School Name	: Jasper Place Composite High School	School Code:		7071
Location:	Edmonton, AB	Facility Code:		1152
Region:	North	Superintendent:	Emery Dosdall	
Jurisdiction:	Edmonton School District #7	Contact Person:	Bob Clark	
		Telephone:	(780) 429-8511	
Grades:	X-XII	School Capacity:	2860	

Building Section	Year of Compl.	No. of Floors	Gross Bldg Area (Sq.M.)	Type of Construction (i.e., structure, roof, cladding)	Description of Mechanical Systems (incl. major upgrades)	Comments/Notes
Original Building	1960	2		Concrete columns and beams supported on concrete grade beams. Main floor slab-on-grade. Clear span concrete double tees from floors and roof. Floor slab +/- 50 mm. Infill walls defining corridors and classrooms where concrete block. Exterior walls precast concrete panels combined with brick construction.	Heating provided by central boiler plant and radiation at building perimeter. Ventilation provided by 10 air handling units located in remote fan rooms throughout the wings. Multiple exhaust fans serving washrooms throughout the wing. Domestic hot water is provided off the boiler system through a tube bundle heat exchanger.	Mechanical systems are original to the building and are generally in good condition. Significant upgrades are required on the heating system valves, exhaust fans, air distribution within classrooms, plumbing fixtures, radiation in corridors and vestibules, domestic hot water and control systems. Minor upgrades are required on the air handling systems and perimeter radiation. Additional roof drainage is required.
Additions/ Expansions	1962	1		Precast concrete. Concrete support frame supported on concrete grade beams. Exterior walls concrete block on precast concrete panels. Interior walls of concrete block. Roof structure precast concrete tees.	handling units serve the central gym, west	specialized exhaust systems in graphic arts and welding, dust collector in woodshop, and control systems. Upgrades are required for general exhaust, radiation systems, and ventilation units.

	1969	6	concrete exterior wall system.	is provided by a third boiler plant located in the tower mechanical room in the basement. Hot water is distributed from this plant to both the tower and the 1969 portion of the CTS wing. Ventilation to the shop areas is provided by a central air handling unit, while both ventilation and cooling are provided to the tower by a pair of large central air handlers in the basement mechanical room of the tower. Cooling for the tower is provided by a central chiller and associated roof mounted cooling tower. The CTS area is	Generally the mechanical systems serving the 1969 portion of the facility are in good condition. Major upgrades are required form the fire protection pump serving the tower and the main control systems serving both areas. Unit heaters and radiation should be upgraded, as should plumbing fixtures. The central air handlers require significant upgrading of components like dampers, actuators, and controls. Central exhaust fans require upgrading. The domestic hot water boiler which serves the tower is in good condition.
				•	central air handlers require significant
				3 1	10 0 1
				3	*
					boiler which serves the tower is in good
				central chiller and associated roof	condition.
				mounted cooling tower. The CTS area is	
				provided with specialized exhaust	
				systems, while the tower has general	
				washroom exhaust. Fire protection in the	
				tower consists of sprinklers at the	
				basement level and standpipe system in	
				the upper levels.	

Evaluator's Name: & Company:

Wesley Sims, M.E.DES.

Manasc Isaac Architects Ltd.

Upgrading/ Modernization (identify whether minor or major)	1996		Modernization consisting of new roofing membrane, in very good condition. Main floor administration area interiors, new finishes and partitions. Exterior precast of building sprayed with rubberized paint surface to repair problems with air/water infiltration. Staff reports this is no longer a problem.		
Portable Struct. (identify whether attached/perman. or free-standing/ relocatable)					
List of Reports/ Supplementary Information	Structural R	Reports/Letters dated	January 25, 1999, August 31, 1998, Au	gust 4, 1995, May 4, 1992, June 8, 198	38, December 20, 1985.

Evaluation Components	Summary Assessment	Estim. Cost
1 Site Conditions	Site size is good, neighboring facilities accessible to the school. As building is built on highly plastic clay soil, all future sitework done should ensure positive slope drainage away from building. Regrading the most affected areas and new paved areas at east entrance will contribute to reducing this problem. Courtyard areas need to be further evaluated in order to ensure snow/water drains away from building foundation. Reversal of bus route direction on 163 Street would reduce consistent J-walking, potential hazard to students.	\$ 232,000.00
2 Building Exterior	Roof condition is greatest concern. Should be repaired and/or replaced. Exterior walls generally in good condition and do not exhibit marked air or water infiltration except at east wall of 1960's wing, second floor. Windows appear to be working fine, need ongoing replacement and maintenance.	\$ 773,000.00
3 Building Interior	Concrete partition walls generally in good condition. Floor heaving has not presented hazardous conditions but on-going maintenance of finishes is required. All stairwells need resurfacing as these are in very poor condition and present tripping/falling hazard. Asbestos floor tile in 1960 classes is very old, glue has dried out and there are loose tiles in many places. New vinyl flooring is recommended. Concrete floors in CTS areas are cracking but safe. Asbestos countertops in Science area need resurfacing with plastic laminate. Doors and frame and hardware throughout the school showing wear. Continual maintenance and replacement is required. Ceiling tiles in 1960 and 1962 areas in very poor condition, due to abuse and water damage. All washrooms and change rooms need refinishing of ceilings, walls and flooring in the next five years, missing miscellaneous accessories. Finishes in 1969 Tower are generally in good condition, due to modernization done in 1996.	\$ 1,004,000.00
4 Mechanical Systems	Significant upgrades and replacements are required to the plumbing system in the CTS wing, to plumbing fixtures throughout all wings, isolation valves on the boiler systems, the tower fire pump, make-up air to the central kitchen, the central DDC system, various dedicated shop exhaust systems, the automotive shop air compressor, General upgrades are required to the air distribution system in	\$ 1,386,000.00
5 Electrical Systems	The electrical systems in place have been in service for 30 to 40 years. Many areas are below standards for lighting levels. The electrical components of many systems, particularly in the 1960 and 1962 sections show evidence of years of hard service. The school is in need of upgrade in many	\$ 1,192,500.00
6 Portable Buildings	N/A	\$ -
7 Space Adequacy:		
7.1 Classrooms	Although listed as a shortage of space, ample auxiliary spaces exist. There is no shortfall. Classrooms are generally small, but none appeared overcrowded during use.	
7.2 Science Rooms/Labs	Not all rooms are equipped to be labs. Most rooms are classrooms. School appears deficient in lab equipment.	
7.3 Ancillary Areas	Computer labs used for all classes, compensates for deficiencies in Business Ed./Library. Many of these rooms appear underutilized (ie Multi-purpose rooms), can be used for other functions.	
7.4 Gymnasium	More than enough gym space. There are also recreational facilities located next door to school.	
7.5 Library/Resource Areas	Although other areas support this function, this appears inadequate for a school of this size.	
7.6 Administration/Staff Areas	Large amount of administration space.	
7.7 CTS Areas	There is a large CTS component to this school.	
7.8 Other Non-Instructional Areas (incl. gross-up)		

Alberta Infrastructure School Facilities Branch

School Facility Evaluation Project Part II - Physical Condition

Jasper Place Composite High School March 16 17, 2000

Evaluation Components	Summary Assessment	Estim. Cost
Overall School Conditions & Estim. Costs		\$ 4,587,500.00

