

GENERAL NOTES

- ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE PREPARED SPECIFICATION.
- REFER TO SPECIFICATIONS FOR DETAILS REGARDING REQUIRED SHOP DRAWINGS SUBMISSIONS, INDEPENDENT SITE TESTING, AND SITE WORK NOTIFICATIONS.
- UPON COMPLETION OF THE PROJECT OR UPON COMPLETION OF EACH INDIVIDUAL PHASE OF THE PROJECT THE CONTRACTORS SHALL PROVIDE THE FOLLOWING CERTIFICATES BEFORE CONFORMANCE LETTERS ARE ISSUED BY THE CONSULTANT: - HVAC SYSTEM CLEANING REPORT - BALANCING REPORT

ALL CERTIFICATES ARE TO BE SUBMITTED TOGETHER IN A SINGLE PACKAGE.

required. Provide the same to meet the required conditions. project. These documents are not to be duplicated or copied without the consent of the Consultant.

The drawings do not indicate all offsets fitting and accessories which may be Drawings and specifications, etc., prepared and issued by the Consultant are the property of the Consultant and must be returned at the completion of the

service from Consultant before commencement of the work.

The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work. The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of

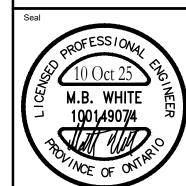
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ISSUANCES	
DESCRIPTION	

1	25.10.10	ISSUED FOR TENDER	MW



HALTON DISTRICT SCHOOL BOARD J.W.SINGLETON EDUCATION CENTRE 2050 GUELPH LINE BURLINGTON, ON., L7R 3Z2 TEL. (905) 335-3663 FAX (905) 335-9802



ROLLING MEADOWS PS RENOVATIONS

1522 MOUNTAIN GROVE AVE., BURLINGTON

KEY PLAN, LEGEND & SCHEDULÉS



MECHANICAL | ELECTRICAL | AQUATIC

55 Northland Road, Waterloo, ON N2V 1Y8 Phone: 519-725-3555 Website: deiassociates.ca

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AS NOTED	OCT 2025		Oct 10, 25		
Project No.		Drawing No.			

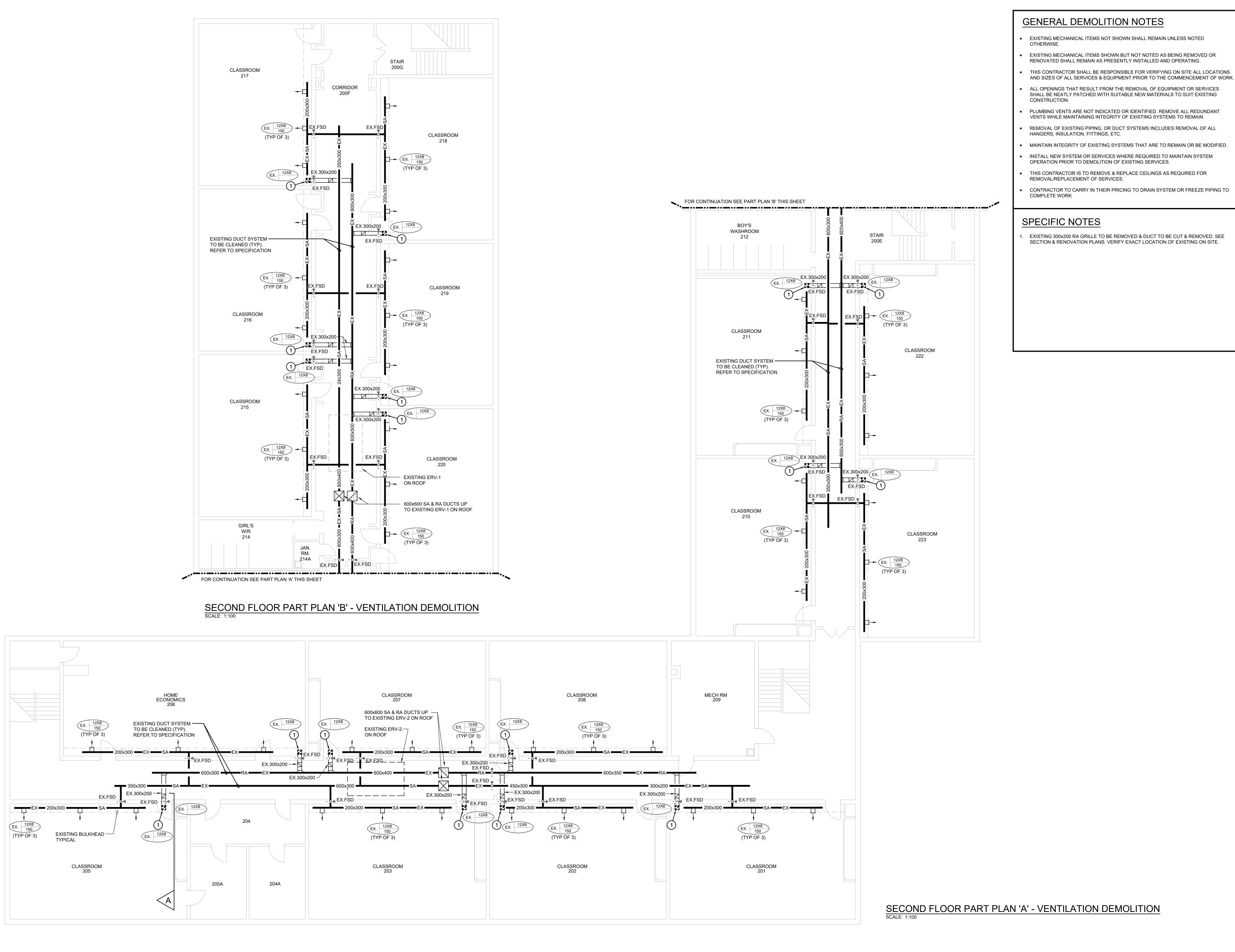
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AIR I	AIR HANDLING UNIT SCHEDULE																							
		Supply Air Fa	an Data				Exhaus	t Air Fan Data		Electri	cal Data			COOL	ING			ΓING	HEAT RE	COVERY			Weight (lbs)	
Item	Service	Capacity S	Size hp	Drive	ESP in wc	Capacity cfm	/ Size hp	Drive	ESP in wc	Voltage	MCA N	моср	Sens.Cap. To MBH	otal Cap. MBH	Ent db/wb	EER	INPUT MBH	OUTPUT MBH	SUMMER EFF.	WINTER EFF.	Manufacturer	Model	(approx.)	Remarks
EX. ERV-1	SECOND FLOOR CLASSROOMS	4500	5	VFD	0.5	4500	5	VFD	0.5	575/3/60	28	30	103	133	78/66	12.2	540	432	69%	70%	AAON	RNA011	4015±	RE-BALANCE UNIT
EX. ERV-2	SECOND FLOOR CLASSROOMS	3200	3	VFD	0.5	3200	3	VFD	0.5	575/3/60	22	25	73	104	81/68	12.9	390	315	62%	64%	AAON	RN009	2406±	RE-BALANCE UNIT

