

**GENERAL**

PERFORM ALL MECHANICAL WORK DETAILED ON THESE DRAWINGS TO PROVIDE A COMPLETE AND FULLY FUNCTIONAL OPERATING SYSTEM TO THE SATISFACTION OF THE MECHANICAL CONSULTANT.

WHEN THERE IS APPARENT CONTRADICTION OR AMBIGUITY IN THE DOCUMENTS, OR WHERE THERE ARE APPARENT DISCREPANCIES IN OR OMISSIONS FROM THE DOCUMENTS, OR IF THERE IS ANY DOUBT AS TO THE INTENT OF THE DOCUMENTS, THE BIDDER SHALL REQUEST AND OBTAIN WRITTEN CLARIFICATION(S) FROM THE CONSULTANT PRIOR TO SUBMITTING A TENDER. CONSIDERATION SHALL NOT BE GRANTED FOR MISUNDERSTANDING OF THE INTENT OF THE DOCUMENTS OR THE EXTENT OF THE WORK TO BE PERFORMED.

EQUIPMENT SUBSTITUTIONS AFTER AWARD OF CONTRACT WILL NOT BE CONSIDERED WITHOUT WRITTEN EXPLANATION AND CONSULTANT'S WRITTEN AUTHORIZATION. THE QUALITY AND PERFORMANCE CHARACTERISTICS OF SUBSTITUTED PRODUCT SHALL BE EQUIVALENT TO THE SPECIFIED PRODUCT. ALL SUBSTITUTE PRODUCTS SHALL BE APPROVED BY CONSULTANTS. ANY ADDITIONAL COSTS INCURRED BY ALL TRADES FOR SUBSTITUTED EQUIPMENT INSTALLATION MUST BE INCURRED BY THIS CONTRACT.

BASE BUILDING STANDARDS SHALL FORM THE BASIS FOR THIS CONSTRUCTION. COMPLY WITH SCHOOL BOARDS' REQUIREMENTS FOR SYSTEM SHUTDOWN AND CONNECTION.

CODES AND BYLAWS SHALL BE STRICTLY ADHERED TO. OBTAIN NECESSARY PERMITS, APPROVALS AND INSPECTIONS FROM THE AUTHORITIES HAVING JURISDICTION.

PERMITS AND FEES REQUIRED BY THE AUTHORITIES HAVING JURISDICTION SHALL BE OBTAINED AND PAID FOR BY THIS CONTRACTOR. INCLUDE ALL APPLICABLE TAXES.

EXISTING SITE CONDITIONS AFFECTING THE WORK OF THIS TRADE SHALL BE REVIEWED PRIOR TO TENDER SUBMISSION. FAILURE TO DO SO SHALL NOT RELIEVE CONTRACTOR OF FULL CONTRACT RESPONSIBILITY.

CUTTING, PATCHING AND CORE DRILLING REQUIRED BY THIS TRADE SHALL BE PAID FOR BY THIS CONTRACTOR. COORDINATE PATCHING WITH GENERAL CONTRACTOR. ANY FLOOR CUTTING, TRENCHING, AND EXCAVATION FOR UNDERGROUND PLUMBING SHALL BE BY THE GENERAL CONTRACTOR. BACKFILL SHALL BE BY THIS CONTRACTOR. ALL SAW CUTTINGS AND RESTORATION OF CONCRETE FLOOR BY GENERAL CONTRACTOR. COORDINATE WITH SAME.

FIRE STOP SHALL BE ULC LISTED FOR THE REQUIRED SEPARATION AND PROVIDED AT ALL PIPE PENETRATIONS THROUGH RATED ASSEMBLIES.

PREMIUM TIME COSTS SHALL BE INCLUDED FOR WORK OUTSIDE OF NORMAL WORKING HOURS.

SHOP DRAWINGS SHALL BE SUBMITTED WITH CONTRACTORS' REVIEWED STAMP. SUBMIT ONE ELECTRONIC COPY. ALLOW ONE (1) WEEK FOR ENGINEERS REVIEW.

CONTROL WIRING AND DEVICES SHALL BE PROVIDED UNDER THIS CONTRACT. WHEN REQUIRED, CONTROL WORK SHALL BE COMPLETED BY SCHOOL BOARDS' APPROVED CONTRACTOR AND PAID FOR UNDER THIS CONTRACT.

ELECTRICAL DEVICES SHALL BE PROVIDED FOR ALL LOAD SIDES INCLUDING WIRING, STARTERS, DISCONNECT, ETC. VERIFY AND COORDINATE VOLTAGE AND PHASE WITH THE ELECTRICAL CONTRACTOR PRIOR TO ORDERING EQUIPMENT.

ACCESS DOORS SHALL BE PROVIDED FOR ALL INACCESSIBLE MECHANICAL EQUIPMENT AND SERVICES REQUIRING INSPECTION OR SERVICE. FINISH SHALL SUIT DESIGNERS' REQUIREMENTS. ACCESS DOORS SHALL BE RECESSED AS REQUIRED TO SUIT WALL FINISH (EG. TILE.)

ENGINEERS FINAL INSPECTION IS IMPERATIVE. PRIOR TO INSTALLATION OF ALL CEILINGS, THIS CONTRACTOR SHALL CONTACT MARGARET EDWARDS (ROMAR) AT MEDWARDS@ROMARENGINEERING.COM TO PERFORM A FINAL INSPECTION. WHEN CEILING TILES HAVE BEEN INSTALLED IT WILL BE NECESSARY FOR THE CONTRACTOR TO REMOVE PORTIONS FOR INSPECTION.

ONE YEAR WRITTEN WARRANTY SHALL BE PROVIDED FOR THE COMPLETE MECHANICAL INSTALLATION FROM DATE OF ACCEPTANCE.

CAD AS-BUILT DRAWINGS SHALL BE COMPLETED UTILIZING AUTOCAD. RECORD ACCURATELY INSTALLED WORK ON WHITE PRINTS TRANSFERRING TO AUTOCAD. SUBMIT BOTH COPIES.

OPERATING AND MAINTENANCE MANUALS CONTAINING APPROVED SHOP DRAWINGS, AIR AND WATER BALANCING REPORTS, EQUIPMENT DATA SHEETS, WRITTEN WARRANTY, OPERATING INSTRUCTIONS AND MAINTENANCE PROCEDURES SHALL BE SUBMITTED TO CONSULTANT FOR REVIEW. MANUALS SHALL BE SEPARATED WITH DIVIDERS IN APPROPRIATE SECTIONS. MAKE ALL CORRECTIONS REQUESTED BY CONSULTANT AND RESUBMIT FOR REVIEW.

WHEN THERE IS APPARENT CONTRADICTION OR AMBIGUITY IN THE DOCUMENTS, OR WHERE THERE ARE APPARENT DISCREPANCIES IN OR OMISSIONS FROM THE DOCUMENTS, OR IF THERE IS ANY DOUBT AS TO THE INTENT OF THE DOCUMENTS, THE BIDDER SHALL REQUEST AND OBTAIN WRITTEN CLARIFICATION(S) FROM THE CONSULTANT PRIOR TO SUBMITTING A TENDER. CONSIDERATION SHALL NOT BE GRANTED FOR MISUNDERSTANDING OF THE INTENT OF THE DOCUMENTS OR THE EXTENT OF THE WORK TO BE PERFORMED.

CHANGE NOTICE QUOTATIONS SHALL BE SUBMITTED COMPLETE WITH COST BREAKDOWN OF LABOUR AND MATERIALS. FAILURE TO PROVIDE WILL RESULT IN REJECTION. ALL MECHANICAL CHANGE NOTICES SHALL BE PRICED IN ACCORDANCE WITH "MECHANICAL CONTRACTORS ASSOCIATION" (MCA), LABOUR UNITS STRICTLY FOR LABOUR AND FOR MATERIAL COST USE "ALL PRISER" LESS 50% DISCOUNT FOR PIPE AND FITTINGS, 35% DISCOUNT FOR INSULATION, AND 25% FOR VALVES AND OTHER MATERIALS.

TEMPORARY FILTERS 25MM (1 IN.) SHALL BE PROVIDED AT ALL BASE BUILDING RETURN AIR OPENINGS WHICH REMAIN OPERATIONAL DURING CONSTRUCTION. FILTERS TO BE REPLACED WEEKLY. REMOVE UPON CONSTRUCTION COMPLETION.

**MECHANICAL DEMOLITION**

PROVIDE LABOUR, MATERIALS, PRODUCTS, EQUIPMENT AND SERVICES REQUIRED TO COMPLETE THE DEMOLITION WORK SPECIFIED HEREIN.

REFER TO DRAWINGS FOR EXTENT OF DEMOLITION WORK. THE DRAWINGS INDICATE THE APPROXIMATE LOCATIONS OF SERVICES AS FAR AS THESE ARE KNOWN. DISPOSE, OFF SITE, OF ALL DEBRIS IN ACCORDANCE WITH THE JURISDICTIONAL AUTHORITIES. REMOVAL AND STORAGE OF SALVAGEABLE ITEMS AS DIRECTED BY THIS SPECIFICATION SECTION UND THE OWNER OF THEIR REPRESENTATIVE.

MEET THE REQUIREMENTS AND RECOMMENDATIONS OF ALL MUNICIPAL, PROVINCIAL AND FEDERAL BYLAWS AND ORDINANCES. EXECUTE THIS WORK IN ACCORDANCE WITH THE LATEST EDITION OF THE FOLLOWING CODES AND STANDARDS. CAN/CSA-S350-M1980 CODE OF PRACTICE FOR SAFETY IN DEMOLITION OF STRUCTURES. ONTARIO BUILDING CODE. OCCUPATIONAL HEALTH AND SAFETY ACT. REGULATIONS FOR CONSTRUCTION PROJECTS.

ONTARIO FIRE CODE. REGULATIONS UNDER FIRE MARSHALS ACT.

REMOVAL FROM SITE AND DISPOSAL OF DEBRIS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL JURISDICTIONAL AUTHORITIES. ARRANGE AND PAY FOR ALL PERMITS, NOTICES AND INSPECTIONS NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE DEMOLITION WORK. ALL MATERIALS WHICH HAVE NOT BEEN DESIGNATED FOR SALVAGE FROM THE DEMOLITION SHALL BECOME THE PROPERTY OF THE CONTRACTOR. REMOVE ALL MATERIAL AND DEBRIS FROM THE SITE AS QUICKLY AS POSSIBLE AND DISPOSE OF LEGALLY. BURNING OF DEBRIS OR SELLING OF MATERIALS ON THE SITE WILL NOT BE PERMITTED. CONFORM TO REQUIREMENTS OF MUNICIPALITY'S WORKS DEPARTMENT REGARDING DISPOSAL OF WASTE MATERIALS. MATERIALS PROHIBITED FROM MUNICIPALITY WASTE MANAGEMENT FACILITIES SHALL BE REMOVED FROM SITE AND DISPOSED OF THROUGH RECYCLING COMPANIES SPECIALIZING IN RECYCLABLE MATERIALS. AT THE END OF EACH WORK SHIFT, LEAVE WORK IN A SAFE CONDITION. PATCH FIRE RATED PARTITIONS AND FLOORS TO MAINTAIN RATING UPON REMOVAL OF MECHANICAL SERVICES ORIGINALLY SPANNING FIRE RATED ASSEMBLIES. DEMOLISH

WORK INTO SECTIONS OF PRACTICAL SIZE FOR REMOVAL WITHOUT ALTERATION OR DAMAGE TO EXISTING BUILDING. STORE MATERIALS ONLY IN AREAS DESIGNATED BY THE OWNER AND AS PERMITTED BY THE LOCAL JURISDICTIONAL AUTHORITIES. MATERIALS AND DEBRIS SHALL NOT BE STACKED IN BUILDINGS TO THE EXTENT THAT OVERLOADING OF ANY PART OF THE STRUCTURE WILL OCCUR.

CONFER WITH THE OWNER CONCERNING SCHEDULE, DUST AND NOISE CONTROL PRIOR TO COMMENCING WORK IN OR ADJACENT TO EXISTING FACILITIES WHERE SUCH WORK MIGHT AFFECT EITHER THOSE FACILITIES OR THEIR OCCUPANTS. EXECUTE WORK WITH LEAST POSSIBLE INTERFERENCE OR DISTURBANCE TO OCCUPANTS, PUBLIC AND NORMAL USE OF PREMISES. PROVIDE TEMPORARY MEANS TO MAINTAIN SECURITY WHEN SECURITY HAS BEEN REDUCED BY DIVISION 15.

PROVIDE TEMPORARY DUST SCREENS, BARRIERS, WARNING SIGNS IN LOCATIONS WHERE RENOVATIONS AND ALTERATION WORK IS ADJACENT TO AREAS WHICH WILL BE OPERATIVE DURING WORK.

PROTECT ALL MECHANICAL SYSTEMS, INDICATED TO REMAIN, FROM DAMAGE. PROVIDE AND MAINTAIN READY ACCESS TO FRESHING EQUIPMENT AT ALL TIMES. PROVIDE AND MAINTAIN PROPER AND SUITABLE FIRE EXTINGUISHERS THROUGHOUT THE DURATION OF THE WORK.

THE DRAWINGS INDICATE THE APPROXIMATE LOCATIONS OF SERVICES AS FAR AS THESE ARE KNOWN. SHOULD ANY MECHANICAL OR ELECTRICAL SERVICE LINE BE BROKEN, OR DISRUPTED BY OPERATIONS SPECIFIED UNDER THIS CONTRACT, REPAIR SERVICE LINES, AND MAKE GOOD ALL DAMAGE DUE TO THE DISRUPTION OR BREAK, AT NO EXPENSE TO THE OWNER. NOTIFY THE OWNER IMMEDIATELY WHENEVER ANY SERVICE LINE IS BROKEN OR DAMAGED.