Section 1	ction 1 Site Conditions		Rating Comments/Concerns	
1.1	General Site Conditions			
1.1.1	Overall site size.	4	Large field area to west.	
1.1.2	Outdoor athletic areas.	4	Access to pool, football field, large track field, Jasper Place Recreation Centre, "Edmonton Parks & Rec" (Rink), tennis courts, no track surface.	
1.1.3	Outdoor playground areas, including condition of equipment and base.	4	Daycare has a good private, secure fenced courtyard.	
1.1.4	Site landscaping.	4	None in field areas, need trees for shade otherwise good.	
1.1.5	Site accessories (i.e., perimeter and other fencing, guard rails, bike stands, flag poles).	4	Good	
1.1.6	Surface drainage conditions (i.e., drains away from building, signs of ponding).	2	Regrading required where ground has sunk around building. Need to create positive drainage away from the building. South side of 1962 structure and all areas around 1968 structure. Regrading to be done in concert with road/sidewalk repairs.	\$ 45,000.00
1.1.7	Evidence of sub-soil problems.	2	Slab is moving continually, as building is built on highly plastic soils	See 1.1.6
1.1.8	Safety and security concerns due to site conditions.	2	Sidewalks are extremely uneven at east and south, causing a potential tripping hazard.	See 1.3.5
Other				
	Access/Drop-Off Areas/Roadways/Bus Lanes Vehicular and pedestrian access points (i.e., size, number, visibility, safety).	3	No crosswalks immediately across from school entrances. Nearest are 1 block either way. Students cross the street randomly in the centre of the street. Bus route is such that students are on the far side of 163 street. Should reverse route direction at 163 street, then students would not be required to cross the street.	\$ 2,000.00

Part II - Physical Condition

Section 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.2.2	Surfacing of on-site road network (note whether asphalt or gravel).		Asphalt is heaving, cracking and has potholes. Requires selective repair and resurfacing. Need to ensure positive slope from building at all exterior walls.	\$ 40,000.00
1.2.3	Bus lanes/drop-off areas (note whether on-site or off-site).	4	Drop-off at 163 street. No area for internal bus loop.	
1.2.4	Fire vehicle access.	5	Good, all sides accessible.	
1.2.5	Signage.	5	Good	
Other				

Section 1	Site Conditions	Rating	Rating Comments/Concerns	
1.3	Parking Lots and Sidewalks			
1.3.1	Number of parking spaces for staff, students and visitors (including stalls for disabled persons).	4	Staff have +/- 120 stalls. 2,150 students park in the neighbourhood, as well as student lot which is not large enough to accommodate all student vehicles. Stalls for disabled persons are available in all lots.	
1.3.2	Layout and safety of parking lots.	4	Safety is good, there is visibility and access from main streets.	
1.3.3	Surfacing and drainage of parking lots (note whether asphalt or gravel).	3	Parking lots have asphalt paving, which require continuous maintenance due to cracking, potholes, etc.	See 1.2.2
1.3.4	Layout and safety of sidewalks.	4	Layout is adequate, much of school exterior area is paved. No sidewalks at courtyard areas of the 1960 wing.	
1.3.5	Surfacing and drainage of sidewalks (note type of material).	2	Concrete is cracked due to ground heaving, and creates a potential tripping hazard. Drainage not directed away from building due to heaving, low areas create ice and snow accumulation, slippery areas. New sidewalks required. Add concrete pads at all exterior doors in CTS area.	\$145,000.00
1.3.6	Curb cuts and ramps for barrier free access.	2	Poor condition, generally uneven and difficult to navigate.	See 1.3.5
Other				
		3		\$232,000.00
	Overall Site Conditions & Estimated Costs		1	

Section 2	2 Building Exterior Rating			Comments/Concerns	Estim. Cost	
2.1	Overall Structure		Bldg. Section	Description/Condition		
2.1.1	Floor structure and beams (i.e., signs of bending, cracking, heaving, settlement, voids, rust, stains).	3	1960 1962	Main Floor: due to highly plastic clay soils slab-on-grade is continually heaving. In many areas slab has subsided, causing uneven condition at grade beam locations. Areas where slab rises has caused interior non-load bearing masonry walls to crack and door frames and hardware to become inoperable. Areas where floor level has shifted creating hazard (i.e. automotive shop at exterior garage	See	3.1 & 3.2
				2nd Floor: floors constructed of precast double tees spanning east-west supported on precast beams running north-south. Uneven slab/column movement has caused masonry walls to push up on these double tees causing slight swales in corridor floors, sever cracking has occurred in floor at Room 202. See Structural Report dated August 31, 1998. On-going monitoring of this condition is recommended to ensure it is structurally safe. Cracking of exterior precast concrete beams at second floor location; cracks do not pose a safety concern at this time. Refer to Structural Report dated August 5, 1995. Caulking/sealing of all precast connections should be undertaken to ensure that no water reaches beam reinforcement.	\$	3,000.00
2.1.2	Wall structure and columns (i.e., signs of bending, cracking, settlement, voids, rust, stains).	2	1960	Brick at north walls of 1960 classroom wings is ready to fall off at upper corner locations. Wall requires immediate repair, new brick. Investigation required to determine structural stability of wall.	\$	8,000.00
2.1.3	Roof structure (i.e., signs of bending, cracking, voids, rust, stains).	3	1960 1962	Some roof tees receive pressure from masonry walls directly below due to slab heaving. Future repairs may be necessary to alleviate large movement resulting in cracking of tees. All areas where roof tees meet at exterior column location need to be recaulked/resealed to avoid rust at and water penetration at connections. Some roof tees at exterior have concrete at their ends chipping and disintegrating, rebar exposed and rusting. Repairs required.	\$	4,000.00
Other				Refer to Structural Reports dated January 25, 1999, August 31, 1998, August 4, 1995, May 4, 1992, June 8, 1988 and December 20, 1985.		

Section 2	Building Exterior	Rating		Comments/Concerns	Estim. Cost
2.2	Roofing and Skylights Identify the availability of an up-to-date inspection report or roofing program. Note if roof sections are of different ages and/or in varying states of repair.			Description/Condition/Age	
2.2.1	Based on the inspection report (and to the extent possible, direct observation), assess and rate roof conditions and estimate costs for required improvements (i.e., covering materials, membrane,	2		East gym roof continually leaks, needs resurfacing. Interface of roof and wall along east facade of building is leaking. Signs of water leakage is evident at interior wall. All classroom wings have random roof leakage at roof penetrations	\$ 425,000.00
		2	1962	Evidence of ice damming along south parapet of Industrial Arts Rooms. Appears as it membrane has failed causing air exfiltration from building. Soffit/underside of roof tees along this wall shows areas of water staining and water penetrations into exterior wall has begun to occur. Brick efflorescence and spalling. This area	\$ 210,000.00
		3	1962	requires re-roofing to prevent further damage to exterior south and west wall Due to shifting of roof structure at west end of 1962 section, leakage occurring sporadically. Membrane damage at these locations. All roof penetrations need to be resealed/flashed. Recommend resurfacing this area.	See Above
		5	1969	Tower, west gym and centre gym all re-roofed in 1995.	
2.2.2	Roof accessories (i.e., ladders, stairs, hatches, masts, exhaust hoods, chimneys, gutters, downspouts, splashpads).	3	1962	Membrane around exhaust heads needs resealing.	See 2.2.1
2.2.3	Control of ice and snow falling from roof.	4	1960 1962 1969	Good. Interior roof drains.	
2.2.4	Skylights (i.e., signs of distress, leaks, ice build-up, condensation, deteriorated materials/seals).	2		Skylights need to be resealed/reflashed. Some units leak and need replacement. Skylight at Graphics Art Room 153 leaks directly above electrical panel. Repair immediately.	\$ 35,000.00
Other					

