RECAPP Facility Evaluation Report

The Board of Trustees of Red Deer Catholic Regional Division No. 39



St. Martin De Porres School B1483A Red Deer

Report run on: March 6, 2007 8:07 AM

Red Deer - St. Martin De Porres School (B1483A)

Facility Details		Evaluation Details	
Building Name:	St. Martin De Porres School	Evaluation Company: Jacques Whitford Limited	
Address:	3911 - 57a Avenue	Evaluation Date: October 17 2006	
Location:	Red Deer	Evaluator Name: Lauren Skallcky	
Building Id:	B1483A		
Gross Area (sq. m):	0.00		
Replacement Cost:	\$2,974,841		
Construction Year:	0	Total Maintenance Events Next 5 years:	\$177,500
		5 year Facility Condition Index (FCI):	5.97%

General Summary:

The St. Martin De Porres Elementary School is a single-storey concrete, masonry block and wood-framed structure originally constructed in 1966. The original building has a total floor area of approximately 903 square metres. There was an upgrade to the school carried out in 1993.

A masonry block, two-storey and single-storey addition was constructed in 1972 on the south and west side of the original building, The addition has a total floor area of approximately 456 square metres. In 1983 a detached ECS building was constructed.

A wood-framed portable building was added to the site on a concrete foundation in 1983 on the west side of the building. It has a total floor area of approximately 76 square metres.

Structural Summary:

Structural drawings were not available for review during the assessment, however the building's foundations likely consist of a poured concrete assembly with concrete foundation walls and strip footings. The structure consists of reinforced, poured concrete floors and load-bearing concrete/masonry block walls.

The roof structural frame for the majority of the building is comprised of wood decking supported by large glulam beams spanning between load-bearing masonry block walls. Renovations in 1993 included a pitched roof constructed of wood roof trusses that lies above the wood decking.

No major work associated with the building structure was identified during the assessment.

The building's structural elements are in acceptable condition.

Envelope Summary:

Exterior cladding consists of a combination of clay brick, stucco and pre-finished metal siding. The sloped roof sections consist of an asphalt shingle roof assembly. Main entrance doors have single-pane glazing and are set in aluminum frames. Windows are fixed and operable with double-glazed units set in aluminum frames.

Major work recommended includes replacement of deficient sealant in construction joints and repair to damaged areas of the stucco finish. As well, there should be a review of systems approaching the end of their theoretical life expectancy.

The building's envelope and exterior components are in acceptable condition.

Interior Summary:

The gymnasium and classrooms typically have vinyl tile flooring. Corridor flooring consists of sheet vinyl flooring. Carpeting is provided in the library and main administration area, while the mechanical rooms have painted/sealed concrete floors. The majority of the interior walls consist of painted gypsum board or painted masonry block. The majority of the building has a suspended acoustic panel ceiling system.

Major work recommended includes installation of proper interior partition firestopping within the attic spaces. As well, there should be a review of systems approaching the end of their theoretical life expectancy.

The building's interior finishes are in acceptable condition.

Mechanical Summary:

St. Martin De Porres Elementary School was originally constructed in 1962, expanded in 1972, 1983 (construction of the

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ECS building), and 1990, and was fully renovated in 1993. The domestic water and sanitary drainage piping is original to the construction of the building (or the respective expansion). There is a backflow prevention device (BFP) present on the domestic water supply. A domestic water heater (installed in 2000) serves the main building. An original (1983) domestic water heater serves the ECS building.

The main building is heated by two hot water boilers. Heating hot water distribution is through cast iron piping to reheat coils, fan coil units, unit heaters, radiant heating panels, and the central air handling unit. Heating and ventilation of the ECS building is provided by a forced-air furnace. Air conditioning is provided to the ECS building by a roof-mounted condensing unit.

Building exhaust is provided by roof mounted exhaust fans. A central BMS system controls the major mechanical equipment in the building. There is no fire suppression system in the building. Fire extinguishers are located throughout the building.

The following are recommended actions for the next five years, including scheduled replacements:

- Install an overhead air distribution system

- Install a wet-pipe sprinkler system

Overall the mechanical systems in the building are in acceptable condition.

Electrical Summary:

The building has a 400 Amp, 120/208 Volt service which feeds lighting, power receptacles, and mechanical equipment in the building. The electrical sub-panels and wiring are original to the construction of the building. All observed wiring was in conduit.

Interior lighting is provided by T8 fluorescent and compact fluorescent fixtures throughout the building. Exterior lighting is provided by metal halide wall-pack fixtures around the building. Emergency lighting is provided by sealed lead-calcium battery packs and remote and integral incandescent lamp heads. Exit lighting in the building is provided by LED fixtures.

The building is protected by an Edwards EST fire alarm control panel which controls fire alarm bells and strobes throughout the building. Initiation in the building is provided by manual pull stations, heat detectors, and smoke detectors.

The building has an externally monitored Maxsys security system, a NEC telephone system (which provides public address and time clock functionality), and a hardwired and wireless Local Area Network.

There are no recommended actions in the next five years with respect to the electrical systems in the building.

