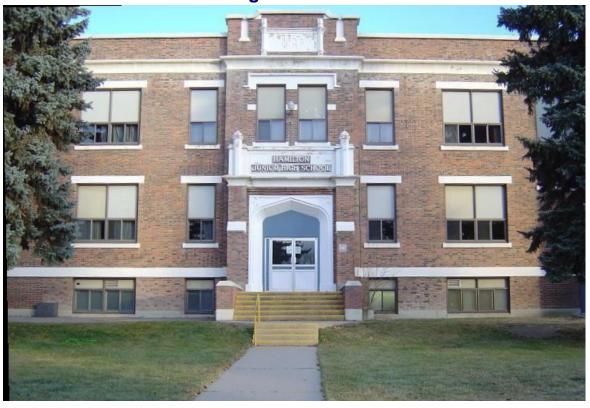
RECAPP Facility Evaluation Report

Lethbridge School Dist #51



Allan Watson School

B3680A Lethbridge

Lethbridge - Allan Watson School (B3680A)

Facility Details

Building Name: Allan Watson School
Address: 1515 - 5 Avenue

Location: Lethbridge

Building Id: B3680A

Gross Area (sq. m): 6,983.10

Replacement Cost: \$20,467,292

Construction Year: 1928

Evaluation Details

Evaluation Company: Stantec Consulting Ltd.

Evaluation Date: July 14 2009 **Evaluator Name:** Kyle Lamport

Total Maintenance Events Next 5 years: \$2,206,000 5 year Facility Condition Index (FCI): 10.78%

General Summary:

The property is occupied by two adjoining buildings. The Lethbridge School District # 51 Education Centre occupies the building constructed in 1928 located on the west portion of the site and the Allan Watson IOP School occupies the building constructed in 1958 on the east portion of the site. The Lethbridge School District #51 Education Centre is considered a separate building and is not included in this report.

The Allan Watson School is a three storey steel and masonry block structure which includes a suspended, enclosed pedestrian link that provides second story access between the buildings. An 80 sq. m addition was made to the northwest corner of the building in 1972. The current school has a reported gross floor area of 3883.54 sq. m. The school includes three floors of classrooms, wood shop, gymnasium and an administration office. The majority of classroom flooring was reportedly replaced in 1995. A modernization completed in 2003 included the renovation of the administration office, several classrooms and the replacement of corridor flooring.

Structural Summary:

Standard foundations for the building are understood to be comprised of cast-in-place and reinforced concrete pad and strip footings. Portions of the building are constructed at grade with concrete slab-on-grade floors and the southern classroom section has three stories with suspended concrete slab floors. Structural interior walls supporting floors or roofs are mainly comprised of load-bearing masonry.

Recommended work includes the following:

- Repair exterior stairs near the southeast entrance

Structural components were observed to be in acceptable condition, overall.

Envelope Summary:

The exterior walls of the building include clay brick veneer, stucco and cementicious parging along the lower portion of the walls. Exterior glazing on the building perimeter is generally comprised of fixed and operable windows comprised of double-pane glazing set in aluminum sashes and frames. Exterior entry and utility doors consist of insulated metal pivot units, several with glazed inserts, set in metal frames. The low-slope roofs are a combination of a built-up bituminous membrane and Modified Bituminous Membrane (SBS) roofing assemblies.

Recommended work includes the following:

- Replace deficient sealant on the building perimeter
- Replace damaged cement parging on foundation walls
- Replace windows in the pedestrian link.
- Replace the built-up roofing (BUR)
- Repair damaged stucco

Building envelope components were observed to be in acceptable condition, overall.

Interior Summary:

The building includes classrooms, connecting corridors and supporting educational rooms, a staff room and office/administrative area, a gymnasium, washrooms and janitorial rooms. Interior finishes are a combination of

resilient sheet and tile flooring, ceramic floor tile and carpeting. Walls generally include gypsum board or masonry block with painted finishes, while painted gypsum board or suspended T-bar grid with inlaid acoustic panel ceilings are provided throughout the building. Acoustic ceiling tiles and hardwood flooring are provided in the gymnasium. Interior swinging doors are a combination of varnished solid core wood or painted hollow metal pivot units set in painted metal or wood frames.

Recommended major work includes the following:

- Replace painted concrete floor finishes in the basement mechanical room
- Replace ceramic tile floors and walls in the multi-user washrooms
- Replace vinyl asbestos floor tiles
- Replace resilient stair finishes
- Replace original fixed casework
- Replace stained ceiling panels throughout the building
- Repair damaged gypsum board ceilings
- Install wheelchair lift(s) and ramp(s) between floors

Interior finishes were observed to be in acceptable condition, overall.

Mechanical Summary:

Allan Watson School has gone through a number of mechanical renovations since the original construction in 1958, with the hot water boiler heating system having been replaced most recently. Mechanical equipment throughout the school is in various states of condition and repair.

The school is very minimally ventilated, with only the science room, staff area and industrial arts shop receiving ventilation air. The staff area is also air-conditioned by a roof-top mounted unit.

Heating throughout the school is provided by two gas fired Weil Maclean hot water boilers, complete with circulation pumps and finned tube radiation cabinets. The majority of the equipment associated with the heating system was replaced in 2004.

A hot water tank provides hot water to the plumbing fixtures throughout the school.

Plumbing fixtures throughout the school are of a variety of ages, with original waste and vent piping. Exhaust fans service the washrooms.

Fire hose cabinets, along with wall mounted fire extinguishers are spaced throughout the school. The fire department connection is located near the main entrance.

The recommended actions for the mechanical systems in the next 5 years include:

- Upgrade the domestic water heater to increase hot water capacity,
- Complete replacement of the furnace and chimney serving the shower room
- Complete a study of the ICG unit serving the Science room,
- Install ventilation equipment to all areas of the school,
- Replace the pneumatic zone radiation controls, and
- Complete a study of the current industrial arts dust collector

The mechanical systems throughout the school are in marginal to acceptable condition.

Electrical Summary:

The electrical service for Allan Watson School is fed from a City of Lethbridge owned transformer to a Siemens 1200A, 120/208V main service entrance switchgear. The switchgear feeds branch circuit panelboards of various ages throughout the school. Loose motor starters are installed to control mechanical equipment.

Interior lighting throughout the school is provided by a combination of recessed and surface mount fluorescent fixtures. Small closets and other areas are illuminated by incandescent fixtures. Lighting throughout the school is controlled by a local light switches. A number of the fluorescent fixtures, along with the exit signs are powered from the emergency power panelboard, which is connected via an automatic transfer switch to a diesel back-up generator. Exterior lighting in the form of wall mounted high pressure sodium fixtures are installed around the school and are photocontrolled.

The telephone and data systems are of the typical variety, with Category 5e cabling runs from the communications infrastructure to voice and data outlets located throughout the school. A Dukane system provides public address services to the school.

The fire alarm system is comprised of an Edwards EST Quick Start panel, with heat detectors, horn and strobe annunciators and manual pull stations located throughout the school. Bell annunicators are also mounted on the exterior of the building.

The recommended actions for the electrical systems in the school in the next 5 years are:

- Replace a portion of the branch circuit panelboards,
- Add receptacles to the classrooms, and
- Replace the intrusion detection system

The electrical systems throughout the school are in marginal to acceptable condition overall.

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*

Construction drawings were not available for review during the assessment; however, standard foundations for the building are understood to be mainly comprised of cast-in-place and reinforced concrete pad and strip footings.