Part II - Physical Condition

Section 2	Building Exterior	Rating		Comments/Concerns	ı	Estim. Cost
2.3	Exterior Walls/Building Envelope		Bldg. Section	Description/Condition		
2.3.1	Exterior wall finishes (i.e., signs of deterioration, cracks, brick spalling, efflorescence, water stains).	3	1960	Brick spalling on north walls of 1960 wings, need repointing. Some masonry units peeling off at upper corners. Wall needs repair and new masonry. Brick spalling on west wall of 1962 section needs repointing. Upper gym walls in good condition. Pre-cast panels at 1960 wings in good condition; need recaulking at all connections and windows. South west wall of 1962 section shows minor cracking, brick should be repaired. Exterior wall sprayed with rubberized coating in 1995, seal is working well.	\$	60,000.00
2.3.2	Fascias, soffits, parapets (i.e., signs of looseness, stains, rust, peeling paint).	4	1960 1962 1969	Galvanized steel, in good condition.		
2.3.3	Building envelope (i.e., evidence of air infiltration/ exfiltration through the exterior wall or ice build up on wall, eaves, canopy).	4	1960 1962 1969	Generally little evidence of air or water infiltration at walls.		
2.3.4	Interface of roof drainage and ground drainage systems.	5	1960 1962 1969	Interior drains.		
2.3.5	Inside faces of exterior walls (i.e., signs of cracks, water stains, dust spots).	4	1960 1962 1969	Generally in good condition for its age.		
Other						

School Facility Evaluation Project

Part II - Physical	Condition
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Section 2	Building Exterior	Rating		Comments/Concerns	Estim. Cost
2.4	Exterior Doors and Windows		Bldg. Section	Description/Condition	
2.4.1	Doors (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure).	3	1960	Generally in good operable condition. Selected replacement of doors and frames +/-20%. Doors at 1960 classrooms 40%, require painting.	\$ 8,000.00
2.4.2	Door accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	3		Selected door hardware in the 1962 CTS area is in need of replacement. Repair damaged metal grilles in doors. Garage door hardware at Auto Shop is tearing up ceiling tiles. Repair T-bar frame at this location to prevent hazardous condition, potential failure of springs or cables.	\$ 12,000.00
2.4.3	Exit door hardware (i.e., safety and/or code concerns).	4	1960 1962 1969	All operable, on-going maintenance required. See 2.4.2.	
2.4.4	Windows (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure).	4	1962	Sealed units do not appear to be leaking. No reported problems from maintenance staff. Sealed units in Tower have internal blinds, these need to be repaired or replaced.	
			1969	Sealed units in Tower have internal billios, these need to be repaired of replaced.	
2.4.5	Window accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	3	1960	Blinds in classrooms in varying state of operability. Replace inoperable units. Latches, pulley at operable units not all working. Insure all operable units latch and lock properly as they present a security risk at the ground level.	\$ 8,000.00
2.4.6	Building envelope (i.e., signs of heavy condensation on doors or windows).	4	1960 1962 1969	Good. No signs of moisture penetration through the wall at door/window locations.	
Other					
	Overall Bldg Exterior Condition & Estim Costs	3			\$ 773,000.00

tion 3 Building Interior - Overall Conditions	Rating		Comments/Concerns	Estim. Cost
3.1 Interior Structure		Bldg. Section	Description/Condition	
3.1.1 Interior walls and partitions (i.e., signs of cracks, spalling, paint peeling).	3	1962	Masonry partition walls in 1962 section are cracking due to uneven floor slab movement. Refer to structural reports. Cosmetic repair and monitoring on a continued basis is recommended. Allowance for repairs at most extreme	\$ 20,000.0
	4		locations. All walls and partitions in 1969 area in good condition.	
3.1.2 Floors (i.e., signs of cracks, heaving, settlement).	3	1962	Floors heaving in 1960 and 1962 sections due to highly plastic soils condition, slab heaving. Levelling of larger level changes recommended to avoid tripping. Use concrete topping to avoid exposed edge conditions in these areas.	\$ 9,000.0
	4		Floor areas in 1969 addition are more level, no evidence of major slab heaving.	
Other				
3.2 Materials and Finishes		Bldg. Section	Description/Condition	
3.2.1 Floor materials and finishes.	4	1960	All gym floors in good condition, well maintained. Cafeteria flooring, VA tile in good condition.	
	3		VA tile in corridors of 1960 wings in fair shape, will need ongoing replacement of tiles in next 5 years as they will wear out and in areas where they became displaced along floor heaving lines. Classrooms appear to have 6" floor tile containing asbestos. These are in very poor condition as glue has dried out and they are loose, chipped, and uneven. Recommend removal and resurface classrooms with linoleum flooring. Needs new rubber base. Men's 256 and Women's 257 Locker Rooms have VC tile flooring which is lifting and wearing out.	\$ 245,000
	1	1960	All stairwells are in very poor condition. Rubber treads are peeling off creating tripping hazard. Repair immediately with new treads, edge and base.	\$ 65,000
	4		Concrete floor in corridors is in good condition, minor cracking but no major settlement, needs repainting in next 5 years.	
	2	1962	Concrete floors in Automotives and Shop areas need to have larger cracks filled and floor painted to ensure safe footing. All shop areas require safe non-slip finish at areas around power tools and machinery to ensure student safety. Carpet in Cosmology 119 should be replaced with linoleum. Needs new rubber base.	\$ 11,000
	4		Carpet in Main Office area is good. Linoleum flooring in Tower is in good condition. Minor repairs are required where linoleum is lifting or chipped.	

Section 3	Building Interior - Overall Conditions	Rating		Comments/Concerns	Estim. Cost
3.2.2	Wall materials and finishes.	3		Corridor walls are painted concrete block, in good condition. Classroom walls need minor repairs and repainting. East gym walls in good condition, concrete block with painted panelling up to 10'. Cafeteria kitchen needs painting. Classrooms in 1960 wing and 50% of 1962 Industrial Arts needs painting. Corridor walls good. Both gym's are in good condition.	\$ 30,000.00
		3 5	1962 1969	Interstitial block walls and south and exterior walls are cracking, see structural. Need caulking and repainting. Repaint where water damage from where roof is leaking. Classroom walls on 2nd level starting to show water damage from leakage above. Repair and repaint. Main floor Central Office area and Learning Resource Centre in very good	\$ 5,000.00
		4		Typical concrete block walls in Tower are in good condition. Drywall partition walls also in good condition.	
3.2.3	Ceiling materials and finishes.	3	1960	Ceiling tiles in corridors and ancillary rooms/administration in poor condition from water damage and general abuse. Need replacing in next 2-3 years. East gym ceiling needs repair where water leakage occurring.	\$ 40,000.00
		2	1960	8" ceiling tiles in classrooms likely contain asbestos. Replace.	\$ 160,000.00
		3	1962	Ceiling in Industrial Arts need repair where water damage has occurred. 8" ceiling tiles likely contain asbestos, need replacing. West and Centre Gym ceilings are in good condition.	\$ 45,000.00
		4	1969		
		2	1969	2nd floor ceiling still contains asbestos, requires replacement.	\$ 12,000.00