2. GRILLE COLOURS ARE SELECTED BY ARCHITECT FROM STANDARD COLOUR CHART, UNLESS OTHERWISE NOTED.

3. PAINT INTERIOR OF DUCTWORK BEHIND GRILLE MATTE BLACK (WHERE VISIBLE THRU GRILLE).

GRILL	LE SCHEDULE				CAPACITY INDICATED ON SCHEDULE REFER TO SPECIFICATION FOR CONSTRUCTION STANDARDS, ACCESSORIES AND ADDITIONAL INFORMATION.
Item	Туре	Equalizing Grid	Volume Damper	Acceptable Manufacturer	Description
R1	CEILING RETURN GRILLE (DUCTED)	NO	NONE	EH PRICE 80FF-FR	1/2x1/2x1/2 ALUMINUM EGGCRATE CORE. C/W 1 1/4" FLAT BORDER & SCREWED FASTENING FOR SURFACE MOUNTING. C/W FILTER GRILLE AND FIRE FLAP
ENERAL GRI	LLE SCHEDULE NOTES:	·			
1.	ACCEPTABLE MANUFACTURERS: E	H PRICE, NAILOR, TITU	JS, KRUEGER,	CARNES, METALAIRE, TUTTLE & BAILEY.	



ALL OPENINGS THAT RESULT FROM THE REMOVAL OF EQUIPMENT OR SERVICES

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actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work. The drawings do not indicate all offsets fitting and accessories which may be

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ROLLING MEADOWS PS RENOVATIONS

