

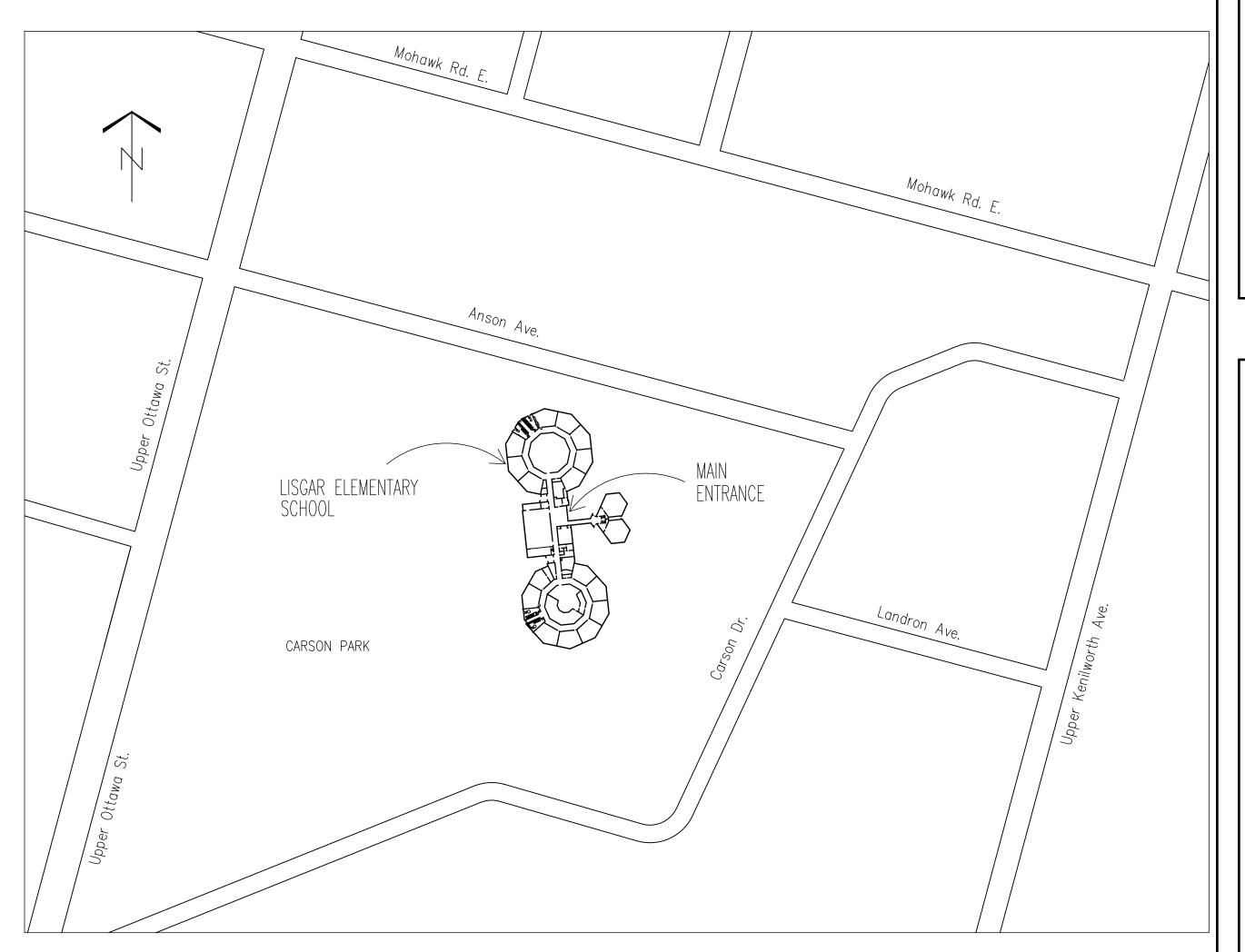
FIRE ALARM SYSTEM REQUIRED:

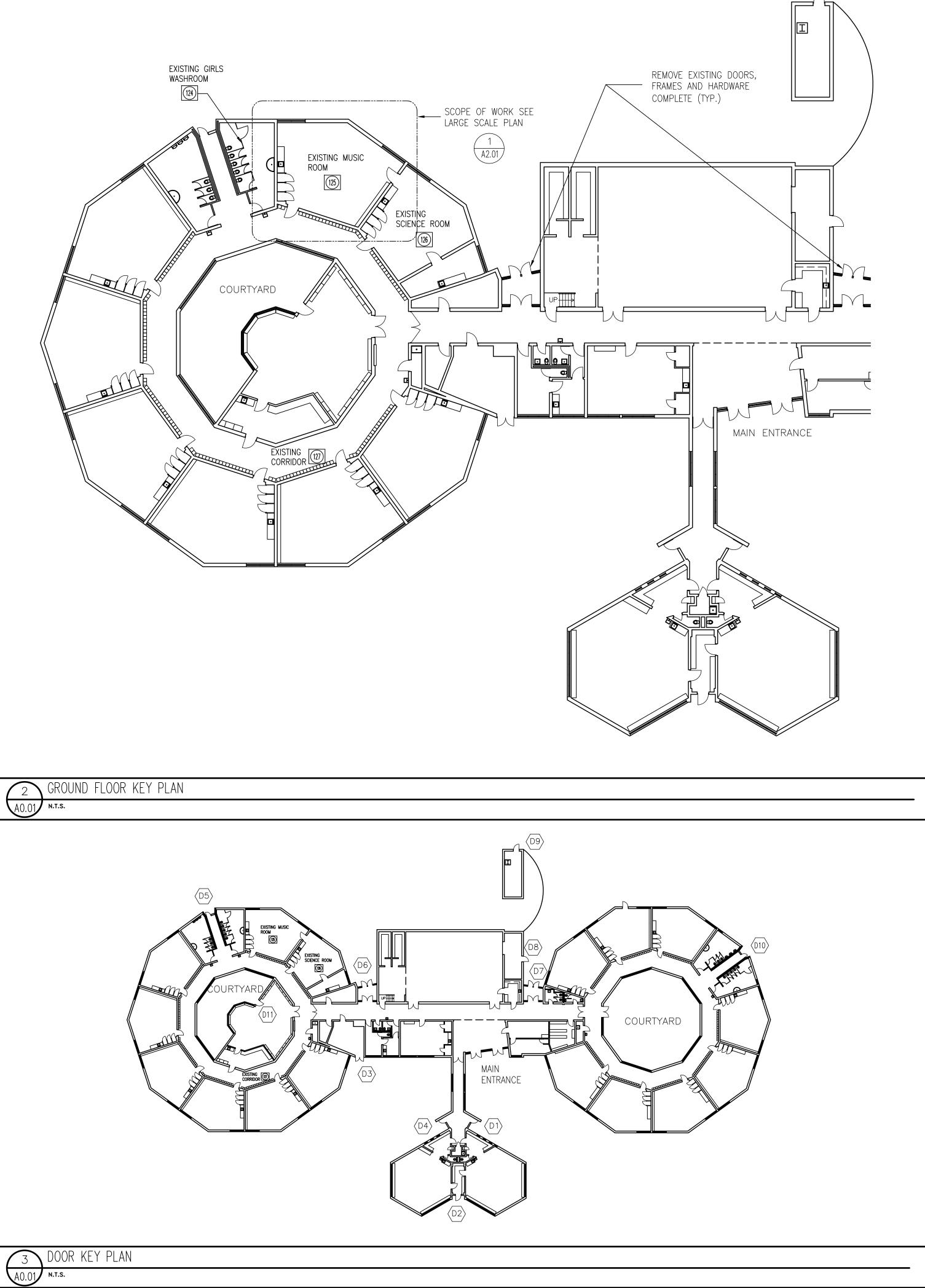
✓ YES

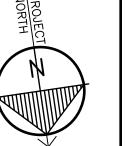
✓ NO

✓ YES

✓ NO







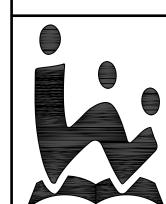
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This drawing shall not be used for construction purposes unless countersigned by:

Richard G. Butterworth, Architect

GENERAL NOTES

- 1. BEFORE TENDERING, EXAMINE ALL CONDITIONS
 AFFECT—ING THE SITE AND WORK TO BE DONE
 THEREON. THE DOCUMENTS ARE FURNISHED IN
 GOOD FAITH FOR THE GUIDANCE OF THE
 CONTRACTOR, BUT SHALL IN NO WAY RELIEVE THE
 CONTRACTOR OF THE RESPONSIBILITY OF
 ASCERTAINING, TO THEIR OWN SATISFACTION, THE
 NATURE OF ALL CONDITIONS ON THE SITE.
- 2. REPORT TO THE OWNER ALL DISCREPANCIES, OMISSIONS, ERRORS, DEPARTURES FROM ALL APPLICABLE CODES, BY-LAWS AND REGULATIONS, GOOD PRACTICE AND ANY POINTS CONSIDERED TO BE OF DUBIOUS INTENT PRIOR TO THE QUESTION PERIOD DEADLINE, SO THAT THE OWNER MAY IF CONSIDERED DESIRABLE, ISSUE INSTRUCTIONS BY ADDENDA. THE OWNER AND ARCHITECT WILL NOT BE RESPONSIBLE FOR ORAL INSTRUCTIONS.
- 3. ALL DIMENSIONS AND INFORMATION SHOWN ON TH CONTRACT DRAWINGS MUST BE CHECKED AND VERIFIED ON SITE PRIOR TO CONSTRUCTION AND FABRICATION OF ITS COMPONENTS, SHOULD EXISTING CONDITIONS OR SERVICES BE FOUND TO VARY FOR THAT INDICATED ON THE CONTRACT DRAWINGS, THE ARCHITECT MUST BE NOTIFIED IMMEDIATELY.
- . ALL CUTTING AND PATCHING BY GENERAL CONTRACTOR. PERFORM FULL ELECTROMAGNETIC SCANNING OF ALL FLOORS TO DETECT ANY PIPING, CONDUIT OR LIVE WIRES BEFORE CUTTING OR CORE DRILLING. MAKE GOOD ALL SURFACES TO MATCH EXISTING FLUSH.
- REMOVE ALL EXISTING ITEMS SHOWN DOTTED AS INDICATED ON DRAWINGS. MAKE GOOD ALL SURFACES TO MATCH EXISTING. PATCH ALL HOLES FLUSH WITH EXISTING SURFACES AND PAINT TO
- 5. PAINT ALL NEW AND EXISTING SURFACES AND ITEMS WITH SPECIAL COLOUR BLOCK PRIMER FOR ALL BASED PAINT AND 2 FINISHED COATS (TYP.)
 7. DO NOT SCALE THE DRAWINGS.



DISTRICT SCHOOL BOARD

WENTWORTH

HAMILTON-

2.	ISSUED FOR TENDER	FEB. 6, 2025
1.	ISSUED FOR REVIEW	NOV. 14, 2024
No.	REVISIONS	DATE

RICHARD

ARCHITECT

Architecture Interiors
UrbanPlanning

Ancaster

Ontario

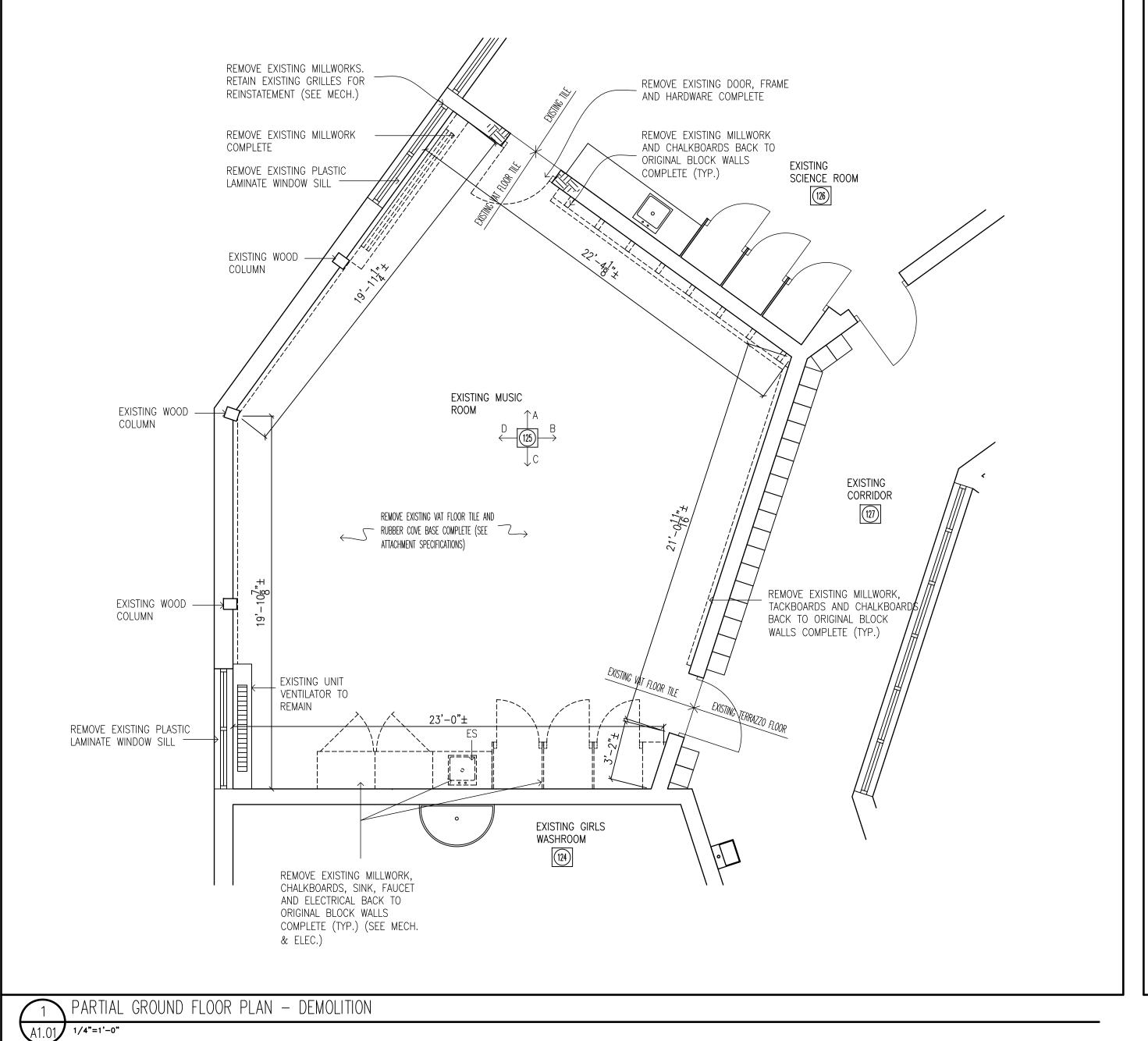
LISGAR ELEMENTARY SCHOOL HAMILTON — WENTWORTH DISTRICT SCHOOL BOARD 110 ANSON AVENUE HAMILTON, ONTARIO