Overall the electrical systems in the building are in good 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*

Structural drawings were not available for review during the assessment. The building foundations presumably consist of cast-in-place concrete foundation walls and strip footings with conventional steel reinforcement.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	0	100	MAR-07

A1030 Slab on Grade*

The main floor of the St. Martin De Porres Elementary School is comprised of a cast-in-place concrete slab-on-grade which is presumed to have conventional steel reinforcement.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	MAR-07

B1010.01 Floor Structural Frame*(Building Frame)

The structural frame of the school building is comprised of load-bearing masonry block or cast-in-place concrete walls which support the roof structure.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	MAR-07

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

Load-bearing interior walls throughout the building are comprised of masonry block or cast-in-place, conventionally reinforced concrete.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	0	100	MAR-07

B1020.01 Roof Structural Frame*

The roof structural frame for the building is comprised of wood decking supported by glue laminated beams. Renovations to the building included the addition of wood roof trusses.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	MAR-07

B1020.04 Canopies*

The building has canopies in many locations. They are enclosed with pre-finished metal cladding and are supported by concrete columns. The construction type is not visible but is presumed to be wood-framed and attached to the exterior walls/roof framing.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	50	MAR-07

			Red Deer - St. Martin De Porres School (B1
S2 ENVELOPE			
B2010.01.02.01 Brick	Masonry: Ext. Wal	I <mark>I Skin</mark> *	
A clay brick veneer is	provided on all side	s of the buil	ding.
Rating 4 - Acceptable	<u>Installed</u> <u>D</u> 0	esign Life 75	Updated MAR-07
B2010.01.06.03 Meta	I Siding**		
Pre-finished metal sic	ling is provided abov	ve the windo	ows on all elevations of the building.
Rating 4 - Acceptable	<u>Installed</u> <u>D</u> 1993	esign Life 40	<u>Updated</u> MAR-07
B2010.01.08 Cement	Plaster (Stucco): E	xt. Wall*	
A cement plaster (stu	cco) finish is provide	ed on the we	est portion of the school.
Rating 3 - Marginal	Installed D 0	esign Life 75	<u>Updated</u> MAR-07
Recomment Repair the lo Consequen	eas of damage to th dation: ocalized stucco dama ces of Deferral: visture ingress throug	age.	
Туре	Year	<u>Cost</u>	Priority
Repair	2008	\$2,000	Medium
Updated: M	1AR-07		

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

Sealant is provided in construction joints, between cladding types and around window and door units on the school perimeter.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
3 - Marginal	1993	20	MAR-07

Event: Repair exterior caulking

Concern:

Joint sealant of the brick masonry walls appeared unbonded and cracked at various locations on the school perimeter. **Recommendation:**

Replace the deficient sealant as necessary on the school perimeter.

Consequences of Deferral:

Potential air or moisture infiltration into the building envelope.

Туре	Year	<u>Cost</u>	Priority
Repair	2008	\$6,000	Medium

Updated: MAR-07

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

Exterior back-up walls are generally comprised of load-bearing masonry block walls.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	0	100	MAR-07

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

Architectural drawings were not available for review as part of the assessment; however the exterior wall assembly for the school is presumably equipped with a vapor retarder and insulation. The type and extent of materials used could not be reviewed visually, and exterior wall cavities were not accessed during the site visit.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	MAR-07

B2010.09 Exterior Soffits*

Exterior soffits along the perimeter of the building are pre-finished, perforated aluminum.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	30	MAR-07

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

Sealed, insulating glazing units set in pre-finished aluminum frames are provided on the exteriors of the school.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1993	40	MAR-07

B2030.01.01 Aluminum-Framed Storefronts**

Exterior doors of the building are aluminum and glass units set in aluminum frames.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1993	30	MAR-07

B3010.02.01.01 Asphalt Shingles**

The pitched roof is covered with three-tab asphalt shingles

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1993	25	MAR-07

B3010.08.02 Metal Gutters and Downspouts**

Stormwater drainage from the roof is provided by pre-finished metal gutters and downspouts.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1993	30	MAR-07

S3 INTERIOR

C1010.05 Interior Windows*

Interior windows are single-glazed units set in aluminum or painted wood frames. The windows are provided in the main office administration area.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	40	MAR-07

C1010.07 Interior Partition Firestopping*

Interior partition firestopping is generally provided by masonry block partitions. However, the site representative reported that several fire separations within the attic space are not yet complete.

Rating	Installed	<u>Design Life</u>	Updated
2 - Poor	0	50	MAR-07

Event: Complete the fire separations above ceiling

Concern:

Fire separations in the attic spaces of the building have not been fully completed.

Recommendation:

Provide proper partition firestopping in the attic spaces.

Consequences of Deferral:

Potential fire and smoke transfer to other areas of the building, creating a safety hazard.