1522 MOUNTAIN GROVE AVE., BURLINGTON

PART FLOOR PLANS VENTILATION - DEMO

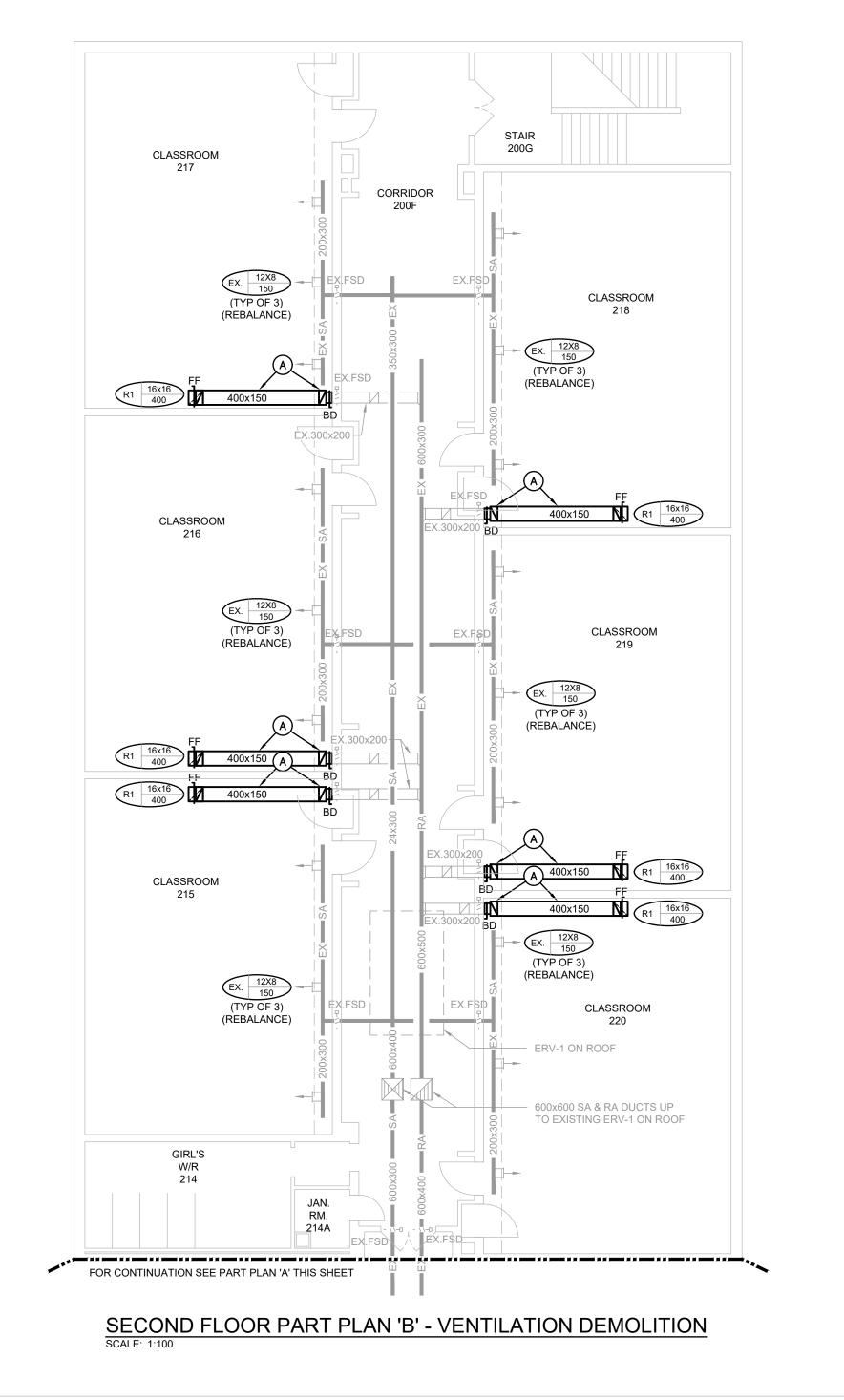


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M2.1



CLASSROOM 207

600x600 SA & RA DUCTS UP

ERV-2 ON ROOF -

(REBALANCE)

EX.300x200 -

(TYP OF 3) (REBALANCE)

EX.300x200 --

EX. 12X8 150 (TYP OF 3)

(REBALANCE)

CLASSROOM 205

TO EXISTING ERV-2 ON ROOF

(TYP OF 3) (REBALANCE)

EX.FSD -

ERV-1 ON ROOF

CLASSROOM 208

(REBALANCE)

CLASSROOM 202

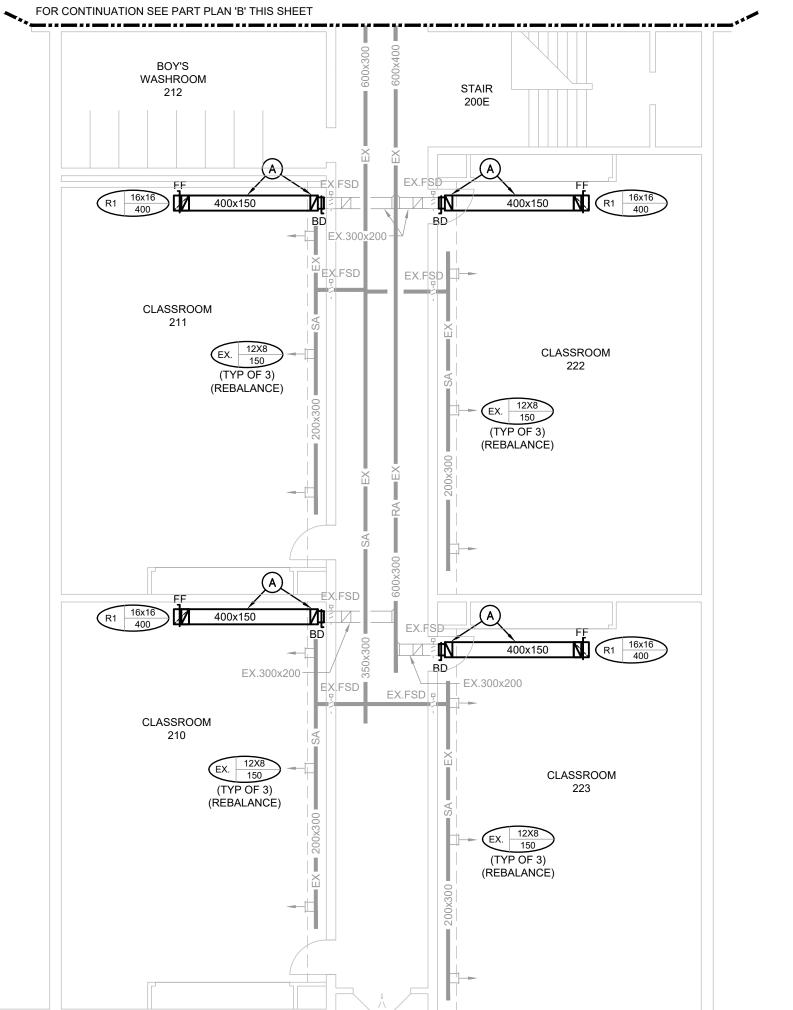
(TYP OF 3) (REBALANCE)

MECH RM 209

(TYP OF 3)