RatingInstalledDesign LifeUpdated4 - Acceptable1958100APR-10

A1030 Slab on Grade*

The main floor of the school has a concrete slab-on-grade floor.

RatingInstalledDesign LifeUpdated4 - Acceptable1958100APR-10

A2020 Basement Walls (& Crawl Space)*

A partial basement level is provided in the 1958 building, which includes cast-in-place concrete foundation walls.

RatingInstalledDesign LifeUpdated4 - Acceptable1958100APR-10

B1010.01 Floor Structural Frame (Building Frame)*

The structural frame supporting the upper floors of the building is understood to be comprised of structural steel.

RatingInstalledDesign LifeUpdated4 - Acceptable1958100APR-10

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

Structural interior walls supporting floors or roofs within the facility are comprised of of load-bearing concrete masonry units.

RatingInstalledDesign LifeUpdated4 - Acceptable1958100APR-10

B1010.03 Floor Decks, Slabs, and Toppings*

The suspended floor decks of the building's upper levels are understood to be comprised of concrete.

RatingInstalledDesign LifeUpdated4 - Acceptable1958100APR-10

B1010.07 Exterior Stairs*

Three sets of cast-in-place concrete stairs are provided on the south side of the school.

RatingInstalledDesign LifeUpdated3 - Marginal195840APR-10

Event: Repair damaged concrete stairs

Concern:

The concrete stair located near the southeast entrance was observed to be cracked down to centre and across the top riser. The stair was also showing signs of settlement.

Recommendation: Repair damaged stairs.

Consequences of Deferral:

The deteriorated stairs may become a safety hazard.

TypeYearCostPriorityRepair2010\$5,000Medium

Updated: APR-10

B1010.09 Floor Construction Fireproofing*

The ceiling of the boiler room was covered with a spray-on fire retardant material.

RatingInstalledDesign LifeUpdated4 - Acceptable200050APR-10

B1010.10 Floor Construction Firestopping*

Ductwork or conduit penetrations through floors in the building are sealed where voids are present.

RatingInstalledDesign LifeUpdated4 - Acceptable195850APR-10

B1020.01 Roof Structural Frame*

Roof structural framework for the building is understood to be comprised of wood joists and steel beams supporting a plywood roof deck. Glu-lam beams and wood joists support the gymnasium roof deck. The wood shop roof is supported by open web steel joists.

RatingInstalledDesign LifeUpdated4 - Acceptable1958100APR-10

B1020.04 Canopies*

Canopy structures are situated above exterior entrances along the building's south and east elevations. The canopies are understood to include wood-frame construction and are supported by painted metal or wood posts. The canopies are finished in a consistent manner to match existing finishes on the building perimeter.

<u>Rating</u>	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	1958	50	APR-10

S2 ENVELOPE

B2010.01.02.01 Brick Masonry: Ext. Wall Skin*

Most of the building's exterior is finished with clay brick veneer.

RatingInstalledDesign LifeUpdated4 - Acceptable195875APR-10

B2010.01.02.02 Concrete Block: Ext. Wall Skin*

The north elevation of the 1972 addition has a painted concrete block wall finish.

RatingInstalledDesign LifeUpdated4 - Acceptable197275APR-10

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

The lower portion of the of the exterior walls on the east elevation of the building has a stucco finish.

Rating Installed Design Life Updated 3 - Marginal 1958 75 APR-10

Event: Repair damage stucco

Concern:

Several areas of stucco on the east side of the building were observed to be cracked and deteriorating.

Recommendation:

Repair damaged stucco.

Consequences of Deferral:

Deferral of stucco repairs may result in accelerated deterioration leading to moisture infiltration and a loss of aesthetic appeal.

 Type
 Year
 Cost
 Priority

 Repair
 2011
 \$10,000
 Low

Updated: APR-10

B2010.01.09 Expansion Control: Exterior Wall Skin*

Expansion joints are provided at periodic intervals in the clay brick veneer for thermal expansion and contraction.

RatingInstalledDesign LifeUpdated4 - Acceptable195875APR-10

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

Sealant is provided in construction joints and around exterior windows/doors along the building's exterior walls.

RatingInstalledDesign LifeUpdated2 - Poor195820APR-10

Event: Replace Deficient Sealant (approx. 1200 m)

Concern:

Joint sealant in construction joints and around exterior windows/doors was observed to have failed adhesively, and exhibited a generally worn and brittle appearance.

Recommendation:

Replace the deficient sealant in construction joints around the building perimeter, as necessary.

Consequences of Deferral:

The unprotected construction joints may allow the passage of air and/or moisture into the building envelope.

TypeYearCostPriorityFailure Replacement2010\$42,000Medium

Updated: APR-10

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

The north elevation of the 1972 addition has a painted concrete block finish.

<u>Rating</u>	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	2005	15	APR-10

Event: Replace paint finish (approx. 50m²)

TypeYearCostPriorityLifecycle Replacement2020\$2,000Unassigned

Updated: APR-10

B2010.01.99 Other Exterior Wall Skin* - Parging

Cement parging is applied to foundation walls along the building's east and west elevations.

RatingInstalledDesign LifeUpdated3 - Marginal19580APR-10

Event: Repair Cement Parging (approx. 140m²)

Concern:

Cement parging was noted to cracked and spalling in several areas along the east and west elevations.

Recommendation:

Replace the deficient cement parging on the building foundation walls.

Consequences of Deferral:

The deficient parging detracts from the building's aesthetic appeal.

TypeYearCostPriorityRepair2010\$15,000Medium

Updated: APR-10

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

Exterior wall construction for the building is understood to be comprised of concrete masonry units.

RatingInstalledDesign LifeUpdated4 - Acceptable1958100APR-10

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

The exterior walls of the building are assumed to be equipped with vapor retarders and insulation; however construction drawings were not available for review during the assessment. The presence of an air barrier within the exterior walls of the original facility is considered unlikely.

RatingInstalledDesign LifeUpdated4 - Acceptable1958100APR-10

B2010.06 Exterior Louvers, Grilles, and Screens*

Painted metal and aluminum louvers and grilles are provided along the perimeter of the building.

RatingInstalledDesign LifeUpdated4 - Acceptable195850APR-10

B2010.09 Exterior Soffits*

Exterior soffits below canopy structures are comprised of pre-finished metal.

RatingInstalledDesign LifeUpdated4 - Acceptable195850APR-10

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

The majority of exterior windows on the building perimeter were installed in approximately 1980 and consist of insulated composite panels set in the upper portion of the aluminum frames with dual glazing set in horizontal sliding sashes in the lower portions. Windows along the northern portion of the east elevation consist of insulating glazing units set in aluminum frames with exterior horizontal security bars.

RatingInstalledDesign LifeUpdated4 - Acceptable198040APR-10

Event: Replace Windows (approx. 200 windows)

TypeYearCostPriorityLifecycle Replacement2020\$300,000Unassigned

Updated: APR-10

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

Windows consisting of insulating glazing units set in aluminum frames are provided in the suspended pedestrian link that joins the Allan Watson school to the #51 District office building.

RatingInstalledDesign LifeUpdated2 - Poor198040APR-10

Event: Replace windows (12 windows)

Concern:

Twelve out of the twenty windows in the pedestrian link have been covered with plywood .

Recommendation:

Replace damaged windows.

Consequences of Deferral:

The plywood over the windows may allow water to enter the building and the it detracts from the overall aesthetic appeal of the school.

TypeYearCostPriorityFailure Replacement2010\$17,000High

Updated: APR-10

B2030.01.01 Aluminum-Framed Storefronts: Doors**

The main entrance doors located on the south side of the building are comprised of aluminum framed pivot doors with half glazing and side lights.

