

HAMILTON WENTWORTH DISTRICT SCHOOL BOARD FEASIBILITY STUDY AND CONCEPT DESIGN

SHERWOOD SECONDARY SCHOOL 25 High Street, Hamilton, ON



SHERWOOD SECONDARY SCHOOL

HAMILTON ONTARIO CANADA

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2 CS&PArchitects

1. EXECUTIVE SUMMARY

1.1. Purpose

The purpose of this study is to examine the feasibility of a complete Building Renewal of all areas of the existing Sherwood Secondary School. The objective is to align the existing facility with the Board's vision for the revitalization and modernization of its complete secondary school portfolio and with its *Secondary Program Strategy*. The study provides recommendations to the HWDSB to support their decision making process regarding the Board's *Secondary School Revitalization Program*. Sherwood Secondary School requires significant upgrades and costly repairs to meet both curricular demands and day-to-day operations. Added to these retrofits are other critical and emerging issues of new curriculum and program delivery strategies, which need to be physically accommodated and resolved including: student engagement, wellness, universal design (accessibility); special education delivery for personalized learning; sustainability; and the integration of, and possibilities for, technological change to teaching and learning strategies.

Similar to most schools built in the 20th century, Sherwood Secondary School was designed to accommodate a very limited range of teaching and learning options associated with a standard classroom and does not address new curriculum directions, desired teaching and learning styles, and the infusion of technology required to deliver the initiatives for Student Success planned by the Board.

1.2. Methodology

The study included a comprehensive review of the existing facility in relation to current and projected enrolments; program delivery; operations and maintenance; and facility conditions. The five year recommendations for upgrades detailed in the *2013 Building Condition Assessment*, prepared by VFA Inc., were analysed and coordinated with the proposed program upgrades. A detailed review of the *Asbestos Inventory January 2015* was undertaken to determine the scope and phasing of the required abatement and associated remediation work.

The *Ontario Ministry of Education Secondary School Space Template* was used to assess the number and size of existing program spaces in relation to the projected enrolment and the specific educational programs planned for this facility. The *HWDSB Secondary Program Strategy* provided information on the required educational programs to be accommodated at Sherwood. Tier 1 programs accommodate all students at all secondary schools. Tier 2 programs accommodate some students at some secondary schools. Tier 3 and Specialist High Skills Major programs require specialized facilities to accommodate few students at selected secondary schools only.

1.3. Overview

Sherwood Secondary School is located on a 13 acre site at 25 High Street, Hamilton. The school was built in 1967. The school is a two storey masonry construction with a fully occupied basement. The 181,000 square foot facility includes selected specialty program areas: a double and single gym; auditorium; cafeteria; manufacturing, construction and automotive shops; family studies food and textiles; and cosmetology.

1.4. Proposed Concept Design

The proposed plan accommodates the required educational space program and aligns with key educational principles and values envisioned by the Board. Improvements to existing program and support spaces are proposed to align the floor area and layouts with the provisions of the *HWDSB Draft Secondary School Design Manual*.

Tier 3, Specialist High Skills Major and Intervention/Support programmes designated for Sherwood include: Manufacturing, Health and Wellness, Cosmetology, Special Education Graduated Support, and French Immersion

Manufacturing

Manufacturing provides students with a strong foundation for a wide variety of careers in the manufacturing sector, from those focussing on the service, repair, and modification of machines and systems to those related to the organization and manufacturing services and mass-transit systems.

Health and Wellness

This program is currently being developed in order to define its functional requirements of the facility. Currently, it is intended to utilize existing instructional spaces within the school. Cosmetology

Students gain hands-on experience in hairstyling techniques and aesthetics that meet industry standards, using industry standard materials and equipment.

Graduated Support

Graduated Support provides specific support for students including integration in the school and community, appropriate to the student's strengths. Although they may not be earning credits, students in this program have the ability to achieve a level of independence in the community upon graduation.

French Immersion

French Immersion provides students with a continuation of the elementary French Immersion program, leading to a Certificat d'Immersion.

The proposed renewal work includes required building improvements as detailed in the *Building Condition Assessment* completed in 2013; required upgrades to meet Ontario Building Code and accessibility standards; site upgrades to meet curriculum, social and municipal requirements; and program and support area upgrades.

The design responds to the current and future needs, unanticipated changes in pedagogy, curriculum, technology and learning expectations. Flexibility in curriculum delivery, based on personalized learning, supported by appropriate technologies and quality learning environments are the basis for the proposed upgrades.

2. EXISITNG CONDITIONS ASSESSMENT

2.1. Introduction

A *Building Condition Assessment* was completed by VFA Inc for HWDSB in 2013. This document is included in the Appendix for reference. According to the VFA assessment the Comparable Facility Condition Index for Sherwood was 41.5% in 2013; the Official FCI was 21.5% which is ranked as Poor. The FCI is a ratio of the cost of deferred maintenance over the cost to replace the facility. A Poor FCI indicates that the facility is aged and worn with increasing deterioration. Component and equipment failure are expected; including potential occasional building shut-downs. Facility staff may often be diverted from regular maintenance to reactive mode.

Our assessment of the building conditions include a compilation of the items noted in the VFA report and our site observations from detailed on-site visual inspections of the building and grounds.

2.2. Site Assessment

Site Background: Sherwood Secondary School is located on a 13 acre site at 25 High Street. The main access to the school is from the parking area school for the parking area off Princeton Drive. A playfield is located at the north portion of the site. The school is surrounded by single-family residential to the east and west and an elementary school to the south.

Accessibility: There is no barrier free access to the main doors located off the parking area. The main entry doors off high street are accessible and are provided with an automatic door opener. An elevator with an 1160 kg capacity provides access to the three floor levels. Access to the gym level (lower ground floor) is provided though an exterior door with an automatic door opener. Classroom doors and washrooms do not meet current standards for accessibility.

Parking and Service: The parking area and service access are both located to the rear of the building, using the same driveways, accessed from Princeton Drive. Access for servicing around the perimeter of the building is limited.

Pedestrian and Vehicular Circulation: There is no provision for car or bus drop-off. Specialty buses drop students off on High Street near the main school entry. Students and staff share the same parking area. Pedestrian pathways to and through the site are limited.

Site Amenities: The site has a combined natural turf football/soccer field, without a running track. There are no hard surface active play areas. There are no planned passive outdoor social spaces.

2.3. Building Condition

Architectura

- exterior walls: brick veneer, stucco EFS finished assembly exterior walls are in poor condition; exterior windows and selected doors have been replaced
- roof: torch-on modified bitumen roof assembly aged and in poor condition
- interior finishes:

floors: vinyl composite tile, ceramic tile, hardwood, terrazzo – carpet and VCT are aged and in fair to poor condition

walls: painted masonry, gypsum board, exposed brick masonry – wall finishes are in poor condition

ceilings: gypsum board, acoustic tile – aged and in fair condition

cabinetry, millwork, washroom partitions, lockers - aged and in fair to poor condition









2. EXISITING CONDITIONS ASSESSMENT









Structural

• metal roof deck, steel trusses, steel joists, load-bearing masonry

Mechanical

- Heating: three gas fired hot water boilers aged and in fair condition, perimeter fin tube radiators, central air handler
- Ventilation: four central air handlers provide heating and ventilation central air handlers and HVAC pumps are aged and in poor condition; and rooftop exhaust fans aged and in poor condition
- Cooling: cooling tower and chiller
- HVAC controls: mix of pneumatic and DDC controls with a building automation system aged and in fair condition
- Domestic hot water: gas fired water tanks domestic water distribution and plumbing fixtures are aged and in fair condition

Electrical

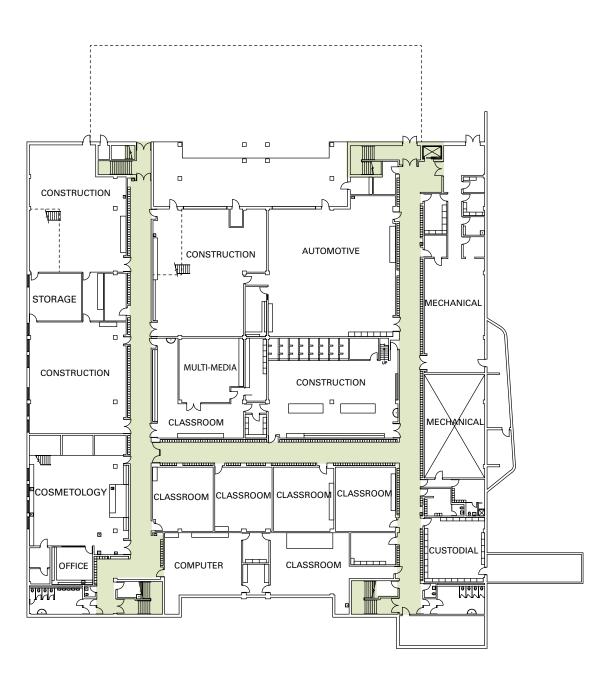
- Main switchgear: original 1967 equipment switchboard, secondary transformers, motor control and branch wiring are aged and in fair condition
- Fire alarm system: good condition
- Emergency lighting: wall mounted battery packs
- Lighting:
 - interior lighting: CFLs and T8 lamps with electronic ballasts exterior lighting: incandescent and HID fixtures and light standards in parking area aged and in poor condition
- Security system: panel, motion detectors, sensors, CCTV and keypads
- PA system: new main PA console; speakers and wiring are aged and in poor condition
- IT system: up to date

2.4. Building Code Analysis

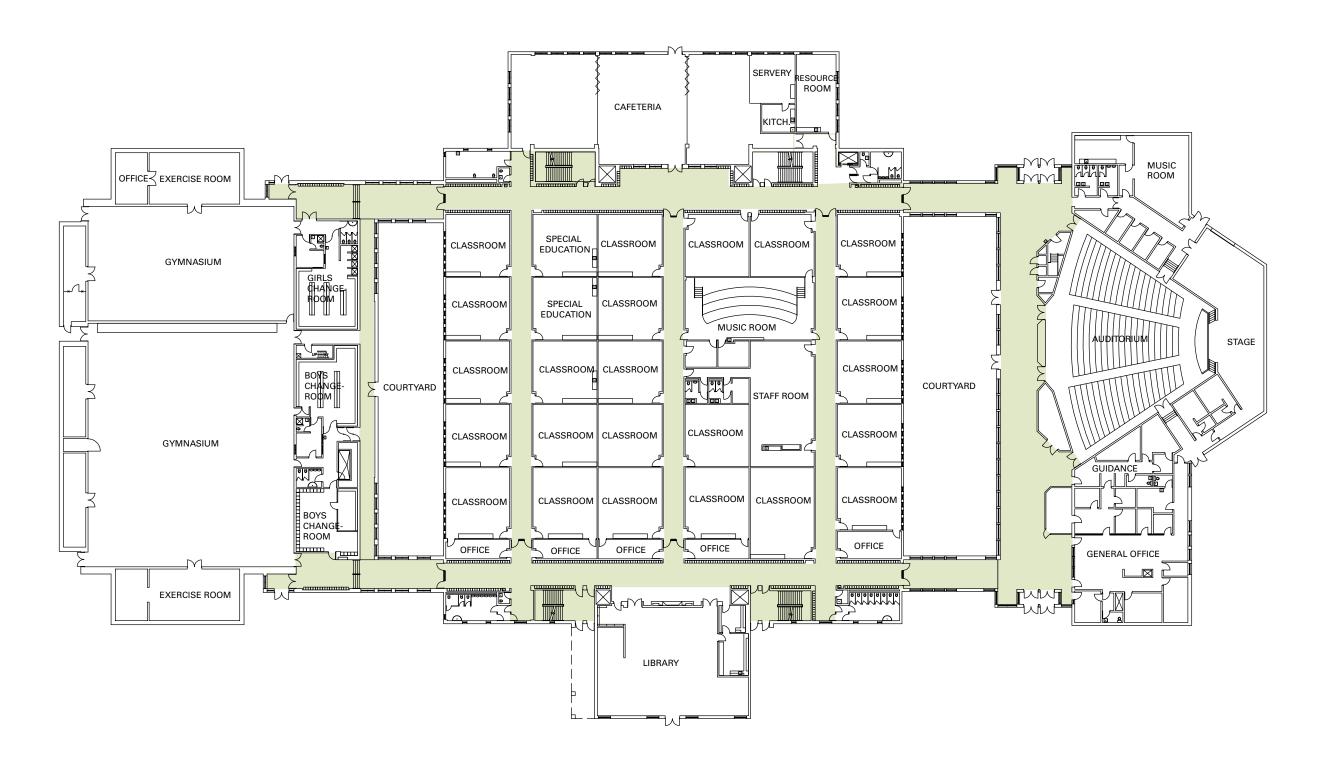
The building is classified as Group a Division 2 by the *Ontario Building Code*. However, as it is not sprinklered and does not meet all the fire separation requirements of an A2 classification, it is considered non-conforming. Any renovations or alterations to the building will be subject to the provisions of Part 11 of the OBC. These OBC provisions set out different requirements depending on whether the renovations are considered *Basic Renovation* or *Extensive Renovation*.

CS&PArchitects

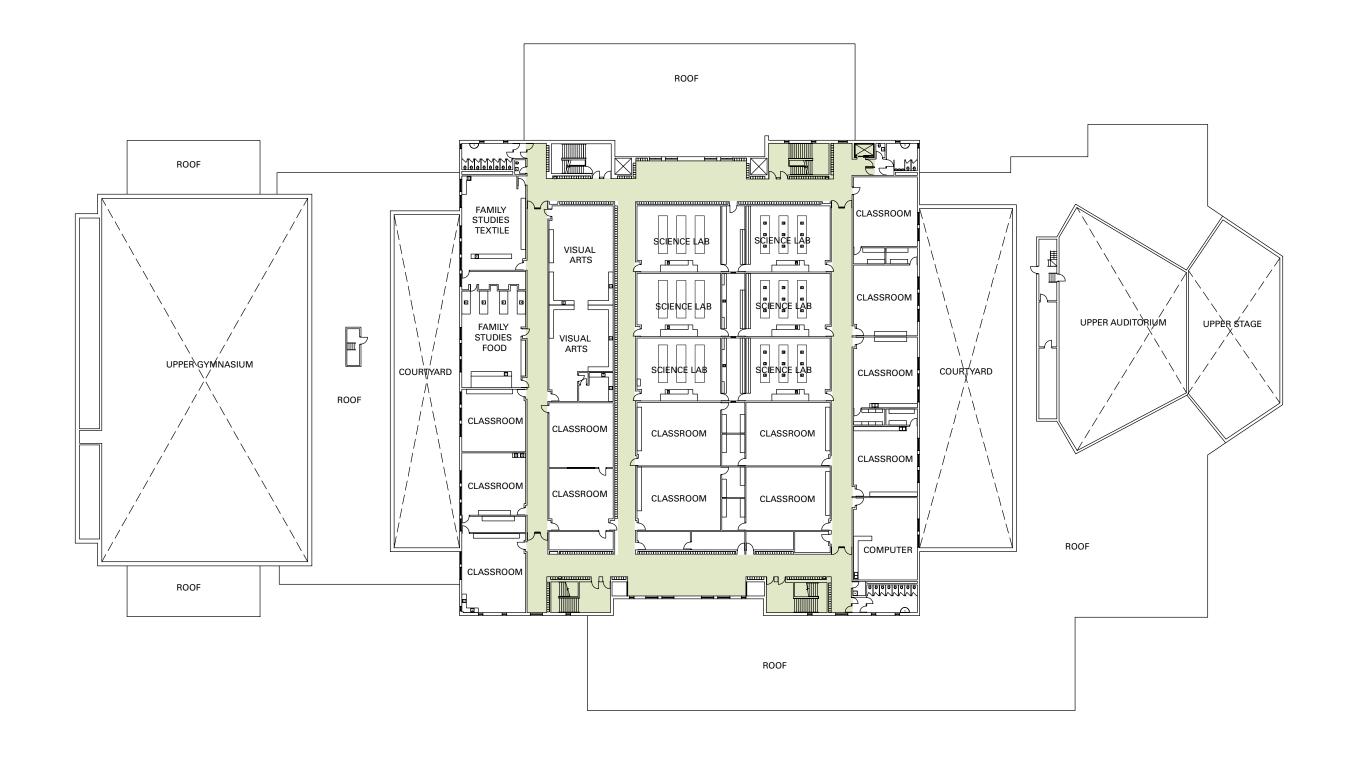
EXISTING FLOOR PLANS



EXISITING FLOOR PLANS



EXISTING FLOOR PLANS



3. CONCEPT PLAN

3.1 Introduction

The proposed deep-retrofit and program upgrades to Sherwood Secondary School are based on a review and analysis of the following:

- HWDSB Secondary Program Strategy
- HWDSB Tier 3 Program and Specialist High Skills Major program requirements
- Ministry of Education Secondary School Space Template
- HWDSB Draft Secondary School Design Manual
- Existing and projected student enrolments
- Building Condition Report prepared by VFA Inc.

3.2 Ministry of Education – Space Template Analysis

An analysis of the existing program areas and overall gross floor area in relation to the provisions of the *Ministry SpaceTemplate* for a school for 1,300 students identifies the following:

- the number of standard Classrooms exceed the requirement by approximately 12 standard classroom spaces
- the number and floor area of Science rooms is deficient
- the floor area of spaces dedicated to Visual Arts is deficient
- the number and floor area of large Technology Labs exceeds the standard
- the floor area dedicated to Special Education and Resource areas is deficient
- the Library is undersized for the current and projected student enrolment
- the Cafeteria is undersized for the current and projected student enrolment
- the General Office, Guidance and Student Services areas are undersized for the current and projected student enrolment
- the combined floor area of the Gymnasium, Exercise rooms and associated change rooms exceed the standard
- the overall gross floor area of the building exceeds the requirements of the Ministry Space Template

3.3 Floor Plans

The proposed upgrades include extensive renovations to provide the following new program areas:

- Manufacturing (Tier 3)
- Integrated Technology
- Graduated Support (Tier 3)

The proposed upgrades include extensive renovations to upgrade or relocate the following program areas:

- Visual Arts
- Multi-Media
- Design/Drafting
- Computer Engineering
- Cafeteria and Kitchen
- Learning Commons
- General Office
- Guidance and Student Services
- Special Education
- Cosmetology
- Science Suite
- Washrooms

The proposed upgrades include *basic renovations* to the following program areas:

- Construction Technology
- General Classrooms
- Family Studies Food
- Family Studies Textiles
- Corridors

3.4 Site Plan

The proposed site improvements include:

- provision of convenience parking located off High Street to provide access to the barrier free entrance at the gymnasium wing
- upgrades to parking surfaces, driveways and sidewalks
- provision of a barrier-free ramp to the main school entrance located off the existing parking area, integrating an outdoor amphitheatre for social and educational activities

SECONDARY SCHOOL SPACE TEMPLATE

SECONDARY SCHOOL SPACE TEMPLATE SAMPLE SCHOOL

SECONDARY SCHOOL SPACE TEMPLATE Sherwood Existing

SECONDARY SCHOOL SPACE TEMPLATE Sherwood Proposed January 2016

School Board: Grade Range: Program: School Name: Table 18: Secondary Model Program Sheet

Sample District School Board Grade 9 to 12 English, French or Dual Track Sample School for 1.300 Students

School Board: Grade Range: Program: School Name:

Sherwood Existing

School Board: Grade Range: Program: School Name:

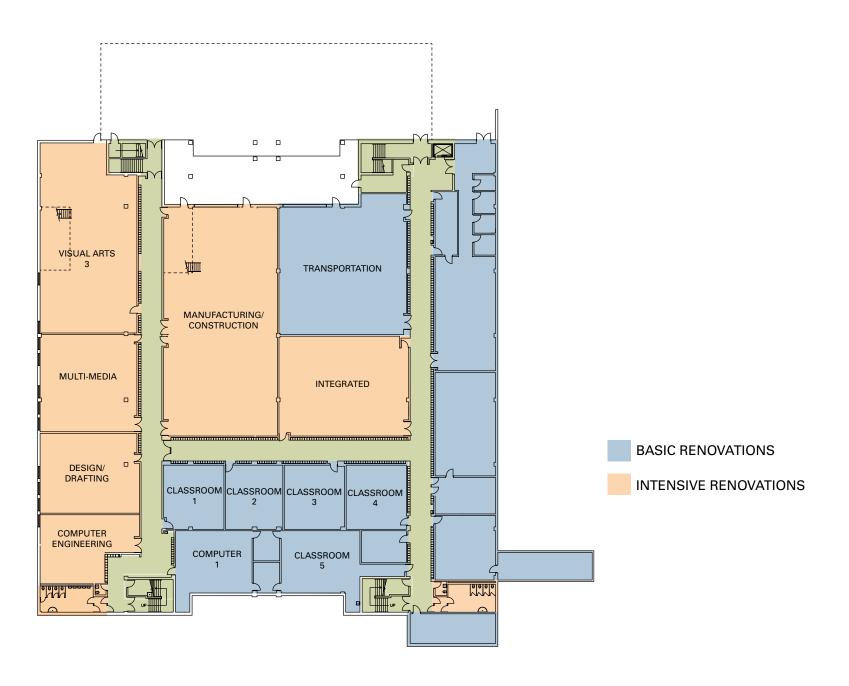
Sherwood Proposed January 2016

Expected Enrolment:	<i>y</i> 11100	ioi i rogi	u 01100		,300																	
Instructional Spaces	#	m²	Size ft²	Floo m²	or Area ft²	Load	ОТС	Instructional Spaces	#	Si m²	ze ft²	Floor a	Area ft²	Load OTG	3 N	Model vs Existing m ² ft ²	Instructional Spaces	# m²	Size ft²	Floo m²	r Area ft²	Load OTG
Classroom	32	70	750	2,230	24,00	0 21	672	Classroom	44	74	794	3,246	34,936	21 92	24	1,016 10,936	Classroom	31				21 651
Science Laboratories	0	110	1.250	1.045	11,25	0 21	189	Science Laboratories	6			636	6,846	12	26	-409 -4,404	Science Laboratories	l el		742	2 000	126
Science General (Avg Size)	9	- 110	1,230	1,040	11,20	- 21	109	Science General (Avg Size)	6	106	1.141	636	6.846	21 12		-409 -4,404	Science General (Avg Size)	4	1 100	743	3,000	21 84
Science Biology (Avg Size)				<u> </u>		- 21		Science Biology (Avg Size)	0	100	1,141	030	0,040	21 12	-		Science Laboratories	2	1,100			21 42
Science Chemistry (Avg Size)						- 21		Science Chemistry (Avg Size)						21			Science Chemistry (Avg Size)		1,000			21 -
Science Physics (Avg Size)			_	1 .		- 21		Science Physics (Avg Size)		_		_	_	21	_		Science Physics (Avg Size)					21 -
Ocience i mysics (7 tvg Gize)	<u> </u>				1			Ocience i mysics (rwg cize)		<u> </u>				21			Ocience i mysics (rwg oize)					
Total Music / Arts	6			678	7,30	0	126	Total Music / Arts	4			529	5,693	8-	84	-149 -1,607	Total Music / Arts	7		377	4,060	147
Music Instrumental/Vocal	2	129	1,390	258	2,78	0 21	42	Music Instrumental/Vocal	2	155	1,668	310	3,336	21 4	42		Music Instrumental/Vocal	2				21 42
Graphics/Visual Arts	4	10	1,130	420	4,52	0 21	84	Graphics/Visual Arts	2	109	1,179	219	2,357	21 4	42		Graphics/Visual Arts	3	1,000			21 63
Theatre Arts			-		-	- 21	-	Theatre Arts		-		-	-	21	-		Theatre Arts	1				21 21
Photography			-		-	- 21	-	Photography		-		-	-	21	-		Photography					21 -
Media Arts			-		•	- 21	-	Media Arts		-		-	-	21	-		Media Arts	1	1,060			21 21
Technical / Vocational	11			1,544			231	Technical / Vocational	8			1,631	17,559	16		87 939	Technical / Vocational	12		1,533	16,500	252
Business/Computer Room	3	97	1,040		- /		63	Business/Computer Room	2	90	967	180	1,933	21 4:	42		Business/Computer Room	2	1,260			21 42
Family Studies	2	114	1,230	229	2,46	-	42	Family Studies	-			-	-		-	-229 -2,460	Family Studies	2		-	- /	42
Family Studies (Food)			-		-	- 21	-	Family Studies (Food)		-		-	-	21	-		Family Studies (Food)	1				21 21
Family Studies (Textiles/Fashion)			-		-	- 21	-	Family Studies (Textiles/Fashion)		-		-	-	21	-		Family Studies (Textiles/Fashion)	1				21 21
Family Studies (Nutrition)			-		-	- 21	-	Family Studies (Nutrition)		-		-	-	21			Family Studies (Nutrition)					21 -
Technology Lab Large	2	232	2,500	465	5,00		42	Technology Lab Large	5			1,217	13,097	108		752 8,097	Technology Lab Large	5		1,139	12,260	105
Transportation			-		-	- 21		Transportation	1	293	3,153	293	3,153	21 2			Transportation	1	3,160			21 21
Construction			-		-	- 21		Construction	4	231	2,486	924	9,944		84		Construction	1	2,415			21 21
Design/Drafting			-		-	- 21		Design/Drafting		-		-	-	21	-		Design/Drafting	1	1,550			21 21
Manufacturing			-		-	- 21		Manufacturing		-		-	-	21			Manufacturing (Tier 3 Program)	1	3,100			21 21
Green Industries			-		-	- 21		Green Industries		-		-	-	21			Green Industries					21 -
Welding			-		-	- 21		Welding		-		-	-	21			Welding					21 -
Wood			-			- 21		Wood		-		-	-	21			Wood					21 -
Integrated			-		-	- 21		Integrated		-		-	-	21			Integrated	1	2,035			21 21
Technology Lab Small	4	140	1,510	561	6,04	_	84	Technology Lab Small	1			235	2,529	21	21	-326 -3,511	Technology Lab Small	3		160	1,720	63
Communications			-		•	- 21		Communications		-		-	-	21	-		Communications					21 -
Computer Engineering			-		-	- 21		Computer Engineering		-		-	-	21	_		Computer Engineering	1				21 21
Computer Laboratory			-		-	- 21		Computer Laboratory		-		-	-	21	-		Computer Laboratory					21 -
Cosmetology			-		-	- 21		Cosmetology	1	235	2,529	235	2,529		21		Cosmetology	1				21 21
Health Sciences			-		-	- 21		Health Sciences		-		-	-	21	-		Health & Wellness (Tier 3 Program)	1	1,720			21 21
_								_														
Special Education / Resource Room				483	5,20	0	-	Special Education / Resource Room	3			194	2,087	3	30	-289 -3.113	Special Education / Resource Room	3		149	1,600	30
Special Education Area			-			- 9	-	Special Education Area	2	70	753	140	1,506	9 1	18		Special Education Area	2	800			9 18
Resource Area - Loaded (400-699 sf)			-		1	- 12	-	Resource Area - Loaded (400-699 sf)	1	54	581	54	581		12		Resource Area - Loaded (400-699 sf)	1				12 12
Resource Area - Unloaded (<400 sf)			-			-		Resource Area - Unloaded (<400 sf)		-		-	-		-		Resource Area - Unloaded (<400 sf)					
Instructional Area Flexibility			-	483	5.20	0		Instructional Area Flexibility		ļ.		ļ					Instructional Area Flexibility					
				+	,=0				-									-				