DEMOLISH AND REMOVE ALL REDUNDANT AND OBSOLETE CONTROLS (I.E. PNEUMATIC TUBING) AND/OR MECHANICAL EQUIPMENT (I.E. EXHAUST FANS, TRANSFER DUCTS, AIR TERMINAL UNIT) WHICH ARE NOT IDENTIFIED TO REMAIN ON NEW LAYOUT PLANS.

ACCEPT LIABILITY FOR COSTS INCURRED BY THE OWNER IN REPAIRING AND CLEANING EQUIPMENT, ETC., RESULTING FROM FAILURE TO COMPLY WITH THE ABOVE REQUIREMENTS.

**CLEAN UP**

DURING THE PROCESS OF WORK EACH CONTRACTOR SHALL KEEP HIS WORK TIDY. THE PREMISES SHALL AT ALL TIMES BE FREE FROM RUBBISH AND SURPLUS MATERIALS, CLEAN DAILY.

**PROTECTING-TRADES**

DIVISION 15 IS ENTIRELY FINANCIALLY RESPONSIBILITY FOR ALL DAMAGE TO PROPERTY OR ADJACENT PROPERTY, ARISING OF THE WORK OF THIS CONTRACTOR, WHETHER CAUSED BY HIMSELF OR ANY PERSONS ENGAGED ON HIS WORK.

DIVISION 15 CONTRACTORS ARE RESPONSIBLE TO ENSURE THAT THEIR EMPLOYEES AND SUB-TRADES USE ONLY SAFE PRACTICES AND CONDITIONS, OBSERVE ALL SAFETY REGULATIONS, SECURITY REGULATIONS AND FIRE SAFETY RULES.

**DUCTWORK**

NEW MATERIAL AND EQUIPMENT SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH BASE BUILDING STANDARDS.

DUCTWORK AND HANGERS SHALL BE FABRICATED IN ACCORDANCE WITH THE LATEST SMACNA STANDARDS.

FLEXIBLE DUCTWORK SHALL BE FLEXMASTER TRIPLE LOC OR EQUAL, SPIRAL WOUND ALUMINUM. SECURE TO RIGID DUCT USING GEAR CLAMPS. AT THE INLET OF EACH VAV TERMINAL CONTROL UNIT, PROVIDE A MINIMUM OF 3 DIAMETERS OF STRAIGHT FLEX DUCT. MAXIMUM LENGTH 1200 MM [4 FT.-0 IN.]. FLEXIBLE DUCTS SERVING DIFFUSERS SHALL BE INSTALLED AS ONE CONTINUOUS PIECE AND SHALL NOT EXCEED 10'-0" LENGTHS.

FIRE SMOKE DAMPERS SHALL BE OUT OF STREAM ULC LABELED. PROVIDE FIRE DAMPERS AS REQUIRED IN NEW AND EXISTING DUCTWORK C/W ACCESS DOORS.

ACOUSTIC DUCT LINING 25MM [1 IN.] SHALL BE PROVIDED WHERE SHOWN ON DRAWINGS. SECURE WITH MECHANICAL FASTENERS AND ADHESIVE. SEAL RAW EDGES. NOTE DUCT DIMENSIONS ARE CLEAR INSIDE.

THERMAL INSULATION WITH VAPOUR BARRIER SHALL BE PROVIDED ON ALL NEW SUPPLY AIR DUCTWORK TO MATCH BASE BUILDING STANDARDS OR REFER TO INSULATION SECTION.

FLEXIBLE DUCT CONNECTIONS SHALL BE DURODYNE NEOPRENE AND INSTALLED BETWEEN ALL AIR HANDLING EQUIPMENT AND SYSTEM DUCTWORK.

AIR TRANSFER OPENINGS INDICATED WITHOUT DUCT SHALL BE THIS CONTRACTOR'S RESPONSIBILITY TO ADVISE AND CONFIRM PROVISION BY GENERAL TRADES.

BALANCING AND VOLUME CONTROL DAMPERS SHALL BE PROVIDED IN NEW OR EXISTING DUCTWORK TO PROVIDE A COMPLETE AND BALANCED SYSTEM. BALANCING CONTRACTOR SHALL BE A MEMBER OF ABC OR NEBC. SUBMIT BALANCING REPORT IN TRIPLICATE TO THE CONSULTANT AND THE OWNER INDICATING TERMINAL DESIGN AND MEASURED FLOW RATES. PROVIDE EIGHT (8) ADDITIONAL HOURS OF BALANCING WORK. THIS WORK SHALL BE PERFORMED AFTER THE OCCUPANTS HAVE MOVED IN, AS MAY BE REQUIRED FOR COMFORT BALANCING.

BALANCING WORK SHALL BE COMPLETED BY SCHOOL BOARD APPROVED CONTRACTOR - QUALITY TESTING AND AIR BALANCING INC. AT 416-845-9594.

FAN SHEAVES SHALL BE ADJUSTED OR REPLACED AS REQUIRED TO OBTAIN DESIGN AIR QUANTITIES. COORDINATE THIS WORK WITH SCHOOL BOARD.

**PLUMBING SYSTEM**

EXISTING SANITARY DRAIN LOCATIONS AND INVERT ELEVATIONS SHALL BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF WORK.

**PIPING MATERIALS:**

.1 DOMESTIC HOT AND COLD WATER PIPING - TYPE "L" HARD COPPER WITH SOLDER JOINTS. PROVIDE TYPE "K" SOFT COPPER PIPING WITHOUT JOINTS BELOW GROUND. VICTAULIC FITTINGS ARE ACCEPTABLE FOR PIPE SIZES 2.5" AND OVER.

.2 DRAINAGE AND VENT PIPING (2-1/2" AND SMALLER):

SANITARY PIPING, ABOVE GROUND - DWV COPPER PIPE WITH WROUGHT COPPER SOLDER FITTINGS OR IPEx XFR OR PVC DWV.  
SANITARY PIPING, BELOW GROUND - TYPE L COPPER WITH 50/50 SOLDER JOINTS.

VENT PIPING, ABOVE GROUND - DWV COPPER PIPE WITH DRAINAGE FITTINGS, 50/50 SOLDER JOINTS.

VENT PIPING, BELOW GROUND - TYPE L COPPER PIPE WITH WROUGHT COPPER FITTINGS AND 50/50 SOLDER JOINTS.

.3 DRAINAGE AND VENT PIPING (3" AND LARGER):

SANITARY PIPING, ABOVE GROUND - CAST IRON MJ PIPE WITH MJ FITTINGS AND STAINLESS STEEL CLAMPS.

SANITARY PIPING, BELOW GROUND - ULC CERTIFIED PVC 40 DWV PIPE TO CAN/CSA B181.2 COMPLETE WITH PVC DWV FITTINGS TO CAN/CSA B181.2 WITH SOLVENT WELD JOINT, OR

ULC CERTIFIED PVCSDR 80 BDS PIPE TO CAN/CSA B182.1 COMPLETE WITH PVC BDS FITTINGS TO CAN/CSA B182.2 WITH SOLVENT WELD JOINTS.

VENT PIPING, ABOVE GROUND - CSA CLASS 4000 CAST IRON SOIL PIPE AND FITTINGS, WITH MECHANICAL JOINTS.

VENT PIPING, BELOW GROUND - CSA CLASS 4000 CAST IRON SOIL PIPE AND FITTINGS, WITH MECHANICAL JOINTS.

PROVIDE A SUPPLY SHUT OFF VALVE ON HOT, COLD, AND/OR TEMPERED WATER SUPPLY TO EACH INDIVIDUAL FIXTURE. SUPPLY SHUT OFF SHALL BE EQUAL TO MCGUIRE H165. ALL VALVES SHALL BE LINE SIZE.

BALL VALVES SHALL BE LEAD FREE WITH SOLDERED OR THREADED ENDS. BALL VALVES SHALL BE EQUAL TO KITZ #858 AND #859. ALL VALVES SHALL BE LINE SIZE.

CHECK VALVES SHALL BE LEAD FREE. CHECK VALVES 2" AND SMALLER SHALL BE EQUAL TO KITZ #822 AND #823 WITH SOLDER OR THREADED ENDS. 2 1/2" AND LARGER CHECK VALVES SHALL BE EQUAL TO KITZ #150UOMM WITH FLANGED ENDS. ALL VALVES SHALL BE LINE SIZE.

FLEXIBLE SUPPLIES ARE NOT ACCEPTABLE FOR FLUSH TANK TOILETS OR ANY EXPOSED INSTALLATION, WHERE SUPPLIES ARE INSTALLED UNDER COUNTER OR BEHIND SHROUDS FLEXIBLE SUPPLIES ARE ACCEPTABLE.

PLUMBING FIXTURES INCLUDING DOMESTIC HOT WATER HEATERS SHALL BE NEW, OF FIRST QUALITY, IN PERFECT CONDITION AND INSTALLED IN BEST WORKMANLIKE MANNER. VERIFY PLUMBING FIXTURE QUANTITIES AND LOCATIONS WITH ARCHITECT'S/DESIGNER'S DRAWINGS. REUSE OF DOMESTIC WATER HEATER IS NOT PERMITTED.

TRAP SEAL PRIMER MUST BE PROVIDED ON ALL NEW FLOOR DRAINS, FUNNEL FLOOR DRAINS AND HUB DRAINS.

EXPOSED PIPING AND FITTINGS WITHIN WASHROOMS SHALL BE CHROME PLATED. PROVIDE CHROME PLATED ESCUTCHEONS ON ALL PIPING PASSING THROUGH FINISHED SURFACES AND MILLWORK.

**INSULATION**

**PIPING INSULATION**

PROVIDE ALL LABOUR, MATERIALS, PRODUCTS, EQUIPMENT AND SERVICES TO SUPPLY AND INSTALL THERMAL INSULATION, VAPOUR BARRIERS AND FINISHES FOR MECHANICAL WORK AS INDICATED ON THE DRAWINGS AND SPECIFIED IN THIS SECTION OF THESE SPECIFICATIONS.

MAINTAIN AMBIENT TEMPERATURES AND CONDITIONS REQUIRED BY MANUFACTURERS OF ADHESIVES, MASTICS AND INSULATING CEMENTS.

INSULATION MATERIALS MUST BE MANUFACTURED AT FACILITIES CERTIFIED AND REGISTERED WITH AN APPROVED REGISTRAR TO CONFORM TO ISO 9000 QUALITY STANDARD.

ALL INSULATION PERTAINING TO DIVISION 15 SHALL BE CARRIED OUT BY ONE FIRM SPECIALIZING IN INSULATION WORK. DO NOT MIX SIMILAR PRODUCTS OF MULTIPLE MANUFACTURERS.

ACCEPTABLE INSULATION MANUFACTURERS ARE OWENS CORNING CANADA, JOHNS MANVILLE, MANSON INSULATION INC. KNAUF FIBER GLASS AND CERTANTECD.

PROVIDE INSULATION AND COVERS IN STRICT ACCORDANCE WITH AUTHORITIES GOVERNING COMBUSTIBILITY AND FIREPROOFING OF MATERIALS AND IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

PROVIDE NON-COMBUSTIBLE INSULATION, JACKETS AND FINISHES HAVING A FLAME SPREAD/SMOKE DEVELOPED RATING OF 25/50 OR LESS, MEETING CAN/ULC 5-102 REQUIREMENTS.

ATTAIN A COMPLETE AND CONTINUOUS VAPOUR BARRIER OVER INSULATION APPLIED TO COLD AND DUAL TEMPERATURE PIPING, SHEET METAL AND EQUIPMENT. USE EITHER FACTORY APPLIED VAPOUR BARRIER JACKET OF FIELD APPLIED REINFORCED FOIL FLAME RESISTANT KRAFT VAPOUR BARRIER JACKET. APPLY TO PIPING AND FITTINGS, VALVES AND INLINE COMPONENTS. SHEET METAL AND FITTINGS AND EQUIPMENT. SEAL LONGITUDINAL AND CIRCUMFERENTIAL LAPS WITH CHILDERS CP82 OR BAKOR 230-39 ADHESIVE. IF VAPOUR BARRIER JACKET IS NOT LAPPED, SEAL JOINTS WITH SELF-ADHERING 4" WIDE PLAIN ALUMINUM FOIL TAPE, OR ADHERE 4" WIDE ALUMINUM FOIL TAPE WITH CHILDERS CP82 OR BAKOR 230-39 ADHESIVE. JACKETSING WITH SELF-ADHESIVE LAPS AND SELF-ADHESIVE BARRIER TAPE WILL BE AN ACCEPTABLE ALTERNATIVE CLOSURE SYSTEM.

PROVIDE INSULATION MATERIALS WITH A MINIMUM THERMAL CONDUCTIVITY OF 0.24BTU.IN/(HR. SQ.FT.F) AT 100°F MEAN TEMPERATURE.

ON HOT PIPING APPLICATIONS, HOLD INSULATION IN PLACE WITH FLARE TYPE STAPLES (OUTWARD CLINCH).

ON COLD PIPING APPLICATIONS, APPLY VAPOUR BARRIER JACKET OVER INSULATION AND SEAL LONGITUDINAL AND CIRCUMFERENTIAL LAPS WITH CHILDERS CP82 OR BAKELITE 230-39 ADHESIVE. SEAL ALL PIPE TERMINATIONS, INCLUDING FITTINGS, WALL PENETRATIONS AND PIPE SUPPORTS WITH VAPOUR BARRIER MASTIC. FOR CHILLED WATER SYSTEMS PROVIDE VAPOUR SEAL PIPE TERMINATIONS EVERY FOUR PIPE SECTIONS.

