

Revised January 2022

Table of Contents

Introduction

Page

Procedure	3
Contractor Accountability	5
Contractor Responsibility	6
Contractor Checklist	7
Contractor Agreement	8
Contractor Orientation	10
Personal Protective Equipment	11
Electric Tools / Machinery	15
Manual Material Handling	16
Ladder Safety	17
Hot Work	19
Mould Abatement	21
Painting & Flooring Requirements	22
Working at Heights	25
Lockout Tag out	29
Confined Space	41
Asbestos Abatement	60
Arc Flash	73
Flammable/Combustible Material	74
Fire Extinguisher	75
Acknowledgement Sign off Sheet	76
Health & Safety Training Sign Off Sheet	77
Training Evaluation Form	78



Superior-Greenstone District School Board

Procedure CONTRACTOR HEALTH & SAFETY RESPONSIBILITIES

PROCEDURE:

To ensure Contractors follow the minimum guidelines in order to provide and maintain a safe work environment for Contractors, Sub-Contractors and Superior Greenstone District School Boards employees.

Superior Greenstone District School Board is committed to the protection of its employees, the environment and its physical assets. SGDBS will continue to maintain a safe work environment in order to prevent occupational injuries and illnesses.

All employees, Contractors and employees of Contractors are responsible for complying with the requirements of the Ontario Occupational *Health and Safety Act and its Regulations*.

All Contractors must be on the Approved Contractor List before any work can be performed

Definition:

Approved Contractors – Is any contractor who has signed and returned all required documents as per this procedure

Delivery Persons - A person who is on Superior Greenstone District School Boards property to either receive or drop off product.

SGDSB – Superior-Greenstone District School Board

Maintenance Coordinator – A company employee who is contracting the work

Designate- A company employee who is contracting the work either the Maintenance Working Foreman, Head Custodian, Site Administrator and or Plant Manager

The Manager of Plant Services or SGDSB designate shall ensure that the Contractor has signed the Contractor Health and Safety Responsibility Agreement.

The Manager of Plant Services or designate shall ensure the Contractor's legal name and the authorized signing officer's title is correct on the Contractor Health and Safety Responsibility Agreement.

The Manager of Plant Services or SGDSB designate shall forward three copies of the Contractor Health and Safety Responsibility Agreement to the Contractor for signature. The Contractor shall keep one copy for their records and forward two copies back to the Manager of Plant Services or SGDSB designate.

The Contractor must provide the Manager of Plant Services or SGDSB designate with an upto-date liability insurance certificate, listing the company as a certificate holder. SGDSB Manager of Plant Services or designate shall ensure the Contractor has no less than two (2) million dollars per occurrence of public and property liability insurance. The Manager of Plant Services may approve some lesser amount at his/her discretion.

The Contractor must submit an up-to-date Workplace Safety and Insurance Board (WSIB) Clearance Certificate.

The Manager of Plant Services or SGDSB designate shall ensure that all required documentation is completed and returned before commencement of the work.

The Contractor, Sub-Contractor shall provide the Manager of Plant Services or SGDSB designate with any Material Safety Data Sheets (MSDS) for all Workplace Hazardous Materials Information Systems (WHMIS) products used on the project.

Delivery Persons are not required to endorse a Contractor Health and Safety Responsibility Agreement. However, they shall not perform any services, other than delivery or receiving, while on Superior Greenstone District School Boards premises.

RESPONSIBILITIES:

The Manager of Plant Services or SGDSB designate shall ensure that the signed Contractor Health and Safety Responsibility Agreement, along with a copy of the Contractor's WSIB Clearance Certificate, a copy of their liability insurance, licenses, certificates and MSDS(s) are on file.

SGDSB Plant Department shall keep a list of the Approved Contractors.

The Joint Health and Safety Committee will include Contractor's adherence to their health and safety roles and responsibilities when conducting monthly inspections.

EVALUATION:

The Manager of Plant Services in consultation with the Joint Health and Safety Committee shall on a review from time to time the Health and Safety Standard Operating Procedures and provide recommendations to the Board as a result of such review.

Any health and safety issues will be addressed immediately by the Manager of Plant Services or SGDSB designate.

CONTRACTOR ACCOUNTABILITY

PURPOSE:

To ensure all Superior Greenstone District School Board Contractors and or Sub-Contractors understand the established policy for discipline related to health and safety.

All Contractors and or Sub-Contractors shall abide by their health and safety roles and responsibilities as outlined in the health and safety standard operating procedure booklet. Failure to comply will result in the application of the progressive discipline procedure.

The procedure has the following steps:

- Step one (1): SGDSB Manager of Plant Services or designate and or supervisor gives a verbal warning and provides corrective action to the contractor and or sub-Contractor worker. Worker must acknowledge receiving verbal warning by signing a Discipline Acknowledgement form.
- Step two (2) Contractor and or Sub-Contractor worker receives a written warning using the Written Discipline form. This will outline the issue, corrective action and timeframes for compliance. The contractor and or sub-contractor worker must sign the form in the presence of their supervisor and a Superior Greenstone District School Board designate.
- Step three (3) should the contractor and or sub-contractor worker not abide with the corrective action, then suspension or termination of the worker will occur.

The Contractor, Sub-Contractor must abide by and must ensure that each of the contractor's employees and sub-contractor's employees (if applicable) abide by Superior Greenstone District School Board Health and Safety Standard operating procedures rules and regulations. The Contractor, Sub-Contractor will also be able and willing at such times as recommended by SGDSB to provide additional precautions as deemed necessary by SGDSB for safe-guarding employees and equipment. The Contractor, Sub-Contractor further acknowledged and agrees that any violation of safety rules or regulations is justification for the immediate termination of its Contract with SGDSB, without any further obligation on the part of SGDSB.

CONTRACTOR RESPONSIBILITY

To ensure the safety of all Contractors, Sub-contractors the following responsibilities must be enforced.

Contractors Sub-Contractors workers must:

- a) Sign in and Sign out in the school visitor log book,
- B) Report to the Head Custodian and or Maintenance Working Foreman
- c) Acknowledge they have read the SGDSB Health and Safety Standard Operating Procedure and sign off.
- d) Wear the appropriate personal protective equipment
- e) Not Smoke anywhere on school premises
- f) Report immediately to a SGDSB Maintenance Working Foreman, Head Custodian, Principal or Vice-Principal any injury, no matter how minor
- g) Remain out of restricted areas
- h) Follow all posted signs and rules
- i) In the event on an emergency follow the instructions given prior to commencing work and remain in the gathering area until given further instructions.
- j) Fill out all maintenance log books, and preventative maintenance sheets. (Fluorescent orange sleeves)

The WSIB Clearance Certificate is only valid for 60 days

Approval signature:	Date:
(Maintenance Foreman or Head Custodian)	
Distribution to: SGDSB Manager of Plant Services	Contractor, Sub-Contractor Name:

CONTRACTOR CHECKLIST

(X) Check as Reviewed /Received Date and checked (X)	Review	Miscellaneous Notes	Initials
	Signed Contractor Health and Safety		
	Responsibility Agreement		
	Received WSIB Clearance Certificate (no		
	more		
	Than 60 days old)		
	Received a copy of the Contractor's accident History(for one year)		
	Received up-to-date liability insurance (Company listed as certificate holder with a minimum of \$2 million coverage)		
	Licenses & certificates of contractor		
	employees or other applicable training		
	requirements		
	<u>Examples:</u>		
	-Fall protection certificate		
	-Oil Burner Technician certificate		
	-GI, GII, GIII certificate		
	-Plumbers certificate		
	-Electrician certificate		
	-Lockout tag out certificate		
	-WHMIS certificate		
	Read SGDSB Health and Safety Rules and		
	Regulations to all employees		
	Read SGDSB Personal Protective		
	Equipment requirements(PPE) It is the		
	Contractor's responsibility to ensure that their		
	employees possess and use all required		
	PPE appropriately Contractor to provide MSDS(s) for any		
	WHMIS controlled products		
	Advise Contractor all occupational		
	injuries/illness that occur on our property		
	must be reported immediately		

CONTRACTOR AGREEMENT

THIS AGREEMENT made the	day of	, 20 ,
between		(the Contractor),
and Superior Greenstone District Sch	ool Board	

- 1) The Contractor must employ only orderly, trained, competent and skilful people to do work and the Contractor's employees must be fully covered under the Workplace Safety and Insurance Board by the Contractor and must provide up-to-date Clearance Certificate from the Workplace Safety and Insurance Board. All sub-contractors must be approved in writing by the company before commencing any work and the Contractor is responsible for ensuring that their employees comply with the terms of this agreement.
- 2) The Contractor acknowledges and accepts all risks arising or pertaining to the ownership, possession, use or operation of its equipment in completing its services, whether in whole or in part, whether directly or indirectly, by an act or omission or negligence of the Contractor, or for those whom it is law responsible.
- 3) Contractor must indemnify and save harmless the Company from any and all claims, demands, actions, losses or property damage arising directly or indirectly from ownership, possession, use or operation of its equipment in completing its services., whether in whole or in part, whether directly or indirectly, by an act omission or negligence of the Contractor, of for those whom it is in law responsible. Contractor must protect and hold Company harmless and must pay all costs, expenses and reasonable legal fees incurred or paid by Company in connection with such litigation. The indemnities contained in this Agreement shall not prejudice by and must survive the termination of this Agreement.
- 4) The Contractor must, during any time in which it is providing services to the Company, take out and keep in full force and effect property damage and public liability insurance in which the limits of public liability and property liability must not be less than two million (\$2,000,000.00) dollars per occurrence, the whole at the Contractor's sole cost and expense. All policies must be in written with insurance companies qualified to do business in the Province of Ontario and shall name the company as an additional insured and a certificate acknowledging same must be provided to the Company.

- 5) The Contractor must abide by and must ensure that each of the contractor's employees and sub-contractor's employees (if applicable) abide by the Company's Health and Safety rules and regulations. The Contractor will also be able and willing at such times as recommended by the Company to provide additional precautions as deemed necessary by the Company for safe-guarding employees and equipment. The Contractor further acknowledged and agrees that any violation of safety rules or regulations is justification for the immediate termination of its Contract with Company, without any further obligation on the part of the Company.
- 6) The Contractor must, at its own expense, obtain and maintain in good standing all permits and licenses required by any authorities having jurisdiction over the business of the Contractor. The Contractor must also comply with all federal, provincial and municipal governmental laws and regulations which are applicable to its business, and in particular, those affecting health and safety, workers' compensation and environmental matters.
- 7) This Agreement must be constructed and enforced in accordance with the laws of the Province of Ontario and the parties agree to attorney to the jurisdiction of the Courts of that Province.
- 8) This Agreement embodies the entire agreement of the parties with regards to the matter herein, and no other agreement must be deemed to exist, except as entered into in writing by both parties to this Agreement.
- 9) The Contractor must not assign this Agreement or any part of it and may not employ or retain anyone as a sub-contractor or otherwise, to perform any part of its obligation under this Agreement without prior written consent of the Company.
- 10) No contracted work offers will be granted by the Company unless this Agreement terms and conditions are fully accepted and agreed upon by the parties to the satisfaction of the Company

<u> Contractor / Sub-Contractor</u>	<u>Company (SGDSB)</u>
y:	by
(Authorized signing officer)	
rint Name:	Print Name:
rint Title:	Print Title:

CONTRACTOR ORIENTATION

Once a SGDSB Contractor and or Sub-Contractor are hired to perform work at any Superior Greenstone District Schools, they will be requested to review the Health and Safety Standard Operating Procedure Handbook.

The Manager of Plant Services or Maintenance Coordinator is responsible to review the content of the handbook with each SGDSB maintenance and or custodial employee.

The Head Custodian and or Maintenance Working Foreman are responsible to review the content of the handbook with each Contractor or Sub-contractor if they have not read nor understand.

SGDSB Contractor and Sub-Contractor must physically sign-off, as required to acknowledge the information has been reviewed.

SGDSB shall retain signatures for their records. All signed acknowledgement forms must be forwarded to the Manager of Plant Services within five workings days.

The review of the handbook is the responsibility of SGDSB and must be done by competent persons.

After receiving the signed acknowledgment form SGDSB will then issue the most current Superior Greenstone District School Board Approved Contractor List to all Head Custodians, Maintenance Working foreman and Site Administrators.

Only Approved Contractors, Sub-Contractors may perform work for SGDSB

PERSONAL PROTECTIVE EQUIPMENT

Procedure:

When exposure to a particular chemical, physical or biological hazard cannot be eliminated or adequately controlled then it may be necessary for workers to wear Personal Protective Equipment (PPE). The type of hazard and the expected exposure duration will determine the appropriate PPE. For Superior Greenstone District School contractors and or sub-contractors this may include: foot and eye protection, gloves, head protection, respirators and fall protection. The following directives provide information as to the proper care and use of the PPE.

Foot Safety

When a worker is exposed to hazards that could cause a foot injury it is necessary that safety footwear be worn. <u>All contractors and sub-contractors</u> are required to wear protective footwear certified by the Canadian Standards Association (CSAZ195-M1992). The footwear should be Grade 1 that offers the highest protection with a steel toe that protects against falling objects and an insole that protects against punctures to the bottom of the foot. In addition, it is recommended that all Maintenance workers and electrical contractors purchase the Grade 1 safety footwear protection with soles that provide resistance to electric shock under dry conditions.

Eye Safety

There are 7 classes of eye protection certified by the Canadian Standards Association (CSAZ94.3-99) to match particular hazards (i.e. impact, splash, radiation). The following protective eyewear is recommended for TCDSB trades staff based on the potential hazards that are likely to occur when completing job tasks.

Potential Hazard	Eye Protection Required
Flying Objects (nailing, drilling, crushing)	Class 1A – Spectacles with side protection
	or
	Class 2B – Cover Goggles with indirect
	ventilation for optimum protection.
Flying Particles and Dust (woodworking,	Class 2B – Cover Goggles with indirect
sanding, plastering, mould abatement)	ventilation
Radiation (Welding)	Class 3 – Welding Helmet

Safety Gloves

Should there be the potential for the hands to be injured by a chemical, biological or physical hazard (abrasion, puncture, laceration) then appropriate gloves should be used and maintained. The gloves should be comfortable and provide a secure fit. The table below outlines the potential hazards to the hands for tasks completed by the trade's staff.

Potential Hazard	Hand Protection Required
Abrasion, Biological Contamination (specific for the Plumbers using the "Snake".	Nitrile glove underneath the metal glove
Abrasion, Sharp Edges	Leather gloves
Electricity	Rubber-insulating gloves tested to appropriate voltage with leather outer glove if risk of puncture, abrasion and moisture or if voltage greater than 250V
Trades Chemicals (based on MSDS)	Polyvinyl or neoprene gloves

The Material Safety Data Sheets (MSDS) for any new chemicals to be used by SGDSB contractors should be reviewed prior to using the chemical to determine the appropriate glove. It should be noted that not any one glove is resistant to all chemicals.

Head Protection

In particular circumstances depending on the work being completed some SGDSB sites may be classified as construction sites. In this case as with all construction sites it is necessary that workers on site wear head protection. The appropriate head protection must comply with the Canadian Standards Association (CSAZ94.1M1992) and protect against impact and small flying or falling objects and can withstand specific electrical contact. The appropriate head protection that should be available for SGDSB contractors would be a Class E hardhat.

Hearing Protection

If potentially hazardous noise exposure levels cannot be adequately reduced through engineering or administrative controls then it will be necessary for SGDSB contractors to wear appropriate hearing protection. Based on the nature of the maintenance work being performed, select trades staff should have earmuffs available that comply with the Canadian Standards Association (CSA Standard Z94.2-M1984) for working in areas with elevated noise levels (e.g. HVAC units, adjacent to compressors).

Respirators

Job tasks conducted by SGDSB contractors can result in the production of respiratory hazards including gases, vapours, fumes, mist and/or dusts. The concentration of these respiratory hazards currently does not warrant respiratory protection based on the existing engineering and administrative controls. However, in the circumstances that a respirator is necessary then determine the appropriate respirator based on the contaminant characteristics and anticipated exposure limit. Upon selecting a respirator it is imperative that the respirator fits properly and is maintained accordingly to ensure the protection factor is not compromised.

Fall Protection

Travel restraint or fall arrest system consists of the following components:

- CSA-approved full body harness
- Lanyard
- Lifeline
- Rope grab
- Adequate anchorage

All fall protection equipment must be inspected for damage, wear and obvious defects prior to each use. Each worker required to use fall protection must be trained in its safe use and proper maintenance. Any defective components should be immediately replaced.

Fall Protection Safety Equipment Checklist is available from the Head Custodian

Anchor Points

Contractors must install all temporary anchor points prior to commencing any tasks that require fall protection.

Anchor points capable of withstanding a 5000 pound shock unless a deceleration device in use limits fall to 2 feet, in which case a 3000 pound anchor point may be used.

Refer to OH&S Regulations

Fall Protection Safety Equipment Checklist

			Ec	quipme	ent	
General Factors	Inspected By:	Tie-Off Adaptors	Lanyards	Full Body Harness	Anchorage Plates	Hook / Carabineers
		(Place	date inspe	ected in co	rrespondin	ig box)
Hardware / Physical Damage (includes d-rings, snap hooks, carabineers, adjusters, keepers, thimbles, buckles, keepers, back pads)	Inspect for damage, distortion, sharp edges, burrs, cracks, corrosion, and proper operation					
Webbing	Inspect for cuts, burns, tears, abrasion, frays, knots, excessive soiling, and discoloration					
Stitching	Inspect for pulled or cut stitches					
Labels	Inspect and make certain all labels are securely held in place and legible.					

Additional Comments:

ELECTRIC TOOLS / MACHINERY

Procedure:

All Superior Greenstone District School Board contractors and or sub-contractors that work with electric tools shall operate the tool according to the manufacturer's instructions.

Directives:

- Only use the power tool for the task in which it was designed.
- Inspect all power tools prior to use for damaged or worn parts and ensure screws, nuts and bolts are tightened.
- Inspect cords for defects: check the power cord for cracking, fraying, and other signs of wear or faults in the cord insulation.
- If a tool is defective, remove it from service immediately for repair by a qualified person.
- Read the operator's manual before using the tool and operate the tool according to the manufacturer's instructions.
- Ensure that the power tool has the correct guard, shield or other attachment that the manufacturer recommends.
- Wear or use personal protective equipment (PPE) or clothing that is appropriate for the work you are doing; this may include items such as safety glasses or goggles, hearing protection, dust mask, gloves, safety boots or shoes, or rubber boots.
- Pull the plug, not the cord when unplugging a tool. Pulling the cord causes wear and may adversely affect the wiring to the plug an electrical shock to the operator may result.
- Before plugging or unplugging tools be sure power switch is turned off.
- Never clean or repair a tool unless power is disconnected and only if you are trained to complete such repairs.
- Electric tools should be properly grounded or double-insulated.
- Keep power cords clear of tools during use
- Suspend power cords over aisles or work areas to eliminate stumbling or tripping hazards.
- <u>Ground fault circuit interrupters</u> must be used with any portable electric tool operated outdoors or in wet locations.
- Wear the appropriate PPE for the task being completed.

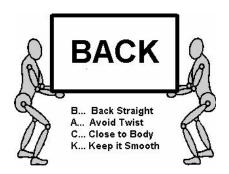
MANUAL MATERIAL HANDLING

Procedure:

This procedure has been developed to minimize the risk of injury associated with Manual Material Handling (MMH).

The risk factors related to MMH including:

- Force (required to perform the task)
- Weight (of the object to be moved)
- Repetition (number of times the lifting motion is performed)
- Duration (length of time task performed)
- Grip
- Stability of load (liquids are not as stable as the centre of gravity shifts)
- Size of object
- Travel distance (vertical and horizontal)



The best lifting practice is to control the risk factors. The following outlines the necessary controls to be followed by contractors involved with MMH.

- 1. When the weight of the object is greater than 100 pounds the object should be designated as a "**team lift**" involving at least two staff members. Gloves should be worn when lifting these objects to secure a grip.
- 2. Objects that have the potential to be unstable should be secured prior to lifting.
- 3. The horizontal travel distance should be minimized where possible to limit unnecessary lifting. This is accomplished by picking-up/dropping off equipment as close as possible to its final destination.
- 4. The following practice should be implemented for all Manual Material Handling:
 - Stand close to the load and face the way you intend to move.
 - Use a wide stance to gain balance.
 - Be sure you have a good grip on the load.
 - Lift the load as close to the body as possible, and lift smoothly without jerking.
 - Avoid twisting and side bending while lifting.
 - Use appropriate mechanical assistance where available.

LADDER SAFETY

Procedure:

All Superior Greenstone District School Board contractors and or sub-contractors are required to comply with the requirements outlined in the Industrial Establishments, Regulation 851 under the Occupational Health and Safety Act for access ladders in fixed position and portable ladders. In addition, the following directives should be applied to prevent injuries when using a ladder to complete work or as a means of access/egress.

Directives

- Inspect the condition of rails, braces, steps and rungs.
- Tag defective ladders so they are out of service and cannot be utilized. Do not make temporary repairs.
- Use an appropriate ladder for the task at hand that meets the accreditation standard (i.e. height, material, ladder type) and use according to specifications.
- Always face the ladder when climbing up or down and when working on the ladder.
- Maintain a three point contact when ascending/descending a straight ladder
- Clear debris, tools and other objects from area where the ladder will be placed to ensure the ladder is secured.
- When erecting a straight ladder, the feet should be 1 rung out for every 4 rungs height to the point the ladder touches the wall.
- Clean muddy or wet soles of shoes/boots before mounting the ladders.
- One or more workers should hold a portable ladder that exceeds 6 metres in length and is not securely fastened or is likely to be endangered by traffic in place.
- Assistance should be made available for any employee required to move a heavy or long ladder.
- Hoist materials or attach them to a belt. Do not carry materials in your hands.
- Painting a ladder is prohibited as it can hide deficiencies.
- The legs of a stepladder should be fully extended and locked before use and should **never** be leaned against a wall for use as a straight ladder.

Ladder Inspection Reports are available from school Head Custodian

LADDER INSPECTION REP	OR	-		
TRUCKNO				
TRUCKNO.				
MAKE AND MATERIAL				
LADDER NO				
TYPE: EXTENSION SINGLE	S	ΤE	P	
DATE PURCHASED				
ASSIGNED TO				
DEPARTMENT				
INDICATE "S" - SATISFACTO "U" - UNSATISFACTORY	RY			
DATE OF INSPECTION D/M/Y				
STEPS, RUNGS:	S()	U()
RUNG LOCKS:	S()	U()
ROPE AND PULLEY:	S()	U()
SAFETY FEET:			U(·
SIDERAILS:			U(,
HINGES:			U(
SPREADERS:			U(
UPRIGHTS:			U(-
VEHICLE LADDER STORAGE:			U()
INSPECTED BY: (print name)				
COMMENTS:				
SIGNATURE:				

Ratings and Types

Manufactured ladders are rated to the duty or service to which they will be put and the working load under which they will be used in a standard inclined position. The following table provides the different grades of ladders and loads they are rated for:

In-Line Load Ratings & Duty Type

(Wooden and Metal Ladders)

Duty Rating & Type	Working Load (pounds)
Extra Heavy Duty – Type IA	300
Heavy Duty – Type I	250
Medium Duty – Type II	225
Light Duty – Type III	200

HOT WORK PROCEDURE

Procedure:

Hot Work is any operation producing flames, sparks or heat, by cutting, welding, brazing, grinding, sawing, soldering, thawing frozen pipe and by applying roof covering.

The Superior Greenstone District School Board Plant Services Department operates under a Hot Work Procedure through a permit system. Before any Hot Work is carried out, Contractors, subcontractors must complete a permit to do Hot Work.

Hot Work Permits available from the school Head Custodian

Contractors and or Sub-Contractors who do not follow these procedures are not authorized to perform Hot Work repairs.

Methods

A) BEFORE DOING HOT WORK

- Seek another repair method if possible, which does not create risk of fire.
- Hot Work permit must be completed and signed by the person doing the work and posted in the work area.
- Prepare the area properly to guard against fire.
- Inspect the area for Fire Alarm smoke detectors.
- Remove combustible contents or cover with Fire resistive tarpaulins.
- Sweep floors clean.
- Remove flammable liquids.
- Make sure Fire protection and Hot Work equipment function properly.
- A Fire Hose and/or Fire Extinguisher must be available and function properly.
- Notify the Head Custodian or Designate of work to be carried out and the time lines.

B) AFTER DOING HOT WORK

- Fire watch up to 1 Hour after work is completed.
- Monitor the Hot Work area for at least 4 hours after the job is complete.