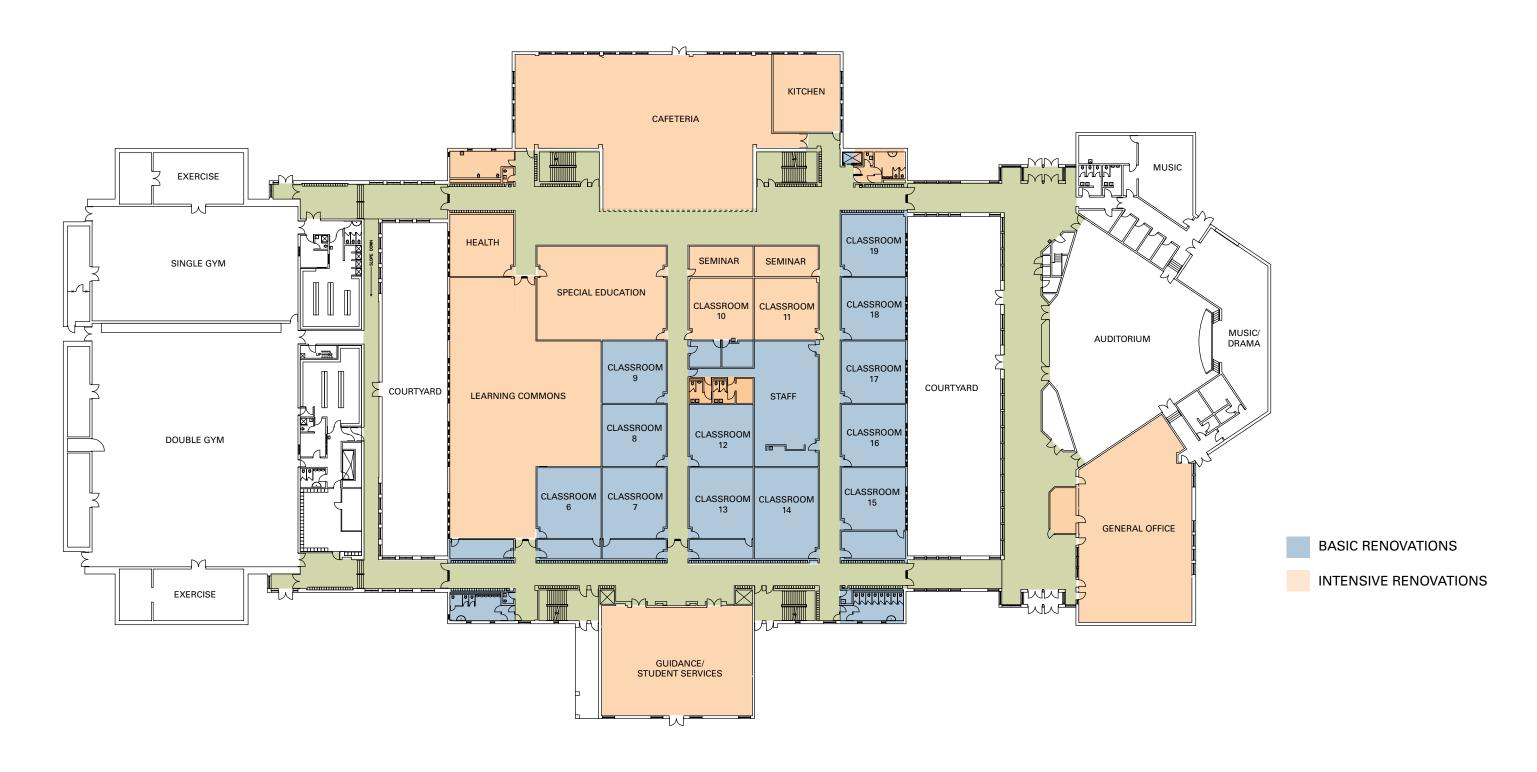
SECONDARY SCHOOL SPACE TEMPLATE

Other Spaces	1,226 13,200	- Other Spaces	3	964	10,375	-		Other Spaces	3	1,110	11,950	-
Stage	139 1,500 139 1,500	Stage	1 224	2,411 224	2,411	-	85 911	Stage	1			-
Library/Library Resource Centre	483 5,200 483 5,200	Library/Library Resource Centre	1 290	3,121 290		-	-193 -2,079	Library/Library Resource Centre	1	5,750		
Cafetorium/Cafeteria	604 6,500 604 6,500	Cafetorium/Cafeteria	1 450	4,843 450	4,843	-	-154 -1,657	Cafetorium/Cafeteria	1	6,200		-
Lecture	21	- Lecture	-	-	- 2	21 -	0 0	Lecture				21 -
Seminar		Seminar	-	-	-	-		Seminar				-
Chapel		Chapel	-	-	-	-		Chapel				-
	, , , , , , , , , , , , , , , , , , , 											
Gymnasium and Exercise Room	1,511 16,260 42		6	1,853	19,943	42	342 3,683	Gymnasium and Exercise Room	3	-	-	42
Gymnasium Area - Quadruple	1,486 16,000 63	- Gymnasium Area - Quadruple	-	-		63 -		Gymnasium Area - Quadruple				63 -
Gymnasium Area - Triple 1	1 1,115 12,000 1,115 12,000 42 42		1 1,292	13,906 1,292		42 42		Gymnasium Area - Triple	1			42 42
Gymnasium Area - Double -	- 743 8,000 21	- Gymnasium Area - Double	-	-		21 -		Gymnasium Area - Double				21 -
Gymnasium Area - Single -	- 372 4,000	Gymnasium Area - Single	-	-	-	-		Gymnasium Area - Single				
Dance/Aerobics Studio		Dance/Aerobics Studio	- 440	4.005		-		Dance/Aerobics Studio				
Exercise Room	 	Exercise Room	2 112	1,205 224	2,410	-		Exercise Room	2			
Weight Room Change Rooms		Weight Room	- 440	4.000	0.007			Weight Room				
Change (Comb	4 64 690 256 2,760	Change Rooms	3 112	1,209 337	3,627			Change Rooms				
Gymnasium and Exercise Room	- 139 1,500											
Flexibility												
Total GFA and OTG of Instructional Area	8,717 93,830 1,260	Total GFA and OTG of Instructional Area		9,052	97,439	1.374	335 3,609	Total GFA and OTG of Instructional Area				1.248
Total GLA and OTG OF INSTRUCTIONAL AREA	0,717 95,830 1,260	Trotal GLA and GTG of instructional Area		9,052	91,439	1,3/4	3,009	Total GLA and OTG OF Instructional Area				1,248
	Per Pupil Floor Area		Por	Pupil Floo	or Area				Per P	unil Floo	r Area	
Operational Areas	m ² ft ² m ² ft ²	Operational Areas	m ²	ft ² m ²	ft²			Operational Areas	m ²	ft ² m ²	ft2	
	III IL III IL			11 111	IL					11 111	IL	
General Office	0.2 2.3 278 2,990	General Office		172	1,851		-106 -1,139	General Office			3 235	
Guidance Area	0.1 1.3 157 1,690	Guidance Area		203			46 495	Guidance Area			3,030	
Cooperative Education Office	26 280	Cooperative Education Office		200	2,100		-26 -280	Cooperative Education Office (incl in G)			3,030	
Staff Lounge	20 200	Staff Lounge		180	1,937		180 1,937	Staff Lounge				
Kitchen/Servery	0.1 1.1 133 1,430	Kitchen/Servery		56			-77 -832	Kitchen/Servery			1 330	
Custodial Areas	0.2 1.7 205 2,210	Custodial Areas		185	1,987		-21 -223	Custodial Areas			1,000	
Staff Room and Teacher Work Rooms	0.3 3.5 423 4,550	Staff Room and Teacher Work Rooms		154			-269 -2,896	Staff Room and Teacher Work Rooms				
Meeting Room	28 300	Meeting Room					-28 -300	Meeting Room				
Academic Storage	0.1 1.0 121 1,300	Academic Storage		239	2,568		118 1,268	Academic Storage				
Washrooms	0.3 3.2 386 4,160	Washrooms		374	4,031		-12 -130	Washrooms				
Gymnasium Storage	74 800	Gymnasium Storage		11	115		-64 -685	Gymnasium Storage				
Mechanical Spaces	0.5 5.8 697 7,501	Mechanical Spaces		233	2,510		-464 -4,991	Mechanical Spaces				
Total Operational Area	2,528 27,211	Total Operational Area		1,806	19,436	71%	-722 -7,775	Total Operational Area				30%
Total Instructional (from above)	8,717 93,830	Total Instructional (from above)		9,052	97,439	104%	335 3,609	Total Instructional (from above)				45% 42%
Total Operational and Instructional	11,245 121,041	Total Operational and Instructional		10,858	116,875	97%	-387 -4,166	Total Operational and Instructional				42%
	400/1 4 7001 50 007			050/ 0.704	40.007				-			
Gross Up Added	42% 4,723 50,837	Gross Up Added		35% 3,791		40.40/	745 7 000	Gross Up Added				000/
Gross Floor Area	15,968 171,878	Gross Floor Area		16,683	179,574	104%	715 7,696	Gross Floor Area				29%
Area ner Dunil for 4200 nunile.	12.28 132.2	Area mar Dunil		10.14	120.7	000/		Area per Pupil				30%
Area per Pupil for 1300 pupils:	12.28 132.2	Area per Pupil		12.14	130.7	99%		Area per Pupii				30%
Community Use Rooms	m² ft²	Community Use Rooms		m²	ft²			Community Use Rooms		m²	ft2	
Collinating Ose Rooms	III II	Community Ose Rooms			IL			Collinating use Rooms		- "	IL	
Child Care		Child Care						Child Care				
Early Years Hub	 	Early Years Hub						Early Years Hub				
Community Use		Community Use						Community Use				
Other (please identify)	-	Auditorium		500	5,380			Other (please identify)				
Other (please identify)	-	Other (please identify)		-				Other (please identify)				
Other (please identify)	-	Other (please identify)		-				Other (please identify)				
Total Community Use Rooms Area		Total Community Use Rooms Area		500	5,380			Total Community Use Rooms Area				
		<u> </u>		!	-,			,		•		
Total Square Feet	15,968 171,878	Total Square Feet		17,183	184,954		1,215 13,076	Total Square Feet				
	<u> </u>				<u> </u>			•		•		
Classrooms: Surp	lus: 12 classrooms											
Science: Defic												
Music/Arts: Defic												
	cit: 1 Business/Computer Room											
	cit: 2 Family Studies Rooms											
	cit: 3 Small Technology Rooms											
The s	space for these could be provided in the existing Large Tech	nnical Labs										
Library: The I	Library is 2000 sqft too small											
· I	nasium is larger than necessary. Including exercise rooms t	he area is 3500 soft larger										
Offices: Defic												
Offices: Delic	ar. 200 syll											

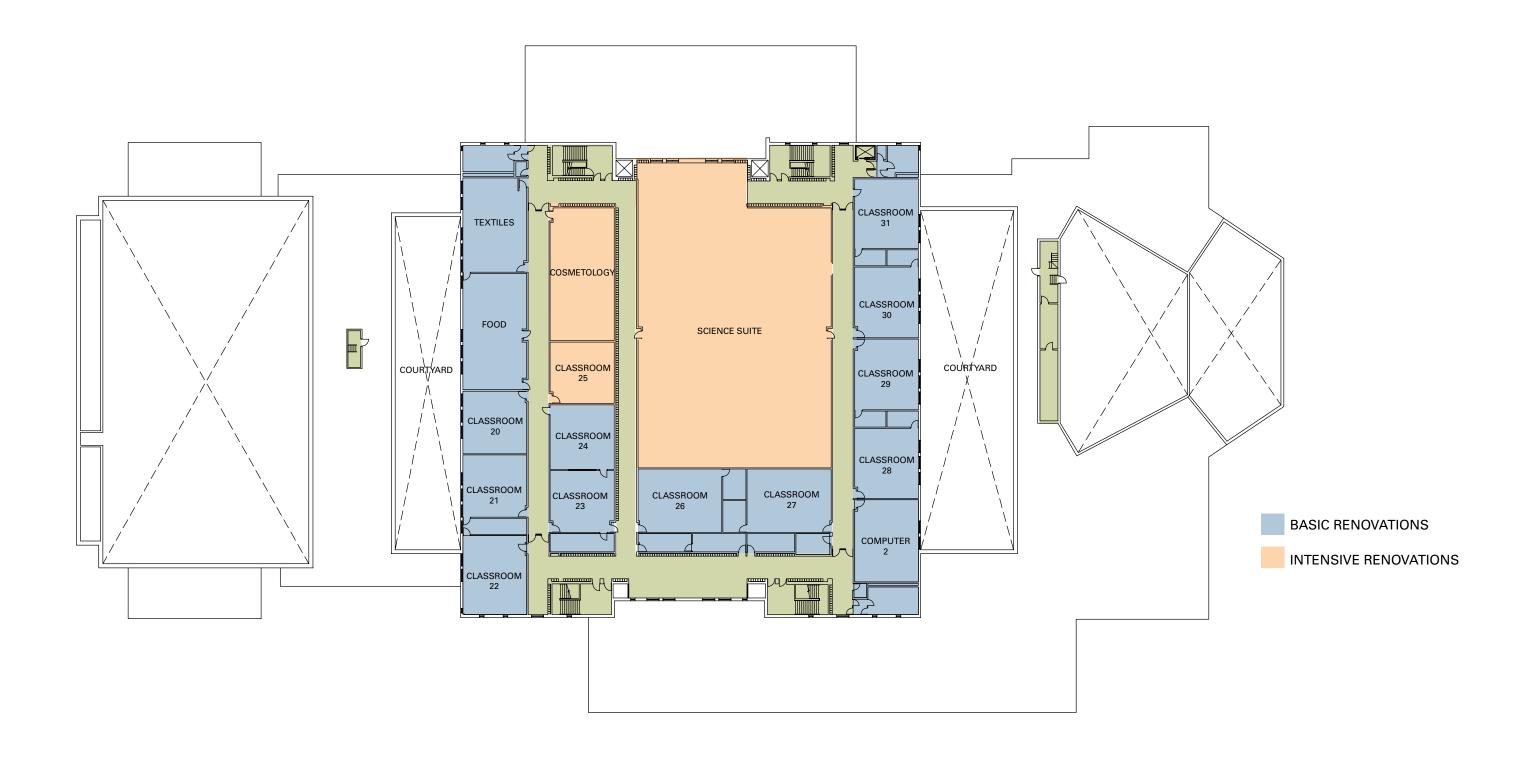
PROPOSED FLOOR PLANS



PROPOSED FLOOR PLANS



PROPOSED FLOOR PLANS



3. CONCEPT PLAN

3.5 Asbestos Abatement

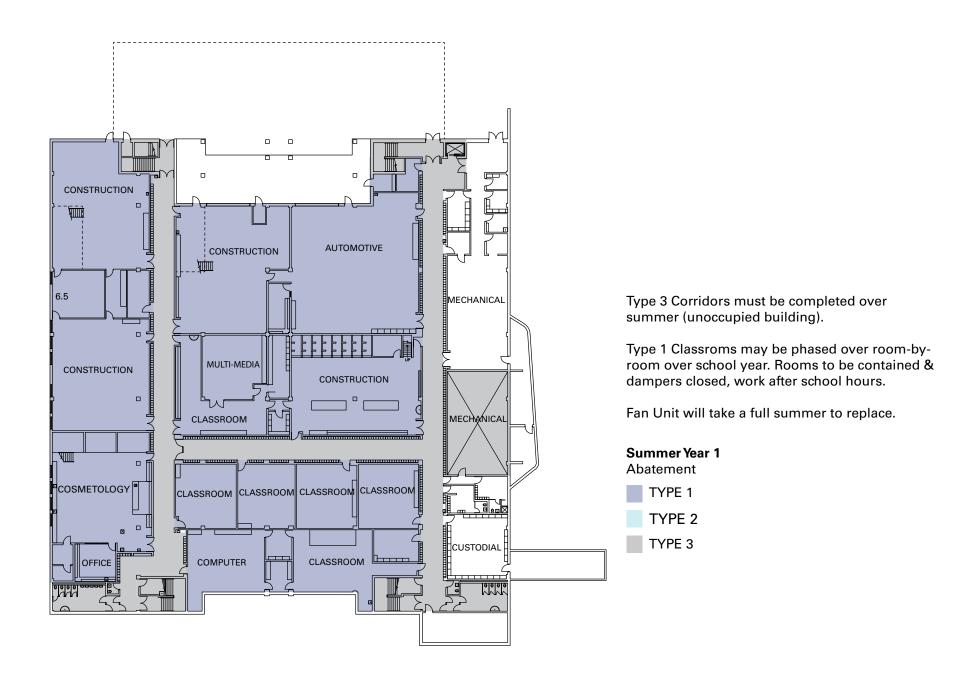
- Abatement work to be phased from the bottom up basement, ground floor, second floor.
- Complexity of the abatement and the required protection of building occupants requires careful phasing. For this reason abatement is expected to be phased over 4-5 years.
- All Corridors are Type 3 abatement and must be completed over summer while building is unoccupied.
- Summer schedule would typically be 4 weeks for demolition and abatement, 3-4 weeks to rebuild.
- Individual Basement and Ground Floor Classrooms may be isolated for glove-bag and floor tile removals Types 1 & 2 over the school year.
- All classrooms will receive new finishes after abatement.
- All Second Floor abatement is Type 3 and must be completed over summer while building is unoccupied.
- Second Floor roof deck spray insulation is ACM. The difficulty and volume of removal reduces the amount of removal that can be completed each summer. This area will take up to 3 summers to fully abate.
- Ductwork, including VAVs, will be removed (to provide access to ACMs) and replaced, as part of abatement program.
- The removal of the roof deck insulation will result in an approximately 30% nergy use reduction for the building as the required HEPA filter in the basement will no longer be required.
- After full completion of abatement throughout the building the following building upgrades can be completed:
 - new roof top units
 - update to fire alarm system
 - required ESA upgrades
 - boiler and water piping replacements
 - basement fan unit (full summer required, timing to be confirmed)
- Additional areas to be reviewed for the presence of hazardous materials include:
 - paint at basement floor
 - floor tiles are likely ACM
 - PCBs

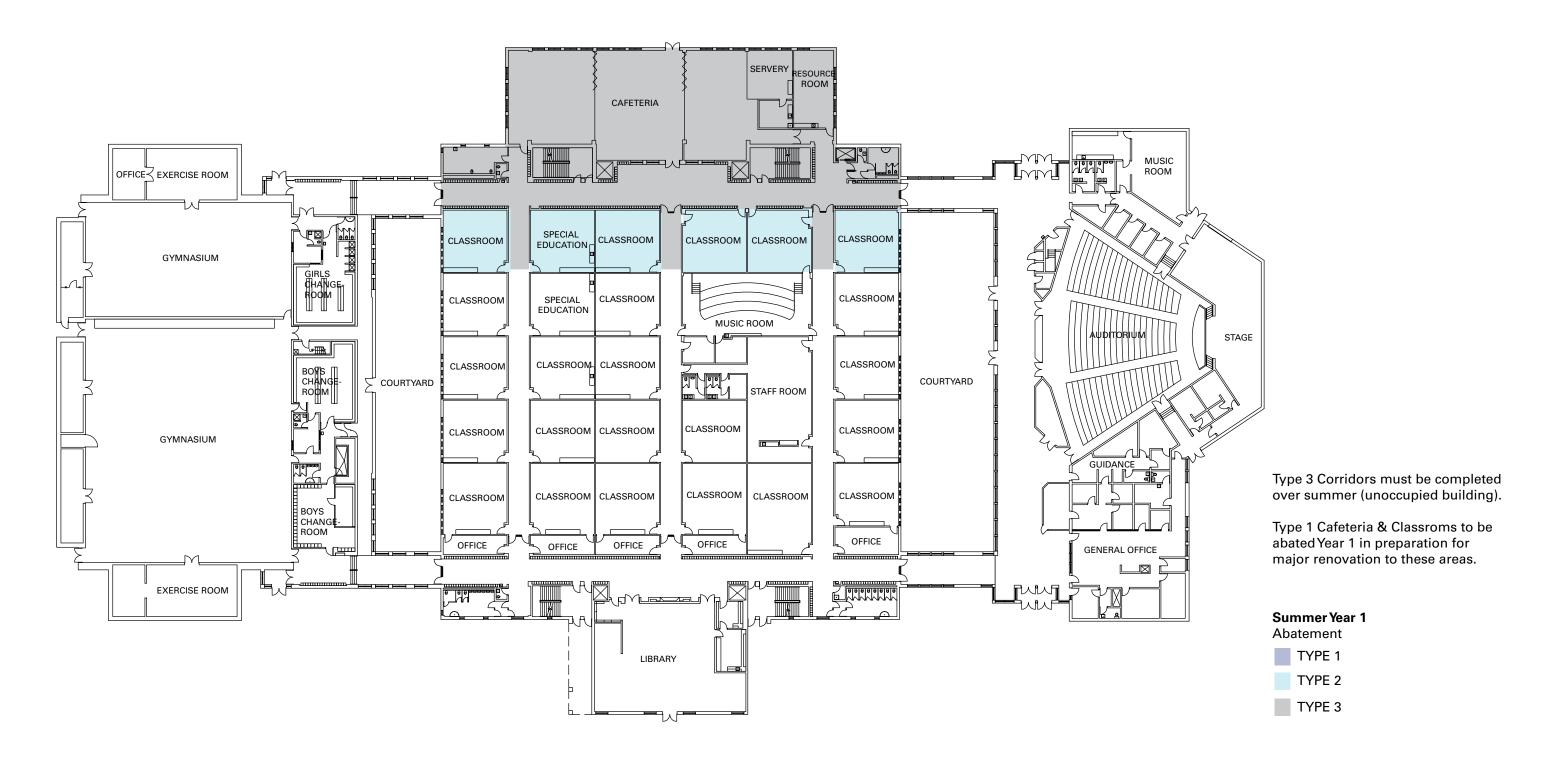
3.6. Phasing

The phasing of the proposed construction is a significant challenge on this site. The school will remain occupied during all phases of construction. The proposed phasing strategy anticipates that it will take six to seven years to complete the full deep retrofit and renovation.

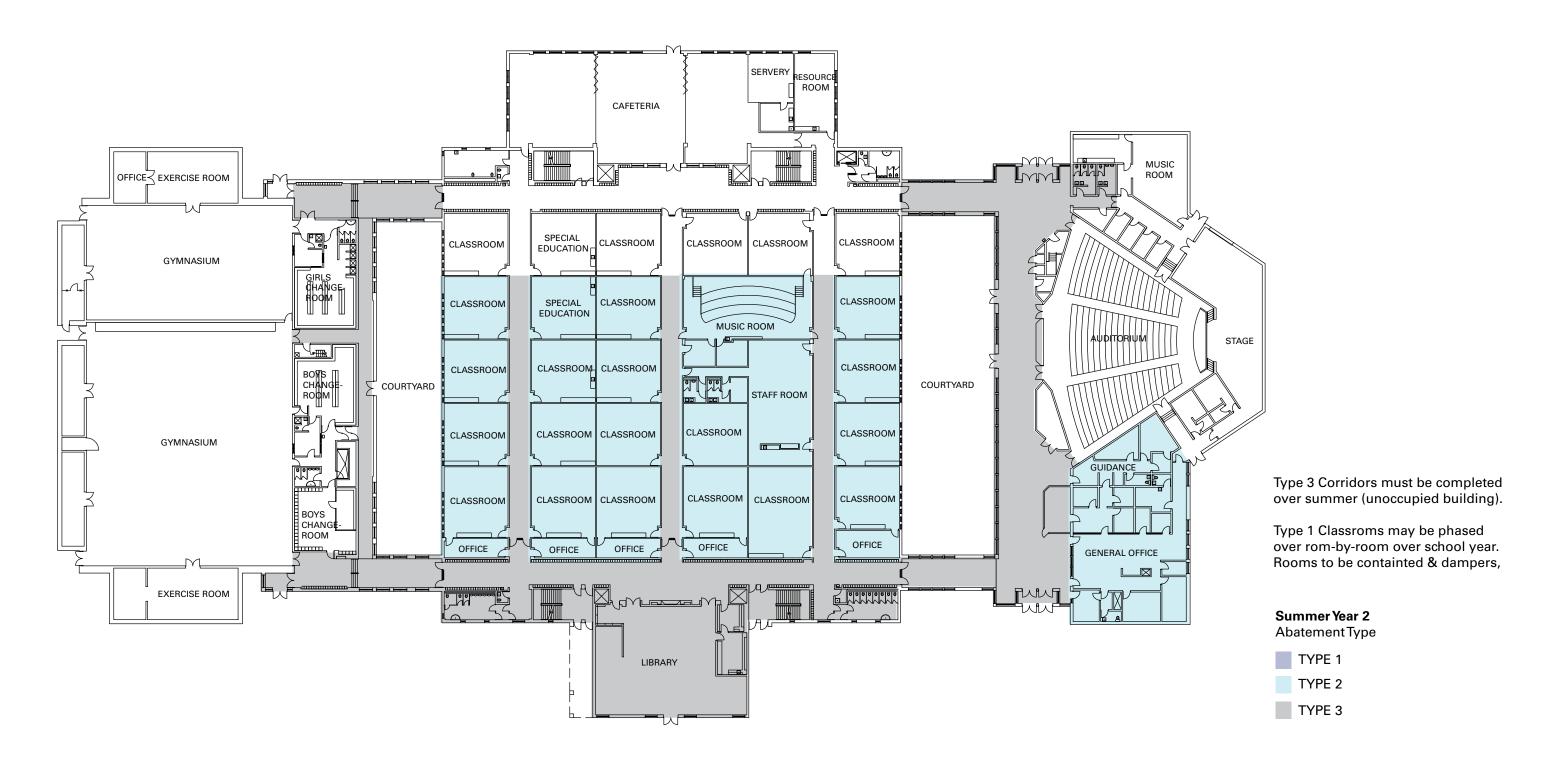
The proposed deep retrofit and renovations include the architectural improvements noted above, in addition to the required building condition, mechanical and electrical upgrades and replacements noted in the Building Condition Report. The building also requires substantial asbestos abatement and remediation prior to the construction of each phase. Up to twelve portable classrooms will be required, throughout the construction timeframe, to accommodate the current student enrolment and to allow the school continue to offer all current programs on site. The following diagrams describe the proposed phasing strategy. The strategy regarding the asbestos abatement and remediation was developed in consultation with the Board's Regulated Substances Supervisor.