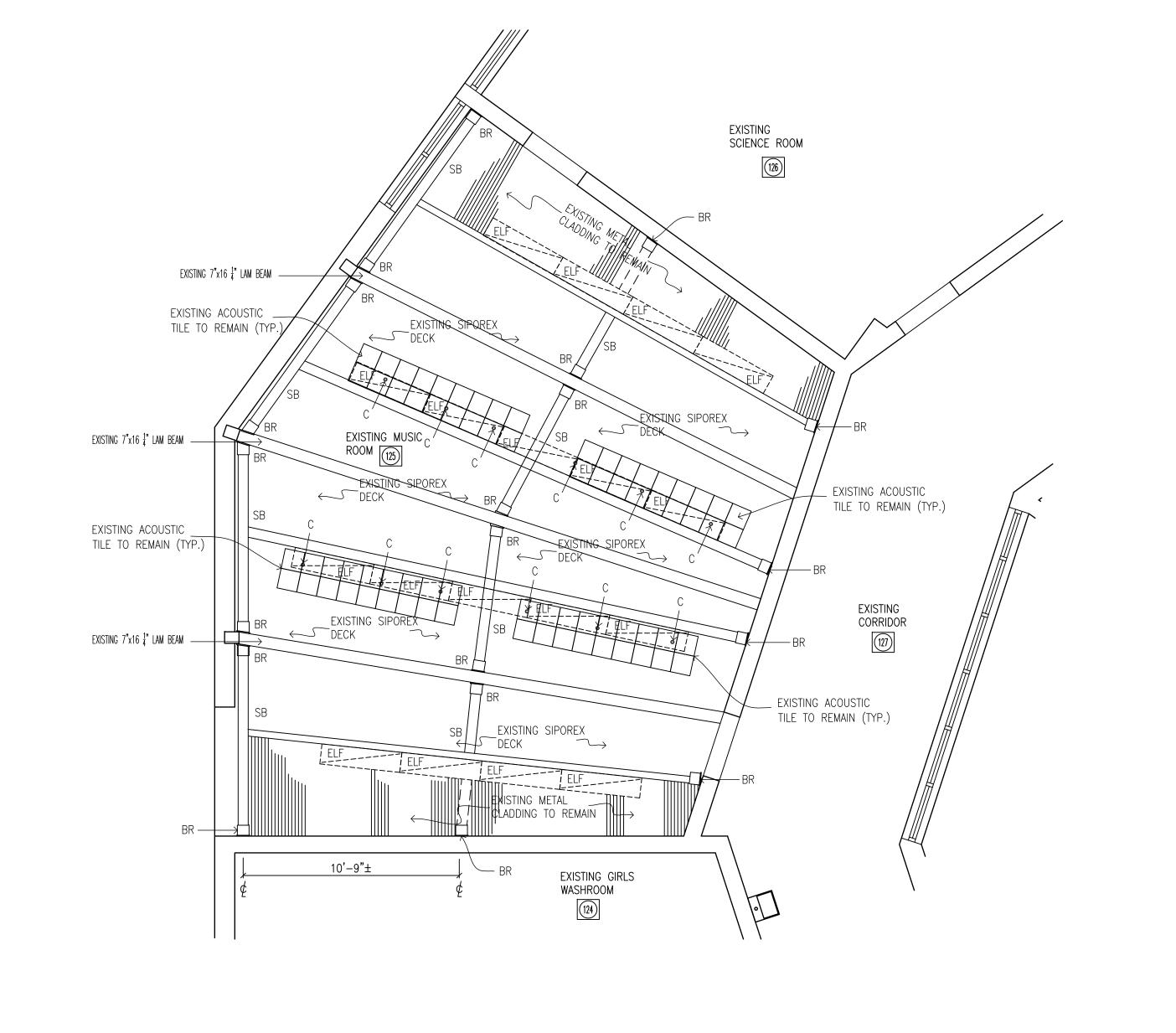
KEY PLANS AND ONTARIO BUILDING CODE MATRIX AND GENERAL NOTES

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	MS	RGB
	DATE:	JOB No.:
1=1	FEBRUARY 2025	24-105
:ALE	SCALE:	SHEET No.:
PLOT SCALE	AS SHOWN	A0.01

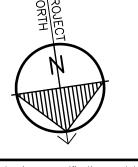
SITE KEY PLAN, O.B.C. MATRIX AND FIXTURE CALCULATIONS

A0.01 N.T.S.





2 PARTIAL GROUND FLOOR REFLECTED CEILING PLAN - DEMOLITION





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<u>DEMOLITION LEGEND</u>

ACP - EXISTING 24"x48" ACOUSTIC PANEL TO

BR - EXISTING STEEL STRUCTURAL BRACKET TO

C - EXISTING CONDUITS TO REMAIN (SEE

ELF - REMOVE EXISTING 1'x4' FLUORESCENT

LIGHT FIXTURES (SEE ELEC.) ES - REMOVE EXISTING SINK AND FAUCET (SEE

HS - EXISTING HORN/STROBE TO REMAIN (SEE

JB - EXISTING JUNCTION BOX TO REMAIN (SEE

RFPB - REMOVE EXISTING FLAG POLE BRACKET

SB - EXISTING STEEL SUPPORT HSS TO REMAIN

T - EXISTING THERMOSTAT (SEE MECH.)

VH - REMOVE EXISTING UNIT HEATER (SEE

VAT — EXISTING VINYL ACOUSTIC TILE WIFI - EXISTING WIFI TO REMAIN (SEE ELEC.)

EXISTING METAL CLADDING TO REMAIN

- EXISTING ACOUSTIC TILE TO REMAIN

⇒ ER - EXISTING RECEPTACLE TO REMAIN (SEE

\$ SW - EXISTING SWITCH TO REMAIN (SEE ELEC.)



HAMILTON-WENTWORTH SCHOOL

ISSUED FOR TENDER FEB. 6, 2025

1. ISSUED FOR REVIEW			NOV. 14, 2	
No.	REVISIONS			DATE
R	ICHARD	G.	BUTTERW	ORTH
Α	RCHITECT			INC.

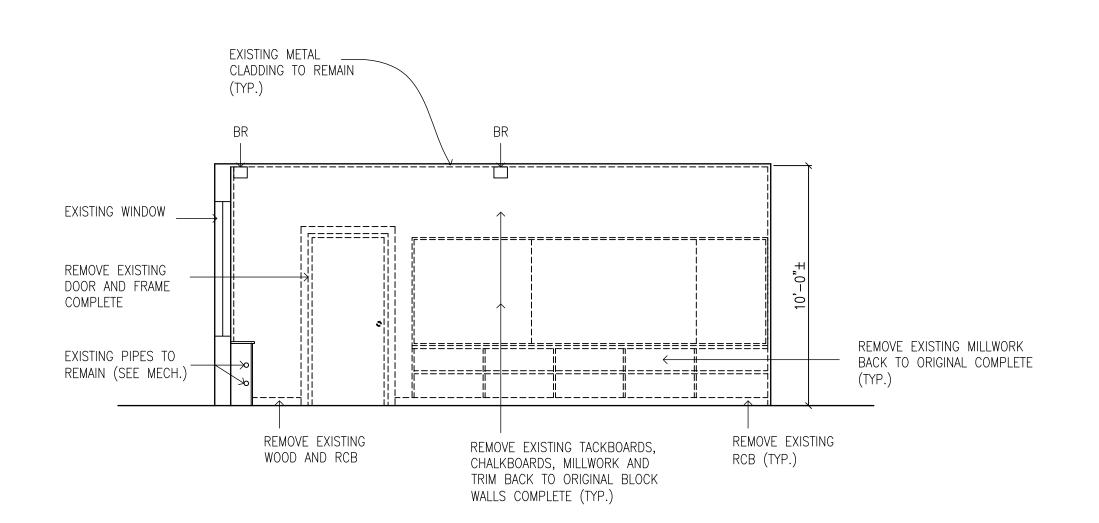
Architecture Interiors UrbanPlanning LISGAR ELEMENTARY SCHOOL HAMILTON - WENTWORTH

DISTRICT SCHOOL BOARD

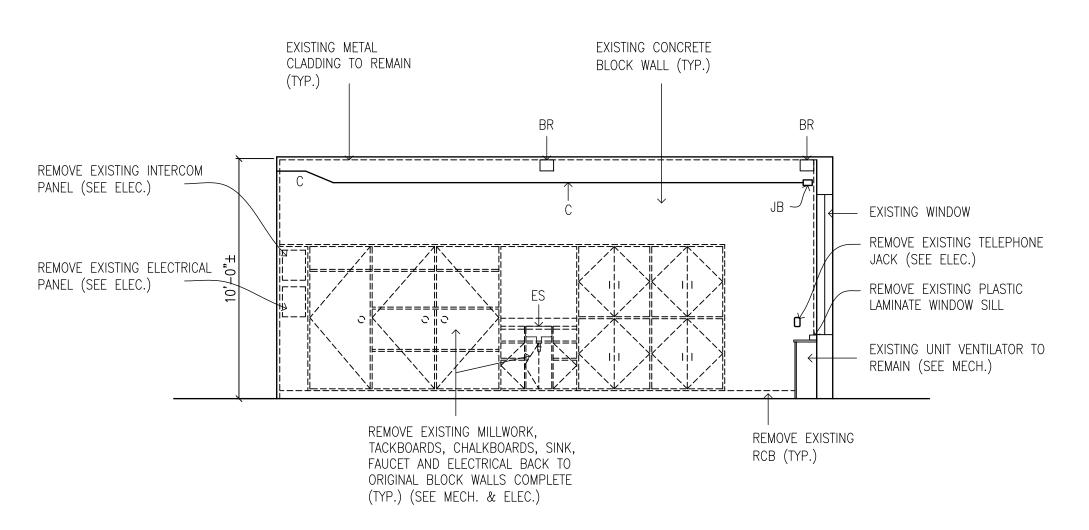
110 ANSON AVENUE HAMILTON, ONTARIO

PARTIAL GROUND FLOOR AND REFLECTED CEILING PLAN DEMOLITION

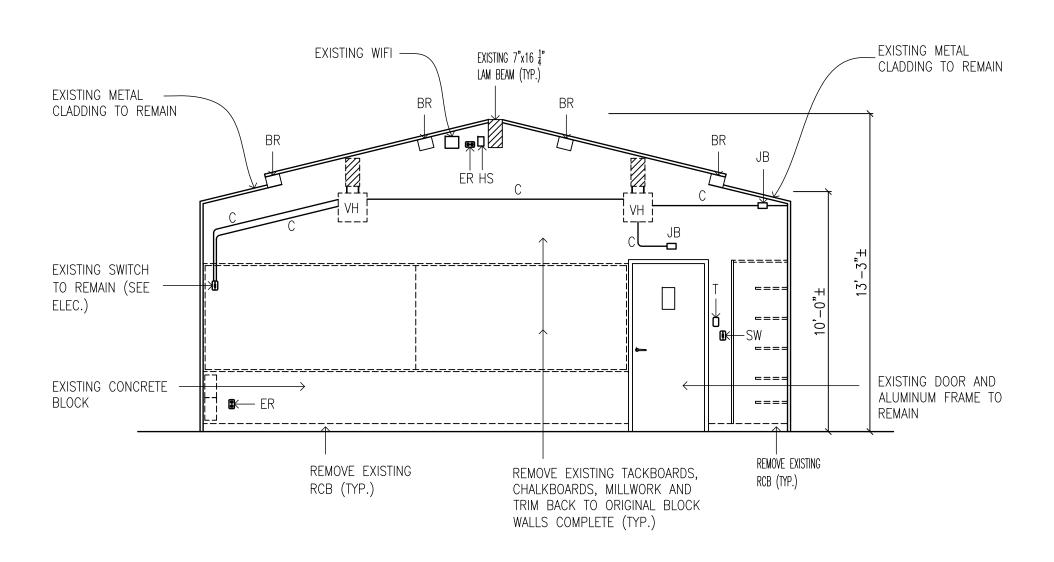
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FEBRUARY 2025	24-105
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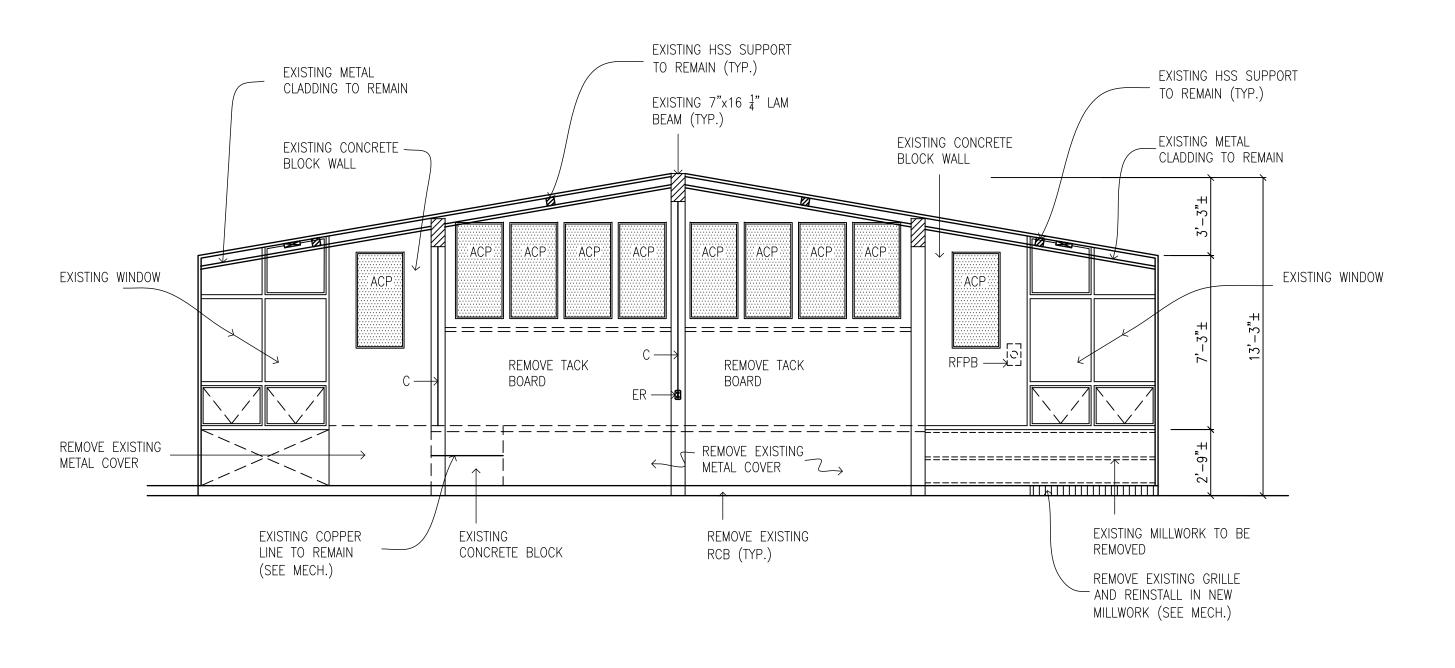
125 EXISTING MUSIC ROOM — ELEVATION "A"



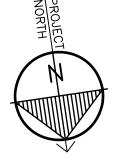
125 EXISTING MUSIC ROOM — ELEVATION "C"

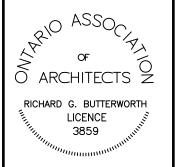


<u> 125 EXISTING MUSIC ROOM – ELEVATION "B"</u>



<u>125 EXISTING MUSIC ROOM — ELEVATION "D"</u>





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<u>DEMOLITION LEGEND</u>

ACP - EXISTING 24"x48" ACOUSTIC PANEL TO

BR - EXISTING STEEL STRUCTURAL BRACKET TO

C - EXISTING CONDUITS TO REMAIN (SEE

ELF - REMOVE EXISTING 1'x4' FLUORESCENT LIGHT FIXTURES (SEE ELEC.)