APPLY PIPE INSULATION OVER 1-1/2" THICKNESS IN TWO LAYERS WITH JOINTS STAGGERED.

INSULATE FITTINGS WITH FABRICATED MITERED OR PREFORMED SECTIONS OF SPECIFIED INSULATION.

INSULATE OVER FLANGES AND MECHANICAL COUPLINGS WITH SPECIFIED INSULATION AND THICKNESS, SIZED TO SUIT FLANGE DIAMETERS. FILL SPACES BETWEEN INSULATION AND ADJOINING PIPE INSULATION WITH SIMILAR MATERIAL.

INSULATE VALVES AND INLINE COMPONENTS WITH FLEXIBLE INSULATION DENSITY (3/4 LBS./CU.FT.) COMPRESSED NOT MORE THAN 50% OF ORIGINAL THICKNESS. BUILD UP TO SPECIFIED THICKNESS WITH APPROVED ASBESTOS FREE FINISHING CEMENT.

DO NOT INSULATE TERMINAL UNIT AUTOMATIC CONTROL VALVES INSTALLED IN HOT PIPING. DO NOT INSULATE TERMINAL UNIT AUTOMATIC CONTROL VALVES WHICH ARE INSTALLED IN COLD PIPING AND WHICH ARE LOCATED OVER CONDENSATE DRAIN PANS.

UNDER ALL HANGERS USED ON CHILLED WATER AND DOMESTIC COLD WATER, PROVIDE AN INSERT BETWEEN SUPPORT SHIELD AND PIPING FOR PIPING 1-1/2" OR LARGER.

PROVIDE THE FOLLOWING PIPE INSULATION TYPE AS INDICATED IN THE PIPE INSULATION TABLE BELOW.

\*TYPE P1\* OWENS CORNING 850 PIPE INSULATION, JOHNS MANVILLE MICRO-LOK AP-T PLUS FIBERGLAS PIPE INSULATION, MANSON FIBERGLAS PIPE INSULATION OR KNAUF PIPE INSULATION WITH FACTORY APPLIED ALL PURPOSE VAPOUR BARRIER JACKET WHERE SCHEDULED.

MECHANICAL LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	EXISTING DUCTS, PIPES & EQUIPMENT TO REMAIN		NEW FLOOR DRAIN
	DUCTS, PIPES & EQUIPMENT TO BE REMOVED		NEW ROOF DRAIN
	NEW DUCT OR PIPE		NEW ISOLATION VALVE
	NEW DUCT OR EQUIPMENT		EXISTING BALL VALVE TO REMAIN
	NEW FLEXIBLE DUCT		NEW BALL VALVE
	NEW CAP ON EXISTING DUCT OR PIPE		EXISTING CONTROL VALVE TO REMAIN
	NEW CAP ON EXISTING DUCT		NEW CONTROL VALVE
	EXISTING VAV BOX TO REMAIN		NEW PRESSURE REDUCING VALVE
	EXISTING THERMOSTAT		NEW CIRCUIT BALANCING VALVE
	REMOVE OR RE-USE WHERE SHOWN AS NEW		NEW THREE WAY AUTOMATIC CONTROL VALVE
	NEW THERMOSTAT	VTR	VENT THROUGH ROOF
	FAN SWITCH	DTF	DOWN THROUGH FLOOR
	EXISTING SPRINKLER HEAD TO REMAIN		PIPE UP
	REMOVE OR RELOCATE EXISTING SPRINKLER HEAD		PIPE DOWN
	NEW FIRE DAMPER		NEW METER
	NEW SMOKE DAMPER		NEW UNION
	NEW MANUAL BALANCING DAMPER		NEW STRAINER
	NEW VOLUME DAMPER		NEW BACKFLOW PREVENTER
	NEW MOTORIZED COMBINATION FIRE AND SMOKE DAMPER		EXISTING SANITARY DRAIN TO REMAIN
	NEW SANITARY VENT PIPE		EXISTING SANITARY DRAIN UNDER FLOOR TO REMAIN
	EXISTING SANITARY VENT PIPE TO REMAIN		EXISTING STORM DRAIN TO REMAIN
	NEW NATURAL GAS PIPE		EXISTING STORM DRAIN UNDER FLOOR TO REMAIN
	EXISTING NATURAL GAS PIPE TO REMAIN		NEW SANITARY DRAIN
	NEW CONDENSATE DRAIN		NEW SANITARY DRAIN UNDER FLOOR
	EXISTING CONDENSATE DRAIN TO REMAIN		P-TRAP
	HEATED WATER SUPPLY		EXISTING DOMESTIC COLD WATER TO REMAIN
	EXISTING HEATED WATER SUPPLY TO REMAIN		EXISTING DOMESTIC HOT WATER TO REMAIN
	NEW HEATED WATER RETURN		EXISTING DOMESTIC HOT WATER RECIRCULATION TO REMAIN
	EXISTING HEATED WATER RETURN TO REMAIN		NEW DOMESTIC COLD WATER
	NEW CHILLED WATER SUPPLY		NEW DOMESTIC HOT WATER
	EXISTING FIRE LINE TO REMAIN		NEW DOMESTIC HOT WATER RECIRCULATION
	EXISTING SPRINKLER LINE TO REMAIN		CIRCULATING PUMP
	GRILLE OR REGISTER SIZE TYPE		DIFF NECK SIZE DIFF TYPE
	EXHAUST OR RETURN AIR CFM		SUPPLY AIR L/S

DRAWING SCHEDULE	
DWG NO	DRAWING TITLE
M-100	MECHANICAL LEGEND, SPECIFICATIONS, SCHEDULES & DRAWING LIST
M-101	SPECIFICATIONS & DETAILS
M-200	PLUMBING - DEMO/NEW
M-300	HVAC - DEMO/NEW

PLUMBING FIXTURES DRAIN TABLE				
FIXTURE DESCRIPTION	DRAIN	VENT	CW	HW
WATER CLOSET - FLUSH TANK	100mm 4"	40mm 1 1/2"	15mm 1/2"	
LAVATORY	32mm 1 1/4"	32mm 1 1/4"	15mm 1/2"	15mm 1/2"
SINK - 1 COMPARTMENT	40mm 1 1/2"	32mm 1 1/4"	15mm 1/2"	15mm 1/2"

EF SCHEDULE									
TAG	MANUFACTURER	AIR VOLUME		ESP (IN H20)	MOTOR (W)	ELECTRICAL		TYPE	REMARKS
		(CFM)	(L/S)			FLA			
EF-118	PENNBARRY	100	47	0.2	79	115/1/60	1	INLINE DUCT MOUNTED CABINET EXHAUST FAN	ON/OFF CONTROL BY LOCAL LIGHT SWITCH
ACCEPTABLE ALTERNATE: GREENHECK									

AIR TERMINAL SCHEDULE							
TAG	SIZE	MANUFACTURER	TYPE	DESCRIPTION	FINISH	OPTIONS/ ACCESSORIES	
A	SEE PLANS	EH PRICE	DE 439	EXTRUDED DRAINAGE LOUVRE	MILL	C/W BIOSCREEN	
B	24" X 24"	EH PRICE	SCD	SQUARE CONE DIFFUSER	B12		
C	12" X 12"	EH PRICE	SCD	SQUARE CONE DIFFUSER	B12		
D	SEE PLANS	EH PRICE	80	EGG CRATE RETURN	B12	CEILING MODULE FOR T-BAR MOUNTING	



No.	DESCRIPTION	BY	DATE
01	ISSUED FOR ADDENDUM	ME	MAR. 5/25
REVISIONS / STATUS			

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PROJECT:	

DUTY	INSULATION TYPE	THICKNESS	VAPOUR BARRIER
DOMESTIC COLD WATER 4" AND LESS	P-1	1/2"	YES
DOMESTIC HOT WATER LESS THAN 1-1/2"	P-1	1"	NO
1-1/2" AND LARGER	P-1	1-1/2"	NO
BUILDING HOT WATER 2" AND LESS	P-1	1"	NO
2-1/2" AND LARGER	P-1	1-1/2"	NO
CHILLED WATER 6" AND LESS	P-1	1"	YES
CONDENSER WATER 4" AND LESS	P-1	1"	YES
5" AND LARGER	P-1	1-1/2"	YES
HORIZONTAL STORM AND SANITARY DRAINAGE ALL PIPE SIZES	P-1	1"	YES
HORIZONTAL CONDENSATE DRAINS ALL PIPE SIZES	P-1	1/2"	YES
REFRIGERANT SUCTION PIPE ALL SIZES	P-1	1"	YES
HEAT TRACED PIPE FOR FREEZE PROTECTION 3" AND LESS	P-1	1"	NO
4" AND ABOVE	P-1	1-1/2"	NO

**SHEET METAL INSULATION**

PROVIDE INSULATION WITH A MINIMUM THERMAL RESISTANCE OF 0.25 BTU/IN.HR. SQ.FT. °F AT 75°F MEAN TEMPERATURE.

APPLY VAPOUR BARRIER OVER INSULATION ON COLD TEMPERATURE DUCTWORK.

CIRCULAR SILENCERS AND ACOUSTIC PLENUMS NEED NOT BE EXTERNALLY INSULATED.

DUCTWORK AND CASINGS LINED WITH ACOUSTIC INSULATION 1" OR MORE IN THICKNESS NEED NOT BE EXTERNALLY INSULATED.

PROVIDE THE FOLLOWING DUCTWORK INSULATION TYPE AS INDICATED IN THE DUCTWORK INSULATION TABLE BELOW.

"TYPE D1" OWENS CORNING RIGID VAPOUR SEAL DUCT INSULATION, JOHN MANSVILLE 814 SPIN-GLAS WITH FSK FACING, MANSION SPIN-GLAS RIGID INSULATING BOARD WITH REINFORCED FOIL FACING, OR KNAUF RIGID INSULATION BOARD WITH FSK FACING. DENSITY SHALL BE NOT LESS THAN 3LBS./CU.FT. IMPALE ON MECHANICALLY FASTENED PINS LOCATED AT NOT GREATER THAN 12" CENTERS. SECURE WITH SPEED WASHERS. BUTT JOINTS TIGHTLY TOGETHER AND SEAL WASHERS, BREAKS AND JOINTS WITH SELF-ADHERING 4" WIDE PLAIN ALUMINUM TAPE, OR ADHERE FOIL WITH CHILDERS CP82 OR BAKELITE 230-39 ADHESIVE.

"TYPE D2" OWENS CORNING FLEXIBLE DUCT INSULATION, JOHNS MANVILLE MICROLITE TYPE 75 DUCT WRAP, MANSION MICROLITE INSULATION OR KRAFT DUCT WRAP, (3/4) LB./CU.FT.) DENSITY WITH FACTORY APPLIED REINFORCED FOIL FACING. ADHERE INSULATION TO DUCT SURFACE WITH CHILDERS CP82 OR BAKELITE 230-39 ADHESIVE, WHICH SHALL BE APPLIED IN STRIPS 6" WIDE AT NOT GREATER THAN 12" CENTERS. BUTT EDGES OF INSULATION TIGHTLY TOGETHER, AND SEAL BREAKS AND JOINTS OF FACING WITH SELF-ADHERING 4" WIDE ALUMINUM TAPE OR ADHERE FOIL WITH CHILDER CP82 OR BAKELITE 230-39 ADHESIVE.

DUTY	INSULATION TYPE	THICKNESS	VAPOUR BARRIER
PANELS BEHIND UNUSED PORTION OF LOUVRES	D-1	2"	YES
FINAL 10' OF EXHAUST DUCT BEFORE EXITING BUILDING	D-1	1"	YES
EXPOSED DUCTWORK	D-1	1"	YES
DUCTWORK OUTSIDE OF BUILDING OR EXPOSED TO WEATHER	D-1	2"	YES
CONCEALED DUCTWORK UP TO TERMINAL CONTROL UNITS	D-2	1"	YES
CONCEALED DUCTWORK FROM AIR TERMINAL CONTROL UNIT DISCHARGE TO AIR TERMINALS EXCLUDING FLEXIBLE DUCTWORK.	D-2	1"	YES

PROTECT THE WORK OF THIS TRADE FROM BEING DEFACED BY OTHER TRADES. MAKE GOOD ANY DAMAGE AND LEAVE IN PERFECT CONDITION, READY FOR FINAL PAINTING.

APPLY INSULATION OVER CLEAN DRY SURFACES, FIRMLY BUTTING ALL SECTIONS TOGETHER.

**CONTROLS**

MECHANICAL AND CONTROLS CONTRACTOR SHALL ENSURE BAS COMMUNICATIONS WIRING REMAINS FULLY OPERATIONAL DURING RENOVATION. PROVIDE TEMPORARY WIRING AS REQUIRED. BAS CONTRACTOR TO BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF ANY BAS WIRING DEMO SUCH THAT NO DAMAGE IS DONE TO EXISTING HARDWARE WHICH WILL BE TURNED OVER TO DOSB FOR RE-USE.

MOUNTING HEIGHT SHALL BE 1500 MM [5 FT.] FROM FINISHED FLOOR. COORDINATE LOCATION WITH ARCHITECT/DESIGNER. DO NOT INSTALL IN VICINITY OF ELECTRICAL LIGHTING DIMMERS.

COORDINATE FINAL LOCATION OF THERMOSTATS WITH THE INTERIOR DESIGNER WITHIN 1000MM (40 IN) OF LOCATION SHOWN. ALL RELOCATIONS OUTSIDE OF THIS RANGE SHALL BE REVIEWED WITH THE CONSULTANT.