Section 3	Building Interior - Overall Conditions	Rating		Comments/Concerns		Estim. Cost
3.2	Materials and Finishes (cont'd)		Bldg. Section	<u>Description/Condition</u>	•	
3.2.4	Interior doors and hardware.	2	1960	Door frames and hardware need replacing where slab heaving has deframed frames. On-going problem. East exit doors need immediate repair or replacement. Fire rating of all doors needs to be confirmed contingency upon results of recommended code analysis. Doors at stair wells do not appear to be General repair/replacement of door hardware required in next five years as it is	\$	40,000.00
		4	1969	worn +/- 35%. Doors and hardware in good condition.	Φ	26,000.00
3.2.5	Millwork	3		Shelving in classrooms covered in linoleum which is splitting, peeling, and delaminating. Needs resurfacing with plastic laminate. Science rooms have asbestos counter tops which are chipping. Require resurfacing with chem-surf plastic laminate. Wood cabinets/backsplash in Home Economics requires plastic laminate finish. Painted wood is in poor condition. Counter tops will need to be resurfaced in next five years.	\$	130,000.00
		2	1962	Wood Shop/Electrical Shop and Art Room have wood tables with badly chipped surfaces. Requires resurfacing or refinishing.	\$	12,000.00
		4	1969	Millwork in Tower, Main Office and Resource Centre is in good condition.		
3.2.6	Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs).	4	1960 1962 1969	Generally good. No classrooms have whiteboards. Teacher's have requested them.		
		2		New benches required in Change Rooms 256 and 257, badly chipped.	\$	2,000.00
3.2.7	Any other fixed/mounted specialty items (i.e., CTS equipment, gymnasium equipment).	4	1960 1962 1969	Good		
3.2.8	Washroom materials and finishes.	2	1960	Washrooms at East Gym need new tile at walls, peeling off. General wall and floor tile repair required at all washrooms. Ceilings need painting. 20% of washroom stalls need replacement. Accessories missing in some washrooms; soap, paper towel, hand dryers are required.	\$	25,000.00
Other						

on 3	Building Interior - Overall Conditions	Rating		Comments/Concerns	_ !	Estim. Cost
	Health and Safety Concerns Intent is to identify		Bldg.	Description/Condition		
	renovations considered necessary to meet applicable codes, primarily due to safety concerns. Basis of evaluation should be an up-to-date inspection report from the authority having jurisdiction together with direct observations as appropriate. Evaluator should note if in his opinion a comprehensive code evaluation is required.	FI		No comprehensive code analysis of the building has been done. Based on a cursory analysis of the 1997 Alberta Building Code: the building is Group A, Division 2 up to 6 stories, any area, sprinklered. This category requires: (a) entire building to be sprinklered, (b) floor to floor fire separations rated to minimum of 1 hour. Neither of these conditions have been met as existing building is not sprinklered and doors at stair wells do no meet 1 hour rating requirement. Further investigation of zones within floor areas is required as large Industrial Arts and Automotive programmes have implications for fire separations between these areas and other areas of the building. Location of doors at corridors and rating of		
	Building construction type - combustible or non- combustible, sprinklered or non-sprinklered.	FI	1960 1962 1969	doors at all CTS areas and fire exits requires further investigation based on Non-combustible, non-sprinklered. See above, comprehensive code evaluation required.		
3.3.2	Fire separations (i.e., between buildings, wings, zones if non-sprinklered).	FI	1960 1962 1969	Masonry partition walls. Comprehensive analysis of zones requires as building has large CTS component, variety of areas and adjacencies.		
	Fire resistance rating of materials (i.e., corridor walls and doors).	4		Masonry, concrete block partition walls. Most doors repainted, further analysis required to determine rating of doors at all critical locations. Gypsum board partition walls in tower.		
3.3.4	Exiting distances and access to exits.	FI	1960 1962 1969	Appears to be good, further analysis required.		
3.3.5	Barrier-free access.	2	1960 1962 1969	No barrier free access to Cafeteria, Centre Gym or West Gym. Elevator required. Tower is good.	\$	80,000.0
	Availability of hazardous materials audit (i.e., evidence of safety concerns with respect to asbestos, PCB's, chemicals).	2	1962	Asbestos panel partition walls in Student Services 106 should be replaced. No available hazardous materials audit. Areas identified as possible sources of asbestos (floor tiles, ceiling tiles, countertops and wall panels), should be further investigated and confirmed by an asbestos consultant.	\$	5,000.00
		1		Asbestos panel stalls in Welding Area are very badly damaged, chipping. Need immediate replacement, unsafe.	\$	25,000.0
	Other health and safety concerns (i.e., evidence of excessive noise conditions, air quality problems)	2	1960	Air quality is poor in Cosmetology Classrooms 119, 121 and 122. Requires proper ventilation (see mechanical). Carpet in room 119 very soiled, likely off-gassing chemicals from Cosmetology. To be removed and replaced with linoleum.		e hanical
			1962	Asbestos ceiling at Shipping/Receiving should be sealed or removed.	\$	7,000.00
			1969	Asbestos ceiling at 2nd Floor Tower should be sealed or removed.	\$	8,000.00
Other						
	Overall Bldg Interior Condition & Estim Costs	3			\$ 1	,004,000.0

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
4.1	Mechanical Site Services				
4.1.1	Site drainage systems (i.e., surface and underground systems, catch basins).	1	All	Storm water from building roofs is conveyed through underground storm system. Several roof drains have damaged strainers. Number and location of roof drains not adequate to provide proper drainage (1960). Drainage of green spaces and	\$40,000.00
4.1.2	Exterior plumbing systems (i.e., irrigation systems, hose bibs).	4	All	parking. no reported or observed problems. Hose bibbs around building perimeter are functional, but require upgrading.	
4.1.3	Outside storage tanks.	-	-		
Other					
			811		
4.2	Fire Suppression Systems		Bldg. Section	Description/Condition	Estim. Cost
4.2.1	Fire hydrants and siamese connections.	5	1969	Hydrant and siamese serving the tower are in good condition.	
4.2.2	Fire suppression systems (i.e., pumps, sprinklers, piping, reservoirs, hoses, stand pipes, CO2 systems).	-	1960	No fire suppression systems	
		5	1962	CO2 fire suppression systems serving kitchen hoods in main kitchen and teaching kitchen are in good condition. Systems are complete with solenoid gas shut off valves.	
		3	1969	Sprinkler system and standpipe system serving tower mechanical room and upper floors (standpipe only) is reported to be in need of major upgrade, including pumps, valves,	\$7,500.00
4.2.3	Hand extinguishers, blankets and showers (i.e., in CTS areas).	3	1960 1962	Extinguishers are plastic manual pump type, many observed to be loose, partially full or empty and should be upgraded. ABC type extinguishers in mechanical room are in good condition.	\$5,000.00
		4	1969	Extinguishers, fire hose cabinets and stairwell standpipes serving toer are in good condition.	
4.2.4	Other special situations (e.g., flammable storage areas, science labs, CTS areas).	2	1960	Emergency shut off valve for gas outlets in science classroom is difficult to access and poorly signed.	\$5,000.00
Other					