ES - REMOVE EXISTING SINK AND FAUCET (SEE

HS - EXISTING HORN/STROBE TO REMAIN (SEE

JB - EXISTING JUNCTION BOX TO REMAIN (SEE

RFPB - REMOVE EXISTING FLAG POLE BRACKET

SB - EXISTING STEEL SUPPORT HSS TO REMAIN

T - EXISTING THERMOSTAT (SEE MECH.) VH - REMOVE EXISTING UNIT HEATER (SEE

VAT - EXISTING VINYL ACOUSTIC TILE

WIFI - EXISTING WIFI TO REMAIN (SEE ELEC.)

EXISTING METAL CLADDING TO REMAIN

- EXISTING ACOUSTIC TILE TO REMAIN

 ⇒ ER
 - EXISTING RECEPTACLE TO REMAIN (SEE

\$ SW - EXISTING SWITCH TO REMAIN (SEE ELEC.)



HAMILTON-WENTWORTH SCHOOL

ISSUED FOR TENDER FEB. 6, 2025 ISSUED FOR REVIEW NOV. 14, 2024 DATE No. REVISIONS

BUTTERWORTH ARCHITECT Architecture Interiors — UrbanPlanning

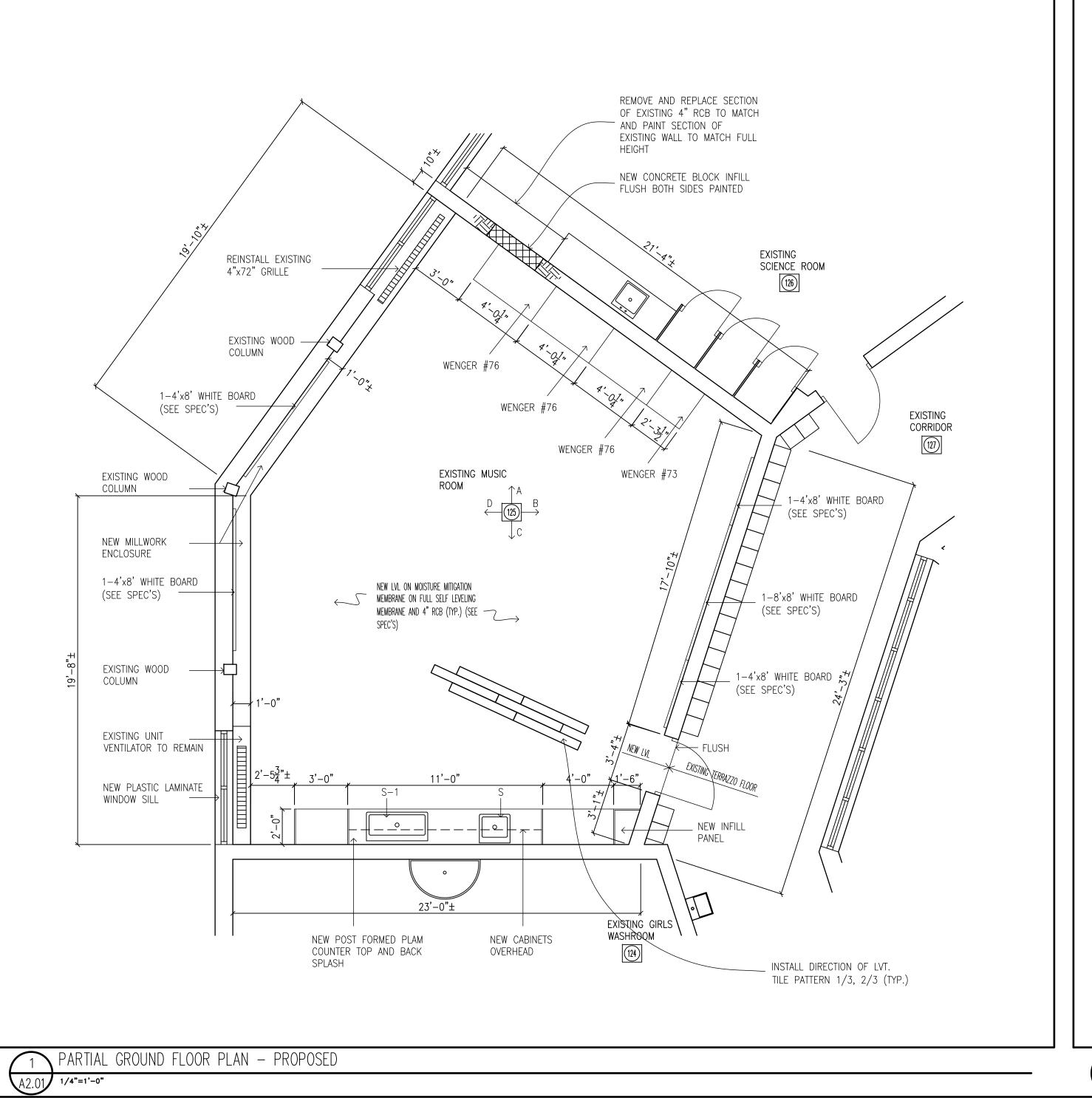
LISGAR ELEMENTARY SCHOOL HAMILTON - WENTWORTH DISTRICT SCHOOL BOARD

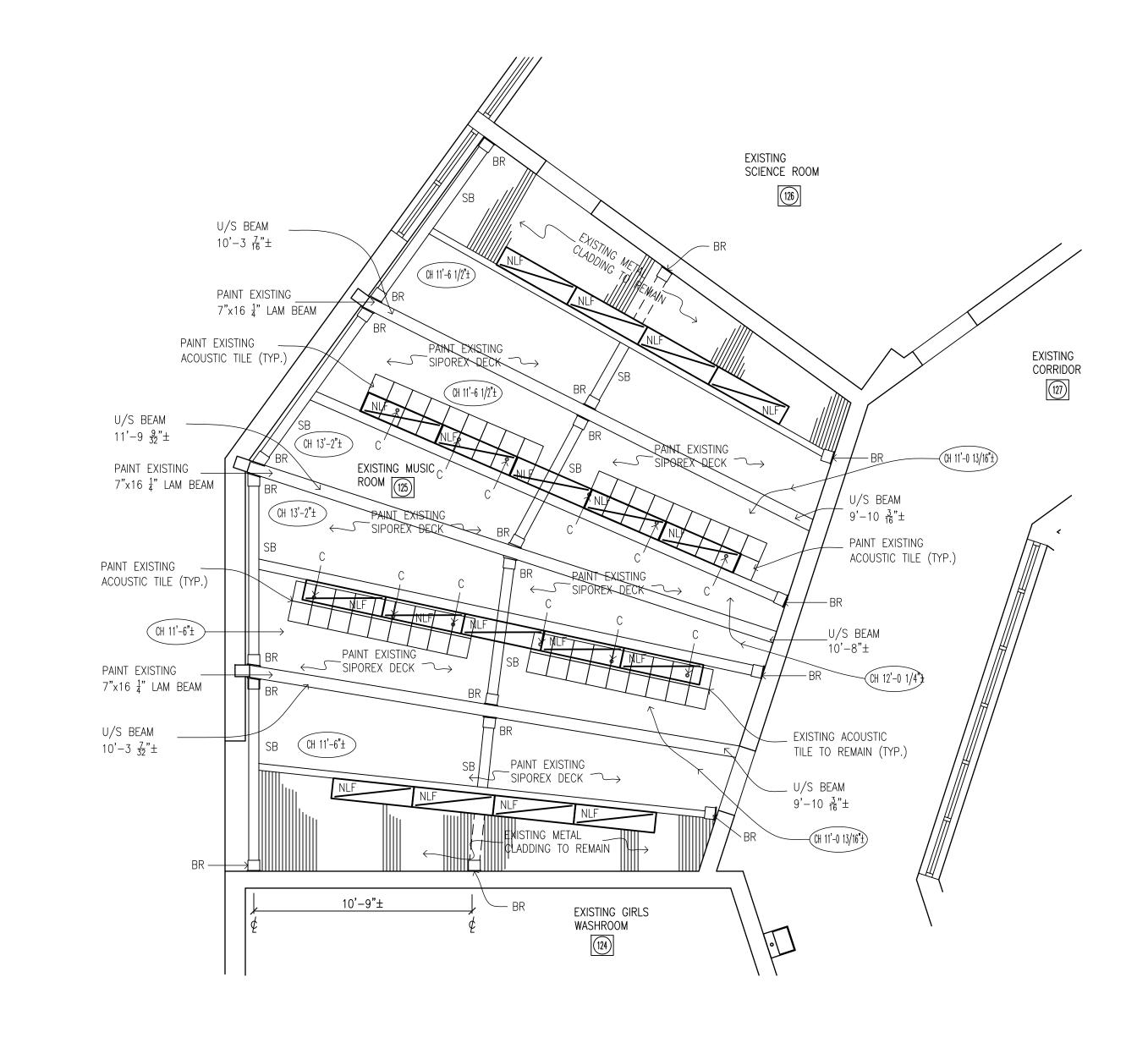
ROOM ELEVATIONS -DEMOLITION

110 ANSON AVENUE HAMILTON, ONTARIO

DRAWN BY:	CHECKED BY:
MS	RGB
DATE:	JOB No.:
FEBRUARY 2025	24-105
SCALE:	SHEET No.:
1/4"=1'-0"	A1.02

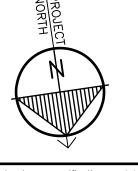
ROOM ELEVATIONS - DEMOLITION Δ1 02 / 1/4"=1'-0"





PARTIAL GROUND FLOOR REFLECTED CEILING PLAN — PROPOSED

1/4"=1'-0"



ASSOCIATION I ARCHITECTS Z RICHARD G. BUTTERWORTH LICENCE 3859

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PROPOSED LEGEND

- ACP EXISTING 24"x48" ACOUSTIC PANEL TO
- BR EXISTING STEEL STRUCTURAL BRACKET TO
- C EXISTING CONDUITS TO REMAIN (SEE
- NLF NEW LED LIGHT FIXTURES (SEE ELEC.)
- S NEW SINK AND FAUCET (SEE MECH.)
- S-1 NEW SINK AND FAUCET (SEE MECH.)
- HS EXISTING HORN/STROBE TO REMAIN (SEE
- JB EXISTING JUNCTION BOX TO REMAIN (SEE
- SB EXISTING STEEL SUPPORT HSS TO REMAIN
- T EXISTING THERMOSTAT (SEE MECH.)
- WIFI EXISTING WIFI TO REMAIN (SEE ELEC.)
- EXISTING METAL CLADDING TO REMAIN
- EXISTING ACOUSTIC TILE TO REMAIN
- ⇒ ER EXISTING RECEPTACLE TO REMAIN (SEE
- ⇒ R NEW RECEPTACLE (SEE ELEC.)
- \$ SW EXISTING SWITCH TO REMAIN (SEE ELEC.)
- DR NEW 2-HDMI AND 1-RECEPTACLE (SEE
- WM NEW WIRE MOLD SURFACE MOUNT (SEE
- WB NEW WHITE BOARD (SEE SPEC'S)
- TB NEW TACK BOARD (SEE SPEC'S)



HAMILTON-WENTWORTH SCHOOL

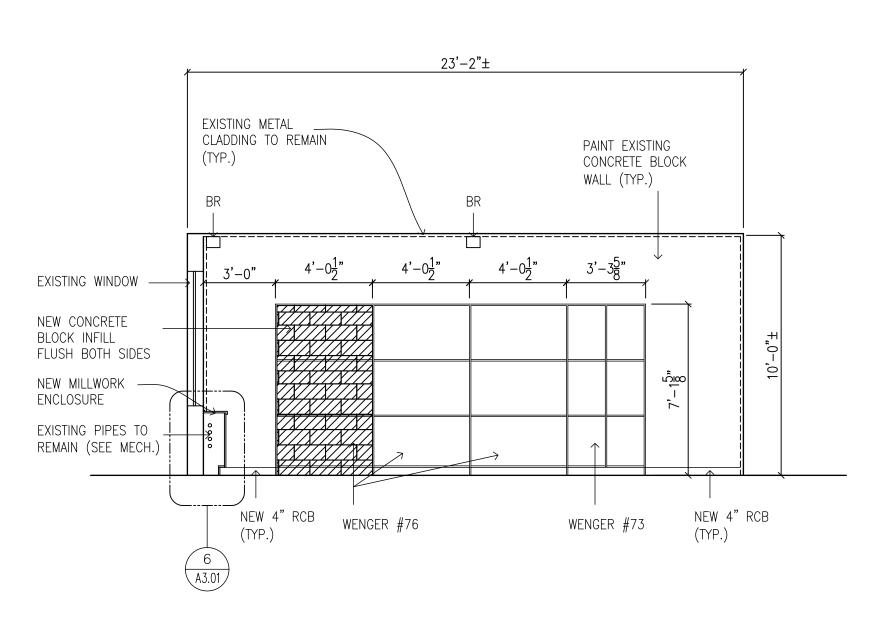
2.	ISSUED FOR TENDER	FEB. 6, 2025
1.	ISSUED FOR REVIEW	NOV. 14, 2024
No.	REVISIONS	DATE

