms are constructed with ceramic tile wall and floor with floor drains. The supply water temperature for showers is controlled by an anti-scalding valve.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	30	AUG-06

Event: Replace original showers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2010	\$24,600	Medium

Updated: OCT-06

D2010.08 Drinking Fountains / Coolers**

Original vitreous china wall mounted porcelain drinking fountains are located in the corridors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	35	AUG-06

D2020.01.01 Pipes and Tubes: Domestic Water*

Incoming water meter is located in Exterior Storage Room beside Custodian Office. Original incoming water main was replaced with new 100mm PVC pipe in 2004. 50mm diameter water main with 25mm water meter is serving the whole building. Generally, the water pipes are original copper pipes.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	40	AUG-06

D2020.01.02 Valves: Domestic Water**

Sinks, lavatories, water closets and drinking fountains are equipped with isolating valves. An anti-scalding mixing valve in shower room is serving the shower.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	40	AUG-06

D2020.01.03 Piping Specialties (Backflow Preventors)**

A fill assembly equips with backflow preventor and pressure reducing valve is serving the hot water and steam boiler systems. This device was installed in 1999.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1999	20	AUG-06

D2020.02.02 Plumbing Pumps: Domestic Water**

A domestic hot water recirculating pump located in boiler room to serve the domestic hot water system in the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	20	AUG-06

Event: Replace Domestic Hot Water Recirculating Pump**Concern:**

Domestic hot water recirculating pump has exceeded its life expectancy. Replace pump with new.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$3,690	Unassigned

Updated: OCT-06

D2020.02.06 Domestic Water Heaters**

Two gas-fired domestic hot water heaters located in the Boiler Room. The heaters are induced draft A.O. Smith Master Fit series. Both domestic water heaters were replaced in 2003.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2003	20	AUG-06

D2020.03 Water Supply Insulation: Domestic*

Original domestic water pipe insulation in the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	40	AUG-06

D2030.01 Waste and Vent Piping*

The sanitary system consists of black steel pipes and connects to the municipal sewage. The vent pipes are through the roof type.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	50	AUG-06

D2040.01 Rain Water Drainage Piping Systems*

The rain water drainage system consists of roof drains, rain water leaders and internal pipes connected to the municipal storm pipe.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	50	AUG-06

D2040.02.04 Roof Drains*

The roof drains are conventional type without storm water management control device.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	40	AUG-06

D3010.02 Gas Supply Systems*

The underground incoming 150mm diameter high pressure gas main along with pressure regulator and gas meter is located in the Exterior Storage Room beside Custodian Room. After the meter, 150mm diameter, 7" water gauge pressure gas main is serving a steam boiler, two hot water boilers, two domestic hot water tanks in mechanical room and gas valves in Science Lab Classrooms. Main shut-off valve locates in each Science Lab Classroom to control the gas valves in each laboratory station.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	60	AUG-06

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

Steam humidifier system consists of one gas-fired cast iron sectional steam boiler and burner in Mechanical Room. Boiler is H.B. Smith model G-400 boiler with input and output capacity of 2,000 MBH and 1,600 MBH respectively. This boiler provides steam to the humidifiers for the two Air Handling Units.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	35	AUG-06
	<u>Capacity Size</u>	<u>Capacity Unit</u>	
	586	kW	

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

B-vent chimney is serving the steam boiler system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	35	AUG-06

D3020.01.04 Water Treatment: Steam Boilers*

The existing chemical treatment system consists of a chemical barrel and a feeding pump locate beside the steam boiler.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	35	AUG-06

D3020.02.01 Heating Boilers and Accessories: H.W. - Boiler #1 and #2**

(1980) Heating boiler system consists of two gas-fired atmospheric hot water boilers and burners. Boiler is Raytherm Model 1353-WTD; gas input=1,352.9 MBH. These boilers are the source to serve the space heating in the whole building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	35	AUG-06

Event: Replace original boiler #1and #2

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$147,600	Unassigned

Updated: OCT-06

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

Chimney system includes B-vent and rain cap for each hot water boiler.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	35	AUG-06

Event: Replace original Chimney

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$24,600	Unassigned

Updated: OCT-06

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

The water treatment system for hot water system includes strainers, water filter and chemical treatment.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	30	AUG-06

Event: Replace water treament system for hot water boiler

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$9,840	Unassigned

Updated: OCT-06

D3020.03.01 Furnaces - Furnace #1 to 6**

Each pod classroom is served by a mid-efficiency gas-fired furnace. The furnaces are located in the classroom furnace rooms. Supply air is discharged from the bottom of unit and distributed with ductwork along the perimeter wall. Return air is taken from the top of the unit ducted from the sidewall grille. Six furnaces are original. They are Palmaire model PAC105AH; gas input=94.5MBH; output=75.6MBH.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1982	25	AUG-06

Event: Replace original furnace #1 to 6**Concern:**

The original furnaces have exceeded their life expectancy. They show sign of rusting and aging.