RatingInstalledDesign LifeUpdated4 - Acceptable198030APR-10

Event: Replace aluminum entrance doors (3 double

doors)

TypeYearCostPriorityLifecycle Replacement2013\$37,000Unassigned

Updated: APR-10

B2030.02 Exterior Utility Doors**

Secondary entrances and service doors are comprised of painted metal pivot units, set in painted metal frames with and without inset glazing.

RatingInstalledDesign LifeUpdated4 - Acceptable195840APR-10

Event: Replace utility doors (11 doors)

TypeYearCostPriorityLifecycle Replacement2013\$15,000Unassigned

Updated: APR-10

B2030.03 Large Exterior Special Doors (Overhead)*

An insulated, metal, sectional overhead door is provided for the building shop on the north side of the School.

RatingInstalledDesign LifeUpdated5 - Good200320APR-10

B3010.01 Deck Vapor Retarder and Insulation*

Roofing assemblies for the building are understood to include a vapor retarder and insulation; however construction drawings were not available for review during the assessment.

RatingInstalledDesign LifeUpdated4 - Acceptable195825APR-10

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

The majority of the roof of the Allan Watson School is covered with a Built-up Bituminous Roofing system.

RatingInstalledDesign LifeUpdated3 - Marginal197525APR-10

Event: Replace Built-up Bituminous Roofing (approx.

1700m²)

Concern:

A review of the built-up roofing assembly revealed exposed and deteriorated roofing felt, damage to the asphalt flood coat, excessive ponding of rain water and general wind scouring of pea gravel ballast. No active roof leaks were reported or observed during the assessment.

Recommendation:

Based on the apparent age and observed condition of the roofing assembly, replacement is recommended.

Consequences of Deferral:

The deferral of roofing replacement may result in an increase in roof maintenance and repair costs, including the repair of recurring leakage and age-related deficiencies.

<u>Type</u>	<u>Year</u>	<u>Cost</u>	<u>Priority</u>
Failure Replacement	2011	\$380,000	Medium

Updated: APR-10

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

The pedestrian link that connects the Allan Watson school to the Administration Office Building is covered with modified Bitumen membrane roofing (SBS).

Rating	<u>Installed</u>	Design Life	Updated
4 - Acceptable	2008	25	APR-10

Event: Replace Modified Bituminous Membrane Roofing

(SBS) (Approx. 540m²)

TypeYearCostPriorityLifecycle Replacement2033\$120,000Unassigned

Updated: APR-10

B3010.08.02 Metal Gutters and Downspouts**

Metal down spouts are provided at the two entrance canopies on the south and east sides of the building.

RatingInstalledDesign LifeUpdated4 - Acceptable195830APR-10

Event: Replace downspouts

TypeYearCostPriorityLifecycle Replacement2013\$1,000Unassigned

Updated: APR-10

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

Multiple vents supporting air flow and ventilation within the building are present on the roof level.

Rating	<u>Installed</u>	Design Life	<u>Updated</u>
4 - Acceptable	1958	25	APR-10

S3 INTERIOR

C1010.01 Interior Fixed Partitions*

Interior fixed partitions throughout the building interior are generally comprised of concrete masonry units or metal/wood stud framing clad with gypsum board.

RatingInstalledDesign LifeUpdated4 - Acceptable00APR-10

C1010.03 Interior Operable Folding Panel Partitions**

An operable folding panel partition is provided between the stage and and the gymnasium.

RatingInstalledDesign LifeUpdated5 - Good200630APR-10

Event: Replace Interior Operable Folding Panel Partition

(approx. 60m²)

Concern:

The cost of this partition was reportedly approximately

\$26,000.

TypeYearCostPriorityLifecycle Replacement2036\$26,000Unassigned

Updated: APR-10

C1010.05 Interior Windows*

A pass-through window comprised of a metal roll-up shutter is provided between the main entrance foyer and lunch room. Other interior fixed windows, comprised of single pane tempered glass set in painted hollow metal framing, separate offices and meeting rooms from corridors or larger gathering areas.

RatingInstalledDesign LifeUpdated4 - Acceptable192880APR-10

C1010.07 Interior Partition Firestopping*

Ductwork or conduit penetrations through fire separations are sealed where voids are present.

RatingInstalledDesign LifeUpdated4 - Acceptable195850APR-10

C1020.01 Interior Swinging Doors (& Hardware)* - 1958

The interior doors are a combination of solid core wood and hollow core metal units set in pressed steel frames.

RatingInstalledDesign LifeUpdated4 - Acceptable195840APR-10

C1020.01 Interior Swinging Doors (& Hardware)* - 2003

Solid core wood doors are set in metal frames.

RatingInstalledDesign LifeUpdated5 - Good200340APR-10

C1020.03 Interior Fire Doors*

Interior fire doors at fire separations consist of painted, solid-core wood or metal pivot units set in painted metal frames.

RatingInstalledDesign LifeUpdated4 - Acceptable195850APR-10

C1030.01 Visual Display Boards**

Wall-mounted white/black/green boards and cork boards are provided in corridors, classrooms and office/administrative areas.

RatingInstalledDesign LifeUpdated4 - Acceptable195820APR-10

Event: Replace Visual Display Boards (approx. 40

chalkboards & tackboards)

TypeYearCostPriorityLifecycle Replacement2013\$60,000Unassigned

Updated: APR-10

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

Floor-mounted, pre-finished metal partitions are provided in multi-user washrooms throughout the building.

RatingInstalledDesign LifeUpdated4 - Acceptable195830APR-10

Event: Replace Washroom Partitions (approx. 14

partitions)

TypeYearCostPriorityLifecycle Replacement2013\$25,000Unassigned

Updated: APR-10

C1030.06 Handrails*

Painted steel handrails are provided for all stairs.

RatingInstalledDesign LifeUpdated4 - Acceptable195840APR-10

C1030.08 Interior Identifying Devices*

Interior identification in the building is generally provided by door and wall-mounted metal or lamicoid signage.

RatingInstalledDesign LifeUpdated4 - Acceptable195820APR-10

C1030.10 Lockers**

Banks of pre-finished metal lockers installed in 2003 are provided in corridors for student use.

RatingInstalledDesign LifeUpdated4 - Acceptable200330APR-10

Event: Replace Lockers (approx. 200 lockers)

TypeYearCostPriorityLifecycle Replacement2033\$144,000Unassigned

Updated: APR-10

C1030.12 Storage Shelving*

Wall-mounted, painted wood and metal storage shelving is typically provided in janitorial closets and office/administrative areas throughout the building.

RatingInstalledDesign LifeUpdated4 - Acceptable195830APR-10

C1030.14 Toilet, Bath, and Laundry Accessories*

Washrooms are typically equipped with wall-mounted grab bars, mirrors, and toilet paper/soap/paper towel dispensers.

RatingInstalledDesign LifeUpdated4 - Acceptable195820APR-10

C2010 Stair Construction*

Interior stair construction between floors is comprised of steel pan staircases with concrete topping. Steel framed stairs provide access to the basement boiler room.

RatingInstalledDesign LifeUpdated4 - Acceptable1958100APR-10

C2020.05 Resilient Stair Finishes**

The staircases between floors are finished with rubber treads and risers.