HOT WORK IN WATCH F	OR FIRE!
CALL:	NING!
	NING!
WAR	NING!
WAR	NING!
	FACTORY MUTUAL
	FACTORY MUTUAL
9	
HOT WOR	
BEFORE INITIATING HOT WORK,	
IS THERE A SA	AFER WAY?
oducing heat and/or sparks. This includes	iporary operation involving open names o
inding, Soldering, Thawing Pipe, Torch Appl	lied Roofing and Welding.
rinding, Soldering, Thawing Pipe, Torch Appl INSTRUCTIONS PAR	Ited Roofing and Welding.
INSTRUCTIONS PAR Firesefety Supervisor: A. Verity precedutions listed at right (or do not	lied Roofing and Welding.
INSTRUCTIONS PAR Firesafety Supervisor: A. Verify precedutions listed at right (or do not proceed with the work).	Iied Roofing and Welding. T1 REQUIRED PRECAUTIONS CHECKLIST Available aprinklere, hose streame and extinguishers are in service/operable. Hot Work equipment in good repair.
INSTRUCTIONS PAR INSTRUCTIONS PAR Firesefety Supervisor: A, Verity precedutions listed at right (or do not proceed with the work). B. Complete and retain PART 1.	Iied Roofing and Welding. T1 REQUIRED PRECAUITIONS CHECKLIST Available spirinklers, hose streams and extinguishers are in service/operable. Hot Work equipment in good repair. Requirements within 35 ft. (11m) of work R ammebile liquids, dust, lint and oily
inding, Soldering, Thawing Pipe, Torch Appl INSTRUCTIONS PAR Firesafaty Supervisor: A. Verify precautions listed at right (or do not proceed with the work). B. Complete and retain PART 1. C. Issue PART 2 to person doing job. TWORK BEING DOME BY: EMPLOYCE	IIII Acofing and Welding. T 1 REQUIRED PRECAUTIONS CHECKLIST CHECKLIST Aveilable aprinklare, hose streame and extinguishers are in aervice/operable. Hot Work equipment in good repair. Requirements within 35 ft. (11m) of work Flammable liquids, dust, lint and oily deposits removed. Exploaive atmosphere in area eliminated.
INSTRUCTIONS PAR INSTRUCTIONS PAR Firesefety Supervisor: A. Verify precedutions listed at right (or do not proceed with the work). B. Complete and retain PART 1. C. Issue PART 2 to person doing job. IT WORK BEND DONE BY: EMPLOYEE CONTRACTOR	Iied Roofing and Welding. T1 REQUIRED PRECAUTIONS CHECKLIST Available aprinklors, hose streams and extinguishars are in service/operable. Hot Work equipment in good repair. Requirements within 35 ft. (11m) of work deposits removed. Explosive atmosphere in ares eliminated. Floors weyt clean. Combustible floors wet down, covered with damp send or file-resistive sheets.
INSTRUCTIONS PAR INSTRUCTIONS PAR Firesafety Supervisor: A. Verify precautions listed at right (or do not proceed with the work). 8. Complete and retain PART 1. C. Issue PART 2 to person doing job. TWORK SUME DOME BY: EMPLOYEE CONTRACTOR TE JOB NO.	Iied Roofing and Welding. T1 REQUIRED PRECAUTIONS CHECKLIST Available aprinklere, hose streams and extinguishers are in service/operable. Hot Work equipment in good repair. Requirements within 35 ft. (11m) of work Bernoshie liquids, dust, lint and oliv deposits removed. Explosits atmosphere in area eliminated. Dioors swept clean. Combustible floors we down, covered with depositible more we down, covered otherwishter combustibles where possible.
Inding, Soldering, Thawing Pipe, Torch Appl INSTRUCTIONS PAR Firesofaty Supervisor: A. Verify precautions listed at right (or do not proceed with the work). B. Complete and retain PART 1. C. Issue PART 2 to person doing job. Tweek BEME DOME BY: EMPLOYEE CONTRACTOR TE JOB NO. CATION/BULDING & FLOOR	
Inding, Soldering, Thawing Pipe, Torch Appl INSTRUCTIONS PAR Firesafaty Supervisor: A. Verify precautions listed at right (or do not proceed with the work). B. Complete and retain PART 1. C. Issue PART 2 to person doing job. IT work SEME OCKES CONTRACTOR JOB NO. CATION/BUILDING & FLOOR TURE OF JOB	
Inding, Soldering, Thawing Pipe, Torch Appl INSTRUCTIONS PAR Firesofaty Supervisor: A. Verify precautions listed at right (or do not proceed with the work). B. Complete and retain PART 1. C. Issue PART 2 to person doing job. TWORK BEING DOING NOT WORK CONTRACTOR	
Inding, Soldering, Thawing Pipe, Torch Appl INSTRUCTIONS PAR Firesofaty Supervisor: A. Verify precautions listed at right (or do not proceed with the work). B. Complete and retain PART 1. C. Issue PART 2 to person doing job. Twork SEME OCKESY: EMPLOYEE CONTRACTOR ITE JOB NO. CATION/BUILDING & FLOOR MALE OF PERSON DOING HOT WORK Verify the above location has been examined, the precautions checked on the Required Precautions	
Inding, Soldering, Thawing Pipe, Torch Appl INSTRUCTIONS PAR Firesofaty Supervisor: A. Verify precautions listed at right (or do not proceed with the work). B. Complete and retain PART 1. C. Issue PART 2 to person doing job. Twork BENG DOKE SY: EMPLOYEE CONTRACTOR TTE JOB NO. CATION/BUILDING & FLOOR MALE OF PERSON DOING HOT WORK Verify the above location has been examined, the precautions checked on the Required Precautions Checklist have been taken to prevent fire, and bernission is authorized for this work.	
Inding, Soldering, Thawing Pipe, Torch Appl INSTRUCTIONS PAR Firesofaty Supervisor: A. Verify precautions listed at right (or do not proceed with the work). B. Complete and retain PART 1. C. Issue PART 2 to person doing job. Twork BENG DOKE SY: EMPLOYEE CONTRACTOR TTE JOB NO. CATION/BUILDING & FLOOR MALE OF PERSON DOING HOT WORK Verify the above location has been examined, the precautions checked on the Required Precautions Checklist have been taken to prevent fire, and bernission is authorized for this work.	Bied Roofing and Welding. T1 REQUIRED PRECAUITIONS CHECKLIST Available aprinklere, hose streams and extinguishers are in service/operable. H tot Work equipment in good repair. Requirements within 35 ft. (11m) of work Explosits removed. Explosits termoved. Explosits termoved. Combustible floors swept clean. Remove other combustibles where possible. Otherwise protect with fire-resistive tarpaulins or metal shields. All well and floor openings covered. Fire-resistive tarpaulins suspended benesth wo Work on wells or cealings Work on wells or cealing Construction is nencombustible and without combustibles work reside of wells constructibles on other side of wells constructibles on the side of the combustible iquide/wepore
Inding, Soldering, Thawing Pipe, Torch Appl INSTRUCTIONS PAR Firesofaty Supervisor: A. Verify precautions listed at right (or do not proceed with the work). B. Complete and retain PART 1. C. Issue PART 2 to person doing job. Twork BENG DOKE SY: EMPLOYEE CONTRACTOR TTE JOB NO. CATION/BUILDING & FLOOR MALE OF PERSON DOING HOT WORK Verify the above location has been examined, the precautions checked on the Required Precautions Checklist have been taken to prevent fire, and bernission is authorized for this work.	Iied Roofing and Welding. T1 REQUIRED PRECAUITIONS CHECKLIST Available aprinklere, hose streame and extinguishers are in service/operable. Hot Work equipment in good repair. Requirements within 35 ft. (11m) of work Permabilis liquid, aux lint and oily deposits removed. Explosity atmosphere in area eliminated. Dioors swept clean. Combustible floors wet down, covered. Rithman and floor openings covered. Rire-resistive tarpaulins suspended benesth wo Work on well or ceilings Combustibles down endowed de and without combustible sovering of insulation. Combustibles overling of lammable liquid/swepter Construction is nencombustible and without combustible overling of lammable liquid/swepter Revisitibles on the side of walls moved away. Work on enclosed equipment Constructions is project of flammable liquid/swepter Pressurized vessels, piping and equipment removed from service, loslatt and watted.
INSTRUCTIONS PAR INSTRUCTIONS PAR Firesefaty Supervisor: A. Verify precautions listed at right (or do not proceed with the work). B. Complete and retain PART 1. C. Issue PART 2 to person doing job. TO WORK BEING DONE BY: EMPLOYEE CONTRACTOR INTE OF JOB WILL OF PERSON DOING HOT WORK Verify the above location has been examined, the precautions checked on the Required Precautions beneficial for this work. NET: IFINESAPETY BURGHOOFERATIONS SUPERVISORS	
INSTRUCTIONS PAR INSTRUCTIONS PAR Firesefety Supervisor: A. Verify precautions listed at right (or do not proceed with the work). B. Complete and retain PART 1. C. Issue PART 2 to person doing job. TO WAR BERN DONE BY: EMPLOYEE CONTRACTOR TWE OF JOB WE OF PERSON DOING HOT WORK Verify the above location has been examined, the precautions checked on the Required Precautions Checklist have been taken to prevent fire, and permission is authorized for this work. NED: UNREAPERTY SUPERMOONOFERATIONS SUPERMOONO	
INSTRUCTIONS PAR INSTRUCTIONS PAR Firesafaty Supervisor: A. Verify precautions listed at right (or do not proceed with the work). B. Complete and retain PART 1. C. Issue PART 2 to person doing job. TWORK BEINE DOINS BY: EMPLOYEE CONTRACTOR UTE DOB NO: CATION&BUILDING & PLOOR TURE OF JOB MME OF PERSON DOINO HOT WORK Verify the above location has been examined, the precutions checked on the Required Precautions Checklist have been taken to prevent fire, and permission is authorized for this work. PERMIT DATE TIME AM	Iied Roofing and Welding. T1 REQUIRED PRECAUST CHECKLIST Available aprinklers, hose streams and extinguishers are in service/operable. Hot Work equipment In good repair. Requirements within 35 ft. (11m) of work Flarmsbin liquids, dust. lint and oily Explosive atmosphere in ares eliminated. Rimove other combustibles where possible. Otherwise protect with fire-resistive streams and without service/operaids. All well and floor openings covered. Fire-resistive tarpaulins suppended benesth wo Work on wells or cellings Contaustible son other side of walls moved form service, jeplated and without combustible and without service of a support. Combustibles on other side of all combustible overlaws of the armsbile lequipment leands of all combustible overlaws of the armsbile lequipment designment. Enclosed equipment cleaned of all combustible overlaws plong and equipment removed from service, jeplated and vented. Fire wetch/Wilb be provided during and for 60 misutes after work, including any offset

MOULD ABATEMENT

Procedure:

The appropriate mould abatement procedure is determined by the quantity of mould identified and the type of material that is contaminated. The following procedure outlines the remediation measures that must be followed by Superior Greenstone District School Board staff, contractors and subcontractors as defined by the extent of the mould contamination.

- 1. For areas contaminated with mould that are less than 10 sq. ft (1m²):
 - Contractors and or Sub-contractors trained on this procedure, personal protective equipment and potential health hazards can conduct the necessary remediation.
 - The personal protective equipment that should be worn includes gloves¹ and goggles².
 - Remediation of materials can be completed during school hours providing there are no occupants in the adjacent vicinity where the work is being completed.
 - Contaminated materials should be removed, sealed in double plastic bags and disposed as normal waste.
- For areas contaminated with mould that are <u>between 10 sq.ft and 100 sq. ft (1 to</u> <u>3m²):</u>
 - The areas requiring remediation should be contained with floor to ceiling enclosed with polyethylene sheeting and maintained under negative pressure with a HEPA filtered fan unit. The supply and return air vents in the contaminated area should be blocked prior to commencing the remediation.
 - The personal protective equipment that should be worn includes a N95 respirator or a half face respirator with HEPA filter, disposable coveralls, gloves¹ and goggles².
 - Remediation of materials contaminated with this extent of mould must be completed after school hours and with advance notification to the area occupants.
 - Contaminated materials should be removed, sealed in double plastic bags and disposed as normal waste.

3. For areas contaminated with mould that are **greater than 100 sq.ft (3m2)**: Any surfaces requiring remediation that are greater than 100 sq.ft should be completed by a qualified contractor.

- ¹ The appropriate gloves that can be used include: natural rubber, neoprene, nitrile, polyurethane or PVC.
- ² The goggles should not have any vent holes to prevent any dust/debris entering the eyes.

PAINTING & FLOORING

Procedure:

To adopt a painting and flooring procedure that will ensure all staff and other parties are informed in advance when painting or flooring work will be performed in their schools. Implementation of a professional uniform colour scheme will enable the schools to look similar to new construction upon completion. Promoting the use of low VOC paints, adhesives, and flooring materials, will see improved air quality for building users upon work completion.

CURRENT SITUATION

Geraldton Composite High School and BA Parker Public School in Geraldton are Paint Free Schools. No Plant Maintenance painting or flooring installation can take place unless approved by Superior Greenstone District School Board Manager of Plant Services or Maintenance Coordinator.

Materials have the potential to impact air quality; therefore the selection of painting, flooring materials and adhesives is an important consideration. Using various paint colours across the Board causes difficulty and extra cost when blending and colour matching.

PRODUCT COMMENTS AND REQUIREMENTS

<u>Paint</u>

1. Low-emitting primer and paint will be standard and applied in all schools and shall consist of the following specifications:

a) **Paint** – Glidden ICI Ultra Alkyd Oil – Low Odour (94410.501)

- b) **Primer** Glidden ICI Gripper 250 (250.501)
- 2. Coordination with existing paint colours and building colour standard must be based with a uniform colour scheme and be continued throughout the school. Repainting will be done in the original colour unless the requester has received approval from Maintenance Coordinator or Plant Manager to change colours from the Plant Department Colour Schedule.
- 3. Head Custodians to ensure ICI Paints document used and store all records in their data base by school location, colour code, dye lot, and paint bases.

MSDS and DATA Sheets

1. MSDS sheets must be on site prior to any painting and be filed in the school's WHMIS binders.

Flooring (carpet, vinyl, related flooring materials and adhesives)

- 1. Install carpet, vinyl and related flooring materials only when the school building is not occupied, except for small installations or repairs.
- 2. Use of low-emitting VOC adhesives recommended, manufactures and/or suppliers to submit information about product emissions that may adversely impact air quality.

SAFE WORKING PRACTICE

- 1. Avoid re-circulating air from painted or flooring installation areas, ensure return air systems are temporarily covered and or blocked.
- 2. Use supply and exhaust fans to remove paint fumes and/or flooring fumes from the school.
- 3. During exterior painting keep windows and doors closed as much as possible.
- 4. Seal containers carefully after use.
- 5. Dispose waste following appropriate manufactures recommendations.

SCHOOL REQUIREMENTS

- 1. Whenever possible, painting and flooring installations will be scheduled during school breaks or summer vacation periods. However, this is not always possible.
- Prior to establishing a schedule for interior painting and flooring installations, the Maintenance Coordinator, Maintenance Working Foreman and or Head Custodian shall discuss the proposed dates with the school Principal/Vice Principal. The discussion shall consider accommodations with respect to class relocation and safety requirements.
- 3. Notification to staff by way of a bulletin and onsite notice shall be given one (1) week prior to the scheduled painting.
- 4. Notice of painting in progress is to be posted on entrance doors by the Maintenance Working Foreman, Head Custodian or designate.
- 5. No painting will be undertaken in a classroom or area that is occupied.
- 6. Keep paint stored in approved storage cabinets.
- 7. MSDS information required and reviewed prior to any painting or flooring work to begin.
- 8. A Work Order Request must be submitted requesting the area to be painted and be approved by the Principal/Vice Principal and Maintenance Coordinator.

9.

FROM:			
SCHOOL:			
Is it intended that the above wo	ork will	beain	
In the following areas of the scl	hool:		
Foyer	[]	
Administration Area	[]	
Corridors	[]	
Washroom	[]	
Gymnasium	[]	
Library	[]	
Classrooms	[]	
Other	[]	
	<u></u>		
Please he assured that the are	a heinr	n work	ed on will be ventilated to the maximum
extent possible.		y won	
f you are allergic to paint or ad	hesive	subs	ances, please contact me as soon as

WORKING AT HEIGHTS

Procedure:

All Superior Greenstone District School Board Contractors, Sub-Contractors working at heights shall exercise caution and safe practices appropriate to the elevated work structure (i.e. any structure or device that is used as an elevated work base for persons or means of access or egress). The following directives serve as a practical guide to ensure the safest practical means of accessing an elevated work area.

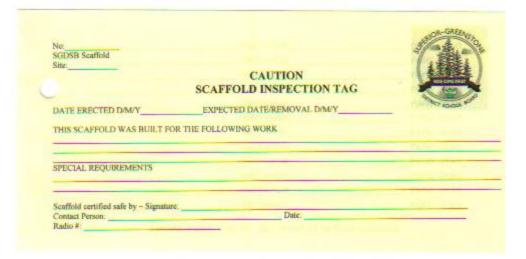
Scaffolding

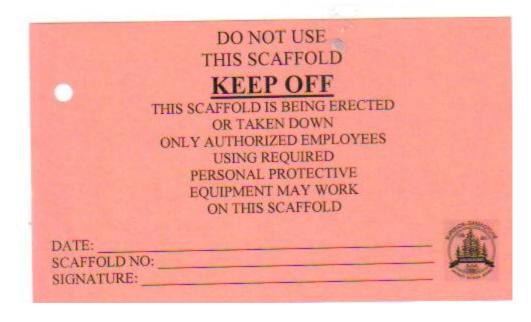
- Install and secure all necessary planks and test all scaffold planks prior to use. Immediately report and tag out any damaged planks.
- On scaffolding where a staff member can fall 2.4 metres (8feet) or more, guardrails must be installed or a <u>fall-arrest system</u> must be worn.
- The scaffold should be braced to prevent lateral movement.
- Scaffold Inspection Tags must be fixed to the scaffolding prior to commencing any work.
 - Green Safe for use scaffolding inspection tag
 - Yellow Caution scaffold inspection tag
 - Red Do not use scaffold inspection tag

Inspection tags are available from school Head Custodian

- Do not climb up or down the scaffold frame, a portable ladder should be made available
- Do not use scaffolds for the storage of material and do not overload a scaffold.
- Scaffolds must be able to support at least four times their designated load capacity.







Elevating work Platforms

The safe directives for the two basic types of elevating platforms – boom and scissor machines are outlined below:

- All elevating work platforms must be engineered tested to meet relevant standards and must be checked each day before use by a trained worker.
- Be familiar with the manufacturer's operating manual and emergency controls.
- Only staff that has received fall arrest training is permitted to operate and utilize a powered boom platform and/or a scissor lift.
- A boom machine is not intended for lifting materials.
- Check for overhead power lines before moving or operating an elevating work platform.

Mobile equipment such as personal lifting equipment is essentially tools used in the field for carrying out various jobs.

Proper maintenance and an understanding of load capacity is a must to prevent accidental injury and machinery breakdown.

REMINDERS:

- 1) Only authorized and qualified persons are permitted to operate personal lifts.
- 2) Ensure safe working conditions and environment prior to start a job.
- 3) Properly maintain tools, equipment, protective eye wear, hard hats and all other protective gear.
- A pre-check of the unit, its equipment, safety devices and work platform for mechanical operation and housekeeping is a must prior to utilization of equipment.
- 5) Personnel working on or about work platforms must be aware of and keep clear of moving parts or pinch points.
- 6) When a person is climbing down from the lift, 3 point contact must be maintained.

STANDARD SAFETY AND CHECK LIST:

- 1) Standard personal safety equipment gloves, boots, hard hat and safety glasses.
- 2) Necessary rigging gear where required.
- 3) Shall not be loaded in excess of its rated working load.
- 4) Shall only be used on firm level surfaces.
- 5) Shall be used only in accordance with the written instructions of the manufacturer.

6) **<u>Regulations:</u>**

Provincial Occupational health and safety regulation 32, 33, 42, 68, 74, 75, 76

Part IV – 67. (1) d

A document purporting to certify the results of a test or an analysis of any equipment, machine, device, article, thing or substance and purporting to be certified by an inspector is evidence of the order, decision, writing or document, and the facts appearing in order.

Section. 144 (8) under Regulation 213/91 – Construction Project – requires that:

An elevating work platform shall have signs that are clearly visible to an operator at its controls indicating:

- a) The rated working load.
- b) All limiting operation conditions including the use of outriggers, stabilizers and extended axles.
- c) Name and Address of the owner.
- d) Maintenance and inspection record tag shall be attached to the elevating work platform near the operator's station. While it is being done, on or near live exposed parts of the installations, equipment or conductors.

Anchor Points

Contractors must install all temporary or permanent anchor points prior to commencing any tasks that require fall protection.

Must have anchor points capable of withstanding a 5000 pound shock unless a deceleration device in use limits fall to 2 feet, in which case a 3000 pound anchor point may be used.

LOCKOUT TAGOUT

Procedure:

To prevent personal injury, which results from exposure to, or contact with electrical, mechanical, hydraulic, pneumatic, thermal, chemical and/or gravity stored energy sources (i.e.: suspended loads, charged air and water lines).

To prevent personal injury or damage to equipment due to the accidental operation of equipment and/or release of stored energy (i.e.: suspended loads, charged air and water lines).

Scope:

This procedure applies to all maintenance and custodial employees of Superior Greenstone District School Board and all contractors and sub-contractors workings for Superior Greenstone District schools.

Definition:

"A set of work practices and procedures designed to guarantee no worker will come in contact with an uncontrolled energy source."

Responsibilities;

Every person working for Superior Greenstone District School Board is required to know, understand and follow the General Lockout Procedure and any specific procedures which apply to their work.

General Guidelines:

Lockout procedures are a form of personal protection for workers. When de-energizing and isolation of equipment is required to ensure safety of workers and limit unnecessary equipment damage, lockout procedures will be followed.

Lockout procedures at Superior Greenstone District School Board incorporate the use of two devices:

1) Personal lock

2) A "DANGER – White "Men working on machinery" tag

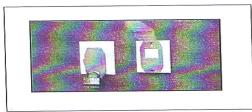
Personal Lock:

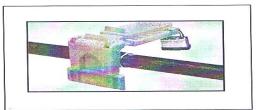
- Belong to one person only.
- Are not transferable.
- Are supplied to all maintenance and custodial staff at SGDSB.
- Are available through the maintenance coordinator by requisition.

White "Danger" tags:

- Are used by each employee working on the equipment.
- Must always accompany each personal lock.
- Must be secured to the personal lock.
- Must state the reason the switch is open.
- Must state the name of the person doing the work (printed).
- Must show the current date.
- White "Danger" Tags are not to be used without a personal lock.

Lockout tags are available from the Head Custodian









Reminders:

- 1) Do not rely on control interlocks as protection against accidental start-ups. Lock out each piece of machinery independently.
- 2) Disconnect electrical motor leads is not a recognized lockout procedure.
- 3) White "Danger" tags must always be used when a personal lock is placed on a disconnect switch. The personal lock and the white tag combine to ensure the safety of people.
- 4) Pulling fuses is not a substitute for lockout.
- 5) Relying on switch position is not a substitute for lockout.
- 6) Assuming job is too small to require locking out is not acceptable.
- 7) Failure to test to verify energy status must be performed.
- 8) Information tags do not equal lockout devices
- 9) Personal Protective Equipment must be worn.
- 10)Identify all equipment to be locked out. Be aware of the other energy sources in addition to electrical sources (batteries or charged air, hydraulic, steam or water lines).

Regulations:

Provincial Occupational health and safety regulation 32, 33, 42, 68, 74, 75, 76

Section 42. (1) Under Regulation 851 – Industrial Establishments – requires that:

Supply to electrical installations, equipment or conductors shall be disconnected, locked out of service and tagged before work is done, and while it is being done, on or near live exposed parts of the installations, equipment or conductors.

Section 42. (6)

If a Tag is used as a means of communication, the tag,

- a) shall be made of non-conducting material;
- b) shall be secured to prevent its inadvertent removal;
- c) shall be placed in a conspicuous location;
- d) shall state the reason the switch is disconnected and locked out;
- e) shall show the name of the worker who disconnected and locked out the switch; and
- f) Shall show the date on which the switch was disconnected and locked out.

LOCKOUT PLANNING STEPS

Specific lockout procedures will vary depending on the work and the process which must be shut down. The following chart can help you develop specific procedures.

- 1. Locate area, Identify equipment, machinery, etc.
 - 2. Identify all energy sources
 - 3. Determine parts to be locked out
 - 4. Determine proper lockout methods
 - 5. Notify affected personnel
 - 6. Shut down equipment
 - 7. Lock out equipment
 - 8. Tag locked-out equipment
 - 9. Verify: zero-energy state
 - 10. Perform the work

LOCKOUT PROCEDURES

Procedures:

The following pages are attached to the SGDSB Site General Lockout Procedures

- 1) Electrical Lockout Procedure
- 2) Procedure For Removing Locks & Tags Left On Equipment
- 3) Lockout Procedure Audits
- 4) Mobile Equipment (vehicles, genie lifts, floor scrubbers etc...)
- 5) Testing / Troubleshooting
- 6) Energy Management Systems Delta Controls Procedure
- 7) Procedure for Troubleshooting Circuit Breakers when tripped on a fault or suspected fault
- 8) Procedure for Working In Live Control Panels
- 9) Procedure for Testing Live Electrical Circuits
- 1) Electrical Lockout Procedure:
- 2) Identify all equipment to be locked out. Be aware of the other energy sources in addition to electrical sources (batteries or charged air, hydraulic, steam or water lines).
- 3) Stop the equipment or arrange to have it stopped. (<u>Energy Management</u> <u>System</u>)
- 4) Verify all test meters are functional by testing a known power source, deenergizing test and re-energizing to test. This will ensure equipment is not faulty and in good working condition.
- 5) Check to ensure the switch to be locked out coincides with the equipment stopped. Verify with cable markers and labels possible.
- 6) **Certified electricians** are permitted to enter electrical panel(s), install new electrical equipment and supply new power source for SGDSB.
- 7) **Hydro permits installations and inspections** must be entered in the electrical log book.
- 8) If the voltage is 600 volts or less, turn switch on front of panel to off, then pull the handle (standing on either side of the door) to the off position. This isolates the equipment. If the voltage is greater than 600 volts, call an electrician. Only electricians are permitted to operate disconnects greater than 600 volts.

- 9) Once power has been disconnected, install a lock(s) and fully completed white tag(s) on the disconnect switch handle(s). Each person working on the equipment must attach their own personal lock(s) and tag(s) to the switch handle(s) for each piece of equipment. Use multi-lock devises if necessary.
- 10)Attempt to start the equipment. If the equipment can be remove started, contact the maintenance coordinator and ask for a start on the equipment which has been locked out.