CLASSROOM

EX.300x200 -

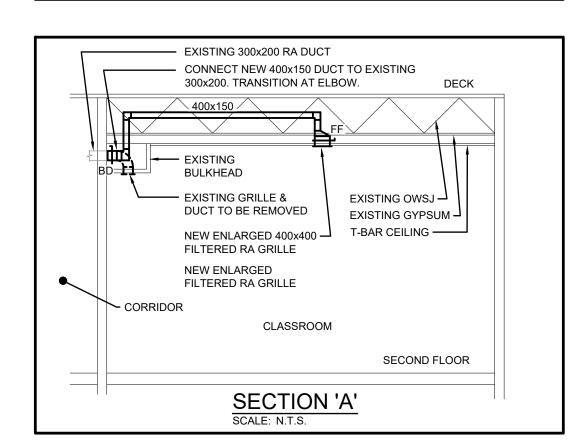


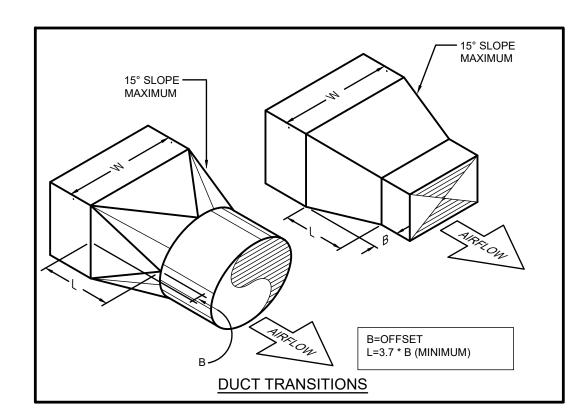
GENERAL RENOVATION NOTES

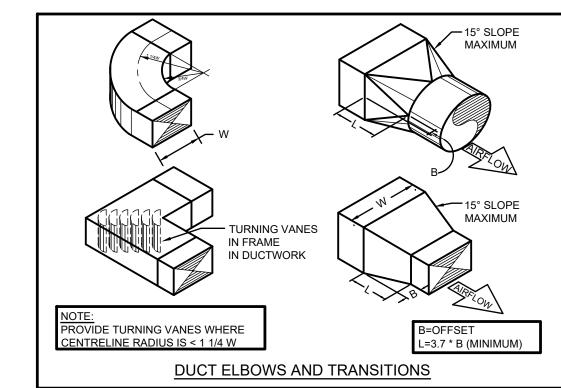
- CLEAN AND VACUUM EXISTING DUCTWORK ADJACENT TO NEW CONNECTIONS ± 10'-0" IN EACH DIRECTION.
- CO-ORDINATE ANY OWSJ BRIDGING RELOCATION OR REMOVAL/REPLACEMENT WITH THE GENERAL CONTRACTOR. PAY ALL COSTS REQUIRED TO MODIFY BRIDGING FOR INSTALLATION OF DUCTWORK.
- SANITARY VENT PIPING IS NOT SHOWN. PROVIDE ALL NECESSARY VENT PIPING FROM ALL FIXTURES FOR A COMPLETE SYSTEM TO ALL LOCAL PLUMBING CODE & LOCAL AUTHORITY REQUIREMENTS, CONNECTED TO EXISTING VENTS OR NEW VENTS AS REQUIRED. CO-ORDINATE VENT LOCATION(S) WITH GENERAL CONTRACTOR. MAINTAIN MINIMUM 3700mm (12'-0") FROM ANY AIR INLET. INSTALL VENT PIPING HIGH IN JOIST
- REFER TO ARCHITECTURAL CEILING PLANS FOR GRILLES/DIFFUSERS LOCATIONS. CO-ORDINATE FINAL LOCATION ON SITE.
- CO-ORDINATE ROUGH-IN AND MOUNTING HEIGHTS OF FIXTURES WITH MILLWORK AND ARCHITECTURAL DETAILS.
- CONTRACTOR TO CARRY IN THEIR PRICING TO DRAIN SYSTEM OR FREEZE PIPING TO COMPLETE WORK

SPECIFIC NOTES

A. OFFSET NEW 400x150 RA DUCT INTO JOIST SPACE . SEE SECTION. VERIFY EXACT LOCATION OF EXISTING ON SITE.







SECOND FLOOR PART PLAN 'A' - VENTILATION DEMOLITION

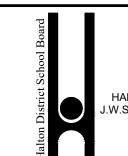
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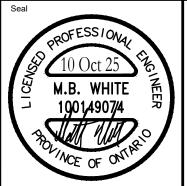
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ROLLING MEADOWS PS RENOVATIONS