	Summer	First Semester	Full Year
Year 1	Abatement: Basement Corridors and Technology Shops; Ground Floor Cafeteria, Corridor and adjacent Classrooms in preparation for renovation in Summer Year 2 Renovation: Basement Manufacturing, Construction and Integrated Technology	Abatement: Basement level Classrooms phased over the school year to accommodate school program requirements Renovation: Basement new Visual Arts and Multimedia, phased upgrades to Basement level Classrooms	
Year 2	Abatement: Ground Floor Corridors, Library, General Office Renovation: Ground Floor Cafeteria and adjacent Corridor		Abatement: Ground Floor level Classrooms phased over the school year to accommodate school program requirements Renovation: Ground Floor new Library; phased upgrades to Ground Floor level Classrooms
Year 3	Abatement: Second Floor Corridors Renovation: Site improvements	Renovation: Ground Floor new Guidance, Student Services and General Office	
Year 4	Abatement: Second Floor Science rooms and adjacent Classrooms		Renovation: Second Floor Science Rooms and adjacent Classrooms
Year 5	Abatement: Second Floor remaining Classrooms		Renovation: phased upgrades to remaining Second Floor Classrooms, including Family Studies Food, Family Studies Fashion and Cosmetology
Year 6	Abatement: Basement level Fan Room Renovation: New mechanical rooftop units	Renovation: Basement level new Design/Drafting and Computer Engineering	

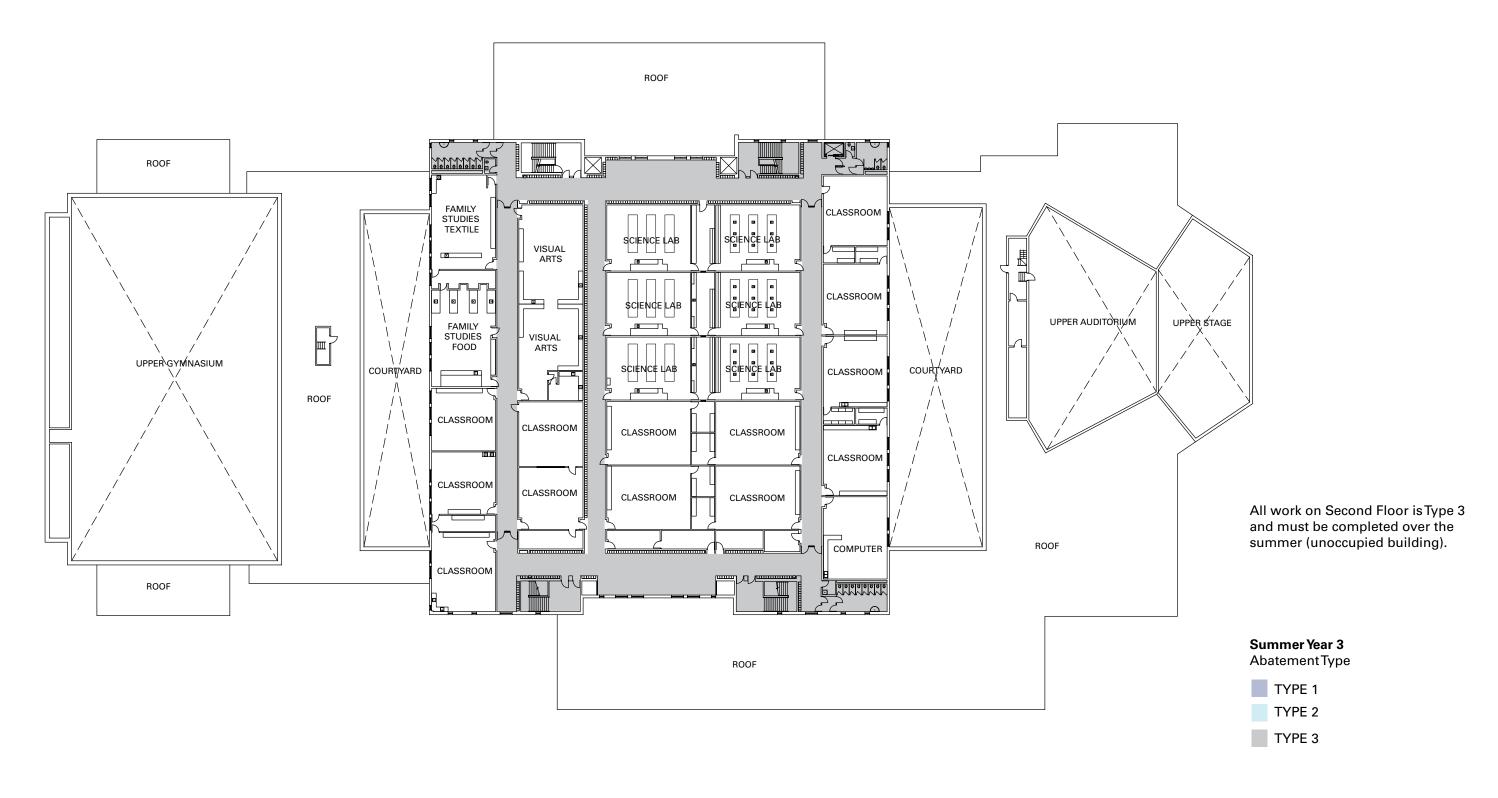




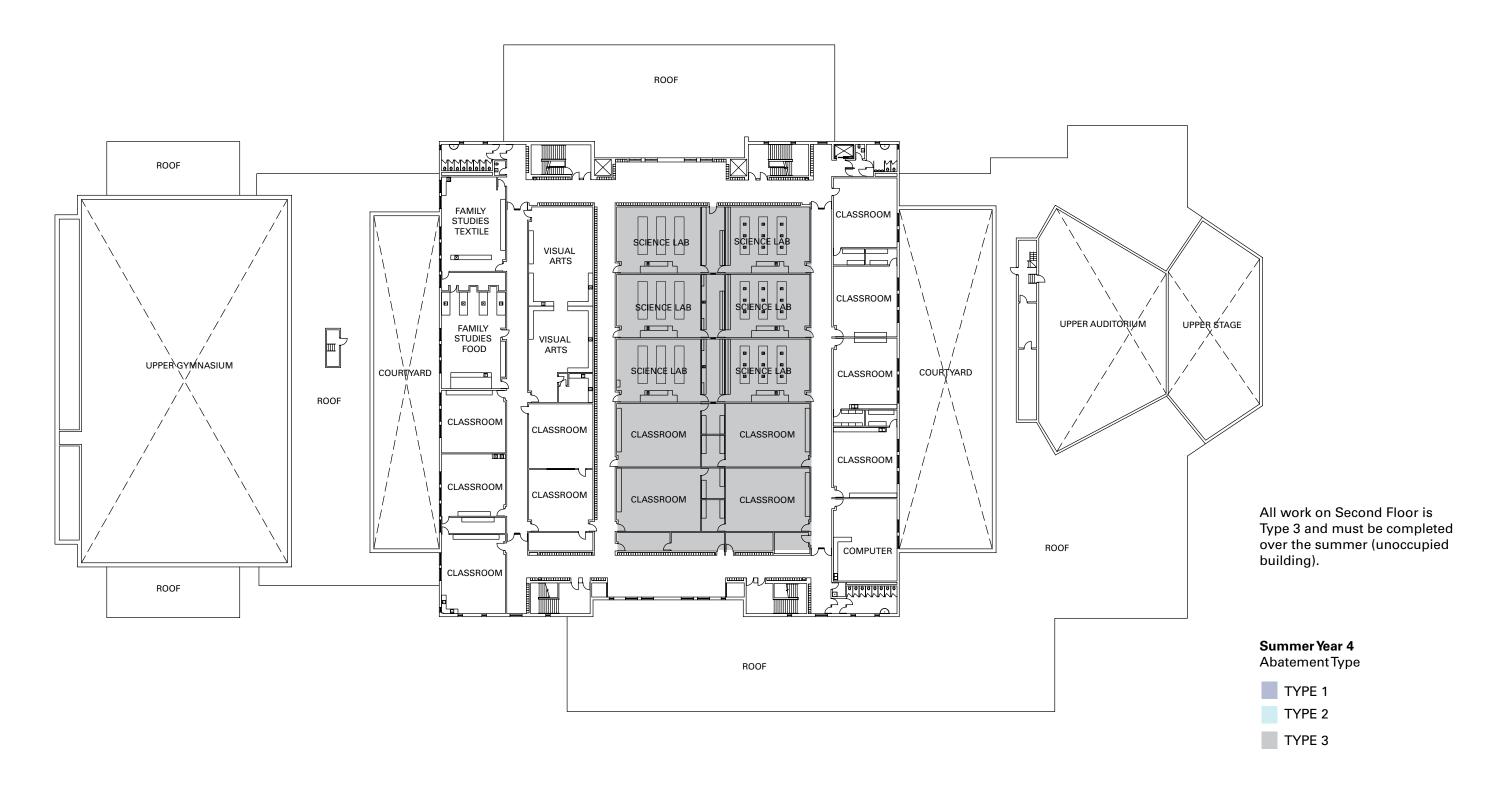
GROUND FLOOR



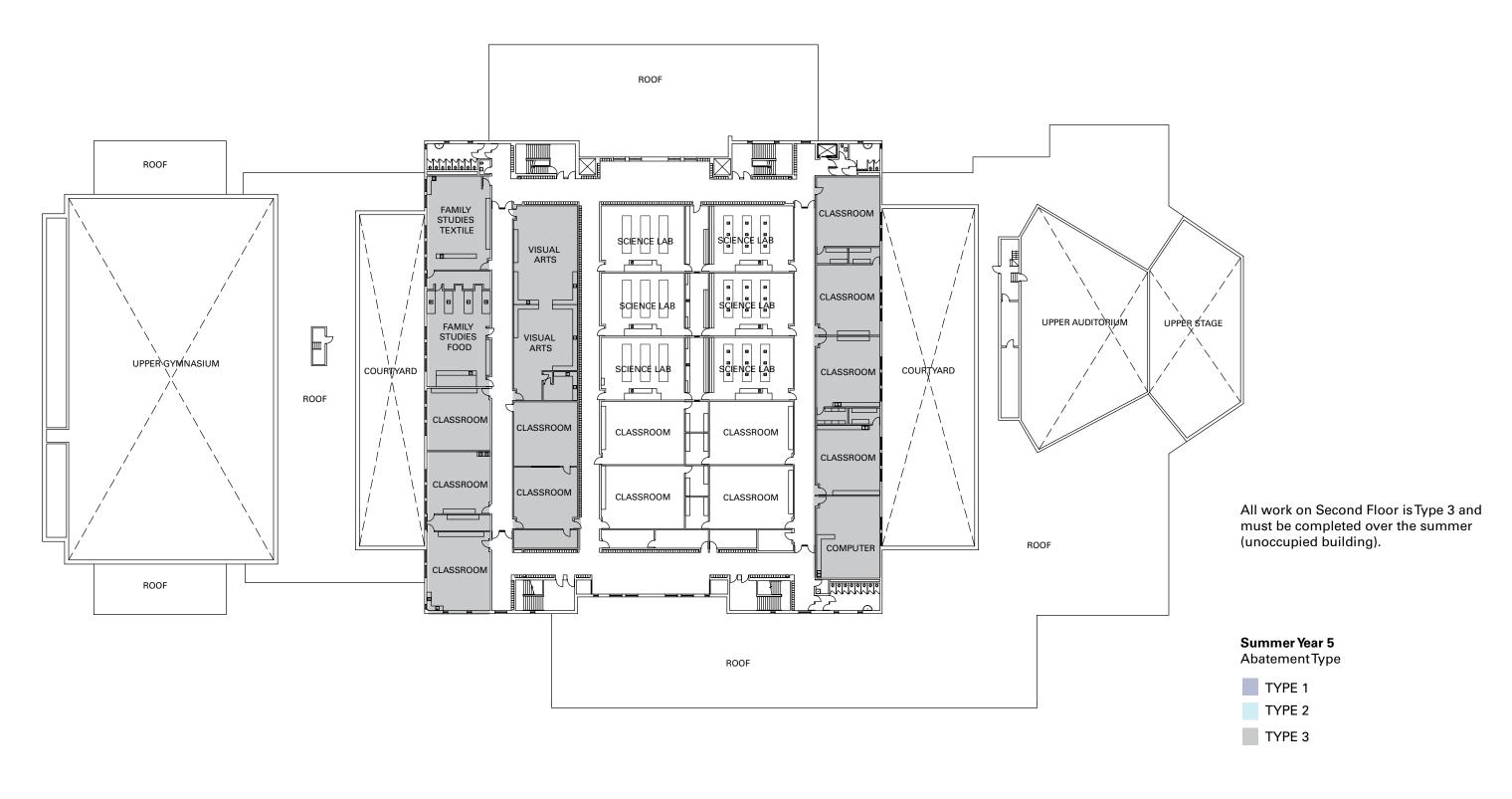
GROUND FLOOR



SECOND FLOOR

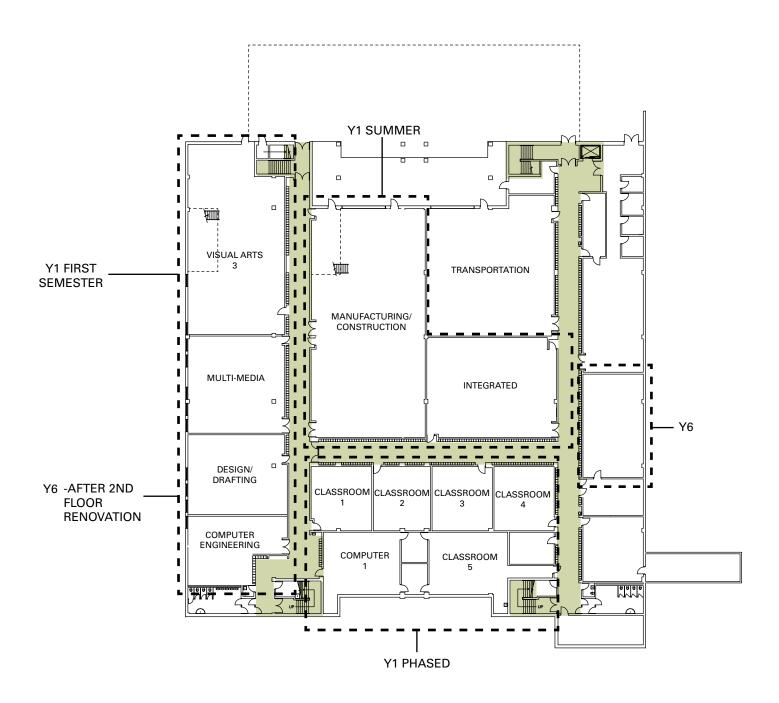


SECOND FLOOR

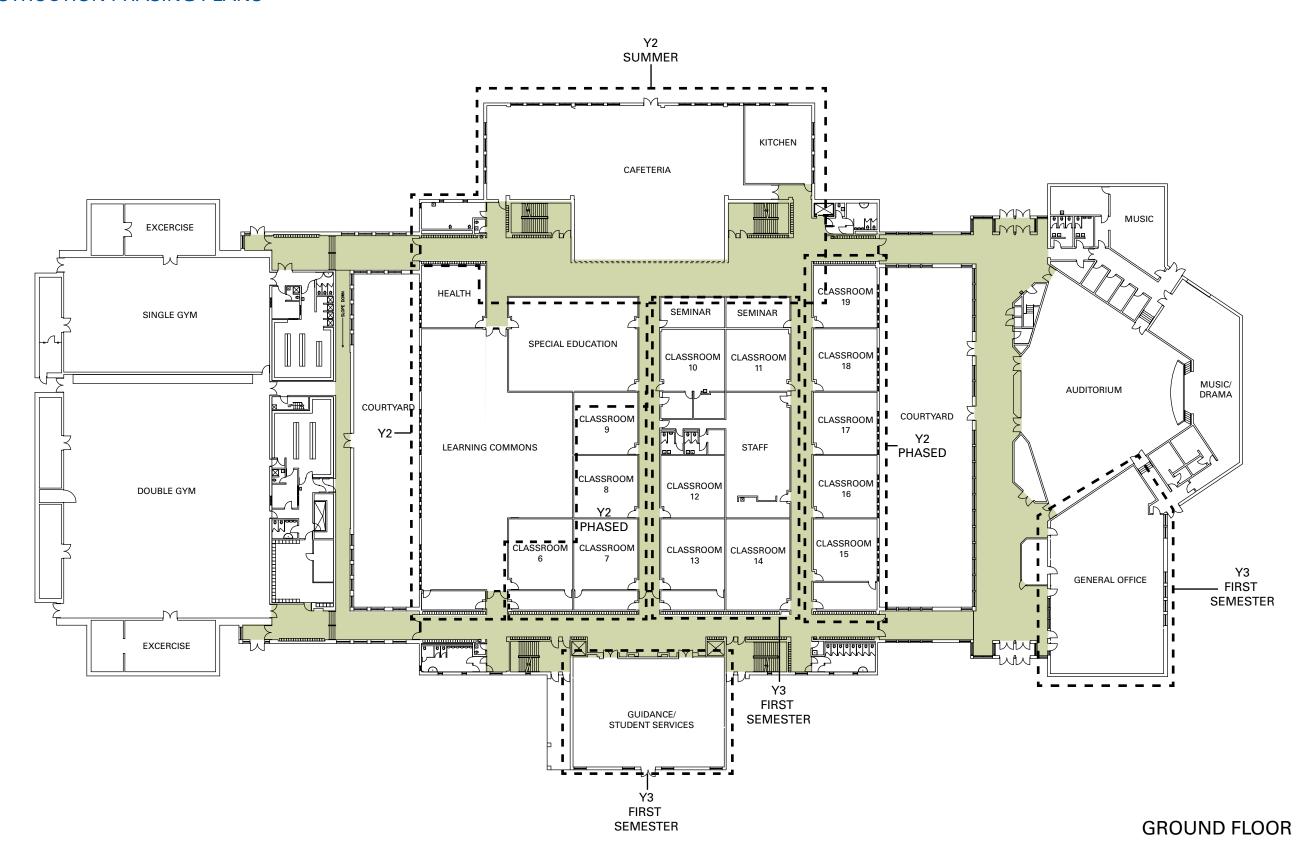


SECOND FLOOR

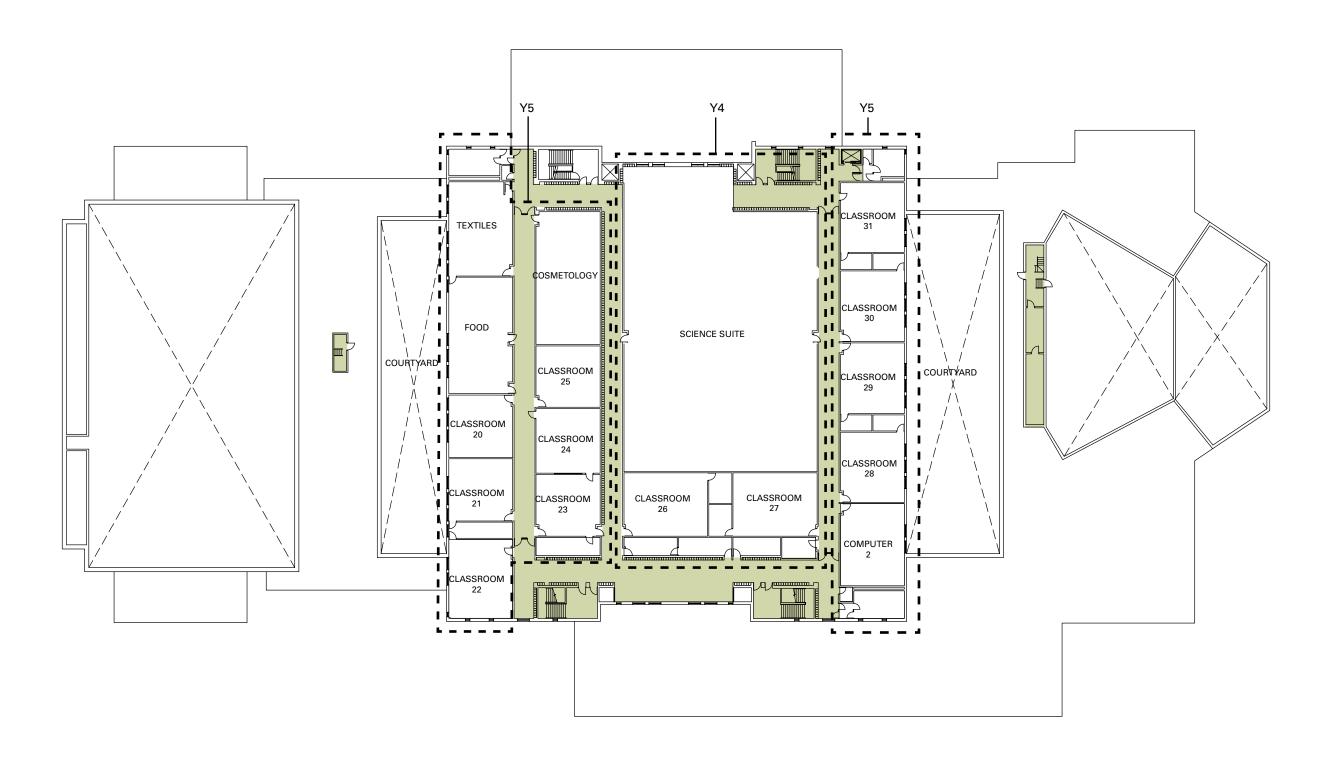
CONSTRUCTION PHASING PLANS



CONSTRUCTION PHASING PLANS



CONSTRUCTION PHASING PLANS



HAMILTON WENTWORTH DISTRICT SCHOOL BOARD SHERWOOD SECONDARY SCHOOL HAMILTON, ONTARIO

ORDER OF MAGNITUDE ESIMATE

JANUARY 22, 2016 R2

HAMILTON WENTWORTH DISTRICT SCHOOL BOARD SHERWOOD SECONDARY SCHOOL HAMILTON, ONTARIO



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Е	Sherwood Secondary School Renovation - Year 5
F	Sherwood Secondary School Renovation - Year 6
G	Existing Building Conditions & Temporary Portables

Hanscomic JANUARY 22, 2016

1.0 Introduction Page

1.1 General

This Order of Magnitude Estimate is intended to provide an assessment of the total project costs associated with the proposed Renovation of Sherwood Secondary School in Hamilton, Ontario as outlined in the documents prepared by CS&P Architects.

Accordingly, this Order of Magnitude Estimate should only be considered within the full context of the above noted documentation.

1.2 Methodology

Generally, the areas of work are priced using parametric quantities, measuring and unit rates considered appropriate for a project of this scope and nature.

Costs reported in these estimates provide for all building construction and include related site development work, allowances for Furnishings & Equipment and Professional Fees & Expenses.

1.3 Construction Phasing

Allowances have been made to cover premiums for phased construction, where applicable.

1.4 Cost Considerations

All costs are estimated on the basis of competitive bids (a minimum of 6 general contractor bids and at least 3 subcontractor bids for each trade) being received in January 2016 from general contractors and all major subcontractors and suppliers based on a stipulated sum form of contract. Pricing shown reflects probable costs obtainable in the Hamilton area on the effective date of this report and is therefore a determination of fair market value for the construction of the work and not a prediction of low bid.

Escalation to tender has been allowed at 2.5% per annum. This will be reviewed when the preferred option is developed. Escalation during the construction period is included in the unit rates used in this estimate.

An allowance of 10% has been included to cover design and pricing unknowns. This allowance is not intended to cover any program space or quality modifications but rather to provide some flexibility for the designers and cost planners during the redevelopment design stages.

An allowance of 5% has been made to cover construction (post contract) unknowns.

Hanscomb JANUARY 22, 2016

1.0 Introduction Page 2

1.4 Cost Considerations (continued)

The unit rates in the preparation of this Order of Magnitude Estimate include labour and material, equipment, subcontractor's overheads and profits.

The following items have been specifically excluded from these estimates:

- land acquisition costs and expenses
- financing and/or fund raising expenses
- all costs associated with an Alternative Financing & Procurement (AFP) method of project delivery

1.5 Ongoing Cost Control

Hanscomb has no control over the cost of labour and materials, the general contractor's or any subcontractor's method of determining prices, or competitive bidding and market conditions. This opinion of probable cost of construction is made on the basis of experience, qualifications and best judgment of the professional consultant familiar with the construction industry. Hanscomb cannot and does not guarantee that proposals, or actual construction costs will not vary from this or subsequent estimates.

Hanscomb recommends that the Owner and the design team carefully review these Master Plan Estimate documents, including line item description, unit price clarifications, exclusions, inclusions and assumptions, contingencies, escalation and mark-ups. If the project is over budget, or if there are unresolved budgeting issues, alternative systems/schemes should be evaluated before proceeding into the bidding phase.

Requests for modifications of any apparent errors or omissions to this document must be made to Hanscomb within ten (10) days of receipt of this estimate. Otherwise, it will be understood that the contents have been concurred with and accepted.

It is recommended that a final updated estimate be produced by Hanscomb using Bid Documents to determine overall cost changes which may have occurred since the preparation of this estimate. The final updated estimate will address changes and additions to the documents, as well as addenda issued during the bidding process. Hanscomb cannot reconcile bid results to any estimate not produced from bid documents including all addenda.

HAMILTON WENTWORTH DISTRICT SCHOOL BOARD SHERWOOD SECONDARY SCHOOL HAMILTON, ONTARIO

2.0 Total Project Summary

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Sherwood Secondary School Renovation			
Renovation Year 1	23,114 SF	107.58	\$2,486,600
Renovation Year 2	51,213 SF	123.46	\$6,322,900
Renovation Year 3	12,959 SF	101.91	\$1,320,600
Renovation Year 4	13,979 SF	188.74	\$2,638,400
Renovation Year 5	16,997 SF	128.18	\$2,178,700
Renovation Year 6	2,662 SF	748.35	\$1,992,100
Infrastructure Upgrades			\$9,163,100
Allowance for Site Works			\$1,100,000
Allowance for Phasing			\$1,362,200
Escalation			\$2,569,900
Sub-total Construction Cost	120,924 SF	257.47	\$31,134,500
Construction Contingency			\$1,386,100
Allowance for Moving			\$302,400
Ancillaries			\$4,021,500
FF&E and IT			\$648,000
Total Project Cost	120,924 SF	310.05	\$37,492,500



APPENDIX A

Sherwood Secondary School Renovation - Year 1



JANUARY 22, 2016

A - 1

Sherwood Secondary School Renovation -	ype				Design	Total	F	otential l	mpact of Escal	ation	Total	PCC				Total
· · · · · · · · · · · · · · · · · · ·	Ę			Net	& Pricing	Construction	@	2.5% p.a.	to Constructio	n Start	Construction	Construction	Project	FF&E / IT A	llowance	Project
Year 1	nst	Areas	\$/SF	Construction	Allowance	Cost Excluding	Const		Escalation	1	Cost Including	Contingency	Ancillaries	5%	New	Cost Including
	ပိ			Cost	10.0%	Escalation	Start	Yrs	2.5% per	annum	Escalation	5.0%	15.0%		Reno	Escalation
ASBESTOS ABATEMENT		1 Sum	612,500.00	\$612,500	\$0	\$612,500				\$23,200	\$635,700	\$0	\$0		\$0	\$635,700
Asbestos Abatement (Costs provided by Architect)		1 Sum	612,500.00	\$612,500	\$0					\$23,200	\$635,700	\$0	\$0		\$0	\$635,700
Basement Corridors		1 Sum	125,000.00	\$125,000	\$0	\$125,000	Jul-17	1.5	3.8%	\$4,700	\$129,700	\$0	\$0	0%	\$0	\$129,700
Basement Technology Shops		1 Sum	62,500.00	\$62,500	\$0	\$62,500	Jul-17	1.5	3.8%	\$2,400	\$64,900	\$0	\$0	0%	\$0	\$64,900
Basement Classrooms		1 Sum	12,500.00	\$12,500	\$0	\$12,500	Jul-17	1.5	3.8%	\$500	\$13,000	\$0	\$0	0%	\$0	\$13,000
Ground Floor Cafeteria		1 Sum	312,500.00	\$312,500	\$0	\$312,500	Jul-17	1.5	3.8%	\$11,800	\$324,300	\$0	\$0	0%	\$0	\$324,300
Ground Floor Corridor adjacent to Cafeteria		1 Sum	62,500.00	\$62,500	\$0	\$62,500	Jul-17	1.5	3.8%	\$2,400	\$64,900	\$0	\$0	0%	\$0	\$64,900
Ground Floor Classrooms adjacent to Cafeteria		1 Sum	37,500.00	\$37,500	\$0	\$37,500	Jul-17	1.5	3.8%	\$1,400	\$38,900	\$0	\$0	0%	\$0	\$38,900
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INTERIOR RENOVATIONS		23,114 bgsf	73.71	\$1,703,700	\$170,400					\$70,700	\$1,944,800	\$97,300	\$291,800		\$77,500	\$2,411,400
BASEMENT		23,114 bgsf	73.71	\$1,703,700	\$170,400	\$1,874,100				\$70,700	\$1,944,800	\$97,300	\$291,800		\$77,500	\$2,411,400
Maufacturing/Construction & Integrated	Extensive	7,450 bgsf	130.00	\$649,200	\$64,900	\$714,100	Jul-17	1.5	3.8%	\$26,900	\$741,000	\$37,100	\$111,200	5%	\$37,100	\$926,400
Visual Arts & Multi-Media	Basic	4,994 bgsf	50.00	\$249,700	\$25,000	\$274,700	Jul-17	1.5	3.8%	\$10,400	\$285,100	\$14,300	\$42,800	5%	\$14,300	\$356,500
Basement Classrooms	Basic	5,644 bgsf	50.00	\$282,200	\$28,200	\$310,400	Jul-17	1.5	3.8%	\$11,700	\$322,100	\$16,100	\$48,300	5%	\$16,100	\$402,600
Basement Corridors	Basic	5,026 bgsf	35.00	\$175,900	\$17,600	\$193,500	Jul-17	1.5	3.8%	\$7,300	\$200,800	\$10,000	\$30,100	5%	\$10,000	\$250,900
Infrastructure Upgrades		1 Sum	346,700.00	\$346,700	\$34,700	\$381,400	Jul-17	1.5	3.8%	\$14,400	\$395,800	\$19,800	\$59,400	0%	\$0	\$475,000
Allowance for Phasing		5.0%	2.316.200	\$115,800	\$11,600	\$127,400	Jul-17	1.5	3.8%	\$4,800	\$132,200	\$6,600	\$19,800		\$0	\$158,600
Allowance for Moving		23,115 bgsf	2.50	Ţ11 0,000	\$0		Jul-17	1.5	3.8%	\$0	\$0	\$0	\$57,800		\$0	\$57,800
	•	·	•	•						•		•	,		•	·
Sherwood Secondary School Renovation - Year 1		23,114 bgsf	105.22	\$2,432,000	\$182,000	\$2,614,000				\$98,700	\$2,712,700	\$103,900	\$369,400		\$77,500	\$3,263,500