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
4.3	Water Supply and Plumbing Systems		Bldg. Section	Description/Condition	Estim. Cost
4.3.1	Domestic water supply (i.e., pressure, volume, quality - note whether municipal or well supply).	5	All	No reported problems with quality or pressure. Water supply is from city mains at three locations.	
4.3.2	Water treatment system(s).	-		None	
4.3.3	Pumps and valves (including backflow prevention valves).	5	All	All domestic water mains are equipped with backflow prevention valves. Combined service to tower is equipped with double check valve assembly on sprinkler main.	
		4	1969	Domestic water booster pumps serving tower are in good condition.	
4.3.4	Piping and fittings.	4	1969	A. Copper domestic water piping is original and may contain lead solder at fittings, no reported problems with breaks or leaks. Sanitary drainage pipe and vents are cast-iron and copper. No reported problems with breaks or backups.	
		2	1962	Domestic water and sanitary drainage piping serving the CTS wing is reported to be in poor condition and prone to leaks. The condition may be due to the excessive structural settling observed. Plumbing in the entire wing should be	\$280,000.00
4.3.5	Plumbing fixtures (i.e., toilets, urinals, sinks)	3	All	A. Plumbing fixtures throughout the building are old (obsolete) but in generally good condition. Handicap fixtures are inadequate. All fixtures should be upgraded. B. Plumbing fixtures in main kitchen are in good condition, but trim should be upgraded. C. Handbasins in CTS shops are in good condition, other fixtures in shops require upgrading. Mop sinks are required in the CTS wings.	\$100,000.00
4.3.6	Domestic hot water system (i.e., heater, storage tanks, failure alarms, pressure, volume, recirculation).	2	1960 1962	Domestic hot water is provided by a immersion tube bundle heat exchanger from the boiler system and a storage tank. The system requires boilers to operate during warm weather and causes overheating in the school due to poor isolation of the system. The system should be replaced with dedicated domestic hot water heaters.	\$45,000.00
		4	1969	Domestic water to the tower is provided by a dedicated copper finned tube domestic hot water boiler located in an upper level mechanical room. The system is original but is reported to be in good condition.	
4.3.7	Sanitary and storm sewers, including sumps and pits (note whether sewage system is municipal or septic).	3	All	A. Sanitary drainage is to the municipal system. B. Piping is generally in good condition. C. Sumps throughout the facility are in poor condition and require upgrades (pumps, controls).	\$12,500.00

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
4.3	Water Supply and Plumbing Systems (con't)		Bldg. Section	Description/Condition	Estim. Cost
Other	Kitchen drainage	4		A. Kitchen grease interceptor recently replaced. B. Some reports of recent backups, possibly due to poor condition of the sump.	
	Compressed air systems	1		A. The air compressor serving the automotive shops is failing and requires replacement.	\$20,000.00
	Emergency systems	2	All	There are no provisions for emergency eyewash or showers in any of the vocational education shops, teaching kitchen, or science shops.	\$30,000.00
4.4	Heating Systems		Bldg.	Description/Condition	Estim. Cost
4.4.1	Heating capacity and reliability (including backup capacity).	4	Section All	A. Three sets of twin hot water boilers serve the 1960, 1962, and 1969 blocs respectively. Boiler plants are original, in generally good condition, and have ample capacity. The steam boiler is in generally good condition.	Estilli. Gost
4.4.2	Heating controls (including use of current energy management technology.	1	All	A. Boiler control is through either DDC (which is failing as reported in section 4.7) or original controls (1969 wing). In all cases, boiler controls are inadequate and have failed on occasion resulting in freeze-ups. All boiler controls should be upgraded.	see 4.7
4.4.3	Fresh air for combustion and condition of the combustion chimney.	4	All	A. Combustion air is provided to all three boiler rooms. B. Boiler flues and stacks are generally in good condition, with some signs of aging on exterior surfaces. C. No problems reported by the staff.	
4.4.4	Treatment of water used in heating systems.	3	All	A. Boiler make-up water is untreated city water. B. Chemical treatment pot feeders are provided on all three boiler systems. The condition of the feeders is poor and they should be upgraded.	\$5,000.00
4.4.5	Low water cutoff/pressure relief valves and failure alarms (i.e., hot water heating).	4	All	A. All boilers are equipped with Low water cut-off devices, pressure relief valves, and blowdowns piped to drain. B. The adequacy of control interlocks and alarms requires further investigation.	
4.4.6	Heating air filtration systems and filters.	-		None	
4.4.7	Heating humidification systems and components.	-		None	

School Facility Evaluation Project

Part II - Physical Condition

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
4.4	Heating Systems (cont'd)		Bldg. Section	Description/Condition	Estim. Cost
4.4.8	Heating distribution systems (i.e., piping, ductwork) and associated components (i.e., diffusers, radiators).	3	1960	A. Baseboard radiation in classrooms is original and requires upgrading and cleaning. B. Ceiling diffusers and return air openings in classrooms are old and insufficient in numbers. C. No reported problems with ductwork blockage or leakage. D. Radiation in hallways and stairwells is deteriorated and requires replacement.	\$75,000.00
		4	1969	A. The perimeter radiation located around each floor of the tower is in generally good condition. B. Forced flow units located in corridors are generally in good condition.	
4.4.9	Heating piping, valve and/or duct insulation.	2	All	A. Piping is original and generally in good condition, no report of breaks or leaks. B. Isolation and control valves throughout the system are worn and require replacement.	\$80,000.00
4.4.10	Heat exchangers.	2		A. The domestic hot water immersion tube bundle served by the boiler system requires year round operation of the boilers. Due to failing valves , this results in overheating throughout the facility. The system should be abandoned and replaced with dedicated domestic hot water heaters.	See 4.3.6.
4.4.11	Heating mixing boxes, dampers and linkages.	-	-	Not applicable	
4.4.12	Heating distribution/circulation in larger spaces (i.e., user comfort, temperature of outside wall surfaces).	2	All	A. Due to the condition of isolation and control valves throughout the system, certain areas experience significant overheating.	See 4.4.9.
4.4.13	Zone/unit heaters and controls.	4	All	A. None of the entrance vestibules are equipped with zone or unit heaters, this results in cold and drafty conditions.	
		3		A. Unit heaters throughout the vocational areas are original and require upgrading. B. Units installed in the drama areas are not operated due to noise levels that are disruptive to the activities being carried out.	\$30,000.00
Other					