11)Proceed with work planned

Removing Locks and tags:

- 1) Personal locks and white tags must be removed by the person(s) who installed them when they leave the job, leave the property or complete the work on the equipment.
- 2) If the work has been completed, remove all personal lock(s) and white tag(s)
- 3) If the voltage is 600 volts or less, push the handle (stand on either side of the door) to the ON position.
- 4) If the voltage is greater than 600 volts, call an electrician. Only electricians are permitted to operate disconnects at greater than 600 volts.
- 5) Inform the Head Custodian that the work has been completed.

<u>2 Procedure For Removing Locks and Tags Left On Equipment:</u>

- 1) When a personal lock and white tag is left on after the completion of a job, every attempt must be made to contact the person(s) responsible. People so contacted will be asked to return to the site and remove their personal lock and white tag.
- If the person(s) cannot be contacted or does not return to remove the lock(s) and tag(s) the school supervisor shall ensure that re-energizing the equipment will not result in personal injury or equipment damage.
- 3) Locks and tags can be removed by someone other than the person(s) who owns them:
 - a. After the actions described in section 1) and 2) have been taken, and
 - b. After the Plant Department Maintenance Coordinator or Plant Manager responsible for the facility authorizes the supervisor to remove them.
- 4) In every situation where locks and tags are removed by a person other than the person who installed them, the school supervisor performing the removal is responsible for the following:

- a. Completing an incident report or initiating a full investigation, depending on the circumstances surrounding the incident.
- b. Communicate the change in status of the equipment to the entire people schedule to work on or near the equipment.

Personal Locks:

- 1) The following criteria is used in selecting these locks:
 - must be a keyed lock (keyed differently)
 - should be durable and of good quality
 - should be corrosion resistant
- 2) Personal locks must be kept personal. Keys must not be given to another person.
- 3) A white Danger tag must always accompany a personal lock when the lock is used as described in any Lockout Procedure.

4) Lockout Procedure Audits:

- 1) The attached form is used when conducting lockout audits on site.
- 2) Completed forms are to be forwarded to the Manager of Plant Services when they are completed.
- 3) Maintenance Working Foreman and or Head Custodians to perform audits on Contractors and or Sub-Contractors.
- 4) Maintenance Coordinator to perform audits on SGDSB staff and or Contractors.

LOCK OUT PROCEDURE AUDIT FORM

LOCATION:
DATE:
NAME:
EMPLOYEE NUMBER:
SCHOOL SUPERVISOR:
DEPARTMENT:

TYPES ENERGY	OF	ENERGY SOURCE IDENTIFIED	PERSONAL LOCKS IN PLACE	WHITE DANGER TAG IN PLACE	COMMEN T	OTHER DEVICES IN PLACE
ELECTRICAL						
MECHANICAL						
HYDRAULIC						
PNEUMATIC						
THERMAL						
GRAVITY						

IS THE LOCKOUT PROCEDURE BEING FOLLOWED FR THE TASK BEING DONE?

YES NO

ARE THE GENREAL OR SPECIFIC STANDARDS/PROCEDURES IN PLACE TO ENSURE THE SAFETY OF WORKERS?

YES NO

ARE THESE STANDARDS/PROCEDURES BEING FOLLOWED?

YES	NO
-----	----

COMMENTS:

PERSON(S) CONDUCTING AUDIT:

4) Mobile Equipment Electrical Lockout Procedure:

- 1) The first person locking out a given piece of mobile equipment (genie lift, lifting equipment, custodial equipment etc..) must lock out the master switch, male plug end and the electrical control panel breaker by installing his/her personal lock and a complete white danger tag where required.
- 2) Worker must test to make sure the mobile equipment cannot be started before commencing work. Stored pressure must be released from all hydraulic, air or water systems before systems are worked on.
- 3) The personal lock and white tag shall be attached to the master switch, control panel and the male plug on the equipment's permanent trailing cable.

5) Equipment Testing and Troubleshooting Procedure:

This equipment testing procedure is a form of personal protection for workers. When testing or troubleshooting is required, the following procedure is to be followed to ensure the safety of workers and to limit unnecessary equipment damage.

Testing / Adjusting / Troubleshooting procedure at superior Greenstone District School Boards incorporates the use of a white warning

When equipment's power is used to "Adjust, Measure or Position", the White Warning Tag shall be used.

When either the master switch, or the electrical disconnect is turned on, person(s) must attach a completed **White Warning Tag** to the source(s) to identify testing / troubleshooting.

While testing, adjusting or troubleshooting is in progress, no other work will take place until testing or troubleshooting is completed.

When testing or troubleshooting is completed, the **White Warning Tag** must be removed and equipment locked out to make repairs.

When working on equipment with more than one energy source, a lock and personal tag may be used to isolate one source, while testing/troubleshooting is being performed on another part of the equipment.

6) Energy Management Systems – Delta Controls Procedure

All SGDSB schools currently each have a Delta Energy Management control system installed and administered by the SGDSB Plant Department Maintenance Coordinator, Plant Manager and John McCready of Great Northern Controls:

These systems are mainly used for night setback purposes and are not controlling the entire building control system in most cases. Local room thermostats will most often still provide room temperature control.

When problems with room temperature or fan unit operation are encountered it is important that they are approached in the following method:

- <u>Safety First!</u> Never assume that a fan, pump, or heating element that is not running will stay that way while you work on it. Lock out procedures must be followed for <u>all</u> equipment. When a fan or other equipment is under the control of an Energy Management System we <u>only</u> interrupt control voltage level signals. Breakers and the main power supply remain the same as before the Energy Management System went in, so, *Lock and Tag out!*
- 2) Check the room thermostat to ensure it has not been set wrong. Many baseboard heaters and reheat coils operate independent of Energy Management Systems.
- 3) Test Voltage meter on a known power source. Test, de-energize and test again (blown fuse in a meter will give no potential difference)
- 4) Check voltage supply to Energy Management Panels. Power supply to panels must be 110-124 volts.
- 5) Check the breakers and fuses that feed the heating, cooling and ventilation system.
- 6) Check your air compressor if a pneumatic control system is used. Many <u>overheat</u> problems are caused by air system failure. Listen for air leaks in control piping; Make sure air tanks are not full of water, check belts, internal overloads and manual resets are not tripped.
- Check filters and change them if they are dirty. Dirty filters are the main cause of complaints of stuffiness. Check heating and cooling coils and clean them if they are plugged.
- 8) If all the above steps have been carried out and the problem still exists then call me at the Red Rock Board Office 1-807-886-9998, or my cell phone at 807-229-5205. I may be able to check your system remotely and advise you.
- 9) Failing getting a hold of me, call Wayne Chiupka at the Marathon Board Office1-807-229-0436 ext 228, or his cell 807-229-7379. Final approach John McCready from Great Northern Controls at 807-345-5300 office or cell 1-807-627-5913 and he can check the system remotely and advise what action to take.

7) Procedure for Troubleshooting Circuit Breakers when tripped on a fault or suspected fault

- 1) Do not attempt to reset until the fault is cleared.
- 2) Turn off all loads

- 3) Isolate power to faulty circuit breaker and lock out isolation switch / breaker
- 4) Check load side for faulty circuit or equipment to this circuit.
- 5) If no fault is found or suspected, then remove lock and tag and turn isolation switch / breaker back on.
- 6) Turn load back on.
- 7) If all okay, turn main breaker back on first and then all secondary breakers one at a time. Apply load in an orderly sequence.
- 8) If breaker trips again contact a certified electrician to check inside electrical panel for loose connection(s), bad contacts or mechanical defect and contaminants. Check continuity on contacts for open or high resistance (breaker in closed position).
- 9) If breaker has to be changed, tag breaker as per lockout procedure.

8)Procedure for Working In Live Control Panels:

Fire alarm panels, instrument panels, telephone systems and energy management systems are used to control stationary equipment on site. These panels are usually located in large cabinets. On occasion wires must be installed or removed from the terminal blocks to assist in live troubleshooting or equipment addition / removal.

Electrical work within the cabinet does not require a complete power outage inside the enclosure for the following reasons:

- 1) there are no exposed 208 volt or greater bus bars
- 2) potential fault current is very low
- 3) distribution panels are not control panels (i.e.: lighting/power panels)

Before work starts in a control cabinet, the voltage potential must be identified. Use specific procedure "A Testing Live Electrical Circuits".

If the voltage is greater than 150 volts to ground, then no work is allowed inside the panel without gloves. If a barrier can be installed to isolate the voltage sources, then work can proceed without gloves.

If, for some reason, you need to work beyond the limits of this procedure, contact the Plant Department Maintenance Coordinator or Plant manager.

9) Procedure for Testing Live Electrical Circuits:

Definition of "testing" as it applies to live electrical equipment:

There are times when electrical personnel are required to troubleshoot testing to be done with electrical circuits and equipment energized. Testing, in this context, is defined as the use of a meter device to determine voltage, current and/or resistance readings towards identifying problems with electrical equipment.

Testing for the purpose of troubleshooting does not include any repair or construction work which might be required to return equipment to regular operation condition.

Normal repair or construction work on equipment can only be done after the equipment has been de-energized and all lockout procedures have been followed.

Certified Electricians are the only workers authorized by SGDSB to enter live electrical panels (lighting panels, power panels), install new electrical circuits and equipment.

This applies to any voltage

RESTRICTED/CONFINED SPACE

Recognizing a Confined Space

A sign often identifies confined spaces, but this may not be the case where access is controlled.

Confined spaces may include, but are not limited to, sewers, tunnels, manholes, utility vaults, piping, storage tanks, process vessels, pits, excavations, and other similar type of enclosures.

Each confined space will require a hazard assessment and development of a plan to determine the precautions to be taken.

Confined spaces at SGDSB are identified on the confined space audit drawing.

No entry or work in a confined space can commence without a written, approved Confined Space Entry Permit and reviewing the SGDSB Health & Safety Reference Manual.

Contractors, Sub-Contractors must submit certificate of Confined Space training

Restricted & Confined Space entry permits, locations, drawings, procedure and the SGDSB Health & Safety Reference Manual are available from the school Head Custodian or Maintenace Working Foreman



CONFINED SPACE ENTRY PROGRAM

I OBJECTIVES

The Superior Greenstone District School Board (SGDSB) Confined Space Entry Program supports SGDSB's Occupational Health and Safety Policy and recognizes the potential confined space hazards at facilities throughout the district. The Program allows for the following:

• Identification of locations or situations where confined space entry and work is required.

• Safe installation, inspection, maintenance, and repair of equipment and facilities by workers where there is a risk of a hazardous atmosphere caused by the construction, location, contents, or work activity within it.

• Use of an entry and work permit system to ensure that only authorized and trained personnel enter a confined space.

• Training and education of workers who supervise or perform work in a confined space.

• Compliance with the requirements of the Occupational Health and Safety Act of Ontario and the relevant regulations and industry standards.

II PHILOSOPHY

Confined spaces are present at SGDSB facilities and must be entered by employees during the course of their work. The hazards associated with confined space entry pose the risk of serious injury to employees who are not properly trained or equipped to deal with them safely. The development and implementation of a Confined Space Entry Program will allow workers to do their work in greater safety and will reduce the risk of an accident in a confined space.

III PROGRAM REVIEW

The SGDSB Confined Space Entry Program shall be reviewed once every two years in consultation with the Joint Health and Safety Committees.

IV STANDARDS AND REGULATIONS

Confined space requirements are established by the Ontario Ministry of Labour in the Regulations (Ontario Regulation 632/05), made under the Occupational Health and

Safety Act.

V DEFINITION AND CLASSIFICATION OF CONFINED SPACES

A confined space means a fully or partially enclosed space that is not both designed and constructed for continuous human occupancy and in which atmospheric hazards may occur because of its construction, location or contents or because of work that is done in it. If there is a space that is fully or partially enclosed, the previous two conditions must both apply before the space can be considered a confined space.

Workspaces such as offices, classrooms, gymnasiums, maintenance rooms, control rooms, etc., are obvious places that are designed for humans to occupy for long periods of time (continuously). These spaces are not considered a confined space, regardless of the atmospheric hazards that may occur in them.

Some examples of spaces that would not be considered as "both designed and constructed for human occupancy" are:

- Storage tanks, process vessels, boilers, bins, silos and other tank like compartments usually having only a manhole for entry
- · Open topped spaces such as pump wells, pits or degreasers
- · Pipes, sewers, ducts and similar spaces
- Flues, chimneys, ovens or furnaces

If it is not obvious as to whether a space is or is not designed for continuous human occupancy, consider whether or not there may be an atmospheric hazard present because of its design, construction or location and the work to be performed. If it is determined that no atmospheric hazard may occur, then the confined space provisions would not apply in any case and the human occupancy question need not be considered.

Atmospheric hazard means the accumulation of flammable, combustible or explosive agents, an oxygen content in the atmosphere that is less than 19.5 per cent or more than 23 per cent by volume, or the accumulation of atmospheric contaminants, including gases, vapours, fumes, dusts or mists, that could result in acute health effects that pose an immediate threat to life or interfere with a person's ability to escape unaided from a confined space.

Sources of atmospheric hazards may include:

• Previous contents of the space.

• Atmospheric hazards generated from chemical reactions of materials present in the space.

• Activities performed in or about the space.

• Hazardous contaminants that may inadvertently enter into the space from adjacent processes or locations.

Control measures, such as continuous mechanical ventilation to ensure that the concentrations of an atmospheric hazard are controlled or maintained at an appropriate level, would not eliminate the possibility of a potential atmospheric hazard. This space would be considered a confined space. If measures are implemented to eliminate the

possibility that any atmospheric hazards may occur in a space, then the confined space provisions would not apply. If workers must enter the confined space to eliminate the hazards, then the regulations would apply during the elimination process.

VI ROLES AND RESPONSIBILITIES

This section outlines the responsibilities within SGDSB for implementation of the Confined Space Entry Program.

1. Management

Management has the primary responsibility for controlling access to and authorizing work in confined spaces. This responsibility applies to work performed by SGDSB employees or contractors hired by SGDSB. Management is also responsible to ensure that all employees who are required to work in a confined space are trained.

2. Supervisors

Supervisors must be familiar with the requirements of this Program and ensure those employees or contractors under his/her supervision understand the general and specific procedures and know how to conduct their confined space tasks in accordance with this Program.

3. Employees

University employees who are required to enter and perform work in confined spaces shall work in accordance with this Program.

4. Contractors

Individuals contracted to enter and perform work in confined spaces shall comply with legislative requirements and shall work in a manner that is consistent with SGDSB's Occupational Health and Safety Policy and SGDSB's Confined Space Entry Program.

VII IDENTIFICATION AND INVENTORY OF CONFINED SPACES AT SGDSB

All confined spaces at SGDSB must be identified. The individual departments in conjunction with the relevant Joint Health and Safety Committees/Representative should develop this inventory.

For each identified confined space, the types of hazards that may be present should be considered.

There may be some hazards that will always be present in any given space. However, there will be situations where hazards are introduced to the space as a result of the work being conducted. This may include activities such as hot work, painting, coating, using solvents, sandblasting, etc. This document will provide general procedures for entry, work and emergency in a confined space.

Once a confined space has been identified, it must be properly signed (see example in Appendix III) to warn against unauthorized entry and work.

VIII CONFINED SPACE HAZARDS

The following are some of the general categories of hazards that may be encountered in confined spaces:

Oxygen deficiency/oxygen enrichment

- · Flammable, combustible or explosive agents
- · Toxic air contaminants, smoke, fumes, and dusts and corresponding OELs
- Residual chemical/materials
- Ignition hazards, including hot work, tools, and other potential source of ignition
- · Chemical contact hazards, including acids, alkalis

• Physical hazards, including mechanical hazards, thermal stress, humidity, radiation, noise and vibration, working/walking surfaces, engulfing material, physical obstacles, poor visibility

- Electrical hazards, including lines and cables, exposed terminals
- Traffic hazards, including pedestrian, mobile equipment
- Biological hazards, including animals and biological agents

• Other hazards related to the confined space, including piping/distribution systems, pressurizing fluids, any type of uncontrolled energy (water, liquid, vapour, electric, magnetic, gaseous, etc.), limited access and egress

IX EDUCATION AND TRAINING

All SGDSB employees who are required to work in confined spaces as well as those SGDSB supervisors who authorize work in confined spaces shall receive appropriate training. All contractors who are contracted to perform work in confined spaces at SGDSB must be familiar with the requirements of the Confined Space Entry Program. In addition, contractors must provide proof of training before performing work in confined spaces at SGDSB.

In addition to the training above, all attendants who remain outside of the confined space shall be trained in standard first aid and cardiopulmonary resuscitation (CPR).

X PRE-ENTRY AND PROCEDURES

This section outlines the general procedures to be followed prior to entry into the confined space. Individual departments may develop their own specific procedures.

1. Lockout and Tagout Procedures

- Disconnect all power for all mechanical equipment in the confined space.
- Lockout the main disconnect switch and controls to prevent accidental start up.

• Neutralize and lockout other power sources including steam, mechanical, gravity, compressed air, etc.

• Double-isolate valves.

• Blank-off all lines and systems that let hazardous materials into the confined space. Simply closing out a valve does not provide adequate isolation. Unless the valve is locked out, it could be opened and/or may leak.

· Alternatively, for high-pressure steam, natural gas, compressed air, high and low

pressure condensate, #2 fuel oil, propane, and treated cold water, use a double-block and bleed system.

• Block equipment parts that might move.

2. Air Monitoring

Because the majority of the atmospheric hazards which may be encountered in a confined space are not visible and because reliance on the sense of smell is far too risky, it is important to conduct air monitoring prior to entry into and while working in a confined space. Air monitoring for oxygen, flammables and toxics (in that order) must be performed by a qualified (i.e., "competent") person. This qualified person should fully understand the applications and limitations of air monitoring equipment and be trained in the proper operation, calibration and maintenance of such equipment. The following procedures shall be followed:

• The confined space meter must be "bump tested" regularly – prior to each use is advised. That is, it should be connected to a cylinder with known concentrations of the applicable gases to verify that the meter is detecting these gases accurately. If it is not, the meter must be calibrated prior to use. All such testing should be documented in a designated logbook.

• The air must be tested prior to entry into the confined space and the test results must be recorded on an entry permit (see Appendix II).

• In performing the air monitoring, oxygen levels must be tested first, then flammables/combustibles since many flammability meters won't work if the atmosphere is oxygen deficient. Lastly, test for toxics such as carbon monoxide and hydrogen sulphide.

• Test all vertical levels of the space (i.e., the top, middle and bottom). Also, check as much of the space's horizontal area as possible. Contaminants that are heavier than air (e.g., hydrogen sulphide) may stratify and settle near the bottom **of the space**.

3. Testing for Oxygen and Flammable/Combustible Materials

• When testing for oxygen, the concentration should be between 19.5% and 23%. A space is considered oxygen-deficient if the oxygen concentration is below 19.5% and a space is considered oxygen-enriched if the concentration exceeds 23%.

• When testing for flammable and combustible gases and vapours, the concentrations should not exceed 10% of LEL (cold work) or 0-1% of LEL (hot work).

• Testing for flammables/combustibles shall be conducted after testing for oxygen is performed.

4. Testing for Toxics

Testing for hydrogen sulphide and carbon monoxide should be performed next. If there is reason to believe that another toxic material may be present, contact the supervisor. Do not enter the space until the problem is identified and controlled. The airborne concentrations should not exceed the following:

Carbon Monoxide: 35ppm

Hydrogen Sulphide: 10 ppm

Continuous air monitoring is necessary to make sure that the atmosphere remains safe for the occupants of the space. The air monitors should be worn by the entrant at all times.

5. Ventilation Procedures

Atmospheric hazards in confined spaces are often controlled by purging (i.e., supplying air to the space in order to replace the hazardous atmosphere) and ventilating the space.

Ventilating is the process of continuously moving fresh air through the space. Ventilating helps maintain an adequate level of oxygen in the space, dilutes or removes toxic air contaminants that may be found or generated in the space, and improves comfort levels by controlling temperature, humidity and nuisance odours.

There are two types of ventilation systems: exhaust ventilation that draws contaminated air out of an area and supply ventilation that blows fresh air in. Supply ventilation is best used to provide fresh air for the occupants and to control low concentrations of materials that are not highly toxic. Generally, exhaust ventilation is preferred when the atmosphere could be flammable or toxic.

Additional tips for ventilating a space safely are as follows:

1. With either general or local ventilation, always ventilate with fresh air - never with pure oxygen.

2. All electrical equipment shall be grounded.

3. In a flammable atmosphere, ventilation equipment shall be electrically bonded to the confined space.

4. Ensure that the intake for the air supply is located far away from any flammable or toxic materials.

5. Position the exhaust outlet such that contaminants cannot be drawn back into the confined space.

6. Place the outlet where air currents will disperse the exhaust quickly, without endangering nearby people.

7. If the exhaust is potentially flammable, remove all ignition sources from the area.

8. As a general rule, ensure a supply of fresh air while working in the confined space.

It is also important to ensure that the space is being ventilated effectively. The ventilation must provide constant circulation of fresh air through all areas of the confined space.

6. Fire and Electrical Safety

Safety measures to follow are outlined below.

• Eliminate all ignition sources from the confined space.

• Eliminate gas cylinders from the confined space (except for breathing air cylinders).

- Ensure that fire-fighting equipment is nearby.
- Use ground-fault circuit interrupters on electrical equipment for added protection.
- · Use properly guarded lighting and low voltage electrical equipment.

7. Work Permit Practices and Procedures

The workplace must have a permanent record that authorizes safe confined space entry. A confined space entry permit system ensures that the potential hazards of a particular confined space have been identified and assessed, that necessary preventive measures are in place, and that workers are aware of and/or reminded of the correct safety procedures (general and specific) prior to entry.

(i) SGDSB Confined Space Entry Permit

The Permit must be completed, authorized and signed by the relevant supervisor or his/her designate. In the case of an emergency, authorization may be given to workers verbally and should be documented as such by the workers.

The Permit must include the following information:

• Date, time, location, and unique identification number;

• Type of work to be done, consideration of the type of hazards that might be encountered and the appropriate procedures and equipment to be selected;

- Air monitoring results;
- Name of confined space entrant(s) and attendant; and
- Advance planning and knowledge of general and specific emergency rescue procedures and authorization by the supervisor.

Notification of the intended work should be provided to SGDSB at least 24 hours prior to the anticipated start of work. In the case of emergency, it should be submitted to SGDSB as quickly as possible following completion of the work. In either case, a received copy of the confined space entry permit will constitute proper notification.

(ii) Contractor Confined Space Entry Permit

This is an external Permit that is used strictly when outside contractors are performing work. The Contractor permit requires the contractor's supervisor to review and authorize the permit for his/her employee(s). In addition, the SGDSB contact person (i.e. the person who hired the contractor) must also sign the permit to authorize the specific work that the contractor will perform. The contact person must ensure that this work will be done in accordance with SGDSB's Confined Space Entry Program.

8. Posting and Record Keeping

The SGDSB confined space entry permit is dated and is valid only for the work to be performed during that time period. It should be posted outside the space while the work is being conducted. Upon completion of the work, the expired permits should be returned to the relevant area supervisor or contact person and kept on record by the issuing department for a minimum of three years.

9. Equipment and Supplies

All required equipment and supplies for entry must be readily available at the confined space site and must be in good working condition. Particular care is required to ensure that the means of ingress and egress from the confined space will not prevent or adversely affect the proper use of these items.

Considerations include, but are not limited to the following:

• Appropriate personal protective equipment depending on the situation. This could include items such as hardhats, safety glasses, boots, hearing protection, gloves, etc.

• Properly calibrated and maintained air monitoring equipment that should be calibrated annually and bump tested prior to each use. A calibration and maintenance log should be kept.

• Appropriate communication device for attendant/worker communication.

• Equipment such as barricades, ventilator/exhaust unit, flashlight, and tools appropriate for the confined space work.

10. Hazard Identification

Entrants should perform a visual inspection of the confined space to determine whether there are physical hazards of which the entrants should be aware (i.e., rusty or missing ladder rungs, deep water, slippery surfaces, trip hazards, etc.).

Once the potential hazards in the space have been identified and the entrants take all necessary steps to protect themselves, the supervisor must sign the confined space entry permit and the work can commence.

XI ENTRY PROCEDURES FOR CLASS II CONFINED SPACES

1. General Entry Procedures

A confined space entry permit is issued by the supervisor responsible for the confined space to be entered. All personnel entering or working in a confined space must be familiar with the correct procedures for safe entry, work and rescue.

A safe means of entry to and exit from the confined space must be established prior to commencement of the work. In addition, any necessary lockout/tagout procedures or other safety procedures must be performed prior to commencement of the work.

Prior to a confined space entry, workers should review the specific emergency procedures and ensure that all equipment and devices required in the event of an emergency are ready for action.

2. Attendant

An attendant must be stationed outside of the confined space at all times. The attendant prevents unauthorized entry into the confined space and gives his/her undivided attention to the worker(s) inside the space. The attendant should be trained in standard first aid and CPR.

3. Communication

A means of communication must be established between the entrant(s) and the attendant

while work is being performed in the confined space (e.g., visual, verbal, portable radio or other). The attendant must have a portable radio or phone and be familiar with the emergency response procedure for SGDSB.

4. Air Monitoring

Before anyone enters the confined space, a qualified person must test the atmosphere for the following:

- 1. Oxygen levels
- 2. Flammable and combustible materials
- 3. Toxics (carbon monoxide, hydrogen sulphide or other hazardous chemicals)

Record the air monitoring results on the confined space entry permit. If air monitoring indicates that the confined space has unacceptable concentrations of oxygen, flammables and/or toxics, ventilate the area using a blower or similar ventilating unit for a period of 15 minutes. Ensure a minimum of four volume changes of fresh air within the 15-minute period (i.e. 16 air changes per hour). This can be calculated as follows:

Flow rate of air blower

(L/hr or L/min, m³/hr or m³/min, or ft³/hr or ft³/min) = Number of air Approximate volume of room changes per hr (L, m³ or ft³) or per min.