APPENDIX B

Sherwood Secondary School Renovation - Year 2

HAMILTON WENTWORTH DISTRICT SCHOOL BOARD SHERWOOD SECONDARY SCHOOL **HAMILTON, ONTARIO**

Sherwood Secondary School Renovation - Year 2



JANUARY 22, 2016

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Sherwood Secondary School Renovation -	ir. Type			Net	Design & Pricing	Total Construction			mpact of Escalation to Construction Start	Total Construction	PCC Construction	Project	FF&E/IT	Allowance	Total Project
Year 2	onst	Areas	\$/SF	Construction	Allowance	Cost Excluding	Const	.,	Escalation	Cost Including	Contingency	Ancillaries	5%	New	Cost Including
AODEOTOO ADATEMENT	ပ	1.0	200 200 20	Cost	10.0%	Escalation	Start	Yrs	2.5% per annum	Escalation	5.0%	15.0%		Reno	Escalation
ASBESTOS ABATEMENT		1 Sum	693,800.00	\$693,800	\$0	\$693,800			\$44,300		\$0	\$0		\$0	\$738,10
Asbestos Abatement (Costs provided by Architect)		1 Sum	693,800.00	\$693,800	\$0	\$693,800			\$44,300	. ,	\$0	\$0		\$0	\$738,10
Ground Floor Corridors, incl. Foyers		1 Sum	375,000.00	\$375,000	\$0	\$375,000	Jul-18	2.5	6.4% \$23,900		\$0	\$0	0%	\$0	\$398,90
Library		1 Sum	156,250.00	\$156,300	\$0	\$156,300	Jul-18	2.5	6.4% \$10,000		\$0	\$0	0%	\$0	\$166,30
General Office		1 Sum	12,500.00	\$12,500	\$0	\$12,500	Jul-18	2.5	6.4% \$800	\$13,300	\$0	\$0	0%	\$0	\$13,30
Ground Floor Classrooms		1 Sum	150,000.00	\$150,000	\$0	\$150,000	Jul-18	2.5	6.4% \$9,600	\$159,600	\$0	\$0	0%	\$0	\$159,60
INTERIOR RENOVATIONS		51,212 bgsf	99.93	\$5,117,400	\$511,700	\$5,629,100			\$358,500	\$5,987,600	\$299,400	\$898,100		\$254,500	\$7,439,600
GROUND FLOOR		51,212 bgsf	99.93	\$5,117,400	\$511,700	\$5,629,100			\$358,500	\$5,987,600	\$299,400	\$898,100		\$254,500	\$7,439,60
Health, Special Education & Learning Commons	Extensive	8,954 bgsf	130.00	\$1,164,000	\$116,400	\$1,280,400	Jul-18	2.5	6.4% \$81,500	\$1,361,900	\$68,100	\$204,300	5%	\$68,100	\$1,702,40
Ground Floor Classrooms	Extensive	2,316 bgsf	95.00	\$220,000	\$22,000	\$242,000	Jul-18	2.5	6.4% \$15,400	\$257,400	\$12,900	\$38,600	5%	\$12,900	\$321,80
Ground Floor Classrooms	Basic	13,525 bgsf	50.00	\$676,300	\$67,600	\$743,900	Jul-18	2.5	6.4% \$47,400	\$791,300	\$39,600	\$118,700	5%	\$39,600	\$989,20
Cafeteria and adjacent Corridor	Extensive	12,403 bgsf	145.00	\$1,798,400	\$179,800	\$1,978,200	Jul-18	2.5	6.4% \$126,000	\$2,104,200	\$105,200	\$315,600	5%	\$105,200	\$2,630,20
Ground Floor Corridors, incl Foyers	Basic	14,014 bgsf	35.00	\$490,500	\$49,100	\$539,600	Jul-18	2.5	6.4% \$34,400	\$574,000	\$28,700	\$86,100	5%	\$28,700	\$717,50
Infrastructure Upgrades		1 Sum	768,200.00	\$768,200	\$76,800	\$845,000	Jul-18	2.5	6.4% \$53,800	\$898,800	\$44,900	\$134,800	0%	\$0	\$1,078,50
Allowance for Phasing		5.0%	5,811,200	\$290,600	\$29,100	\$319,700	Jul-18	2.5	6.4% \$20,400	\$340,100	\$17,000	\$51,000		\$0	\$408,10
Allowance for Moving		51,212 bgsf	2.50		\$0	\$0	Jul-18	2.5	6.4% \$0	\$0	\$0	\$128,000		\$0	\$128,00
Sherwood Secondary School Renovation - Year 2		51.213 basf	119.15	\$6.101.800	\$540,800	\$6,642,600			\$423,200	\$7,065,800	\$316.400	\$1,077,100		\$254,500	\$8,713,80



APPENDIX C

Sherwood Secondary School Renovation - Year 3

HAMILTON WENTWORTH DISTRICT SCHOOL BOARD SHERWOOD SECONDARY SCHOOL HAMILTON, ONTARIO

Sherwood Secondary School Renovation - Year 3



C - 1

Sherwood Secondary School Renovation -	r. Type			Net	Design & Pricing	Total Construction			mpact of Escalation to Construction Start	Total Construction	PCC Construction	Project	FF&E / IT Allowance	Total Project
Year 3	Const	Areas	\$/SF	Construction Cost	Allowance 10.0%	Cost Excluding Escalation	Const Start	Yrs	Escalation 2.5% per annum	Cost Including Escalation	Contingency 5.0%	Ancillaries 15.0%	5% New Reno	Cost Including Escalation
ASBESTOS ABATEMENT		1 Sum	437,500.00	\$437,500	\$0				\$39,500			\$0	\$0	\$477,00
Asbestos Abatement (Costs provided by Architect)		1 Sum	437,500.00	\$437,500	\$0				\$39,500	\$477,000	\$0	\$0	\$0	\$477,00
Second Floor Corridors		1 Sum	437,500.00	\$437,500	\$0	\$437,500	Jul-19	3.5	9.0% \$39,500	\$477,000	\$0	\$0	0% \$0	\$477,00
INTERIOR RENOVATIONS		12,959 bgsf	61.95	\$802,800	\$80,300	\$883,100			\$79,700	\$962,800	\$48,200	\$144,500	\$36,500	\$1,192,00
GROUND FLOOR		6,959 bgsf	85.18	\$592,800	\$59,300				\$58,800			\$106,700	\$23,900	\$877,10
Student Services/ New Library	Basic	3,129 bgsf	60.00	\$187,700	\$18,800	\$206,500	Jul-19	3.5	9.0% \$18,600	\$225,100	\$11,300	\$33,800	5% \$11,300	\$281,50
General Office	Basic	3,830 bgsf	55.00	\$210,700	\$21,100	\$231,800	Jul-19	3.5	9.0% \$20,900	\$252,700	\$12,600	\$37,900	5% \$12,600	\$315,80
Infrastructure Upgrades		1 Sum	194,400.00	\$194,400	\$19,400	\$213,800	Jul-19	3.5	9.0% \$19,300	\$233,100	\$11,700	\$35,000	0% \$0	\$279,80
SECOND FLOOR		6,000 bgsf	35.00	\$210,000	\$21,000	\$231,000			\$20,900	\$251,900	\$12,600	\$37,800	\$12,600	\$314,90
Second Floor Corridors	Basic	6,000 bgsf	35.00	\$210,000	\$21,000	\$231,000	Jul-19	3.5	9.0% \$20,900	\$251,900	\$12,600	\$37,800	5% \$12,600	\$314,90
Allowance for Site Works		1 Sum	1,000,000	\$1,000,000	\$100,000	\$1,100,000			\$99,300	\$1,199,300	\$60,000	\$179,900	\$0	\$1,439,20
Site Improvements		1 Sum	1,000,000.00	\$1,000,000	\$100,000	\$1,100,000	Jul-19	3.5	9.0% \$99,300	\$1,199,300	\$60,000	\$179,900	\$0	\$1,439,20
Allowance for Phasing		5.0%	1,240,300	\$62,000	\$6,200	\$68,200	Jul-19	3.5	9.0% \$6,200	\$74,400	\$3,700	\$11,200	\$0	\$89,30
Allowance for Moving		12,960 bgsf	2.50	,	\$0			3.5	9.0% \$0			\$32,400	\$0	\$32,40
Sherwood Secondary School Renovation - Year 3		12,959 bgsf	177.66	\$2,302,300	\$186,500	\$2,488,800			\$224,700	\$2,713,500	\$111,900	\$368,000	\$36,500	\$3,229,90



APPENDIX D

Sherwood Secondary School Renovation - Year 4

HAMILTON WENTWORTH DISTRICT SCHOOL BOARD SHERWOOD SECONDARY SCHOOL **HAMILTON, ONTARIO**

Sherwood Secondary School Renovation - Year 4



JANUARY 22, 2

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Sherwood Secondary School Renovation - Year 4	Constr. Type	Areas	\$/SF	Net Construction Cost	Design & Pricing Allowance 10.0%	Total Construction Cost Excluding Escalation			mpact of Esc to Construct Escalati 2.5% pe	ion Start on	Total Construction Cost Including Escalation	PCC Construction Contingency 5.0%	Project Ancillaries 15.0%	FF&E / IT Allowance 5% New Reno	Total Project Cost Includio Escalation
ASBESTOS ABATEMENT		1 Sum	450,000.00	\$450,000	\$0	\$450,000				\$52,900	\$502,900	\$0	\$0	\$(\$502
Asbestos Abatement (Costs provided by Architect)		1 Sum	450,000.00	\$450,000	\$0	\$450,000				\$52,900	\$502,900	\$0	\$0	\$(
Second Floor Science and adjacent classrooms		1 Sum	450,000.00	\$450,000	\$0	\$450,000	Jul-20	4.5	11.8%	\$52,900	\$502,900	\$0	\$0	0% \$0	\$502
INTERIOR RENOVATIONS		13,979 bgsf	142.31	\$1,989,400	\$199,000	\$2,188,400				\$257,200	\$2,445,600	\$122,300	\$366,900	\$109,400	\$3,044
SECOND FLOOR		13,979 bgsf	142.31	\$1,989,400	\$199,000	\$2,188,400				\$257,200	\$2,445,600	\$122,300	\$366,900	\$109,40	\$3,044
Science Suite	Extensive	10,807 bgsf	150.00	\$1,621,100	\$162,100	\$1,783,200	Jul-20	4.5	11.8%	\$209,600	\$1,992,800	\$99,600	\$298,900	5% \$99,600	
Classrooms	Basic	3,172 bgsf	50.00	\$158,600	\$15,900	\$174,500	Jul-20	4.5	11.8%	\$20,500	\$195,000	\$9,800	\$29,300	5% \$9,800	\$243 \$309
Infrastructure Upgrades		1 Sum	209,700.00	\$209,700	\$21,000	\$230,700	Jul-20	4.5	11.8%	\$27,100	\$257,800	\$12,900	\$38,700	0% \$6	\$309
Allowance for Phasing		5.0%	2,439,400	\$122,000	\$12,200	\$134,200	Jul-20	4.5	11.8%	\$15,800	\$150,000	\$7,500	\$22,500	\$0	
Allowance for Moving		13,980 bgsf	2.50		\$0	\$0	Jul-20	4.5	11.8%	\$0	\$0	\$0	\$35,000	\$(\$35
					•		•			•					
Sherwood Secondary School Renovation - Year 4		13,979 bgsf	183.23	\$2,561,400	\$211,200	\$2,772,600				\$325,900	\$3,098,500	\$129,800	\$424,400	\$109,400	\$3,762



APPENDIX E

Sherwood Secondary School Renovation - Year 5

HAMILTON WENTWORTH DISTRICT SCHOOL BOARD SHERWOOD SECONDARY SCHOOL HAMILTON, ONTARIO

Sherwood Secondary School Renovation - Year 5



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ı, T		\$/SF	Net	Design & Pricing	Total Construction			mpact of Escalation to Construction Start	Total Construction	PCC Construction	Project	FF&E / IT Allowance		Total Project
Const	Areas		Construction Cost	Allowance 10.0%	Cost Excluding Escalation	Const Start	Yrs	Escalation 2.5% per annum	Cost Including Escalation	Contingency 5.0%	Ancillaries 15.0%	5%	New Reno	Cost Including Escalation
	1 Sum	700,000.00	\$700,000	\$0	\$700,000			\$101,8	00 \$801,800	\$0	\$0		\$0	\$801,8
	1 Sum	700,000.00	\$700,000	\$0	\$700,000			\$101,8	00 \$801,800	\$0	\$0		\$0	\$801,8
	1 Sum	700,000.00	\$700,000	\$0	\$700,000	Jul-21	5.5	14.5% \$101,8	00 \$801,800	\$0	\$0	0%	\$0	\$801,8
	16,997 bgsf	79.08	\$1,344,200	\$134,500	\$1,478,700			\$215,1	00 \$1,693,800	\$84,700	\$254,100		\$68,600	\$2,101,2
	16,997 bgsf	79.08	\$1,344,200	\$134,500	\$1,478,700			\$215, ⁻	00 \$1,693,800	\$84,700	\$254,100		\$68,600	\$2,101,2
Basic	12,082 bgsf	50.00	\$604,100	\$60,400	\$664,500	Jul-21	5.5	14.5% \$96,	00 \$761,200	\$38,100	\$114,200	5%	\$38,100	\$951,6
Basic	2,548 bgsf	65.00	\$165,600	\$16,600	\$182,200	Jul-21	5.5	14.5% \$26,	00 \$208,700	\$10,400	\$31,300	5%	\$10,400	\$260,8
Extensive	2,367 bgsf	135.00	\$319,500	\$32,000	\$351,500	Jul-21	5.5	14.5% \$51,	00 \$402,600	\$20,100	\$60,400	5%	\$20,100	\$503,2
	1 Sum	255,000.00	\$255,000	\$25,500	\$280,500	Jul-21	5.5	14.5% \$40,8	00 \$321,300	\$16,100	\$48,200	0%	\$0	\$385,6
	5.0%	2,044,200	\$102,200	\$10,200	\$112,400	Jul-21	5.5	14.5% \$16,4	00 \$128,800	\$6,400	\$19,300		\$0	\$154,5
	16,998 bgsf	2.50		\$0	\$0	Jul-21	5.5	14.5%	\$0 \$0	\$0	\$42,500		\$0	\$42,5
	Basic	1 Sum 1 Su	Basic 12,082 bgsf 50.00 Extensive 2,367 bgsf 135.00 5.0% 1,997 50.00 50.00 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997 10,997	Areas	Areas	Net Construction Allowance Cost Excluding Escalation	Net Second Pricing Construction Cost Cost Cost Construction Cost C	Net Servicing Construction Cost Excluding Construction Cost Start Yrs	Net Secondaria Pricing Construction @ 2.5% p.a. to Construction Start Construction Cost Construction Cost Escalation Cost Escalation Cost Co	Net Construction Cost Allowance 10.0% Escalation Cost Construction Cost Cost	Net Construction Cost Excluding Construction Cost Excluding Construction Start Yrs 2.5% per annum Escalation Construction Constructi	Net Construction Cost Allowance Cost Excluding Construction Cost Construction Cost Construction Cost Construction Cost Construction Cost Construction Cost Including Escalation Construction Cost Including Escalation Construction Cost Including Escalation Contingency Ancillaries 15.0%	Net Construction Reconstruction Reconstruction Construction Constructio	Areas S/SF Net Construction Construction



APPENDIX G

Sherwood Secondary School Renovation - Year 6



JANUARY 22, 2016

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Sherwood Secondary School Renovation -	. Type			Net	Design & Pricing	Total Construction	Potential Impact of Escalation @ 2.5% p.a. to Construction Start				Total Construction	PCC Construction	Project	FF&E / IT A	llowance	Total Project
Year 6	Constr	Areas	\$/SF	Construction Cost	Allowance 10.0%	Cost Excluding Escalation	Const Start	Yrs	Escalation 2.5% per an		Cost Including Escalation	Contingency 5.0%	Ancillaries 15.0%	5%	New Reno	Cost Including Escalation
ASBESTOS ABATEMENT		1 Sum	218,800.00	\$218,800	\$0	\$218,800				\$38,100	\$256,900	\$0	\$0		\$0	\$256,900
Asbestos Abatement (Costs provided by Architect)		1 Sum	218,800.00	\$218,800	\$0	\$218,800				\$38,100	\$256,900	\$0	\$0		\$0	\$256,900
Basement Level Fan Room		1 Sum	218,750.00	\$218,800	\$0	\$218,800	Jul-22	6.5	17.4%	\$38,100	\$256,900	\$0	\$0	0%	\$0	\$256,900
	_		_													
INTERIOR RENOVATIONS		2,662 bgsf	605.60	\$1,612,100	\$161,200	\$1,773,300				\$308,700	\$2,082,000	\$104,100	\$312,300		\$101,500	\$2,599,900
BASEMENT		2,662 bgsf	605.60	\$1,612,100	\$161,200	\$1,773,300				\$308,700	\$2,082,000	\$104,100	\$312,300		\$101,500	\$2,599,900
Design/Drafting/Computer Engineering	Extensive	2,662 bgsf	100.00	\$266,200	\$26,600	\$292,800	Jul-22	6.5	17.4%	\$51,000	\$343,800	\$17,200	\$51,600		\$17,200	\$429,800
New Mechanical Roof top units c/w controls		1 Sum	1,306,000.00	\$1,306,000	\$130,600	\$1,436,600	Jul-22	6.5	17.4%	\$250,100	\$1,686,700	\$84,300	\$253,000	5%	\$84,300	\$2,108,300
Infrastructure Upgrades		1 Sum	39,900.00	\$39,900	\$4,000	\$43,900	Jul-22	6.5	17.4%	\$7,600	\$51,500	\$2,600	\$7,700	0%	\$0	\$61,800
			<u> </u>	<u> </u>						<u> </u>						
Allowance for Phasing		5.0%	1,830,900	\$91,500	\$9,200	\$100,700	Jul-22	6.5	17.4%	\$17,500	\$118,200	\$5,900	\$17,700		\$0	\$141,800
Allowance for Moving		2,663 bgsf	2.50		\$0	\$0	Jul-22	6.5	17.4%	\$0	\$0	\$0	\$6,700		\$0	\$6,700
Sherwood Secondary School Renovation - Year 6		2,662 bgsf	722.16	\$1,922,400	\$170,400	\$2,092,800				\$364,300	\$2,457,100	\$110,000	\$336,700		\$101,500	\$3,005,300



APPENDIX F

Existing Building Conditions & Temporary Portables

HAMILTON WENTWORTH DISTRICT SCHOOL BOARD SHERWOOD SECONDARY SCHOOL HAMILTON, ONTARIO

Existing Building Conditions & Temporary Portables



JANUARY 22, 2(

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Existing Building Conditions & Temporary			Net	Design & Pricing	Total Construction				Escalation uction Start	Total Construction	PCC Construction	Project Ancillaries	FF&E/IT	Allowance	Total Project
Portables #g	Areas	\$/SF	Construction	Allowance	Cost Excluding	Const	t Escalation		Cost Including	Contingency		0% New		Cost Includin	
ő			Cost	10.0%	Escalation	Start	Yrs	2.5%	per annum	Escalation	5.0%	15.0%		Reno	Escalation
Infrastructure Upgrades	1 Sum	9,083,100	\$9,083,100	\$80,000	\$9,163,100				\$780,900	\$9,944,000	\$497,100	\$1,354,600		\$0	\$11,795,
Building Condition Assessment (VFA Report)	1 Sum	8,283,100	\$8,283,100	\$0	\$8,283,100	Jul-19	3.5	9.0%	\$747,700	\$9,030,800	\$451,500	\$1,354,600	0%	\$0	\$10,836,
Portable (Temporary Accomodations)	12 No.	50,000	\$600,000	\$60,000	\$660,000	Jul-17	1.5	3.8%		\$684,900	\$34,200	\$0	0%	\$0	\$719, \$239,
Portable (Temporary Accomodations), Electrical Upgrades	1 Sum	200,000	\$200,000	\$20,000	\$220,000	Jul-17	1.5	3.8%	\$8,300	\$228,300	\$11,400	\$0	0%	\$0	\$239,
Allowance for Phasing	5.0%	9,083,100	\$454,200	\$45,400	\$499,600	Jul-17	1.5	3.8%	\$18,900	\$518,500	\$25,900	\$77,800		\$0	\$622,2
Existing Building Conditions & Temporary Portables	1 Sum		\$9,537,300	\$125,400	\$9,662,700				\$799,800	\$10,462,500	\$523,000	\$1,432,400		\$0	\$12,417,9

5. RECOMENDATIONS

5.1. Potential Options

Option 1: Phased full building retrofit while school remains occupied; approximately 12 portables required

This report focusses on the implementation plan and associated costs to complete a full building deep retrofit while Sherwood Secondary School remains occupied. The complexity of the work, including abatement and phasing, results in a six to seven year construction program at an estimated Construction Cost of \$31M. These estimated costs do not include soft costs related to consulting fees, permits, Board expenses to accommodate phasing, applicable taxes, etc. These soft costs would bring the Total Project Cost up to approximately \$37.5M

Option 2: Full building retrofit of vacant building; school is relocated for two years

The schedule and associated costs to complete the proposed building upgrades, as noted above, are substantially reduced if the school is vacated and the students are relocated. The abatement costs would be reduced by approximately fifty percent. Construction costs would be reduced by approximately \$2.9M if the Contractor had access to the entire facility and could work in all areas without phasing restrictions or cost escalation over six to seven years. The Board's expenses, including portable costs, to accommodate the phasing plan would be eliminated. However, the Board would incur relocation costs for approximately one year.

Option 3: Construct new replacement school on site while existing school remains occupied

Prohibitive to Repair is a Ministry of Education designation for school facilities where the Facility Condition Index is equal to or greater than 65%. A high FCI is indicative of the cost of repairs to the building compared to the cost to rebuild the facility. The VFA Building Condition Report indicated an FCI of 41.5% in 2013. When abatement costs are factored in the FCI is increased to 52%. If the cost of the full deep building retrofit, as proposed, which includes required upgrades to program areas is used the calculation increases to 108%. There are inherent compromises when accommodating 21st century program requirements in a fifty year old structure. The Sherwood site can readily accommodate the construction of a new school while the existing school remains occupied. The associated costs would include demolition of the existing school, site upgrades and landscaping.

Option 4: Construct new replacement school on site; school is relocated for two years

This option is similar to Option 3 except that the students would be relocated for two years to accommodate the construction of a new school at the same location on the site as the existing school. Options 3 and 4 would require Ministry approval for funding for a new school. The anticipated Construction Costs would align with Ministry Benchmarks. Additional associated costs would include demolition (including abatement) of the existing school and relocation costs.

MECHANICAL SYSTEMS

FOR

SHERWOOD HEIGHTS SECONDARY SCHOOL RENOVATIONS 25 HIGH STREET HAMILTON, ONTARIO

PREPARED BY:

ELLARD-WILLSON ENGINEERING LIMITED 260 Town Centre Boulevard Suite 202 Markham, Ontario L3R 8H8

FOR

HAMILTON WENTWORTH DISTRICT SCHOOL BOARD

1. GENERAL

- .1 Documentation of existing mechanical services has been obtained from an on-site visit and existing engineering drawings provided by CS&P Architects.
- .2 Existing building is an area of 16,815 sq. meters.

2. EXISTING MECHANICAL SYSTEMS

.1 Site Services:

- .1 Gravity storm and sanitary drainage systems piped to Princeton Drive.
- .2 Incoming 100Ø domestic water services from Princeton Drive.

.2 Building Domestic Water System:

- .1 Incoming 100Ø domestic water service enters building in the Basement Custodial Area. The water meter assembly is within an underground chamber at the property line at Princeton Drive.
- .2 Copper pipe water distribution system from the incoming service and throughout the school appears to be original and should be further reviewed.

.3 Building Domestic Hot Water Generating System:

The existing school has two (2) newer gas-fired high efficiency water tanks and storage tank, located in the existing Basement Boiler/Mechanical Room.

.4 Building Storm and Sanitary Drainage System:

The building has a gravity, piped storm and sanitary drainage system. The drawings indicate that two (2) 200Ø sanitary drains and multiple storm drains exit the building on the North and East sides, through the field and parking to Princeton Drive.

.5 Plumbing Fixtures:

The school plumbing fixtures appear to be original to the date of construction, and in fair condition. Existing drinking fountains were updated complete with bottle fillers.

.6 Fire Protection:

The building is not sprinklered and does not have a fire hose system. Portable fire extinguishers are located throughout the building.

.7 Heating System:

- .1 The heating source for the building is provided by three (3) heating boilers.
- .2 Hot water perimeter heaters are provided for Classrooms, Library, Entrance lobby and Corridors. Cabinet unit heaters are provided for stairs entrance and Washrooms. Hot water heating coils are provided on supply air ductwork for Classrooms, Administration Offices and Gymnasium.

.8 Ventilation and Air Conditioning System:

.1 Generally throughout the existing facility, ventilation air conditioning is provided by four (4) indoor air handling units utilizing a dual duct system with a terminal box in each room.

.9 Cooling System:

.1 The School is using a central chilled water chiller and cooling tower,

3. RECOMMENDED MODIFICATIONS

- .1 Replacement of all existing AHU's for existing Classrooms, Gymnasium and Administration is recommended due to the fact that they were manufactured in 1966 (505 years old) and are at the end of life
- .2 Alternatively, rooftop HVAC units can be used to allow phasing requirements.
- .3 The existing combination pneumatic and DDC building automation system shall be replaced with state-of-the-art DDC controls.
- .4 The chilled water plant and heating hot water plant circulating pumps shall be replaced with variable frequency drive motors.
- .5 The existing boiler shall be replaced with new high efficiency cast iron boilers.
- .6 The School shall be free from asbestos prior to any mechanical work being performed.

4. RENOVATIONS – PLUMBING AND FIRE PROTECTION

.1 Storm and Sanitary Drains:

- .1 An acid neutralizing system will be added for new Science Lab drainage, with new acid resistant (glass) piping overhead in ceiling of floor below.
- .2 Renovated areas will tie into existing sanitary drainage piping.
- .3 All existing storm and sanitary drains should be video reviewed and a report on the condition of piping submitted.

.2 Domestic Water:

- .1 Renovated areas will tie into existing domestic hot and cold water services in existing ceiling.
- .2 New backflow preventers provided at each Science Lab teachers desk for classroom isolation.

.3 Roof Drainage:

.1 Roof drainage is existing and will be removed/replaced only in areas of new roofing.

.4 Plumbing Fixtures:

.1 New plumbing fixtures, to Board's Standards, will be provided throughout the renovated areas.

.5 Fire Protection:

.1 Portable fire extinguishers, some in cabinets, will be provided throughout the renovated areas.

END

ELECTRICAL SYSTEMS

FOR

SHERWOOD SECONDARY SCHOOL RENOVATIONS 25 HIGH STREET HAMILTON, ONTARIO

PREPARED BY:

ELLARD-WILLSON ENGINEERING LIMITED 260 Town Centre Boulevard Suite 202 Markham, Ontario L3R 8H8 **FOR**

HAMILTON WENTWORTH DISTRICT SCHOOL BOARD

JANUARY 22, 2016

1. GENERAL

- .1 Documentation of existing electrical services has been obtained from an on-site visit Condition Assessment Report provided by H.W.D.S.B.
- .2 Existing building is with area of 16,815 square meters.

2. EXISTING ELECTRICAL SYSTEMS AND PROPOSAL FOR NEW ADDITION

.1 Power Supply:

- .1 Existing main switchboard is 3000Amp, 347/600V, 3ø, 4W. Main switchboard has exceeded the useful life and should be replaced due to age and reliability.
- .2 Existing peak demand load will be provided by Horizon Utilities Corp.

.2 <u>Power and Lighting Panels:</u>

- .1 Existing power and lighting panels have exceed the useful life and should be replaced due to age and reliability. Part of this Contract will be to replace only panels which do not meet Code requirements.
- .2 Power and lighting panels for new addition will be of the breaker type, with bolt-on breakers and of the NHDP/CDP or NBLP type respectively. Power panels of both of the NHDP and CDP types will have a voltage rating of 347/600 volt, while NBLP panels will be 120/208 volt.