1522 MOUNTAIN GROVE AVE., BURLINGTON

PART FLOOR PLANS **VENTILATION - RENO**



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MECHANICAL SPECIFICATION

PART A GENERAL NOTES

- PROVIDE LABOUR, MATERIAL AND EQUIPMENT REQUIRED TO PROVIDE A COMPLETE INSTALLATION WITH QUALITY WORKMANSHIP ACCEPTABLE TO OWNER AND CONSULTANT.
- OBTAIN ALL PERMITS AND PAY ALL TAXES, FEES, AND OTHER COSTS INCURRED WITH THIS WORK. FILE ALL PLANS. OBTAIN ALL NECESSARY APPROVALS, CERTIFICATES. SUBMIT ALL FINAL CERTIFICATES TO THE CONSULTANT, COMPLY WITH RULES AND RECOMMENDATIONS OF THE BOARD OF FIRE UNDERWRITERS. THE CANADIAN GAS ASSOCIATION, THE LOCAL BUILDING CODE, AND ALL REQUIREMENTS OF THE LOCAL UTILITY COMPANY AND BY-LAWS. POST BUILDING PERMIT AT SITE IN ACCORDANCE WITH O.B.C. REQUIREMENTS.
- 4. VISIT THE SITE BEFORE SUBMITTING TENDERS TO EVALUATE ANY SITE CONDITIONS THAT MIGHT ARISE. INCLUDE ALL SITE CONDITIONS IN TENDER, EXTRAS WILL NOT BE ACCEPTED UNLESS BELIEVED TO BE REASONABLE BY THE OWNER AND CONSULTANT.
- 5. COORDINATE WITH OTHER CONTRACTORS INSTALLING EQUIPMENT OR MATERIAL AND ARRANGE EQUIPMENT IN PROPER RELATION WITH ALL OTHER TRADES. ENSURE SYSTEMS ARE SERVICEABLE.
- 6. CUTTING AND PATCHING SHALL BE BY THE CONTRACTOR REQUIRED TO INSTALL THE SERVICE.
- 7. THE DRAWINGS ARE DIAGRAMMATIC. THE SERVICES SHALL BE INSTALLED TO CONSERVE HEADROOM AND INTERFERE AS LITTLE AS POSSIBLE WITH THE FREE USE OF THE SPACES THROUGH WHICH THEY PASS.
- PROVIDE TWO MARKED COPIES OF "ASBUILTS" SHOWING THE SYSTEM AS INSTALLED. PROVIDE UPDATED DIGITAL CAD FILES IN ADDITION TO THE MARKED COPIES. THE DIGITAL AND HARD COPY ASBUILTS SHALL BE PROVIDED TO THE OWNER AS PART OF THE MAINTENANCE MANUALS.
- 9. THE MECHANICAL SYSTEMS OF THIS BUILDING MUST ACHIEVE THE ENERGY EFFICIENCY LEVELS BY CONFORMING TO ANSI/ASHRAE/IESNA 90.1 "ENERGY STANDARD FOR BUILDINGS EXCEPT LOW-RISE RESIDENTIAL BUILDINGS" AND CHAPTER 2 OF DIVISION 3 OF SB-10 PRESCRIPTIVE METHOD FROM THE ONTARIO BUILDING CODE.
- 10. ALL EQUIPMENT AND MATERIAL SHALL BE NEW. REPLACE ALL DAMAGED EQUIPMENT.
- 11. MATERIAL AND EQUIPMENT ARE NAMED IN THE SPECIFICATION TO ESTABLISH AN ACCEPTABLE STANDARD OF MATERIALS AND THE QUALITY OF WORKMANSHIP BY WHICH TO ADHERE.
- 12. SUBMIT SHOP DRAWINGS ELECTRONICALLY FOR ALL EQUIPMENT. THESE WILL BE REVIEWED BY THE CONSULTANT. RESUBMIT AS OFTEN AS MAY BE FOUND NECESSARY. SUBMIT ONE COMPLETE SUBMISSION INDEXED AND LABELED FOR THIS PROJECT.
- 13. PROVIDE ALL NECESSARY PROTECTION FOR FINISHED OR UNFINISHED WORK. ALL OPENINGS IN PIPES, DUCTS AND EQUIPMENT SHALL BE CAPPED TO ENSURE SERVICES ARE KEPT CLEAN WHEN NOT IN USE.
- 14. MAINTAIN INSURANCE TO FULLY PROTECT THE CONTRACTOR, OWNER AND CONSULTANT FROM ANY AND ALL CLAIMS SUCH AS UNDER THE WORKERS COMPENSATION ACT, ETC. POST PROJECT NOTIFICATION AT THE SITE IN ACCORDANCE WITH THE MINISTRY OF LABOUR REQUIREMENTS.
- 15. INSTRUCT THE OWNER'S STAFF IN THE CARE, MAINTENANCE AND OPERATION OF THE SYSTEMS.
- 16. REMOVE ALL PROTECTIVE COVERINGS, CLEAN AND POLISH ALL EQUIPMENT, FREE ALL OBSTRUCTIONS, CLEAN AND REPLACE ALL FILTERS WITH NEW. AND LEAVE ALL KEYS AND WRENCHES WITH THE OWNER.
- 17. ALL SURPLUS AND WASTE MATERIALS SHALL BE PROMPTLY REMOVED FROM THE PREMISES.
- 18. ALL AREAS NOT AFFECTED BY RENOVATION OR DEMOLITION SHALL REMAIN AS PRESENTLY INSTALLED UNLESS NOTED OTHERWISE.
- 19. THE OWNER WILL DECIDE WHICH ITEMS OR EQUIPMENT SLATED FOR REMOVAL THAT THEY WISH TO RETAIN AS THEIR PROPERTY AND THIS CONTRACTOR SHALL REMOVE ALL OTHER MATERIALS FROM THE PREMISES.
- 20. WARRANTY ALL MATERIAL AND EQUIPMENT FOR A PERIOD OF ONE (1) YEAR AFTER FINAL ACCEPTANCE OF