Туре	Year	<u>Cost</u>	Priority
Code Repair	2007	\$10,000	High

Updated: MAR-07

C1020.01 Interior Swinging Doors**

Classroom doors are generally solid core wood doors set in painted metal frames.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1969	40	MAR-07

Event: Replace approximately 20 doors

Туре	Year	<u>Cost</u>	Priority
Lifecycle Replacement	2010	\$20,000	Low

Updated: MAR-07

C1030.01 Visual Display Boards**

Whiteboards are generally provided in each classroom

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	2002	20	MAR-07

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

Pre-finished metal toilet partitions are provided in each student washroom in the building.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1962	30	MAR-07

Event: Replace toilet compartments

Туре	Year	<u>Cost</u>	Priority
Lifecycle Replacement	2010	\$10,000	Low

Updated: MAR-07

C1030.08 Interior Identifying Devices*

Teacher identification tags are mounted on the doors of classrooms and shop areas.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	20	MAR-07

C1030.10 Lockers**

Painted metal lockers for student use are provided in corridors throughout the school.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1993	30	MAR-07

C2010.04 Wood Stair Construction*

Stairs leading to the upper classroom of the 1972 addition are presumed to be of wood-framed construction.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	100	MAR-07

C2020.06 Carpet Stair Finishes**

Carpet flooring is provided on the stairs leading to the upper level classroom.

Rating	Installed	Design Life	Updated
4 - Acceptable	1993	10	MAR-07

Event: Replace Stair Carpeting

Туре	Year	<u>Cost</u>	Priority
Lifecycle Replacement	2010	\$1,500	Low

Updated: MAR-07

				Red Deer - St. Martin De Porres School (B1483A)
<u>C2020.08</u>	8 Stair Railings and	l Balustrac	les*	
Wall mou	unted, painted steel	handrails a	re provided o	n either side of the staircase.
<u>Rating</u> 4 - Accep	table	Installed 0	Design Life 50	Updated MAR-07
<u>C3010.04</u>	4 Gypsum Board W	all Finishe	<u>es</u> *	
Several	walls in the main adn	ninistration	office area ar	e finished with painted gypsum board.
<u>Rating</u> 4 - Accep	table	Installed 0	Design Life 60	Updated MAR-07
<u>C3010.00</u>	6 Tile Wall Finishes	* *		
Ceramic	tile wall finishes are	provided in	n Girls and Bo	bys washrooms throughout the school.
<u>Rating</u> 4 - Accep	table	Installed 1962	Design Life 40	Updated MAR-07
Event:	Replace approxima	ately 100 s	q.m. of ceran	nic tile_
	<u>Type</u> Lifecycle Replacemer	nt 201		Priority Low
	Updated: MAR-07			
<u>C3010.1′</u>	1 Interior Wall Pain	ting**		
Masonry	block and gypsum b	oard walls	throughout th	e school have a painted finish.
<u>Rating</u> 4 - Accep		Installed 1993	Design Life 10	<u>Updated</u> MAR-07
Event:	Paint approximate	ly 2600 sq.	m. of interio	r wall
	<u>Type</u> Lifecycle Replacemen	<u>Yea</u> nt 201		<u>Priority</u> Low
	Indated: MAR-07			

Updated: MAR-07

C3020.01.02 Paint Concrete Floor Finishes**

Painted concrete floors are provided in the main mechanical room.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1993	10	MAR-07

Event: Lifecycle Replacement

Concern:

The service rooms' floor paint finish is deteriorated. **Recommendation:** Replace the painted finish. **Consequences of Deferral:** Loss of aesthetics; possible concrete deterioration.

Туре	Year	<u>Cost</u>	Priority
Failure Replacement	2008	\$2,000	Medium

Updated: MAR-07

C3020.02 Tile Floor Finishes**

Quarry tile flooring is provided in the student washrooms.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1962	50	MAR-07

C3020.07 Resilient Flooring** - Vinyl tile

Classrooms are generally finished with vinyl tile flooring.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1993	20	MAR-07

C3020.07 Resilient Flooring** - sheet vinyl

Sheet vinyl flooring is provided in the corridors.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1993	20	MAR-07

C3020.08 Carpet Flooring**

Carpet flooring is provided in the library and the main administration areas.

Rating	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1993	15	MAR-07

Event: Replace carpeting

Туре	Year	<u>Cost</u>	<u>Priority</u>
Lifecycle Replacement	2010	\$8,000	Low

Updated: MAR-07

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

The majority of the building has a suspended T-bar grid ceiling with in-laid acoustic panels.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1993	25	MAR-07