.3 <u>Emergency Lighting:</u>

- .1 Emergency lighting consists of emergency battery units and remote heads.
- .2 New units shall be added in existing school to improve lighting level, and Code requirements.
- .3 Existing battery units and remote heads which are not functioning properly will be replaced.
- .4 New exit signs shall be "Running Man" type to suit O.B.C.
- .5 New battery units will 550 watts for 24volt/120volt power supply.

.4 Wiring Materials and Methods:

.1 Existing electrical wiring material/installation could remain.

.2 New Addition

.1 All new wiring will be minimum #12 gauge and will be installed in conduit, or surface mounted wiremold in existing school.

- .2 EMT will be used for branch circuits installed in furred ceiling spaces and in masonry or drywall partitions. <u>An insulated ground wire will be installed in all</u> new conduits.
- .3 Conductors will be copper. Insulation for feeders will be R90. Type TW will be used for 15, 20 and 30 amp. branch circuits.
- .4 Cable trays will be provided in corridors for computer, P.A./telephone, security and cable TV wiring.
- .5 All wiring devices and switches shall be specification grade.
- .6 Locations of new power outlets shall be as required to suit application.
- .7 GFCI receptacles to be complete with pilot light.

.5 Lighting:

- .1 Lighting in School, in most areas is 2'-0"x4'-0" fluorescent T-8 fixtures with diffused type of lenses or suspended 1'-0"x4'-0" complete with cube lenses.
- .2 In most areas, lighting level should be increased. We would recommend replacing the existing lenses with K-12 lenses or to retrofit fixtures with LED strips.
- .3 Exterior lighting fixtures are old, complete with incandescent or H.P.S. lamps and should be replaced with new L.E.D. type. Existing parking lighting standards should be replaced with LED lamps.
- .4 Replace existing broken/missing lenses for existing lighting fixtures.
- .5 New lighting will be 2'-0" x 4'-0" or 1'-0" x 4'-0" fixtures complete with LED strips. Lighting level in classrooms and science rooms will be at 55 F.C. maintained.
- .6 In new classrooms and science rooms, two light switches will be provided, one for rows near windows and one for remaining fixtures. Also, for fixtures near windows, relays and sensor will be provided.
- .7 Occupancy sensors will be provided in classrooms, science rooms, storage rooms, etc. Daylight harvesting will be provided also.
- .8 Exit lights will be "Running Man" type.

.6 <u>Fire Alarm System:</u>

- .1 Existing Fire Alarm panel is to remain and will be modified to suit architectural changes.
- .2 Existing Fire Alarm devices (i.e.: F.A. pull stations complete with cover, F.A. heat and smoke detectors, F.A. horns, etc.) will remain.
- .3 Existing Fire Alarm annunciator/graphic shall be replaced with new to suit architectural and mechanical modifications.

.7 P.A./Telephone Integrated System:

- .1 P.A./Telephone system is provided in school.
- .2 P.A. speakers are located throughout the school.
- .3 In classrooms, wall mounted P.A./Telephone handsets and speakers are provided.
- .4 Main P.A. unit has been changed recently.
- .5 New components to suit architectural changes will be part of this Contract.

.8 <u>Computer System:</u>

- .1 Computer components have been provided throughout the school.
- .2 New computer outlets complete with conduits, wiring, jacks and patch panels will be part of this contract.
- .3 Sleeves will be provided between classrooms and corridors and between classrooms.
- .4 Quantity and location of new outlets will suit the Board requirements.
- .5 New AV outlets complete with associated components will be part of this contract.

.9 Security System:

- .1 Existing security system containing motion detectors, door contacts and CCTV cameras will remain.
- .2 New devices and expenders will be provided. (Door contacts, motion detectors and CCTV cameras) to suit architectural modification.

.10 Cable TV System – New Addition:

.1 Outlets and empty conduits will be provided in areas to suit Board's requirements. <u>The Board to advise, regarding location.</u>

.11 Clock System:

- .1 Existing clocks are located throughout the school.
- .2 New clocks will be Prymax type to suit architectural/Board's requirements.

.12 Classroom Control Panel:

.1 New classroom control panels will be provided to suit architectural/Board's requirements.

.13 Mechanical System:

- .1 Motor starters will be supplied by Division 15. Division 15 will install starters located in motor control centre and Division 16 will install all remote starters.
- .2 Motor control centre will be provided by Division 15 and installed by Division 16 in location as shown on drawings. Main feeders to motor control centers and branch wiring to the disconnect switches/motors will be by Division 16.
- .3 Motor disconnect switches will be supplied and installed by Division 16, unless mechanical unit is complete with control panel and/or main switch.
- .4 All low voltage control wiring will be by Division 15 (automatic controls).

END

Hamilton-Wentworth District School Board

Condition Assessment

Sherwood SS, Building ID 9143-1



Facility Name (SFIS) Sherwood SS 9143-1 Ministry Building Number GFA (m2) 16815 Year Built by Original/Additions 1967 Replacement Value - OTG \$32,886,500 Official FCI (%) 20.45 Comparable FCI (%) 41.47 25 High Street Asset Address Asset City Hamilton Asset Postal Code L8T3Z4 -- ACCESSIBILITY CHECKLIST --Designated parking space Yes Path of travel to the main entrance door. No Designated entrances No Path of travel to all floors/elevations. No Elevator Yes Instructional spaces entrance doors. No Fire policy and fire safety plan No Fire alarm system with strobe and audible signals No Communal washrooms No Designated washroom No -- ENERGY CHECKLIST --Energy efficient boiler Yes Energy audit report No Energy efficient domestic hot water heater No Energy efficient recovery system No Energy efficient HVAC pumps and fan motors Yes Energy efficient interior lighting Yes **Building Automation System** Yes Energy efficient faucets No Energy efficient urinals and toilets No Architectural and Site Assessor Ramin Saeedi Mechanical and Electrical Assessor Mark Pantchevski

How to read the final report

The Final Report contains assessment information for 5 years for this facility.

Asset details reported are either populated from the SFIS system (e.g. GFA, year built etc) or calculated based on Ministry's criteria (e.g. Replacement Value – OTG, Official FCI, Comparable FCI etc).

Accessibility and Energy assessment lists are provided in a yes/no format. For a full description of accessibility/energy definitions please check the TCPS database, Asset Narratives, under the Narratives Tab.

Asset Narratives include the following:

- Architectural & Structural Summary —a brief summary of the asset including construction dates and areas of the original and additions. A brief description of the structure, the exterior wall system, the roof assembly system and the building interiors.
- Mechanical Summary a brief summary of the mechanical systems.
- Electrical Summary a brief summary of the Electrical systems.
- Site Summary a brief summary of the Site systems.
- Limitations a summary of the scope of work and the Tactical Planning Window.

Building Elements listed are only the ones that require replacement in the next 5 years; their condition is Critical if failed or risk of imminent failure is observed, or Poor if it is not functioning as intended with significant repairs within the next two (2) years, or Fair if normal deterioration and minor distress is observed requiring repairs within three (3) to five (5) years.

2011-2015 Cost and Year information is a snapshot from the assessment and cannot be edited in TCPS.

2011-2015 Priority is the value of the Event priority calculated when the assessment data was imported in TCPS and stored in this read-only field.

Estimated Cost and Fiscal Year are values that can be edited at any time by end users.

Event Priority is a field populated with labels like Urgent, High, Medium and Low based on the Event Priority Value. This value is calculated based on the Element Type and Element Condition.

Photos are provided at the event level: old photos are suffixed with the world "Old", new photos are suffixed with the date of assessment

A copy of this report in PDF format is saved in the TCPS database. You can access it by selecting the Asset Instance in Data Manager and opening this report in PDF format from the Document Tab.

1. Architectural & Structural Executive Summary

Date of Assessment Apr 22, 2013

2013Sherwood SS Building ID-9143-1was assessed on April 22, 2013 by VFA is located at 25 High St., Hamilton, Ontario. The original facility is a 2 story structure of block construction with basement. The building is constructed in 1967.

The total size of the both building is 16,815 square meters. Where visible, mainly in the GYM, workshops, and Cafeteria, the structure of the school are of-Metal roof decking, steel trusses, steel joists and load bearing masonry. It was indicated that the roof coverings has been done in 1994.

The interior finishes consist of mainly vinyl composite tiles, ceramic tiles, hard wood flooring, painted masonry and gypsum board walls and, gypsum board acoustic ceilings.

The exterior walls of the school are brick veneer and stucco EFS finished assembly.

There is no information available regarding the site area.

Typical spaces in the school include Auto shops, Wood shop, Library/resource center, Music room, Theater art class, gymnasiums, weight room, Computer rooms, science labs, administration office, and mechanical service space and general instructional classrooms.

2. Mechanical Executive Summary

2013 - Overall, the mechanical equipment is in fair condition.

Heating for Sherwood Secondary School is provided by three gas fired hot water boilers installed in 2004 and 1986. The boilers provide hot water to perimeter fin tube radiators, force flow heaters and the heating coils of the AHUs. There are 4 central air handlers which supply heating and ventilation throughout the school. The cooling system includes a cooling tower and chiller which are in good condition. The remaining ventilation is provided by rooftop exhaust fans and various internal exhaust fans.

Domestic hot water is provided by gas fired water tanks which are in good condition.

The building HVAC controls system is a mix of pneumatic and DDC controls with a building automation system.

The school has one elevator serving three floors with a 1160 Kg capacity.

Fire protection for the school is provided by fire extinguishers.

Comments on exceptions: Based on age of components and observed site conditions the following mechanical equipment has exceeded their theoretical useful life and will require replacement within the tactical planning window.

- Plumbing fixtures are aged and in fair condition.
- Domestic water distribution is in fair condition and a study is recommended.
- Sanitary waste distribution is aged in fair condition and a study is recommended.
- Rain water drainage distribution is aged in fair condition and a study is recommended.
- Boilers are aged and in fair condition.
- HVAC pumps are original and in poor condition.
- Exhaust fans are aged and in poor condition.
- The central air handlers are original and in poor condition.
- Terminal units are aged and in fair condition.
- The HVAC controls are aged and in fair condition.

3. Electrical Executive Summary

2013 - Electrically Sherwood Secondary School is in fair condition.

The main switchgear is original to 1967. The fire alarm panel and end devices are in good condition.

Emergency lighting is provided by wall mounted battery pack units. The interior lighting within the building is in good condition with CFLs and T8 lamps with electronic ballasts. Exterior lighting is provided by incandescent and HID fixtures and light standards for the parking area. Exit lighting is in good condition.

Security system includes a panel, motion detectors, sensors, CCTV and keypads.

A new PA main console was recently installed.

The information technology system is in good condition.

Comments on exceptions: Based on age of components and observed site conditions the following electrical equipment has exceeded their theoretical useful life and will require replacement within the tactical planning window.

- The main switchboard is aged and in fair condition.
- The motor control centre is aged and in fair condition.
- The secondary transformers original and in fair condition.
- Branch wiring is original in fair condition and a study is recommended.
- Exterior lighting is aged and in poor condition.
- PA speakers and wiring is aged and in poor condition.

4. Site Summary

2013-The site at Sherwood SS is bounded by play field on the north, residential to the East and, west Sides, on the south there is a facility called Pavilion de la jeunesse.

Typical walkways service the site, with asphalt concrete landing or stairs at most building entrances.

A six foot high chain link fence marks the perimeter of the site; there is a wall mounted sign on top of the main entrance facing west of the building which displays school name; the building access off of High Street and there are paved parking at East side of the site.

Definitions for Energy Checklist

Energy audit report: An ASHRAE Level I energy audit report was completed within the last three years.

Energy efficient boiler: The energy efficient boiler provided is a condensing boiler installed within the last five years or is energy star rated.

Energy efficient domestic hot water heater: The energy efficient domestic hot water heater provided is direct or power vented natural gas fired or has an electric heat coil.

Energy efficient recovery system: The building is provided with a Heat Recovery Unit (HRU).

Energy efficient HVAC pumps and fan motors: The energy efficient HVAC pumps and fan motors are reportedly provided with a variable frequency drive.

Energy efficient interior lighting: The provided interior lighting is controlled by motion sensors or building automation system and/or the interior light fixtures are provided with T8 or T5 fluorescent lamps and electronic ballast.

Building Automation System: The building has a comprehensive Direct Digital Control (DCC) automation system to monitor and control the mechanical system.

Energy efficient faucets: Approximately 50% of the lavatory faucets are provided with aerators and motion sensors.

Energy efficient urinals and toilets: Approximately 50% of the urinals and toilets are provided with a low flow flush valve (less than 1.6

Definitions for Accessibility Checklist

Designated parking space: The provided designated Barrier Free Accessible parking space is a minimum 2,400 mm wide and is clearly marked with an accessibility sign.

Path of travel to the main entrance door: The provided accessible path of travel from the designated Barrier Free Accessible parking space to an accessible building entrance is a minimum 910 mm wide and includes curb cuts and ramps

Designated entrances: The provided designated Barrier Free Accessible entrance is a minimum 850 mm wide to allow a mobility device, clearly marked with an accessibility sign and is provided with an automatic door open device.

Path of travel to all floors/elevations: The Barrier Free Accessible path of travel is provided with either an accessible ramp or a vertical transportation device where a floor or an elevation difference exists.

Elevator: The provided Barrier Free Accessible Elevator has the following: clear audible communication indicating floors and up/down direction; doors, which open long enough and a minimum 900 mm wide; and a control panel, which is provided with Braille and an emergency call system and where the top is at a maximum height of 1,400 mm above floor.

Instructional spaces entrance doors: The instructional spaces are provided with an entrance door which is a minimum of 850 mm wide.

Fire policy and fire safety plan: Fire policy and fire safety plans are reportedly in place for the evacuation of people with disabilities.

Fire alarm system with strobe and audible signals: Fire alarm system is reported to include strobe lights and audible signals

Communal washrooms: There is a Barrier Free Accessible washroom stall, which is a minimum of 1,500 x 1,500 mm, in the each boys and girls washroom on each accessible floor.

Designated washroom: A designated Barrier Free Accessible washroom is provided on each floor, and is equipped with the following: an automatic door open device; grab bars; emergency call button; lever handle or motion sensor faucets; and a lavatory, where an insulated knee space is provided and the height of lavatory top is a maximum of 815 mm above the floor.

Limitations

This report has been prepared to meet the Ministry of Education (EDU) objectives for the Condition Assessment Program for Educational Facilities in Ontario. The purpose of the Condition Assessment Program was to assess the current physical condition of the schools and associated site features, and to validate information currently contained in the online capital renewal database software Total Capital Planning Solution (TCPS).

The validation of data was limited to a five year period, which is defined as the current assessment year plus four years. Information contained in the database beyond this period was not validated or reviewed.

The provided event costs are intended for global budgeting purposes only. The event costs were adjusted to include regional factors and were based on an approved unit cost list. Actual event costs for the work recommended may differ since the event costs can only be determined after preparation of tender documents, which would consider: specific design conditions, site restrictions, effects of ongoing building operations and construction schedule. The approved cost threshold for the Condition Assessment Program is \$ 10,000.

Barrier Free Accessibility and Energy Conservation Measures assessments were limited to a preapproved checklist presented on Page 2. The assessment of portables (classrooms not integrated with the building envelope), solar photovoltaic panels, other solar energy collectors, wind turbines, sheds, less than 45 sq.m., play-equipment/structures, score boards, goal posts and flag poles, fire

extinguishers, decommissioned swimming pools, window coverings, black/white boards, benches, gymnastic equipment and the appropriateness of room space were excluded from the scope of work. Information related to these components contained in the database was not updated to reflect condition observed. Information related to events which are either planned or in progress, and currently locked were not updated.

Mike Kwok 2013.10.30 11:19:57 -04'00'

All Elements

Event Type:

Brief Description

B SHELL

B20 Exterior Enclosure

B2010 Exterior Walls

Element Instance : B2010 Exterior Walls - Original Building

Description 2013 - All materials associated with the following construction: exterior load bearing walls, insulation and vapor

retarder, parapets, exterior louvers and screen, sun control devices, (exterior balcony walls and handrails,

High

Major Repair [B2010 Exterior Walls Stucco(EFS)- Original Building]

exterior soffits, screen walls,..etc....)

Condition Assessment 2013 - At the time of the assessment the exterior walls EFS and, brick systems were in poor condition, there

is extensive signs of deterioration of EFS system, and spalling bricks.

Priority:

Last Replacement Year 1967
Theoretical Life 75

Technical Condition Poor

Major Repair

Major Repair [B2010 Exterior Walls (EFS System)- Original Building]

 Estimated Cost
 \$145,988

 Fiscal Event Year
 2014

 2011-2015 Cost
 \$145,988

2011-2015 Cost #145,9
2011-2015 Priority High
2011-2015 Year 2014

Recommendation 2013 - The exterior EFS walls are showing signs of deterioration on all facades of the building. Replacement is

necessary as to maintain the integrity of the building envelope.

Apr 2013- Deteriorating exterior EFS wall system.



Apr 2013- Deteriorating EFS system.



Apr 2013- Damaged exterior EFS wall system.



Major Repair[B2010 Extetrior Wall(Brick)- Original Building]

Event Type: Major Repair Priority: High

Brief Description Major Repair[B2010 Extetrior Wall(Brick)- Original Building]

Estimated Cost \$97,920

Asset Assessment Program 2011-2015

Fiscal Event Year	2014
2011-2015 Cost	\$97,920
2011-2015 Priority	High
2011-2015 Year	2014

Recommendation

2013 - The exterior brick veneer walls are showing signs of deterioration on all facades of the building. Repointing and brick replacement is necessary as to maintain the integrity of the building envelope.

Apr 2013- Broken brick and spalling mortar joint.



Apr 2013- Spalling bricks.



Apr 2013- Spalling brick veneer on chimney on the roof.



Apr 2013- Spalling brick veneer.



B201008 Exterior Soffits

Element Instance : B201008 Exterior Soffits[B2010 Exterior wall- Original Building]

Description2013 - Exposed under surface of overhead building elements such as roof eaves, projecting or overhanging floors, exposed floor surfaces. Soffits: Exterior gypsum soffit board, braced Wood soffit, with louvered and

screened vents.

Condition Assessment 2013 - At the time of the assessment the gypsum board and, concrete soffits were in poor condition, the paint

finish was peeling due to age and weather conditions

Last Replacement Year 1000
Theoretical Life 75

Technical Condition Poor

Major Repair[B2010 Exterior Wall -Original Building]

Event Type: Major Repair Priority: Medium

Brief Description Major Repair[B2010 Exterior Wall -Original Building]

 Estimated Cost
 \$73,950

 Fiscal Event Year
 2014

 2011-2015 Cost
 \$73,950

 2011-2015 Priority
 Medium

 2011-2015 Year
 2014

Recommendation 2013 - It is recommended that the gypsum Board soffits be repainted as soon as possible.

Apr 2013- Peeling Paint covering of soffit.



Apr 2013- Discolored gypsum board soffit.



B2020 Exterior Windows

B2020 Exterior Windows - Original Building Element Instance :

2013 - The building windows are single glazed throughout, installed in metal frames. The operable units are inward opening hopper style. The windows are reportedly original to construction. Description

2013 - The building windows are in poor overall condition, with an aged appearance, deteriorating seals and reported water and air infiltration. **Condition Assessment**

Last Replacement Year 1967

Theoretical Life 32

Technical Condition Poor

Replacement [B2020 Exterior Windows - Original Building]

Priority: High Event Type: Replacement

Replacement [B2020 Exterior Windows - Original Building] **Brief Description**

Estimated Cost	\$948,921
Fiscal Event Year	2015
2011-2015 Cost	\$948,921
2011-2015 Priority	High
2011-2015 Year	2015

Recommendation

2013 - The windows of the building are beyond their expected service life. Based on the windows performance and observed condition, age, design and thermal properties, replacement of the building windows is recommended.



Mar 2013- Typical exterior window thrugh out.



Mar 2013- Exterior window.



Mar 2013- Deteriorating exterior window.



Mar 2013- Damaged and, broken seal of the exterior window.



Mar 2013- Deteriorating exterior window from inside of the facility.

B2030 Exterior Doors

Element Instance : B2030 Exterior Doors - Original Building

Description 2013 - Exterior painted wood and, hollow metal doors and frames with single glazed non-tempered vision lite.

Asset Assessment Program 2011-2015

Condition Assessment

2013 - The majority of the exterior door assemblies are original, with worn finish, corroded frames, deteriorated door seals, single glazed vision lites and have exceeded their effective design rated life.

Last Replacement Year 1967
Theoretical Life 27

Technical Condition Poor

Replacement [B2030 Exterior Doors - Original Building]

Event Type: Replacement Priority: High

Brief Description Replacement [B2030 Exterior Doors - Original Building]
Estimated Cost \$87,593

Fiscal Event Year 2015
2011-2015 Cost \$87,593
2011-2015 Priority High
2011-2015 Year 2015

Recommendation

2013 - The majority of the exterior door assemblies are original and have exceeded their effective design rated life. Replacement of the door assemblies is recommended.



Apr 2013- Typical wooden exterior door in the facility.



Apr 2013- Main entrance doors.



Apr 2013- Worn exterior hollow metal door.



Apr 2013- Rusted Exterior door frame.

Element Instance : B2030 Exterior Doors - Original Building

Description 2013 - Exterior door hardware consists of panic bars, push bars, butt hinges and door pulls

Condition Assessment2013 - At the time of the assessment the exterior door was in poor condition, showing signs of wear and tear due to use

Asset Assessment Program 2011-2015

Last Replacement Year 1967
Theoretical Life 15

Technical Condition Poor

Replacement [B2030 Exterior Doors - Original Building]

Event Type: Replacement Priority: High

Brief Description Replacement [B2030 Exterior Doors - Original Building]

 Estimated Cost
 \$43,797

 Fiscal Event Year
 2015

 2011-2015 Cost
 \$43,797

 2011-2015 Priority
 High

 2011-2015 Year
 2015

Recommendation

2013 - It is recommended that the exterior door hardware should be replaced at the time the exterior doors are replaced.

Apr 2013- Worn exterior door hardware.



Apr 2013- Worn exterior door hardware.



B30 Roofing

B3010 Roof Coverings

Element Instance: B3010 Roof Coverings - Original Building

Description 2013 - Roof is covered with a torch-on modified bitumen roof assembly system. The waterproofing membranes

are likely installed over rigid insulation. The presence of a vapor barrier is unknown.

Condition Assessment 2013 - The condition of the assembly system of roof is consistent with its age and is in poor overall condition,

with patches, blisters, ridging, discoloration, wind scour and cracking of the cap sheet noted at the time of the assessment. No roof leaks have been reported to date/roof leaks were reported which have been resolved/are

unresolved.

Last Replacement Year 1994
Theoretical Life 28

Technical Condition Poor

Replacement [B3010 Roof Coverings - Original Building]

Event Type: Replacement Priority: Urgent

Brief Description Replacement [B3010 Roof Coverings - Original Building]

Estimated Cost \$1,723,010
Fiscal Event Year 2015

 2011-2015 Cost
 \$1,723,010

 2011-2015 Priority
 Urgent

 2011-2015 Year
 2015

Recommendation2013 - The roof assembly system of roof is beyond its expected service life and is no longer performing as intended. Replacement is recommended.

Apr 2013- Typical roof covering.



Apr 2013- Evidence of blister and ballast dis placement.



Apr 2013- Water pooling due to roof membrane settlement.



B301099 Other Roofing

Element Instance : B301099 Other Roofing[Access Ladder Cage]

Description 2013 -Roof metal access ladder as part of access to deferent level of roof.

Condition Assessment 2013 - The metal access ladders are showing signs of wear and tear due to the elements

Last Replacement Year 1967

Theoretical Life 22

Technical Condition Poor

Replacement[B3010 Access ladder Cage- Original Building]

Event Type: Replacement Priority: High

Brief Description Replacement[B3010 Access ladder Cage- Original Building]

Estimated Cost	\$19,890
Fiscal Event Year	2015
2011-2015 Cost	\$19,890
2011-2015 Priority	High
2011-2015 Year	2015

Recommendation

2013 - Replacement are recommended based on condition of metal access ladders.



Apr 2013- Worn roof access ladder.



Apr 2013- Worn roof access ladder.

CINTERIORS

C10 Interior Construction

C1010 Partitions

Element Instance : C1010 Partitions - Original Building

Description 2013 - Moveable folding partition wall in Cafeteria.

Condition Assessment

2013 - The moveable folding partitions in the cafeteria are peeling, damaged, and have surpassed their expected useful life and they in poor condition .

Last Replacement Year 1967
Theoretical Life 20

Technical Condition Poor

Replacement [C1010 Partitions - Original Building]

Event Type: Replacement Priority: High

Brief Description Replacement [C1010 Partitions - Original Building]

 Estimated Cost
 \$109,491

 Fiscal Event Year
 2015

 2011-2015 Cost
 \$109,491

 2011-2015 Priority
 High

 2011-2015 Year
 2015

Recommendation

2013 - The moveable folding partition in the cafeteria is peeling, damaged, and has surpassed its expected useful life. Replacement is recommended.



Apr 2013- Worn Movable partition in cafeteria.

Apr 2013- Damaged track of movable partition in cafeteria.



C1030 Fittings

Element Instance : C1030 Fittings - Original Building

Description 2013 - Classroom fittings include cabinetry, millwork items, counters and countertops with associated

accessories and anchoring devices.

Condition Assessment 2013 - At the time of the assessment all cabinetry, millwork items, counters and countertops were in a fair

condition

Last Replacement Year 1967
Theoretical Life 20

Fittings Type Unspecified

Technical Condition Fair

Replacement [C1030 Fittings - Original Building]

Event Type: Replacement Priority: Medium

Brief Description Replacement [C1030 Fittings - Original Building]

 Estimated Cost
 \$1,186,730

 Fiscal Event Year
 2015

 2011-2015 Cost
 \$1,186,730

 2011-2015 Priority
 Medium

 2011-2015 Year
 2015

Recommendation 2013 - As all the cabinetry, millwork items, counters and countertops have exceeded their expected useful life

and are in fair condition the recommendation is to replace them



Apr 2013- Typical millwork in the school.



Apr 2013- Typical millwork in the school.



Apr 2013- Damaged millwork.

Element Instance : C1030 Fittings - Original Building

Description 2013 - Painted metal floor mounted toilet partitions situated in two washrooms of the original building.

Condition Assessment2013 - At the time of the assessment the painted metal toilet partitions are original and are showing signs corrosion, damage worn finish and unreliable or missing hardware.

Asset Assessment Program 2011-2015

Last Replacement Year 1967
Theoretical Life 15

Fittings Type Unspecified

Technical Condition Poor

Replacement [C1030 Fittings - Original Building]

Event Type: Replacement Priority: High

Brief Description Replacement [C1030 Fittings - Original Building]

 Estimated Cost
 \$72,994

 Fiscal Event Year
 2015

 2011-2015 Cost
 \$72,994

 2011-2015 Priority
 High

 2011-2015 Year
 2015

Recommendation

2013 - The original floor mounted painted toilet partitions have exceeded their effective rated design life. Replacement is recommended.



Apr 2013- Typical washroom partitions in the school.

Apr 2013- Worn washroom floor mounted partition.



Element Instance : C1030 Fittings - Original Building

Description 2013 - Lockers and chalkboards

Condition Assessment 2013 - Lockers are generally in poor condition throughout the school. The chalkboards are in fair condition.

Last Replacement Year 1967 Theoretical Life 22

Fittings Type Unspecified

Technical Condition Fair

Replacement [C1030 Fittings - Original Building]

Priority: Medium **Event Type:** Replacement

Brief Description Replacement [C1030 Fittings - Original Building]

Estimated Cost \$182,485 Fiscal Event Year 2016 2011-2015 Cost \$182,485 2011-2015 Priority Medium 2011-2015 Year 2016

The lockers are from original construction and have exceeded their theoretical useful life. Damage to door panels and sidings, and corrosion of the hardware and shelving was evident. Full replacement is required Recommendation

based on age and condition.



Apr 2013- Typical chakboard in the classrooms.



Apr 2013- Typical old worn lockers in the school.