PART B DEMOLITION NOTES

- 1. THIS PROJECT IS ONE OF A RETROFIT NATURE IN PART, AND WHICH WILL REQUIRE SOME DEMOLITION. ALLOW FOR ALL REMEDIAL WORK IN AREAS INDICATED ON THE DRAWINGS AND AS GENERALLY DEFINED IN THE RELEVANT SECTIONS OF THE SPECIFICATIONS.
- 2. THE SCOPE OF WORK IS ESSENTIALLY THE SELECTED DISCONNECTION AND/OR REMOVAL OF SERVICES AND/OR EQUIPMENT, PIPING, DUCTWORK ETC. AS INDICATED OR REQUIRED TO COMPLETE THE WORK.
- 3. THIS DIVISION IS TO LIAISE WITH THE OWNERS OR CONSULTANT FOR EQUIPMENT BEING REMOVED THAT MAY BE SUITABLE FOR REUSE TO THAT SPECIFIED OR HANDED OVER TO THE OWNER.
- 4. THIS DIVISION TO TAKE FULL RESPONSIBILITY FOR ANY SPECIAL TOOLS OR EQUIPMENT REQUIRED TO DISASSEMBLE OR REMOVE MATERIAL FROM BUILDING.
- 5. THE GENERAL EXECUTION OF THE DEMOLITION IS TO BE CARRIED OUT IN A CLEAN AND EFFICIENT MANNER.
- DEMOLITION OF EXISTING CEILING, WALLS ETC., TO FACILITATE REMOVAL OF EXISTING SERVICES OR EQUIPMENT OR INSTALLATION OF NEW TO BE KEPT TO A MINIMUM AND THEN RESTORED TO MATCH EXISTING.
- 7. ALL OPENINGS OR HOLES CREATED BY REMOVAL OF EXISTING MECHANICAL SYSTEMS WHICH ARE NOT BEING REUSED ARE TO BE PATCHED WITH THE SAME MATERIAL SURROUNDING SURFACES.
- 8. PROTECT ALL EXISTING FURNISHINGS MATERIALS AND EQUIPMENT. ANY DAMAGE OCCURRING AS A RESULT OF THE WORK OF THIS DIVISION SHALL BE REPAIRED OR REPLACED AT THE EXPENSE OF THIS DIVISION.
- 9. WHERE WORK INVOLVES BREAKING INTO OR CONNECTING TO EXISTING SERVICES, CARRY OUT WORK AT TIMES DIRECTED BY THE OWNERS IN AN EXPEDIENT MANNER WITH MINIMUM DISRUPTION TO THE FACILITY AND SYSTEMS DOWNTIME.
- 10. WHERE UNKNOWN SERVICES ARE ENCOUNTERED, IMMEDIATELY ADVISE CONSULTANT AND CONFIRM
- 11. WHERE THE LOCATION OF ANY SERVICES HAS BEEN SHOWN ON THE PLANS, SUCH INFORMATION IS NOT GUARANTEED. IT IS THIS DIVISION'S RESPONSIBILITY TO VERIFY LOCATIONS, INVERT ELEVATIONS, ETC., IMMEDIATELY AFTER MOVING ON SITE. SHOULD FOR ANY REASON THE INFORMATION OBTAINED NECESSITATES CHANGES IN PROCEDURE OR DESIGN, ADVISE THE CONSULTANT AT ONCE. IF VERIFICATION OF EXISTING CONDITIONS IS NOT DONE AT THE OUTSET AND ANY PROBLEMS ARISE, THE RESPONSIBILITY FOR SAME IS ENTIRELY THIS DIVISION'S.
- 12. DISCONNECT AND/OR REMOVE EQUIPMENT PIPING, DUCTWORK, ETC. AS INDICATED.
- 13. CAP AND CONCEAL ALL REDUNDANT AND OBSOLETE CONNECTIONS.
- 14. PROVIDE A LIST OF EQUIPMENT TO BE REMOVED TO THE OWNER, FOR HIS ACCEPTANCE OF SAME. REMOVE ALL EQUIPMENT FROM SITE WHICH THE OWNER DOES NOT RETAIN.
- 15. MAINTAIN EQUIPMENT TO BE RETAINED BY OWNER ON SITE WHERE DIRECTED BY CONSULTANT.
- 16. DEMOLITION OF ALL PARTS OF THE WORK MUST BE COMPLETED WITHIN THE CONFINES OF THE WORK AREA AND IN SUCH A WAY AS THE DUST PRODUCED AND RISK TO INJURY OF WILL NOT ADVERSELY AFFECT THE BUILDING USERS.
- 17. DEMOLISHED AREAS OF THE EXISTING BUILDING WILL REMAIN IN THEIR CURRENT USE IN SOME CASES. DEMOLITION IN THESE AREAS MUST BE KEPT TO THE MINIMUM REQUIRED TO COMPLETE THE WORK.
- 18. DEMOLITION SHALL TAKE PLACE WITHIN AREAS ISOLATED FROM ALL OTHER AREAS WITH APPROPRIATE HOARDING, SCAFFOLDING, NETTING, FENCING OR OTHER MEANS OF SECURITY BETWEEN BUILDING USERS
- 19. CO-ORDINATE MAKING SAFE ELECTRICAL DEVICES, CAPPING PLUMBING AND REMOVAL OF FIXTURES PRIOR TO COMMENCEMENT OF DEMOLITION.
- 20. DISPOSAL OF EXISTING SYSTEM SHALL BE TO THE REQUIREMENTS OF THE LOCAL AND/OR PROVINCIAL REGULATIONS

PART C HEATING, AIR CONDITIONING, AND VENTILATION NOTES

- 1. DUCTWORK TO BE CONSTRUCTED TO SMACNA STANDARDS, MEDIUM STATIC PRESSURE WITH LEAKAGE RATE OF 5% MAXIMUM. FABRICATED IN ACCORDANCE WITH RECOMMENDATIONS OF SMACNA AND ASHRAE. SEAL ALL TRANSVERSE AND LONGITUDINAL JOINTS WITH DUCT SEALER.
- 2. SQUARE AND RECTANGULAR DUCTS:TO SMACNA. TRANSVERSE JOINTS, LONGEST SIDE UP TO AND INCLUDING 750 MM (30"): SMACNA PROPRIETARY DUCT JOINTS.

DAMPERS

ALL DAMPERS TO TO SMACNA RECOMMENDATIONS AS MINIMUM ACCEPTABLE STANDARD. SPLITTER DAMPERS OF SAME MATERIAL AS DUCT BUT ONE SHEET METAL THICKNESS HEAVIER WITH APPROPRIATE STIFFENING, CUT AIRFOIL SHAPE, PIANO HINGE PIVOT, WITH CONTROL ROD WITH LOCKING DEVICE AND POSITION INDICATOR ON EXTERIOR OF DUCT. SINGLE BLADE BALANCING ROUND AND RECTANGULAR, MAXIMUM 100MM (4") HIGH, OR SAME MATERIAL AS DUCT BUT ONE SHEET METAL THICKNESS HEAVIER (MINIMUM 16 GAUGE), V-GROOVE STIFFENED WITH LOCKING QUADRANT. MULTI-LEAF OPPOSED BLADE DAMPERS DESIGNED TO SMACNA DETAILS, SELF-LUBRICATING NYLON BEARINGS, SHAFT EXTENSION TO ACCOMMODATE INSULATION THICKNESS, WITH LOCKING QUADRANT. MANUFACTURED ADJUSTABLE EXTRACTORS TO BE WITH ADJUSTMENT ROD. ACCEPTABLE PRODUCTS: TITUS, NAILOR OR EQUAL.

FIRE DAMPERS

UL OR ULC AND SHALL MEET REQUIREMENTS OF NFPA 90A-1978.