Ensure the proper placement of the intake of the ventilation unit so that only fresh, uncontaminated air is introduced into the space (i.e., ensure nearby vehicle or equipment exhaust is not entrained).

After this ventilating period, the qualified person shall then retest the air and record the results. If the atmosphere is acceptable, the confined space entry may proceed. If not, ventilate the space for another period of 15 minutes, as above, and retest until the atmosphere is acceptable. Continue to ventilate for the duration of work in the confined space.

Workers entering the confined space shall wear or carry an air monitoring device with alarm to provide early warning of changing conditions.

After leaving the confined space (e.g., for breaks, lunch, to get tools, etc.), it is necessary to retest the air prior to re-entry into the space. Note that there are extra columns in the air monitoring section of the confined space entry permit for inputting the re-test results. If conditions have changed and rendered the space unsuitable for human occupancy, the space must be ventilated and re-tested until the atmosphere is acceptable.

5. Time of Entry

Wherever possible, confined space entry should only be performed during regular working hours. In the case that emergency work must be performed in a confined space, verbal authorization can be provided by the area supervisor.

A confined space entry permit can be valid for periods longer than one shift, provided the pre-entry procedures are followed (e.g., air monitoring, lockout, etc.) and the air monitoring results are documented and approved by the supervisor.

Post the permit at the entry to the confined space.

6. Site-Specific Entry Procedures

These space specific entry procedures shall supplement standard procedures for Confined Space Entry as outlined in the Entry Procedures for Class II Confined Spaces above. Entry Precautions shall include the posting of a completed Confined Space Entry Permit (see Appendix II), protective equipment, review of an Emergency Rescue Plan and other precautions relevant to the specific location of entry.

Manhole, Catch Basin, Septic Tank, Holding Tank

- (i) Open the hatch/cover and secure in the open position or move out of area of work.
- (ii) Position winch/tripod at top of access to space (attendant remains in control of the tripod/winch until worker has safely exited).
- (iii) Complete atmospheric testing of the space.
- (iv) If levels are safe, worker dons harness (attached by a lifeline to tripod/winch outside the space), attaches monitor to his/her belt and enters space. Typical Confined Space Access
 - (i) Open the access door and secure in the open position.
- (ii) Complete atmospheric testing of the space.
- (iii) If levels are safe, worker attaches monitor to his/her belt and enters space.

XII EVACUATION PROCEDURES

Workers **MUST LEAVE** the confined space **IMMEDIATELY** in the case of any of the following:

- If they feel ill, light-headed, dizzy, or any pain.
- If the alarm sounds on the air monitoring equipment.

• If conditions in the confined space change such that re-evaluation of the potential hazards would be required.

• When the attendant is present but is unable to perform the duties of an attendant.

• When notified to evacuate by the attendant or entry supervisor or by evacuation alarm.

• When communication with the attendant is disrupted.

If available, an emergency escape breathing device (EEBD) should be used by the confined space worker while exiting the confined space.

XIII RESCUE AND EMERGENCY PROCEDURES

The employee, or attendant, OUTSIDE the space must closely monitor the employee inside and be prepared to respond quickly in the event of an emergency.

At any indication that an employee working INSIDE a confined space may be in difficulty, the employee assisting OUTSIDE the space will **NOT ENTER THE CONFINED SPACE.**

At the first indication of an emergency, the attendant must:

- Assist the worker out of the confined space should the employee be able to make it to the access point.
- If the employee cannot be removed from the space, or is in any medical difficulty, contact Emergency Services: dial 911, ask for the appropriate emergency service (i.e., paramedic, fire or police) then provide the details of the emergency and any other information that is asked.
- Contact SGDSB Maintenance Coordinator, Marc Paris: dial 807-229-5205, inform him that emergency services are en route and provide any additional information that is asked.

If a phone is not readily accessible, Administration can be contacted by pressing the emergency/panic button on the portable radios. Inform them of the emergency and that they should call 911.

The attendant shall perform any required first aid (including artificial resuscitation or CPR) until emergency services arrive.

The attendant should activate the fire extinguisher if necessary (and if safe to do so).

SGDSB

APPENDIX II

RESTRICTED ACCESS ENTRY PERMIT RESTRICTED ACCESS ENTRY PROCEDURE CONFINED SPACE ENTRY PROCEDURE CONFINED SPACE ENTRY PERMIT CONFINED SPACE CO-ORDINATION ENTRY PERMIT/DOCUMENT CONFINED SPACE ENTRY RECORD CONFINED SPACE HAZZARD ASSMENT FORM

Small Schools Make a Difference	PERIOR-	GREE	NSTON	EDISTRIC	Г SCH(OOL BOAF	8D	
DISTRICT SCHOOL BOM R	ESTRI	CTEI) ACC	CESS ENT	FRY	PERMIT	-	
Date & Time Issued:	/		Expires:_	/		_(8 hrs maxi	i mum)	
School:								
Permit Entry Location:			Purpose	of Entry				
Entrants Company:								
Entry Worker	•							
1:	2:			3:				
Attendant / Contact Person								
All Entrants, Attendant/ Cor YesNo List Hazard(s) of Space:		-						
YesNo							NO	
YesNo List Hazard(s) of Space:		Ē	Equipme				NO	
YesNo List Hazard(s) of Space: Calibrated Gas Monitor Lights		Ē	Equipme	nt Available Protective C Tools	lothing	YES	NO	N/A
YesNo List Hazard(s) of Space: Calibrated Gas Monitor Lights		Ē	Equipme	nt Available Protective C	lothing	YES	NO	
YesNo		Ē	Equipme	nt Available Protective C Tools Verify First	lothing	YES	NO	N/A
YesNo List Hazard(s) of Space: Calibrated Gas Monitor Lights Flash Light Communication Device Entry cannot	YES	F NO ed if any	Equipme N/A entries a	nt Available Protective C Tools Verify First	lothing Aid Kit	YES	NO	N/A
YesNo List Hazard(s) of Space: Calibrated Gas Monitor Lights Flash Light Communication Device Entry cannot	YES t be approve is permit is	H NO ed if any not vali	Equipme N/A entries a d unless	nt Available Protective C Tools Verify First Location re marked with all items are co	lothing Aid Kit	YES	NO	
Yes No List Hazard(s) of Space: Calibrated Gas Monitor Lights Flash Light Communication Device Entry cannot Th	YES t be approve is permit is <u>G:</u> Continu	F NO ed if any <u>not vali</u> uous & F	Equipme N/A entries a d unless Recorded	nt Available Protective C Tools Verify First Location re marked with all items are co	lothing Aid Kit n the "N omplete	YES JO" column. ed.		
YesNo List Hazard(s) of Space: Calibrated Gas Monitor Lights Flash Light Communication Device Entry cannot Th <u>TESTING & MONITORIN</u>	YES t be approve is permit is G: Continu 1	F NO ed if any not vali uous & F 2.	entries a d unless Recorded	nt Available Protective C Tools Verify First Location re marked with all items are co hourly	lothing Aid Kit n the "N omplete 4	YES		
Yes No List Hazard(s) of Space: Calibrated Gas Monitor Lights Flash Light Communication Device Entry cannot Th <u>TESTING & MONITORIN</u> Oxygen: 19.5% - 23% -	YES Image: state of the second sec	H NO ed if any not vali uous & F 2222222	entries a d unless Recorded	nt Available Protective C Tools Verify First Location re marked with all items are co hourly3	lothing Aid Kit n the "N omplete 4	YES		



RESTRICTED ACCESS ENTRY PROCEDURE

- **1.** Complete the Restricted entry permit.
- 2. Control all hazards.
- **3.** Set up barricades and warning signs as needed around entry point.
- **4.** Atmospheric testing to be completed before space entry & continuously, air testing device will remain with the entrant during entry. Ventilating may be required.
- 5. Inspect personal protective and safety equipment, as well as any equipment that could introduce a hazard to the space for example welding equipment if required.
- 6. Test radio communication equipment and stay in contact at all times.

RESTRICTED ACCESS EMERGENCY PROCEDURE

- **1.** The attendant or contact person, upon receiving an emergency call from the entrant(s) will contact the appropriate emergency unit, ex. Fire Department or Medical Unit.
- 2. The attendant or contact person will then stay in constant communication with the entrant(s) Medical Emergency
- **3.** If the injured entrant reaches the access point unaided emergency first aid will be performed until the medic arrives.
 - Fire Emergency
- 4. Once all personnel are out of the space it will be properly secured.

RESTRICTED ACCESS SPECIAL INSTRUCTIONS (if required)

- If WORK YOU ARE PERFORMING WILL ALTER AN ATMOSPHERIC CONDITION AND INTRODUCE A HAZARD THAN THE CONFINED SPACE ENTRY PROGRAM MUST BE FOLLOWED.
- A COPY OF ALL PERMITS WILL BE RETAINED AT THE SCHOOL FOR A MINIMUM OF TWO YEARS
- THIS FORM MUST BE FAXED TO THE SUPERIOR GREENSTONE DISTRICT SCHOOL BOARD MAINTENANCE COORDINATOR IMMEDIATELY AFTER THE WORK IS COMPLETED.

Entry is authorized	_(Attendant)
Entry is authorized	_(Entry Worker)
Date	



CONFINED SPACE ENTRY PROCEDURE

- 1. Complete the entry permit.
- **2.** Control all hazards.
- 3. Set up barricades and warning signs as needed around entry point.
- **4.** Atmospheric testing to be completed before confined space entry & periodically, air testing device will remain with the entrant during entry. Ventilating or purging may be required.
- 5. Ensure a qualified confined space rescue team is on site prior to entry.
- 6. Test radio communication equipment and stay in contact at all times.
- 7. The attendant shall keep a record of who enters and exits the space.

CONFINED SPACE EMERGENCY PROCEDURE

- **1.** The attendant, upon receiving an emergency call from the entrant(s) will contact the appropriate emergency unit, ex. Fire Department or Medical Unit.
- 2. The rescue team will then commence the rescue.

Medical Emergency

Once the injured entrant is extracted from the space on going care will be performed until EMS arrives.

Fire Emergency

Once all entrants reach the access point the access will be closed and all personnel will immediately vacate the building by the nearest designated exit.

A COPY OF ALL PERMITS WILL BE RETAINED AT THE SCHOOL FOR A MINIMUM OF TWO YEARS

A COPY TO MUST BE FAXED TO THE MANAGER OF OPERATIONS OR DESIGNATE

Strial Schools Make a Difference	Sup				one Distric PACE ENTI				
Date & Time Issued:	/	Ez	xpires:	/	School:				
Permit Entry Location:			Purj	pose of En	try				
Entrants Company:									
Entry Worker 1:		2	!:		3:				
Attendant:				_					
		ical	Water_		_Electrical _Other le/ Required				
		YES	NO	N/A			YES	NO	N/A
Calibrated Gas Monitor					Protective Clothin	ng			
Safety Harness & Lifeline					Ventilation				
First Aid Kit					Breathing Appara	tus			
Emergency Lighting					Tools				
Intrinsically Safe Equipment					Communication				
Entry of TESTING & MONITORI	This	s permit i	s not val	id unless	re marked with the " all items are comple		lumn.		
Oxygen: 19.5% - 23% -	1		2	3	4	5.			
Flammability: <10%LEL	1		_2	3	4	5.			
H2S Concentrations:	1		_2	3	4	5.			
Co Concentration:	1		_2	3	4	5.			
Additional Work Permits:	Hot	- Work_							
Entry is authorized					(Attendan	t Worke	r)		
Entry is authorized					(Entry Wo	orker/En	try supervi	sor)	



SGDSB CONFINED SPACE CO-ORDINATION DOCUMENT

Confined Space Location:						
Building (or Location on Grour	ıds):		Room:			
Name of Equipment or space	to be entered:		I			
Notes:						
Has a copy of SGDSB Confin employer does not have a JHS to each worker)				ers (contractors)? (If any space program must be given		
Yes No	<u> </u>					
Has a copy of the hazard assessment for the relevant confined space been given to all other employers (contractors)? (If any employer does not have a JHSC or H&S representative a copy of the hazard assessment must be given to each worker) Yes No						
	<u></u>					
Have all workers received pl	an specific tra	ainina?				
Yes No	-					
If Lock-out/Tag-out is to be	 performed hav	/e all workers recei	ived lockout Trainii	na?		
Yes⊡ No[5		
Attendants to be provided by	y Safety Net S	Security or other S	GDSB Approved Sa	afety Provider		
Yes No		-	-			
Atmospheric testing to be p	e rformed by (r	esults to be recorde	ed on Entry Permit) :			
Vertilation and Duraina (If re	ruinad) to be	formed by				
Ventilation and Purging (If re I have Received:	iquired) to be h	Jenomieu by.				
	1 A copy o	of SGDSB's Confined	d Space Program			
				e relevant confined space		
		in confined space e		Flevant commercia space		
Employer		Name	Signature	Date (mm/dd/yy)		
		<u> </u>	II			

Confined Space Locatior	1:	Date:	
Attendant Name:		_	
Company or Employer N	ame:		
Norker Name:	Employer/Contractor		Confirmation
		□In □Out	□In □Out
		□In □Out	□In □Out
		□In □Out	□In □Out
			\Box In \Box Out
		□In □Out	□In □Out □In □Out
		□In □Out	□In □Out
		□In □Out □In □Out	□In □Out □In □Out
		□In □Out □In □Out □In □Out	□In □Out □In □Out □In □Out
		□In □Out □In □Out	□In □Out □In □Out



CONFINED SPACE HAZARD ASSESSMENT FORM

Purpose:

This form is provided as an assessment tool to help Divisions develop specific Confined Space Entry Plans. It can be used as is or, if required, the hazard identification section may be modified to suit specific operational needs.

Definitions:

The definition of "confined space" is consistent across all regulations.

Confined Space means:

A fully or partially enclosed space

(a) that is not both designed and constructed for continuous human occupancy, and

(b) In which atmospheric hazards may occur because of its construction, location or contents or because of work that is done in it.

In order for there to be a confined space in the workplace, the two conditions (a) and (b) of the definition above must both apply. The only way to determine if a "space" meets the definition for a "confined space" is to evaluate it.

The definition of "atmospheric hazards" is consistent across all regulations.

Atmospheric Hazards means:

(a) accumulation of flammable, combustible or explosive agents,

(b) an oxygen content in the atmosphere that is less than 19.5 per cent or more than 23 per cent by volume, or

(c) the accumulation of atmospheric contaminants, including gases, vapours, fumes, dusts or mists that could,

(i) result in acute health effects that pose an immediate threat to life, or

(ii) interfere with a person's ability to escape unaided from a confined space.

Do You Have A Confined Space In The Workplace?

Is it designed & constructed for Continuous human occupancy?	Might an atmospheric hazard occur?	Is it a confined space?
Yes	Yes	Yes
Yes	Νο	No
No	Yes	Yes
Νο	Νο	No

Superior Greenstone District School

a CBr					
Stald Schools Make a	HAZARD ASSESSMENT FORM				
Division Name	e: Date of Assessment:				
Section Name					
1. CONFINED	SPACE CLASSIFICATION				
Upon completi assessment, tl	his space is				
considered:	□ A Non-confined Space (Restricted Space)				
2. SPACE LOO	CATION/DESCRIPTION				
Facility/Area Name:					
Location:					
Description of Location:					
Street Address:					
Space:	At Ground/Floor Level Indoors Below Ground/Floor Level Outdoors (give reference points & distance) Elevated Other (provide details) Details:				
No. of Access Standard Dwg Photographs A	s. Available?YES NOIf yes, Drawing Number:				
Means of Access Into Space:	Portable Ladder Existing Ladder Stairwell Above Ground, Hand Railing Provided Horizontal Elevated				
3. PROCESS/	Vertical Other: Vertical Other				
Identification o	f Work or Process:				
Chemicals/Ha	zardous Materials in Use?				
If Yes:	Chemical/Material Name / Supplier Name				
Waste Produc	Grequired at worksite YES NO ts/Sludge Present When Space is Emptied? YES NO O SPACE IS CARRIED OUT YES NO				
Primary	O SPACE IS CARRIED OUT Preventative Maintenance Cleaning				
Reason for Entry	Maintenance Repair Other:				
Frequency of	Daily Weekly Monthly Other:				
Entry 5. NOTIFICAT	I ION				
	be given to the affected department of service interruption and entry work :				
61					
01					

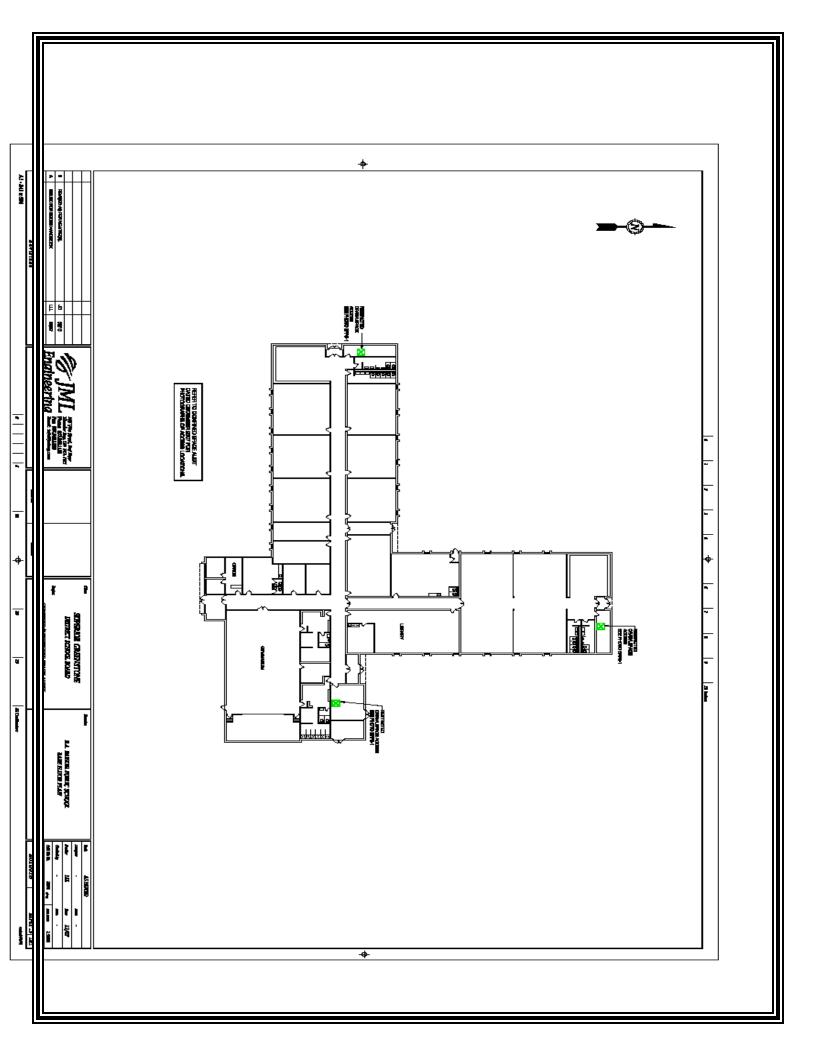
6. SITE CONTROL – Potential for Unauthorized Entry? Yes No If YES:
Barricades/Guardrails Rope/Warning Tape Warning Signs Secure Access Doors Traffic Protection Plan Other:
7. SPACE PREPARATION METHODS REQUIRED Yes INO IF YES:
Empty Purge Depressurize Ventilating Clean Cool Heat Other:
8. LOCKOUT / TAGOUT REQUIRED
Electrical Hydraulic Pneumatic Chemical Thermal Radiation Gravity Gases Chemical/ Fluids Blocking/ Cribbing Other:
Reference established Lockout/Tag out written procedure.
PIPELINE ISOLATION REQUIRED Yes No If YES:
□ Broken □ Blanked/ Blind □ Capped □ Vented □ Double Valve & Bleed □ Isolation Valve
9. HAZARD IDENTIFICATION
62

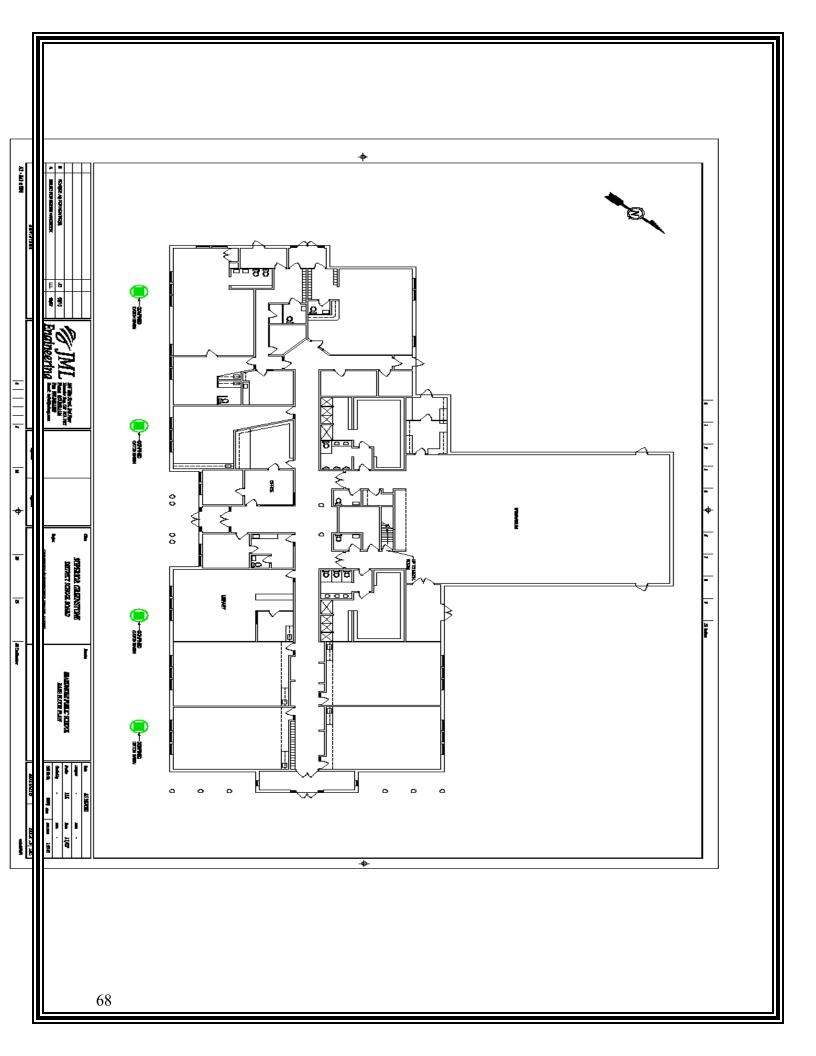
Atmospheric Hazards	Substandard Conditions/Hazards
Yes No	Yes No
Dargen Content: Chemicals or other substances absorbing or consuming oxygen, Nert gas displacing oxygen Oxygen consumed by welding or other processes, Rusting or Dargen Contents Lack of/Deficient < 19.5%	Limited Entry/ Exit (access/egress) Ventilation Systems Piping/ Distribution Systems Machinery Physical obstacles Temperature extremes (hot/cold) Humidity Residual chemicals/ materials Visibility Cramped or awkward body positions Noise Vibration / mobility of space Slippery or uneven surfaces Sludge, residues or seepage Hazardous animals/vermin Other: External Hazards Yes No Traffic / Pedestrians Machinery / equipment Work in neighbouring compartments Processes Terrain Weather Conditions examples: Other:
	Entanglement by Equipment Hazards Yes Inadequate lock out / tag out systems Equipment not chocked Pressurized systems not bled off Caught or entangled in equipment Other: Engulfment Hazards Yes No Breaking through crust Rock burst when tunnelling Mud / earth slide in trenches Flowing liquid/Pool of liquid