RatingInstalledDesign LifeUpdated4 - Acceptable195820APR-10

Event: Replace Resilient Stair Finishes (6 flights of stairs)

TypeYearCostPriorityLifecycle Replacement2013\$42,000Unassigned

Updated: APR-10

C2020.08 Stair Railings and Balustrades*

Stair railings and balustrades are typically comprised of base and wall-mounted painted metal, and include wood hand grips.

RatingInstalledDesign LifeUpdated4 - Acceptable192840APR-10

C2020.10 Stair Painting*

Stairs leading to the basement level mechanical room include painted concrete and steel surfaces.

RatingInstalledDesign LifeUpdated4 - Acceptable19950APR-10

C3010.01 Concrete Wall Finishes (Unpainted)*

Concrete masonry unit partitions are provided throughout the building interior.

RatingInstalledDesign LifeUpdated4 - Acceptable1958100APR-10

C3010.04 Gypsum Board Wall Finishes (Unpainted)*

Interior wood or metal stud partitions in the building are typically sheathed with gypsum board.

RatingInstalledDesign LifeUpdated4 - Acceptable195860APR-10

C3010.06 Tile Wall Finishes**

Boys and Girls Washrooms have tile finish on the walls throughout.

RatingInstalledDesign LifeUpdated3 - Marginal195840APR-10

Event: Replace ceramic wall tile (approx. 125m²)

Concern:

Boys and Girls Washrooms are in poor condition. All finishes in the washroom are dated, worn. They appear to be original finishes. There is constant odor in the washroom from old materials.

Recommendation:

Upgrade all the finishes in the Boys and Girls washrooms. (Approximately 125 m2 of tile surface for Boys and Girls Washrooms).

Consequences of Deferral:

Failure to replace the ceramic tile may result in the loss of ease of cleaning and a loss of aesthetic appeal.

TypeYearCostPriorityFailure Replacement2012\$10,000Low

Updated: APR-10

C3010.11 Interior Wall Painting*

Concrete masonry unit and gypsum board surfaces typically include a paint finish.

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

C3020.01.02 Paint Concrete Floor Finishes*

Painted concrete floors are provided in storage rooms and the basement level mechanical room.

RatingInstalledDesign LifeUpdated3 - Marginal010APR-10

Event: Replace Concrete Floor Finishes (approx. 72 m²)

Concern:

Minor peeling and flaking of painted/sealed concrete floor surfaces was observed in the basement level mechanical room.

Recommendation:

Based on the observed condition of the concrete floor finishes, replacement is recommended.

Consequences of Deferral:

Deferral of replacement will result in a loss of aesthetic appeal and exposure of concrete surfaces to potentially harmful chemicals and other forms of abuse.

TypeYearCostPriorityFailure Replacement2012\$2,000Low

Updated: APR-10

C3020.02 Tile Floor Finishes**

Ceramic tile floor finishes are provided in multi-user washrooms and shower rooms throughout the school.

<u>Rating</u>	<u>Installed</u>	<u>Design Life</u>	<u>Updated</u>
3 - Marginal	1958	50	APR-10

Event: Replace the floor tile finish in both Boys and Girls Washrooms (approx. 90 m²)

Concern:

The tile finish in the Washrooms was observed to have visible cracks, missing tiles and deteriorated grout. The tile was showing its age and displayed an overall dated appearance.

Recommendation:

Replace the floor tile finish in both Boys and Girls Washrooms.

Consequences of Deferral:

The tile floors will continue to deteriorate, resulting in a loss of aesthetic appeal, the loss of ease of cleaning and the development of potential tripping/walking hazards.

TypeYearCostPriorityFailure Replacement2012\$20,000Low

Updated: APR-10

C3020.04 Wood Flooring** - Wood Shop

The floor of the wood shop is finished with parquet flooring.

RatingInstalledDesign LifeUpdated4 - Acceptable195830APR-10

Event: Replace wood parquet flooring (approx. 300 m²)

TypeYearCostPriorityLifecycle Replacement2013\$75,000Unassigned

Updated: APR-10

C3020.04 Wood Flooring** - Gymnasium

The gymnasium and stage area include maple strip flooring. The gymnasium floors were reportedly re-finished in 1994.

RatingInstalledDesign LifeUpdated4 - Acceptable195830APR-10

Event: Replace Hardwood Flooring (approx. 643 sq. m.)

TypeYearCostPriorityLifecycle Replacement2013\$200,000Unassigned

Updated: APR-10

C3020.07 Resilient Flooring** - 1958

Several corridors, classrooms and storage rooms have original vinyl tile flooring that is suspected to contain asbestos.

RatingInstalledDesign LifeUpdated2 - Poor195820APR-10

Event: Replace vinyl tile flooring (approx. 300m²)

Concern:

The vinyl tile flooring was observed to be chipped, scratched and lifting at the corners.

Recommendation:

It is recommended that the original vinyl tiles be replaced. A cost for asbestos abatement is included.

Consequences of Deferral:

Lifting tiles may cause a tripping hazard as well as the loss of aesthetic appeal and the loss of ease of cleaning.

TypeYearCostPriorityFailure Replacement2011\$30,000Low

Updated: APR-10

C3020.07 Resilient Flooring** - 1995

The majority of classrooms are finished with vinyl sheet flooring.

RatingInstalledDesign LifeUpdated4 - Acceptable199520APR-10

Event: Replace vinyl sheet flooring (approx. 1200 m²)

TypeYearCostPriorityLifecycle Replacement2015\$125,000Unassigned

Updated: APR-10

C3020.07 Resilient Flooring** - 2003

The majority of corridors and several classrooms have sheet vinyl flooring that was installed in 2003.

RatingInstalledDesign LifeUpdated4 - Acceptable200320APR-10

Event: Replace Sheet vinyl flooring (approx. 750m²)

TypeYearCostPriorityLifecycle Replacement2023\$80,000Unassigned

Updated: APR-10

C3020.08 Carpet Flooring** - 2003

The office area has carpet flooring.

RatingInstalledDesign LifeUpdated4 - Acceptable200315APR-10

Event: Replace Carpet Flooring (approx. 50m²)

TypeYearCostPriorityLifecycle Replacement2018\$4,000Unassigned

Updated: APR-10

C3020.08 Carpet Flooring** - 2006

The carpet in the staff room was reportedly replaced in 2006.

RatingInstalledDesign LifeUpdated4 - Acceptable200615APR-10

Event: Replace Carpet Flooring (approx. 35m²)

TypeYearCostPriorityLifecycle Replacement2021\$2,800Unassigned

Updated: APR-10

C3030.04 Gypsum Board Ceiling Finishes (Unpainted)*

Gypsum board ceilings are typically provided in janitorial closets and multi-user washrooms.

RatingInstalledDesign LifeUpdated3 - Marginal195860APR-10

Event: Repair gypsum board ceilings

Concern:

There are holes in the washroom ceilings cut for access that were not repaired.

Recommendation:

Repair damaged gypsum board ceilings.

Consequences of Deferral:

The openings in ceiling may allow moisture to enter the ceiling space and they detract from the overall aesthetic appeal.

TypeYearCostPriorityRepair2010\$2,000Medium

Updated: APR-10

C3030.06 Acoustic Ceiling Treatment (Glue -on)**

Perforated acoustic ceiling tiles are adhered or mechanically fastened to ceilings in several corridors, classrooms, the wood shop and the gymnasium.

RatingInstalledDesign LifeUpdated3 - Marginal195825APR-10

Event: Replace Acoustic Panel Ceilings (approx. 2000 sq.

<u>m.)</u>

TypeYearCostPriorityLifecycle Replacement2013\$224,000Unassigned

Updated: APR-10

Event: Replace damaged or stained acoustic ceiling tiles

Concern:

Several stained and/or damaged acoustic ceiling tiles were observed in corridors and classrooms in the building.