S4 MECHANICAL

	1 Water Closets**				
There ar					
	re approximately 9 v	itreous china	a water closet	s in the building.	
<u>Rating</u> 4 - Accep	otable	Installed 1962	Design Life 35	Updated MAR-07	
Event:	Replace water clos	<u>sets</u> <u>Yea</u>	<u>r Cost</u>	<u>Priority</u>	
	Lifecycle Replaceme	ent 2010	0 \$9,000	Low	
	Updated: MAR-07				
D2010.0	2 Urinals**				
There a	re approximately 3	floor-mounte	ed vitreous cl	ina urinals in the building. The fixtures have been fitted v	with ser
activated	d flush valves.				
Rating	- 4 - b 1 -		Design Life		
4 - Accep	Dtable	1962	35	MAR-07	
	<u>Type</u> Lifecycle Replaceme		<u>r</u> <u>Cost</u> 0 \$3,000	Priority Low	
<u>D2010.0</u>	Lifecycle Replaceme Updated: MAR-07 <u>3 Lavatories**</u>				
	Lifecycle Replaceme Updated: MAR-07 <u>3 Lavatories**</u>	nt 2010	5 \$3,000		
	Lifecycle Replaceme Updated: MAR-07 <u>3 Lavatories**</u>	int 2010	5 \$3,000	Low	
There a	Lifecycle Replaceme Updated: MAR-07 <u>3 Lavatories**</u>	int 2010	3 \$3,000	Low	
There ar <u>Rating</u>	Lifecycle Replaceme Updated: MAR-07 <u>3 Lavatories**</u>	itreous china	3 \$3,000 a lavatories th <u>Design Life</u>	Low roughout the building. Updated	
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There ar <u>Rating</u> 5 - Good <u>D2010.0</u> There a	Lifecycle Replaceme Updated: MAR-07 <u>3 Lavatories**</u> re approximately 9 vi <u>4 Sinks**</u>	itreous china <u>Installed</u> 2005	a lavatories th Design Life 35 ous sinks in	Low roughout the building. Updated MAR-07	stainle
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There ar <u>Rating</u> 5 - Good D2010.0 There a steel. Th <u>Rating</u> 4 - Accep D2010.0	Lifecycle Replaceme Updated: MAR-07 <u>3 Lavatories**</u> re approximately 9 v <u>4 Sinks**</u> re approximately 12 he sinks in the janitor otable <u>8 Drinking Fountai</u>	itreous china itreous china installed 2005 2 miscellane 's rooms are installed 1993 ns / Coolers	0 \$3,000 a lavatories th Design Life 35 ous sinks in e iron and ena Design Life 30	Low roughout the building. Updated MAR-07 the building. Sinks in the classrooms and staff room are mel. Updated	stainle
There ar <u>Rating</u> 5 - Good D2010.0 There a steel. Th <u>Rating</u> 4 - Accep D2010.0	Lifecycle Replaceme Updated: MAR-07 <u>3 Lavatories**</u> re approximately 9 v <u>4 Sinks**</u> re approximately 12 he sinks in the janitor otable <u>8 Drinking Fountai</u> re approximately 4 n	itreous china <u>Installed</u> 2005 2 miscellane 's rooms are <u>Installed</u> 1993 ns / Coolers on-refrigerat	0 \$3,000 a lavatories th Design Life 35 ous sinks in e iron and ena Design Life 30	Low roughout the building. Updated MAR-07 the building. Sinks in the classrooms and staff room are mel. Updated MAR-07 hina drinking fountains in the building.	stainle

D2020.01.01 Pipes and Tubes: Domestic Water*

Domestic water piping is copper throughout the building. Additional domestic water piping has been installed at various times since the original construction of the building during renovations and building expansions.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1962	40	MAR-07

D2020.01.03 Piping Specialties (Backflow Preventors)**

There is a backflow prevention device on the domestic water supply.

Rating	Installed	<u>Design Life</u>	Updated
5 - Good	2001	20	MAR-07

D2020.02.06 Domestic Water Heaters** - ECS Building

Domestic hot water is supplied to the ECS building by a natural gas fired Rheem domestic hot water heater tank (114 L) located in the mechanical closet.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1983	20	MAR-07

Event: Replace ECS domestic hot water heater

Туре	Year	<u>Cost</u>	Priority
Lifecycle Replacement	2010	\$2,000	Low

Updated: MAR-07

D2020.02.06 Domestic Water Heaters** - Main Building

Domestic hot water is supplied by a natural gas fired Giant domestic hot water heater tank (151 L) located in the main boiler room. The domestic hot water system includes an Bell & Gosset circulation pump.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	2000	20	MAR-07

D2030.01 Waste and Vent Piping*

Waste and vent piping is generally cast iron and original to the construction of the building.

Rating	Installed	Design Life	Updated
4 - Acceptable	1962	50	MAR-07

D3010.02 Gas Supply Systems*

The natural gas supply is provided above grade on the west side of the building. The piping feeds the central heating boilers and the domestic hot water heater in the main building as well as the furnace and domestic hot water heater in the ECS building.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1962	60	MAR-07

D3020.02.01 Heating Boilers and Accessories: H.W.**
Heating hot water is provided to the building via two Super Hot boilers (960 MBH each).
RatingInstalledDesign LifeUpdated4 - Acceptable199335MAR-07
D3020.03.01 Furnaces** A Lennox split system forced-air furnace with rooftop condensor provides heating, ventilation, and air conditioning to
ECS building.
RatingInstalledDesign LifeUpdated4 - Acceptable198325MAR-07
Event: Replace ECS Portable furnace
TypeYearCostPriorityLifecycle Replacement2010\$3,000Low
Updated: MAR-07
D3030.06.02 Refrigerant Condensing Units**
An roof-mounted condensing unit provides cooling to the ECS building via a direct expansion cooling coil in the E building furnace.
RatingInstalledDesign LifeUpdated4 - Acceptable198325MAR-07
Event: Replace ECS split system condensing unit
TypeYearCostPriorityLifecycle Replacement2010\$12,000Low
Updated: MAR-07
D3040.01.01 Air Handling Units: Air Distribution**
A central Trane air handling unit provides tempered ventilation air to the main building. The unit includes supply and retu air fans, a filter section, an evaporative humidifier and hot water heating coils.
Pating Installed Design Life Undeted