PROVIDE ALL NECESSARY EMT CONDUIT, FITTINGS AND WIRE TO PROVIDE A COMPLETE AND OPERATING CONTROL SYSTEM. HARD WIRE ALL ELECTRICAL CONTROL DEVICES INTO THE

ASSOCIATED SYSTEM MAGNETIC STARTER, ELECTRICAL TO PROVIDE 120V POWER TO CONTROL PANEL FROM THE NEAREST NORMAL POWER ELECTRICAL DISTRIBUTION PANEL.

PROVIDE ONE (1) YEAR WARRANTY ON ALL CONTROLS MATERIAL AND LABOUR. PROVIDE ALL CONTROL SHOP DRAWINGS C/W ALL CONTROL COMPONENTS, SCHEMATICS, SEQUENCES, AND WIRING DETAILS. PROVIDE AS BUILT CONTROLS DRAWINGS FOR INCLUSION IN O&M MANUALS.

BAS CONTRACTOR SHALL UPDATE ALL GRAPHICS, PROGRAMMING, PANELS, ETC. TO REFLECT CURRENT SCOPE OF WORK AND FLOOR PLANS INCLUDING ROOM NAMES AND NUMBERS.

PERMANENTLY IDENTIFY EACH WIRE, CABLE, CONDUIT AND TUBE AT EACH POINT OF CONNECTION. REMOVE AND DISPOSE OF EXISTING INSTRUMENTATION WHICH BECOMES REDUNDANT IN ACCORDANCE WITH THE OWNER'S DIRECTION.

**PLUMBING FIXTURES:**

**LS - LAB SINK**

ORION APLS-17 SINK - COUNTER MOUNTED, SINGLE COMPARTMENT SINK, CONSTRUCTED FROM CORROSION RESISTANT VIRCON HIGH DENSITY POLYETHYLENE. WITH OVERALL DIMENSION 521 MM (20-1/2") LONG, 648 MM (25-1/2") WIDE, 362 MM (14-1/4") HIGH.  
CHICAGO FAUCETS 930-CP FAUCET - MANUAL, TWO HANDLES, LABORATORY FAUCET.  
MCQUIRE LFCX170 SUPPLY - ICV DEFENDER FAUCET SUPPLY KIT, CONSISTING OF (2) STOP VALVES, (2) RISERS, (2) FLANGES (STANDARD), LEAD FREE BRASS BODY, CHROME-PLATED FINISH, WHEEL HANDLE (STANDARD), ANGLE STOP, 305 MM (12") C.P. LAVATORY FLEXIBLE COPPER RISER TUBES (STANDARD), 13 MM (1/2") SWEAT INLET X 10 MM (3/8") O.D. OUTLET.

**S-1 SINK**

FRANKE COMMERCIAL LBS6810-1-3 SINK - COUNTER MOUNTED, SINGLE COMPARTMENT SINK, CONSTRUCTED FROM GRADE 18-8 20 GAUGE TYPE 302 STAINLESS STEEL, 203 MM (8") CENTERSET, WITH OVERALL DIMENSION 522 MM (20-9/16") LONG, 511 MM (20-1/8") WIDE, 254 MM (10") HIGH.  
CHICAGO FAUCETS 786-GR8E39V317KXAB FAUCET - MANUAL, TWO HANDLES, SINK FAUCET.  
LAWLER 570-86820 MIXING VALVE - POINT OF USE AND MASTER CONTROLLED FIXTURES, THERMOSTATIC MASTER WATER MIXING CONTROL VALVE.  
MCQUIRE LFCX170 SUPPLY - ICV DEFENDER FAUCET SUPPLY KIT, CONSISTING OF (2) STOP VALVES, (2) RISERS, (2) FLANGES (STANDARD), LEAD FREE BRASS BODY, CHROME-PLATED FINISH, WHEEL HANDLE (STANDARD), ANGLE STOP, 305 MM (12") C.P. TOILET FLEXIBLE COPPER RISER TUBES (STANDARD), 13 MM (1/2") SWEAT INLET X 10 MM (3/8") O.D. OUTLET.  
MCQUIRE 8912CB P-TRAP - HEAVY CAST BRASS, ADJUSTABLE P-TRAP, 292 MM (11-1/2") LENGTH, WITH CLEANOUT PLUG.

**WC - FLOOR MOUNTED TOILET - VITREOUS CHINA - FLUSH TANK**

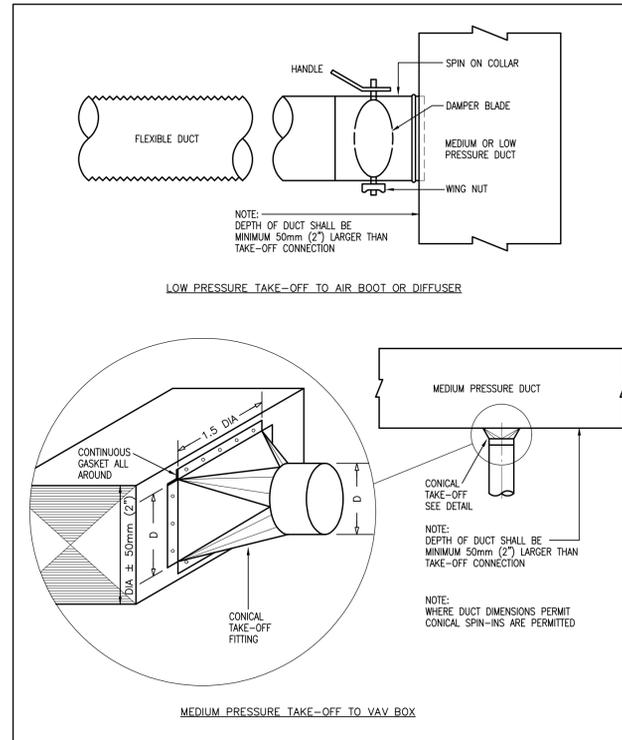
AMERICAN STANDARD 2158A174.020 TOILET - CADET® PRO™, TANK TYPE TOILET, FLOOR MOUNTED WITH FLOOR OUTLET, HIGH EFFICIENCY HET 4.8 LPF (1.28 GPF), VITREOUS CHINA, WHITE FINISH, EVERCLEAN® ANTIMICROBIAL SURFACE, ROUND FRONT BOWL.  
CENTOCO 300CCSS-001 SEAT - OPEN FRONT TOILET SEAT WITHOUT COVER, FOR ROUND BOWL, WHITE POLYPROPYLENE PLASTIC, COLOR-MATCHED PLASTIC SELF-SUSTAINING CHECK HINGES WITH ONE SOLID METAL HINGE PIN AND BOLT.  
MCQUIRE LFBV172 SUPPLY - CONVERTIBLE™ COMMERCIAL TOILET SUPPLY KIT, CONSISTING OF (1) STOP VALVE, (1) RISER, (1) FLANGE, LEAD FREE BRASS BODY, CHROME-PLATED FINISH, CONVERTIBLE LOOSE KEY/TRIANGLE HANDLE, ANGLE STOP, 305 MM (12") C.P. TOILET FLEXIBLE COPPER RISER TUBE (STANDARD), 13 MM (1/2") SWEAT INLET X 10 MM (3/8") O.D. OUTLET.

**LAV - WALL HUNG BASIN - SINGLE HANDLE METEDED FAUCET - BARRIER FREE**

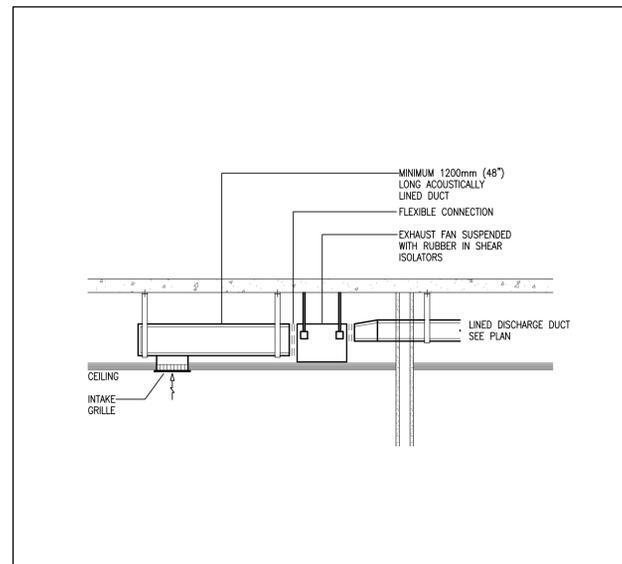
AMERICAN STANDARD 0954004EC.020 0097000.020 BASIN - MURRO, WALL-HUNG LAVATORY, VITREOUS CHINA, EVERCLEAN® ANTIMICROBIAL SURFACE, WHITE FINISH, CONCEALED FLOOR MOUNT CARRIERS.  
WATTS WCA-411 BASIN CARRIER, CONCEALED ARMS, WALL FLANGES TO ATTACH TO BACKING PLATE SECURED IN WALL WITH LOCKING DEVICE AND LEVELLING SCREWS, HEAVY GAUGE STEEL UPRIGHTS WITH INTEGRAL WELDED FEET. FOR ONE UNIT: 102 MM (4") FOR TWO TO SIX UNITS IN A ROW: 152 MM (6") FINISHED METAL STUD WALL TO PACK OF PIPE SPACE.  
MOEN COMMERCIAL 8894 M-PRESS FAUCET WITH 4" DECK PLATE, CHROME PLATED BRASS CONSTRUCTION, VANDAL RESISTANT, ADA LEVER STYLE HANDLE, CYCLE TIME ADJUSTMENT FROM 5 TO 60 SECONDS, 0.5 GPM (1.9L/MIN) VANDAL RESISTANT MULTI-STREAM LAMINAR FLOW LIMITS WATER DISCHARGE TO A MAXIMUM OF 0.25 GPC (0.96 L/CYCLE) AT 30 SECONDS OR 0.20 GPC (0.76L/CYCLE) AT 24 SECONDS.  
MOEN COMMERCIAL 99551 SERIES ESCUTCHEON PLATE CHROME FINISH.  
MCQUIRE 8872C P-TRAP, HEAVY CAST BRASS ADJUSTABLE BODY, WITH SLIP NUT, 32MM SIZE, SHALLOW WALL FLANGE AND SEAMLESS TUBULAR WALL BEND.  
AMERICAN STANDARD 0059 020 EC SHROUD/KNEE CONTACT GUARD.

**FD - FLOOR DRAIN - FINISHED AREA**

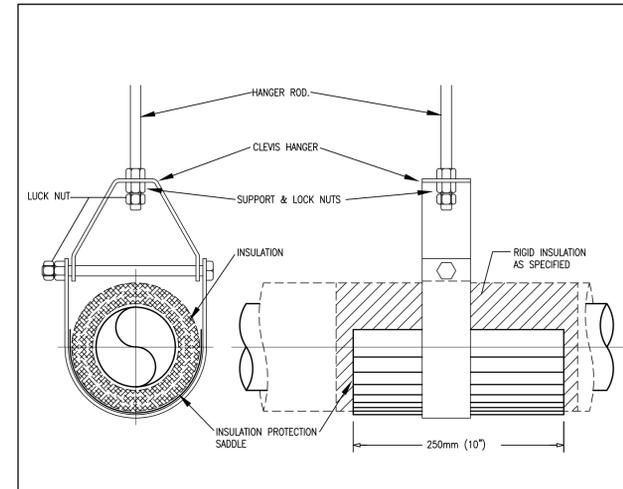
WATTS FD-100-C-A5-1 FLOOR DRAIN - EPOXY COATED CAST IRON, FLOOR DRAIN, ADJUSTABLE ROUND 6 MM (1/4") THICK TOP, 102 MM (4") PIPE SIZE, 127 MM (5") DIAMETER NICKEL BRONZE STRAINER.