Recommendation:

Replace the stained/damaged ceiling tiles where present throughout the facility.

Consequences of Deferral:

The stained ceiling tiles provide a suitable environment for microbial growth, which may lead to potential health implications for students and staff members. Damaged tiles detract from the overall aesthetic appeal.

TypeYearCostPriorityRepair2009\$1,000Medium

Updated: APR-10

C3030.06 Acoustic Ceiling Treatment (Susp.T-Bar)** - 2003

Most ceilings throughout the building interior are finished with a suspended T-bar grid assembly with in-laid acoustic panels.

RatingInstalledDesign LifeUpdated4 - Acceptable200325APR-10

Event: Replace Acoustic Panel Ceilings (approx. 2,500 sq.

<u>m.)</u>

TypeYearCostPriorityLifecycle Replacement2028\$280,000Unassigned

Updated: APR-10

Event: Replace Stained Ceiling Panels

Concern:

Several stained ceiling panels were observed in corridors and classrooms in the building, typically due to previous roof or plumbing leaks which have since been repaired.

Recommendation:

Replace the stained ceiling panels where present throughout the facility.

Consequences of Deferral:

The stained ceiling panels provide a suitable environment for microbial growth, which may lead to potential health implications for students and staff members.

TypeYearCostPriorityRepair2009\$1,000High

Updated: APR-10

C3030.07 Interior Ceiling Painting*

Gypsum board ceilings in washrooms and janitorial closets typically include a paint finish.

RatingInstalledDesign LifeUpdated4 - Acceptable195820APR-10

S4 MECHANICAL

D2010.04 Sinks** - 1958

Five sinks throughout the school are from the original 1958 construction.

RatingInstalledDesign LifeUpdated4 - Acceptable195830APR-10

Event: Replace (5) Sinks

TypeYearCostPriorityLifecycle Replacement2013\$10,000Unassigned

Updated: APR-10

D2010.04 Sinks** - 1995

Ten stainless steel sinks in various classrooms were installed in 1995.

RatingInstalledDesign LifeUpdated4 - Acceptable199530APR-10

Event: Replace (10) Sinks

TypeYearCostPriorityLifecycle Replacement2025\$20,000Unassigned

Updated: APR-10

D2010.05 Showers**

Two communal shower poles are installed in the boys gymnasium change room.

Additional showers are installed in the area between the boys and girls washrooms but are not in use.

RatingInstalledDesign LifeUpdated4 - Acceptable198530APR-10

Event: Replace (4) Showers

TypeYearCostPriorityLifecycle Replacement2015\$10,000Unassigned

Updated: APR-10

D2010.08 Drinking Fountains / Coolers**

Vitreous china non-refrigerated drinking fountains are installed throughout the school.

RatingInstalledDesign LifeUpdated4 - Acceptable195835APR-10

Event: Replace (9) Drinking Fountains / Coolers

TypeYearCostPriorityLifecycle Replacement2013\$18,000Unassigned

Updated: APR-10

D2010.10 Washroom Fixtures (WC, Lav, Urnl)** - 1958

Floor mounted porcelain water closets with bottom outlets (8), vitreous china lavatories (8), and built in porcelain urinals (11) are installed in the washrooms.

All fixtures with the exception of the urinals are manually controlled.

RatingInstalledDesign LifeUpdated4 - Acceptable195835APR-10

Event: Replace Washroom Fixtures - WCx8, Lav x8, Urnl

<u>x11</u>

TypeYearCostPriorityLifecycle Replacement2013\$50,000Unassigned

Updated: APR-10

D2010.10 Washroom Fixtures (WC, Lav, UrnI)** - 1985

Floor mounted porcelain water closets with bottom outlets (6) are installed in the washrooms.

The water closets are manually controlled.

RatingInstalledDesign LifeUpdated4 - Acceptable198535APR-10

Event: Replace Washroom Fixtures - WC x6

TypeYearCostPriorityLifecycle Replacement2020\$12,000Unassigned

Updated: APR-10

D2010.10 Washroom Fixtures (WC, Lav, UrnI)** - 1996

Stainless steel lavatories (6) are installed in the washrooms.

The lavatories are manually controlled.

RatingInstalledDesign LifeUpdated4 - Acceptable199635APR-10

Event: Replace Washroom Fixtures - Lav x6

TypeYearCostPriorityLifecycle Replacement2031\$9,000Unassigned

Updated: APR-10

D2020.01.01 Pipes and Tubes: Domestic Water*

Insulated copper domestic water piping is installed throughout the school.

RatingInstalledDesign LifeUpdated4 - Acceptable199540APR-10

D2020.01.02 Valves: Domestic Water**

Domestic water shut-off valves in the mechanical room and water service entrance are installed. Local shut-off valves are installed for the washrooms and sinks throughout the school.

RatingInstalledDesign LifeUpdated4 - Acceptable199540APR-10

Event: Replace (8) Valves: Domestic Water

TypeYearCostPriorityLifecycle Replacement2035\$12,000Unassigned

Updated: APR-10

D2020.01.03 Piping Specialties (Backflow Preventors)**

Backflow prevention was installed as part of the water service upgrade.

RatingInstalledDesign LifeUpdated4 - Acceptable199520APR-10

Event: Replace Backflow Preventor

TypeYearCostPriorityLifecycle Replacement2015\$5,000Unassigned

Updated: APR-10

D2020.02.06 Domestic Water Heaters**

A State Sandblaster, 19kW input, 284 L domestic water heater is installed in the mechanical room.

RatingInstalledDesign LifeUpdated4 - Acceptable199520APR-10

Event: Replace Domestic Water Heater

TypeYearCostPriorityLifecycle Replacement2030\$4,000Unassigned

Updated: APR-10

Event: Replace domestic water heater

Concern:

The capacity of the domestic water heater has been reported as an issue.

Recommendation:

Replace the domestic water heater with a model with increased capacity.

Consequences of Deferral:

The capacity of the domestic water heater will continue to be an issue.

TypeYearCostPriorityProgram Functional Upgrade2010\$4,000Low

Updated: APR-10

D2020.03 Water Supply Insulation: Domestic*

Fiberglass pipe insulation and canvas jacketing is installed on the domestic hot and cold water piping.

Rating 5 - Good 1995 40 Life Updated APR-10

D2030.01 Waste and Vent Piping*

The original cast iron and copper waste and vent piping remains throughout the school.

RatingInstalledDesign LifeUpdated4 - Acceptable195850APR-10

D2040.01 Rain Water Drainage Piping Systems*

Roof drains complete with gravel strainers collect and convey storm water to interior cast iron leaders and the underground storm sewer.

RatingInstalledDesign LifeUpdated4 - Acceptable195850APR-10

D2040.02.04 Roof Drains*

Roof drains convey storm water to interior rainwater leaders.

RatingInstalledDesign LifeUpdated4 - Acceptable195840APR-10

D2090.01 Compressed Air Systems (Non Controls)**

Compressed air equipment in the mechanical room provides air for the industrial arts shop.

RatingInstalledDesign LifeUpdated4 - Acceptable19850APR-10

Event: Replace Compressed Air System

TypeYearCostPriorityLifecycle Replacement2020\$18,000Unassigned

Updated: APR-10

D3010.02 Gas Supply Systems*

The low pressure gas supply system was installed in 1972 and services the rooftop and mechanical room equipment.