BUTTERWORTH ARCHITECT Architecture Interiors _____ UrbanPlanning

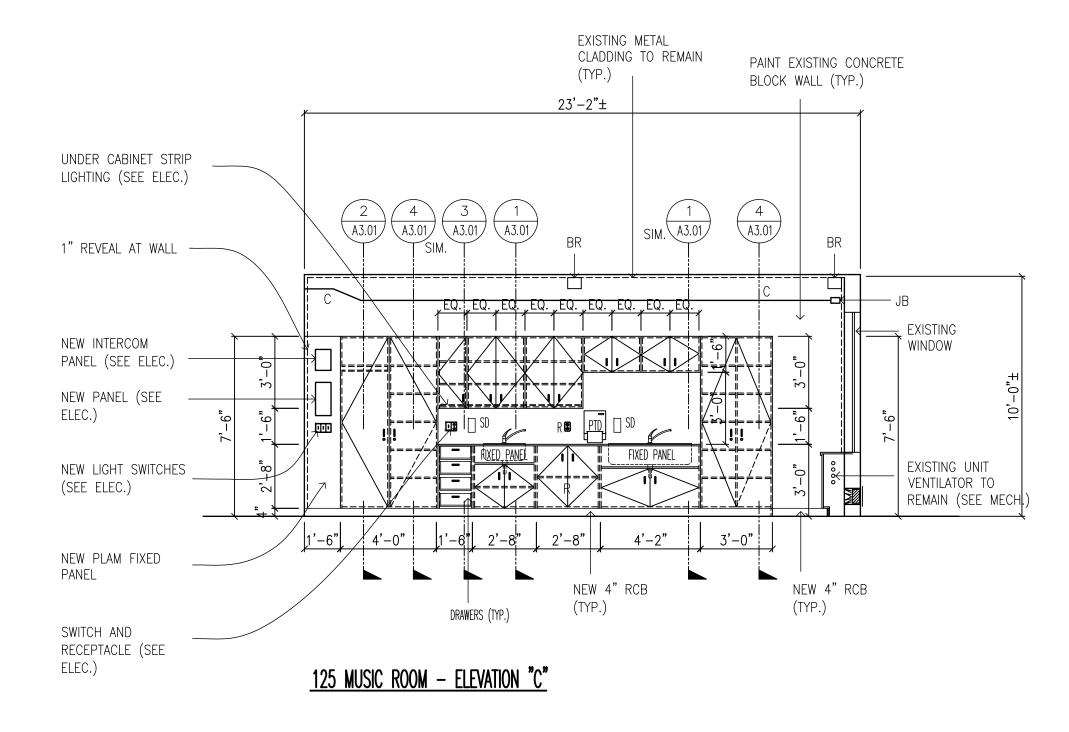
LISGAR ELEMENTARY SCHOOL HAMILTON - WENTWORTH DISTRICT SCHOOL BOARD 110 ANSON AVENUE HAMILTON, ONTARIO

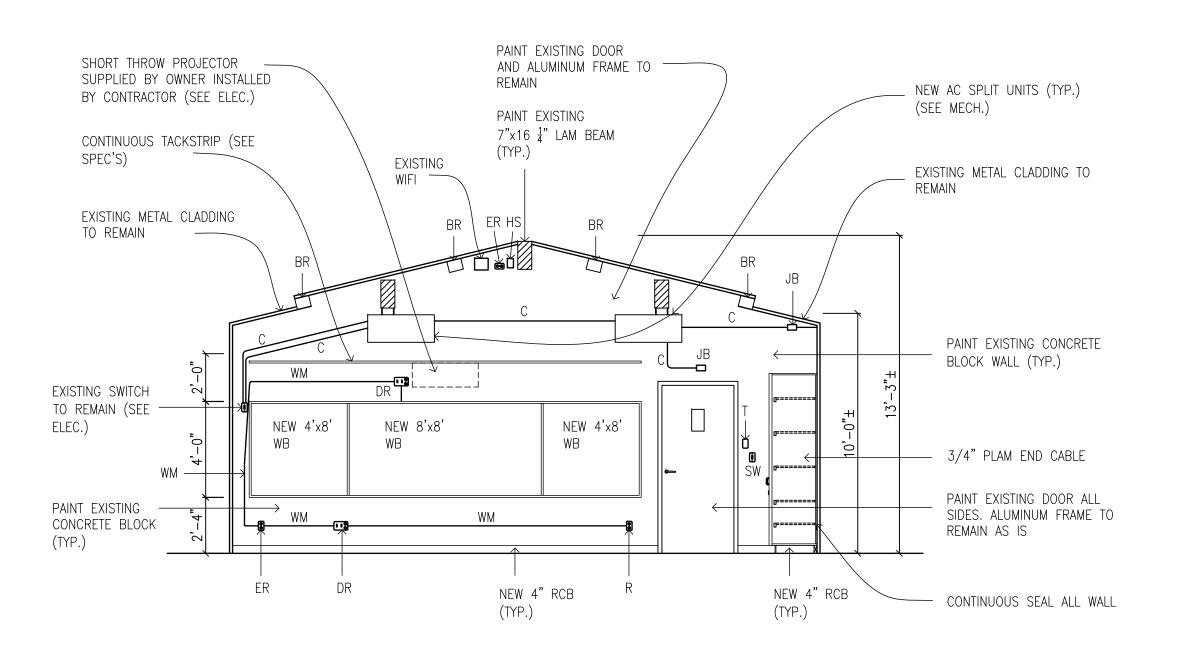
PARTIAL GROUND FLOOR AND REFLECTED CEILING PLAN PROPOSED

	DRAWN BY:	CHECKED BY:
	MS	RGB
	DATE:	JOB No.:
1=1	FEBRUARY 2025	24-105
SCALE	SCALE:	SHEET No.:
PLOT SC	1/4"=1'-0"	A2.01

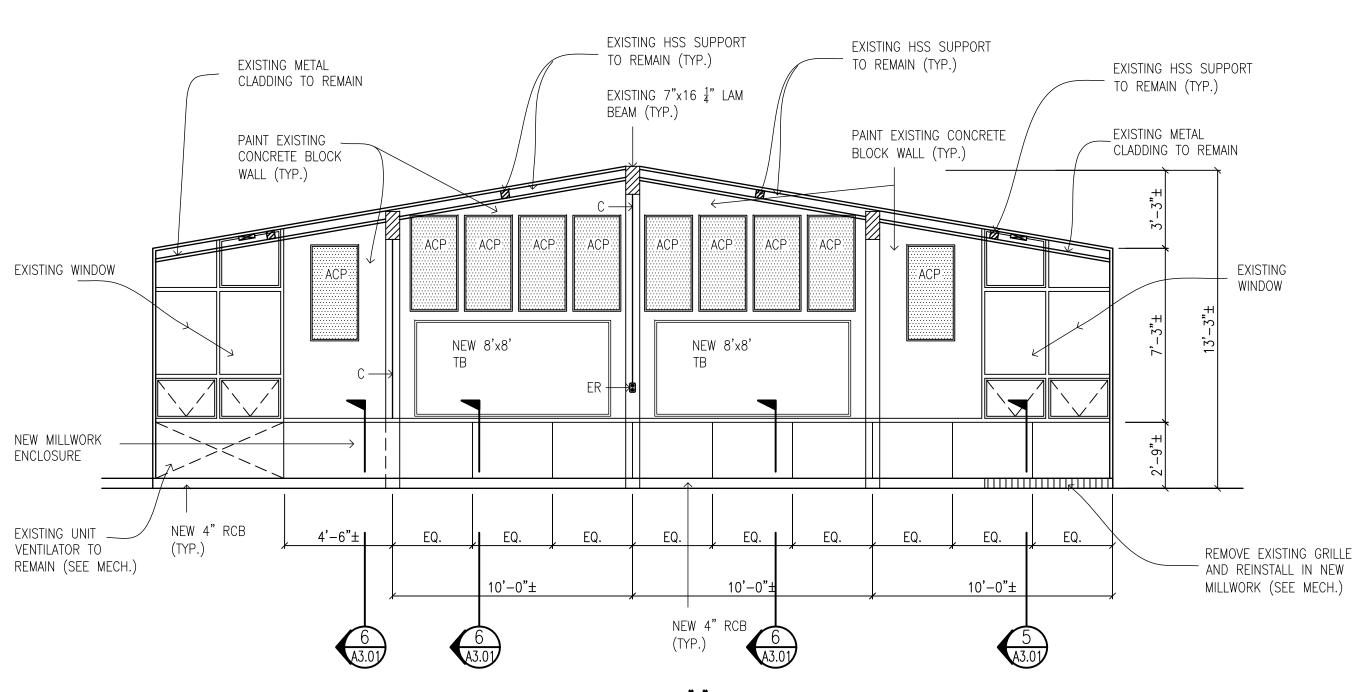


125 MUSIC ROOM - ELEVATION "A"



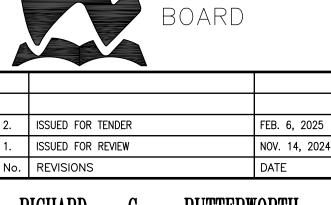


125 MUSIC ROOM - ELEVATION "B"



125 MUSIC ROOM — ELEVATION "D"





HAMILTON-

SCHOOL

WENTWORTH

RIO ASSOCIA

ARCHITECTS Z

RICHARD G. BUTTERWORTH

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ACP - EXISTING 24"x48" ACOUSTIC PANEL TO

BR - EXISTING STEEL STRUCTURAL BRACKET TO

C - EXISTING CONDUITS TO REMAIN (SEE

NLF - NEW LED LIGHT FIXTURES (SEE ELEC.)

S - NEW SINK AND FAUCET (SEE MECH.)

S-1 - NEW SINK AND FAUCET (SEE MECH.)

HS - EXISTING HORN/STROBE TO REMAIN (SEE

JB - EXISTING JUNCTION BOX TO REMAIN (SEE

SB - EXISTING STEEL SUPPORT HSS TO REMAIN

T — EXISTING THERMOSTAT (SEE MECH.)

WIFI - EXISTING WIFI TO REMAIN (SEE ELEC.)

EXISTING METAL CLADDING TO REMAIN

- EXISTING ACOUSTIC TILE TO REMAIN

⇒ ER - EXISTING RECEPTACLE TO REMAIN (SEE

\$ SW - EXISTING SWITCH TO REMAIN (SEE ELEC.)

DR - NEW 2-HDMI AND 1-RECEPTACLE (SEE

WM - NEW WIRE MOLD SURFACE MOUNT (SEE

WB - NEW WHITE BOARD (SEE SPEC'S)

TB - NEW TACK BOARD (SEE SPEC'S)

⇒ R - NEW RECEPTACLE (SEE ELEC.)

Richard G. Butterworth, Architect

ELEC.)

PROPOSED LEGEND

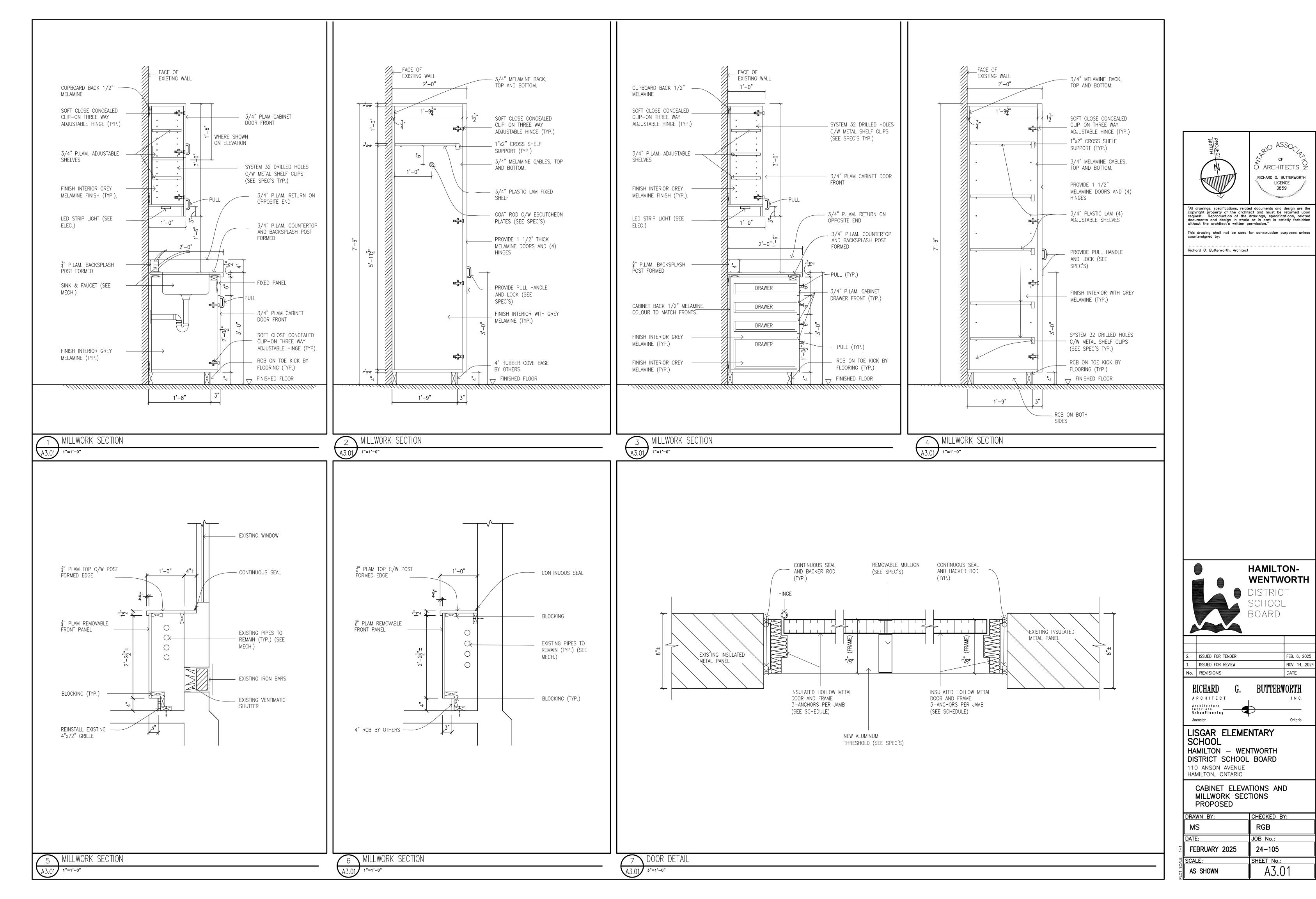
LICENCE 3859

RICHARD	G.	BUTTERWORTE
ARCHITECT	ı	INC
Architecture Interiors UrbanPlanning		>
Ancaster		Ontari

LISGAR ELEMENTARY SCHOOL HAMILTON — WENTWORTH DISTRICT SCHOOL BOARD 110 ANSON AVENUE HAMILTON, ONTARIO

ROOM ELEVATIONS — PROPOSED

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MS	RGB
DATE:	JOB No.:
FEBRUARY 2025	24-105
SCALE:	SHEET No.:
1/4"=1'-0"	A2.02



FEB. 6, 2025

NOV. 14, 2024 DATE



FRAME TYPES

2'-11" 2'-11"

2" 2" 2"

1 NEW INSULATED HOLLOW METAL PAINTED ALL SIDES

EXISTING OR NEW INSULATED GLAZING UNIT

REMOVABLE MULLION (SEE SPEC'S) —

EXISTING INSULATED

ALL SIDES (TYP.)