**1 DUCT TAKE-OFF**  
M-101 NTS



**2 TRANSFER FAN IN CEILING SPACE**  
M-101 NTS

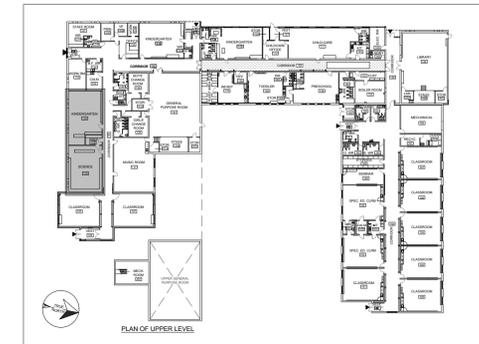


**3 PIPE HANGER**  
M-101 NTS

No.	DESCRIPTION	BY	DATE
01	ISSUED FOR ADDENDUM	ME	MAR. 5/25
REVISIONS / STATUS			

PROJECT:	
<b>VAUGHAN WILLARD KINDERGARTEN, SCIENCE, &amp; MUSIC ALTERATIONS</b>	
Project No: 25-02	
Scale:	AS NOTED
Drawn by:	GPC
Checked by:	ME
Address:	1911 Dixie Rd N, Pickering, ON L1V 1V4
TITLE:	
<b>SPECIFICATIONS &amp; DETAILS</b>	

PROJECT:	
<b>VAUGHAN WILLARD KINDERGARTEN, SCIENCE, &amp; MUSIC ALTERATIONS</b>	
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TITLE:	
<b>SPECIFICATIONS &amp; DETAILS</b>	



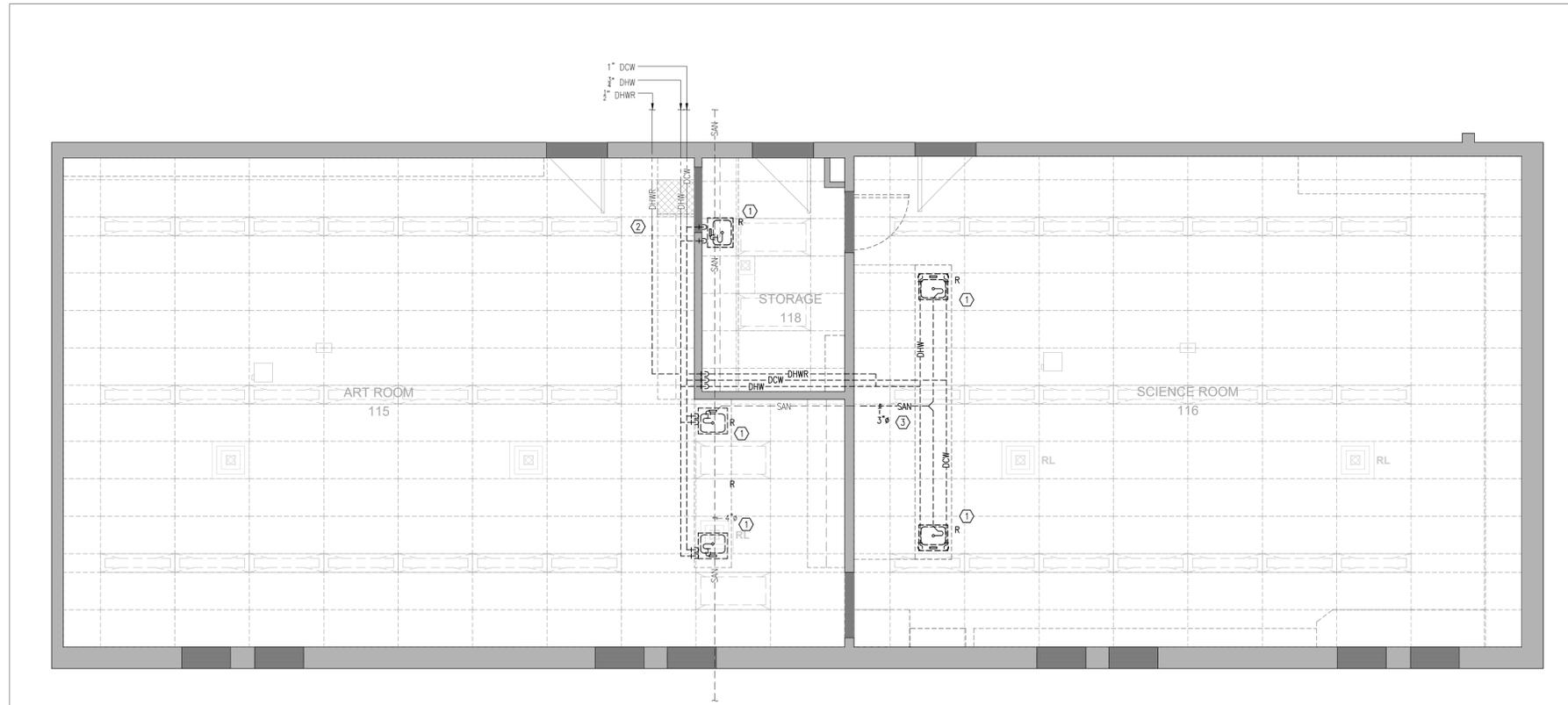
KEY PLAN

KEYED NOTES: (1/M-200)

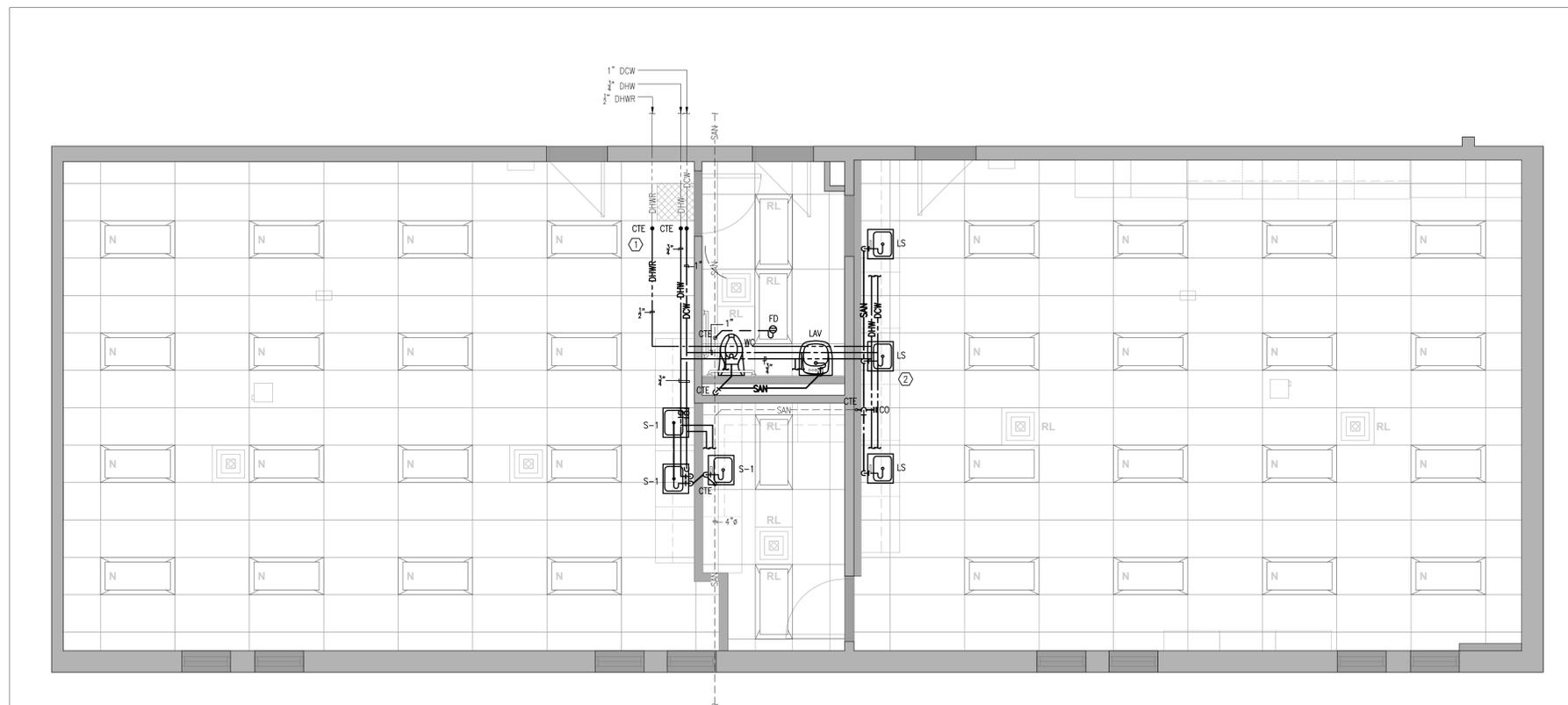
- ① REMOVE SINK (TYP.) AND ASSOCIATED DCW, DHW, DHWR AS SHOWN.
- ② REMOVE DCW, DHW, DHWR BACK TO RM.115 AS SHOWN.
- ③ REMOVE SANITARY LINES WITHIN RM. 116, LEAVE ATUBOUT CONNECTION FOR NEW WORK AS PER 2/M-200.

KEYED NOTES: (2/M-200)

- ① CONNECT DCW, DHW, DHWR TO EXISTING IN RM.115.
- ② DCW, DHW, AND SAN TO RUN AT BACK OF CABINETRY TO SERVE NEW SINKS.



1 PD - DEMO  
M-200 SCALE: 1/4"=1'-0"



2 PD - NEW  
M-200 SCALE: 1/4"=1'-0"

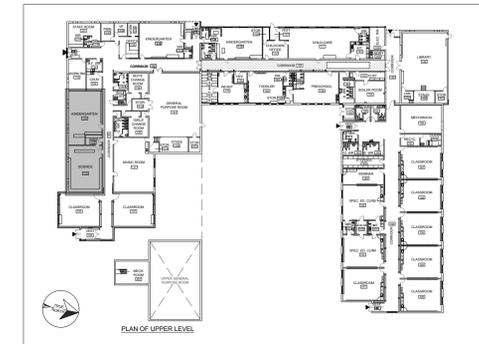
No.	DESCRIPTION	BY	DATE
01	ISSUED FOR ADDENDUM	ME	MAR. 5/25

REVISIONS / STATUS

PROJECT:  
**VAUGHAN WILLARD  
KINDERGARTEN, SCIENCE, &  
MUSIC ALTERATIONS**  
Project No: 25-02

Scale: AS NOTED  
Drawn by: GPC  
Checked by: ME  
Address: 1911 Dixie Rd N, Pickering, ON L1V 1V4

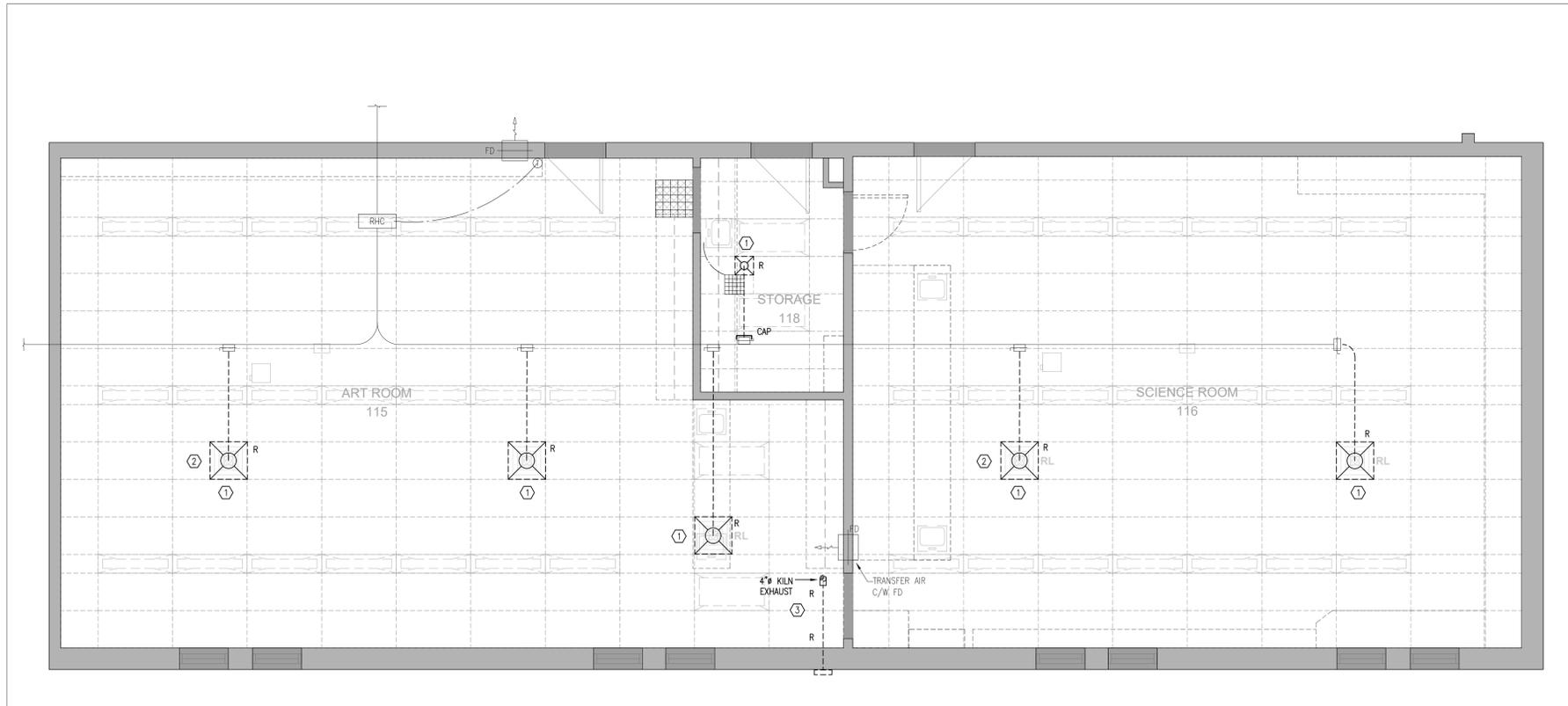
TITLE:  
**PD - (DEMO/NEW)**



KEY PLAN

KEYED NOTES: (1/M-300)