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1993	30	MAR-07

D3040.01.04 Ducts: Air Distribution*

Air distribution throughout the main building is via original in-floor air ducts.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
2 - Poor	1962	50	MAR-07

Event: Install overhead ducting system

Concern:

Existing below-grade in-floor duct system is prone to water accumulation.

Recommendation:

Decommission in-floor duct system and install a conventional overhead ducting system.

Consequences of Deferral:

Water ingress into the in-floor ductwork creates conditions conducive for mold growth. This represents a health hazard for building occupants.

Туре	Year	<u>Cost</u>	Priority
Failure Replacement	2007	\$35,000	Unassigned

Updated: MAR-07

D3040.03.01 Hot Water Distribution Systems**

Heating distribution is through cast iron piping to reheat coils, fan coil units, unit heaters, radiant heating panels, and the central air handling unit. A Grundfos duplex inline pump circulates heating hot water through the building.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1993	40	MAR-07

D3040.04.01 Fans: Exhaust**

Washroom and gymnasium exhaust is provided by roof and wall mounted exhaust fans.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1993	30	MAR-07

D3050.05.01 Convectors**

Primary heating is provided to some classrooms and the gymnasium by baseboard and wall mounted convection heaters.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1993	40	MAR-07

D3050.05.02 Fan Coil Units**

Auxiliary heating at building entrances is provided by recessed fan coil units.

Rating	Installed	Design Life	Updated
4 - Acceptable	1993	30	MAR-07

D3050.05.06 Unit Heaters**

Auxiliary heating in utility rooms and storage areas is provided by hot water unit heaters.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1993	30	MAR-07

D3050.05.08 Radiant Heating (Ceiling & Floor)**

Primary heating is provided to perimeter classrooms by suspended radiant heating panels.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1993	35	MAR-07

D3050.07 Other Terminal and Packaged Units*

Auxiliary heating for some classroom, office, and gymnasium spaces is provided by hot water reheat coils.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1993	15	MAR-07

D3060.02.01 Electric and Electronic Controls**

Controls of terminal units is provided by unitary low-voltage electric thermostats.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1993	30	MAR-07

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

A Dimax Controlls BMS controls the major mechanical equipment in the building.

<u>Rating</u>	Installed	Design Life	Updated
4 - Acceptable	1993	25	MAR-07

D4010 Sprinklers: Fire Protection*

There is no fire protection system installed in the building.

Rating	Installed	Design Life	Updated
2 - Poor	1962	60	MAR-07

Event: Install sprinkler system

Concern:

There is no fire protection system in the building.

Recommendation:

Install wet-pipe sprinkler system.

Consequences of Deferral:

The current lack of a fire protection system represents higher safety and damage risk in the event of a fire.

Туре	Year	<u>Cost</u>	Priority
Code Upgrade	2008	\$70,000	Medium

Updated: MAR-07

D4030.01 Fire Extinguisher, Cabinets and Accessories**

Fire extinguishers are provided throughout the building.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1993	30	MAR-07

S5 ELECTRICAL

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

The main electrical switchboard is manufactured by Federal Pioneer and is rated at 400A, 120/208 V, 3 phase, 4 wires.

Rating	Installed	Design Life	Updated
4 - Acceptable	1993	40	MAR-07

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

Electrical sub-panels and circuit breakers are generally original to the major renovations in 1993. The majority of the electrical distribution equipment is manufactured by Square D. The electrical sub panel serving the ECS building is original to the construction of that building in 1983.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1993	30	MAR-07

D5010.07.02 Motor Starters and Accessories**

Klockner-Moeller motor starters are provided for fans and pumps in the building.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1993	30	MAR-07

D5020.01 Electrical Branch Wiring*

The electrical wiring in the building is standard wire in conduit. Flexible conduit and cabling is provided to motors and other mechanical equipment.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1993	50	MAR-07

D5020.02.01 Lighting Accessories (Lighting Controls)*

Low-voltage switching controls interior lighting throughout the building.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1993	30	MAR-07

D5020.02.02.02 Interior Florescent Fixtures**

Fluorescent fixtures are used throughout the school and consist of recessed and surface mounted T8 fixtures with electronic ballasts.

Rating	Installed	Design Life	Updated
4 - Acceptable	1993	30	MAR-07

D5020.02.03.02 Emergency Lighting Battery Packs**

Emergency lighting is provided by a variety of incandescent emergency lighting fixtures original to the major renovation in 1993.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1993	20	MAR-07

D5020.02.03.03 Exit Signs*

The building is equipped with LED Exit signs.