⟨A−1⟩ REVERSE

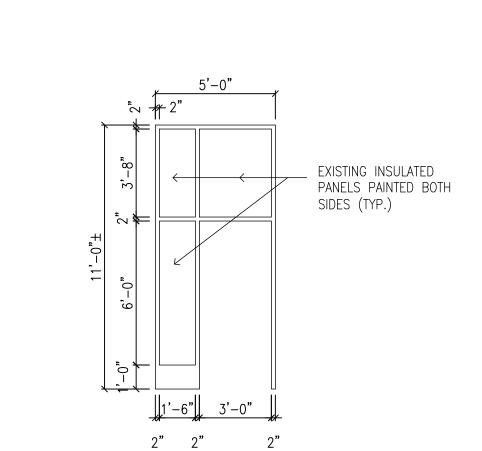
HOLLOW METAL PAINTED

DOOR TYPES

NEW INSULATED HOLLOW

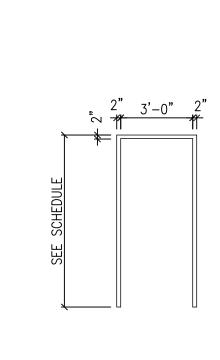
METAL PAINTED ALL SIDES

(SEE SPEC'S)

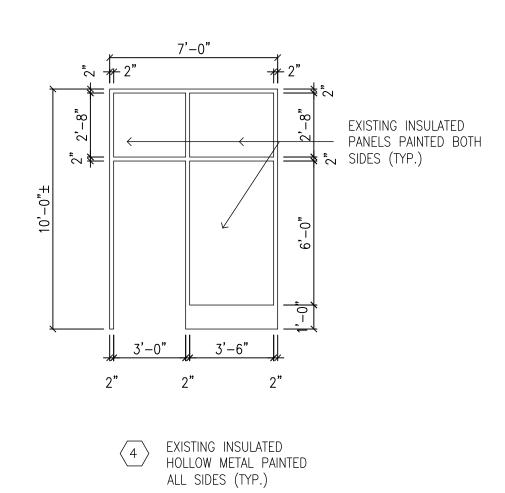


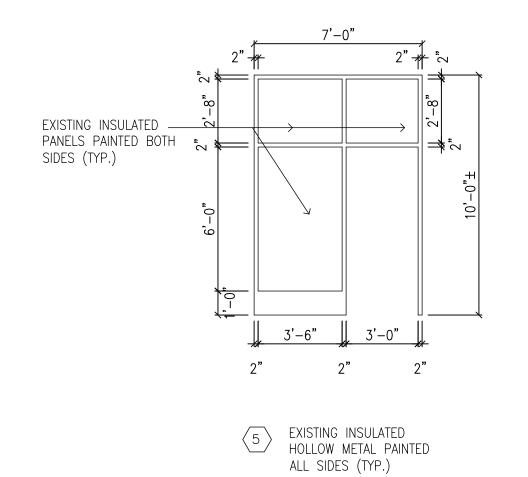
2 EXISTING INSULATED HOLLOW METAL PAINTED ALL SIDES (TYP.)

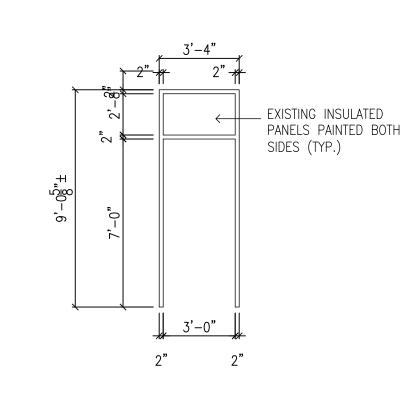
⟨2−1⟩ REVERSE



EXISTING INSULATED HOLLOW METAL PAINTED ALL SIDES (TYP.)







6 EXISTING INSULATED HOLLOW METAL PAINTED ALL SIDES (TYP.)

⟨5−1⟩ REVERSE

HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

BIO ASSOCIA

ARCHITECTS

RICHARD G. BUTTERWORTH

LICENCE

3859

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2.	ISSUED FOR TENDER	FEB. 6, 2025
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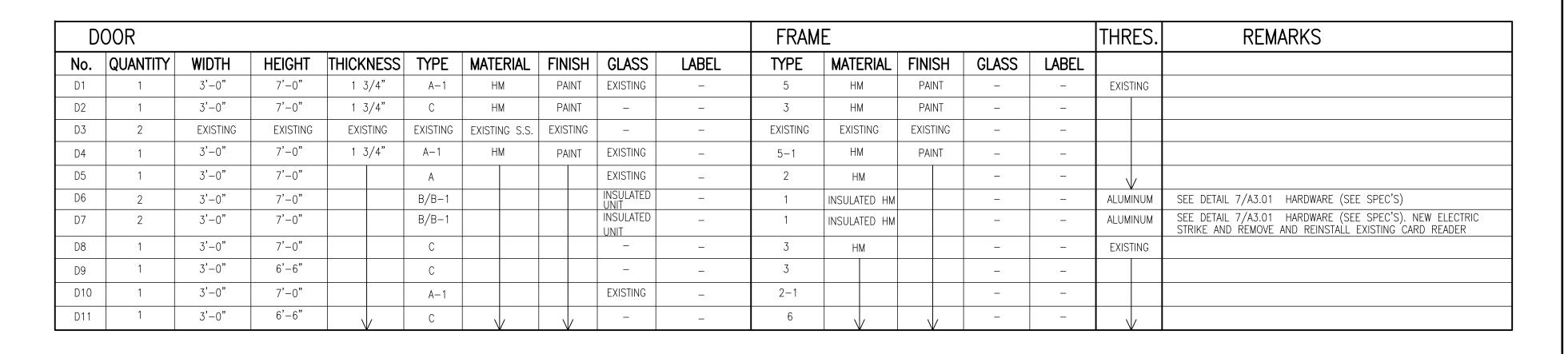
ARCHITECT Architecture Interiors UrbanPlanning

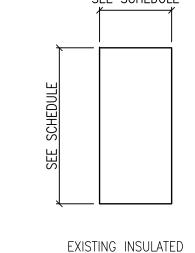
G. BUTTERWORTH

LISGAR ELEMENTARY SCHOOL HAMILTON — WENTWORTH DISTRICT SCHOOL BOARD 110 ANSON AVENUE HAMILTON, ONTARIO

DOOR AND FRAME TYPES SCHEDULE

DRAWN BY:	CHECKED BY:
MS	RGB
DATE:	JOB No.:
FEBRUARY 2025	24-105
SCALE:	SHEET No.:
AS SHOWN	A3.02





HOLLOW METAL PAINTED

ALL SIDES (TYP.)

CHEDULE	S	EE SCHEDULE
SEE S(SEE SCHEDULE	

	4.TION 44.D 44.D 004.DITIONING (4.14.4.0)
HEATING, VENTIL	ATION AND AIR CONDITIONING (HVAC)
	RIGID DUCTWORK
	ACOUSTICALLY LINED DUCTWORK
vWM	FLEXIBLE ROUND DUCTWORK
	SUPPLY DUCTWORK RISER UP
	EXHAUST/RETURN DUCTWORK RISER UP
\boxtimes	SUPPLY DUCTWORK RISER DOWN
	EXHAUST/RETURN DUCTWORK RISER DOWN
——————————————————————————————————————	BALANCING DAMPER
•—SD	SPLITTER DAMPER
- = ∪/c	DOOR UNDERCUT
	DOOR GRILLE
CAP [CAPPED DUCTWORK
T DE BD	SPIN-ON FITTING WITH BALANCING DAMPER
	SUPPLY AIR DIFFUSER
	RETURN/EXHAUST AIR GRILLE
	FLEXIBLE CONNECTION
<u>/</u>	SUPPLY AIR GRILLE — WALL—MOUNTED
<u>/</u>	RETURN AIR GRILLE — WALL—MOUNTED
₹BD Ž	FLEXIBLE DUCT CONNECTION TO RIGID DUCTWORK
\$ 00	
KKK 1	SQUARE ELBOW WITH AIR TURNING VANES
	CANUAL FEDOM MILLI WILL TOLVINING ANNES
<u> </u>	FLICIDLE LAW FIRE DAVIDED WITH LEAST TO
 	FUSIBLE LINK FIRE DAMPER WITH ACCESS DOOR IN DUCT
MD	
	MOTORIZED DAMPER
¬ BDD	
	BACK DRAFT DAMPER
_ PD	
BD	BALANCING DAMPER
	BRANCH TAKE-OFF WITH ADJUSTABLE SPLITTER DAMPER IN SUPPLY DUCT
	SOFFEI DOCI
├──1 <mark>OED</mark>	OPEN ENDED DUCT WITH BALANCING DAMPER AND BELLMOUTH
	INLET
	AIR HANDLING UNIT SILENCER
SL-AHU1-2	AS PER SILENCER SCHEDULE
A-84	— DENOTES DIFFUSER TYPE – DENOTES AIRFLOW (IN L/S)
25	— DENOTES NECK SIZE. DUCTWORK TO MATCH.
T	LOCAL ELECTRONIC THERMOSTAT
Т	STANDALONE THERMOSTAT
<u> </u>	PUMP
	HOT WATER SUPPLY - HEATING
	HOT WATER RETURN — HEATING
/HWRR/	HOT WATER REVERSE RETURN — HEATING
	REFRIGERATION LINE - LIQUID
	REFRIGERATION LINE — GAS
	CONDENSATE LINE
	NATURAL GAS LINE
/GV/	NATURAL GAS VENT LINE
/ A/	COMPRESSED AIR LINE
/── ✓	ISOLATION VALVE. TYPE AS PER SPECIFICATION
/ — X	BALANCING VALVE
/ 	STRAINER
	PRESSURE REDUCING VALVE
<u> </u>	AUTOMATIC 2-WAY CONTROL VALVE
/	AUTOMATIC 3-WAY CONTROL VALVE
/ / / / / / / / / / / / / / / / / / /	CHECK VALVE
, 1 1 /	UNION
<u>/ /</u> 	
//	MANUAL AIR VENT
/ 	DENOTES EXISTING PIPING TO BE REMOVED
//	DENOTES EXISTING PIPING TO REMAIN
	DENOTES NEW PIPING
/G/	GAS METER
<u></u>	PROPANE METER
/ ()	ELECTRIC HEAT TRACING; DIVISION 15 UNLESS OTHERWISE NOTED
О _Ф PG	PRESSURE GAUGE
	THERMOMETER
∄ TG I	
TG UP O	PIPE UP