RatingInstalledDesign LifeUpdated4 - Acceptable197260APR-10

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

Two Weil McLain LGB-19W units, 685kW input each, provide hot water heating to the entire school.

RatingInstalledDesign LifeUpdated5 - Good200435APR-10

Event: Replace Heating Boilers and Accessories: H.W.

TypeYearCostPriorityLifecycle Replacement2039\$125,000Unassigned

Updated: APR-10

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

A new chimney and combustion air ducting system was installed as part of boiler replacement in 2004.

RatingInstalledDesign LifeUpdated5 - Good200430APR-10

Event: Replace Chimneys (&Comb. Air): H.W. Boiler

TypeYearCostPriorityLifecycle Replacement2034\$40,000Unassigned

Updated: APR-10

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

The water treatment filter system and pot feeders were installed during the 2004 boiler replacement.

RatingInstalledDesign LifeUpdated5 - Good200430APR-10

D3020.03.01 Furnaces**

A Flamemaster furnace services the shower room. The furnace is being replaced in 2009 due to equipment failure.

RatingInstalledDesign LifeUpdated2 - Poor198525APR-10

Event: Replace Furnace

Concern:

Furnace is to be replaced due to equipment failure

Recommendation: Install new furnace

Consequences of Deferral:

Lack of ventilation and heating for the area served by the

furnace

TypeYearCostPriorityFailure Replacement2010\$6,000High

Updated: APR-10

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

The furnace chimney shows significant corrosion and is being replaced along with the furnace in 2009.

RatingInstalledDesign LifeUpdated3 - Marginal198525APR-10

Event: Replace Furnace Chimney

Concern:

Chimney for furnace shows significant corrosion

Recommendation:

Replace chimney at same time as furnace

Consequences of Deferral:

Failure of chimney interrupting ventilation and heating to area

TypeYearCostPriorityFailure Replacement2010\$1,000High

Updated: APR-10

D3040.01.04 Ducts: Air Distribution*

All air distribution ducting is from the original construction.

RatingInstalledDesign LifeUpdated4 - Acceptable195850APR-10

D3040.01.07 Air Outlets & Inlets:Air Distribution*

All air outlets and inlets are from the original construction.

RatingInstalledDesign LifeUpdated4 - Acceptable195830APR-10

D3040.03.01 Hot Water Distribution Systems**

Four new primary and secondary loop distribution pumps were installed as a part of the boiler system upgrade. Insulated hot water heating piping is installed throughout the school.

Rating Installed Design Life Updated 5 - Good 2004 40 APR-10

Event: Replace Hot Water Distribution Systems. Cost

based on floor area.

TypeYearCostPriorityLifecycle Replacement2044\$450,000Unassigned

Updated: APR-10

D3040.04.01 Fans: Exhaust**

Local exhaust fans serve the washroom areas.

RatingInstalledDesign LifeUpdated4 - Acceptable197030APR-10

Event: Replace Fans: Exhaust. Cost based on floor area.

TypeYearCostPriorityLifecycle Replacement2013\$80,000Unassigned

Updated: APR-10

D3040.04.02 Air Cleaning Devices: Exhaust*

A dust collection unit with partial recirculation is installed in the shop area.

RatingInstalledDesign LifeUpdated3 - Marginal19850APR-10

Event: Replace dust collection unit

Concern:

The dust collection unit recirculates air into the shop which is not recommended and may not be allowed by current codes.

Recommendation:

Replace the dust collection unit with a unit that exhausts 100% of the filtered air.

Consequences of Deferral:

Indoor air quality may not be satisfactory.

TypeYearCostPriorityIndoor Air Quality Upgrade2010\$30,000Low

Updated: APR-10

Event: Study Dust Collector Installation

Concern:

The dust collection unit recirculates air into the shop which is not recommended and may not be allowed by current codes.

Recommendation:

Review the current operation and configuration of the shop dust collector.

Consequences of Deferral:

Indoor air quality may not be satisfactory.

TypeYearCostPriorityStudy2010\$2,000Low

Updated: APR-10

D3040.04.03 Ducts: Exhaust*

Duct work for the exhaust fans throughout the school are from the original equipment installation.

RatingInstalledDesign LifeUpdated4 - Acceptable197050APR-10

D3040.04.05 Air Outlets and Inlets: Exhaust*

Air outlets and inlets for the exhaust fans throughout the school are from the original equipment installation.

RatingInstalledDesign LifeUpdated4 - Acceptable197030APR-10

D3050.01.02 Packaged Rooftop Air Conditioning Units (& Heating Units)** - 1985

A Buffalo roof-top unit heats the shop area and an Engineered-Air unit provides make-up air for the shop dust collector.

RatingInstalledDesign LifeUpdated4 - Acceptable198530APR-10

Event: Replace Packaged Rooftop Units

TypeYearCostPriorityLifecycle Replacement2015\$110,000Unassigned

Updated: APR-10

D3050.01.02 Packaged Rooftop Air Conditioning Units (& Heating Units)** - 1995

An I.C.G air handling unit provides ventilation for the science room.

A York air-conditioning unit serves the administration area.

RatingInstalledDesign LifeUpdated4 - Acceptable199530APR-10

Event: Install ventilation air equipment and ducting

Concern:

Ventilation air is not provided to the school with the exception of the science room, administration and shop areas.

Recommendation:

Install ventilation air equipment and ducting throughout the school.

Consequences of Deferral:

Lack of ventilation air throughout the school will affect the services provided by the school.

TypeYearCostPriorityIndoor Air Quality Upgrade2010\$500,000Medium

Updated: APR-10

Event: Repair found issues from study to resolve

reliability problems

Concern:

The I.C.G. air-handling unit serving the science room does not function reliably and requires frequent maintenance.

Recommendation:

Repair found issues from study to resolve reliability problems.

Consequences of Deferral:

The I.C.G. unit will continue to require frequent maintenance.

TypeYearCostPriorityRepair2010\$5,000Medium

Updated: APR-10

Event: Replace (2) Packaged Rooftop Air Conditioning

Units (& Heating Units)

TypeYearCostPriorityLifecycle Replacement2025\$100,000Unassigned

Updated: APR-10

Event: Study Packaged Rooftop Ventilation Unit

Concern:

The I.C.G. air-handling unit serving the science room does not function reliably and requires frequent maintenance.

Recommendation:

Investigate and inspect the unit for issues leading to reliability problems.

Consequences of Deferral:

The I.C.G. unit will continue to require frequent maintenance.

TypeYearCostPriorityStudy2010\$1,000Medium

Updated: APR-10

D3050.05.02 Fan Coil Units**

Fan coil units are installed in the entry vestibules.

RatingInstalledDesign LifeUpdated4 - Acceptable198730APR-10

Event: Replace (4) Fan Coil Units

TypeYearCostPriorityLifecycle Replacement2017\$24,000Unassigned

Updated: APR-10

D3050.05.03 Finned Tube Radiation**

Finned tube radiation cabinets are installed around the perimeter of the school and in various other locations throughout.

RatingInstalledDesign LifeUpdated4 - Acceptable198740APR-10

Event: Replace Finned Tube Radiation. Cost based on

floor area.

TypeYearCostPriorityLifecycle Replacement2027\$230,000Unassigned

Updated: APR-10

D3050.05.06 Unit Heaters**

Force flow unit heaters are installed in the mechanical room.

RatingInstalledDesign LifeUpdated4 - Acceptable198730APR-10

Event: Replace (2) Unit Heaters

TypeYearCostPriorityLifecycle Replacement2017\$8,000Unassigned

Updated: APR-10

D3060.02.02 Pneumatic Controls**

Pneumatic perimeter radiation zone valves and thermostats are installed throughout the school.