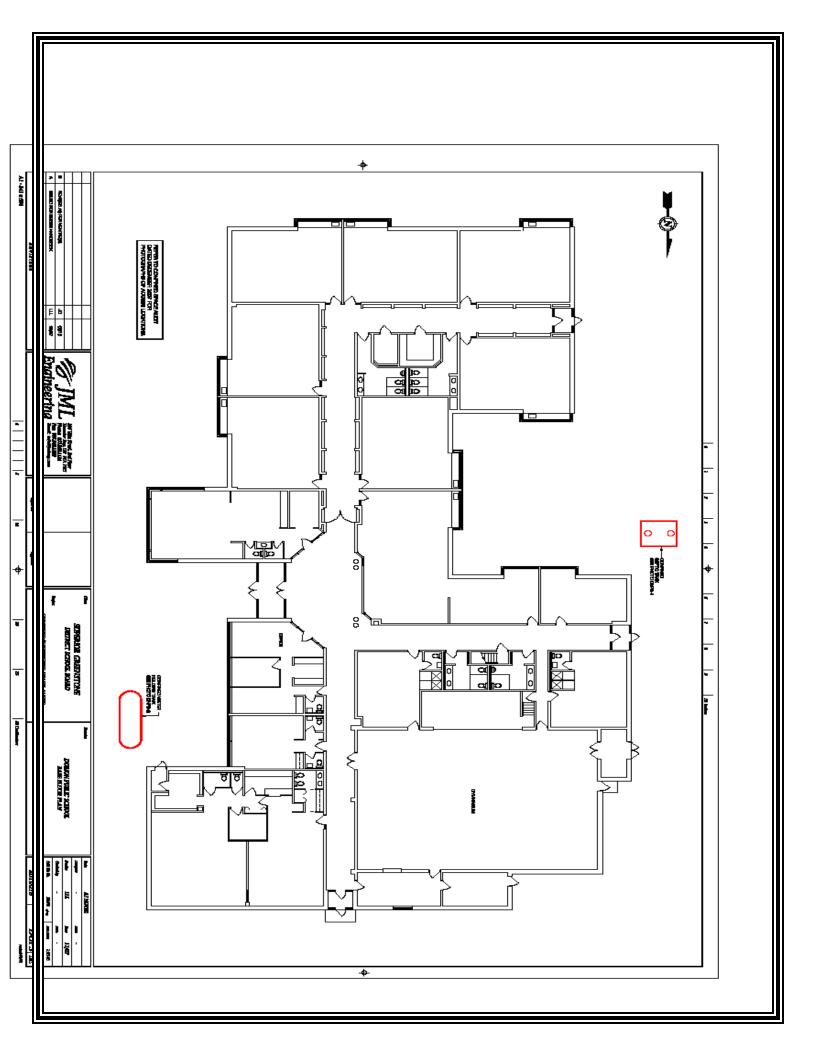
Hazardous Materials Yes No Original chemical/process contents Cleaning materials Animal or human sewage	Falling Object Hazards Yes No Kicked in unintentionally/Tools dropped in Material Crusts breaking off sides or top of space Other:			
10. HOT WORK				
Will Hot Work be performed? If Yes, then Hot Work Permit must be completed and accompany Entry ** NO SMOKING IS PERMITTED IN A CONFIN	ED SPACE AT ANY TIME **			
11. ELECTRICAL EQUIPMENT TO BE TAKEN INTO SPACE?	Yes D No If YES:			
Interrupter (GFCI)	w Voltage Ground Fault Circuit			
	plosion Proof Equipment Other:			
12. ILLUMINATION – Is Temporary Lighting To Be Taken Into Space	e?			
 Portable Electric Safety Lamp Light Stations Light Stations Light Sticks Ex Lighting Provided within space String of Lights 	Battery Operated Lighting (ex. Flashlights) plosion Proof Equipment Others:			
13. ATMOSPHERIC TESTING REQUIRED FOR ENTRY Yes	□ No			
* Oxygen □ Continuous □ Periodic Monitoring * Combustible Gas □ Continuous □ Periodic Monitoring * Toxic □ H2S □ CO □ Continuous □ Periodic Monitoring				
PEL: H2S = 10 ppm, CO = 35 ppm GAS DETECTION EQUIPMENT/INSTRUMENTATION: 3-Gas Meter 4-Gas Meter 3-Gas Meter Accessories 3-Gas meter = % oxygen / % LEL / Toxic. 4-gas meter = % oxygen / % 14. RESPIRATORY PROTECTION Yes				
☐ Half Mask Air Purifying Respirator for:	Powered Air Purifying Respirator for:			
☐ Full Mask Air Purifying Respirator for: [Supplied Air-Line			
Self-Contained Breathing Apparatus (SCBA):	Other:			
15. PERSONAL PROTECTIVE EQUIPMENT REQUIRED:				
	rotective Clothing (type)			
🔄 Impact Goggles 🛛 Hard Hat 🔄 Pi	rotective Footwear			
	loves (type)			
□ Cutting Goggles □ Hearing Protection □ D □ Traffic Vest □ Other	ouble Hearing Protection			
*PPE requirements must be determined from the a	nctivity being performed within the			
Confined Space				
	Yes 🔲 No If YES:			
 Davit System / Tripod System Full Body Harness with "D" Ring Escape SCBA Barricades/ Guard Rails Other: 	ooks (type):			
64				

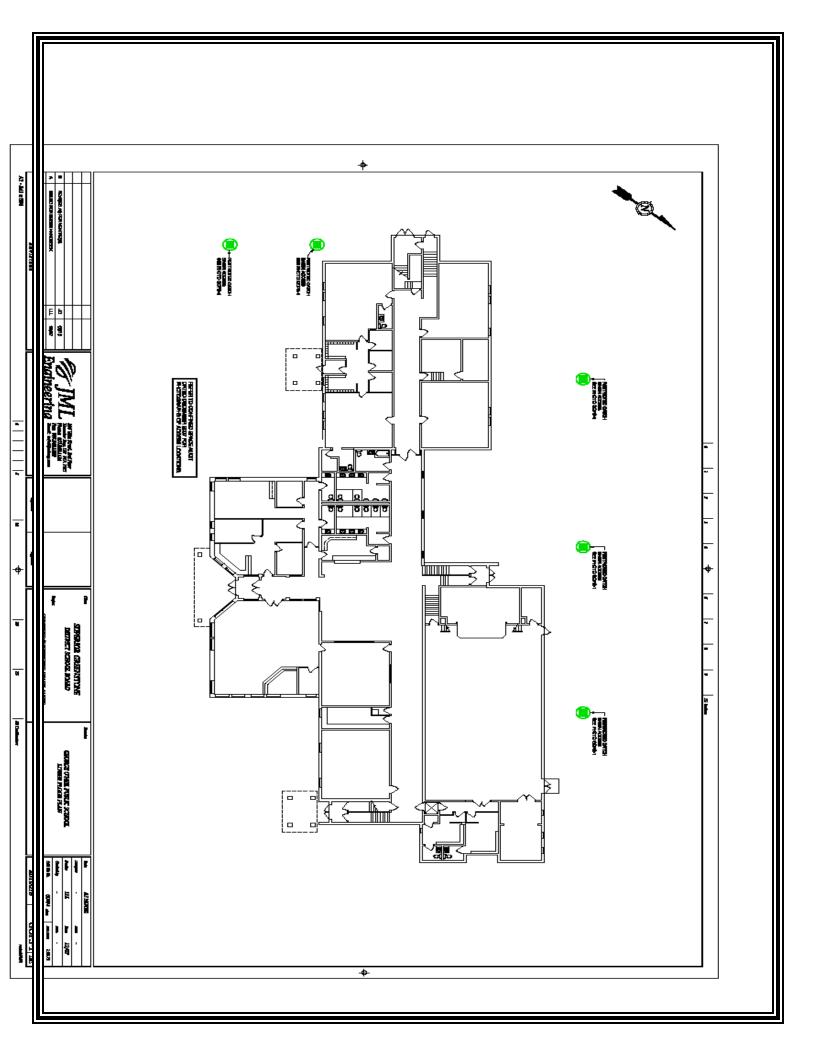
17 COMMUNICATION	EQUIPMENT Required Not Required	
	assigned whenever a worker is to enter a "Cor	
	Between Attendant and Entrant(s):	-
☐ Verbal (voice)	Radio Personal Communication	n Device (cell phone) Other:
Emergency	Portable Radio Tele;	phone 🗌 Walkie-talkie
Notification:	Emergency Telephone Number:	
	ocation of Nearest Working Telephone:	
	NNING – Will be conducted by a Certified C	Confined Space Becaus Brovider on an
Contractors must com commencing any wor workers trained prior t i) First aid/CPR ii) Use of rescue	actor may use other Certified Confined Sp pply with the Superior Greenstone District So k. Rescue Personnel must have the followin o entry: equipment appropriate for entry into the confin procedures, must be assigned.	chool Board Contractor Agreement prior ng qualifications and adequate number
Testing & Monitoring O: LELH2S	xygenFlammability<10% CO	
	S / REQUIREMENTS / OTHER NOTES (For add o end of this document)	litional attachments, identify in this space
*note – to insert ph	Photos (insert below) otos, form must be unprotected on forms toolbar	Comments (insert below)
65		

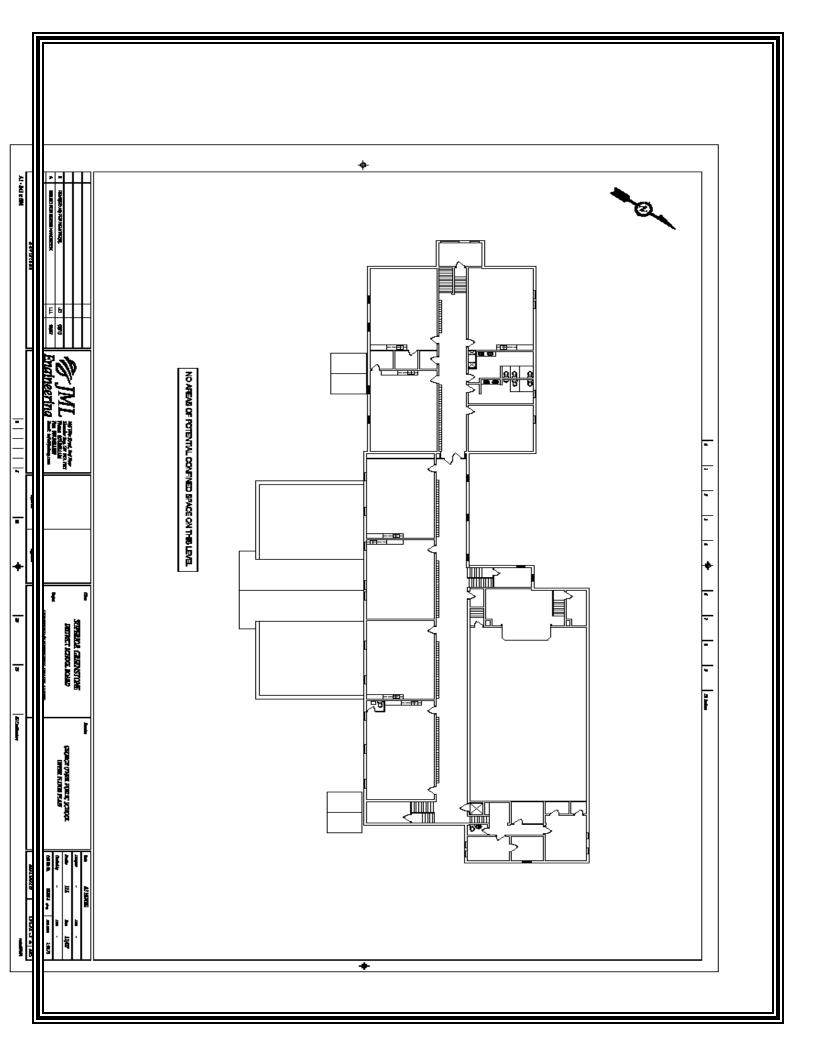
20. THIS ASSESSMENT PREPARED BY THE FOLLOWING COMPETENT PERSON(s): (Indicate Position) :	Name (print)	Signature	Date
21. REVIEWED & APPROVED BY :	Name (print)	Signature	Date
SGDSB Plant Services Manager:			