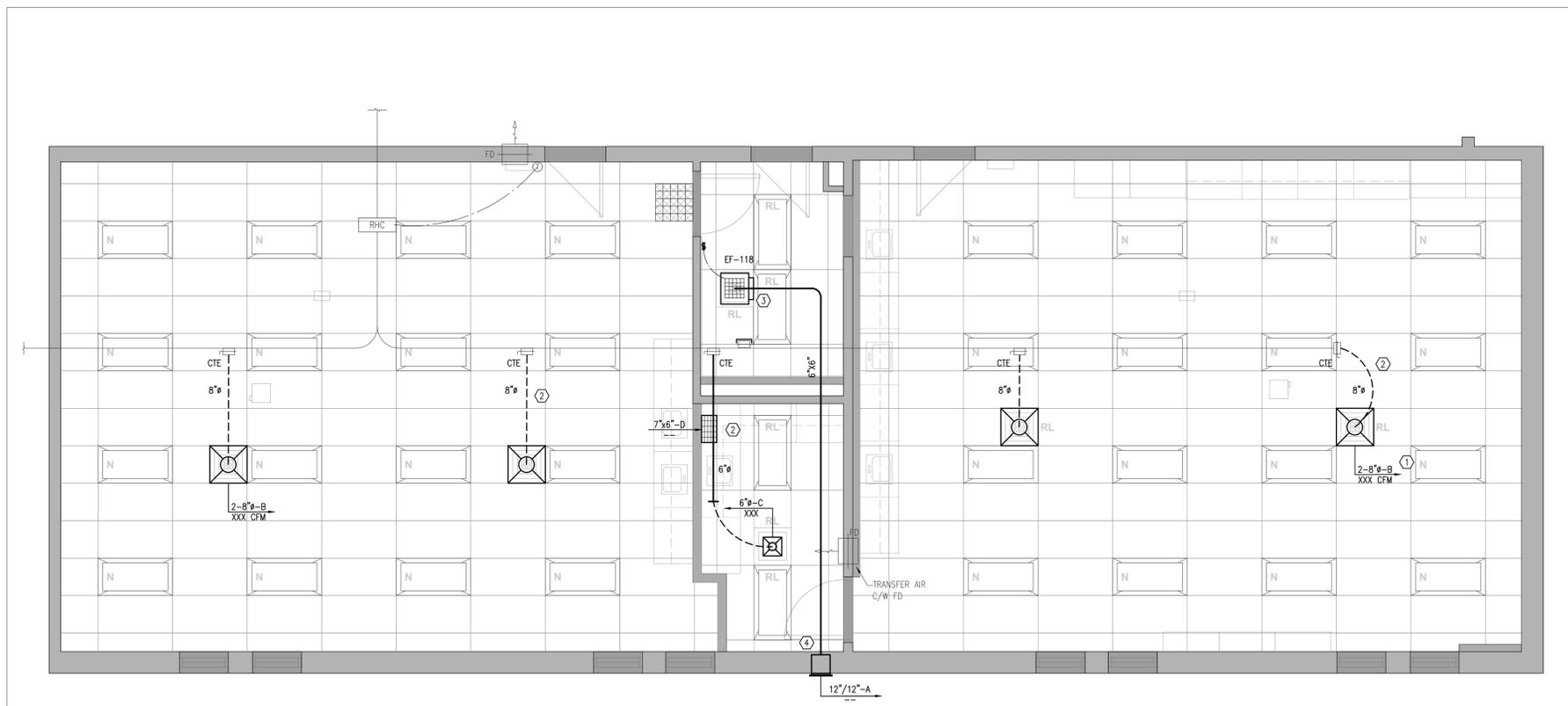
- ① AIR BALANCER TO PROVIDE PRE-PROJECT BALANCING AIRFLOW STATUS REPORT BASED ON EXISTING DIFFUSER, RETURN AIR GRILLES.
- ② REMOVE ALL DIFFUSERS AS SHOWN (TYP) AND ASSOCIATED DUCT BACK TO MAIN DUCT.
- ③ REMOVE EXISTING KILN EXHAUST WITHIN CLASSROOM, ABOVE T-BAR AND THRU OUTSIDE WALL.



1 HVAC - DEMO  
M-300 SCALE: 1/4"=1'-0"

KEYED NOTES: (2/M-300)

- ① ENGINEER TO REVIEW PRE-PROJECT BALANCING REPORT AND PROVIDE FINAL PROJECT AIRFLOWS TO CONTRACTOR.
- ② CONNECT NEW FLEX DUCT AND DIFFUSERS TO EXISTING MAIN DUCT AS SHOWN. (TYP.)
- ③ INSTALL EF-115A IN NEW WASHROOM AS SHOWN WITH LOCAL CONTROL SWITCH.
- ④ EXHAUST DUCTWORK TO GO THROUGH EXISTING OPENING FROM KILN EXHAUST. CONTRACTOR TO ADJUST EXISTING OPENING AS REQUIRED.



2 HVAC - NEW  
M-300 SCALE: 1/4"=1'-0"

No.	DESCRIPTION	BY	DATE
01	ISSUED FOR ADDENDUM	ME	MAR. 5/25

REVISIONS / STATUS

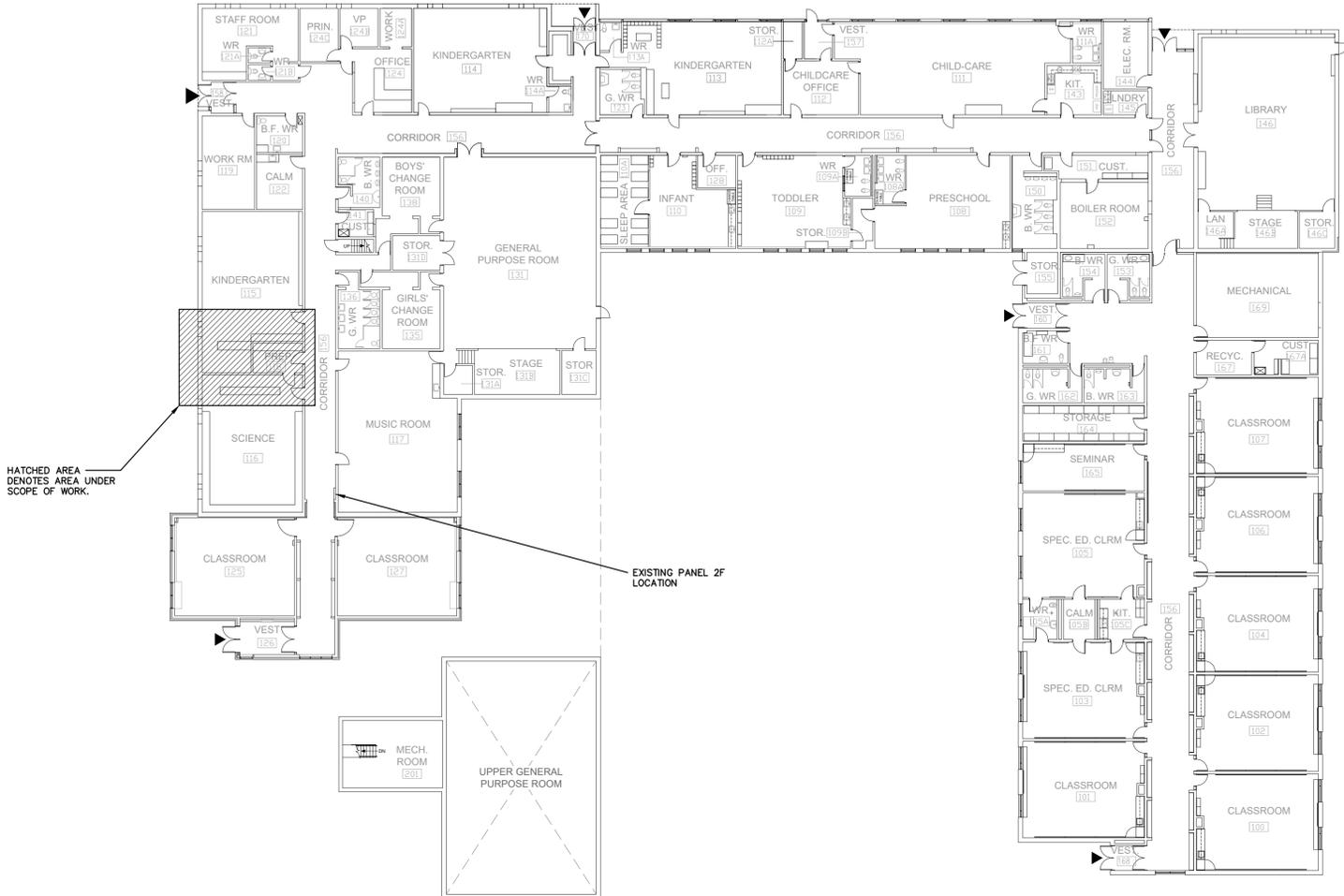
PROJECT:  
**VAUGHAN WILLARD  
KINDERGARTEN, SCIENCE, &  
MUSIC ALTERATIONS**  
Project No: 25-02

Scale: AS NOTED  
Drawn by: GPC  
Checked by: ME  
Address: 1911 Dixie Rd N, Pickering, ON L1V 1V4

TITLE:  
**HVAC - (DEMO/NEW)**

**SPECIFICATION NOTES:**

DRAWINGS ARE PERFORMANCE IN INTENT AND DIAGRAMMATIC IN NATURE.  
 PROVIDE ALL PRODUCTS AND LABOUR TO PERFORM COMPLETELY THE WORK AS SHOWN OR REQUIRED TO MEET THE DESIGN INTENT, AT NO EXTRA COST.  
 PERFORM ALL WORK IN CONFORMANCE TO BUILDING CODE, ELECTRICAL SAFETY CODE, LOCAL ELECTRICAL INSPECTOR'S REQUIREMENTS AND ALL MUNICIPAL BY-LAWS.  
 DO NOT REDUCE STANDARDS SET BY THESE DRAWINGS BY APPLYING CODES.  
 EXAMINE SITE FOR CONDITIONS AFFECTING WORK, NO EXTRA COST SHALL BE ALLOWED FOR CONSIDERATIONS OVERLOOKED.  
 APPLY FOR ALL PERMITS, SERVICES AND INSPECTIONS AND PAY ALL RELATED FEES.  
 SUBMIT SHOP DRAWINGS TO CONSULTANT FOR ALL ELECTRICAL EQUIPMENT FOR REVIEW AND COMMENTS.  
 CARRY OUT WORK IN CONFORMANCE TO BASE BUILDING STANDARDS.  
 MAKE ANY ADJUSTMENTS, REROUTINGS OR RELOCATIONS TO EXISTING ELECTRICAL PRODUCTS AS REQUIRED. PROVIDE SUCH ADJUSTMENTS AT NOT EXTRA COST.  
 BECOME FULLY FAMILIAR WITH EXISTING BUILDING SYSTEMS & EQUIPMENT OPERATIONS. PROVIDE ALL REQUIRED PRODUCTS TO MAKE NEW WORK FULLY OPERATIONAL TO MEET DESIGN INTENT.  
 INCLUDE IN QUOTED PRICE FOR ALL ALTERATIONS TO EXISTING BUILDING SYSTEMS AND ANY INSTALLED PRODUCTS AFFECTED IN INTERFACING NEW WORK.  
 MAINTAIN ALL BUILDING SERVICE IN OPERATION. PROVIDE ALL TEMPORARY WIRING AND CONNECTIONS. SHUTDOWN SERVICES ONLY AS AUTHORIZED IN WRITING.  
 INCLUDE IN QUOTED PRICE FOR PREMIUM TIME WORK REQUIRED.  
 COORDINATE WORK WITH ALL OTHER TRADES PRIOR TO INSTALLATION. NOTIFY CONSULTANT OF ANY DISCREPANCIES.  
 TEST NEW AND EXISTING INTERFACED SYSTEMS TO ENSURE PROPER OPERATION. CORRECT ALL DEFICIENCIES.  
 REPAIR ANY SYSTEM DAMAGED DURING EXECUTION OF WORK.  
 PRODUCTS SHALL BE OF MANUFACTURE SPECIFIED. WHERE MANUFACTURE IS NOT SPECIFIED, PRODUCTS SHALL BE OF HIGH COMMERCIAL QUALITY AND SHALL BE CSA APPROVED FOR THE APPLICATION.  
 VERIFY LOADING OF EXISTING CIRCUITS TO BE REUSED. DO NOT EXCEED CODE REQUIREMENTS. VERIFY ON SITE EXISTING CIRCUITS USED. SPARE AND SPACES AVAILABLE WHERE EXISTING PANELS ARE TO BE REUSED. PROVIDE ADDITIONAL BREAKERS AND CIRCUITS AS NECESSARY.  
 ADJUST PANEL SCHEDULES TO REFLECT ANY CHANGES PERFORMED TO THE CIRCUITS.  
 ALL NEW PANELS SHALL BE COPPER BUS, SIZE AS NOTED. ALL BRANCH CIRCUIT BREAKERS SHALL BE BOLT-ON TYPE, 'SMD' RATED.  
 ALL NEW DISCONNECT SWITCHES SHALL BE HEAVY DUTY QUICK-MAKE, QUICK BREAK ENCLOSED SAFETY SWITCHES.  
 HAVE ALL FLOOR PENETRATIONS FOR POKE-THROUGH SERVICES APPROVED ON SITE BY STRUCTURAL ENGINEER.  
 PACK AND SEAL ALL PENETRATIONS THROUGH FLOORS AND FIRE RATED WALLS WITH APPROVED MATERIAL TO RETAIN FIRE RATING.  
 PROVIDE ALL CUTTING AND PATCHING REQUIRED TO EFFECT WORK WITH THE PRIOR APPROVAL AND INSTRUCTION OF THE OWNER'S REPRESENTATIVE.  
 RELOCATE AND REROUTE ELECTRICAL CONDUITS, OUTLET BOXES AND OTHER PRODUCTS IN CEILING SPACES WHERE NEW PARTITIONS TO SLAB, DRYWALL CEILINGS OR NEW MECHANICAL WORK WILL INTERFERE WITH SERVICING ACCESS.  
 WIRE NEW POWER OUTLETS IN EXISTING PARTITIONS WITH ARMoured CABLE.  
 PROVIDE NEW PULL CABLE FOR ALL NEW TELEPHONE OR SIGNAL WIRING IN EXISTING PARTITIONS.  
 REMOVE ALL WIRING AND CONDUIT IN PARTITIONS TO BE DEMOLISHED.  
 REMOVE ALL ARMoured CABLE IN CEILING SPACES WHERE EXISTING OUTLETS OR EQUIPMENT IS TO BE REMOVED. MAKE SAFE ALL WIRING AND BLANK OFF ALL BOXES.  
 DO ALL REQUIRED WORK RELATED TO LIFE SAFETY SYSTEMS AT NO EXTRA COST. RETAIN THE SYSTEM MANUFACTURER'S FORCES TO PERFORM FINAL CONNECTIONS, MODIFICATIONS AND PROVISION OF NEW INTERFACING DEVICES IN THE SYSTEM PANELS.  
 ENSURE FULL COMPATIBILITY OF ALL NEW DEVICES WITH EXISTING LIFE SAFETY SYSTEMS.  
 HAVE SYSTEM MANUFACTURER TEST AND CERTIFY LIFE SAFETY SYSTEMS FOR PROPER OPERATION AT COMPLETION OF WORK. PROVIDE COMPLETE SYSTEM VERIFICATION TO SUIT LOCAL AUTHORITIES.  
 DO NOT SCALE DRAWINGS. FOR EXACT LOCATIONS REFER TO ARCHITECTURAL DRAWINGS AND VERIFY ON SITE ALL DIMENSIONS PRIOR TO INSTALLING PRODUCTS.  
 ADJUST LOCATION OF PRODUCTS UP TO 3m (10 FT) IN ANY DIRECTION AS DIRECTED AT NO EXTRA COST, PROVIDED THE CHANGES ARE REQUESTED PRIOR TO INSTALLATION.  
 INCLUDE FOR ANY ADDITIONAL COSTS INCURRED BY OTHER TRADES RESULTING FROM SUBSTITUTING ANY ALTERNATIVE EQUIPMENT.  
 PROVIDE RECORD DRAWINGS OF THE AS-CONSTRUCTED WORK. OBTAIN AND PAY FOR ONE (1) SET OF MYLAR SEPIAS. SUBMIT SEPIAS AND ONE (1) SET OF PRINTS FOR APPROVAL.  
 PROVIDE A FULLY ITEMIZED BREAKDOWN OF LABOUR AND MATERIAL FOR EXTRA OR DELETED WORK.  
 ARRANGE FOR INSPECTION OF WORK BY INSPECTION AUTHORITY. PROVIDE A FINAL UNCONDITIONAL CERTIFICATE OF APPROVAL.  
 PROVIDE A WRITTEN GUARANTEE FOR ONE (1) YEAR COVERING MATERIAL AND WORKMANSHIP. RECTIFY ANY DEFECTS PROMPTLY.  
 REFER TO DIVISION 15 DOCUMENTS AND PROVIDE ALL POWER WIRING AND DISCONNECT SWITCHES REQUIRED.  
 ENSURE RECEPTACLES ARE INSTALLED WHICH MATCH EQUIPMENT PLUG CON-FIGURATION. MAKE CHANGES TO SUIT AT NO EXTRA COST. TEST EACH RECEPTACLE FOR PROPER POLARITY AND GROUND.  
 SUPPORT ALL NEW CONDUIT INSTALLATION FROM STRUCTURE. SECURE ALL PRODUCTS IN APPROVED MANNER.  
 CIRCUIT NUMBERS INDICATED ON DRAWINGS ARE FOR LOAD GROUPING PURPOSES ONLY. BALANCE LOADS ON PANELS TO WITHIN 10% ACROSS PHASES.  
 PROVIDE ALL WIRING DEVICES AS SPECIFICATION GRADE UNLESS NOTED OTHERWISE.  
 IDENTIFY ALL EQUIPMENT PROVIDED WITH LAMICOID PLATES WITH 7mm (1/4") HIGH ENGRAVED LETTERS.  
 PROVIDE ALL WIRING AS COPPER T90 FOR OVERHEAD INSTALLATION AND RW90 FOR UNDER GROUND INSTALLATION. ALL WIRING SHALL BE DONE IN CONDUIT UNLESS OTHERWISE NOTED. Bx CABLE MAY BE USED IN PARTITION WALLS AND CEILING SPACE FOR RUNS NOT EXCEEDING 10 FT. HORIZONTALLY.  
 MINIMUM WIRE SIZE IS #12 AWG. INCREASE SIZE AS REQUIRED TO LIMIT BRANCH CIRCUIT VOLTAGE DROP TO 3% AND FEEDER VOLTAGE DROPS TO 2% AT FULL LOAD AS PER OESC AND OBC SB-10 REQUIREMENTS. USE SOLID CONDUCTORS FOR SIZES #10 AWG AND SMALLER AND STRANDED CONDUCTORS FOR SIZES # 8 AWG AND LARGER.  
 ALL LIGHTING CONTROL SYSTEMS SHALL BE TESTED AND COMMISSIONED BY THIRD PARTY IN COMPLIANCE WITH OBC SB-10.