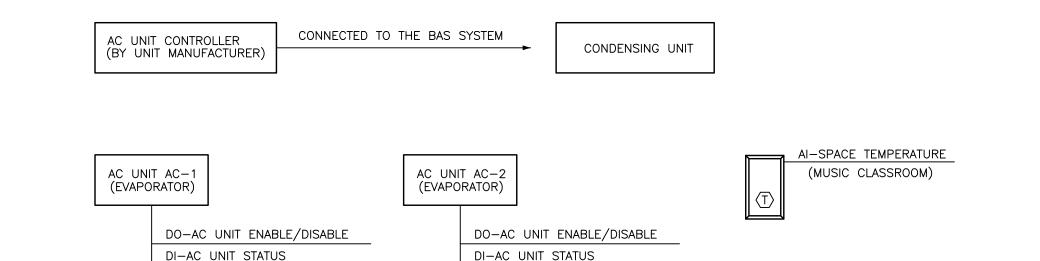
	MECHANICAL LEGEND
HEATING, VENTIL	ATION AND AIR CONDITIONING (HVAC)
CV-A 7000 0.15	WALL FIN HEATER CV-A DENOTES TYPE 7000 DENOTES HEAT OUTPUT IN WATTS 0.15 DENOTES FLOW RATE IN L/S
FFH-A	FORCED FLOW HEATER FFH-A DENOTES TYPE REFER TO FORCED FLOW HEATER SCHEDULE FOR HEAT OUTPUT AND FLOW RATE
1–101 4 125 75	VAV BOX
PLUMBING AND [DRAINAGE
/STM	ABOVE-GROUND STORM
<u> </u>	UNDERGROUND STORM
SAN	ABOVE-GROUND SANITARY
∠ SAN ∠ PUMPED SAN .	UNDERGROUND SANITARY
	PUMPED SANITARY RUNNING TRAP
<u>~</u> ∪ .	PLUMBING TRAP
	SANITARY VENT
∕—Ico	SANITARY CLEANOUT IN ACCESSIBLE CEILING SPACE
со а—⁄	SANITARY CLEANOUT IN SLAB
<i></i>	DOMESTIC COLD WATER
<i></i>	DOMESTIC HOT WATER
## / BFP	DOMESTIC HOT WATER RECIRCULATION
	BACKFLOW PREVENTER - SUITABLE FOR SERVICE INTENDED
/(W)/	WATER METER HOSE BIBB
T NFHB	NON-FREEZE HOSE BIBB
O VTR	VENT THROUGH ROOF
O RWL	RAIN WATER LEADER
⊘ FD	FLOOR DRAIN
⊘ FFD	FUNNEL FLOOR DRAIN
⊘ RD	ROOF DRAIN
CONTROLS	DAG TEMPERATURE OF MOOR IN RIPING
—(Ţ) —□ c/s	BAS — TEMPERATURE SENSOR — IN PIPING BAS — CURRENT SENSOR
P/S	BAS - PRESSURE SWITCH
F/S	BAS - FLOW SWITCH
Al	BAS - ANALOG INPUT
AO	BAS - ANALOG OUTPUT
DI	BAS - DIGITAL INPUT
DO	BAS - DIGITAL OUTPUT
	<u>1</u>
FIRE PROTECTION	FIDE EVENOUED IN EVOLUCION O AND
FIRE PROTECTION	FIRE EXTINGUISHER IN ENCLOSURE C/W MOUNTING BRACKET
FE FE	FIRE EXTINGUISHER C/W MOUNTING BRACKET
FIRE PROTECTION	·
FIRE PROTECTION FE FE ACRONYMS	FIRE EXTINGUISHER C/W MOUNTING BRACKET FIRE BLANKET
FIRE PROTECTION FE FE ACRONYMS LABEL DESCR AD ACCES	FIRE EXTINGUISHER C/W MOUNTING BRACKET FIRE BLANKET IPTION S DOOR
FIRE PROTECTION FE FE ACRONYMS LABEL DESCR AD ACCES AC AIR CO BD BALAN	FIRE EXTINGUISHER C/W MOUNTING BRACKET FIRE BLANKET IPTION S DOOR ONDITIONER CING DAMPER
FIRE PROTECTION FE FE ACRONYMS LABEL DESCR AD ACCES AC AIR CO BD BALAN BDD BACKD CAP CAP E	FIRE EXTINGUISHER C/W MOUNTING BRACKET FIRE BLANKET IPTION S DOOR DNDITIONER
FIRE PROTECTION FE FE ACRONYMS LABEL DESCR AD ACCES AC AIR CC BD BALAN BDD BACKD CAP CAP E CD CONDE CTE CONNE CUT CUT P	FIRE EXTINGUISHER C/W MOUNTING BRACKET FIRE BLANKET IPTION S DOOR DNDITIONER CING DAMPER PRAFT DAMPER XISTING SERVICE RNSATE CCT TO EXISTING OINT
FIRE PROTECTION FE FE ACRONYMS LABEL DESCR AD ACCES AC AIR CC BD BALAN BDD BACKD CAP CAP E CD CONDE CTE CONNE CUT CUT P DF DRINKI EA EXHAU	FIRE EXTINGUISHER C/W MOUNTING BRACKET FIRE BLANKET IPTION S DOOR ONDITIONER CING DAMPER PRAFT DAMPER XISTING SERVICE INSATE CCT TO EXISTING OINT NG FOUNTAIN IST AIR
FIRE PROTECTION FE FE ACRONYMS LABEL DESCR AD ACCES AC AIR CC BD BALAN BDD BACKD CAP CAP E CD CONDE CTE CONNE CUT CUT P DF DRINKI EA EXHAU EX EXISTIN FD FIRE D	FIRE EXTINGUISHER C/W MOUNTING BRACKET FIRE BLANKET IPTION S DOOR ONDITIONER CING DAMPER PRAFT DAMPER XISTING SERVICE INSATE CCT TO EXISTING OINT NG FOUNTAIN IST AIR
FE PROTECTION FE FE FIRE E FS FLOW: FE FIRE D FE FIRE E FS FLOW: HHS HAND-	FIRE EXTINGUISHER C/W MOUNTING BRACKET FIRE BLANKET IPTION S DOOR ONDITIONER CING DAMPER VRAFT DAMPER XISTING SERVICE INSATE ICT TO EXISTING OINT NG FOUNTAIN ST AIR NG OAMPER XXINGUISHER SWITCH -HELD SHOWER
FE PROTECTION FE FE ACRONYMS LABEL DESCR AD ACCES AC AIR CC BD BALAN BDD BACKD CAP CAP E CD CONDE CTE CONNE CUT CUT P DF DRINKI EA EXHAU EX EXISTIN FD FIRE D FE FIRE E FS FLOW: HHS HAND- LV LAVATI MD MOTOR	FIRE EXTINGUISHER C/W MOUNTING BRACKET FIRE BLANKET IPTION S DOOR DNDITIONER CING DAMPER CING DAMPER RAFT DAMPER XISTING SERVICE INSATE ICT TO EXISTING OINT NG FOUNTAIN IST AIR NG DAMPER XXINGUISHER SWITCH -HELD SHOWER ORY RIZED DAMPER
FIRE PROTECTION FE FE ACRONYMS LABEL DESCR AD ACCES AC AIR CO BD BALAN BDD BACKD CAP CAP E CD CONDE CTE CONNE CUT CUT P DF DRINKI EA EXHAU EX EXISTIN FD FIRE D FE FIRE E FS FLOW: HHS HAND- LV LAVATI MD MOTOR NO NORMA NO NORMA OA OUTDO	FIRE EXTINGUISHER C/W MOUNTING BRACKET FIRE BLANKET IPTION S DOOR ONDITIONER CING DAMPER RIAFT DAMPER XISTING SERVICE INSATE ICT TO EXISTING OINT NG FOUNTAIN IST AIR NG IAMPER XXINGUISHER SWITCH -HELD SHOWER ORY RIZED DAMPER ALLY OPEN ALLY CLOSED FOR AIR
FIRE PROTECTION FE FE ACRONYMS LABEL DESCR AD ACCES AC AIR CO BD BALKN CAP CAP E CD CONDE CTE CONNE CUT CUT P DF DRINKI EA EXHAU EX EXISTIN FD FIRE D FE FIRE E FS FLOW: HHS HAND- LV LAVATO MD MOTOR NO NORMA NO NORMA NO NORMA OA OUTDO PG PRESS RWL RAIN N	FIRE EXTINGUISHER C/W MOUNTING BRACKET FIRE BLANKET IPTION S DOOR DNDITIONER CING DAMPER PRAFT DAMPER XISTING SERVICE NSATE CCT TO EXISTING OINT NG FOUNTAIN IST AIR NG IST A
FIRE PROTECTION FE FE ACRONYMS LABEL DESCR AD ACCES AC AIR CO BD BALAN BDD BACKD CAP CAP E CD CONDE CTE CONNE CUT CUT P DF DRINKI EA EXHAU EX EXISTIN FD FIRE D FE FIRE E FS FLOW HHS HAND- LV LAVATI MD MOTOR NO NORMA NO NORMA NO NORMA NO NORMA OA OUTDO PG PRESS RWL RAIN N REM REMOV RP REPLAX	FIRE EXTINGUISHER C/W MOUNTING BRACKET FIRE BLANKET IPTION S DOOR ONDITIONER CING DAMPER RAFT DAMPER XISTING SERVICE INSATE ICT TO EXISTING OINT NG FOUNTAIN ST AIR NG IAMPER XTINGUISHER SWITCH -HELD SHOWER ORY RIZED DAMPER ALLY OPEN ALLY CLOSED IOR AIR URE GAUGE WATER LEADER VE CE
FIRE PROTECTION FE FE ACRONYMS ACRONYMS LABEL DESCR AD ACCES AC AIR CO BD BALAN BDD BACKD CAP CAP E CD CONDE CTE CONNE CUT CUT P DF DRINKI EA EXHAU EX EXISTIN FD FIRE D FE FIRE E FS FLOW: HHS HAND- LV LAVATI MD MOTOR NO NORMA NO NOR	FIRE EXTINGUISHER C/W MOUNTING BRACKET FIRE BLANKET IPTION S DOOR DNDITIONER CING DAMPER RAFT DAMPER XISTING SERVICE NSATE CCT TO EXISTING OINT NG FOUNTAIN IST AIR NG PAMPER XXINGUISHER SWITCH -HELD SHOWER ORY XIZED DAMPER ALLY OPEN ALLY CLOSED OOR AIR URE GAUGE WATER LEADER /E CE N AIR Y AIR VISED VALVE

WASHER-DRYER UNIT WATER CLOSET

GENERAL NOTES:

- ALL DEMOLITION AND NEW WORK SHALL BE COORDINATED WITH ALL TRADES PRESENT ON SITE. CONSTRUCT NEW SERVICES AND LOCATE NEW EQUIPMENT IN SUCH A WAY THAT IT DOES NOT CONFLICT WITH WORK OF OTHER DIVISIONS AND/OR THE OPERATION/MAINTENANCE OF WORK/MATERIAL SUPPLIED BY OTHER DIVISIONS.
- 2. IT IS HIGHLY SUGGESTED AND RECOMMENDED FOR THE MECHANICAL CONTRACTOR TO VISIT THE SITE PRIOR TO BIDDING AND REVIEW EXISTING CONDITIONS AND DEMOLITION SCOPE OF WORK TO SUIT EXISTING ARCHITECTURAL, ELECTRICAL, STRUCTURAL AND MECHANICAL SITE CONDITIONS, DRAWINGS, SPECIFICATIONS AND ALL CONTRACT DOCUMENTS. NO EXTRA WILL SUBSEQUENTLY BE ALLOWED TO COVER ANY SUCH ERROR, OMISSION AND/OR OVERSIGHT FOR NOT HAVING MADE A THOROUGH INSPECTION OF THE GROUNDS, EXISTING CONDITIONS, DRAWINGS, SPECIFICATION AND DESIGN INTENT. THE MECHANICAL CONTRACTOR SHALL NOTE THAT THE EXISTING BUILDING WILL REMAIN IN OPERATION THROUGHOUT DEMOLITION/CONSTRUCTION. ALLOW FOR ANY WORK REQUIRED TO BE DONE WHICH MAY AFFECT POWER SUPPLY AND OPERATION OF THE BUILDING TO BE CARRIED OUT AFTER HOURS OR AT A TIME CONVENIENT TO THE BUILDING MANAGEMENT. PROVIDE TEMPORARY SERVICES AS REQUIRED TO ENSURE CONTINUED OPERATION AT ALL TIMES.
- 3. CAREFULLY EXAMINE OTHER EXISTING UTILITY LINES SUCH AS GAS, WATER ETC. PRIOR TO STARTING ANY WORK.
- 4. THESE DRAWINGS SHALL BE READ & PRICED IN CONJUNCTION WITH ALL DRAWINGS AND SPECIFICATIONS FORMING THE CONTRACT AS WELL AS ALL OTHER DOCUMENTS FORMING THIS BID. NO EXTRA COST WILL BE ACCEPTED IN FAILURE TO OBTAINING AND/OR REVIEW OF SUCH DOCUMENTS. REFER TO ARCHITECTURAL, ELECTRICAL, FIRE PROTECTION STRUCTURAL AND MECHANICAL LAYOUTS IN CONJUNCTION FOR EXACT LOCATION OF ALL EQUIPMENT. REPORT ANY DISCREPANCIES TO THE MECHANICAL ENGINEER PRIOR TO COMMENCING WORK. NO EXTRA WILL BE PROVIDED AS A RESULT OF A FAILURE TO DO SO.
- 5. IT IS MANDATORY THAT ALL WORK COMPLY WITH ALL APPLICABLE CODES AND, BASE BUILDING (BOARD) STANDARDS, AND THE STANDARDS SET BY ANY AND ALL LOCAL AUTHORITIES HAVING JURISDICTION.
- 6. ARRANGE FOR ALL INSPECTIONS REQUIRED BY AUTHORITIES HAVING JURISDICTION AS MANDATED BY CODES OR THE REQUIREMENTS OF THE AUTHORITIES. ATTEND ALL INSPECTIONS AND FURNISH ALL MATERIALS AND LABOUR REQUIRED TO COMPLETE THE INSPECTIONS TO THE SATISFACTION OF THE AUTHORITIES.
- 7. IN THE EVENT OF ANY DISCREPANCY BETWEEN THE MECHANICAL DRAWINGS AND SPECIFICATIONS, ALLOW FOR THE HIGHEST—PRICED OPTION IN THE TENDER PRICE
- 8. ALL EQUIPMENT AND SERVICES SHALL BE STARTED-UP BY THE CONTRACTOR AND BY THE APPROPRIATE AGENCIES REQUIRED FOR CONDUCTING SUCH START-UPS. PROVIDE A MINIMUM OF 10 BUSINESS DAYS NOTICE TO THE MECHANICAL ENGINEER OF NEW EQUIPMENT/ SERVICES START-UPS.
- 9. FURNISH ALL MATERIAL AND EQUIPMENT AS SPECIFIED, EXCEPT WHERE SPECIFIC APPROVAL FOR SUBSTITUTION IS GIVEN IN WRITING BY THE
- 10. PROVIDE FIRESTOPPING OF ALL PENETRATIONS THROUGH RATED CEILINGS, WALLS OR ROOF ASSEMBLIES.

l	DRAWING LIST						
	DRAWING NUMBER	DESCRIPTION					
l	M1	MECHANICAL LEGEND, NOTES AND SCHEDULES					
l	M2	FIRST FLOOR KEY PLAN					
l	М3	PLUMBING & DRAINAGE PLANS					
	M4	HVAC PLANS					
1							



SEQUENCE OF OPERATION

UNOCCUPIED HOURS:
 COOLING SHALL BE DISABLED THROUGHOUT THE UNOCCUPIED HOURS.

COOLING SEASON, COOLING MODE, OCCUPIED HOURS:

• IF THE OUTDOOR TEMPERATURE IS ABOVE 24°C (ADJUSTABLE) AND THE ROOM TEMPERATURE IS ABOVE 21°C (ADJUSTABLE), THE AC SYSTEM SHALL RUN TO KEEP THE SPACE AT THE OCCUPIED COOLING SETPOINT. IF THE ROOM TEMPERATURE GETS BELOW 21°C, THE BAS SHALL DISABLE THE AC UNITS.

• THE INDOOR AC UNITS SHALL BE ENABLED (FAN) WHENEVER THE SPACE TEMPERATURE EXCEEDS THE COOLING SETPOINT FOR THE SPACE. MODULATION OF THE COOLING (VIA THE UNIT'S INTERNAL LINEAR EXPANSION VALVE) SHALL BE BY THE AC SYSTEM CONTROLLER. THE OUTDOOR CONDENSING UNIT SHALL BE ENABLED/DISABLED BY THE SYSTEM CONTROLLER AND NOT BY THE BAS. THE BAS SHALL ONLY MONITOR THE STATUS OF THE CONDENSING UNIT. ONCE THE COOLING SETPOINT FOR THE SPACE TEMPERATURE IS MET AND MAINTAINED FOR A PERIOD OF 10 MINUTES (ADJUSTABLE), THE AC UNITS SHALL BE DISABLED UNTIL THE NEXT CALL FOR COOLING.

ALARMS:

- AN ALARM SHALL BE GENERATED VIA THE BAS IN THE FOLLOWING CONDITIONS/CIRCUMSTANCES:

 ANY AC (EVAPORATOR) UNIT OR CONDENSER FAILURE (STATUS/COMMAND MISMATCH).
- SPACE TEMPERATURE IS +/- 2°C FROM THE SETPOINT.

NOTES: • VRF SYSTEM SHALL OPERATE IN THE COOLING MODE ONLY. THOUGH CAPABLE OF HEATING (HEAT PUMP SYSTEM), THE SYSTEM SHALL NOT OPERATE IN THE HEATING

- MODE.
- IT SHALL BE POSSIBLE TO DISABLE THE COOLING IN A SPACE (OR SPACES) AT THE BAS WORKSTATION BY A USER DISABLE COMMAND.
 FAN SPEED ADJUSTMENT NEED NOT BE ADJUSTABLE VIA THE BAS. IT SHALL REMAIN ADJUSTABLE BY THE AC UNIT CONTROLLER.
- EACH ZONE (TYPICAL OF 2) SHALL COME WITH A SEPARATE, WALL-MOUNTED MANUFACTURER'S THERMOSTAT WITH TAMPER-PROOF GUARD WITH LOCKABLE COVER. PROVIDE FOUR (4) SETS OF KEYS (KEYED ALIKE) TO THE CARETAKER.
- THE ON/OFF REMOTE ADAPTOR FOR THE AC UNITS SHALL ALLOW THE AC UNITS TO INTERFACE WITH THE BUILDING AUTOMATION SYSTEM BY ENABLING/DISABLING THE AC UNITS BASED ON THE SPACE REQUIREMENTS. SUCH ENABLING/DISABLING, THE WALL—MOUNTED AC UNIT CONTROLLER SHALL NOT REQUIRE MANUAL RESET OR RE—ADJUSTMENT OF SETTINGS.