School Facility Evaluation Project

Part II - Physical	Condition
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Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
4.5	Ventilation Systems		Bldg.	Description/Condition	Estim. Cost
4.5.1	Air handling units capacity and condition.	3	Section 1960	A. The original wing of the building is served by a total of 10 air handling units. The units are original and in reasonable condition, however upgrading of dampers, linkages, fan bearings, and controls are required.	\$30,000.00
		3	1962	A. The current weight room and automotive shop 135 are served by a single unit. B. The vocational shops in the 1962 wing are served by 8 make-up air units located in an elevated fan gallery above the wing's corridors. The gymnasiums and cafeteria are served by dedicated air handling units located in a separate fan room near the West gym. The units are in generally good condition, but require	\$30,000.00
		3	1969	A. The 1969 portion of the vocational wing is served by a single air handling unit located in a mechanical room above room 159B. B. The tower is served by a large pair of twin air handling units built-in into the basement mechanical room. The units are in generally good condition, however upgrades on the dampers, linkages, fan bearings and controls is required.	\$10,000.00
4.5.2	Outside air for the occupant load (if possible, reference CFM/occupant).	FI	All	A. No data is available on ventilation rates, however all systems do have the capacity to provide some measure of outdoor air.	
4.5.3	Air distribution system (if possible, reference number of air changes/hour).	FI	All	A. No data is available on number of air changes. B. Supply and return air ductwork throughout the school requires cleaning.	
		3	1960	Classrooms are provided with a single supply air diffuser, which does not provide adequate distribution of air within the spaces. Additional outlets should be provided.	\$125,000.00
4.5.4	Exhaust systems capacity and condition.	3	All	A. General exhaust systems throughout the facility require upgrading of fans and controls. B. Exhaust rates in washrooms is inadequate to control odours.	\$50,000.00
		2	1960 1962	B. Janitor closets are not provided with exhaust.	\$8,500.00

Section 4	Mechanical Systems	Rating	1	Comments/Concerns	Estim. Cost
4.5	Ventilation Systems (cont'd)		Bldg.	Description/Condition	Estim. Cost
4.5.5	Separation of out flow from air intakes.	3	Section 1960	A. Welding exhaust from shops is occasionally drawn into the air intake of adjacent make-up air units.	\$2,500.00
4.5.6	Special/dedicated ventilation and/or exhaust systems (i.e., kitchen, labs, CTS areas).	2	1962	A. Exhaust system serving the main kitchen requires fan upgrading. Ductwork is in generally good condition. B. The kitchen is not provided with any direct make-up air, air is transferred from cafeteria, staff dining a dedicated system should be	\$50,000.00
		4	1962 1969	A. In-floor vehicle exhaust system serving automotive shops is original and in generally good condition.	
		3	1962	A. Exhaust system serving welding shop 140 is old and requires upgrading. B. Shop is provided with make-up air by a central unit which is not interlocked with	\$35,000.00
		4	1969	the exhaust system resulting in excessive positive pressure. A. Exhaust and dedicated make-up air system serving welding shop 139 are in generally good condition.	
		3	1969	A. Exhaust systems serving graphic arts rooms 151 and 152 require upgrading.	\$20,000.00
		1	1969	A. Dust collector system serving building construction cannot be operated due to excessive noise, upgrading or replacement required. B. Dust collector system ductwork is generally in good condition.	\$40,000.00
Other				additional advisorally in good containent.	
4.5	Ventilation Systems (cont'd)		Bldg. Section	Description/Condition	Estim. Cost
	Note: Only complete the following items if there are separate ventilation and heating systems.		<u>Scottori</u>		
4.5.7	Ventilation controls (including use of current energy management technology).	1	All	A. Central DDC system is failing and requires replacement/upgrade of main control panels, sensors, and other components.	See 4.7
4.5.8	Air filtration systems and filters.	4	All	A. All air handling systems are equipped with filters and regular maintenance and filter change out is performed.	
4.5.9	Humidification system and components.	3	1962 1969	A. Humidification in central air handlers is in poor condition, and not operated due to high operating cost and risk of contamination.	\$25,000.00
ı		2	1969	A. Dedicated humidifiers serving graphic arts rooms are in poor condition or inoperable, replacement required.	\$7,500.00
4.5.10	Heat exchangers.	3	All	A. Heating and cooling coils in air handlers and unit heaters throughout the facility are in generally good condition but require cleaning. B. Reheat coils throughout	\$20,000.00
4.5.11	Ventilation distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages).	3	All	the facility are generally in good condition but require cleaning. A. Supply and return air ductwork requires cleaning throughout the facility. B. Air handler dampers and linkages as previously noted. C. Diffusers and grilles as previously noted.	\$40,000.00
Other				proviously noted.	

School Facility Evaluation Project

Part II - Physical Condition

Section 4	Mechanical Systems	Rating		Comments/Concerns	Estim. Cost
4.6	Cooling Systems		Bldg. Section	Description/Condition	Estim. Cost
	Cooling system capacity and condition (i.e., chillers, cooling towers, condensers).	4	1969	A. The tower is served by a central chiller located in the basement and a roof mounted cooling tower. B. Chilled water is distributed to the air handlers by chilled water pumps located in the basement mechanical room of the tower. C. The chiller has been converted to an ozone friendly refrigerant. D. The cooling system is in generally good condition, but requires a control system upgrade.	-
	Cooling distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages)	-	1969	A. See 4.5.11	
	Cooling system controls (including use of current energy management technology).	2	1969	A. See 4.7.1	See 4.7.1
	Special/dedicated cooling systems (i.e., labs, CTS areas).	3		9-1	\$7,500.00
Other					
4.7	Building Control Systems		Bldg. Section	<u>Description/Condition</u>	Estim. Cost
	Building wide/system wide control systems and/or energy management systems.	2	All	A. The facility controls were upgraded to DDC at some time in the past. B. The existing system is an Andover system, and includes control panels throughout the mechanical rooms, equipment sensors, and a central terminal in the custodial office. C. The system is reported to be failing and has experienced a number of incidents which resulted in freeze-ups of various systems. D. The system should be upgraded or replaced. E. Stand-alone thermostats serving radiation, unit heaters, reheat coils, etc, throughout the facility are in poor condition and require	\$150,000.00
	Overall Mech Systems Condition & Estim. Costs	2			\$1,386,000.00