Recommendation:

Replace six original furnaces with high efficiency type gas-fired furnaces.

Consequences of Deferral:

Higher maintenance cost. Higher chance of equipment break down. No heat to classrooms.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2008	\$61,500	Low

Updated: AUG-06

D3020.03.01 Furnaces - Furnace #7 and 8**

Two original furnaces in two of the pod classrooms #102 and 103 were replaced with mid-efficiency gas-fired furnace in 2002. This furnaces are Carrier WeatherMaker 8000TS series model 58CTA090-10114.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2002	25	AUG-06

D3020.03.02 Chimneys (&Comb. Air): Furnace*

The flue pipes for furnace #1 to 8 are B-vents through roof. Combustion air is taken from outdoor and controlled by motorized damper.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	25	AUG-06

D3040.01.01 Air Handling Units: Air Distribution - AHU-1 Classroom, Office and General Area**

One packaged Air Handling Unit (AHU) and one site-built AHU locate in mechanical penthouse. This AHU serves the areas other than Gymnasium, Lunch room and the pods. It is equipped with a supply air fan, return air fan, hot water coil and steam humidifier. A duct smoke detector is monitoring the equipment and will shut down the AHU when smoke situation is detected. The supply air fan delivers 10,435 L/S at 1,060 Pa. Return air fan delivers 9,100 L/S at 250 Pa.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	30	AUG-06

Event: Replace Air Handling Unit, AHU-1

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$86,100	Unassigned

Updated: OCT-06

D3040.01.01 Air Handling Units: Air Distribution - AHU-2 Gymnasium and Lunch Room**

One packaged Air Handling Unit (AHU) and one site-built AHU locate in mechanical penthouse. This AHU serves the Gymnasium and Lunch room. It is equipped with a supply air fan, return air fan, hot water coil and steam humidifier. A duct smoke detector is monitoring the equipment and will shut down the AHU when smoke situation is detected. The supply air fan delivers 4,040 L/S at 435 Pa. Return air fan delivers 3,270 L/S at 250 Pa.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	30	AUG-06

Event: Replace Air Handling Unit, AHU-2

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$61,500	Unassigned

Updated: NOV-06

D3040.01.03 Air Cleaning Devices: Air Distribution*

The air cleaning devices include the air filters in the Air Handling Units and furnaces.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	30	AUG-06

D3040.01.04 Ducts: Air Distribution*

Air distribution duct system includes supply air ducts, return air ducts, duct insulation, volume dampers, fire dampers, acoustic lining and motorized dampers. Round exposed duct is serving the Gymnasium at high level and return at high level by side wall grille. Ventilation air to other areas is distributed by supply and return air duct in corridor. Branch ducts are terminated with sidewall diffusers or grilles in the classrooms at high level or ceiling diffusers and eggcrate in area with false ceiling. Supply air duct in 1982 Pod Classrooms is built under the cabinet along perimeter wall. Air is supplied through the floor register built on top of cabinet. Supply air is distributed via the ceiling diffusers in 1990 Pod Classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	50	AUG-06

D3040.01.07 Air Outlets & Inlets:Air Distribution*

Air outlets and inlets for air distribution system includes ceiling mounted or wall mounted linear diffusers, eggcrates return air grille, door grilles, square ceiling diffusers, opposed type volume dampers for diffusers, outdoor louvers, volume damper for return air grilles and residential type floor registers in 1982 Pods.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	30	AUG-06

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

Steam distribution system includes steam pipes, pipe insulation and steam condensate return sump and pumps.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	30	AUG-06

Event: Replace original steam distribution system

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$30,750	Unassigned

Updated: OCT-06

D3040.03.01 Hot Water Distribution Systems**

Hot water distribution system includes two hot water main circulating pumps, P-1 and P-2, two glycol heating pumps, P-3 and P-4, hot water pipes, pipe insulation, pressure gauges, thermometers, regulating valves, strainers, shut-off valves, control valves, 3-way mixing valves, pressure different valves, expansion tanks and air vents. The expansion tanks include HG vertical tank, model HGTV-110; 66 US Gallon and Westeel-Rosco vertical tank and Extrol model XT-30 ELBI. Hot water pumps, P-1 and P-2 are Taco model BB2008-7.70B5B2D2T14; 60GPM at 59 feet head. Both P-3 and P-4 are in-line centrifugal pumps hung at high level.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1980	40	AUG-06

Event: Replace pump #1 to 4**Concern:**

Original hot water pumps #1 to 4 require frequent maintenance and repairs to keep the equipment in operation.