RatingInstalledDesign LifeUpdated3 - Marginal195840APR-10

Event: Replace Pneumatic Controls. Cost based on floor

area.

Concern:

The pneumatic zone valves are leaking and require frequent maintenance.

Recommendation:

Replace the pneumatic zone valves with new equipment.

Consequences of Deferral:

The pneumatic zone valves will continue to require frequent maintenance.

TypeYearCostPriorityFailure Replacement2010\$30,000Low

Updated: APR-10

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

A DDC system controls the boiler plant, as well as radiation valves in the administration areas.

Event: Replace Building Systems Controls. Cost based

on floor area.

TypeYearCostPriorityLifecycle Replacement2029\$110,000Unassigned

Updated: APR-10

D4010 Sprinklers: Fire Protection*

Sprinklers are installed in the shop paint booth.

RatingInstalledDesign LifeUpdated4 - Acceptable198560APR-10

D4020 Standpipes*

The fire system standpipe connection is located at the exterior of the main entrance.

RatingInstalledDesign LifeUpdated4 - Acceptable198860APR-10

D4030.01 Fire Extinguisher, Cabinets and Accessories*

Fire hose cabinets and wall mounted fire extinguishers are located throughout the school.

Rating	<u>Installed</u>	Design Life	Updated
4 - Acceptable	1988	30	APR-10

S5 ELECTRICAL

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

The main electrical switchboard is a 1200A, 120/208V Siemens unit complete with two CDPs. The main breaker and feeders were upgraded from a 800A to a 1200A in 2005. The CDPs are 75% full.

RatingInstalledDesign LifeUpdated4 - Acceptable199540APR-10

Event: Replace Main Electrical Switchboard

TypeYearCostPriorityLifecycle Replacement2035\$60,000Unassigned

Updated: APR-10

D5010.05 Electrical Branch Circuit Panelboards (Secondary Distribution)** - 1958

Four electrical panels throughout the school are from the 1958 construction and have little or no room for future expansion.

RatingInstalledDesign LifeUpdated3 - Marginal195830APR-10

Event: Replace (4) Electrical Panels

Concern:

The existing panels are significantly beyond their theoretical lifecycle. In addition, the panels are full and have very minimal room for future expansion.

Recommendation:

New panels and feeders should be installed to increase capacity and ampacity throughout the school.

Consequences of Deferral:

Existing electrical panels could fail, creating significant electrical disruptions.

Additional mechanical or electrical loads cannot be added until existing panels and feeders are replaced.

TypeYearCostPriorityFailure Replacement2010\$40,000Low

Updated: APR-10

D5010.05 Electrical Branch Circuit Panelboards (Secondary Distribution** - 1995

Four electrical panels throughout the school are from the 1995 electrical renovation. The panels have a small amount of room for future expansion.

RatingInstalledDesign LifeUpdated4 - Acceptable199530APR-10

Event: Replace (4) Electrical Branch Circuit Panelboards

TypeYearCostPriorityLifecycle Replacement2025\$24,000Unassigned

Updated: APR-10

D5010.07.02 Motor Starters and Accessories**

Loose motor starters are installed in the mechanical room or mounted in close proximity to the individual motors.

RatingInstalledDesign LifeUpdated4 - Acceptable198830APR-10

Event: Replace (10) Motor Starters and Accessories

TypeYearCostPriorityLifecycle Replacement2018\$20,000Unassigned

Updated: APR-10

D5020.01 Electrical Branch Wiring*

Electrical branch wiring throughout the school is a mixture of concealed and surface mount conduit installation. Additional receptacles were added to the classrooms in 1995 and 1997, however, more receptacles would be useful.

RatingInstalledDesign LifeUpdated4 - Acceptable195850APR-10

Event: Add Receptacles and Circuits to Classrooms

Concern:

The classrooms have a lack of receptacles.

Recommendation:

Add 2 to 3 receptacles per classroom, and add extra circuits to accommodate the increased load.

Consequences of Deferral:

Continued addition of electrical equipment to the classrooms may overly tax the capacity of the existing receptacles and circuits.

TypeYearCostPriorityProgram Functional Upgrade2010\$70,000Low

Updated: APR-10

D5020.02.01 Lighting Accessories (Lighting Controls)*

Lighting throughout the school is controlled with local line voltage switches.

RatingInstalledDesign LifeUpdated4 - Acceptable197230APR-10

D5020.02.02.01 Interior Incandescent Fixtures*

Incandescent keyless fixtures are located in mechanical, service and storage rooms.

RatingInstalledDesign LifeUpdated4 - Acceptable197230APR-10

D5020.02.02.02 Interior Florescent Fixtures** - 1972

Recessed and surface mounted fluorescent fixtures with T-12 bulbs are installed in the classrooms, gymnasium and hallways throughout the school.

RatingInstalledDesign LifeUpdated4 - Acceptable197230APR-10

Event: Replace Interior Florescent Fixtures. Cost based

on floor area.

TypeYearCostPriorityLifecycle Replacement2013\$385,000Unassigned

Updated: APR-10

D5020.02.02.02 Interior Florescent Fixtures** - 2003

Recessed fluorescent fixtures are installed in the administration area.

RatingInstalledDesign LifeUpdated5 - Good200330APR-10

Event: Replace Interior Florescent Fixtures. Cost based

on floor area.

TypeYearCostPriorityLifecycle Replacement2033\$40,000Unassigned

Updated: APR-10

D5020.02.03.01 Emergency Lighting Built-in*

An emergency generator and panelboard provide emergency lighting to the school. A number of the recessed fluorescent fixtures throughout the school are powered through the emergency panelboard, as are the exit signs.

RatingInstalledDesign LifeUpdated4 - Acceptable198835APR-10

D5020.02.03.03 Exit Signs*

Exit signs throughout the school are tied to the emergency generator and panelboard system. The exit signs have been retrofitted with LED bulbs.

RatingInstalledDesign LifeUpdated4 - Acceptable197030APR-10

D5020.02.05 Special Purpose Lighting*

Track lighting is mounted in the old music room for performances.

RatingInstalledDesign LifeUpdated4 - Acceptable198530APR-10

D5020.03.01.04 Exterior H.P. Sodium Fixtures*

150W HPS fixtures are installed around the school for perimeter lighting and a flood fixture is installed over the north parking lot.

RatingInstalledDesign LifeUpdated4 - Acceptable198530APR-10

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

Exterior lighting is controlled by local photocells on each exterior fixture.

RatingInstalledDesign LifeUpdated4 - Acceptable198530APR-10

D5030.01 Detection and Fire Alarm**

The fire alarm panel is a Edwards EST Quick Start unit, located in the main entryway. Heat detectors, combination strobe and horn annunciators, and manual pull stations are located throughout the school to meet code requirements. Annunciator bells are wall mounted on the exterior of the building.

Rating Installed Design Life Updated
5 - Good 2006 25 APR-10

Event: Replace Detection and Fire Alarm. Cost based on

floor area.

TypeYearCostPriorityLifecycle Replacement2031\$145,000Unassigned

D5030.02.02 Intrusion Detection**

A Magnum Alert security panel complete with motion detection and door contact sensors is installed throughout the school.

RatingInstalledDesign LifeUpdated3 - Marginal198525APR-10

Event: Replace Intrusion Detection. Cost based on floor

area.

Concern:

The existing intrusion detection system has become outdated.