 +	Electrical Systems	Rating		Comments/Concerns		Stim. Cost
5.1.1	Site Services Primary service capacity and reliability (i.e., access, location, components, installation, bus sizes - note whether overhead or underground).	3	1960	Original 1960 service is rated 4160V, 125A, 3 phase, 4 wire. The utility transformers are pole platform mounted in the lane and the service is underground to the load break switch in the automotive shop. The transformer, switch and 120/208Vdistribution sections are located in the electrical vault, adjacent to the	\$	60,000.00
		4	1969	Separate underground service installed to basement electrical room in 1969. Service board is FPE, 1200 amps, 347/600 volts, 3 phase, 4 wire. There are 3 spaces available in the 600 volt CDP section. Any future renovation should include standardizing the utilization voltage at 347/600-120/208 volts and removal of the 5 kV switchgear. Although the equipment is functional and in good repair it is full to		
5.1.2	Site and building exterior lighting (i.e., safety concerns).	3	1962	capacity and is nearing the end of its reliable lifespan. Site and building exterior lighting is a mixture of incandescent and HID sources. Generally fixtures are located over the entrance and service doors and under canopy overhangs. There is no centralized control of the exterior lighting and most fixtures are manually switched from entrance vestibules. Some of the newer replacement fixtures have integral photocells but most fixtures are switched on and remain on. Parking lot lighting consists of flood lights mounted on the	\$	22,500.00
5.1.3	Vehicle plug-ins (i.e., number, capacity, condition).	4	1969	parapets of the school.		
Other						
5.2	Life Safety Systems		Bldg. Section	Description/Condition	E	Estim. Cost
5.2.1	Life Safety Systems Fire and smoke alarm systems (i.e., safety concerns, up-to-date technology, regularly tested).	5	Section 1960	New addressable Edwards IRC-3 system installed 3 years ago. All fire alarm devices are in good condition and appear to be installed in accordance with code requirements. Annunciators are provided adjacent to all fire fighting entrances. Passive graphics are installed adjacent of the annunciators. The system is tested	E	Estim. Cost
5.2.1 5.2.2	Fire and smoke alarm systems (i.e., safety concerns,	5	1960 1962 1969	New addressable Edwards IRC-3 system installed 3 years ago. All fire alarm devices are in good condition and appear to be installed in accordance with code requirements. Annunciators are provided adjacent to all fire fighting entrances. Passive graphics are installed adjacent of the annunciators. The system is tested every summer by E.P.S.B. Emergency lighting panel and UPS installed as part of 1960 main distribution has been disconnected and emergency panel has been backfed from 1969 emergency	E	Estim. Cost
5.2.1 5.2.2 5.2.3	Fire and smoke alarm systems (i.e., safety concerns, up-to-date technology, regularly tested). Emergency lighting systems (i.e., safety concerns,		1960 1962 1969 1960 1962 1969	New addressable Edwards IRC-3 system installed 3 years ago. All fire alarm devices are in good condition and appear to be installed in accordance with code requirements. Annunciators are provided adjacent to all fire fighting entrances. Passive graphics are installed adjacent of the annunciators. The system is tested every summer by E.P.S.B. Emergency lighting panel and UPS installed as part of 1960 main distribution has been disconnected and emergency panel has been backfed from 1969 emergency genset. 1960 building has dual incandescent lamp holders connected to emergency panel. 1962 building has local battery operated emergency lighting units and the 1969 sections have selected light fixtures connected to the emergency generator. Coverage difficult to ascertain as battery pack areas(1962)	\$	Estim. Cost 82,500.00

Alberta Infrastructure School Facilities Branch

Section 5	Electrical Systems	Rating	Comments/Concerns	Estim. Cost
Other				

Section 5	Electrical Systems	Rating		Comments/Concerns	Es	stim. Cost
5.3	Power Supply and Distribution		Bldg. Section	Description/Condition	Es	stim. Cost
5.3.1	Power service surge protection.	2	1960 1969	No T.V.S.S. units have been installed on the 1960 or the 1969 distribution equipment. The 1969 service has a 180 kVAR power factor correction unit that was recently installed.	\$	9,000.00
5.3.2	Panels and wireways capacity and condition.	4		Panelboards in the facility are of original vintage with new panels added to accommodate small renovation projects throughout. Most existing branch circuit panels are at capacity and additional panels are difficult to add as all central distribution panels for the 1960 and 1962 buildings are also at capacity.		
	Emergency generator capacity and condition and/or UPS (if applicable).	4	1969	120/208V Kholer genset installed in basement electrical room in 1969 construction. 120V panelboard fed from transfer switch. Emergency panel in 1960 building backfed from 1969 panel. Genset appears in good condition,		
5.3.4	General wiring devices and methods.	4		Wiring devices in the 1960 and 1962 buildings are original. Conduit is generally concealed in wall or ceiling construction. Some newer devices located in small areas that have been renovated to serve different functions. Surface conduit installed where new devices have been added. Devices in heavy use areas such as shops show evidence of age and rough service. No dangerous conditions noted.		
5.3.5 Other	Motor controls.	4	1962	Motor control centres are installed to serve mechanical loads in the 1960(208V), 1962(208V) and 1969(600V) buildings. All motor control centres and starters are of original vintage. All MCC'S are full to capacity for sections installed. Expansion space is unavailable for the 1960 and 1962 units.		
Other						

Section 5	Electrical Systems	Rating		Comments/Concerns		Estim. Cost
5.4	Lighting Systems		Bldg. Section	<u>Description/Condition</u>		Estim. Cost
5.4.1	Interior lighting systems and components (i.e., illumination levels, conditions, controls).	3	1962	1960/1962 classrooms employ two rows of suspended 2 lamp fluorescent luminaires (T12 lamps) with chalkboard lights. The fixtures appear to be original to the school. Classrooms are illuminated to 250-300 lux. Corridors in the 1960/1962 building use recessed 2'x4', 2 lamp with 2'x2' opal acrylic lay in lenses. These lenses have deteriorated and are reducing fixture efficiency. Many of the lenses are missing or have been removed to improve light levels. Corridors in the 1960 section are illuminated to 200 lux and some areas of the 1962 section are 50 lux. Some areas that have undergone recent renovation employ T8 lamps and parabolic louvres. Shop areas throughout the school use surface or chain suspended industrial style fluorescent luminaires. Light levels vary from good in some areas 400-600 lux to poor in others 250-350 lux. Many light fixtures throughout the facility are in need of repair due to broken or missing lenses.	\$	980,500.00
		4		Fixtures in the 1969 section of the facility are generally recessed 1'x4' or 2'x4' fluorescents using T12 lamps and magnetic ballasts. Illumination levels are 250-350 lux in the instructional spaces and 200-250 lux in the corridors.		
	Replacement of ballasts (i.e., health and safety concerns). Implementation of energy efficiency measures and recommendations.	3	1962 1960 1962	No formal ballast replacement program is in place. Some of the original fixtures may contain PCB ballasts. Replace all exit lighting units with LED type. Replace 1969 fixtures T12 lamps and magnetic ballasts with T8's and electronic ballasts. Replace all exterior lighting fixtures with HID type and provide centralized automatic control.	5.7 ex exit	Costs are own in items 1.2, 5.2.3 for terior ltg and ts. \$75,000 to etrofit 1969 wing ltg
Other						0 0

Section 5	Electrical Systems	Rating		Comments/Concerns	Es	tim. Cost
5.5	5.5 Network and Communication Systems Bldg. <u>Description/Condition</u> <u>Section</u>		<u>Description/Condition</u>	Es	tim. Cost	
5.5.1	Telephone system and components (i.e., capacity, reliability, condition).	4	1960 1962 1969	Newer Norstar Meridain telephone system installed approximately 3 years ago. All new telephone wiring installed and a handset provided in each classroom to replace the intercom systems. Telephone system interfaced with existing speakers to provide paging. Condition of equipment is good.		
5.5.2	Other communication systems (i.e., public address, intercom, CCTV, satellite or cable TV).	4		Original vintage paging speakers interfaced with telephone system to provide all call paging. Intercom system was replaced 3 years ago by telephone system. Cable tv outlet in most instructional areas. These appear to be largely unused.		
		3	1962	The paging system is inadequate in the 1962 shop area of the school as the original speakers do not provide adequate coverage.	\$	8,000.00
5.5.3	Network cabling (if available, should be category 5 or better).	4	1960 1962 1969	Network cabling consists of Cat. 5 structured cabling system with a fibre optic backbone between telecommunications closets.		
5.5.4	Network cabling installation (i.e., in conduit, secured to walls or tables).	4	1960 1962 1969	The cabling was installed approximately 3 years ago when the telephone wiring was also upgraded. Cabling is installed in conduit system.		
5.5.5	Wiring and telecommunication closets (i.e., size, security, ventilation/cooling, capacity for growth).	4	1960 1962 1969	The network server room is located on the third floor of the 1969 tower. It was installed as part of the computer lab upgrade. The room is large, in a secure locations and has adequate power and wire management in place. The ventilation is inadequate and ceiling tiles have been removed from the room in an attempt to ventilate the room.		
5.5.6	Provision for dedicated circuits for network equipment (i.e., hubs, switches, computers).	4	1960 1962 1969	Power service to the network equipment is adequate and in good condition.		
Other						