Rating	Installed	<u>Design Life</u>	Updated
5 - Good	2002	30	MAR-07

D5020.03.01.02 Exterior Florescent Fixtures*

A single surface mounted exterior fluorescent lighting fixture is provided on the east elevation of the building.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1993	30	MAR-07

D5020.03.01.03 Exterior Metal Halide Fixtures*

Exterior metal halide wall-pack lighting fixtures are provided around the building.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1993	30	MAR-07

D5030.01 Detection and Fire Alarm**

The building has manual pull stations and smoke detectors connected to a Edwards EST-6616 fire alarm control panel which controls fire alarm bells and strobes throughout the building.

Rating	Installed	Design Life	Updated
5 - Good	2002	25	MAR-07

D5030.02.02 Intrusion Detection**

The building is equipped with a DSC Maxsys security system, complete with motion detectors throughout the building. The system is externally monitored.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1993	25	MAR-07

D5030.04.01 Telephone Systems**

The building is equipped with a NEC/Panasonic telephone system. The telephone system provides public address and master clock functionality.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1993	25	MAR-07

D5030.04.04 Data Systems**

The building is serviced by a Bell fiberoptic internet system. The school has Category 5 data wiring throughout the building.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	2000	25	MAR-07

D5030.05 Public Address and Music Systems**

The gymnasium is served by a custom sound system which includes wall-mounted speakers.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1993	20	MAR-07

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1090.04 Residential Equipment*

Residential type equipment in use in the building includes smaller fridges, stoves and dish washers in the teachers' lounge.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	25	MAR-07

E2010.02 Fixed Casework**

Fixed wooden casework with laminated finishes is typically provided in each classroom and other areas of the school.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1990	35	MAR-07

E2010.03.01 Blinds**

A combination of vertical blinds and pull down shades are provided in each classroom and the main administration areas.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1993	30	MAR-07

E2020 Moveable Furnishings*

Desks, chairs and tables are typically provided in each classroom and shop area, including the main office.

Rating	Installed	Design Life	<u>Updated</u>
4 - Acceptable	0	20	MAR-07

F1010.02.04 Portable and Mobile Buildings* - E.C.S. Building

A detached classroom is located north of the school building. The age of the detached classroom is approximately 23 years. The building has a cast-in-place concrete slab-on-grade, wood stud framing, and a pitched roof consisting of wood sheathing supported by pre-engineered roof trusses. The type and extent of foundations used for the detached classroom is unknown.

The detached classroom is entirely clad with wood siding, and has vented wood soffits around its perimeter. Windows are fixed and operable with sealed, insulating glazing units set in aluminum frames. The exterior door is painted metal set in a painted wood frame. The pitched roof of the classroom has asphalt shingles, and metal gutters and downspouts which discharge storm water to landscaped areas at ground level.

Interior finishes generally consist of vinyl tile flooring and painted gypsum board walls and ceilings. Moveable wood casework with laminated surfaces is provided along various walls. Other equipment includes a wall-mounted whiteboard for teaching purposes, various wall-mounted wooden shelves, and residential kitchen appliances, such as a stove, fridge and microwave. The classroom is equipped with a washroom, and an exterior ramp for barrier-free use provides access to the entrance.

The building is heated with a forced air furnace. Interior lighting is provided by fluorescent fixtures with T12 bulbs. Exterior lighting is provided by wall-mounted, high intensity discharge fixtures.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
4 - Acceptable	1983	25	MAR-07

Event: Replace ECS Portable asphalt shingle roof

Туре	Year	Cost	Priority
Lifecycle Replacement	2010	\$3,000	Low

Updated: MAR-07

F1010.02.04 Portable and Mobile Buildings* - relocateable classrooms

Two attached relocatable classrooms are located southwest of the gymnasium. The age of the detached classrooms is unconfirmed, however, a previous report states that the relocatable units were installed in 1990. The building appears to have a cast-in-place concrete slab-on-grade. Exterior wall framing reportedly consists of structural insulated panels (SIP's) and a flat roof presumably consisting of wood sheathing supported by pre-engineered roof trusses. The type and extent of foundations used for the relocatable classrooms is unknown.

The relocatables are clad with stucco and pre-finished metal siding. Windows are fixed and operable with sealed, insulating glazing units set in vinyl frames. The flat roof of the classrooms has metal gutters and downspouts which discharge storm water to paved and landscaped areas at ground level.

Interior finishes generally consist of vinyl floor tiles and painted gypsum board walls with a suspended T-bar grid ceiling with in-laid acoustic panels. Moveable wood casework is provided along various walls of the classroom. Other equipment includes wall-mounted whiteboards for teaching purposes.

The relocatables have mechanical services provided from the main building. Interior lighting is provided by fluorescent fixtures with T12 bulbs.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	1990	0	MAR-07

F2020.01 Asbestos*

Suspected asbestos-containing materials identified within the building include drywall joint compound, mechanical pipe insulation and pipe elbows.