C30 Interior Finishes

C3010 Wall Finishes

Element Instance : C3010 Wall Finishes - Original Building

Description 2013 - Interior painted wall finishes – concrete masonry unit and gypsum wallboard surfaces

Condition Assessment 2013 - At the time of the assessment the interior wall finishes were in poor condition

Last Replacement Year 1967
Theoretical Life 10

Wall Finishes Type Unspecified

Technical Condition Poor

Replacement [C3010 Wall Finishes - Original Building]

Event Type: Replacement Priority: High

Brief Description Replacement [C3010 Wall Finishes - Original Building]

 Estimated Cost
 \$495,976

 Fiscal Event Year
 2015

 2011-2015 Cost
 \$495,976

 2011-2015 Priority
 High

 2011-2015 Year
 2015

Recommendation

2013 - Recommend all interior wall finishes be repainted as the finishes are fading and showing signs of age





Apr 2013- Stained wall covering.



Apr 2013- Peeling wall covering in the GYM.



C3020 Floor Finishes

Element Instance : C3020 Floor Finishes - Original Building

Description 2013 - Cast in place terrazzo flooring with cove base.

Condition Assessment 2013 - The cast in place terrazzo flooring is showing signs of expansion and settling cracks.

Last Replacement Year 1967
Theoretical Life 75

Floor Finishes Type Unspecified

Technical Condition Fair

Major Repair [C3020 Floor Finishes - Original Building]

Event Type: Major Repair Priority: Medium

Brief Description Major Repair [C3020 Floor Finishes - Original Building]

 Estimated Cost
 \$109,491

 Fiscal Event Year
 2015

 2011-2015 Cost
 \$109,491

 2011-2015 Priority
 Medium

 2011-2015 Year
 2015

Recommendation 2013 - Settlement and expansion cracks are evident from the original construction. Repairs of the cracking is

recommended for aesthetic reasons.

Apr 2013- Crack on terrazzo flooring of the corridor



Apr 2013- Cracked terrazzo flooring.



Element Instance : C3020 Floor Finishes - Original Building

Description 2013 - Carpet floor covering in Resource Center

Condition Assessment 2013 - At the time of the assessment the Resource Center carpet floor covering was in fair condition, it was

showing signs of age and wear

Last Replacement Year 1985
Theoretical Life 10

Floor Finishes Type Unspecified

Technical Condition Fair

Replacement [C3020 Floor Finishes - Original Building]

Event Type: Replacement Priority: Medium

Brief Description Replacement [C3020 Floor Finishes - Original Building]

Estimated Cost	\$195,585
Fiscal Event Year	2016
2011-2015 Cost	\$195,585
2011-2015 Priority	Medium
2011-2015 Year	2016

Recommendation

2013 - The carpet located in the Resource Center is subjected to frequent foot traffic. Excessive wear was evident throughout the Resource Center. Replacement of carpet is recommended.

Apr 2013- Typical stained carpet in the building.



Apr 2013-Worn carpet covering.



Element Instance : C3020 Floor Finishes - Original Building

Description 2013 - Vinyl composite floor tile and vinyl base.

Condition Assessment 2013 - The vinyl composite floor tile is showing signs of wear and discoloration.

Last Replacement Year 1967
Theoretical Life 20

Floor Finishes Type Unspecified

Technical Condition Fair

Replacement [C3020 Floor Finishes - Original Building]

Event Type: Replacement Priority: Medium

Brief Description Replacement [C3020 Floor Finishes - Original Building]

 Estimated Cost
 \$131,964

 Fiscal Event Year
 2016

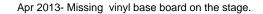
 2011-2015 Cost
 \$131,964

 2011-2015 Priority
 Medium

 2011-2015 Year
 2016

Recommendation

2013 - The vinyl composite floor tile and vinyl base is exhibiting signs of wear and has exceeded its effective rated design life. Replacement planning is recommended.





Apr 2013- Worn VCT.



C302099 Other Flooring & Floor Finishes

Element Instance : C302099 Other Flooring & Floor Finishes[Sheet Vinyl flooring]

Description 2013 - Vinyl sheet goods and vinyl base situated in GYM.

Condition Assessment 2013 - The sheet vinyl goods is showings signs of wear, separated seams and has aged beyond its effective

design rated life.

Last Replacement Year 2016
Theoretical Life 15

Technical Condition Fair

Replacement[C3020- Floor Finishes- Original Building]

Event Type: Replacement Priority: Medium

Brief Description Replacement[C3020- Floor Finishes- Original Building]

 Estimated Cost
 \$119,340

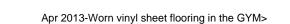
 Fiscal Event Year
 2016

 2011-2015 Cost
 \$119,340

 2011-2015 Priority
 Medium

 2011-2015 Year
 2016

Recommendation2013 - The vinyl sheet goods and vinyl base is worn and aged beyond its effective design rated life. Replacement is recommended.





Apr 2013- evidence of blistering on the vinyl sheet flooring in the GYM.



C3030 Ceiling Finishes

Element Instance : C3030 Ceiling Finishes - Original Building

Description 2013 - Acoustical ceiling tiles 2' x 4' acoustical ceiling tiles and grid

Condition Assessment 2013 - At the time of assessment the acoustical ceiling tiles were in fair condition with signs of age and

deterioration

Last Replacement Year 1967
Theoretical Life 25

Ceiling Finishes Type

Unspecified

Technical Condition Poor

Replacement [C3030 Ceiling Finishes - Original Building]

Event Type: Replacement Priority: High

Brief Description Replacement [C3030 Ceiling Finishes - Original Building]

 Estimated Cost
 \$729,940

 Fiscal Event Year
 2015

 2011-2015 Cost
 \$729,940

 2011-2015 Priority
 High

 2011-2015 Year
 2015

Recommendation

2013 - The 2'x4' acoustic tile ceiling system has exceeded its useful life and is known to contain asbestos materials. Replacement planning is recommended as to update the appearance of the facility and remove any Chrysotile asbestos spray fireproofing present which presents potential health concerns. especially an third floor ceiling space, refer to asbestos report that has been done in Nov 2012..

Apr 2013- Typical third floor ceiling tiles.



Apr 2013- Discolored and deteriorated grid ceiling in the GYM change room.



Apr 2013- Stained ceiling tile.



Element Instance : C3030 Ceiling Finishes - Original Building

Description 2013 - Gypsum board ceilings

Condition Assessment 2013 - At the time of the assessment the gypsum board ceilings were in fair condition

Last Replacement Year 1967
Theoretical Life 15

Ceiling Finishes Type

Unspecified

Technical Condition Fair

Replacement [C3030 Ceiling Finishes - Original Building]

Event Type: Replacement Priority: Medium

Brief Description Replacement [C3030 Ceiling Finishes - Original Building]

 Estimated Cost
 \$24,798

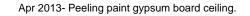
 Fiscal Event Year
 2015

 2011-2015 Cost
 \$24,798

 2011-2015 Priority
 Medium

 2011-2015 Year
 2015

Recommendation 2013 - Gypsum board ceilings are original and have passed there EUL and should be replaced.







Apr 2013- Aged drywall ceiling.

D SERVICES

D20 Plumbing

D2010 Plumbing Fixtures

Element Instance : **D2010 Plumbing Fixtures**

Description 2013 - The washroom plumbing fixtures include vitreous china water closets, lavatories, urinals, wash basins

and showers in the change rooms. Classroom sinks and drinking fountains are also provided in various

2013 - The majority of the plumbing fixtures appear to be functioning, but are in fair condition. Some fixtures (15%) have been replaced over time. The majority of the fixtures have surpassed the their normal service life **Condition Assessment**

and are inefficient. Planning for renewal is recommended.

Last Replacement Year 1967

Theoretical Life 25

Technical Condition Fair

Replacement - Science Lab Sinks

Medium **Priority:** Event Type: Replacement

Brief Description Replacement - Science Lab Sinks

Estimated Cost \$21,420 Fiscal Event Year 2016 2011-2015 Cost \$21,420 2011-2015 Priority Medium 2011-2015 Year 2016

Recommendation

2013 - The science lab sinks are original, stained and in fair condition. Replacement is recommended.



April 2013 - Aged Science Lab Sinks



April 2013 - Aged Science Lab Sinks

Replacement [D2010 Plumbing Fixtures]

Event Type:	Replacement	Priority:	Medium
Brief Description		Replacement	t [D2010 Plumbing Fixtures]
Estimated Cost		\$306,000	
Fiscal Event Year		2016	
2011-2015 Cost		\$306,000	
2011-2015 Priority		Medium	
2011-2015 Year		2016	

Recommendation2013 - Replacement of the original and aged plumbing fixtures in the building (85%) is recommended based on the age, condition and remaining useful life.

April 2013 - Aged Water Closet



April 2013 - Aged Wash Basin



D2020 Domestic Water Distribution

Element Instance : **D2020 Domestic Water Distribution - Original Building**

2013 - The building domestic water system includes a main line, water meter, pressure reducer and associated Description piping and insulation. At the time of assessment the majority of the domestic water distribution system was observed to be original to the dates of construction of the school.

2013 - The domestic piping system is mostly concealed and therefore the current condition is not fully known. Condition Assessment

However due to the age, the expected wear and the theoretical useful life, the system is assessed as being in

fair condition.

Last Replacement Year 1967 Theoretical Life 37

Domestic Water Distribution Type Unspecified

Technical Condition

Replacement [D2020 Domestic Water Distribution - Original Building]

Event Type:	Replacement	Priority:	Medium
Brief Description		Replacement	[D2020 Domestic Water Distribution - Original Building]
Estimated Cost		\$700,001	
Fiscal Event Year		2017	
2011-2015 Cost		\$700,001	
2011-2015 Priority		Medium	
2011-2015 Year		2017	

Recommendation

2013 - Based on the age and theoretical useful life of the domestic water piping system replacement is recommended. A study is recommended to determine the current condition, remaining service life, current service requirements and the cost of replacement.





Study

Event Type:	Study	Priority:	Medium
Brief Description		Study	
Estimated Cost		\$10,200	
Fiscal Event Year		2014	
2011-2015 Cost		\$10,200	
2011-2015 Priority		Medium	
2011-2015 Year		2014	

Recommendation

2013 - An in depth study is recommended to determine the condition of the domestic water piping system, the required recommended scope of work and the cost for system renewal.

D2030 Sanitary Waste

Element Instance : D2030 Sanitary Waste

Description

2013 - The sanitary waste distribution system for the school is provided by various types of piping. The majority of the piping is reported to be aged or original to the construction dates of the school.

Condition Assessment

2013 - Much of the sanitary waste water distribution system is concealed with only small areas of the system being visible during the assessment. The visible sections of the piping were observed to be functional but aged. The waste water distribution system is past its rated useful life of 37 years.

Last Replacement Year 1967

Theoretical Life 37

Technical Condition Fair

Replacement

Medium **Event Type: Priority:** Replacement

Brief Description Replacement **Estimated Cost** \$400,000

Fiscal Event Year 2017 2011-2015 Cost \$400,000

2011-2015 Year 2017

Recommendation

2011-2015 Priority

2013 - Planned replacement of the waste water distribution system is recommended based on age and condition.



Medium



Study

Priority: Medium **Event Type:** Study **Brief Description** Study **Estimated Cost** \$10,200

Asset Assessment Program 2011-2015

Fiscal Event Year	2014
2011-2015 Cost	\$10,200
2011-2015 Priority	Medium
2011-2015 Year	2014

Recommendation2013 - A study is recommended to determine the condition of the sanitary waste piping system, the required recommended scope of work and the cost for system renewal.

D2040 Rain Water Drainage

Element Instance : D2040 Rain Water Drainage

Description 2013 - Rain water drainage for the school is provided by roof drains and cast iron distribution piping and is

reported to be original to the construction dates of the school.

Condition Assessment 2013 - Much of the rain water drainage system is concealed with only small areas of the system being visible

during the assessment. The visible sections of the rain water piping were observed to have minor corrosion.

The rain water drainage system is past its rated useful life of 37 years.

Last Replacement Year 1967
Theoretical Life 37

Technical Condition Fair

Replacement

Event Type: Replacement Priority: Medium

 Brief Description
 Replacement

 Estimated Cost
 \$150,000

 Fiscal Event Year
 2017

 2011-2015 Cost
 \$150,000

 2011-2015 Priority
 Medium

 2011-2015 Year
 2017

Recommendation 2013 - Planned replacement of the rain water drainage system is recommended based on age and condition.

April 2013 - Original Rain Water Drainage Piping



Study

Event Type:	Study	Priority:	Medium
Brief Description		Study	
Estimated Cost		\$10,200	
Fiscal Event Year		2014	
2011-2015 Cost		\$10,200	
2011-2015 Priority		Medium	
2011-2015 Year		2014	
Recommendation	2013 - A study is recommended t	o determine the	e condition of the rainwater drainage distribution system, the

D30 HVAC

D3020 Heat Generating Systems

D302002 Hot Water Boilers

D302002 Hot Water Boilers - Original Building Element Instance :

2013 - Building comfort is provided by a hydronic system, where three natural gas fired boilers provide heating water to the building perimeter radiators and air handling units. One condensing boiler was installed in 2005. Description

The remaining two boilers are atmospheric and were installed in 1986.

required recommended scope of work and the cost for system renewal.

Condition Assessment 2013 - The atmospheric boilers are in fair condition and are past their rated life of 35 years.

Last Replacement Year 1986 Theoretical Life 35 **Technical Condition** Fair

Asset Assessment Program 2011-2015

Replacement [D302002 Hot Water Boilers - Original Building]

Event Type: Replacement Priority: High

Brief Description Replacement [D302002 Hot Water Boilers - Original Building]

 Estimated Cost
 \$367,200

 Fiscal Event Year
 2016

 2011-2015 Cost
 \$367,200

 2011-2015 Priority
 High

 2011-2015 Year
 2016

Recommendation2013 - Replacement of the aged atmospheric boilers is recommended with more efficient condensing boilers..

April 2013 - Aged Atmospheric Boilers



D302005 Auxiliary Equipment

Element Instance : D302005 Auxiliary Equipment

Description 2013 - The HVAC system has a variety of HVAC pumps that service the heating and cooled water

systems.

Condition Assessment 2013 - The two HVAC pumps in the boiler room were aged worn and showed signs of previous leaks.

Last Replacement Year 1967
Theoretical Life 25

Auxiliary Equipment Type Unspecified

Technical Condition Poor

Replacement [D302005 Auxiliary Equipment]

Event Type: Replacement Priority: High

Brief Description Replacement [D302005 Auxiliary Equipment]

 Estimated Cost
 \$51,000

 Fiscal Event Year
 2014

 2011-2015 Cost
 \$51,000

 2011-2015 Priority
 High

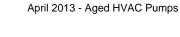
 2011-2015 Year
 2014

Recommendation

2013 - Replacement of the aged HVAC pumps is recommended to ensure functionality of the heating and cooling systems.



April 2013 - Aged HVAC Pumps





D3040 Distribution Systems

D304007 Exhaust Systems

Element Instance : D304007 Exhaust Systems

Description2013 - Various rooftop and internal exhaust fans service classrooms, washrooms and the general building providing ventilation to the building. There are a total of 12 original roof top exhaust fans.

Asset Assessment Program 2011-2015

Hamilton-Wentworth District School Board

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Condition Assessment

2013 - The exhaust fans are typically original to the building, many had worn and weathered casings. The fans are well maintained but are well past their intended useful life and are in poor condition overall.

Last Replacement Year 1967
Theoretical Life 25

Technical Condition Poor

Replacement [D304007 Exhaust Systems]

Event Type: Replacement Priority: High

Brief Description Replacement [D304007 Exhaust Systems]

Estimated Cost \$81,600

Fiscal Event Year 2015

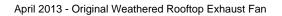
2011-2015 Cost \$81,600

High

Recommendation

2011-2015 Year

2013 - The exhaust fans are operating past their expected useful lives and will likely require replacement as most are in fair condition.



2015



April 2013 - Original Weathered Rooftop Exhaust Fan



D304008 Air Handling Units

Element Instance: **D304008 Air Handling Units**

Description 2013 - HVAC in the school is provided by 4 central air handling units original to 1967.

2013 - The original central air handlers are have well exceeded the end of their predictable service life of 35 years. The units have been well maintained and are currently functioning, but are in poor condition. **Condition Assessment**

Last Replacement Year 1967 Theoretical Life 35

Technical Condition Poor

Replacement [D304008 Air Handling Units]

High **Priority: Event Type:** Replacement

Brief Description Replacement [D304008 Air Handling Units]

Estimated Cost \$338,640 Fiscal Event Year 2015 2011-2015 Cost \$338,640 2011-2015 Priority High 2011-2015 Year 2015

2013 - While it is impossible to predict with certainty when any air handler will fail, air handling units typically last (35) years according to their theoretical life. Due to age and some mechanical wear, the units should be Recommendation

replaced within the next 5 years for reliability.

April 2013 - Original Air Handlers



April 2013 - Side of Walk-in Central Air Handler



D3050 Terminal & Package Units

Element Instance: D3050 Terminal & Package Units - Original Building

2013 - The building is equipped with hot water perimeter fin tube radiators, fan coil units and forced flow heaters which are original to 1967. Description

2013 - Although the fin tube radiation and forced flow units have been properly maintained, the system has degraded in condition over the years. Due to age and wear the unit will require replacement soon. **Condition Assessment**

Last Replacement Year 1967

Theoretical Life 25

Technical Condition

Replacement [D3050 Terminal & Package Units - Original Building]

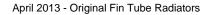
Priority: High Event Type: Replacement

Replacement [D3050 Terminal & Package Units - Original Building] **Brief Description**

Estimated Cost	\$816,000
Fiscal Event Year	2016
2011-2015 Cost	\$816,000
2011-2015 Priority	High
2011-2015 Year	2016

Recommendation

2013 - Replacement of the aged fin tube radiation units and forced air units is recommended based on condition and theoretical life.





April 2013 - Original Forced Flow Heaters



D3060 Controls & Instrumentation

Element Instance : D3060 Controls & Instrumentation

Description

2013 - The current HVAC controls are a mix of original and outdated equipment controls. The building is equipped with a building automation system and had a combined electric and pneumatic system. The classrooms are equipped with pneumatic controls for the radiators. DDC controls were reportedly installed in 2007.

Printed On: 2013/10/30

Condition Assessment

Technical Condition

2013 - Controls have exceeded their theoretical life. Maintenance and control problems have been reported. Replacement of the remaining aged pneumatic control system is recommended. Consideration should be made to replace the system with the efficient controls and link them with the school main DDC. The BAS system is due for an upgrade.

Last Replacement Year 2007 Theoretical Life 15

Replacement [D3060 Controls & Instrumentation]

Priority: High **Event Type:** Replacement **Brief Description** Replacement [D3060 Controls & Instrumentation] **Estimated Cost** \$306,000 Fiscal Event Year 2016 2011-2015 Cost \$306,000 2011-2015 Priority High

Recommendation

2011-2015 Year

2013 - Replacement of the remaining aged pneumatic controls and upgrade of the BAS system is

Fair

2016

April 2013 - Aged Pneumatic Thermostat





April 2013 - Aged BAS Controls



D50 Electrical

D5010 Electrical Service & Distribution

D501002 Secondary

Element Instance : D501002 Secondary - Original Building

Description 2013 - A 225 kVA secondary transformer is located on the second floor mechanical room and is original to

1967.

Condition Assessment 2013 - The secondary transformer is aged and at the end of its useful life.

Last Replacement Year 1967
Theoretical Life 30

Technical Condition Fair

Replacement [D501002 Secondary - Original Building]

Event Type: Replacement Priority: High

Brief Description Replacement [D501002 Secondary - Original Building]

 Estimated Cost
 \$13,770

 Fiscal Event Year
 2016

 2011-2015 Cost
 \$13,770

 2011-2015 Priority
 High

 2011-2015 Year
 2016

Recommendation 2013 - Replacement of the aged secondary transformer is recommended based on age and condition.

April 2013 - Original Secondary Transformer 225 kVA



D501003 Main Switchboards

Element Instance : D501003 - Motor Control Center

Description 2013 - The school has one motor control center (MCC) which is located in the main mechanical room and in

original to the construction date of the school.

Condition Assessment 2013 - The MCC is original to 1967 and is reaching the end of its useful life.

Last Replacement Year 1967
Theoretical Life 40

Technical Condition Fair

Replacement [D501003 - Motor Control Center]

Event Type: Replacement Priority: High

Brief Description Replacement [D501003 - Motor Control Center]

 Estimated Cost
 \$40,800

 Fiscal Event Year
 2016

 2011-2015 Cost
 \$40,800

 2011-2015 Priority
 High

 2011-2015 Year
 2016

Recommendation 2013 - Planned replacement of the original MCC is recommended within the next 5 years.

April 2013 - Original Motor Control Centre



Element Instance : **D501003 Main Switchboards**

Description 2013 - The main switchboard has a 3000 Amp capacity and is original in the building construction date .

2013 - Although maintained properly, the main switchboard has exceeded the rated useful life and should be replaced due to age and for reliability. **Condition Assessment**

Last Replacement Year 1967 Theoretical Life 40 **Technical Condition** Fair

Replacement [D501003 Main Switchboards]

Event Type: Priority: High Replacement

Brief Description Replacement [D501003 Main Switchboards]

Estimated Cost \$510,000 Fiscal Event Year 2016 2011-2015 Cost \$510,000 2011-2015 Priority High 2011-2015 Year 2016

Recommendation 2013 - Replacement of the aged main switchboard is recommended based on age and capacity.

April 2013 - Original Main Switchboards



Study [D501003 Main Switchboards]

Event Type:	Study	Priority: High
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Brief Description Study [D501003 Main Switchboards]

Estimated Cost \$10,200 Fiscal Event Year 2014 2011-2015 Cost \$10,200 2011-2015 Priority High 2011-2015 Year 2014

Recommendation 2013 - It was reported that the current switchboards are undersized and not meeting the growing capacity of the school. A study is recommended to determine the capacity needs of the school for resizing the replacement

switchgear.

D5020 Lighting & Branch Wiring

D502001 Branch Wiring

Element Instance: D502001 Branch Wiring

2013 - The branch wiring system consists of cabling, raceways, conduit, wiring, bus ducts and wiring terminal devices. Flexible conduit and cabling is provided to motors and other mechanical equipment. Description

2013 - Apart from minor renovations the majority of the branch wiring system in the school is original. The branch wiring is fair condition and is past its theoretical useful life. **Condition Assessment**

Last Replacement Year 1967 Theoretical Life 40 **Technical Condition** Fair

Replacement [D502001 Branch Wiring]

Event Type:	Replacement	Priority: N	<i>M</i> edium
Brief Description		Replacement [D	502001 Branch Wiring]
Estimated Cost		\$2,652,000	
Fiscal Event Year		2016	
2011-2015 Cost		\$2,652,000	
2011-2015 Priority		Medium	

Recommendation

2011-2015 Year

2013 - Based on the age of the branch wiring, replacement is recommended. An in depth study should be conducted to determine the current condition, remaining useful life cost of replacement.



2016



Study [D502001 Branch Wiring]

Event Type:	Study	Priority: Medium
Brief Description		Study [D502001 Branch Wiring]
Estimated Cost		\$10,200
Fiscal Event Year		2014
2011-2015 Cost		\$10,200
2011-2015 Priority		Medium
2011-2015 Year		2014
Recommendation	2013 - A study is recommended replacement or repair of the bran	and would provide a more detailed condition, remaining useful life and cost of nch wiring system.

D502002 Lighting Equipment

Element Instance : D502002 Lighting Equipment - Original Building

Description 2013 - Exterior lighting for the school includes wall-mounted and soffits HID and incandescent fixtures.

Condition Assessment

2013 - The exterior lamps and fixtures have exceeded their rated useful life and the lamps are not energy efficient and should be replaced with high efficient lamps. Original incandescent fixtures were observed at entrance soffits, while wall-mounted fixtures were observed to be damaged or discoloured in some locations.

Last Replacement Year 1990
Theoretical Life 30

Lighting Equipment Type Exterior Lighting

Technical Condition Poor

Replacement [D502002 Lighting Equipment - Original Building]

Event Type: Replacement Priority: High

Brief Description Replacement [D502002 Lighting Equipment - Original Building]

 Estimated Cost
 \$30,600

 Fiscal Event Year
 2015

 2011-2015 Cost
 \$30,600

 2011-2015 Priority
 High

 2011-2015 Year
 2015

Recommendation

2013 - The exterior lighting fixtures are original and appear to be functional at this time, but have surpassed their anticipated service life. Replacement of existing aged lamps and fixtures with higher efficiency lamps and fixtures is recommended.



April 2013 - Typical Aged Wall Mounted Exterior Lighting Fixture

April 2013 - Aged Exterior Lighting Fixture - Soffit



April 2013 - Aged Exterior Lighting Fixture - Main Entrance Overhang



D5030 Communications & Security

D503004 Public Address Systems

Element Instance : **D503004 Public Address Systems**

2013 - Building is provided with a public address system, which includes: Amplifier, intercom/monitor, volume control, speakers (ceilings or walls), conduit and shielded wires. Description

2013 - The existing PA wiring and speakers are at the end of its life cycle of 20 years and is in poor condition. The PA console was recently replaced. **Condition Assessment**

Last Replacement Year 1967 Theoretical Life 20

Technical Condition Poor

Replacement

High Priority: Event Type: Replacement

Brief Description	Major Repair [D503004 Public Address Systems]

 Estimated Cost
 \$76,500

 Fiscal Event Year
 2014

 2011-2015 Cost
 \$76,500

 2011-2015 Priority
 High

 2011-2015 Year
 2014

Recommendation2013 - The public address system speakers and wiring are aged beyond their rated life and are recommended for replacement.

•



April 2013 - Original PA Speakers

G BUILDING SITEWORK

G20 Site Improvement

G2020 Parking Lots

Element Instance : G2020 Parking Lots - Site

Description 2013 - Asphalt paved parking lot with line painting for parking stalls.

Condition Assessment 2013 - The asphalt paved parking lot is in poor condition with pot holes, alligator cracking and non visible line

painting.

Last Replacement Year 1967
Theoretical Life 20

Technical Condition Poor

Replacement [G2020 Parking Lots - Site]

Event Type: Replacement Priority: High

Brief Description Replacement [G2020 Parking Lots - Site]

Asset Assessment Program 2011-2015

Estimated Cost	\$94,893
Fiscal Event Year	2015
2011-2015 Cost	\$94,893
2011-2015 Priority	High
2011-2015 Year	2015

Recommendation

2013 - The asphalt paved parking lot is in poor condition with pot holes and alligator cracking. Reconstruction of the parking lot is recommended.



Apr 2013- Parking lot on the south east of the building.



Apr 2013- Evidence of pothole and alligator craning.

Apr 2013- Evidence of pothole and alligator craning.



G2030 Pedestrian Paving

Element Instance : **G2030 Pedestrian Paving - Site**

Description 2013 - Concrete and Asphalt Paved sidewalks situated around the perimeter of the building on the North and

Condition Assessment 2013 - The asphalt and concrete paved surfaces are showing signs of uneven and cracked surfaces with signs

of vegetation growth and isolated areas of spalling and deteriorated concrete.

Last Replacement Year 1967 Theoretical Life 22

Technical Condition Poor

Replacement [G2030 Pedestrian Paving - Site]

Priority: High **Event Type:** Replacement

Replacement [G2030 Pedestrian Paving - Site] **Brief Description**

Estimated Cost \$58,395 Fiscal Event Year 2015 2011-2015 Cost \$58,395 2011-2015 Priority High 2011-2015 Year 2015

Pavement failure, and settled/heaved sections of the pavement, was encountered on the asphalt paved walkways. Replacement is recommended. Recommendation



Apr 2013- Damaged Concrete paved pedestrian.

Apr 2012- Damaged Asphalt paved pedestrian.



G2040 Site Development

G204002 Retaining Walls

Element Instance : G204002 Retaining Walls - Site

Description 2013 -Concrete retaining wall situated North side of the building.

Condition Assessment 2013 - The Concrete retaining wall is corroded, damaged and aged beyond its effective design rated life.

Last Replacement Year 1967
Theoretical Life 30

Technical Condition Poor

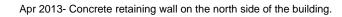
Replacement [G204002 Retaining Walls - Site]

Event Type: Replacement Priority: High

Brief Description	Replacement [G204002 Retaining Walls - Site]
Estimated Cost	\$53,550
Fiscal Event Year	2015
2011-2015 Cost	\$53,550
2011-2015 Priority	High
2011-2015 Year	2015

Recommendation

2013 - The concrete retaining wall is original to the construction of the property and has exceeded its effective design rated life. Replacement of the fence is recommended.





Apr 2013- Corroded concrete retaining wall.