THE MECHANICAL CONTRACTOR SHALL RETAIN THE SERVICES OF THE BASE BUILDING BAS/CONTROLS CONTRACTOR FOR ALL BUILDING AUTOMATION SYSTEM-RELATED WORK. THE BAS VENDOR IS RESPONSIBLE FOR UPGRADING THE EXISTING BUILDING AUTOMATION SYSTEM TO ACHIEVE THE ABOVE-NOTED NOTED AND SEQUENCES. UPDATE THE EXISTING BAS GRAPHICS TO REFLECT THE NEW MECHANICAL SYSTEM.

THE SCHOOL USES BOTH SIEMENS AND HONEYWELL FOR THE BAS. EITHER CAN BE CONTACTED FOR PRICING.

JAKE RENDULIC SIEMENS CANADA LIMITED, ACCOUNT EXECUTIVE — SMART BUILDING AND AUTOMATION

C: 905-541-7433 E: JAKE.RENDULIC@SIEMENS.COM

ALEX SKALJAC
CHAMBERLAN BUILDING SERVICES, PRESIDENT
OFFICE: 905-664-1914 EXT. 2, C: 905-961-7142
E: A.SKALJAC@CHBS.CA

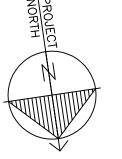
1 MUSIC CLASSROOM AIR CONDITIONING BAS CONTROL SEQUENCE & SCHEMATIC

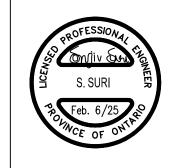
M1 SCALE: N.T.S.

	INDOOR A/C UNIT SCHEDULE												
TAG	SERVES	MAKE/MODEL	COOLING CAP.	AIR FLOW (CFM)	POWER SUPPLY (V/PH/Hz)		FUSE (A)			RG (MM)		DRAIN (MM)	REMARKS
AC-1	MUSIC CLASSROOM	MITSUBISHI PKFY-P18NLMU-E-TH	18,000 BTU/HR	240-438	208/1ø/60	0.3	15	13	299x898x237	ı	-	16	OPERATES WITH CDU-1
AC-2	MUSIC CLASSROOM	MITSUBISHI PKFY-P18NLMU-E-TH	18,000 BTU/HR	240-438	208/1ø/60	0.3	15	13	299x898x237	_	_	16	OPERATES WITH CDU-1

AC UNITS SHALL COME COMPLETE WITH CONDENSATE PUMP
AC UNITS SHALL COME COMPLETE WITH MITSUBISHI PAC-SE55RA-E REMOTE ON/OFF ADAPTOR TO INTERFACE WITH THE BUILDING AUTOMATION SYSTEM FOR ON/OFF (ENABLE/DISABLE) CONTROL.

OUTDOOR CONDENSING UNIT SCHEDULE										
TAG	MAKE/MODEL	REFRIGERANT		ON SIZES RG (MM)	EQUIPMENT SIZE (HxWxD; MM)	POWER SUPPLY (V/PH/Hz)	MCA (A)	FUSE (A)	WEIGHT (KG)	REMARKS
CDU-1	MITSUBISHI PUMY-P48NKMU4	R-410A	_	_	1338×1050×330	208/1ø/60	36	75	123	OPERATES WITH AC-1/2; C/W NON-PENETRATING 450mm HIGH SUPPORT
CONDENSIN	CONDENSING UNIT NON-PENETRATING ROOFTOP SUPPORT STAND SHALL BE 'ECOFOOT SUPPORT FRAME' OR APPROVED EQUAL.									





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MECHANICAL LIGHTING COMMUNICATION SECURITY



 4.
 RE-ISSUED FOR TENDER
 FEB. 6, 2025

 3.
 RE-ISSUED FOR TENDER
 JAN. 17, 2025

 2.
 ISSUED FOR TENDER
 NOV. 20, 2024

 1.
 ISSUED FOR 100% REVIEW
 OCT. 30, 2024

 No.
 REVISIONS
 DATE

HAMILTON-

DISTRICT

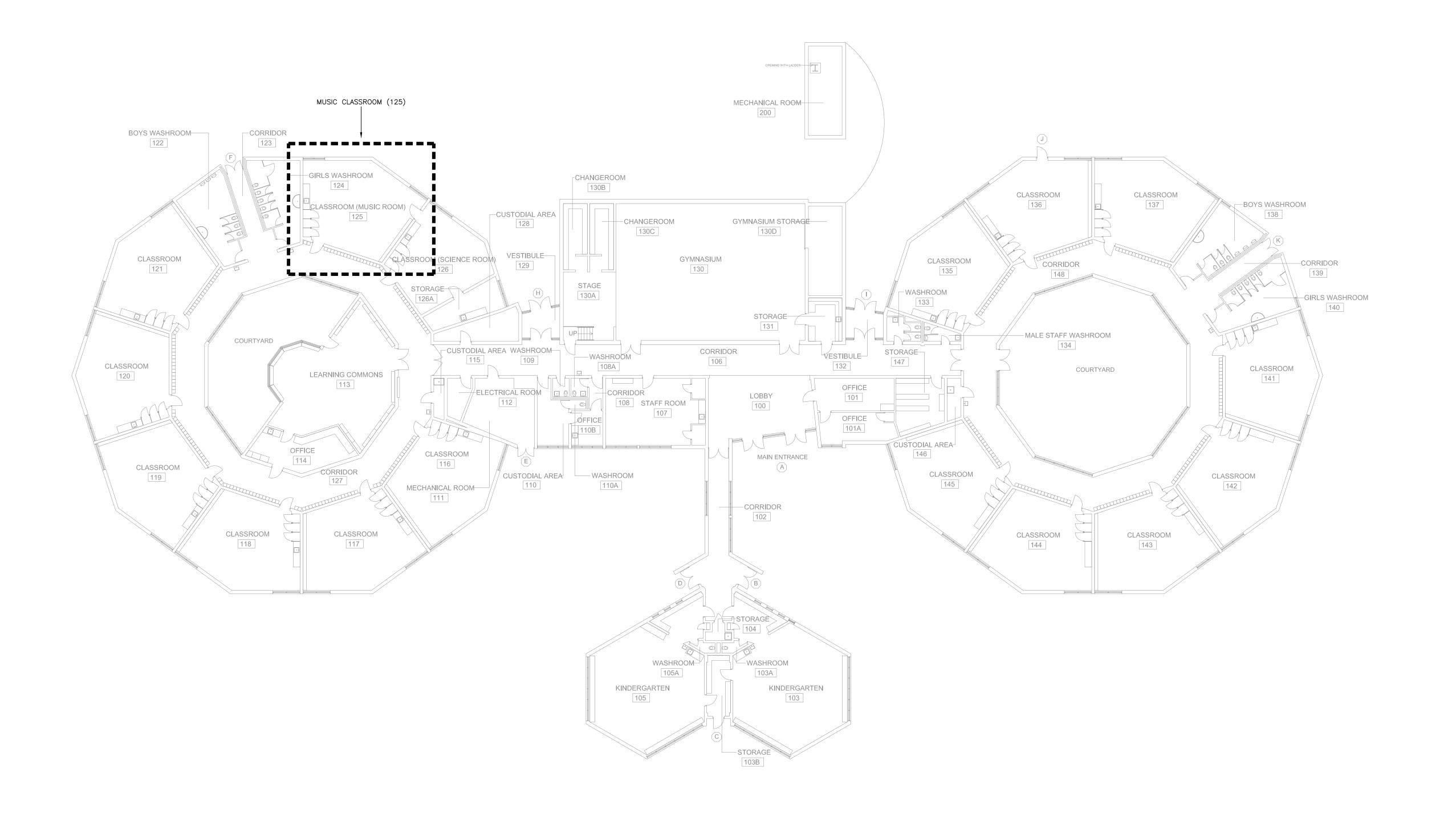
SCHOOL

WENTWORTH

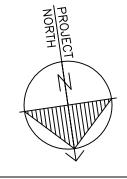
LISGAR ELEMENTARY
SCHOOL
HAMILTON - WENTWORTH
DISTRICT SCHOOL BOARD
110 ANSON AVENUE
HAMILTON, ONTARIO

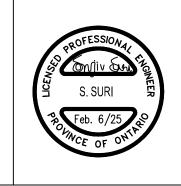
MECHANICAL LEGEND, NOTES AND SCHEDULES

DRAWN BY:	CHECKED BY:
RS	SS
DATE:	JOB No.:
NOVEMBER 2024	24-244
SCALE:	SHEET No.:
AS SHOWN	M 1









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MECHANICAL
LIGHTING
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HAMILTONWENTWORTH

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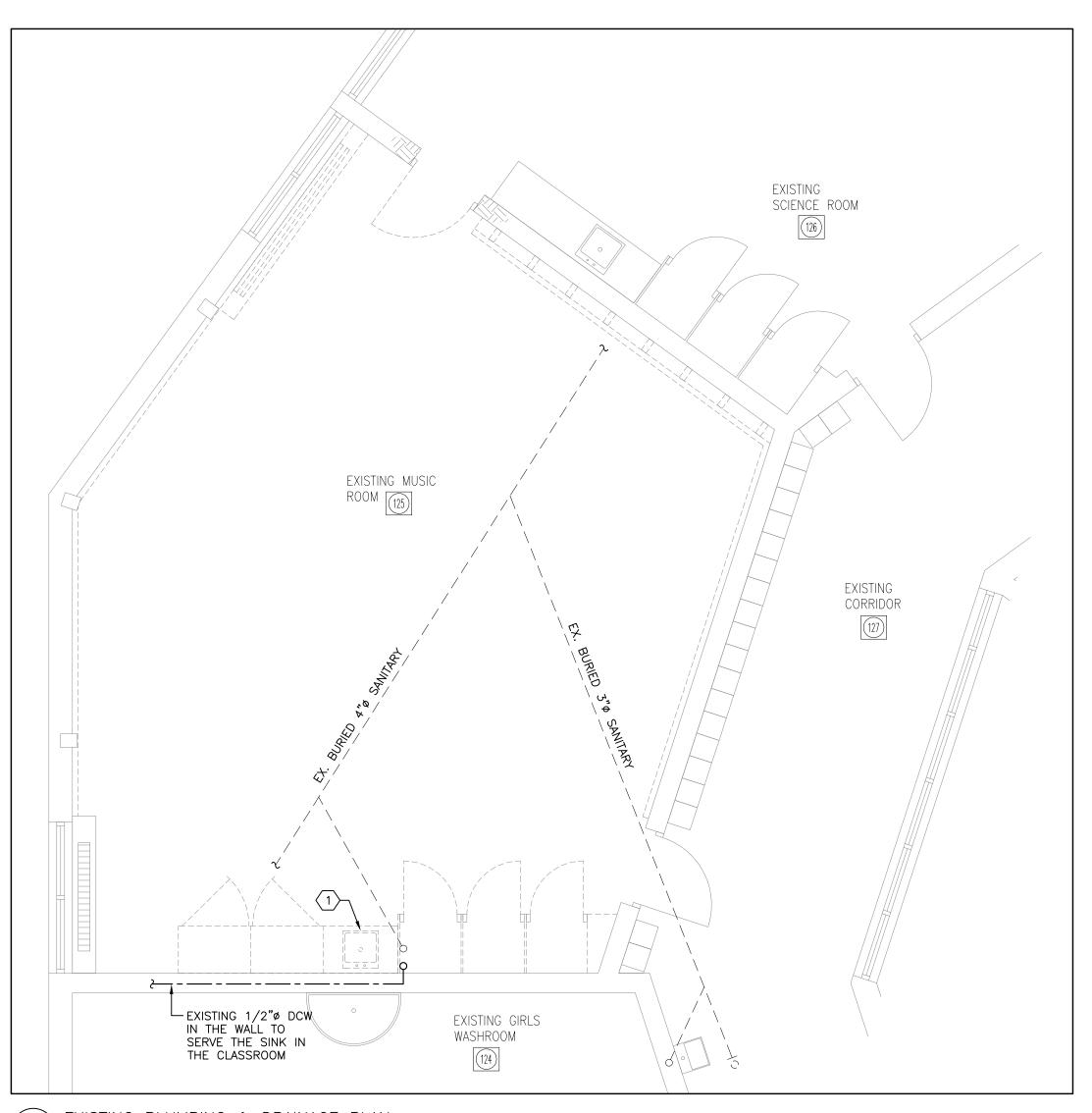
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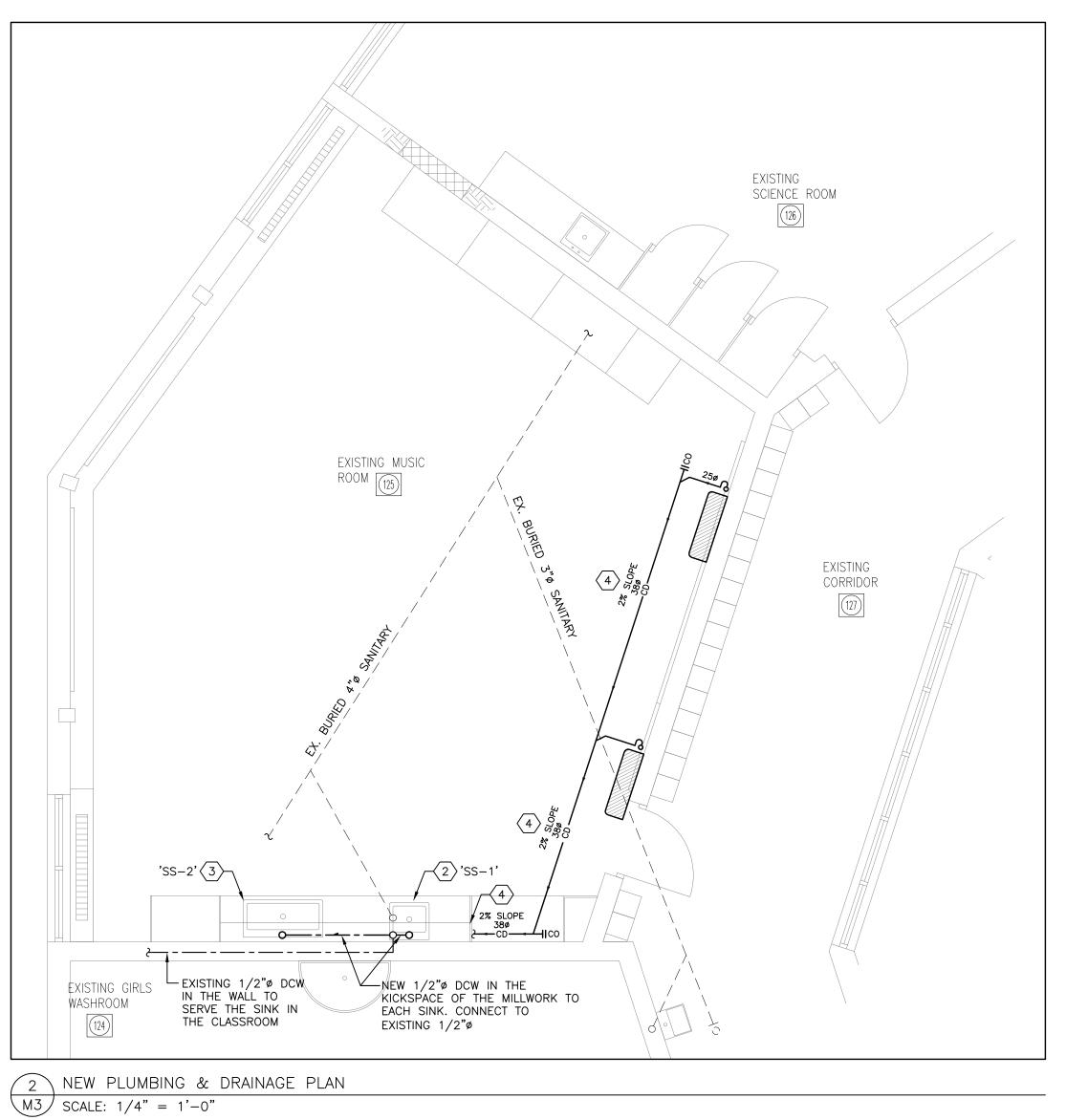
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FIRST FLOOR KEY PLAN