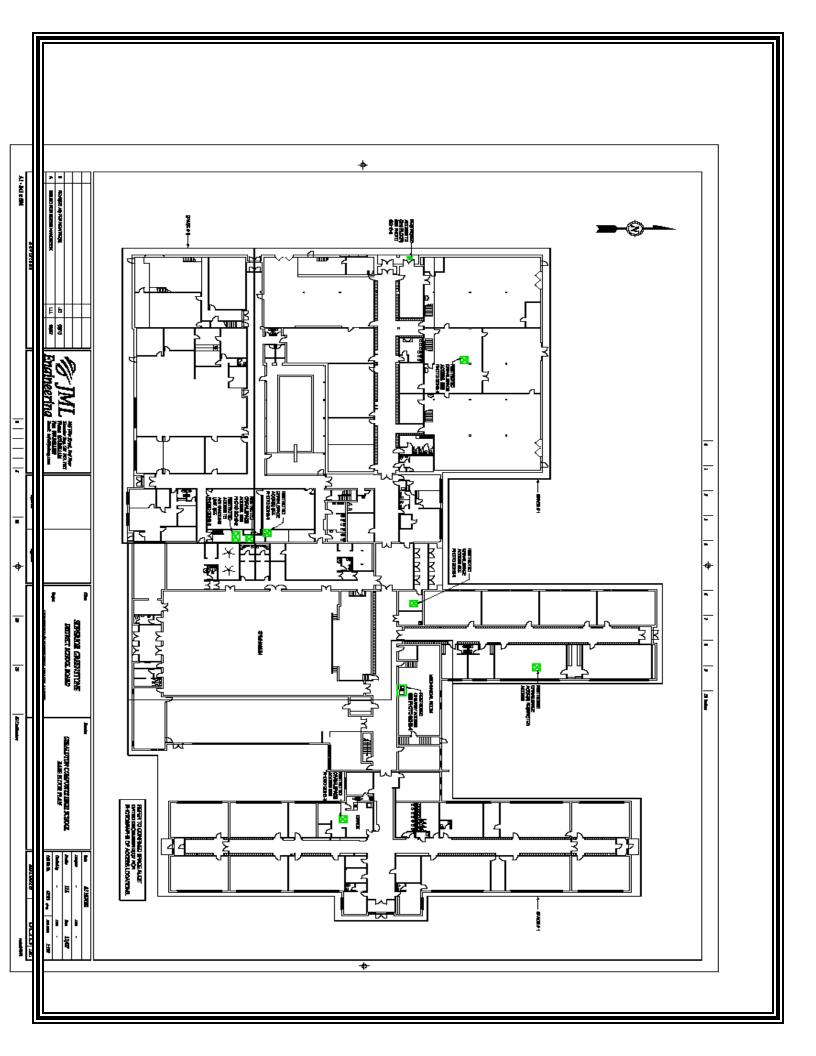


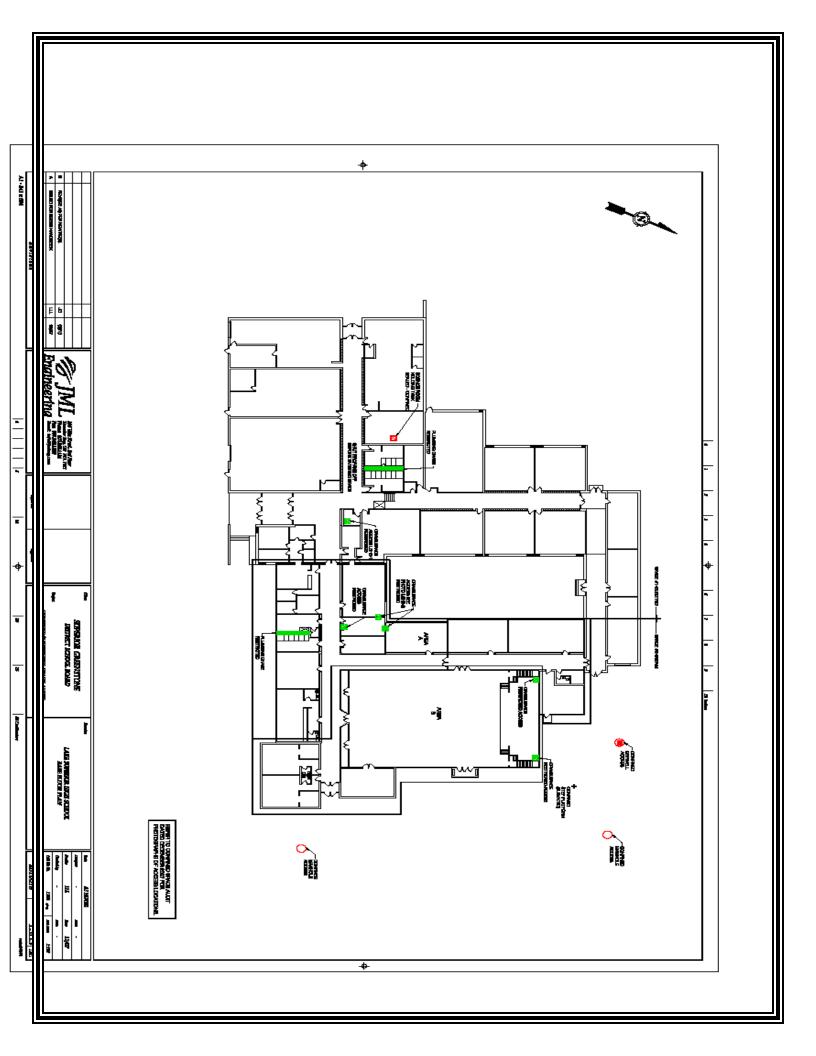


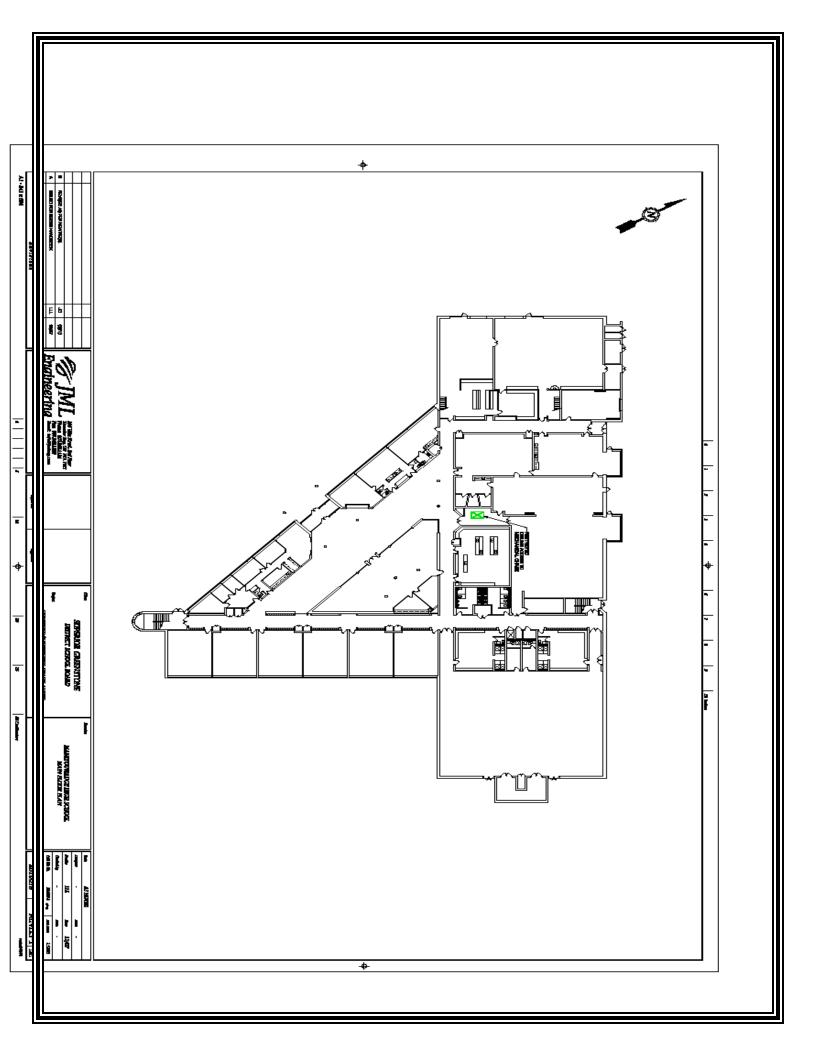


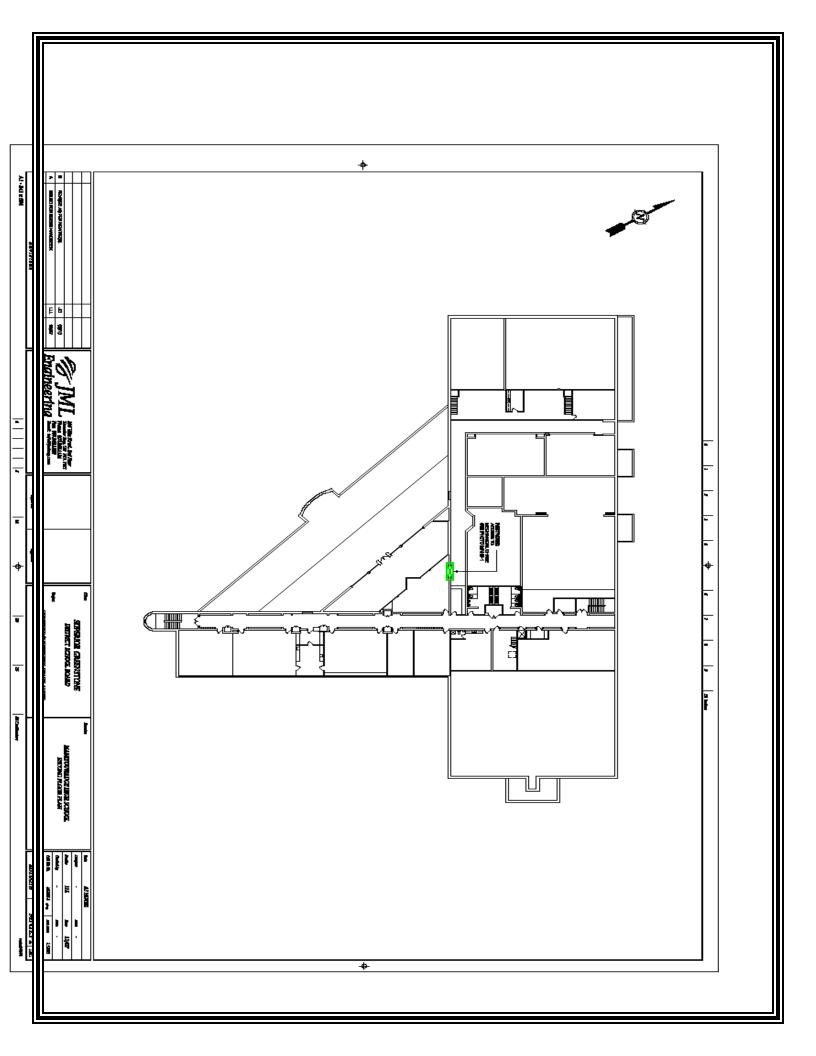


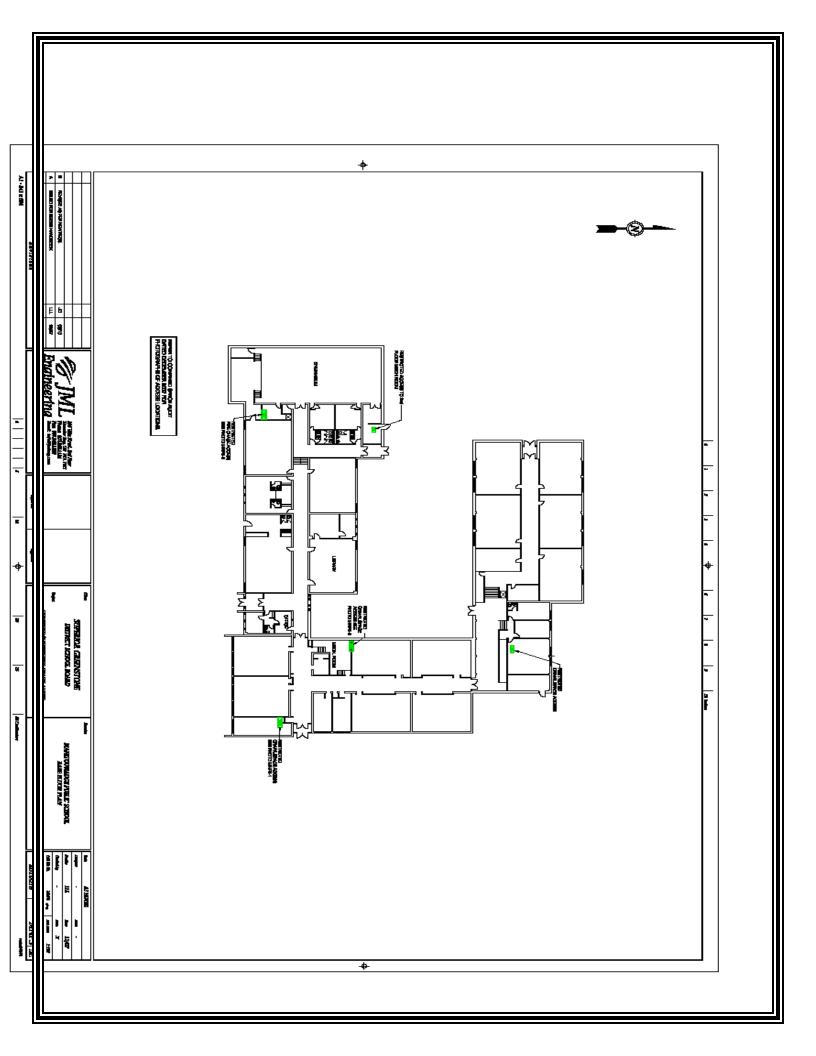


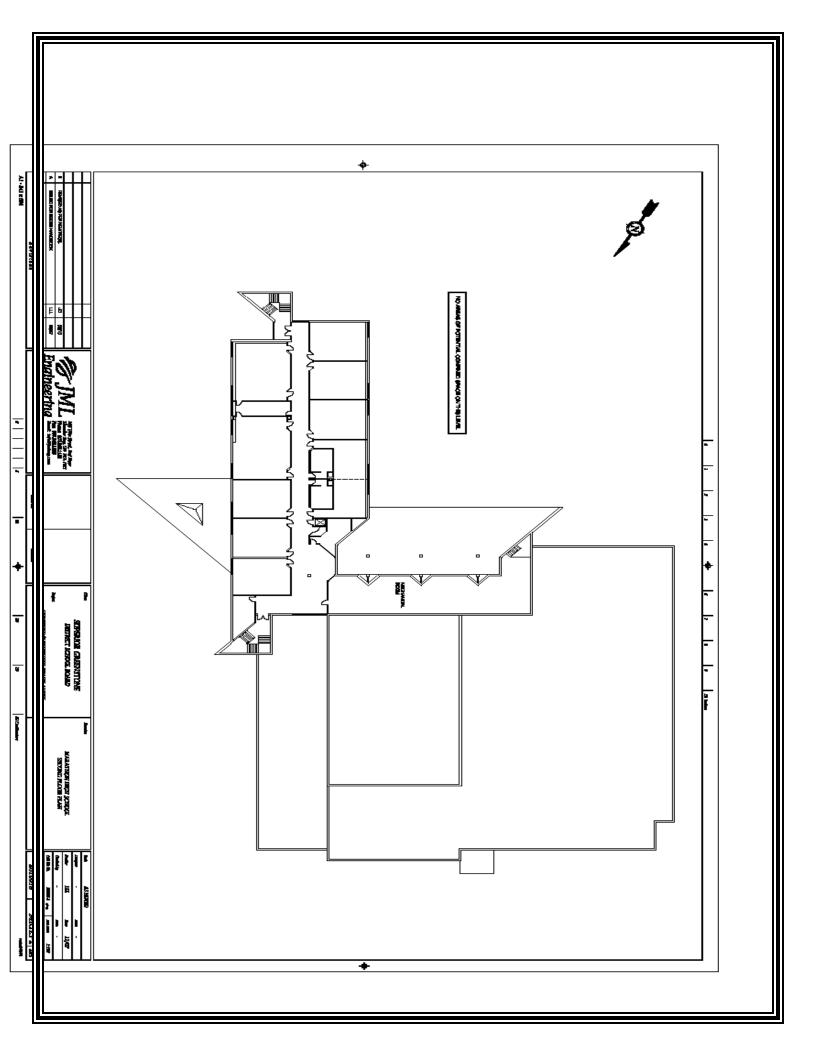


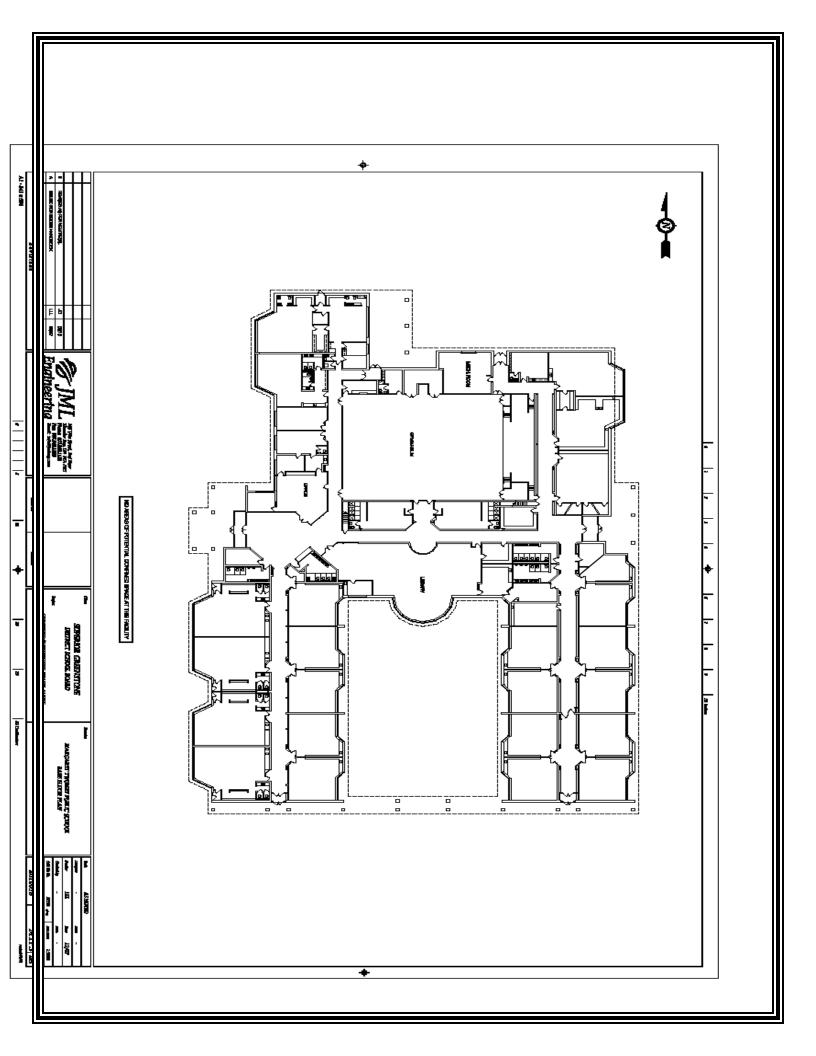


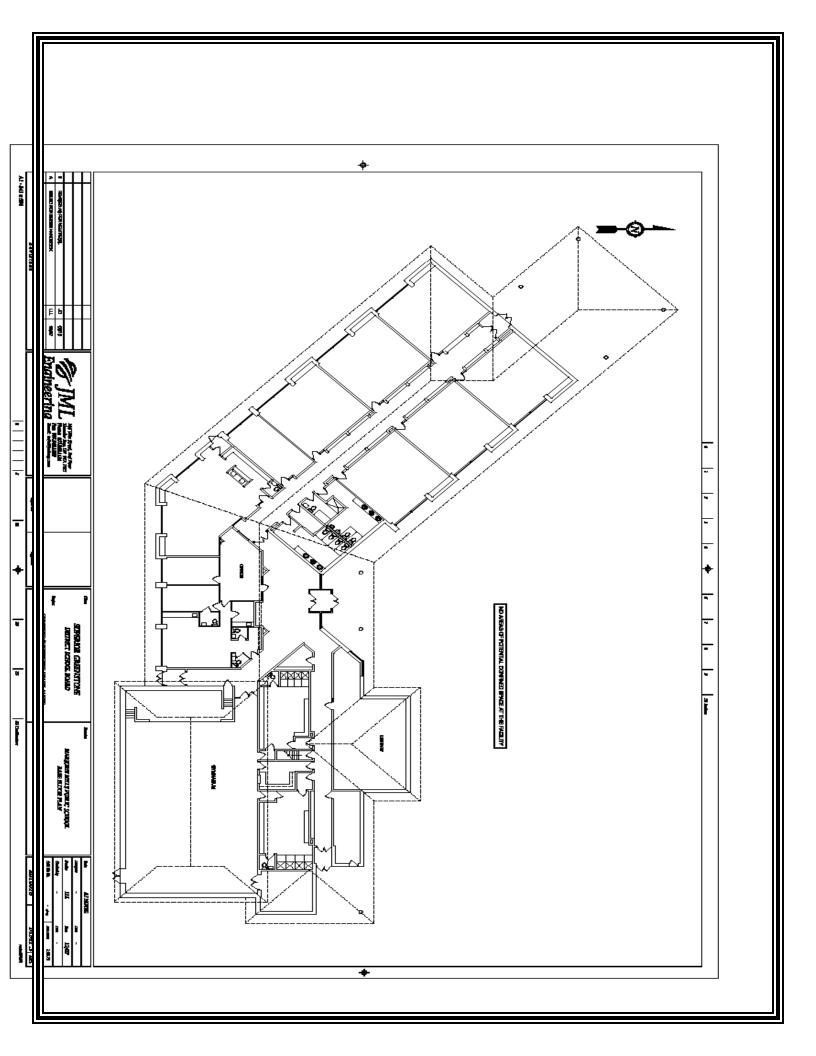


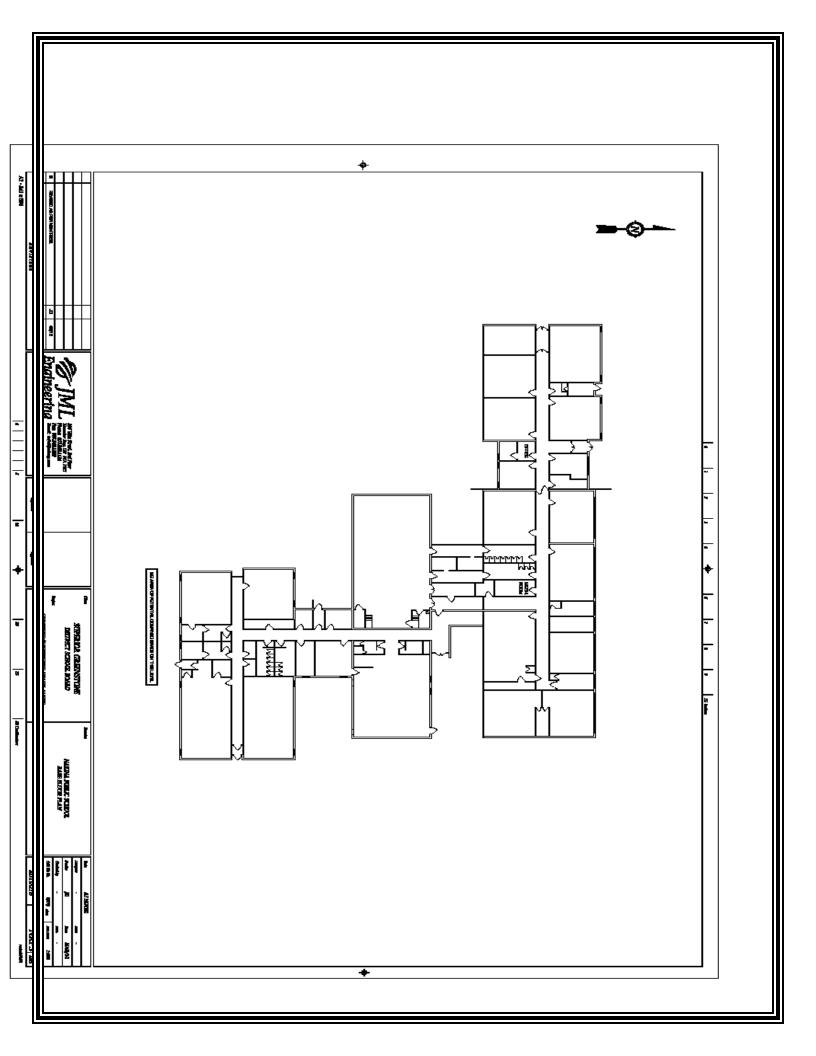


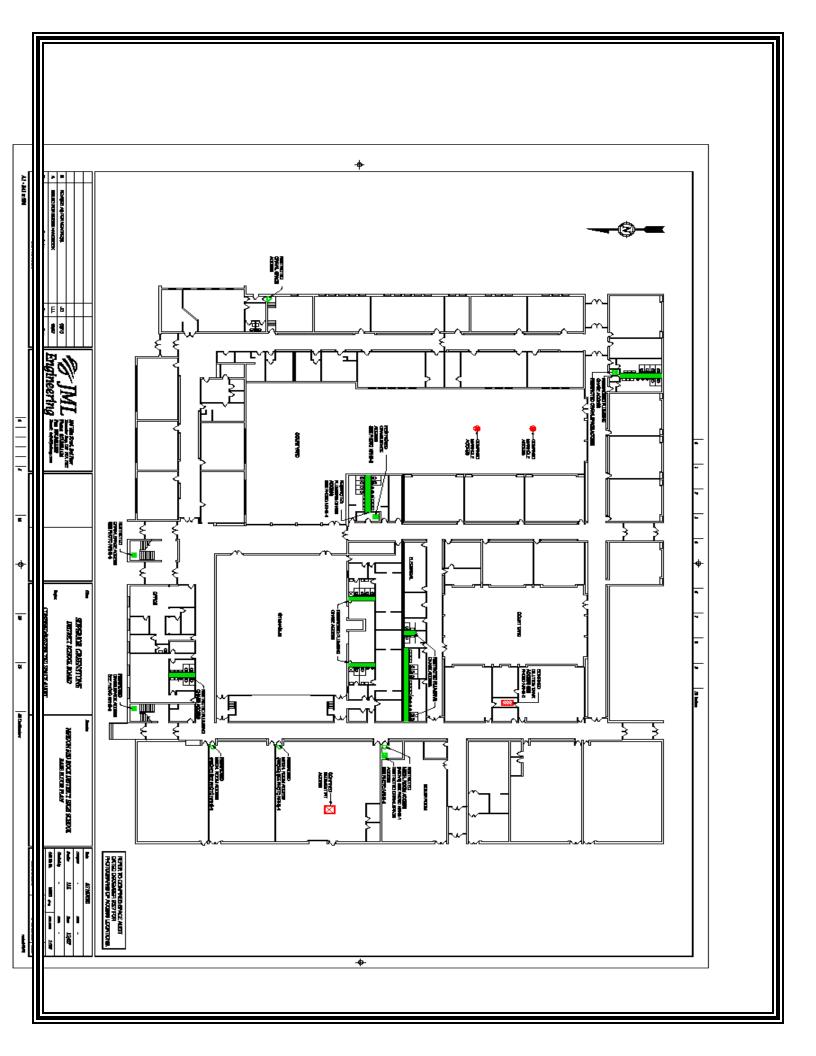


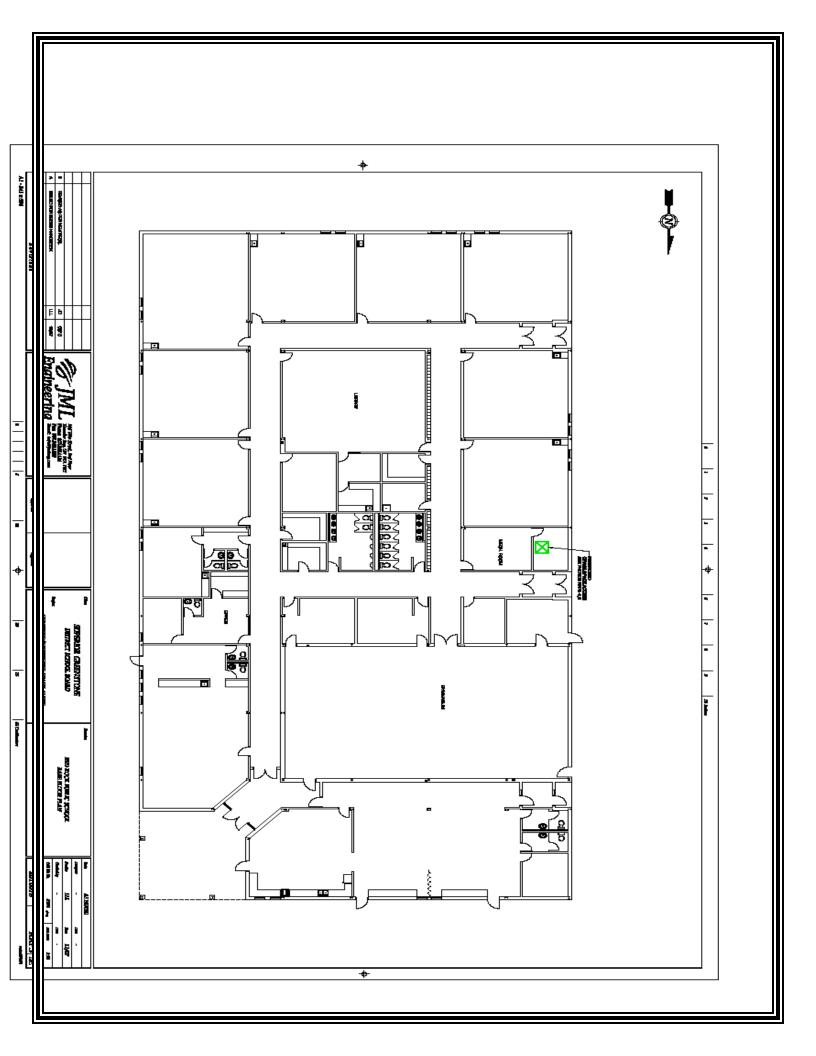


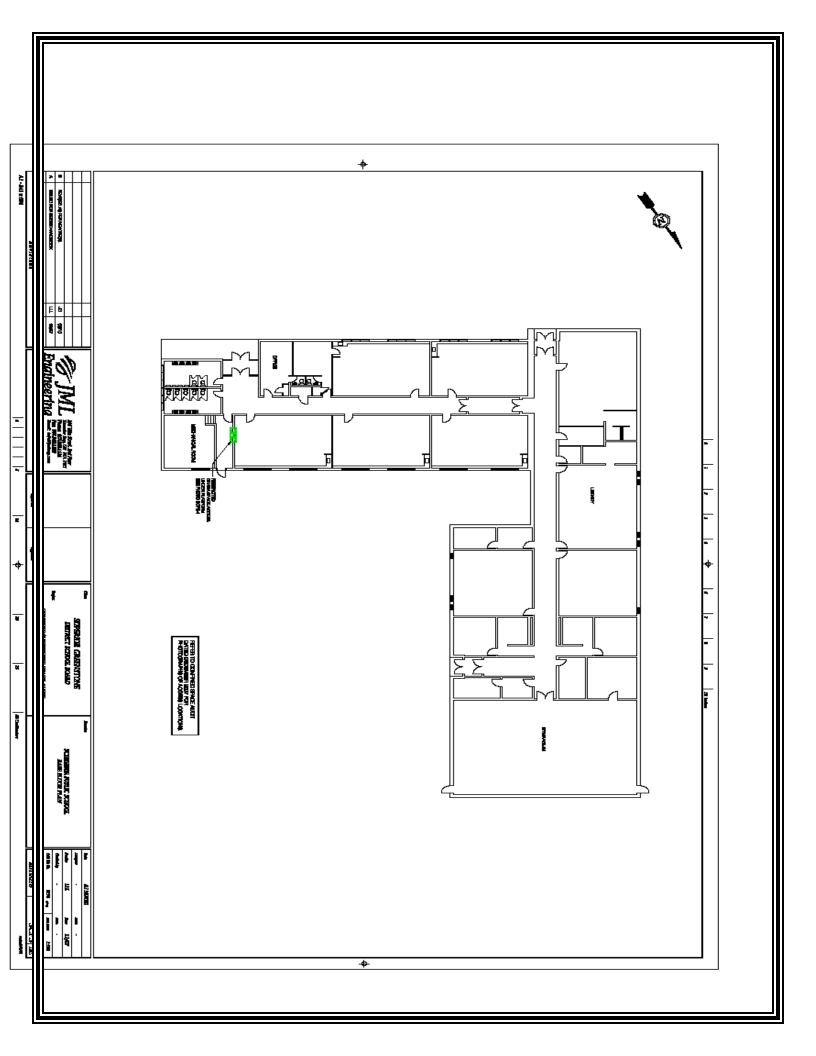


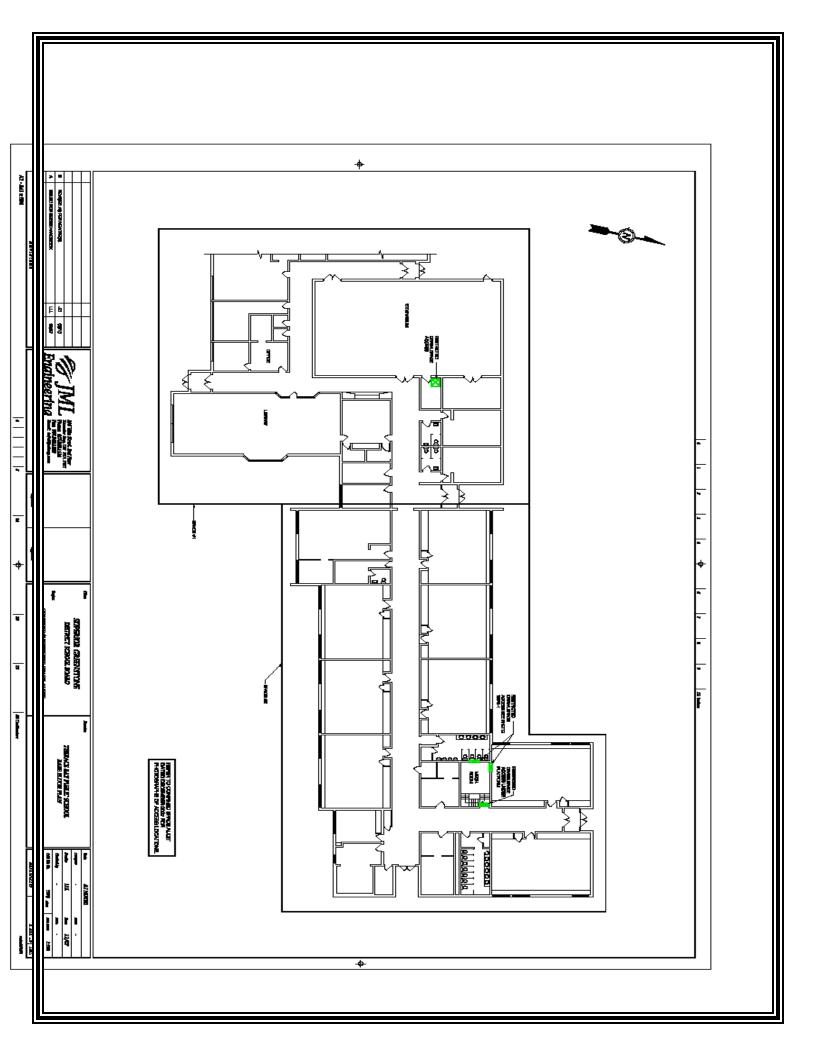












ASBESTOS ABATEMENT

Designated Substances

The Ontario Ministry of Labour (MOL) has "designated" substances for special attention. This is done in cases where a toxic substance or hazardous agent has significant impact on employees in Ontario. These designated substances require a detailed exposure assessment and control program in all workplaces where these substances are used.

SGDSB Contractors and or Sub-Contractors working in areas where Asbestos is present will be informed and provided with specific details.

Should direct involvement with Asbestos be part of the job scope, this will be specified in the bid package.

Asbestos is a naturally occurring fibrous material that looks similar to fibreglass. It is composed of millions of tiny fibres that can easily separate into small bundles or individual fibres. Asbestos fibres are only a health concern when small pieces of the materials become airborne and are inhaled into the lower portions of the lungs. The larger particles and fibres get trapped by nasal hairs or sticky mucous located in the upper respiratory system.

At Superior Greenstone District School Boards schools, asbestos is primary found in the following locations:

Piping and Boilers:

- Pipes in high temperature environments installed prior to the late 1970s may be wrapped with insulation containing asbestos (approximately two (2) to four (4) inched thick) or wrapped with asbestos tape or paper. Elbows and T-joints are sometimes insulated with cements containing asbestos.
- Steam or hot water pipes installed prior to the mid 1970s may have been insulated with insulation containing asbestos. Occasionally cold water or other piping was asbestos insulated in older buildings.
- Cement piping was often reinforced with asbestos in the past.
- Gaskets at piping (mainly high heat or corrosive lines) flanges were commonly asbestos containing.

Boiler insulation Furnaces / Vessels:

• Materials containing asbestos can still be found in some high heat applications. In furnaces and vessels, it is occasionally the first insulation layer next to the steel liner, flanges or joints.

It may be found in cement asbestos boards (transite) used as siding, flooring materials, drywall joint filling compounds, shingles, plasters, boiler Insulation and coatings.

At SGDSB schools all asbestos-related work must be performed only by specified and approved asbestos contractors in compliance with Reg. 278/05 – Asbestos on construction projects and in buildings and repair operations.

Asbestos Removal Tracking Form and SGDSB Health & Safety Reference Manual are available from the school Head Custodian



SUPERIOR-GREENSTONE DISTRICT SCHOOL BOARD

Asbestos Management Program

Introduction

Asbestos, a designated substance, is a natural fibre commonly used in the manufacture of building materials. The use of asbestos is generally classified into two groups: friable and non-friable. When dry, a friable material will crumble, pulverize or powder under hand pressure. Friable material may be found in pipe elbows, straight pipe insulation, as well as boiler and valve wrapping. If friable material is disturbed or damaged, fibres will become airborne. Although friable materials are banned as a construction material, it is still present in many buildings. Materials of non-friability include vinyl asbestos tile (VAT), ceiling tile, and transited cement.

Several diseases are associated with exposure to asbestos through the inhalation of fibres. These include asbestosis, mesothelioma, cancer of the lung and other asbestos related cancers. There is typically a latency period of more than ten years after the first exposure to asbestos and the onset of an asbestos related disease)

Objective

Superior Greenstone District School Board shall provide a safe and healthy environment. The purpose of this plan is to provide information on procedures and accepted work practices in compliance to the current Ontario Acts and Regulations regarding Asbestos on Construction Projects or in Building and Repair Operations. To properly establish this program, staff must be aware of the program and the procedures to follow when conducting maintenance and other work that might disturb asbestos-containing material.

Health and Safety Reference Manual for Accessible Asbestos Containing Materials (ACM)

As part of the Asbestos Management Plan, it is mandatory to prepare and maintain a record of all buildings owned and occupied within the Superior Greenstone District School Board which contain asbestos materials. A building record will be established by means of a written report or electronic file with attached floor plans. The report and/or drawings will show the extent and condition of the accessible asbestos containing materials in the building, location of any samples taken, as well as the results of the analysis of the samples taken.

A copy of the Health and Safety Reference Manual, as well as the Asbestos Management Plan will be kept accessible in the Head Custodian's office or Plant Department <u>Yellow Lockers</u> where it will be available for review. It will be used to direct employees or contractors in locating and being aware of asbestos containing material while they are performing work.

Annual Re-assessment

A yearly inspection will be arranged by the Maintenance Coordinator to update the condition of any accessible asbestos containing materials in the building. A copy of this inspection will be kept by the school with the Asbestos Management Plan.

Sampling and Testing

Representative samples will be arranged by the Health and Safety Department to determine if a suspect material contains asbestos. Analysis will determine if the material does or does not contain asbestos, the type, and the concentration.

Asbestos Work Report

All persons involved in Type II and Type III operations are required by the Ministry of Labour to produce an Asbestos Work Report "Form 1". Form 1 must be submitted to the Ministry of Labour once every 12 months, and immediately upon termination. The Asbestos Work Report will include the number of hours the worker has spent on a Type II or Type III operation. The Provincial Physician keeps track of the worker's accumulated exposure and will determine when a medical examination is required. It is the responsibility of the Maintenance Coordinator to quarterly submit exposure times of asbestos abatement workers to the Health and Safety Department.

Training Program

Regular Staff in the Vicinity of Contained Asbestos

Awareness training is to be provided to Superior Greenstone District School Board workers who are working in close proximity to asbestos containing materials, and where there is a chance they may disturb the material over the normal course of performing their duties. This section does not apply to workers covered in the next section, who actually are involved in the removal of asbestos.

Asbestos Abatement Workers

Specific training is to be provided to Superior Greenstone District School Board workers who are working directly with asbestos containing material in repair/removal operations. The training will be arranged by the Maintenance Coordinator and designed to cover the following objectives as stated in Regulation 838 Section 15:

- the hazards of asbestos
- personal hygiene and work practices
- the use, disposal and cleaning of personal protective equipment (i.e. respirator training).