Recommendation:

Replace original hot water pumps with new.

Consequences of Deferral:

Higher maintenance cost. No heat in the building.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2008	\$24,600	Low

Updated: AUG-06



D3040.04.01 Fans: Exhaust**

About twenty three rooftop centrifugal cabinet fans and ceiling fans to serve the washrooms, shower, change rooms, janitor rooms and Science Lab classrooms. The housing of the cabinet fans had been repainted. Three exhaust fans provides ventilation in the crawl space in the two 1982 pod additions and 1990 pod addition.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	30	AUG-06

Event: Replace original rooftop cabinet fans

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$73,800	Unassigned

Updated: OCT-06

D3040.04.03 Ducts: Exhaust*

All exhaust fans are connected with ductwork to serve washrooms, shower, change rooms, janitor rooms and Science Lab classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	50	AUG-06

D3040.04.05 Air Outlets and Inlets: Exhaust*

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

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	30	AUG-06

D3040.05 Heat Exchangers**

A shell and tube heat exchanger locates in mechanical room transfers heat from hot water to glycol solution.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	30	AUG-06

Event: Replace Heat Exchangers

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$24,600	Unassigned

Updated: AUG-06

D3050.01.02 Packaged Rooftop Air Conditioning Units (& Heating Units)**

Six gas-fired, electric cooling roof top units are serving the 1990 pod classrooms. These roof top units were replaced in 2001.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2001	30	AUG-06

D3050.02 Air Coils**

Two hot water heating coils RC-1 and RC-2 in mechanical penthouse are serving Gymnasium and Lunch Room respectively. A glycol heating coil, HC-1 preheats the fresh air to serve air handling unit AHU-1. A hot water coil is serving air handling unit AHU-2. Hot water reheat coils are located in the air distribution ductwork to provide temperature control in the classrooms and offices.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	30	AUG-06

Event: Replace air coils

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$123,000	Unassigned

Updated: AUG-06

D3050.03 Humidifiers**

Two steam humidifiers are serving the Air Handling Unit, AHU-1 and AHU-2.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	25	AUG-06

Event: Replace Humidifier

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$12,300	Unassigned

Updated: AUG-06

D3050.05.01 Convectors**

Hot water convectors are located in washrooms and change rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	40	AUG-06

D3050.05.03 Finned Tube Radiation**

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

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	40	AUG-06

D3050.05.06 Unit Heaters**

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

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	30	AUG-06

Event: Replace unit heaters

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$30,750	Unassigned

Updated: AUG-06

D3060.02.01 Electric and Electronic Controls**

The furnaces in Pod classrooms are controlled by the electronic thermostat. Cost for controls include in item D3020.03.01.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	30	AUG-06

D3060.02.02 Pneumatic Controls**

The pneumatic control system consists of air compressor and zone sensors to control the control valves, 3-way valves and actuators for motorized dampers. A remote alarm system will notify the main office if the boilers fail.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	40	AUG-06

D3090 Other Special HVAC Systems and Equipment*

Special ventilation system includes the dust collection system, fume extraction system and paint booth in Industrial Arts Room and exhaust system for Science Lab in Classrooms 108 and 109. The storage room inside Arts Classroom 118 is overheated because of the Kiln furnace. Ventilation system is required for Kiln furnace in Arts Classroom 118.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	0	AUG-06

Event: Replace original dust collection system

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$53,505	Unassigned

Updated: OCT-06

D4020 Standpipes*

Fire hose cabinets are located in Gymnasium only. It is fed from the same cold water main with domestic water system.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	100	AUG-06

D4030.01 Fire Extinguisher, Cabinets and Accessories*

ABC type fire extinguishers locate mainly in corridor. Most of the fire extinguishers are housed in a recessed wall mounted cabinet.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	30	AUG-06