**PLAN OF UPPER LEVEL**

HATCHED AREA DENOTES AREA UNDER SCOPE OF WORK.

EXISTING PANEL 2F LOCATION

S/N	DESCRIPTION
(15A-1P) 1	(15A-1P) CORRIDOR RECEPT.
(15A-1P) 2	(15A-1P) VEST. UV.
(15A-1P) 3	(15A-1P) VEST. UV.
(20A-1P) 4	(20A-1P) CLASSROOM CONTROL PNL REC.
(20A-1P) 5	(20A-1P) CLASSROOM 175 REC.
(20A-1P) 6	(20A-1P) CLASSROOM 175 REC.
(20A-1P) 7	(20A-1P) SPARE
(20A-1P) 8	(20A-1P) SPARE
(20A-1P) 9	(20A-1P) SPARE
(20A-1P) 10	(20A-1P) SPARE
(20A-1P) 11	(20A-1P) SPARE
(20A-1P) 12	(20A-1P) SPARE
(20A-1P) 13	(20A-1P) SPARE
(20A-1P) 14	(20A-1P) SPARE
SPACE 15	(20A-1P) SPARE
SPACE 16	(20A-1P) SPARE
SPACE 17	(15A-1P) EMERGENCY LGT. *
SPACE 18	(20A-1P) CONV. RECEPT. *
SPACE 19	(20A-1P) CONV. RECEPT. *
SPACE 20	(20A-1P) GFCI RECEPT. *
SPACE 21	(20A-1P) GFCI RECEPT. *
SPACE 22	(20A-1P) GFCI RECEPT. *
SPACE 23	SPACE
SPACE 24	SPACE
SPACE 25	SPACE
SPACE 26	SPACE
SPACE 27	SPACE
SPACE 28	SPACE
SPACE 29	SPACE
SPACE 30	SPACE

**EXISTING PANEL '2F'**

225 AMP, 120/208V, 3φ, 4W  
 LOCATED IN CORRIDOR 156  
 AT ENTRY TO NEW ADDITION

EXISTING TO REMAIN AS IS.

DENOTES NEW BREAKER TO MATCH EXISTING IN MANUFACTURER AND TYPE.

DRAWING LIST	
E-0.0	SITE PLAN AND LEGEND
E-0.1	FLOOR PLAN LIGHTING AND POWER

LEGEND OF SYMBOLS		
EXISTING	NEW	DESCRIPTION
		FLUORESCENT OR LED LIGHT FIXTURE. INSCRIBED LETTER DENOTES TYPE AS PER SCHEDULE.
		H.I.D. OR LED LIGHT FIXTURE. INSCRIBED LETTER DENOTES TYPE AS PER SCHEDULE.
		Ceiling or wall mounted LED series pictogram "RUNNING MAN" EXIT LIGHT SHADED AREA DENOTES REQUIRED FACE. SELF-POWERED 120/347V. LUMACELL OR EQUAL.
		Ceiling or wall mounted LED series pictogram "RUNNING MAN" COMBO EXIT LIGHT C/W SELF-CONTAINED 120/347V, 6V DC EMERGENCY BATTERY PACK AND 2-6W MR16 LED LAMPHEADS. LUMACELL OR EQUAL.
		EMERGENCY BATTERY UNIT AS NOTED ON DRAWINGS C/W 12V, 6 WATT MR16 LED LAMPHEADS, UNLESS NOTED OTHERWISE. LUMACELL RGS SERIES C/W 1/2 HOUR WATTAGE CAPACITY AS NOTED ON DRAWINGS (120/347V INPUT). CONTRACTOR MUST NOT EXCEED 3% VOLTAGE DROP.
		SINGLE OR DOUBLE REMOTE EMERGENCY LAMPHEADS WALL MOUNTED C/W 6 WATT MR16 LED LAMP, UNLESS NOTED OTHERWISE. LUMACELL OR APPROVED EQUAL.
		CEILING MOUNTED SELF-POWERED, 120/347V EMERGENCY FIXTURE C/W 4 X 2.5 WATT LED LAMP BEGHELLI PL-R-EM SERIES OR APPROVED EQUAL.
		15A 120V DUPLEX U-GROUND RECEPTACLE C/W MATCHING COVERPLATE. MH 12" A.F.F. ("20A" DENOTES CSA 5-20R, "1/6" DENOTES ISOLATED GROUND).
		SAME AS ABOVE EXCEPT QUAD RECEPTACLE.
		SAME AS ABOVE EXCEPT MH 3"-6" AFF OR 6" ABOVE COUNTER. SPECIAL RECEPTACLE. CSA CONFIGURATION AS NOTED.
		FLUSH FLOOR MOUNTED BOX WITH 2-20A DUPLEX RECEPTACLE AND PROVISION FOR TEL./DATA WIRING C/W CAST ALUMINUM COVER. VERIFY FINISHED COLOR. LEGRAND EVOLUTION SERIES EF88
		FLUSH FLOOR MOUNTED BOX FOR CONNECTION TO SYSTEMS FURNITURE C/W CAST ALUMINUM COVER, VERIFY FINISHED COLOR. LEGRAND EVOLUTION SERIES EF88
		WALL MOUNTED BOXES FOR POWER AND TEL./DATA WIRING TO SYSTEMS FURNITURE REFER TO FLOOR PLANS FOR WIRING REQUIREMENTS.
		SINGLE POLE TOGGLE SWITCH C/W MATCHING COVERPLATE. ("PL" DENOTES C/W PILOT LIGHT, "3" DENOTES 3-WAY, "D" DENOTES DIMMER TO SUIT APPLICATION)
		WALL MOUNTED TELEPHONE OUTLET C/W COVER PLATE MATCHING ADJACENT CONVENIENCE OUTLETS. MH 12" A.F.F. UNLESS NOTED OTHERWISE EXTEND 3/4" EMT CONDUIT C/W PULL ROPE TO ACCESSIBLE CEILING SPACE.
		WALL MOUNTED DATA OUTLET C/W COVER PLATE MATCHING ADJACENT CONVENIENCE OUTLETS. MH 12" A.F.F. UNLESS NOTED OTHERWISE EXTEND 3/4" EMT CONDUIT C/W PULL ROPE TO ACCESSIBLE CEILING SPACE.
		WALL MOUNTED CABLE OUTLET C/W COVER PLATE MATCHING ADJACENT CONVENIENCE OUTLETS. MH 12" A.F.F. UNLESS NOTED OTHERWISE EXTEND 3/4" EMT CONDUIT C/W PULL ROPE TO ACCESSIBLE CEILING SPACE.
		CONNECTION TO 120V MOTOR OR POWER OUTLET AS INDICATED ON DRAWINGS.
		CONNECTION TO 208V 1 PHASE MOTOR OR POWER OUTLET AS INDICATED ON DRAWINGS.
		CONNECTION TO 208V 3 PHASE MOTOR OR POWER OUTLET AS INDICATED ON DRAWINGS.
		CONNECTION TO 600V 3 PHASE MOTOR OR POWER OUTLET AS INDICATED ON DRAWINGS.
		DISCONNECT SWITCH SIZED AS INDICATED ON DRAWINGS OR TO SUIT.
		MANUAL MOTOR STARTER SUPPLIED BY MECHANICAL CONTRACTOR BUT INSTALLED AND WIRED BY ELECTRICAL CONTRACTOR.
		MAGNETIC MOTOR STARTER SUPPLIED BY MECHANICAL CONTRACTOR BUT INSTALLED AND WIRED BY ELECTRICAL CONTRACTOR.
		THERMOSTAT PROVIDED BY MECHANICAL CONTRACTOR UNLESS OTHERWISE NOTED.
		ELECTRIC BASEBOARD HEATER 347V 1 PHASE C/W BUILT-IN THERMOSTAT UNLESS INDICATED OTHERWISE STELPRO B SERIES OR APPROVED EQUAL. WATTAGE OF UNITS AS INDICATED ON DRAWINGS. PROVIDE JUNCTION BOX BEHIND BASEBOARD HEATER FLUSH WITH FINISHED WALL FOR CONNECTION TO HEATER.
		RECESSED ELECTRIC FORCE FLOW HEATER 347V 1 PHASE C/W BUILT-IN THERMOSTAT TAMPERPROOF. STELPRO WF SERIES OR APPROVED EQUAL. WATTAGE OF UNITS AS INDICATED ON DRAWINGS.
		SUSPENDED ELECTRIC UNIT HEATER 600V, 3 PHASE C/W REMOTE THERMOSTAT UNLESS OTHERWISE NOTED. STELPRO SHU SERIES OR APPROVED EQUAL. WATTAGE OF UNITS AS INDICATED ON DRAWINGS.
		ELECTRICAL PANEL
		FIRE ALARM PANEL OR ANNUNCIATOR
		JUNCTION BOX TO SUIT APPLICATION
		SPEED CONTROLLER SUPPLIED, INSTALLED AND WIRED BY ELECTRICAL CONTRACTOR.
		SINGLE PUSH BUTTON STATION
		MULTI PUSH BUTTON STATION
		FIRE ALARM MANUAL PULL STATION.
		FIRE ALARM HORN,
		FIRE ALARM STROBE (110cd).
		FIRE ALARM HORN/STROBE (110cd).
		FIRE ALARM HEAT DETECTOR, 135°F RATE OF RISE.
		FIRE ALARM HEAT DETECTOR, 200°F FIXED TEMPERATURE.
		FIRE ALARM SMOKE DETECTOR.
ABBREVIATION:		
WP	DENOTES "WEATHER PROOF (NEMA TYPE 4X ENCLOSURE)".	
IG	DENOTES "ISOLATED GROUND".	
GF	DENOTES "GROUND FAULT INTERRUPTER".	
---ER	DENOTES EXISTING ITEM TO BE RELOCATED.	
---RL	DENOTES EXISTING ITEM IN RELOCATED POSITION.	
---EX	DENOTES EXISTING ITEM TO REMAIN.	
---R	DENOTES EXISTING ITEM TO BE REMOVED.	
---	DENOTES NEW TO MATCH EXISTING.	