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

F2020.02 PCBs*

Suspected PCB-containing equipment identified within the building include fluorescent light ballasts and other electrical/transformer equipment.

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

F2020.04 Mould*

No visible signs of suspected mould growth were observed in the building during the site visit.

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

S8 FUNCTIONAL ASSESSMENT

K4010.01 Barrier Free Route: Parking to Entrance

No handicapped parking stalls or signage is provided in front of the school or in the paved parking area north of the building.

Rating	Installed	Design Life	Updated
2 - Poor	0	0	MAR-07

Event: Provide handicapped parking and sidewalk access

Concern:

Only standard parking stalls are provided along the north end of the property for staff usage. No curb cut-outs are provided along municipal sidewalks.

Recommendation:

Provide two barrier-free parking stalls closest to the northwest corner of the school. The re-distribution of adjacent parking stall markings may be required to accommodate this installation.

Consequences of Deferral:

Non-compliance with current barrier-free standards and poor accessibility for handicapped persons.

Туре	Year	<u>Cost</u>	Priority
Barrier Free Access Upgrade	2007	\$3,000	High

Updated: MAR-07

K4010.02 Barrier Free Entrances

All entrances to the building are manually-operated (i.e., no automated door-openers).

Rating	Installed	<u>Design Life</u>	Updated
2 - Poor	0	0	MAR-07

Event: Install automatic door openers

Concern:

All entrances to the school are manually-operated and provide poor accessibility for handicapped users. **Recommendation:** Install automated door-openers at the building's northeast entrance and corresponding vestibule entrance.

Consequences of Deferral:

Non-compliance with current barrier-free standards and poor accessibility for handicapped persons.

Туре	Year	<u>Cost</u>	Priority
Barrier Free Access Upgrade	2007	\$6,000	High

Updated: MAR-07

K4010.03 Barrier Free Interior Circulation

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	MAR-07

K4010.04 Barrier Free Washrooms

None of the washrooms in the building are equipped to accommodate barrier-free usage.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
2 - Poor	0	0	MAR-07

Event: Modify washrooms for handicapped use

Concern:

Washrooms distributed throughout the building are not equipped with barrier-free stalls or accessories. **Recommendation:** Provide a uni-sex barrier-free washroom in the school, complete with appropriate signage, fixtures and accessories. **Consequences of Deferral:**

Non-compliance with current barrier-free requirements and poor accessibility for handicapped persons.

Туре	Year	<u>Cost</u>	Priority
Barrier Free Access Upgrade	2007	\$10,000	Unassigned

Updated: MAR-07

RECAPP Facility Evaluation Report



St. Martin De Porres School S1483 Red Deer

Report run on: March 6, 2007 10:24 AM

Red Deer - St. Martin De Porres School (S1483)

Facility Details		Evaluation Details	
Building Name:	St. Martin De Porres School	Evaluation Company: Jacques Whitford Limited	
Address:		Evaluation Date: October 17 2006	
Location:	Red Deer	Evaluator Name: Lauren Skalicky	
Building Id:	S1483	, 	
Gross Area (sq. m):	0.00		
Replacement Cost:	\$0		
Construction Year:	0	Total Maintenance Events Next 5 years:	\$82,500
		5 year Facility Condition Index (FCI):	0%

General Summary:

The site is occupied by the St. Martin De Porres Elementary School, which is located at the east corner of the property. The site features include a paved parking lot to the north of the building and a grassed play field to the west of the building. There are concrete sidewalks to each building entrance. Landscaped areas are provided adjacent to the northeast side of the building. No irrigation systems are provided on-site. Drainage on landscaped areas is provided by land infiltration and/or overland flow, and a catch basin on the northwest side of the school.

Major work recommended includes re-grading of the negatively sloped areas of the property and installation of a proper perimeter stormwater drainage system. As well, there should be a review of systems approaching the end of their theoretical life expectancy.

Site components were observed 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