Responsibilities

Manager of Plant Services

Notification of Damaged ACM

Any concerns regarding damaged/deteriorated asbestos materials are to be directed to the Plant Maintenance Department immediately. The Maintenance Department will evaluate the condition of the material and arrange for clean up and repair/ removal as appropriate.

Maintenance of the Asbestos Management Plan

A copy of the detailed Health and Safety Reference Manual – Asbestos section 1, as well as any repair/removal reports must be maintained at the school in the Head Custodian's office or the Plant Yellow Lockers (within the asbestos section), as well as the Maintenance Coordinator Master Asbestos Reports Binder. Any consultant/contractor or maintenance reports involving repair or removal must be forwarded to the Maintenance Coordinator.

School Notification

It is the responsibility of the Manager of Plant Services to notify the school Principal/Vice-Principal prior to any asbestos repair/removal projects under said Supervisor control. Note: If the school Principal/Vice-Principal is not available for notification (i.e. summer hours), then the Head Custodian and/or Maintenance Working Foreman will be notified. Signage may also be used where appropriate.

Asbestos Abatement Workers

Type I operations (Appendix 1) may be performed by the Maintenance Working Foreman. The Maintenance Department will provide supplies and equipment as required (Refer to Appendix 2: Procedures to Follow for Repair/Removal). All repair/removal operations will be documented and forwarded to the Health and Safety Department.

Type II and III Operations

The Coordinator of Maintenance will be responsible for contracting and supervising a qualified consultant familiar with the Ontario Regulation respecting Asbestos on Construction Projects and in Building and Repair Operations.

Maintenance Staff and Contractors

Maintenance staff and contractors will be supplied with all documentation involving the location of all friable and non-friable asbestos, in chance of contact with or disturbance of the material. Notification to contractors will be supplied by a written statement on Purchase Order or Tender agreement.

Note: Maintenance Staff/Contractors must immediately cease work if they come across asbestos that must be disturbed or removed. Work may only resume after approval from the Manager of Plant Services, Maintenance/Safety Co-ordinator.

School Notification

It is the responsibility of the Manager of Plant Services to notify the school Principal/Vice-Principal prior to any asbestos repair/removal projects under said Supervisor's control. Note: If the Principal/Vice-Principal is not available for notification (i.e. summer hours), then notification will take place through the Head Custodian or Maintenance Working Foreman.

Transportation and Disposal

The Manager of Plant Services will arrange for proper disposal of asbestos waste as per the asbestos waste regulation made under the Environmental Protection Act.

The waste will be transported to a designated site for asbestos waste only.

Maintenance Coordinator

Inspection for Construction Purposes

In the event of renovation or demolition of a building, it is the responsibility of the Maintenance Coordinator to arrange for an inspection to non-accessible areas when necessary.

Type II and III Operations

The Maintenance Coordinator and or Manager of Plant Services will be responsible for contracting and supervising a qualified consultant familiar with the Ontario Regulation respecting Asbestos on Construction Projects and in Building and Repair Operations.

School Notification

It is the responsibility of the Maintenance Coordinator and or Manager of Plant Services to notify the school Principal/Vice-Principal prior to any asbestos repair/removal projects under said Maintenance Coordinators control. Note: If the Principal is not available for notification (i.e. summer hours), then notification will take place through the Head Custodian or Maintenance Working Foreman.

Purchasing Services

The Manager of Plant Services, in conjunction with the Maintenance Coordinator, will provide procurement services for Consultants and abatement of asbestos.

Asbestos Contact Person (Head Custodian)

Head Custodians are designated as the Asbestos Site Contact Person and have the following responsibilities:

- Become familiar with all asbestos-containing materials that have been identified in their buildings, as described in the Health and Safety Reference Manual Asbestos section.
- Keep written records of ALL asbestos-related work including re- inspections, fibre release episodes and removal or repair of any asbestos-containing materials.
- Ensure proper response to any disturbances of asbestos-containing materials (fibre release episodes).
- Annually re-inspect with Maintenance Coordinator of all identified asbestos-containing friable materials and suspected non-friable materials.

School Principals/ Vice-Principals

Contractor Notification

Ensure contractors review the detailed drawing of known Asbestos locations with the Head Custodian and or Maintenance Working Foreman prior to undertaking any work.

Staff Notification

It is the responsibility of the Principal/Vice-Principal to notify staff of the Asbestos Management Plan and Health and Asbestos reports. These documents are available for review in the Health and Safety **Reference Manual located in the mechanical room Plant Department Yellow Lockers or the Head Custodian's office**.

Principals/Vice Principals will notify staff of the time and location of any asbestos work operation.

Appendix 1: Classification of Asbestos Work Operations

Work is to be classified into three categories, according to the likely risk of exposure to asbestos that it presents.

Type I

May result in minimal exposure to asbestos fibres. Type I removal operations may involve the following:

- The installation or removal of non-friable material containing asbestos (i.e. ceiling tiles, vinyl tiles) if the material covers an area less than 7.5 square metres (24 sq.ft.) without being broken, cut, drilled, abraded, ground, sanded or vibrated.
- Breaking, cutting, drilling, abrading, grinding, sanding or vibrating non-friable material that contains asbestos if the material is wetted to control the dust or fibres.
- The use of non-powered hand tools to cut, grind asbestos containing materials.

Type II

Work performed results in greater airborne concentration of asbestos. For minor disturbances or removal of friable material the classification is: Type II removal operations may involve the following:

- Removal of all or part of a false ceiling where a significant amount of friable asbestos is likely to be lying on the surface of the false ceiling.
- Minor removal or disturbance of friable asbestos material during the repair, removal, maintenance or alteration of equipment.
- The enclosure or taping of pipe or boiler insulation containing asbestos.
- Drywall removal where asbestos filler compound has been used.
- Enclosing friable material containing asbestos.
- The installation or removal of products other than non-friable cement pipes containing asbestos (i.e. ceiling tiles) if the material covers an area of at least 7.5 square metres (24 sq.ft.)
- Breaking, cutting, drilling, abrading, grinding, sanding or vibrating non-friable material that contains asbestos if the material is not wetted to control the dust or fibres.
- Removing insulation containing asbestos from a pipe, duct or similar structure using a glove bag.

Type III

Will result in the highest asbestos fibre levels resulting in a high risk of health effects. All major removals of friable material are classified as Type III. For Type III operations and asbestos of a type other than chrysotile, a powered air purifying dust respirator is required. If dry removal is performed, a positive pressure supplied air respirator must be used.

Type III removal operations may involve the following operations:

- Removal other than minor removal of friable material containing asbestos.
- Spray application of a sealant to friable asbestos.
- Cleaning or removal of air handling equipment that has sprayed fireproofing containing asbestos.
- Repair or demolition of a kiln, furnace or boiler made in part of refractory materials containing asbestos.
- Breaking, cutting, drilling, abrading, grinding, sanding or vibrating non-friable material that contains asbestos by means of power tools.
- Use of power tools not equipped with a HEPA filter used for the use of asbestos containing materials.

Appendix 2: Procedures to Follow For Repair/Removal

The protective measures and the procedures to follow will depend on the classification of the particular work at hand.

Type I

Preparation of work area:

- Remove any visible dust from the surface of the work area with a damp cloth or a vacuum equipped with a HEPA filter.
- Use drop sheets where appropriate to control the spread of dust from the work area.

Removal process:

• A wetting agent (amended water) must be applied to the material to be repaired/removed unless the use of water will create a hazard.

Personal protective equipment:

- Protective equipment is required and will be supplied. In this case a NIOSH approved respirator in accordance with the Schedule "Work Category" is required and shall be fitted so that there is an effective seal between the respirator and the workers face.
- Type 1 operations require a NIOSH 10 with N-, R-, or P- series filter and 100 % efficiency.
- Disposable coveralls (i.e. Tyvek) that do not permit the penetration of asbestos fibres must be worn. The coverall must have a snug fit at the wrists, ankles and neck, and must contain a hood.
- Eating, drinking, chewing or smoking shall not be permitted in the work area.

Clean-up:

- Discard waste in a 6-mil polyethylene disposable bag, identified as containing asbestos waste, and seal with tape. Place this bag in a second clean, labelled bag and seal with tape.
- Frequent clean up must be done at regular intervals by use of HEPA Vacuum, or damp mopping, or by wet sweeping.
- Wet and fold any contaminated drop sheets and coveralls used at the completion of work that are to be discarded and placed in a container.
- Workers must use the washing facilities at a nearby rest room.

Type II and Glove Bag

Type II:

<u>Board employees will not undertake Type II work.</u> This will be contracted out to contractors experienced in this field. The work area will be designed so that there will be no need for Board employees to require access to the work-site except in emergency situations or to inspect work. The employer of a worker working in a Type 2 shall complete an asbestos work report in Form 1 for each worker at least once in each twelve month period and forward the work report to the Provincial Physician with the Ministry of Labour.

Preparation of work area:

- Use drop sheets to control the spread of dust.
- Before work is initiated any friable material that is likely to be disturbed and that is lying on the surface of the work area must be removed and cleaned up by damp wiping.
- Visible warning signs indicating an asbestos project must be posted.
- Mechanical ventilation to the immediate work area must be disabled, and when possible, vents should be sealed off.
- Installation of a ventilation system equipped with a HEPA filtered exhaust unit that creates and maintains a negative air pressure of 0.02 inches of water. Provides at least four air exchanges per hour in the work area and uses a device to measure the negative air pressure within the enclosed area
- If the work area is not enclosed by walls, it is necessary to build an enclosure of polyethylene.

Removal process:

- Unless wetting will create a hazard, amended water must be used to control dust.
- When removing friable material, or when working above a false ceiling, an enclosure surrounding the work area must be constructed where practicable.

Personal protective equipment:

- For Type II operations a non-powered reusable or replaceable air purifying dust respirator suitable for asbestos is required. Type 2 operations require a NIOSH 50 with N-, R-, or P-, series filter and 100 % efficiency or 50 with a Hepa filter.
- Disposable coveralls (i.e.Tyvek) that do not permit the penetration of asbestos fibres must be worn by all workers in the work area. The coveralls must have a snug fit at the wrists, ankles and neck, and must contain a hood.

Clean-up:

- Discard waste in a 6 mil polyethylene disposable bag, identified as containing asbestos waste, and seal with tape. Place this bag in a second clean, labelled bag and seal with tape.
- Frequent clean-up must be done at regular intervals by use of a HEPA vacuum, by damp mopping, or by wet sweeping.
- Discard any drop sheets, barriers and protective clothing as asbestos waste at the completion of work.
- Clean and disinfect respirator. Workers may use the washing facilities at a nearby rest room.

Glove Bag:

Glove bags may be used for Type II operations involving the minor removal of pipe insulation when appropriate.

An inappropriate circumstance for glove bag use includes:

- Pipe temperature exceeding 65°C (cannot be used on hot water or steam lines).
- Pipe jacketing made of aluminum of thickness exceeding 0.51 mm (24 gauge) or a jacketing made of steel.

Glove bags may be used to remove pipe insulation that has a jacketing made of aluminum of thickness less than 0.51 mm (24 gauge) so long as the following conditions are satisfied:

- The length of each section of the jacketing shall not exceed the length of the glove bag.
- The jacketing shall only be removed after the glove bag has been attached to the pipe and sealed.
- Any jagged or sharp edges that have been produced in the removal of the jacketing shall be handled in such a way as to minimize the possibility of ripping or puncturing the glove bag.

The following procedures are to be followed for use of a glove bag:

Preparation of Work Area:

- Separate the work area from the rest of the building if walls are not present and post asbestos warning signs.
- Disable ventilation and seal off any ducts and use a drop sheet under area of removal.
- Use a vacuum equipped with a HEPA filter or damp wipe any fallen dust from the pipe insulation prior to attaching the glove bag.
- Thoroughly wet any friable material that is to be disturbed or removed before the glove bag is attached.
- Inspect the glove bag for any defects before commencing work.
- Place the necessary tools inside the glove bag (knife with a retractable blade, flexible wire type saw, stiff brush, cutters).
- Zip the glove bag onto the pipe and seal each end with straps. Insert the nozzle of the spray pump into the elasticized valve.

Removal Process:

- With the worker's hands inserted in the sleeves, wet the insulation before and during removal. If the pipe is covered by an aluminum jacket, use wire cutters to cut the bands and tin snips to remove the aluminum. Fold any sharp edges to prevent tearing the bag.
- Use a saw or knife to cut the insulation at each end of the section to be removed.
- Slit the section of pipe from end to end using a utility knife (it is ideal to make this slit on the underside of the pipe).
- Lift the insulation off and place at the bottom of the bag.
- Clean the pipe using water and a brush. Sealant or tape should be applied to any remaining exposed insulation after the glove bag has been removed.
- If an adjacent area of pipe is to be removed, wash the bag down, loosen shoulder sleeves, slide the bag along the pipe, and re-tighten straps. The tools remain inside the bag.
- If the bag is to be used for another pipe, place the tools in the lower section, wash down the top section of the bag, close the interior zipper and move the bag to the new location.

Note: If the glove bag is ripped, cut or opened in any way, cease work immediately. Clean up the work area by using a HEPA vacuum or damp wiping. If the opening is small enough use tape to repair. Work may continue once repairs are made. If the opening is not small enough to repair, then every worker in the vicinity must don the prescribed protective clothing (see below section on Personal Protective Equipment).

Clean-up:

- Prior to disposal of the bag, the tools inside the glove bag must be washed and retrieved.
- Wash down the inside of the glove bag so that any fibres adhering to the inside of the bag will be contained in the lower portion of the glove bag.
- Remove the air inside the bag using a vacuum equipped with a HEPA filter.

- Seal the lower portion of the bag by using the closure strip or by twisting and taping in an effective way to contain the asbestos waste.
- Place the glove bag in an asbestos waste bag while still attached to pipe.
- Remove the glove bag from the pipe and seal the asbestos waste bag with tape.
- Place this bag in a second clean, labelled bag and seal with tape.

Personal Protective Equipment:

- Every worker entering the work area must wear a non-powered reusable or replaceable air purifying dust respirator suitable for protection against asbestos. Disposable coveralls (i.e. Tyvek) that do not permit the penetration of asbestos fibres must be worn. The coverall must have a snug fit at the wrists, ankles and neck, and must contain a hood.
- Discard any contaminated protective clothing as asbestos waste. Clean and disinfect respirator after use.

Type III

Superior Greenstone District School Board employees <u>will not undertake Type III work</u>. This will be contracted out to contractors experienced in this field. The work area will be designed so that there will be no need for Superior Greenstone District School Board employees to require access to the work-site except in emergency situations or to inspect work.

The employer of a worker working in a Type 2 or 3 shall complete an asbestos work report in Form 1 for each worker at least once in each twelve month period and forward the work report to the Provincial Physician with the Ministry of Labour.

Appendix 3: <u>Health and Safety Reference Manual</u>

Introduction

The Health and Safety Reference Manual has been prepared to facilitate asbestos management in all building owned by Superior Greenstone District School Board. It is to be used as a guide by all Maintenance Working Foreman and or Head Custodian in order to ease their respective asbestos management duties.

Responsibilities

The responsibilities of the Maintenance Coordinator, Maintenance Working Foreman and Head Custodian are as follows:

- Become familiar with all asbestos-containing materials that have been identified in their buildings, as described in the Health and Safety Reference Manual Asbestos section of the manuals.
- Keep written records of all asbestos-related work including re-inspections, fibre release episodes and removal or repair of any asbestos-containing materials.
- Ensure proper response to any disturbances of asbestos-containing materials (fibre release episodes).
- Periodically re-inspect all identified asbestos-containing friable materials and suspected nonfriable materials.

Records of Location

Locations of all identified friable asbestos-containing materials have been identified on drawings in the **Health and Safety Reference Manual of the Asbestos Manuals**. The Maintenance Working Foreman and Head Custodian must become familiar with the locations of all identified asbestos in his/her building.

Appendix 4 Asbestos Condition Report

The keeping of complete and accurate records is absolutely vital to an Asbestos Management Program. The Health and Safety Reference Manual (Asbestos-section 1) has been prepared for this purpose.

It is to be filled out when any of the following situations occur:

- Fibre release episode (asbestos-containing material is damaged).
- Periodic re-inspection of asbestos-containing materials conducted by the Plant Department (condition may or may not have changed).
- Asbestos-containing material has been removed or repaired following proper procedures by a professional contractor.

Subsequent to the completion of a Condition Report (Asbestos-containing Materials) or any of the abovementioned situations, the Maintenance Working Foreman and Head Custodian are responsible to ensure that:

- One copy is submitted to the Maintenance Coordinator;
- And the original report is filed in back of Section 1 of the Health and Safety Reference Manual (Asbestos Section 1) that is maintained by the Head Custodian.

Emergency Response Procedures

Asbestos-containing materials that are present in the schools will be damaged from time to time, through such causes as natural deterioration, water damage, accidental contact or vandalism. These incidents will create fibre release episodes. Emergency response procedures must be applied to minimize the release and spread of asbestos fibres.

The following emergency response procedures should be performed if a release episode has occurred:

- Immediately shut off any air handling units that affect the area.
- Isolate the area by sealing any openings, posting "warning" signs at the entrance to the area and installing locks to prevent unauthorized access, in the case of a minor disturbance (less than 3 ft2 or 3 linear ft. of asbestos-containing material).
- Contact the Maintenance Coordinator 1-807-229-5205 or Manager of Plant Services 1-807-229-7379.
- Document the episode by completing a Condition Report (Asbestos-containing Materials).
- The Maintenance Working Foreman and or Head Custodian shall ensure that the affected air conditioning and ventilation filters are changed by a professional contractor trained in asbestos removal.

Periodic Asbestos Re-Inspections

Re-inspections are to be conducted annually by the Maintenance Coordinator, as long as any potentially friable asbestos-containing materials remain in a facility. A Condition Report (Asbestos-containing Materials) is to be filled out for each material so that any deterioration or damage is noted and acted upon before a dangerous situation develops.

The following information shall be included:

- Location of asbestos-containing material.
- Type of asbestos-containing material.
- Assessment (evidence of damage, accessibility, degree of activity near material and other observations).
- Recommended action (Maintenance Coordinator, Manager of Plant Services).
- Date of re-inspection and signature of Maintenance Coordinator, Maintenance Working Foreman and Head Custodian).

Non-friable materials such as floor tiles, linoleum and cement board, which have been assumed to contain asbestos in a particular building should also be re-inspected. The reason for this is that normally non-friable materials may become friable once they are damaged, and fibres may be released if they are disturbed. The Maintenance Working Foreman and Head Custodian should also ensure that sawing, sanding or drilling is not performed on any of these materials by their staff, other Superior Greenstone District School Board employees or outside contractors.

Note: Any suspect materials that have not been previously identified as asbestos-containing or any nonfriable materials that have been assumed to contain asbestos should be sampled prior to planned disturbances such as demolition or any other type or renovation. When in doubt, the Maintenance Working Foreman and or Head Custodian must contact the Maintenance Coordinator 1-807-229-5205 and or the Manager or Plant Services 1-807-229-7379.

Documentation of Asbestos Removal

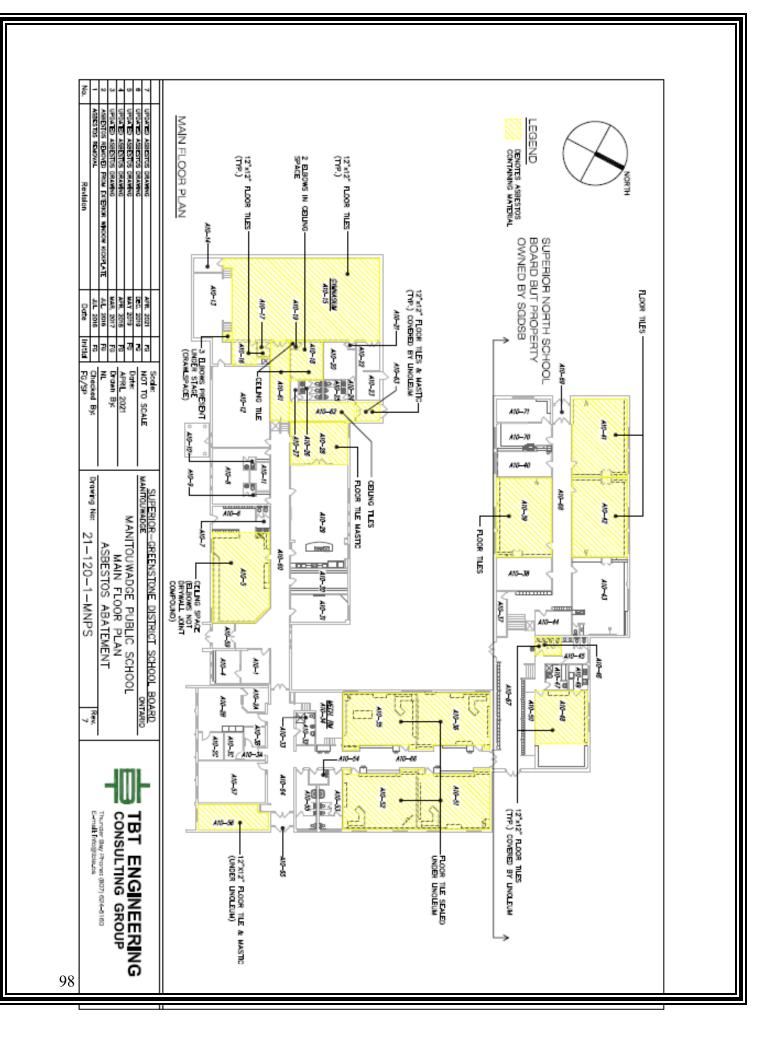
Superior Greenstone District School Board has been on an asbestos removal program since 1990 and all of their buildings shall be free of identified friable asbestos-containing materials (not including materials enclosed in fixed ceilings or walls) in the near future. As stated previously, the Maintenance Working Foreman and or Head Custodian are to fill out a Condition Report (Asbestos-containing Materials) in order to document the removal of any such materials in their respective buildings.