Section 5	Electrical Systems	Rating	Comments/Concerns	Estim. Cost
5.6	Miscellaneous Systems		Bldg. <u>Description/Condition</u> Section	Estim. Cost
	Site and building surveillance system (if applicable). Intrusion alarms (if applicable).	4	No building surveillance system is in place. 1960 Standard E.P.S.B. security system is in place. Keypads located in selected secure areas with main keypad located in the general office. 1969	
5.6.3	Master clock system (if applicable).	2	Master clock system is in disrepair, many clocks are broken. The school has recently purchased a large volume of battery operated clocks and will be taking the master clock system out of service in the near future.	\$ 30,000.00
Other				
5.7	Elevators/Disabled Lifts (If applicable)			
	Elevator/lift size, access and operating features (i.e., sensing devices, buttons, phones, detectors).	4	1960 There are two handicapped lift elevators in place at the school. Wall mounted 1969 control devices	
5.7.2	Condition of elevators/lifts.	4	1960 Condition of lifts appears good and no operating troubles have been reported. 1969	
5.7.3	Lighting and ventilation of elevators/lifts.	4	1960 Lighting is adequate. 1969	
Other				
	Overall Elect. Systems Condition & Estim Costs	3 6 8 9 6 5 5 1 7 2		\$ 1,192,500.00

Part II - Physical Condition

Section 6	Portable Buildings	Rating	Comments/Concerns	Estim. Cost
	Note: Separate sheets can be completed, if necessary, for portable buildings of different ages and/or conditions.			
6.1.1	Foundation and structure (i.e., signs of bending, cracking, settlement, rust, voids, stains).			
6.1.2	Roof materials and components (i.e., signs of deterioration, leaks, ice build-up).			
6.1.3	Exterior wall finishes (i.e., signs of deterioration, cracks, water stains).			
6.1.4	Doors and windows (i.e., signs of deterioration, rusting hardware, glass cracks, peeling paint, damaged seals).			
6.1.5	Interior finishes (i.e., floors, walls, ceiling).			
6.1.6	Millwork (i.e., counters, shelving, vanities, cabinets).			
6.1.7	Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs)			
6.1.8	Heating system.			
6.1.9	Ventilation system.			
6.1.10	Electrical, communication and data network systems.			
6.1.11	Health and safety concerns (i.e., fire and smoke alarms, fire protection systems, exiting, fire resistance rating of materials).			
6.1.12	Barrier-free access.			
	Overall Portable Bldgs Condition & Estim Costs			\$ -

	Space Adequacy	This Facility			Equiv. New Facility			Surplus/			
Section 7		No.	Size	Total Area	No.	Size	Total Area	Deficiency	Comments/Concerns		
7.1	Classrooms	55	vary	3913	55	77	4235	-322	Although listed as a shortage of space, ample auxiliary spaces exist. There is no shortfall. Classrooms are generally small, but none appeared overcrowded during		
7.2	Science Rooms/Labs	16	83 avg.	1328	11	120	1320	8	Not all rooms are equipped to be labs. Most rooms are classrooms. School appears deficient in lab equipment.		
7.3	Ancillary Areas (i.e., Art, Computer Labs, Drama, Music,)	23	140	3220	12	97	1164	2056	Computer labs used for all classes, compensates for deficiencies in Business Ed./Library. Many of these rooms appear underutilized (ie Multi-purpose rooms), can be used for other functions.		
7.4	Gymnasium (incl. gym storage)	1	848	848	2	837	1674	599	More than enough gym space. There are also recreational facilities located next door to school.		
		1	757	757					lacilities located next door to school.		
		1	668	668							
7.5	Library/Resource Areas	2	varies	259	1	975	975	-716	Although other areas support this function, this appears inadequate for a school of this size.		
7.6	Administration/Staff, Physical Education, Storage Areas			2427			1837	590	Large amount of administration space.		
7.7	CTS Areas 7.7.1 Business Education	3	60	180	8	115	920	-740	This shortfall can be compensated by using various auxiliary spaces or other CTS areas.		
	7.7.2 Home Economics	4	varies	411	-	-	-	411	Currently half of this space is leased out.		
	7.7.3 Industrial Arts	15	varies	2034	-	-	-	2034	Large CTS component to the school. Some areas are cluttered.		
	7.7.4 Other CTS Programs			1974	-	-	-	1974			
7.8	Other Non-Instructional Areas (i.e., circulation, wall area, crush space, wc area)			19643			4665		This includes cafeteria, kitchen, mechanical and locker rooms.		
	Overall Space Adequacy Assessment			37662			16790	20872			

Evaluation Component/ Sub-Component	Additional Notes and Comments
	The overall building area is about double the amount specified by current guidelines, due to a large CTS programme at the school. Deficiencies existing in current space allocation is a result of programming of space rather than lack of it. Some classrooms are small, improved space planning and renovations are recommended to better utilize the facility. Currently the school leases out extra space.

aluation Component/ b-Component	Additional Notes and Comments

Evaluation Component/ Sub-Component	Additional Notes and Comments

aluation Component/ b-Component	Additional Notes and Comments

School Facility Evaluation Project
Part II - Physical Condition

Evaluation Component/ Sub-Component	Additional Notes and Comments



East Sidewalk



Industrial Arts Roof







Heaving Roof Membrane at Industrial Arts



Roof Parapet at East Façade



Roof Tees at Column Location







Typical Window/Precast Interface



Brick Splayed at Upper Corner



Efflorescence/Spalling at North Walls



Leaking Skylight



Roof Leaking at South Wall of Industrial Arts

40



Roof Leakage at Classrooms - 1960 Wing



Roof Leak Above Electrical Panel, Room 153



Settlement Outside South Façade, 1962 Portion

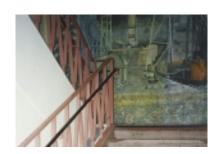


Floor heaving at 1960 Structure



Wall Cracking at Automotives







Typical Corridor Floor Heaving, 1960 Corridors



Typical Condition of Stairwells



Loose Asbestos Tiles at 1960 Classrooms





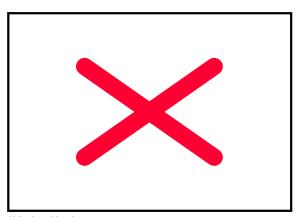
Floor Displacement at Room 204



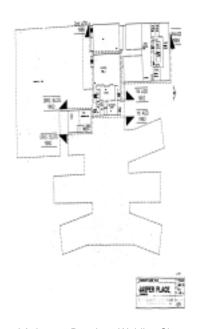
Compressed Door Frame at East Entrance



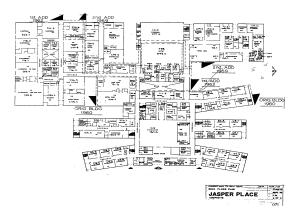
Detail - Compressed Door Frame



Window Hardware



Chipped Asbestos Panels at Welding Shop



Classroom Lino Covering at Millwork - Typical