G1030 §					
	Site Earthwork (Site	Grading)*			
The are	a of the property is g	enerally flat			
<u>Rating</u> 3 - Margi	nal	Installed 0	Design Life 50	Updated MAR-07	
Event:	Regrade the site a	s-required			
	Concern: Areas of the prope away from the build Recommendation	ling.	ope properly	to keep storm water	
	building. Consequences of	Deferral:		slope towards the tion walls and floor	
	Type Repair Updated: MAR-07	<u>Yea</u> 200	r <u>Cost</u> 8 \$7,500	<u>Priority</u> High	
	•				
G2020.0	02.02 Flexible Pavin	ig Parking I	_ots(Asphalt	<u>)**</u>	
An asph	alt-paved parking lot	t is situated	on the northw	est portion of the site.	
<u>Rating</u> 4 - Accer	otable	Installed 1993	Design Life 10	<u>Updated</u> MAR-07	
Event:	Replace asphalt p	ovina			
		aving			
	Type	Yea		Priority	
	Lifecycle Replaceme	Yea	_	<u>Priority</u> Low	
	Lifecycle Replaceme Updated: MAR-07	<u>Yea</u> ent 201	0 \$6,500		
	Lifecycle Replaceme Updated: MAR-07 05 Parking Lot Curk	ent 201	0 \$6,500 <u>ers</u> *	Low	
	Lifecycle Replaceme Updated: MAR-07 05 Parking Lot Curk	ent 201	0 \$6,500 <u>ers</u> *		parking lot.
	Lifecycle Replaceme Updated: MAR-07 05 Parking Lot Curb e curbs are provided	ent 201 os and Gutt	0 \$6,500 <u>ers</u> *	Low	parking lot.
Concret <u>Rating</u> 4 - Acce _l	Lifecycle Replaceme Updated: MAR-07 05 Parking Lot Curb e curbs are provided	<u>Yea</u> ent 201 os and Gutt d along the s <u>Installed</u> 0	0 \$6,500 ers* southeast bou <u>Design Life</u>	Low Indary of the northwest	parking lot.
Concret <u>Rating</u> 4 - Accep <u>G2020.(</u>	Lifecycle Replaceme Updated: MAR-07 05 Parking Lot Curk e curbs are provided ptable	ent 201 <u>Second Gutt</u> d along the s <u>Installed</u> 0	0 \$6,500 ers* southeast bou <u>Design Life</u> 25	Low Indary of the northwest Updated MAR-07	parking lot.

G2030.02.01 Gravel Pedestrian Surfacing*
Gravel surfacing is provided in the children's play area at the northwest corner of the property.
RatingInstalledDesign LifeUpdated4 - Acceptable010MAR-07
G2030.02.02 Asphalt Pedestrain Pavement**
Asphalt paved pedestrian pavement is located along the north, west and east sides of the building
RatingInstalledDesign LifeUpdated4 - Acceptable199310MAR-07
Event: Replace asphalt-paved walkways (375m2)
TypeYearCostPriorityLifecycle Replacement2010\$10,000Low
Updated: MAR-07
G2030.04 Rigid Pedestrian Pavement (Concrete)**
Concrete sidewalks lead from school entrances to municipal walkways along the east side of the building.
RatingInstalledDesign LifeUpdated4 - Acceptable199315MAR-07
Event: Replace concrete walkways
TypeYearCostPriorityLifecycle Replacement2010\$8,500Low
Updated: MAR-07
G2040.02 Fences and Gates**
Chainlink fencing is generally provided along the southwest and northwest boundaries of the site.
RatingInstalledDesign LifeUpdated4 - Acceptable199330MAR-07
G2040.05 Site and Street Furnishings*
Children's play equipment is located at the northwest corner of the school and several wooden picnic tables are interspondent throughout the site.
RatingInstalledDesign LifeUpdated4 - Acceptable015MAR-07

G2040.08 Flagpoles*

A painted metal flagpole is located outside the main entrance to the school, at its northeast end.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	0	30	MAR-07

G2050.04 Lawns and Grasses*

Grassed surfaces are provided on the play field to the southwest of the property and around the perimeters of the building.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	15	MAR-07

G2050.05 Trees, Plants and Ground Covers*

Trees, plants and bushes are distributed along the northeast side of the school.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	10	MAR-07

G3010.02 Site Domestic Water Distribution*

Municipally-supplied domestic cold water enters the meter room located on the northeast side of the building.

Rating	Installed	<u>Design Life</u>	Updated
4 - Acceptable	0	50	MAR-07

G3020.01 Sanitary Sewage Collection*

Sanitary sewage collected in the building is discharged to the municipal sanitary sewer system.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	50	MAR-07

G3030.01 Storm Water Collection*

Storm water collected from the building is generally discharged onto the landscaped areas of the site. On-site catch basins also provide additional storm water collection.

<u>Rating</u>	Installed	<u>Design Life</u>	Updated
2 - Poor	0	50	MAR-07

Event: Repair the storm water drainge system.

Concern:

Inadequate storm water drainage around the building perimeter has caused significant pooling. Downspouts were extended approximately eight years ago to keep the water away from the building, but deficiencies still exist. It was reported that storm water piping at one of the on-site catch basins was damaged during the 1993 renovations and has never been repaired.

Recommendation:

Install a proper perimeter drainage system around the building to eliminate storm water pooling. Investigate the adequacy of the drainage system of the on-site catch basins.

Туре	Year	<u>Cost</u>	Priority
Repair	2008	\$50,000	High

Updated: MAR-07

G3060.01 Gas Distribution*

Natural gas supplied by local utility suppliers enters the meter room located on the northeast side of the school.

<u>Rating</u>	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	MAR-07

G4010.02 Electrical Power Distribution Lines*

Electricity for the building is supplied to the main electrical panel adjacent to the mechanical room via underground conduit from a utility-owned transformer located on the northwest side of the building.

Rating	Installed	<u>Design Life</u>	<u>Updated</u>
4 - Acceptable	0	50	MAR-07

G4010.04 Car Plugs-ins*

Vehicle plug-in receptacles mounted on painted metal rails are provided in the parking lot north of the school.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	25	MAR-07