G2050 Landscaping

Element Instance : G2050 Landscaping - Site

2013 - Soft Landscaping include trees, shrubs, and flowers, as well as container gardens, potted plants, and hanging baskets Description

Condition Assessment 2013 - At the time of the assessment the soft landscaping was in Fair condition Last Replacement Year 1967
Theoretical Life 17

Technical Condition Fair

Replacement [G2050 Landscaping - Site]

Event Type: Replacement Priority: Medium

Brief Description Replacement [G2050 Landscaping - Site]

 Estimated Cost
 \$20,103

 Fiscal Event Year
 2015

 2011-2015 Cost
 \$20,103

 2011-2015 Priority
 Medium

 2011-2015 Year
 2015

Recommendation

2013 - The soft landscaping is showing signs of lack of grass growth. Repair planning is recommended.





Hamilton-Wentworth District School Board

Report Summary

Saved Report Name Final Report Template mod1

User Name william lo

 Report Type
 Text With Pictures

 Report Name
 Condition Assessment

Start Year2013Number of Years5

Priority Default

Structure / Instance Sherwood SS, Building ID 9143-1

Parent Criteria Summary: Structure parent - A SUBSTRUCTURE OR Structure parent - B SHELL OR Structure parent - C INTERIORS OR Structure parent - D SERVICES OR Structure parent - G BUILDING SITEWORK - where the detail criteria for the parent node is - Technical

Condition <> Not Assessed;

Asset Photos Default Photos Only

Current Backlog FCI No

Element Photos No Photos

Include Element ACL Criteria No

Exclude Elements Without Events Yes
Include Event level details Yes

Event Photos All Photos

Include Costlines No

Printed Date 10/30/2013

Filter

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PLEASE DO NOT PHOTOCOPY OR DISTRIBUTE THIS BOOK

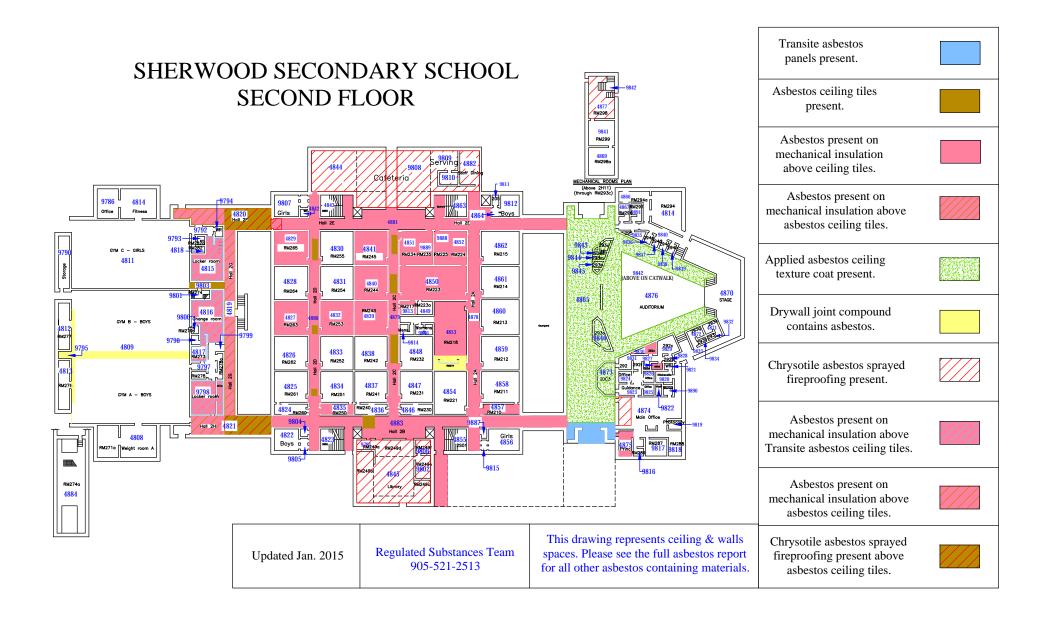
SHERWOOD SECONDARY SCHOOL Asbestos Inventory

Updated JAN. 2015

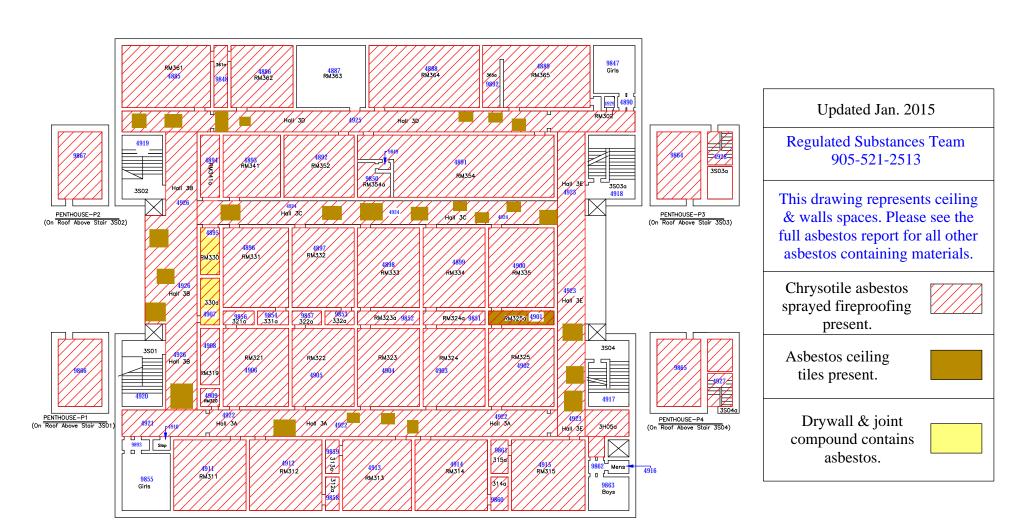
Prepared by:
Regulated Substance Team (905-521-2513)
The Hamilton-Wentworth District School Board

SHERWOOD SECONDARY SCHOOL FIRST FLOOR





SHERWOOD SECONDARY SCHOOL THIRD FLOOR



SUMMARY PAGE

The following designated substances are present in the school:

Asbestos (samples taken to-date are attached to this report)

Lead (Assume **Lead** is present in older paints. Samples taken to-date are attached to this report. Lead based paints are those containing greater than 0.5% Lead by weight)

ASBESTOS

- Applied texture coat in foyer and auditorium contains asbestos
- Sprayed Chrysotile asbestos fireproofing present on roof decks (library, cafeteria, third floor ceiling plenum & penthouses). Filters changes/inspections are restricted to Type 2 asbestos procedures
- 2x4 ceiling tiles contain asbestos (as identified in the lab results and specific location shown on drawing)
- Vinyl Asbestos floor tiles present, assume leveling coat present underneath
- In Mechanical room and Boiler room mechanical fittings and pipes contains asbestos
- Patterson-Kelley boiler installed in 2003
- Ray Pack boilers (2) present. Boiler contains Asbestos and/or Silica
- Soffit over parking area (under cafeteria) is comprised of Transite asbestos board
- Parking lot ceiling contains asbestos
- Assume black acid resistant vinyl counter tops contain asbestos
- Assume stage fire curtain contains asbestos
- Assume radiators and old window putty/caulking contains asbestos
- Assume green/beige resin chairs and desks contain asbestos
- Assume roof drains and/or collar contain asbestos
- Assume asbestos gaskets present behind the old black and old tack boards
- Assume fire doors contain asbestos (for non-asbestos fire doors, please see tag on door spine)
- Asbestos free insulation present on hot water holding tank (2003)
- Some incandescent light fixtures contain heat-deflecting paper with an asbestos paper backing. This is a pre-manufactured product and not considered hazardous unless worked on using power tools
- Spray booths/paint booths/welding booths, fume hoods, cabinet linings, sink underlining, counter tops, duct work, kilns and exhaust system (when present), assume to contain asbestos
- OIL TANK: Buried oil tank present on site

NOTE: Please contact the Regulated Substance Team at 905-521-2513 to co-ordinate site specific assessment & sampling of products that contain Asbestos or Lead including but not limited to wall or ceiling plaster, floor leveler, ceiling tiles etc. This specific assessment & testing must be done prior to construction or maintenance work, which will disturb materials.

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Boiler room	4772	2 Raypack boiler present - boilers contain asbestos and/or Silica Asbestos present on mechanical insulation below ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Aud Boys washroom	9891	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Aud Catwalk	9842	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Aud entry to stage	9833	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos Foil faced light gasket contains asbestos
Aud fan room (above)	4869	Asbestos present on mechanical insulation below ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Aud Girls washroom	4867	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Aud Lighting room (above)	9841	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Aud Mechanical room (above stage)	4877	Sprayed Chrysotile asbestos fireproofing present on ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Aud Practice rm. 1	9837	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Aud Practice rm. 2	9838	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Aud Storage 1	9835	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Aud Storage 2	4866	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Aud Storage 3	9836	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Aud Storage 4	9839	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Aud Washroom 1	9832	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Aud Washroom 2	9834	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos Foil faced light gasket contains asbestos
Aud. Stage - Practise room 1	4871	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Aud. Stage - Practise room 2	4872	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Auditorium	4876	Applied asbestos texture coat present on ceiling perimeter * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls or above ceiling * Fire doors contain asbestos
Auditorium - Stage	4870	* Fire curtain contains asbestos * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Boiler room - Entranceway	4771	Asbestos present on mechanical insulation below ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Cafeteria	4844/9808	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles Soffit over parking area (under cafeteria) is comprised of Transite asbestos panels * Asbestos insulation present behind wall cavity * Fire doors and old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards
Cafeteria - Office	9810	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles Soffit over parking area (under cafeteria) is comprised of Transite asbestos panels * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Cafeteria - Servery	9809	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles Soffit over parking area (under cafeteria) is comprised of Transite asbestos panels * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards
Caretaker - lunch room	9868	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Caretaker - lunch room	9868	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls or above plaster ceiling * Fire doors contain asbestos
Entryway - basement	4771	Asbestos present on mechanical insulation below ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Entryway and Stairwell D	4767/4963	Asbestos present on mechanical insulation above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Fan room (by Gym A)	4884	Asbestos present on mechanical insulation below ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Foyer - Main	4865	Applied asbestos texture coat present on ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls or above ceiling * Fire doors and old window putty/caulking contains asbestos
Foyer - storage 1 (outside aud.)	9843	Applied asbestos texture coat present on ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls or above ceiling * Fire doors contain asbestos
Foyer - storage 2 (outside aud.)	9844	Applied asbestos texture coat present on ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls or above ceiling * Fire doors contain asbestos
Foyer - storage 3 (outside aud.)	9845	Applied asbestos texture coat present on ceiling Applied Chysotile asbestos fire proofing present above ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls or above ceiling * Fire doors contain asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Foyer - storage 3 (outside aud.)	9846	Vinyl asbestos floor tiles present - * leveling coat present underneath Applied asbestos texture coat present on ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls or above ceiling * Fire doors contain asbestos
Gym A - Storage	4813	Asbestos present on mechanical insulation below ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Gym A/B - Boys	4809/9805	Vinyl asbestos floor tiles - * leveling coat present underneath Asbestos present on mechanical insulation below ceiling Drywall and joint compound on walls contain asbestos Transite asbestos panels present on bulkhead * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls and/or inside bulkhead * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards
Gym A/B - Boys Change room	4816	Transite asbestos ceiling tiles present * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Gym A/B - Boys shower	9797/9799	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS	
Gym A/B - Football locker room	9798	Transite asbestos ceiling panels present * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos	
Gym A/B - Men's washroom	9796	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos	
Gym A/B - Phys. Ed. Office	4817	Vinyl asbestos floor tiles - * leveling coat present underneath Transite asbestos ceiling panels present * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards	
Gym A/B - Phys. Ed. Office	9800	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos	
Gym A/B - Weight room A	4808	Vinyl asbestos floor tiles - * leveling coat present underneath Asbestos present on mechanical insulation below ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards	

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Gym B - Storage	4812	Asbestos present on mechanical insulation below ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Gym C - Fitness room	9786	Vinyl asbestos floor tiles - * leveling coat present underneath Asbestos present on mechanical insulation below ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards
Gym C - Girls	4811	Asbestos present on mechanical insulation below ceiling Transite asbestos panels present on bulkhead * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls and/or inside bulkhead * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards
Gym C - Girls Change room	4815	Asbestos present on mechanical insulation above Transite asbestos ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Gym C - Girl's washroom	9794	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS	
Gym C - Jock shop	4818	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards	
Gym C - Phys. Ed. Office	4814	Vinyl asbestos floor tiles - * leveling coat present underneath Asbestos present on mechanical insulation below ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos	
Gym C - storage	9790	Asbestos present on mechanical insulation below ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos	
Gym C - washroom	4842	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos	
Gym C - Women's washroom	9793	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos	

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Hallway 1A (across boiler room)	4807/9885	Asbestos present on mechanical insulation above ceiling tiles Some ceiling tiles contain asbestos (shown on drawing) * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind wall cavity/lockers * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards
Hallway 1B (between rm. 103/113)	4806	Asbestos present on mechanical insulation above ceiling tiles Some ceiling tiles contain asbestos (shown on drawing) * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind wall cavity/lockers * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards
Hallway 1C (across rm. 124 to boys w/r)	4805	Asbestos present on mechanical insulation above ceiling tiles Some ceiling tiles contain asbestos (shown on drawing) * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind wall cavity/lockers * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards
Hallway 2A (across rm. 210/224)	4878	Asbestos present on mechanical insulation above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind wall cavity/lockers * Fire doors and old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Hallway 2B (across rm. 210/260)	4883	Asbestos present on mechanical insulation above ceiling tiles Some ceiling tiles contain asbestos (shown on drawing) * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind wall cavity/lockers * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards
Hallway 2C (across rm. 230/245)	4879	Asbestos present on mechanical insulation above ceiling tiles Some ceiling tiles contain asbestos (shown on drawing) * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind wall cavity/lockers * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards
Hallway 2D (across rm. 250/255)	4880	Asbestos present on mechanical insulation above ceiling tiles Some ceiling tiles contain asbestos (shown on drawing) * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind wall cavity/lockers * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards
Hallway 2E (across cafeteria)	4881	Asbestos present on mechanical insulation above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind wall cavity/lockers * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Hallway 2F (hall leaing to Girls' gym)	4820	Asbestos present on mechanical insulation above ceiling tiles Some ceiling tiles contain asbestos (shown on drawing) Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls cavity/lockers * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards
Hallway 2G (across rm. 250/255)	4819	Asbestos present on mechanical insulation above ceiling tiles Some ceiling tiles contain asbestos (shown on drawing) * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind wall cavity/lockers * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards
Hallway 2H (halls leading to Boys gym)	4821	Asbestos present on mechanical insulation above ceiling tiles Some ceiling tiles contain asbestos (shown on drawing) Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind wall cavity/lockers * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards
Hallway 3A (across rm. 311 to 325)	4922	Asbestos present on mechanical insulation above ceiling tiles Some ceiling tiles contain asbestos (shown on drawing) Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind wall cavity/lockers * Fire doors and old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Hallway 3B (across rm. 311 to 341A)	4921/4926	Asbestos present on mechanical insulation above ceiling tiles Some ceiling tiles contain asbestos (shown on drawing) Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind wall cavity/lockers * Fire doors and old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards
Hallway 3C (across rm. 330 to 354)	4924	Asbestos present on mechanical insulation above ceiling tiles Some ceiling tiles contain asbestos (shown on drawing) Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind wall cavity/lockers * Fire doors and old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards
Hallway 3D (across rm. 341A to 365)	4925	Asbestos present on mechanical insulation above ceiling tiles Some ceiling tiles contain asbestos (shown on drawing) Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind wall cavity/lockers * Fire doors and old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Hallway 3E (across rm. 315 to 365)	4923	Asbestos present on mechanical insulation above ceiling tiles Some ceiling tiles contain asbestos (shown on drawing) Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind wall cavity/lockers * Fire doors and old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards
Hallway by Aud/music	9840	Vinyl asbestos floor tiles - * leveling coat present underneath Asbestos present on mechanical insulation above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards
Library	4845	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards
Library - Book Store	9802	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Asbestos insulation present behind wall cavity * Fire doors and old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Library - Librarian office	9806	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards
Library - Office	9791	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards
Office - Break room	9830	Vinyl asbestos floor tiles - * leveling coat present underneath Asbestos present on mechanical insulation above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Office - Caretaker	4774	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Office - Conference & corridor	9831	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Office - Guidance	9823	Vinyl asbestos floor tiles - * leveling coat present underneath
Office - Guidance Reception	4873	Vinyl asbestos floor tiles present - * leveling coat present underneath Applied asbestos texture coat present on ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards
Office - Kitchenette	9820	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos
Office - Main	4874	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles (see map for details) * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards
Office - Nurse	9828	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Office - Photocopy room	9819	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos
Office - Principal	4875	Vinyl asbestos floor tiles - * leveling coat present underneath Asbestos present on mechanical insulation above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contain asbestos
Office - staff 1	9824	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos
Office - staff 2	9825	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos
Office - staff 3	9826	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Office - staff 4	9829	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos
Office - Storage	9890	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos
Office - Vice- Principal 1	9817	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos
Office - Vice- Principal 2	9818	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos
Office - Washroom	9821	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Office - Washroom	9827	Vinyl asbestos floor tiles - * leveling coat present underneath Asbestos present on mechanical insulation above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Over flow tank room - basement	9781	Asbestos present on mechanical insulation below ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Over flow tank room 2 - basement	9783	Asbestos present on mechanical insulation below ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Parking area	4773	Transite asbestos panels present on ceiling
Penthouse 1 (above stairs 1)	9866	Applied Chysotile asbestos fire proofing present on ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Penthouse 2 (above stairs 2)	9867	Applied Chysotile asbestos fire proofing present on ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Penthouse 3 (above stairs 3)	9864	Applied Chysotile asbestos fire proofing present on ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Penthouse 4 (above stairs 4)	9865	Applied Chysotile asbestos fire proofing present on ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Room 100 - Storage	4782	Vinyl asbestos floor tiles present - * leveling coat present underneath Asbestos present on mechanical insulation below ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Room 101 - Drafting	9872	Vinyl asbestos floor tiles present - * leveling coat present underneath Asbestos present on mechanical insulation above 2x4 ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 102	4788	Vinyl asbestos floor tiles present - * leveling coat present underneath
Room 103	4789	Vinyl asbestos floor tiles present - * leveling coat present underneath 2x4 ceiling tiles contain asbestos * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos
Room 104	4770	Vinyl asbestos floor tiles present - * leveling coat present underneath Asbestos present on mechanical insulation below ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos
Room 104E - Office	9782	Vinyl asbestos floor tiles present - * leveling coat present underneath

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 105 - Autoshop	4769	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos
Room 105B	9870	Asbestos present on mechanical insulation below ceiling and in fire bricks * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos
Room 106	4790	Vinyl asbestos floor tiles present - * leveling coat present underneath
Room 107	4791	Vinyl asbestos floor tiles present - * leveling coat present underneath Some 2x4 ceiling tiles contain asbestos * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 111	4793	Vinyl asbestos floor tiles present - * leveling coat present underneath Asbestos present on mechanical insulation above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos
Room 111A	9875	Vinyl asbestos floor tiles present - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos
Room 111B	9874	Vinyl asbestos floor tiles present - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 112	4792	Vinyl asbestos floor tiles present - * leveling coat present underneath Asbestos present on mechanical insulation above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos
Room 113	4803	Vinyl asbestos floor tiles present - * leveling coat present underneath Asbestos present on mechanical insulation below ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind wallsty * Fire doors and old window putty contain asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos
Room 113A - Control centre	4802	Vinyl asbestos floor tiles present - * leveling coat present underneath

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 113B - TV studio	9882	Vinyl asbestos floor tiles present - * leveling coat present underneath
Room 113C	9883	Vinyl asbestos floor tiles present - * leveling coat present underneath
Room 114 - Woodshop	4801	Asbestos present on mechanical insulation below ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty contain asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos
Room 117	4804	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 121	4796	Vinyl asbestos floor tiles present - * leveling coat present underneath Asbestos present on mechanical insulation below ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos
Room 121A (mezzanine above 121B)	4796	Vinyl asbestos floor tiles present - * leveling coat present underneath
Room 121B	9878	Vinyl asbestos floor tiles present - * leveling coat present underneath
Room 121K	9879	Vinyl asbestos floor tiles present - * leveling coat present underneath

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 122 - Machine	4797	Asbestos present on mechanical insulation below ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty contain asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos
Room 123 - Machine	9884	Vinyl asbestos floor tiles present - * leveling coat present underneath Asbestos present on mechanical insulation above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos
Room 124 - Machine	4799	Asbestos present on mechanical insulation below ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty contain asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos
Room 124D	4798	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 124E	9880	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Room 127 - Work shop - by boiler room	4778	Asbestos present on mechanical insulation below ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Room 128 - storage 2 by boiler room	4777	Asbestos present on mechanical insulation below ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Room 130 - storage 1 by boiler room	4775	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls or above plaster ceiling
Room 133 - by boiler room	4779	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 135 (by rm. 105)	9789	Asbestos present on mechanical insulation below ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty contain asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos
Room 136	9785	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty contain asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos
Room 137 (by rm. 124)	9788	Asbestos present on mechanical insulation below ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty contain asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hood, cabinet lining, counter tops, kilns and exhaust system contains asbestos
Room 138 - by boiler room	4781	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 139 - by boiler room	4780	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Room 200 - Music	4814	Vinyl asbestos floor tiles - * leveling coat present underneath
Room 210	4857	Vinyl asbestos floor tiles - * leveling coat present underneath Asbestos present on mechanical insulation above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards
Room 211	4858	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contain asbestos * Asbestos gaskets present behind old black/tack boards

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 212	4859	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contain asbestos * Asbestos gaskets present behind old black/tack boards
Room 213	4860	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contain asbestos * Asbestos gaskets present behind old black/tack boards
Room 214	4861	Vinyl asbestos floor tiles - * leveling coat present underneath
Room 215	4862	Vinyl asbestos floor tiles - * leveling coat present underneath

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 216 - Teacher's Dining room	4882	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards
Room 217 (by rm. 223A)	9813	Vinyl asbestos floor tiles - * leveling coat present underneath Asbestos present on mechanical insulation above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards
Room 218 - Staff room	4853	Vinyl asbestos floor tiles - * leveling coat present underneath Drywall and joint compound on wall contains asbestos Asbestos present on mechanical insulation above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contain asbestos * Asbestos gaskets present behind old black/tack boards
Room 221	4854	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contain asbestos * Asbestos gaskets present behind old black/tack boards

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 223/233	4850	Vinyl asbestos floor tiles - * leveling coat present underneath Asbestos present on mechanical insulation above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards
Room 223A	4849	Vinyl asbestos floor tiles - * leveling coat present underneath
Room 224	4852	Vinyl asbestos floor tiles - * leveling coat present underneath Asbestos present on mechanical insulation above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards
Room 225	9888	Vinyl asbestos floor tiles - * leveling coat present underneath Asbestos present on mechanical insulation above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 230	4846	Vinyl asbestos floor tiles - * leveling coat present underneath
Room 231	4847	Vinyl asbestos floor tiles - * leveling coat present underneath
Room 232	4848	Vinyl asbestos floor tiles - * leveling coat present underneath
Room 234	4851	Vinyl asbestos floor tiles - * leveling coat present underneath Asbestos present on mechanical insulation above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 235	9889	Vinyl asbestos floor tiles - * leveling coat present underneath Asbestos present on mechanical insulation above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards
Room 240	4836	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contain asbestos * Asbestos gaskets present behind old black/tack boards
Room 241	4837	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contain asbestos * Asbestos gaskets present behind old black/tack boards
Room 242	4838	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contain asbestos * Asbestos gaskets present behind old black/tack boards

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 243	4839	Vinyl asbestos floor tiles - * leveling coat present underneath Asbestos present on mechanical insulation above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards
Room 244	4840	Vinyl asbestos floor tiles - * leveling coat present underneath Asbestos present on mechanical insulation above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards
Room 245	4841	Vinyl asbestos floor tiles - * leveling coat present underneath Asbestos present on mechanical insulation above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards
Room 250	4835	Vinyl asbestos floor tiles - * leveling coat present underneath Asbestos present on mechanical insulation above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 251	4834	Vinyl asbestos floor tiles - * leveling coat present underneath
Room 252	4833	Vinyl asbestos floor tiles - * leveling coat present underneath
Room 253	4832	Vinyl asbestos floor tiles - * leveling coat present underneath Asbestos present on mechanical insulation above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards
Room 254	4831	Vinyl asbestos floor tiles - * leveling coat present underneath

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 255	4830	Vinyl asbestos floor tiles - * leveling coat present underneath
Room 260	4824	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contain asbestos * Asbestos gaskets present behind old black/tack boards
Room 261	4825	Vinyl asbestos floor tiles - * leveling coat present underneath
Room 262	4826	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contain asbestos * Asbestos gaskets present behind old black/tack boards

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 263	4827	Vinyl asbestos floor tiles - * leveling coat present underneath Asbestos present on mechanical insulation above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards
Room 264	4828	Vinyl asbestos floor tiles - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contain asbestos * Asbestos gaskets present behind old black/tack boards
Room 265	4829	Vinyl asbestos floor tiles - * leveling coat present underneath Asbestos present on mechanical insulation above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos * Asbestos gaskets present behind old black/tack boards
Room 311	4911	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 312	4912	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos
Room 312A	9858	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos
Room 313	4913	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 313A	9859	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos
Room 314	4914	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos
Room 314A	9860	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 315	4915	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos
Room 315A	9861	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos
Room 319	9863	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 319	4908	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos
Room 320	4909	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos
Room 321	4906	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 321A	9856	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos
Room 322	4905	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos
Room 322A	9857	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Asbestos insulation present behind wall cavity * Fire doors contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 323	4904	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles Fume hood contains Transite asbestos panels * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, cabinet linings/counter tops/kilns and exhaust system contain asbestos
Room 323A	9852	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos
Room 324	4903	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 324A	9851	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos
Room 325	4902	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos
Room 330	4895	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles Drywall and joint compound contains asbestos * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 330A	4907	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles Drywall and joint compound contains asbestos * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos
Room 331	4896	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos
Room 331A	9854	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 332	4897	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos
Room 332A	9853	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos
Room 333	4898	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles Fume hood contains Transite asbestos panels * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, cabinet linings/counter tops/kilns and exhaust system contain asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 334	4899	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles Fume hood contains Transite asbestos panels * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, cabinet linings/counter tops/kilns and exhaust system contain asbestos
Room 335	4900	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above asbestos ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos
Room 341	4893	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above asbestos ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 341A	4894	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above asbestos ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos
Room 352	4892	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos
Room 353 & 354	4891	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles Panels by sink contain Amosite and Chrysotile asbestos Panels under kiln contains Crocidolite and Chrysotile asbestos * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system contain asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 354A	9849/9850	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles Panels by sink contain Amosite and Chrysotile asbestos Panels under kiln contains Crocidolite and Chrysotile asbestos * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system contain asbestos
Room 361	4885	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns & exhaust system (when present) contain asbestos
Room 361A	9848	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 362	4886	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos
Room 363	4887	Vinyl asbestos floor tiles present - * leveling coat present underneath
Room 364	4888	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns & exhaust system (when present) contain asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Room 365	4889	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos
Room 365A	9892	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above ceiling tiles * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors and old window putty/caulking contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos
Room325A	4901	Vinyl asbestos floor tiles present - * leveling coat present underneath Sprayed Chrysotile asbestos fireproofing present above asbestos ceiling tiles Some ceiling tiles contain asbestos (shown on drawing) * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contains asbestos * Asbestos gaskets present behind old black/tack boards * Spray/paint/welding booths, fume hoods, cabinet linings, counter tops, kilns and exhaust system (when present) contain asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Slop sink (by boiler room)	4776	Asbestos present on mechanical insulation below ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Slop sink (by Gym A/B)	9801	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Slop sink (by rm. 100)	4784	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Slop sink (by rm. 210)	9887	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls or above plaster ceiling * Fire doors and old window putty/caulking contains asbestos
Slop sink (by rm. 311)	4910	Foil faced light gasket present * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls or above plaster ceiling * Fire doors contain asbestos
Stairs to penthouse (above stairs 3)	4928	Applied Chysotile asbestos fire proofing present above ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Stairs to penthouse (above stairs 4)	4927	Applied Chysotile asbestos fire proofing present on ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Stairwell 1 - under stairs storage	4787	Asbestos present on mechanical insulation below ceiling * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Stairwell 1 (by rm. 102/221/321)	4786/4855/4 920	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Stairwell 2 - under stairs storage	9784	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Stairwell 2 (by rm. 118)	4794	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Stairwell 3 (by cafeteria)	9787/4843/ 4918	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Stairwell 4 - under stairs storage	4768	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Stairwell B	4823/4919	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Washroom - Boys (across rm. 215)	4864/9812	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls or above plaster ceiling * Fire doors and old window putty/caulking contains asbestos
Washroom - Boys (across rm. 260)	4822	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls or above plaster ceiling * Fire doors and old window putty/caulking contains asbestos
Washroom - Boys (across rm. 315)	9862/9863	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls or above plaster ceiling * Fire doors and old window putty/caulking contains asbestos
Washroom - Boys (by rm. 100)	4783/9873	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls or above drywall ceiling * Fire doors contain asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Washroom - Boys (by rm. 121)	4795/9876	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls or above plaster ceiling * Fire doors contain asbestos
Washroom - Female staff (across rm. 265)	4842	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls or above plaster ceiling * Fire doors and old window putty/caulking contains asbestos
Washroom - Girls (across rm. 265)	9807	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls or above plaster ceiling * Fire doors and old window putty/caulking contains asbestos
Washroom - Girls (by rm. 100)	4785	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls or above drywall ceiling * Fire doors contain asbestos
Washroom - Girls (by rm. 210)	4856/9815	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls or above plaster ceiling * Fire doors and old window putty/caulking contains asbestos
Washroom - Girls (by rm. 311)	9855/9893	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls or above plaster ceiling * Fire doors and old window putty/caulking contain asbestos
Washroom - Girls (by rm. 365)	4890/9847	Vinyl asbestos floor tiles present - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Washroom - Ladies staff (by rm. 365)	4929	Vinyl asbestos floor tiles present - * leveling coat present underneath * Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Washroom - Ladies staff (by rm. 232)	9886	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls or above plaster ceiling * Fire doors and old window putty/caulking contains asbestos
Washroom - Male (by rm. 121)	4794	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls or above plaster ceiling * Fire doors contain asbestos
Washroom - Male staff (across rm. 260)	9804	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls or above plaster ceiling * Fire doors and old window putty/caulking contains asbestos
Washroom - Men staff (across rm. 315)	4916	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls or above plaster ceiling * Fire doors and old window putty/caulking contains asbestos
Washroom - Men's staff (across rm. 215)	9811	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls or above plaster ceiling * Fire doors and old window putty/caulking contains asbestos