D4090.07 Fire Pumps & Water Storage Tanks*

A dedicated fire main and fire pump 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.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	40	AUG-06

S5 ELECTRICAL

D5010.01 Main Electrical Transformers**

The incoming hydro service to Dan Knott Junior High School is a 120/208V, 3-phase, 4-wire service from an exterior padmounted transformer located on the East side of the school property. The padmounted transformer is owned and maintained by EPCOR. The EPCOR meter is located in the main electrical room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	40	AUG-06

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

The main electrical switchboard is a Canadian General Electric switchboard rated at 1200A, 120/208V, 3-phase, 4-wire. The switchboard has a 1200A main breaker and a distribution section with moulded case breakers feeding the transfer switch and branch circuit panels within the school. The main electrical switchboard is original equipment that was installed when the school was constructed.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	40	AUG-06

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

Electrical branch circuit panelboards within the 1990 pod are Federal Pioneer panels.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1990	30	AUG-06

D5010.05 Electrical Branch Circuit Panelboards (Secondary Distribution) - Original school and 1982 pods**

The majority of the electrical branch circuit panelboards are CGE panels that appear to have been installed when the building was originally constructed. The shop panels are equipped with contactors and emergency shut-off buttons. Stab-Lok panels are used in the 1982 pods.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	30	AUG-06

Event: Replace panels - Original school and 1982 pods

Concern:

The original school branch circuit panels have reached their theoretical life expectancy.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$73,800	Unassigned

Updated: AUG-06

D5010.07.02 Motor Starters and Accessories**

The motor starters within the school are individual motor starters (Klockner Moeller) or motor rated starter switches.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	30	AUG-06

Event: Replace motor starters**Concern:**

The motor starters have reached their theoretical life expectancy.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$12,300	Unassigned

Updated: AUG-06

D5020.01 Electrical Branch Wiring*

The majority of the cabling is standard building wire in EMT conduit. Armoured cable has been provided, in selected locations, for final connections to mechanical and miscellaneous equipment.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	50	AUG-06

D5020.02.01 Lighting Accessories (Lighting Controls)*

Lighting is typically controlled by individual 120V switches within the individual rooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1990	30	AUG-06

D5020.02.02.01 Interior Incandescent Fixtures*

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

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	30	AUG-06

D5020.02.02.02 Interior Fluorescent Fixtures**

The typical classroom lighting consists of wrap-around, two lamp fluorescent fixtures, surface mounted on the ceiling. Surface mounted 1 foot by 4 foot fluorescent fixtures have been installed in the corridors of the main school. Two lamp fluorescent fixtures with wire guards have been provided in the gymnasium. The typical classroom fixture in the 1990 pod is a recessed 1 foot by 4 foot fluorescent fixture. The fluorescent lighting fixtures throughout the school have T12 lamps and magnetic ballasts.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	30	AUG-06

Event: Replace Interior Fluorescent Fixtures**Concern:**

The interior fluorescent fixtures have reached their theoretical life expectancy.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$184,500	Unassigned

Updated: AUG-06

D5020.02.03.01 Emergency Lighting Built-in*

Existing building fluorescent lighting fixtures, fed from emergency panels, are utilized for emergency lighting.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	35	AUG-06

D5020.02.03.03 Exit Signs*

The majority of the exit signs are metal, stencil faced exit signs that have been retrofitted with LED lamps.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1995	30	AUG-06

D5020.03.01.01 Exterior Incandescent Fixtures*

Incandescent Kennal surface mounted fixtures are mounted on the exterior walls of the original school and 1982 pods.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	30	AUG-06

D5020.03.01.04 Exterior H.P. Sodium Fixtures*

The exterior lighting for the 1990 pod consists of H.P.S wallpack fixtures on the exterior walls at exit door locations.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1990	30	AUG-06

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

Timers have been provided for exterior lighting control.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1990	30	AUG-06

D5030.01 Detection and Fire Alarm**

The fire alarm system control panel is an Edwards 6500 panel with 11 active zones and 1 spare zone. The control panel is located in the general office and there is a remote annunciator at the main entrance. The audible devices within the school are 10" dia. Bells. Strobes have not been installed. Duct mounted smoke detection has been provided for the gymnasium air handling unit.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	25	AUG-06

Event: Replace fire alarm system**Concern:**

The fire alarm system has exceeded its theoretical life expectancy.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$55,350	Unassigned