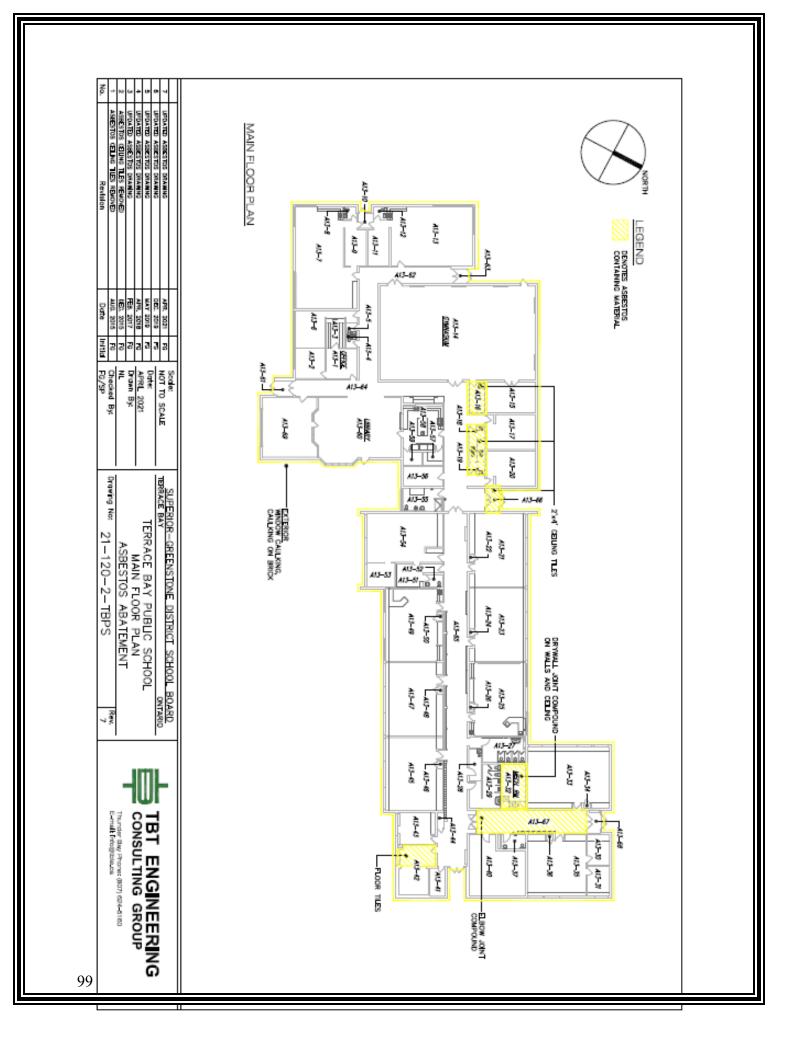


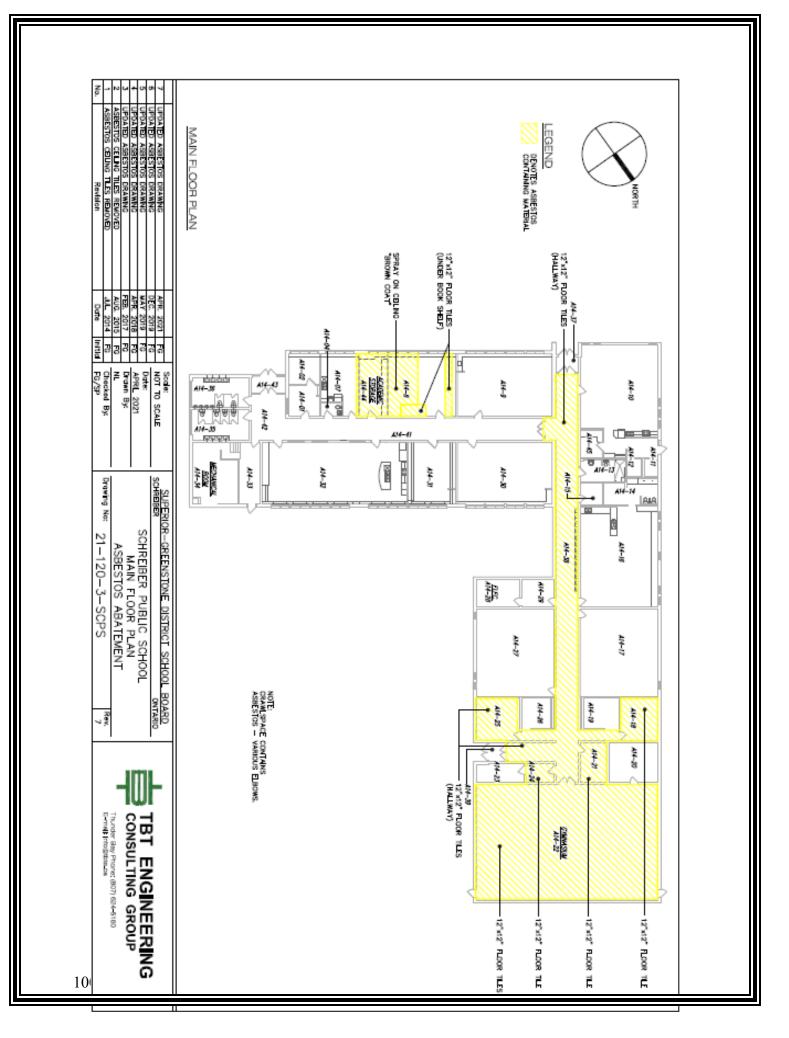
SGDSB Asbestos Removal Tracking Form

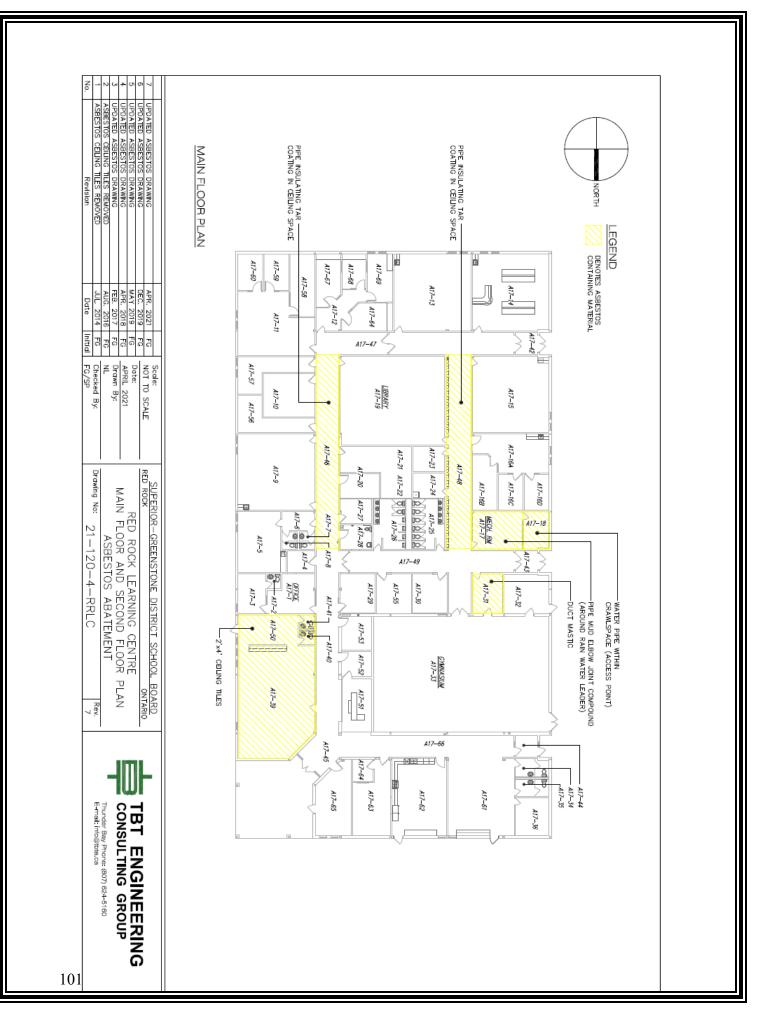
Name:						
Company:					· · · · ·	
Date of work:						
SGDSB Maintenance W						
School:						
Square Feet:						
Location No						
Location Name:					·	
Work Performe						
Room No (e.g. lunch room, storag						
Indicate on the table the asbestos containing materials to be removed or repaired. System	Component - Location	Material	ltem	Coveri ng	Quanti ty	Units
Example 1 : Piping two	Heating Water Return	Magnesia Block	Hanger Support	N/A	2	LF (Linear Feet)

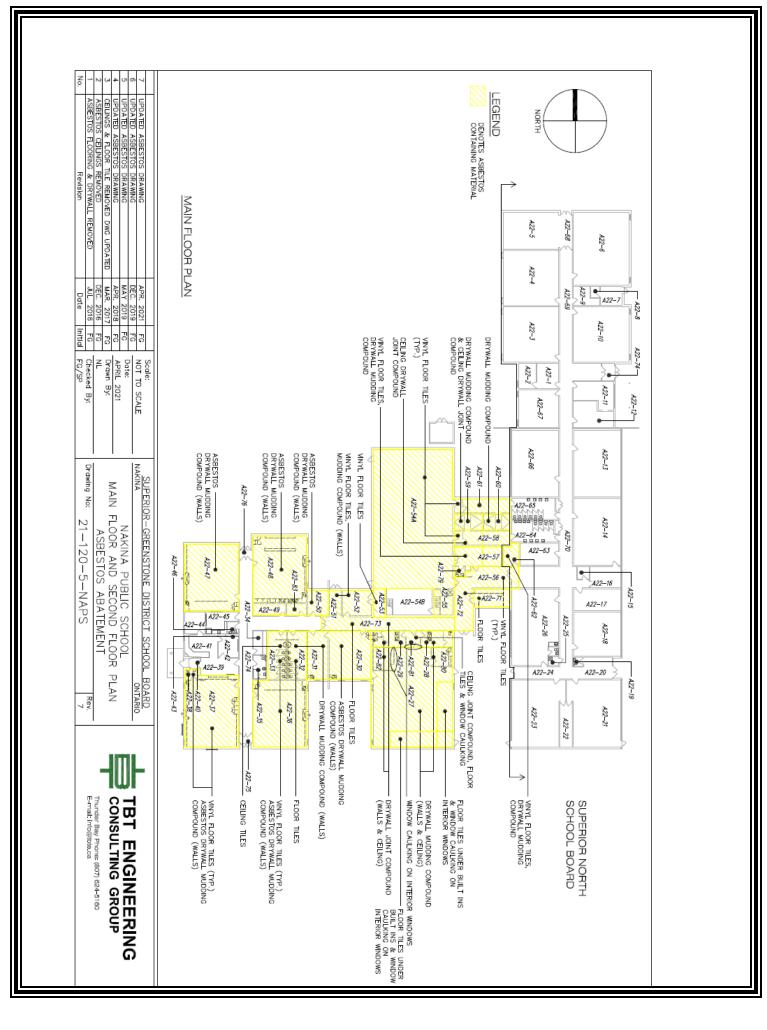
Forward Asbestos Tracking Form to Maintenance Coordinator and a copy must be in inserted in the SGDSB Asbestos section of the Health & Safety Reference Manual.

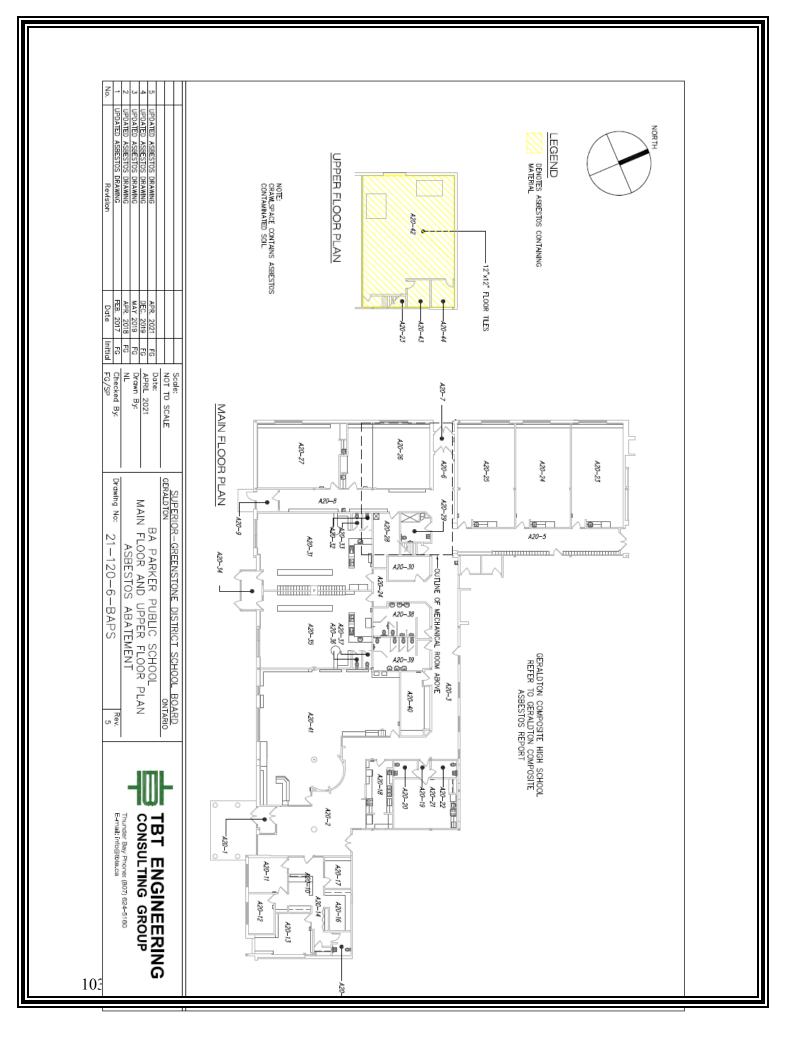


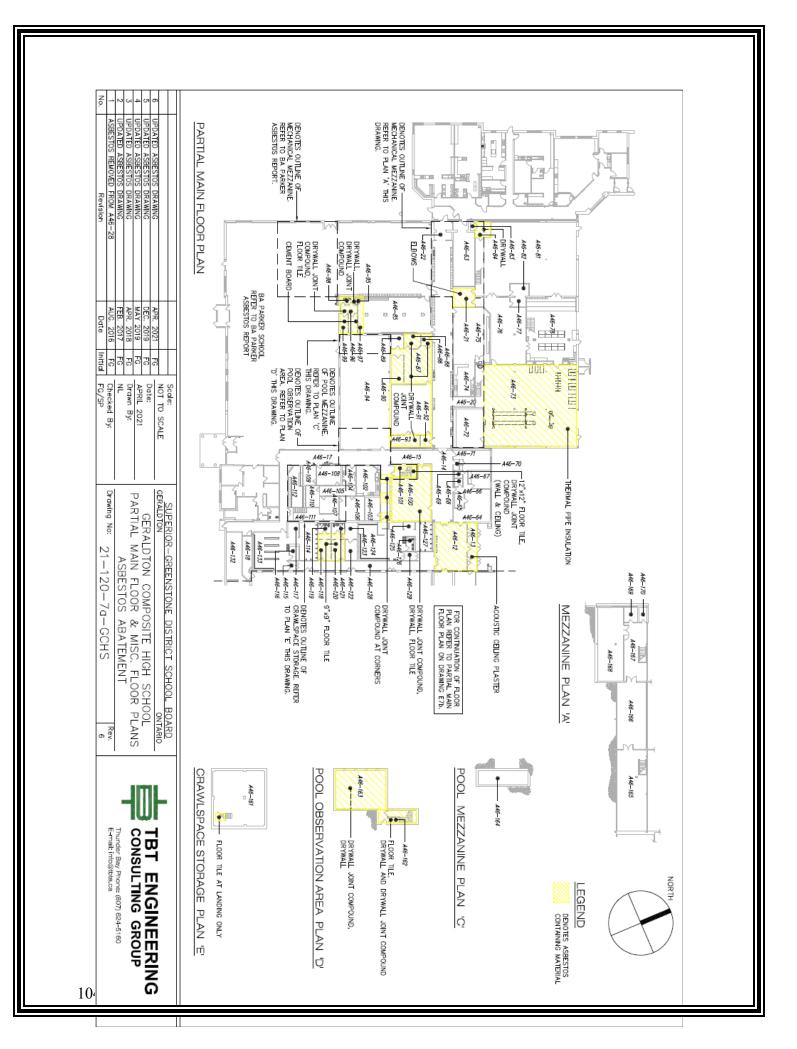


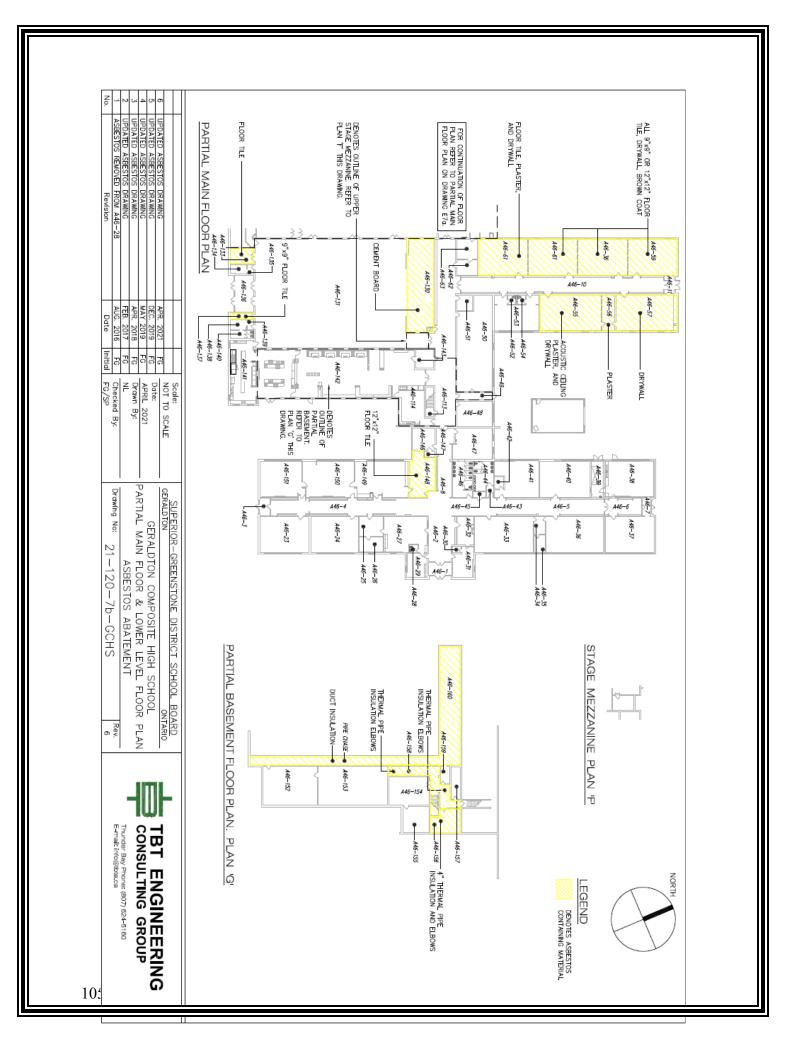


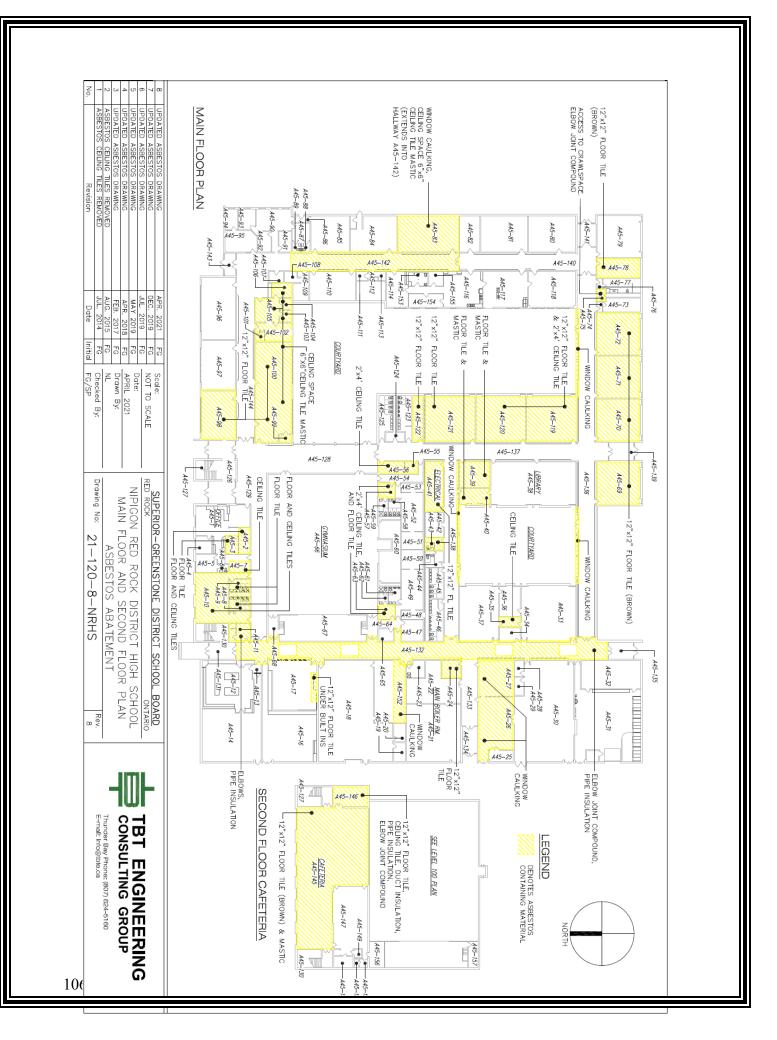


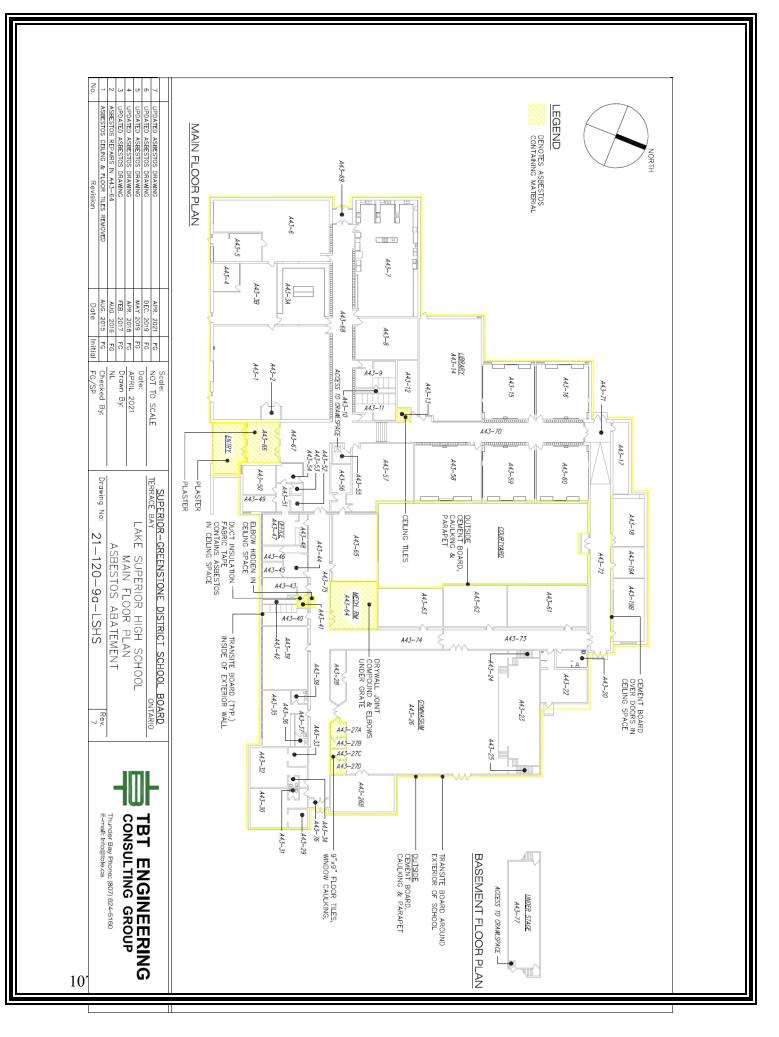


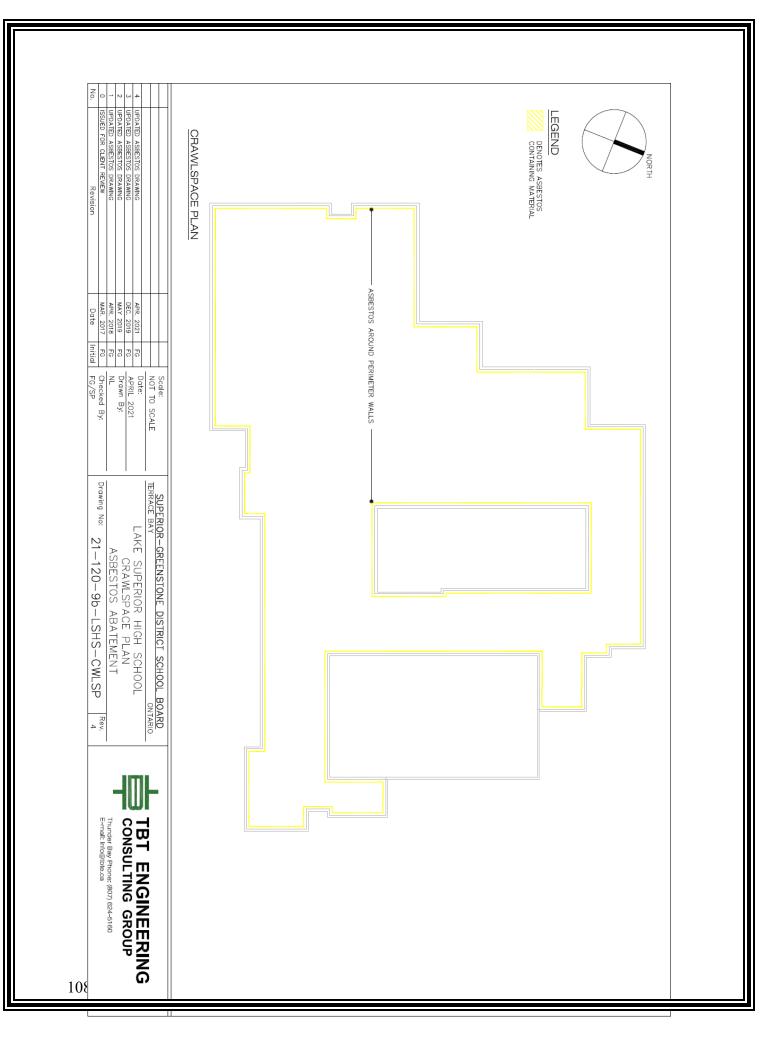












ARC FLASH

FLAMMABLE / COMBUSTIBLE MATERIALS

Flammable materials must be stored only in ULC approved containers with spring loaded caps and flame arresters in place.

Flammable or combustible materials must not be stored or situated in areas where welding, cutting or open flames are produced.

Large quantities of flammable materials must be stored outside in an isolated, fenced area, with spill containment and "No Smoking" signs.

All flammable or combustible materials must be clearly labelled as to their inherent dangers as per WHMIS regulations.

When transferring flammable liquids from one container to another, the containers must be grounded and bonded to prevent a discharge of static electricity.

FIRE EXTINGUISHERS

Class "A" fires are fires in combustible materials such as wood, paper, cloth, rubber and many plastics. These may be extinguished by using:

- (a) Pressurized water extinguishers, or
- (b) ABC multi-purpose dry chemical extinguishers.

Class "B" fires are fires in flammable liquids, gases, or greases. These fires may be extinguished by using:

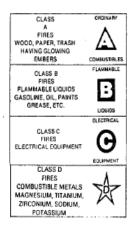
- (a) Standard dry chemical extinguishers,
- (b) Carbon dioxide extinguishers (CO2)
- (c) ABC multi-purpose dry chemical extinguishers

Class "C" fires are fires which involve energized electrical equipment where the Electrical non-conductivity of the extinguishing agent is of importance. These fires may be extinguished by using:

- (a) Carbon dioxide extinguishers (CO2)
- (b) Standard dry chemical extinguishers,
- (c) ABC multi-purpose dry chemical extinguishers.

Superior Greenstone Contractors and Sub-Contractors must know the locations and correct operating practices of fire fighting equipment for their area.

Review extinguisher location with the Head Custodian





Superior-Greenstone District School Board

PLANT SERVICES DEPARTMENT

Acknowledgement/Sign off

I have read and understood the following Plant Services procedure:

Health & Safety Standard Operating Procedures

Name:		 	
	(Print)		
Company:		 	_
	(Print)		
Position: _		 	
Site/Schoo	l:	 	_
Date:			
Signed: _		 	
Date: _	l:	 	_

Note to Contractor, and Sub-Contractor:

- Please complete this form once procedure has been reviewed and forward the fully completed original to the Manager of Plant Services after making a copy for your records.
- If you have any questions about the procedure or this form, contact the Manager of Plant Services as soon as possible.

SUPERIOR GREENSTONE DISTRICT SCHOOL BOARD

HEALTH AND SAFETY TRAINING SIGN-OFF SHEET

SGDSB Contractor & Sub-Contractor Health and Safety Standard Operating Procedures

My signature verifies that I have attended the training:

Location (Training Centre):_____

Name (please print):_____

Signature: _____

Date: _____

Note: Please complete this form and leave it at the training centre where directed.

If you have any questions about the procedure or this form, contact the Manager of Plant Services as soon as possible