Confirmed asbestos items are highlighted

* Material is assumed to contain asbestos until confirmed by competent staff (For non-asbestos doors, please see tag on door spine)

AREA DESCRIPTION	LOCATION ID	ASBESTOS MATERIALS
Washroom - Men's staff (across rm. 232)	9814	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls or above plaster ceiling * Fire doors and old window putty/caulking contains asbestos
Washroom - Men's staff (by rm. 121)	9877	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls * Fire doors contain asbestos
Washroom - Principal	9816	* Prior to demolition, HWDSB must confirm the presence or lack of Asbestos Containing Materials (ACM) behind walls or above plaster ceiling * Fire doors contain asbestos

Confirmed asbestos items are highlighted

* Material is assumed to contain asbestos until confirmed by competent staff (For non-asbestos doors, please see tag on door spine)

APPENDIX II RESULTS OF BULK SAMPLE ANALYSIS FOR ASBESTOS





Project Name:

Sherwood SS, 25 High Street, Hamilton

Project No.:

53138.005

Prepared For:

Damian Palus

Lab Reference No.:

b63048

Date Analyzed:

June 17, 2009

BULK SAMPLE ANALYSIS

SAMPLE	SAMPLE	% COMPOSITION (VISUAL ESTIMATE)			
IDENTIFICATION	DESCRIPTION	ASBESTOS	OTHER		
001a 24x48 ceiling tiles- pinhole and I/w fissure- 1H02	Homogeneous, yellow, compressed, fibrous material.	None Detected	Fibreglass Non-Fibrous Material	> 75% 0.5-5%	
001b 24x48 ceiling tiles- pinhole and I/w fissure- 1H02	Homogeneous, yellow, compressed, fibrous material.	None Detected	Fibreglass Non-Fibrous Material	> 75% 0.5-5%	
001c 24x48 ceiling tiles- pinhole and I/w fissure- 1H02	Homogeneous, yellow, compressed, fibrous material.	None Detected	Fibreglass Non-Fibrous Material	> 75% 0.5-5%	
002a 24x48 ceiling tiles- pinhole and w/w fissure-1H02	Homogeneous, off-white, layered, compressed, fibrous material.		Mineral Wool Non-Fibrous Material	> 75% 5-10%	
002b 24x48 ceiling tiles- pinhole and w/w fissure-1H02			Not Analyzed		
Comments:	Analysis was stopped due	to a previous positive result.			
002c 24x48 ceiling tiles- pinhole and w/w fissure-1H02			Not Analyzed		
Comments:	Analysis was stopped due	to a previous positive result.			
003a 24x48 ceiling tiles- pinhole and small – w/w fissure- 1h02	Homogeneous, beige, layered, compressed, fibrous material.	None Detected	Cellulose Mineral Wool Perlite Other Non-Fibrous	25-50% 25-50% 25-50% 0.5-5%	

ANALYST:





Project Name:

Sherwood SS, 25 High Street, Hamilton

Project No.:

53138.005

Prepared For:

Damian Palus

Lab Reference No.:

b63048

Date Analyzed:

June 17, 2009

BULK SAMPLE ANALYSIS

SAMPLE	SAMPLE	% COMPOSITION (VISUAL ESTIMATE)	
IDENTIFICATION	DESCRIPTION	ASBESTOS	OTHER	
003b 24x48 ceiling tiles- pinhole and small – w/w fissure- 1h02	Homogeneous, beige, layered, compressed, fibrous material.	None Detected	Cellulose Mineral Wool Perlite Other Non-Fibrous	25-50% 25-50% 25-50% 0.5-5%
003c 24x48 ceiling tiles- pinhole and small – w/w fissure- 1h02	Homogeneous, beige, layered, compressed, fibrous material.	None Detected	Cellulose Mineral Wool Perlite Other Non-Fibrous	25-50% 25-50% 25-50% 0.5-5%
004a 24x48 ceiling tiles- pinhole and fleck- 1h02	Homogeneous, beige, layered, compressed, fibrous material.	None Detected	Cellulose Mineral Wool Perlite Other Non-Fibrous	25-50% 25-50% 25-50% 0.5-5%
004b 24x48 ceiling tiles- pinhole and fleck- 1h02	Homogeneous, beige, layered, compressed, fibrous material.	None Detected	Cellulose Mineral Wool Perlite Other Non-Fibrous	25-50% 25-50% 25-50% 0.5-5%
004c 24x48 ceiling tiles- pinhole and fleck- 1h02	Homogeneous, beige, layered, compressed, fibrous material.	None Detected	Cellulose Mineral Wool Perlite Other Non-Fibrous	25-50% 25-50% 25-50% 0.5-5%
005a Rough plaster upper wall- 133	Homogeneous, beige, hard, cementitious material.	Actinolite/Tremolite < 0.5%	Vermiculite Other Non-Fibrous	10-25% > 75%
005b Rough plaster upper wall- 133	Homogeneous, beige, hard, cementitious material.	None Detected	Vermiculite Other Non-Fibrous	10-25% > 75%
005c Rough plaster upper wall- 133	Homogeneous, beige, hard, cementitious material.	None Detected	Vermiculite Other Non-Fibrous	10-25% > 75%
005d Rough plaster upper wall- 133	Homogeneous, beige, hard, cementitious material.	None Detected	Vermiculite Other Non-Fibrous	10-25% > 75%

ANALYST:





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53138.005

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Damian Palus

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b63048

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June 17, 2009

BULK SAMPLE ANALYSIS

SAMPLE	SAMPLE	% COME	OSITION (VISUAL ESTIMATE)	
IDENTIFICATION	DESCRIPTION	ASBESTOS		OTHER	
005e Rough plaster upper wall- 133	Homogeneous, beige, hard, cementitious material.	Actinolite/Tremolite		Vermiculite Other Non-Fibrous	10-25% > 75%
006a 24x48 ceiling tiles- small w/w fissure, pinhole and indents- 103	Homogeneous, off-white, layered, compressed, fibrous material.	Chrysotile Amosite		Mineral Wool Non-Fibrous Material	> 75% 5-10%
006b 24x48 ceiling tiles- small w/w fissure, pinhole and indents- 103				Not Analyzed	
Comments:	Analysis was stopped due	to a previous positive res	ult.		
006c 24x48 ceiling tiles- small w/w fissure, pinhole and indents- 103				Not Analyzed	
Comments:	Analysis was stopped due	to a previous positive res	ult.		
007a 24x48 ceiling tiles- large pinhole and w/w fissure- rm 101	Homogeneous, beige, layered, compressed, fibrous material.	None Detected		Cellulose Mineral Wool Perlite Other Non-Fibrous	25-50% 25-50% 25-50% 0.5-5%
007b 24x48 ceiling tiles- large pinhole and w/w fissure- rm 101	Homogeneous, beige, layered, compressed, fibrous material.	None Detected		Cellulose Mineral Wool Perlite Other Non-Fibrous	25-50% 25-50% 25-50% 0.5-5%
007c 24x48 ceiling tiles- large pinhole and w/w fissure- rm 101	Homogeneous, beige, layered, compressed, fibrous material.	None Detected		Cellulose Mineral Wool Perlite Other Non-Fibrous	25-50% 25-50% 25-50% 0.5-5%





Project Name:

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b63048

Date Analyzed:

June 17, 2009

BULK SAMPLE ANALYSIS

SAMPLE	SAMPLE	% COMPOSI	TION (VISUAL ESTIMATE)	
IDENTIFICATION	DESCRIPTION	ASBESTOS		OTHER	
008a Rough plaster ceiling- rm 121k	Homogeneous, off-white, hard, cementitious material.		< 0.5%	Perlite Other Non-Fibrous	5-10% > 75%
Comments:	Foam is present on the surf	ace of this sample.			
008b Rough plaster ceiling- rm 121k	Homogeneous, off-white, hard, cementitious material.	Chrysotile	< 0.5%	Perlite Other Non-Fibrous	5-10% > 75%
Comments:	Foam is present on the surf	ace of this sample.			
008c Rough plaster ceiling- rm 121k	Homogeneous, off-white, hard, cementitious material.	Chrysotile	< 0.5%	Perlite Other Non-Fibrous	5-10% > 75%
Comments:	Foam is present on the surf	face of this sample.			
009a Drywall compound- wall- rm 113a	Homogeneous, white, soft, cementitious material.	None Detected		Non-Fibrous Material	> 75%
009b Drywall compound- wall- rm 113a	Homogeneous, white, soft, cementitious material.	None Detected		Non-Fibrous Material	> 75%
009c Drywall compound- wall- rm 113a	Homogeneous, white, soft, cementitious material.	None Detected		Non-Fibrous Material	> 75%
010a Texture finish on plaster ceiling wall and ceiling- corridor and auditorium	Phases: a) Homogeneous, beige, soft, cementitious material,	Chrysotile	5-10%	Perlite Other Non-Fibrous	50-75% 25-50%
	b) Homogeneous, white, soft, cementitious material.	Chrysotile 1	10-25%	Vermiculite Other Non-Fibrous	5-10% > 75%
Comments:	Phase b) is a thin layer on t	he surface of phase a).			

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Project Name:

Sherwood SS, 25 High Street, Hamilton

Project No.:

53138.005

Prepared For:

Damian Palus

Lab Reference No.:

b63048

Date Analyzed:

June 17, 2009

BULK SAMPLE ANALYSIS

SAMPLE	SAMPLE	% COMPOSIT	ION (VISUAL ESTIMATE)	
IDENTIFICATION	DESCRIPTION	ASBESTOS	OTHER	
010b Texture finish on plaster ceiling wall and ceiling- corridor and auditorium			Not Analyzed	
Comments:	Analysis was stopped due to a	previous positive result.		
010c Texture finish on plaster ceiling wall and ceiling- corridor and auditorium			Not Analyzed	
Comments:	Analysis was stopped due to a	previous positive result.		
010d Texture finish on plaster ceiling wall and ceiling- corridor and auditorium			Not Analyzed	
Comments:	Analysis was stopped due to a	previous positive result.		
010e Texture finish on plaster celling wall and ceiling- corridor and auditorium			Not Analyzed	
Comments:	Analysis was stopped due to a	previous positive result.		
010f Texture finish on plaster ceiling wall and ceiling- corridor and auditorium			Not Analyzed	
Comments:	Analysis was stopped due to a	previous positive result.		
010g Texture finish on plaster ceiling wall and ceiling- corridor and auditorium			Not Analyzed	
Comments:	Analysis was stopped due to a	previous positive result.		

ANALYST:





Project Name:

Sherwood SS, 25 High Street, Hamilton

Project No.:

53138.005

Prepared For:

Damian Palus

Lab Reference No.:

b63048

Date Analyzed:

June 17, 2009

BULK SAMPLE ANALYSIS

SAMPLE	SAMPLE	% COMPOSITION (VISUAL ESTIMATE)	
IDENTIFICATION	DESCRIPTION	ASBESTOS	OTHER	
011a Plaster wall- room 293 a	2 Phases: a) Homogeneous, grey, hard, cementitious material.	None Detected	Non-Fibrous Material	> 75%
	b) Homogeneous, white, hard, cementitious material.	None Detected	Non-Fibrous Material	> 75%
Comments:	Phase a) is small in size. For	or more reliable results, a larger sam	ple is required.	4
011b Plaster wall- room 293 a	2 Phases: a) Homogeneous, grey, hard, cementitious material.	Chrysotile < 0.5%	Non-Fibrous Material	> 75%
	b) Homogeneous, white, hard, cementitious material.	None Detected	Non-Fibrous Material	> 75%
011c Plaster wall- room 293 a	2 Phases: a) Homogeneous, grey, hard, cementitious material.	None Detected	Non-Fibrous Material	> 75%
	b) Homogeneous, white, hard, cementitious material.	None Detected	Non-Fibrous Material	> 75%
012a Drywall compound- wall- rm 330a	Homogeneous, beige, soft, cementitious material.	Chrysotile 0.5-5%	Non-Fibrous Material	> 75%
Comments:	Cellulose is present on the	surface of this sample.		

ANALYST:

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Project Name:

Sherwood SS, 25 High Street, Hamilton

Project No.:

53138.005

Prepared For:

Damian Palus

Lab Reference No.:

b63048

Date Analyzed:

June 17, 2009

BULK SAMPLE ANALYSIS

SAMPLE	SAMPLE	% COMPOSITION (VISUAL ESTIMATE)		
IDENTIFICATION	DESCRIPTION	ASBESTOS	OTHER	
012b Drywall compound- wall- rm 330a			Not Analyzed	
Comments:	Analysis was stopped due t	o a previous positive result.		
012c Drywall compound- wall- rm 330a			Not Analyzed	
Comments:	Analysis was stopped due to	o a previous positive result.		
013a Drywall compound- wall- rm 354a	Homogeneous, white, soft, cementitious material.	None Detected	Non-Fibrous Material	> 75%
013b Drywall compound- wall- rm 354a	Homogeneous, white, soft, cementitious material.	None Detected	Non-Fibrous Material	> 75%
013c Drywall compound- wall- rm 354a	Homogeneous, white, soft, cementitious material.	None Detected	Non-Fibrous Material	> 75%
014a Drywall compound- bulkhead- rm 219	Homogeneous, beige, soft, cementitious material.	Chrysotile 0.5-59	Non-Fibrous Material	> 75%
Comments:	Cellulose is present on the	surface of this sample.		
014b Drywall compound- bulkhead- rm 219			Not Analyzed	
Comments:	Analysis was stopped due to	o a previous positive result.		
014c Drywall compound- bulkhead- rm 219			Not Analyzed	
Comments:	Analysis was stopped due to	o a previous positive result.		

ANALYST:

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Project Name:

Sherwood SS, 25 High Street, Hamilton

Project No.:

53138.005

Prepared For:

Damian Palus

Lab Reference No.:

b63048

Date Analyzed:

June 17, 2009

BULK SAMPLE ANALYSIS

SAMPLE	SAMPLE	% COMPOSITION (VISUAL ESTIMATE)		
IDENTIFICATION	DESCRIPTION	ASBESTOS	OTHER	
015a Plaster ceilings- washrooms- janitor rooms	2 Phases: a) Homogeneous, grey, hard, cementitious material.	None Detected	Non-Fibrous Material	> 75%
	b) Homogeneous, white, hard, cementitious material.	None Detected	Non-Fibrous Material	> 75%
015b Plaster ceilings- washrooms- janitor rooms	2 Phases: a) Homogeneous, grey, hard, cementitious material.	None Detected	Non-Fibrous Material	> 75%
	b) Homogeneous, white, hard, cementitious material.	None Detected	Non-Fibrous Material	> 75%
015c Plaster ceilings- washrooms- janitor rooms	2 Phases: a) Homogeneous, grey, hard, cementitious material.	None Detected	Non-Fibrous Material	> 75%
	b) Homogeneous, white, hard, cementitious material.	None Detected	Non-Fibrous Material	> 75%
Comments:	Phase a) is small in size. F	or more reliable results, a large	er sample is required.	

ANALYST:

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Project Name:

Sherwood SS, 25 High Street, Hamilton

Project No.:

53138.005

Prepared For:

Damian Palus

Lab Reference No.:

b63048

Date Analyzed:

June 17, 2009

BULK SAMPLE ANALYSIS

SAMPLE	SAMPLE	% COMPOSITION (VISUAL ESTIMATE)		
IDENTIFICATION	DESCRIPTION	ASBESTOS	OTHER	
015d Plaster ceilings- washrooms- janitor rooms	Phases: Homogeneous, grey, hard, cementitious material.	None Detected	Non-Fibrous Material	> 75%
	b) Homogeneous, white, hard, cementitious material.	None Detected	Non-Fibrous Material	> 75%
Comments:	Phase a) is small in size. For	or more reliable results, a larger sar	nple is required.	
015e Plaster ceilings- washrooms- janitor rooms	Phases: A) Homogeneous, grey, hard, cementitious material.	None Detected	Non-Fibrous Material	> 75%
	b) Homogeneous, white, hard, cementitious material.	None Detected	Non-Fibrous Material	> 75%
Comments:	Phase a) is small in size. For	or more reliable results, a larger sar	mple is required.	
015f Plaster ceilings- washrooms- janitor rooms	Homogeneous, white, hard cementitious material.		Non-Fibrous Material	> 75%
Comments:	A second phase is present	in this sample, but is too small to ar	nalyze.	
015g	2 Phases:			
Plaster ceilings- washrooms- janitor rooms	a) Homogeneous, grey, hard, cementitious material.	Chrysotile < 0.5%	6 Non-Fibrous Material	> 75%
	b) Homogeneous, white, hard, cementitious material.	None Detected	Non-Fibrous Material	> 75%

ANALYST:

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Project Name:

Sherwood SS, 25 High Street, Hamilton, ON

Project No.:

53138.005

Prepared For:

Damian Palus

Lab Reference No.:

b63876

Date Analyzed:

July 3, 2009

BULK SAMPLE ANALYSIS

SAMPLE	SAMPLE	% COMPO	OSITION (VISUAL ESTIMATE)	
IDENTIFICATION	DESCRIPTION	ASBESTOS		OTHER	
018A Cementitious SFP- 3S03A stair –beam deck	Homogeneous, beige, soft, cementitious material.	Chrysotile Actinolite/Tremolite		Vermiculite Non-Fibrous Material	25-50% 50-75%
018B Cementitious SFP- 3S03A stair –beam deck				Not Analyzed	
Comments:	Analysis was stopped due t	o a previous positive resu	lt.		
018C Cementitious SFP- 3S03A stair –beam deck				Not Analyzed	
Comments:	Analysis was stopped due t	o a previous positive resu	it.		
019A Paper light shield- 309	Homogeneous, off-white, layered paper.	Chrysotile	> 75%	Non-Fibrous Material	5-10%
Comments:	Foil is present on the surface	ce of this sample.			
019B Paper light shield- 309				Not Analyzed	
Comments:	Analysis was stopped due t	to a previous positive resu	ilt.		
019C Paper light shield- 309				Not Analyzed	
Comments:	Analysis was stopped due	I to a previous positive resu	ult.		

ANALYST: AND EUX





Project Name:

Sherwood SS, 25 High Street, Hamilton, ON

Project No.:

53138.005

Prepared For:

Damian Palus

Lab Reference No.:

b63876

Date Analyzed:

July 3, 2009

BULK SAMPLE ANALYSIS

SAMPLE	SAMPLE	% COMPOSITION (VISUAL ESTIMATE)				
IDENTIFICATION	DESCRIPTION	ASBESTOS		OTHER		
016A Parging cement- dw/hwh/chilled water- boiler	Homogeneous, grey, soft, cementitious material.	Chrysotile	25-50%	Non-Fibrous Material	50-75%	
room 131						
016B Parging cement- dw/hwh/chilled water- boiler room 131				Not Analyzed		
Comments:	Analysis was stopped due t	to a previous positive	e result.			
016C Parging cement- dw/hwh/chilled water- boiler room 131				Not Analyzed		
Comments:	Analysis was stopped due	was stopped due to a previous positive result.				
017A Parging cement on chillers- 131	Homogeneous, grey, soft, cementitious material.	Chrysotile	50-75%	Non-Fibrous Material	25-50%	
017B Parging cement on chillers- 131				Not Analyzed		
Comments:	Analysis was stopped due to a previous positive result.					
017C Parging cement on chillers- 131				Not Analyzed		
Comments:	Analysis was stopped due	to a previous positive	e result.			

ANALYST: Les DECLUTA

- 4 -Results



Section 4 Results

Materials that were suspected of being asbestos-containing were grouped homogeneously; that is, they were grouped as to similar composition (colour, texture), system and general appearance (age, type, etc.). Collected samples were organized by the mechanical or structural system (i.e. wall, floor and ceiling materials).

Samples were also described as being friable or non-friable. Friable describes a material that is loose in composition and can be pulverized by hand pressure. Non-friable materials are materials which indicate a solid composition requiring power tools for the pulverization of the material.

4.1 Homogeneous Materials

The following table represents all of the homogeneous materials identified within Sherwood Secondary School, including the analytical results and friability of each product.

Table 1 - Homogeneous Materials within Sherwood Secondary School

Table Notes:

1. Shading of homogeneous materials indicates asbestos minerals were detected above 0.5%.

2. Complete laboratory results are provided in Appendix B.

3. Based on historical evidence and previous sampling, Vinyl Floor Tiles can be assumed to contain Chrysotile asbestos. Vinyl flooring has been assumed to be an asbestos-containing, as identified by the HWDSB. Areas where carpet is located could not be adequately assessed to determine if floor tile is present. There may or may not be asbestos-containing materials located beneath carpeting. At the time of renovation or demolition bulk sampling should occur by OESN Ltd. to confirm material composition below carpeting.

4. Materials determined to be "Asbestos-Containing" have been assumed based on HWDSB identification. At the time of

renovation or demolition bulk sampling should occur by OESN Ltd. to confirm material composition.

 Complete laboratory analytical results for the Pinchin Environmental Ltd. asbestos assessment can be found within the Asbestos Materials Assessment 2009 within Sherwood Secondary School (a copy of this report can be found within the HWDSB Regulated Substances office).

Homogeneous Number	Location ID (OESN Functional Space Location)	Material and Building Floor	Friability	Asbestos Content and Type	Sample Numbe
		Floor Material	S		
HF-01		Floor Tile – 9" x 9"	Non-Friable	Chrysotile	Not Sampled
HF-02		Floor Tile - 12" x 12"	Non-Friable	Chrysotile	Not Sampled
HF-03		Linoleum	Non-Friable	Asbestos- Containing	Not Sampled
		Wall Materials	5		
HW-01	330A	Drywall & Joint Compound	Friable	0.5-5% Chrysotile	012A
				Not Analyzed	012B
				Not Analyzed	012C
	219			0.5-5% Chrysotile	014A
	200			Not Analyzed	014B
				Not Analyzed	014C



Homogeneous Number	Location ID (OESN Functional Space Location)	Material and Building Floor	Friability	Asbestos Content and Type	Sample Number
		Ceiling Materia	als		
HC-01	103	Ceiling Tile – 2' x 4' Fissure	Non-Friable	0.5-5% Chrysotile	006A
		on 2'		<0.5% Amosite	
				Not Analyzed	006B
				Not Analyzed	006C
HC-02	Corridor &	Texture Coat on Plaster	Non-Friable	5-25% Chrysotile	010A
	Auditorium			Not Analyzed	010B
				Not Analyzed	010C
				Not Analyzed	010D 010E
	-	1		Not Analyzed Not Analyzed	010E
				Not Analyzed	010G
				INOL Allalyzeu	0100
		Thermal Materi	als		
HT-01		Insulated Cement Fittings	Friable	Asbestos- Containing	Not Sampled
HT-02	131	Parging on Chiller Tubes	Friable	50-75% Chrysotile	017A
	12.	- 3 - 3		Not Analyzed	017B
				Not Analyzed	017C
HT-03	4772	Fibreglass with Tar Pipe	Non-Friable	Non-Asbestos	3111-27-T01
	(1002)	Insulation		Non-Asbestos	3111-27-T02
				Non-Asbestos	3111-27-T03
		Manufactured Ma	terials		
		Elea Balada	Non Frieble	Asbestos-	Not Sampled
HM-01		Fire Brick	Non-Friable	Containing	
HM-02	9872	Duct Parging	Non-Friable	Non-Asbestos	3111-27-M01
	(1026)			Non-Asbestos	3111-27-M02
				Non-Asbestos	3111-27-M03
HM-03	4803	Brown Mastic	Non-Friable	Non-Asbestos	3111-27-M04
	(1050)			Non-Asbestos	3111-27-M05 3111-27-M06
1114.04		Transite Panel	Non-Friable	Non-Asbestos Asbestos-	Not Sampled
HM-04	-	Transite Panel	Non-Friable	Containing	Not Sampled
HM-05		Kiln	Non-Friable	Asbestos- Containing	Not Sampled
HM-06		Transite Fume Hood	Non-Friable	Asbestos- Containing	Not Sampled
HM-07		Vermiculite Bag	Friable	Asbestos- Containing	Not Sampled
HM-08	309	Foil Faced Light Gasket	Friable	>75% Chrysotile	019A
		The state of the s		Not Analyzed	019B
				Not Analyzed	019C



Homogeneous Number	Location ID (OESN Functional Space Location)	Material and Building Floor	Friability	Asbestos Content and Type	Sample Number
	3 TX 10 TX	Surfacing Materi	als		
HS-01	3S03A	Applied Fireproofing - Grey	Friable	5-10% Chrysotile <0.5% Actinolite/Tremolite	018A
				Not Analyzed	018B
				Not Analyzed	018C

The results of the assessment and analysis indicate that **fifteen (15)** homogeneous materials contain asbestos minerals. A summary of all identified building materials and their location within Sherwood Secondary School can be referenced in **Appendix A** – **Table 3** - **Inventory of Asbestos and Non-Asbestos Containing Building Materials within Sherwood Secondary School**. A log of photographs of the materials identified to be asbestos-containing within the school can be found below within **Table 2**.



SHERWOOL SECONDARY - SAMPLE RESULTS

	DATED ov. 29, 1989	1989	
RES	DATED Nov. 29, 1989	Nov. 29, 1989	
CONTENT			
CONTENT & TYPE	10-25% Amosite & 25- 50% Chrysotile 25-50% Crocidolite & 25-50% Chrysotile		
MATERIAL	18x24 sheets next to sink Heat resistan t board below kiln		
LOGATION ID#	4891		
di loonoo	Room 354	POS TOO TOO TOO TOO TOO TOO TOO TOO TOO T	