Updated: AUG-06

D5030.02.02 Intrusion Detection**

The security system is an RX1608 system with the main panel located in the Compactor room. A security system keypad has been located in the custodian room. PIR smoke detectors have been provided throughout the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2005	25	AUG-06

D5030.02.04 Video Surveillance**

Sanyo camera system and time lapse VCR, and multi-plexer located in the Custodian's Office. Two (2) cameras located in the parking lot.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1998	25	AUG-06

D5030.03 Clock and Program Systems*

The majority of the clocks within the school are battery powered clocks.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1990	25	AUG-06

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.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1998	25	AUG-06

D5030.04.04 Data Systems*

The data system server is located in the staff area - photocopy room. Cat. 5 cables are used for the network wiring within the school. Supernet has been installed in the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1996	25	AUG-06

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.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	2002	20	AUG-06

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

A 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. Generator is leaking oil and requires maintenance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	35	AUG-06

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1090.04 Residential Equipment*

The home economic cooking labs are equipped with refrigerator, stoves, microwaves and several small kitchen appliances.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	10	AUG-06

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

Basketball hoops are located in the gymnasium. A stair climber, treadmill and other therapeutic accessories were located in a classroom (Rm.106) that was converted to an exercise room.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	15	AUG-06

E2010.02 Fixed Casework**

Original 1980 building

Each classroom is equipped with custom wood open faced and/or painted cabinet units.

Each science laboratory is equipped with upper wood cabinets, lower cupboards c/w counter-top, open fixed shelving. Most of the other labs, such as; home economics, industrial arts, and music all have fixed storage wood cabinets throughout the room.

The library has fixed and moveable wood shelving casework.

Glass display cabinets are located in the corridors & entrance area.

1982 Additions - Each classroom is equipped with custom wood open faced and/or painted cabinet units.

1990 Addition - Each classroom is equipped with custom wood open faced and/or painted cabinet units.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1980	35	AUG-06

Event: Replace classroom millwork

Concern:

Several plastic laminate counter-tops are worn & have deteriorated.

Recommendation:

Replace all damaged Plastic laminate counter-tops.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2007	\$36,900	Low

Updated: AUG-06

E2010.03.06 Curtains and Drapes**

Curtains are located in the library, staff room and most of the classrooms.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	30	AUG-06

Event: Replace curtains

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$36,900	Unassigned

Updated: AUG-06

E2020 Moveable Furnishings

Desks with plastic laminate tops are located throughout the classrooms. Labs & shops have metal base stools.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	AUG-06

F2020.01 Asbestos*

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

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	AUG-06

F2020.04 Mould*

An investigation was conducted in 2003. Mould was found in one of the 1982 Pod additions. One of the classrooms in the south 1982 Addition (rm. 103) is being cleaned and repaired. A budget has been attached to the exterior wall element - See B2010.01.06.04 Wood Siding**

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	AUG-06

F2020.09 Other Hazardous Materials*

No other hazardous material known or reported

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	AUG-06

S8 FUNCTIONAL 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). Signage for a designated handicap parking space is not provided.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	AUG-06

K4010.02 Barrier Free Entrances*

No automatic door entrances are provided.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	0	0	AUG-06

Event: Provide power operators for barrier free

Concern:

No automatic access is currently provided from any exterior entrance doors.

Recommendation:

Provided power operators for barrier free access at the south entrance of the original 1980 building.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Barrier Free Access Upgrade	2007	\$4,305	Low

Updated: APR-07

K4010.03 Barrier Free Interior Circulation*

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

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	AUG-06

K4010.04 Barrier Free Washrooms*

Barrier free washrooms are provided opposite the library.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	0	AUG-06

RECAPP Facility Evaluation Report



Dan Knott Junior High School

S3086
Edmonton

Facility Details**Building Name:** Dan Knott Junior High School**Address:****Location:** Edmonton**Building Id:** S3086**Gross Area (sq. m):** 0.00**Replacement Cost:** \$0**Construction Year:** 0**Evaluation Details****Evaluation Company:** Asset Evolution Incorporated (AEI)**Evaluation Date:** May 10 2006**Evaluator Name:** Mario Plastina**Total Maintenance Events Next 5 years:** **\$92,250****5 year Facility Condition Index (FCI):** **0%****General Summary:**

The site of Dan Knott Junior High School includes an asphalt paved roadway & parking area accessible from 80th Street. A sodded playing field is located at the north end of the property. Grass, shrubs and trees are located along the south and west elevations of the school. An asphalt paved playground is located north end of the school. Pedestrian concrete walkways are located at the main entrances and along the south & west elevation. Site drainage slopes away from the building with no problems indicated or observed.