CLIENT:

KEY PLAN

SITE STATISTICS

No.	DESCRIPTION	BY.	DATE.
1	ISSUED FOR ADDENDUM	M.A	MAR. 05/25

REVISIONS

**MJA ENGINEERING LTD.**  
ELECTRICAL ENGINEERS

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PROJECT:

**VAUGHAN WILLARD  
 KINDERGARTEN, SCIENCE  
 & MUSIC ALTERATIONS**

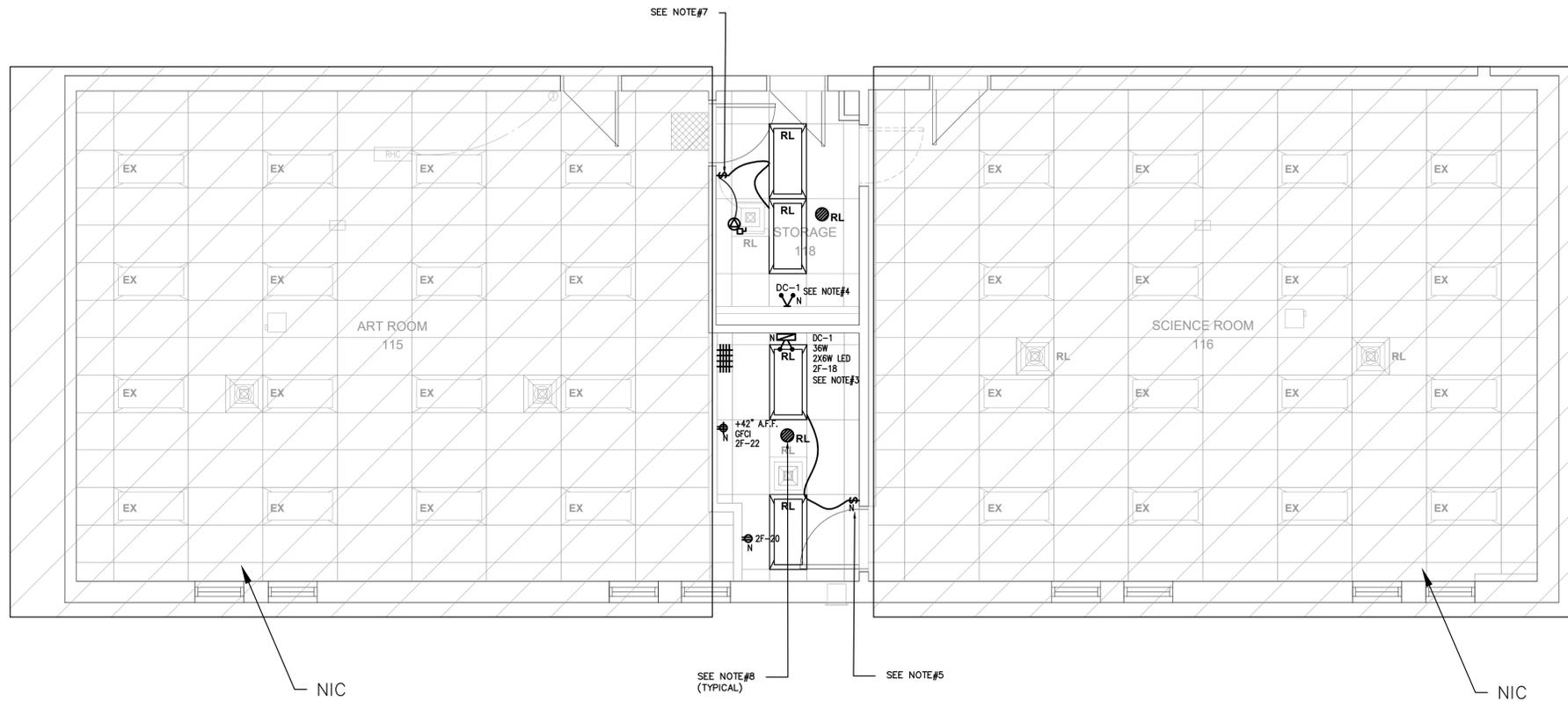
1911 DIXIE ROAD, PICKERING, ON.

SCALE: 1:250  
 DWG. BY: M.A  
 CHECKED BY: M.A  
 STATUS:  
 PLOT FACTOR:

TITLE:

**SITE PLAN  
 AND LEGEND**

PROJECT No.: 2025-015  
 DWG. No.: E-0.0  
 DATE: MAR. 05. 2025



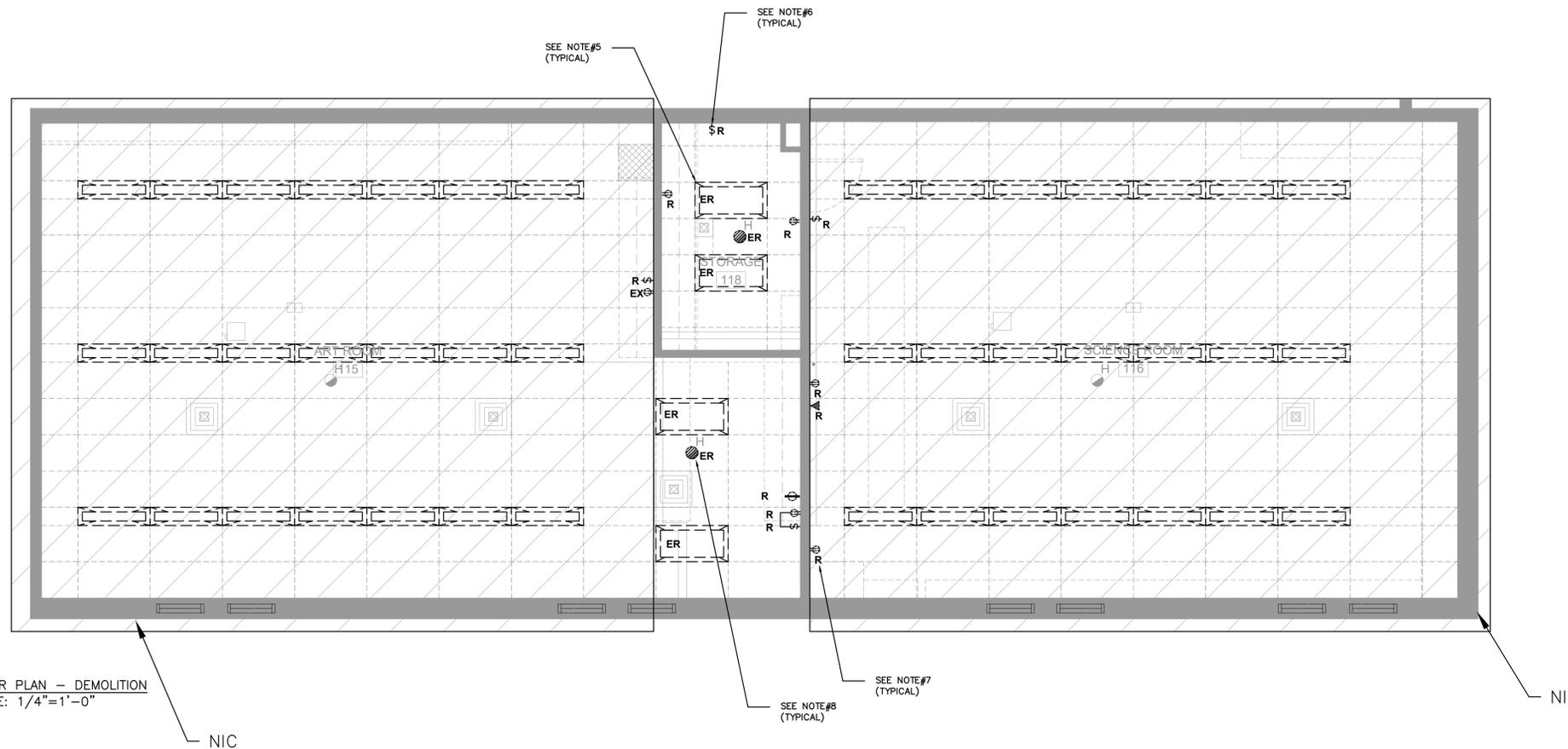
1 FLOOR PLAN -- NEW WORK  
E-0.1 SCALE: 1/4"=1'-0"

**NOTES: (NEW WORK)**

- UNLESS OTHERWISE NOTED ALL EQUIPMENT SHOWN IS NEW TO BE PROVIDED BY THIS ELECTRICAL CONTRACTOR.
- ALL NEW LIGHT FIXTURES ARE TO BE SUPPORTED INDEPENDENT OF THE T-BAR CEILING FROM THE BUILDING STRUCTURE BY MEANS OF SAFETY CHAINS (TWO PER FIXTURE) TO APPROVAL OF ESA INSPECTOR.
- PROVIDE NEW BATTERY UNIT. SEE LEGEND DWG#E0.0 FOR DESCRIPTION.
- ALL NEW REMOTE EMERGENCY LAMPHEADS SHALL BE LED (6W) OF VOLTAGE TO MATCH NEW BATTERY UNIT . SEE LEGEND FOR DESCRIPTION.
- MODIFY EXISTING CLASSROOM CIRCUIT TO ACCOMMODATE NEW BRANCH CIRCUIT AS SHOWN AND INDICATED.
- ALL CIRCUIT INDICATED IS FOR GROUPING PURPOSE ONLY, ELECTRICAL CONTRACTOR TO CONFIRM ON SITE CIRCUIT BEEN USED AND RE-USE EXISTING CIRCUITS TO FEED NEW ELECTRICAL SERVICES ACCORDINGLY. SHOW CIRCUITS USED ON AS-BUILT DRAWINGS.
- NEW LIGHT SWITCH TO CONTROL STORAGE ROOM LIGHTS AND EF-1 AT THE SAME TIME.
- EXISTING SMOKE DETECTOR IN RELOCATED POSITION, THIS ELECTRICAL CONTRACTOR TO PROVIDE FIRE ALARM VERIFICATION REPORT FOR RELOCATED SMOKE DETECTOR AND SUBMIT TO CLIENT.

**NOTES : (RE. DEMOLITION)**

- UNLESS OTHERWISE NOTED ALL ELECTRICAL EQUIPMENTS SHOWN ON THIS DRAWING ARE EXISTING TO BE REMOVED AND DISPOSED OF OFF-SITE BY THIS ELECTRICAL CONTRACTOR. COORDINATE WITH PROJECT MANAGER EXISTING SERVICES BEING REMOVED PRIOR TO COMMENCING WORK AND ADJUST ACCORDINGLY.
- WITHIN RENOVATED AREA WHERE DEVICES ARE MOUNTED WITHIN REMOVED BLOCK WALLS / PARTITIONS ELECTRICAL CONTRACTOR SHALL REMOVE DEVICE AND CUT BACK WIRING AND CONDUITS TO FEEDING JUNCTION BOX AND MAKE SAFE.
- IN GENERAL ENTIRE, ENTIRE AREA TO BE VACANT FOR NEW FIT OUT AS INDICATED ON NEW WORK DRAWING.
- ELECTRICAL CONTRACTOR SHALL ALSO REMOVE ALL ASSOCIATED CONDUIT AND WIRE, OUTLET/JUNCTION BOXES MADE REDUNDANT/OBSOLETE BY THIS ALTERATION.
- EXISTING LINEAR FLUORESCENT LIGHT BEING RELOCATED. SEE NEW WORK FOR MORE DETAILS.
- EXISTING LIGHTING SWITCH BEING REMOVED, THIS ELECTRICAL CONTRACTOR TO REMOVE WIRES & CONDUIT BACK TO JUNCTION BOX AND MAKE SAFE.
- EXISTING RECEPTACLE BEING REMOVED, THIS ELECTRICAL CONTRACTOR TO REMOVE WIRES & CONDUIT BACK TO JUNCTION BOX AND MAKE SAFE.
- EXISTING SMOKE DETECTOR BEING RELOCATED, SEE NEW PLAN FOR MORE DETAILS.



2 FLOOR PLAN -- DEMOLITION  
E-0.1 SCALE: 1/4"=1'-0"



KEY PLAN



SITE STATISTICS

No.	DESCRIPTION	M.A.	DATE.
1	ISSUED FOR ADDENDUM	M.A.	MAR. 05/25

REVISIONS

No.	DESCRIPTION	M.A.	DATE.



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PROJECT:  
**VAUGHAN WILLARD  
KINDERGARTEN, SCIENCE  
& MUSIC ALTERATIONS**  
1911 DIXIE ROAD, PICKERING, ON.

SCALE: 1/4"=1'-0"  
DWG. BY: M.A.  
CHECKED BY: M.A.  
STATUS:  
PLOT FACTOR:

TITLE:  
**FLOOR PLAN  
DEMOTION AND NEW WORK**

PROJECT No.:  
**2025-015**  
DATE: MAR. 05. 2025

DWG. No.:  
**E-0.1**