- FACTORY FABRICATED FOR FIRE RATING REQUIREMENTS TO MAINTAIN INTEGRITY OF MEMBRANE BEING MILD STEEL, FIRE LINK ACTUATED TOP. ROUND OR SQUARE GUILLOTINE TYPE, WEIGHTED TO CLOSE AND LOCK IN CLOSED POSITION WHEN RELEASED. ROLL DOOR TYPE IN HORIZONTAL POSITION WITH VERTICAL
- AIRFLOW. SIZED TO MAINTAIN FULL FLOW CROSS SECTION OF DUCT (TYPE B). GRILLES, REGISTERS AND DIFFUSERS
- GRILLES, REGISTERS AND DIFFUSERS SHALL BE THE SAME MANUFACTURER. TYPE AS SHOWN ON THE

ACCEPTABLE MATERIALS: E.H. PRICE, TITUS, NAILOR, KRUEGER, TUTTLE & BAILEY, METALAIRE. FILTERS

SUPPLY AND INSTALL FILTERS FOR NEW EQUIPMENT AND EXISTING EQUIPMENT SERVING RENOVATED AREAS.

1" DISPOSABLE FILTER MEDIA SHALL BE SUPPLIED FOR USE DURING THE CONSTRUCTION, A COMPLETE SET

OF NEW FILTER MEDIA SHALL BE INSTALLED BEFORE TESTING AND BALANCING.

7. SYSTEM BALANCING BALANCING WILL BE FROM CASH ALLOWANCE IN TENDER FORM.

SYSTEM BALANCING

BALANCE AIR AND WATER SYSTEMS USING NEBB CERTIFIED FIRM AND AS PER NEBB REQUIREMENTS TO WITHIN 5% OF TOTAL SYSTEM CAPACITY. PROVIDE 3 COPIES OF BALANCING REPORTS C/W SYSTEM