There are no portables on site.

Overall the site elements appeared to be in 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

G2010.02.02 Flexible Pavement Roadway (Asphalt)**

An asphalt paved roadway to the main parking areas is accessible from 80th street located at the north-east corner of the site.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	25	AUG-06

Event: Repave Roadway

Concern:

Exceeded theoretical life expectancy

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$24,600	Unassigned

Updated: AUG-06

G2010.05 Roadway Curbs and Gutters*

Poured in place concrete curbs are located around the perimeter of the asphalt paved roadway.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	25	AUG-06

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

The asphalt paved parking area is located at the south-east end of the property.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1980	25	AUG-06

Event: Repair damaged surfaces

Concern:

Isolated pot holes are located at the north end of the parking area.

Recommendation:

Repair all damaged asphalt paved surfaces.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Repair	2007	\$6,150	Low

Updated: APR-07



Event: Repave Parking Lot

Concern:

Exceeded theoretical life expectancy

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2011	\$61,500	Unassigned

Updated: AUG-06

G2020.05 Parking Lot Curbs and Gutters*

Poured in place concrete curbs are located around the perimeter of the parking lot

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	25	AUG-06

G2020.06.03 Parking Lot Signs*

Parking signs are fastened to the exterior building indicating assigned parking spaces.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	AUG-06

G2030.04 Rigid Pedestrian Pavement (Concrete)**

A small playground between the school and the 1990 Pod addition at the north-east has a concrete paved surface. Poured in place concrete walkways lead to all the school entrances. The lifecycle should be 40 years for concrete surfaces.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	25	AUG-06

G2030.06 Exterior Steps and Ramps*

1990 Pod Addition - Wood framed stairs with painted steel handrails at the exit doors.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	15	AUG-06

G2040.02 Fences and Gates

Chain-link fencing is located along most of the property boundary.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
5 - Good	1996	30	AUG-06

G2040.03 Athletic and Recreational Surfaces**

(1990) Basketball hoops are located adjacent to the asphalt paved playground at the north-west end of the property.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1990	25	AUG-06

G2040.05 Site and Street Furnishings*

Bicycle racks are located at the south-west end of the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	15	AUG-06

G2040.06 Exterior Signs*

Exterior wall-mounted signage is provided on the building's main entrances. School signage is located on the south wall. A free-standing signage panel is located adjacent to the main entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	25	AUG-06

G2040.08 Flagpoles*

A flagpole is located on the south elevation of the property adjacent to the main entrance.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	AUG-06

G2050.04 Lawns and Grasses*

Grassed areas are located along the south and west sides of the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	15	AUG-06

G2050.05 Trees, Plants and Ground Covers*

Mature trees and shrubs are located along the south & west sides of the site. Small shrubs are also located throughout the parking area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	10	AUG-06

G3010.02 Site Domestic Water Distribution*

Domestic water main runs from street main to the exterior storage room at the northeast corner of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	50	AUG-06

G3010.03 Site Fire Protection Water Distribution*

The standard pipe system shares the same water line with domestic water system. This pipe runs from street main to the exterior storage room at the northeast corner of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	50	AUG-06

G3020.01 Sanitary Sewage Collection*

Main sanitary waste pipe is connected to municipal main drain.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	50	AUG-06

G3030.02 Storm Water Equipment*

Storm water equipment includes area drain and pipes in the north side parking area. A building main drain is expected collecting the rain water from the area drain at parking area and connect to the municipal drain. Most of the storm water goes to sod area.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	50	AUG-06

G3060.01 Gas Distribution*

A 75mm diameter gas main runs from 76th Avenue to the exterior storage room at north side of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	50	AUG-06

G3060.04 Fuel Storage Tanks*

An exterior storage cage for propane gas tanks is located at north corner of the building.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1982	50	AUG-06

G4010.03 Electrical Power Distribution Equipment*

An EPCOR padmounted transformer is located on the East side of the site. The transformer and secondary feeder into the building were installed in 1980. The transformer is owned and maintained by EPCOR.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	50	AUG-06

G4010.04 Car Plugs-ins*

There are 38 energized parking stalls. Plug-in receptacles for block heaters are mounted on a metal railing northeast of the school and on the east wall of the school. An adequate number of car plug-ins have been provided.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1980	25	AUG-06