Recommendation:

Install a new computer based intrusion detection system in the school.

Consequences of Deferral:

The intrusion detection capabilities of the existing system may not be adequate to prevent security incidents.

TypeYearCostPriorityFailure Replacement2010\$145,000Low

Updated: APR-10

D5030.02.04 Video Surveillance**

A video survellience system is installed in the administration area.

RatingInstalledDesign LifeUpdated5 - Good200325APR-10

Event: Replace Video Surveillance

TypeYearCostPriorityLifecycle Replacement2028\$8,000Unassigned

Updated: APR-10

D5030.04.01 Telephone Systems*

The telephone system switch is a Nortel Norstar MOX16, with a 25 pair phone line coming into the building. The main service enters in the NE side of the building and is routed to the switch in the SW basement.

RatingInstalledDesign LifeUpdated4 - Acceptable199825APR-10

D5030.04.02 Paging Systems*

Paging is handled through phone system.

RatingInstalledDesign LifeUpdated4 - Acceptable19980APR-10

D5030.04.05 Local Area Network Systems*

The Local Area Network hardware is located in a server room and is comprised of Cisco Systems equipment complete with a small UPS pack. Category 5e cables are run in surface conduit from this point to data outlets throughout the school. There is no computer room, and minimal space in the existing equipment for additional data runs.

RatingInstalledDesign LifeUpdated4 - Acceptable199815APR-10

D5030.05 Public Address and Music Systems** - 1997

A Dukane MCS 350 PA system provides public address throughout the school and controls the change bells.

RatingInstalledDesign LifeUpdated4 - Acceptable199725APR-10

Event: Replace Public Address System

TypeYearCostPriorityLifecycle Replacement2022\$20,000Unassigned

Updated: APR-10

D5030.05 Public Address and Music Systems** - 2008

A separate public address and sound system are installed for the gymnasium.

RatingInstalledDesign LifeUpdated5 - Good200825APR-10

Event: Replace Public Address and Music System

TypeYearCostPriorityLifecycle Replacement2033\$10,000Unassigned

Updated: APR-10

D5030.06 Television Systems*

CATV has been brought into the building but there is no distribution throughout the school.

RatingInstalledDesign LifeUpdated4 - Acceptable198820APR-10

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

A 10kW Toshiba diesel genset and automatic transfer switch provide backup power in the event of electrical service failure.

RatingInstalledDesign LifeUpdated4 - Acceptable198540APR-10

Event: Replace Packaged Engine Generator Systems

TypeYearCostPriorityLifecycle Replacement2025\$40,000Unassigned

S6 EQUIPMENT, FURNISHINGS AND SPECIAL CONSTRUCTION

E1090.04 Residential Equipment*

Residential-grade appliances, including a refrigerator, stove and microwave oven, are provided in the staff room. Similar appliances are also present in the Home Economics classroom on the building's second floor.

RatingInstalledDesign LifeUpdated4 - Acceptable200310APR-10

E1090.07 Athletic, Recreational, and Therapeutic Equipment*

Fixed and retractable wall/ceiling-mounted basketball equipment is provided in the gymnasium, along with a wall-mounted electronic score clock and retractable bleachers.

RatingInstalledDesign LifeUpdated4 - Acceptable195815APR-10

E2010.02 Fixed Casework** - 1958

Fixed wooden casework and vanities with plastic laminate counter tops are provided in most classrooms, multi-user washrooms, staff room, and office/administrative area.

RatingInstalledDesign LifeUpdated3 - Marginal195835APR-10

Event: Replace original casework (approx. 200m)

Concern:

Original casework has surpassed its expected useful life and was observed to be chipped, dented and scratched. The laminated countertops in the computer room have patches where lab sinks were removed.

Recommendation:

Replace original casework.

Consequences of Deferral:

Loss of aesthetic appeal and loss of ease of cleaning.

TypeYearCostPriorityFailure Replacement2012\$192,000Low

E2010.02 Fixed Casework** - 2003

The Home Economics classroom and the administration office include fixed wooden casework with plastic laminate counter tops that were installed in 2003.

RatingInstalledDesign LifeUpdated4 - Acceptable200335APR-10

Event: Replace Fixed Casework (approx. 8 m)

TypeYearCostPriorityLifecycle Replacement2038\$65,000Unassigned

Updated: APR-10

E2010.03.01 Blinds**

Most exterior windows include vertical polyvinyl chloride window coverings.

RatingInstalledDesign LifeUpdated4 - Acceptable198030APR-10

Event: Replace Blinds (approx. 200 blinds)

TypeYearCostPriorityLifecycle Replacement2013\$30,000Unassigned

S8 FUNCTIONAL ASSESSMENT

K4010.01 Barrier Free Route: Parking to Entrance*

Barrier free accessibility is available from the parking lot to the entrance at the rear of the school. However, no designated barrier free parking places are provided in the parking lot.

RatingInstalledDesign LifeUpdated4 - Acceptable19580APR-10

Event: Provide pavement markings and signage

Concern:

Designated handicapped parking spaces are not provided at the site.

Recommendation:

Provide pavement markings and signage for handicapped parking spaces.

Consequences of Deferral:

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

TypeYearCostPriorityBarrier Free Access Upgrade2010\$2,000Medium

Updated: APR-10

K4010.02 Barrier Free Entrances*

A barrier free-entrance is not provided for the school.

RatingInstalledDesign LifeUpdated2 - Poor19580APR-10

Event: Provide power door operator at designated

entrance

Concern:

There are no automatic door operators provided for the school.

Recommendation:

Install automatic door operator at the rear entry door of the school which is accessible for handicap parking.

Consequences of Deferral:

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

TypeYearCostPriorityBarrier Free Access Upgrade2010\$8,000Medium

Updated: APR-10

K4010.03 Barrier Free Interior Circulation*

There is no barrier free circulation in the school due to the various levels which are only accessible by stairs.

RatingInstalledDesign LifeUpdated2 - Poor19580APR-10

Event: Provide lifts and ramps to accomadate barrier free

<u>access</u>

Concern:

Barrier Free Circulation is poor in the school.

Recommendation:

Install lifts and ramps to accommodate for barrier free access.

Consequences of Deferral:

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

Type Year Cost Priority
Barrier Free Access Upgrade 2010 \$120,000 Low

Updated: APR-10

K4010.04 Barrier Free Washrooms*

No Barrier Free washroom facilities are provided.

RatingInstalledDesign LifeUpdated2 - Poor19580APR-10

Event: Create unisex handicap washroom.

Concern:

No handicap washroom exists in the school at this time.

Recommendation:

Renovation of existing student washrooms to include barrierfree stalls could only be done by eliminating one stall in each washroom. Reducing the number of stalls is not practical, therefore it is recommended that an existing staff washroom be renovated to create a unisex barrier-free washroom.

Consequences of Deferral:

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

TypeYearCostPriorityBarrier Free Access Upgrade2009\$8,500Low

Updated: APR-10

K4030.01 Asbestos*

The original vinyl tile flooring is suspected to contain asbestos. The costs to dispose of the asbestos in included in the cost to replace the tile.

RatingInstalledDesign LifeUpdated4 - Acceptable19580APR-10

K4030.04 Mould*

Apart from water-stained ceiling panels observed in several classrooms, no other reported or observed moisture ingress was observed. No mould was observed or reported.

Rating	Installed	Design Life	Updated
4 - Acceptable	0	0	APR-10

K4030.09 Other Hazardous Materials*

Chemical storage practices observed during the assessment appeared to be acceptable.

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