PART D: HVAC SYSTEM CLEANING

- 1. SCOPE OF WORK: THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF VISIBLE SURFACE CONTAMINANTS AND DEPOSITS FROM WITHIN THE HVAC SYSTEMS ERV-1 AND ERV-2 IN STRICT ACCORDANCE WITH THESE SPECIFICATIONS.
- 2. SITE EVALUATION AND PREPARATIONS: CONTRACTOR SHALL CONDUCT A SITE EVALUATION, AND ESTABLISH A SPECIFIC, COORDINATED PLAN WHICH DETAILS HOW EACH AREA OF THE BUILDING WILL BE PROTECTED DURING THE VARIOUS PHASES OF THE PROJECT.
- 3. INSPECTOR QUALIFICATIONS: QUALIFIED PERSONNEL SHOULD PERFORM THE HVAC CLEANLINESS INSPECTION TO DETERMINE THE NEED FOR CLEANING. AT MINIMUM, SUCH PERSONNEL SHOULD HAVE AN UNDERSTANDING OF HVAC SYSTEM DESIGN, AND EXPERIENCE IN UTILIZING ACCEPTED INDOOR ENVIRONMENTAL SAMPLING PRACTICES, CURRENT INDUSTRY HVAC CLEANING PROCEDURES, AND APPLICABLE INDUSTRY STANDARDS.
- 4. PARTICULATE COLLECTION: WHERE THE PARTICULATE COLLECTION EQUIPMENT IS EXHAUSTING INSIDE THE BUILDING, HEPA FILTRATION WITH 99.97% COLLECTION EFFICIENCY FOR 0.3-MICRON SIZE (OR GREATER) PARTICLES SHALL BE USED.
- AIR-VOLUME CONTROL DEVICES: DAMPERS AND ANY AIR-DIRECTIONAL MECHANICAL DEVICES INSIDE THE HVAC SYSTEM MUST HAVE THEIR POSITION MARKED PRIOR TO CLEANING AND, UPON COMPLETION, MUST BE RESTORED TO THEIR MARKED POSITION.
- 6. THE CONTRACTOR SHALL CLEAN ALL AIR DISTRIBUTION DEVICES (REGISTERS, GRILLES & DIFFUSERS).
- 7. AIR HANDLING UNITS, TERMINAL UNITS (VAV, DUAL DUCT BOXES, ETC.), BLOWERS AND EXHAUST FAN: THE CONTRACTOR SHALL ENSURE THAT SUPPLY, RETURN, AND EXHAUST FANS AND BLOWERS ARE THOROUGHLY CLEANED. AREAS TO BE CLEANED INCLUDE BLOWERS, FAN HOUSINGS, PLENUMS (EXCEPT CEILING SUPPLY AND RETURN PLENUMS), SCROLLS, BLADES, VANES, SHAFTS, BAFFLES, DAMPERS, AND DRIVE ASSEMBLIES. ALL VISIBLE SURFACE CONTAMINATION DEPOSITS SHALL BE REMOVED IN ACCORDANCE WITH NADCA STANDARDS. CONTRACTOR SHALL:
- 8. CLEAN ALL AIR HANDLING UNITS (AHU) INTERNAL SURFACES, COMPONENTS AND CONDENSATE COLLECTORS AND DRAINS AND CLEAN ALL COILS AND RELATED COMPONENTS, INCLUDING EVAPORATOR FINS.
- 9. DUCT SYSTEMS: THIS CONTRACTOR SHALL: CREATE SERVICE OPENINGS IN THE SYSTEM AS NECESSARY IN ORDER TO ACCOMMODATE CLEANING OF OTHERWISE INACCESSIBLE AREAS. PROVIDE ACCESS DOORS SPECIFIED IN DUCT ACCESSORIES TO REPLACE OPENINGS. MECHANICALLY CLEAN ALL DUCT SYSTEMS TO REMOVE ALL VISIBLE CONTAMINANTS, SUCH THAT THE SYSTEMS ARE CAPABLE OF PASSING CLEANING VERIFICATION TESTS (SEE NADCA STANDARDS).
- 10. OTHER OPENINGS SHALL BE CREATED BY THIS CONTRACTOR WHERE NEEDED AND THEY MUST BE CREATED SO THEY CAN BE SEALED BY THIS CONTRACTOR IN ACCORDANCE WITH INDUSTRY CODES AND STANDARDS. CLOSURES MUST NOT SIGNIFICANTLY HINDER, RESTRICT, OR ALTER THE AIRFLOW WITHIN THE SYSTEM CONSTRUCTION TECHNIQUES USED IN THE CREATION OF OPENINGS SHOULD CONFORM TO REQUIREMENTS OF APPLICABLE BUILDING AND FIRE CODES, AND APPLICABLE NFPA, SMACNA AND NADCA STANDARDS. ALL SERVICE OPENINGS CAPABLE OF BEING RE-OPENED FOR FUTURE INSPECTION OR REMEDIATION SHALL BE CLEARLY MARKED AND SHALL HAVE THEIR LOCATION REPORTED TO THE CONSULTANT IN PROJECT REPORT
- 11. CEILING SECTIONS (TILE): THE CONTRACTOR MAY REMOVE AND REINSTALL CEILING SECTIONS TO GAIN ACCESS TO HVAC SYSTEMS DURING THE CLEANING PROCESS.
- 12. THE HVAC SYSTEM SHALL BE CLEANED USING SOURCE REMOVAL MECHANICAL CLEANING METHODS DESIGNED TO EXTRACT CONTAMINANTS FROM WITHIN THE HVAC SYSTEM AND SAFELY REMOVE CONTAMINANTS FROM THE FACILITY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SELECT SOURCE REMOVAL METHODS THAT WILL RENDER THE HVAC SYSTEM VISIBLY CLEAN AND CAPABLE OF PASSING CLEANING VERIFICATION METHODS (SEE APPLICABLE NADCA STANDARDS) AND OTHER SPECIFIED TESTS, IN ACCORDANCE WITH ALL GENERAL REQUIREMENTS. NO CLEANING METHOD, OR COMBINATION OF METHODS. SHALL BE USED WHICH COULD POTENTIALLY DAMAGE COMPONENTS OF THE HVAC SYSTEM OR NEGATIVELY ALTER THE INTEGRITY OF THE SYSTEM.
- 13. ALL METHODS USED SHALL INCORPORATE THE USE OF VACUUM COLLECTION DEVICES THAT ARE OPERATED CONTINUOUSLY DURING CLEANING. A VACUUM DEVICE SHALL BE CONNECTED TO THE DOWNSTREAM END OF THE SECTION BEING CLEANED THROUGH A PREDETERMINED OPENING. THE VACUUM COLLECTION DEVICE MUST BE OF SUFFICIENT POWER TO RENDER ALL AREAS BEING CLEANED UNDER NEGATIVE PRESSURE, SUCH THAT CONTAINMENT OF DEBRIS AND THE PROTECTION OF THE INDOOR ENVIRONMENT ARE ASSURED.
- 14. VERIFICATION OF HVAC SYSTEM CLEANLINESS WILL BE DETERMINED AFTER MECHANICAL CLEANING AND BEFORE THE APPLICATION OF ANY TREATMENT OR INTRODUCTION OF ANY TREATMENT-RELATED SUBSTANCE TO THE HVAC SYSTEM, INCLUDING BIOCIDAL AGENTS AND COATINGS. VISUAL INSPECTION: THE HVAC SYSTEM SHALL BE INSPECTED VISUALLY TO ENSURE THAT NO VISIBLE CONTAMINANTS ARE PRESENT. IF NO CONTAMINANTS ARE EVIDENT THROUGH VISUAL INSPECTION. THE HVAC SYSTEM SHALL BE CONSIDERED CLEAN: HOWEVER. THE CONSULTANT RESERVES THE RIGHT TO FURTHER VERIFY SYSTEM CLEANLINESS THROUGH SURFACE COMPARISON TESTING OR THE NADCA VACUUM TEST SPECIFIED IN THE NADCA STANDARDS. IF VISIBLE CONTAMINANTS ARE EVIDENT THROUGH VISUAL INSPECTION, THOSE PORTIONS OF THE SYSTEM WHERE CONTAMINANTS ARE VISIBLE SHALL BE RE-CLEANED AND SUBJECTED TO RE-INSPECTION FOR CLEANLINESS. NADCA VACUUM TEST ANALYSIS SHALL BE PERFORMED BY A QUALIFIED THIRD PARTY EXPERIENCED IN TESTING OF THIS NATURE THROUGH THE HVAC COMMISSIONING CONTRACT.
- 15. POST-PROJECT REPORT AT THE CONCLUSION OF THE PROJECT, THE CONTRACTOR SHALL PROVIDE A REPORT TO THE CONSULTANT INDICATING THE FOLLOWING: SUCCESS OF THE CLEANING PROJECT. AS VERIFIED THROUGH VISUAL INSPECTION AND/OR GRAVIMETRIC ANALYSIS AND AREAS OF THE SYSTEM FOUND TO BE DAMAGED AND/OR IN NEED OF REPAIR.

The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work. The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of

service from Consultant before commencement of the work.

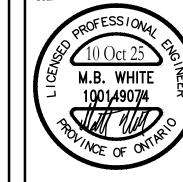
The drawings do not indicate all offsets fitting and accessories which may be required. Provide the same to meet the required conditions Drawings and specifications, etc., prepared and issued by the Consultant are the property of the Consultant and must be returned at the completion of the project. These documents are not to be duplicated or copied without the consent of the Consultant.

Do not scale this drawing. © 2025 DEI Consulting Engineers Inc.

ISSUANCES

No	DATE YY.MM.DD	DESCRIPTION	BY
1	25.10.10	ISSUED FOR TENDER	MW

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ROLLING MEADOWS PS RENOVATIONS

1522 MOUNTAIN GROVE AVE., BURLINGTON

SPECIFICATION **MECHANICAL**



MECHANICAL | ELECTRICAL | AQUATIC

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MW MW Print Date AS NOTED OCT 2025 Oct 10, 25