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NOVEMBER 2024	24-244
SCALE:	SHEET No.:
AS SHOWN	M2



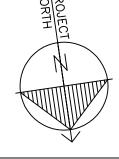


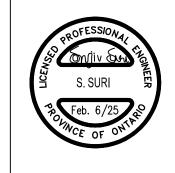
1 EXISTING PLUMBING & DRAINAGE PLAN

M3 SCALE: 1/4" = 1'-0"

DRAWING NOTES:

- REMOVE THE EXISTING COUNTERTOP SINK. DISCONNECT FROM THE EXISTING DCW, SANITARY AND VENT PIPING. DISPOSE OF THE SINK OFFSITE.
- PROVIDE A NEW COUNTERTOP SINK 'SS-1' AS SPECIFIED. PROVIDE 1/2"Ø DCW, 1-1/2"Ø SANITARY AND 1-1/4"Ø VENT TO THE SINK. CONNECT TO THE EXISTING 1/2"Ø DCW STUBBING THROUGH THE WALL. CONNECT TO THE EXISTING SANITARY STUB-UP FROM THE FLOOR. PROVIDE NEW VENT AS PER OBC. CONNECT TO THE VENT OF SUFFICIENT SIZE IN THE ADJACENT WASHROOM.
- PROVIDE A NEW COUNTERTOP SINK 'SS-2' AS SPECIFIED. PROVIDE 1/2"Ø DCW, 1-1/2"Ø SANITARY AND 1-1/4"Ø VENT TO THE SINK. CONNECT TO THE EXISTING 1/2"Ø DCW STUBBING THROUGH THE WALL. CONNECT TO THE EXISTING SANITARY STUB-UP FROM THE FLOOR. PROVIDE NEW VENT AS PER OBC. CONNECT TO THE VENT OF SUFFICIENT SIZE IN THE ADJACENT WASHROOM.
- $\overline{\langle 4 \rangle}$ connect the New condensate drain from the AC units indirectly to the waste of the sink per OBC.





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ELECTRICAL MECHANICAL LIGHTING COMMUNICATION SECURITY



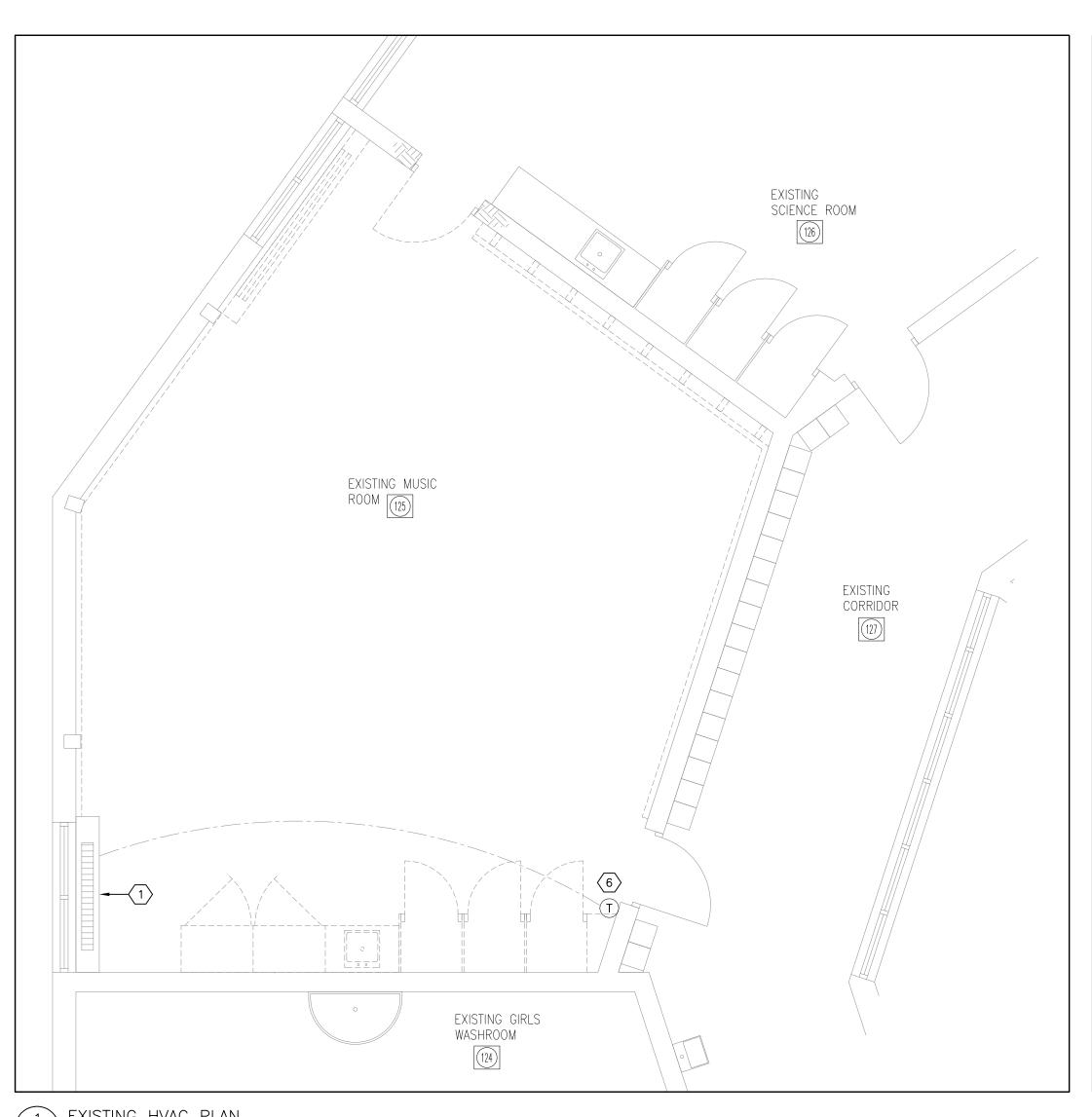
HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

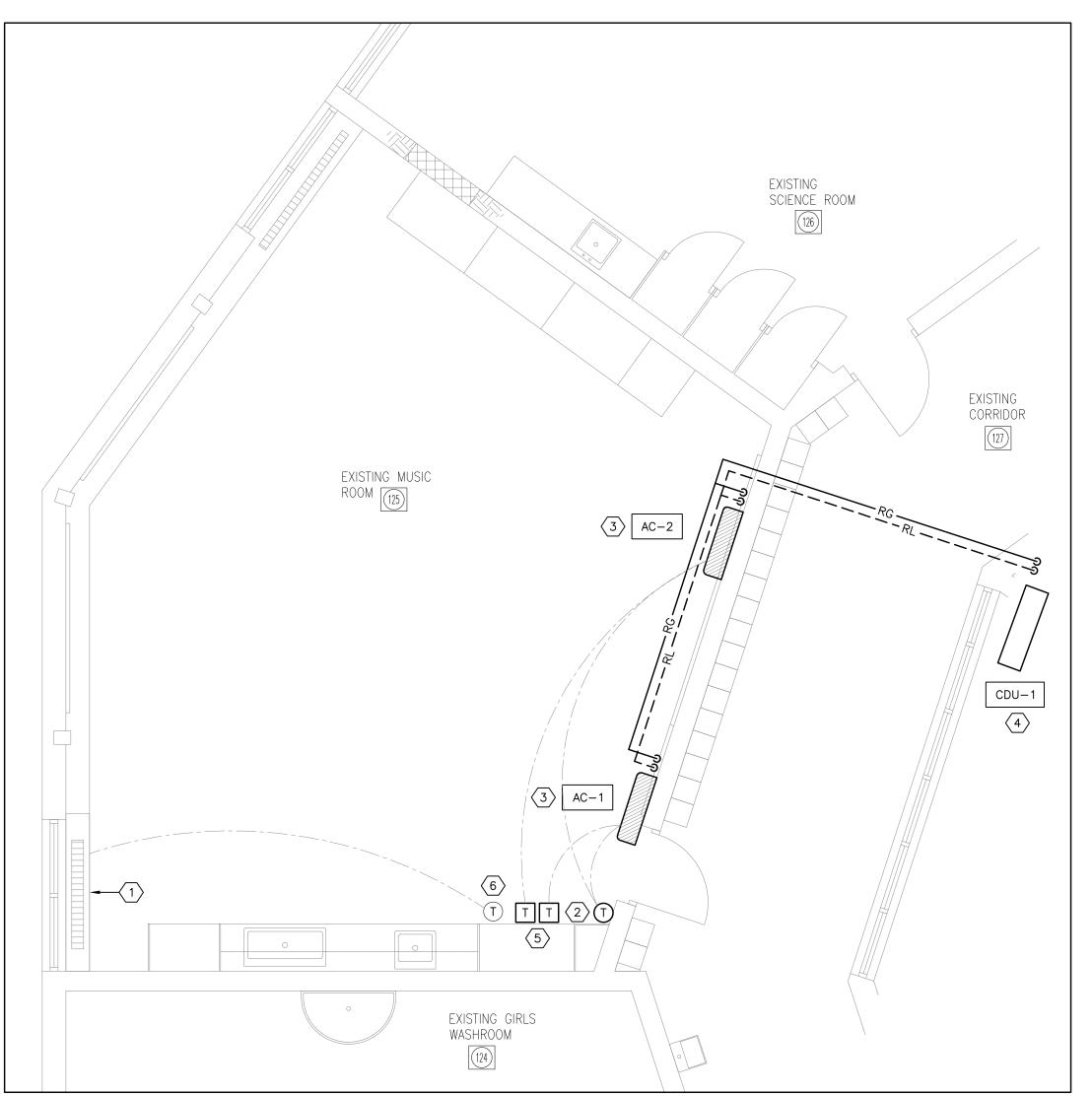
4.	RE-ISSUED FOR TENDER	FEB. 6, 2025
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No.	REVISIONS	DATE
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PLUMBING & DRAINAGE PLANS

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SCALE:	SHEET No.:
AS SHOWN	M3





M4 SCALE: 1/4" = 1'-0"

1 EXISTING HVAC PLAN

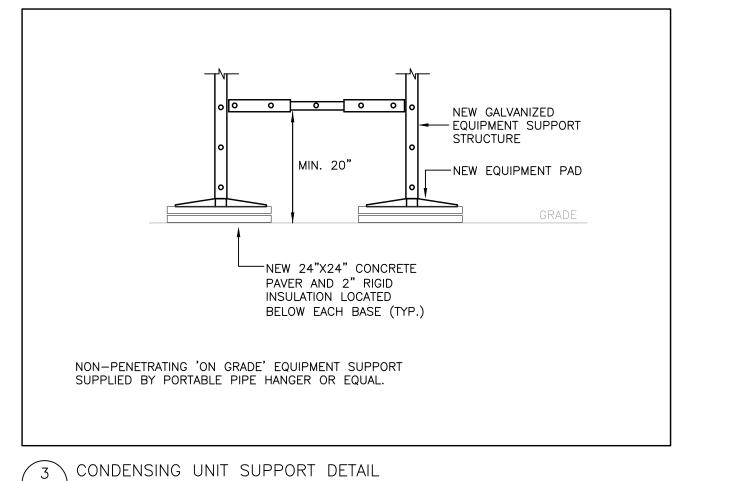
M4 SCALE: 1/4" = 1'-0"

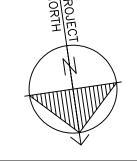
NEW HVAC PLAN

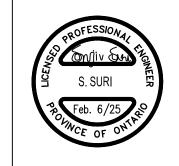
M4 SCALE: 1/4" = 1'-0"

DRAWING NOTES:

- EXISTING HOT WATER UNIT VENTILATOR (SERVING THE VENTILATION AND HEATING FOR THE CLASSROOM) IS TO REMAIN AS IS.
- 2 PROVIDE A NEW BAS TEMPERATURE SENSOR TIED TO THE BAS IN THE RENOVATED CLASSROOM. SENSOR SHALL CONTROL THE NEW AC UNITS.
- PROVIDE NEW HI-WALL AC UNITS. PROVIDE NEW REFRIGERANT AND CONDENSATE PIPING AS SHOWN. ALL REFRIGERANT PIPING SHALL BE INSULATED WITH PVC JACKETING INDOORS AND ALUMINUM JACKETING OUTDOORS. EXTERNALLY INSULATE ALL CONDENSATE PIPING
- PROVIDE A NEW CONDENSING UNIT ON A 600mm HIGH NON-PENETRATING GRADE SUPPORT. RUN NEW REFRIGERANT PIPING ALONG THE EXTERIOR WALL TO THE CONDENSING UNIT. INSTALL ADHERING TO ALL MAINTENANCE CLEARANCES.
- PROVIDE NEW MANUFACTURER SUPPLIED AC UNIT CONTROLLERS ON THE WALL C/W POLYCARBONATE LOCKABLE COVERS. PROVIDE LOW-VOLTAGE WIRING/CONDUIT FROM THE CONTROLLERS TO THE AC UNITS.
- 6 EXISTING LOCAL THERMOSTAT SERVING THE UNIT VENTILATOR IS TO REMAIN AS IS.
- WHERE PIPES PASS THROUGH FIRE SEPARATIONS (WALLS, FLOORS, CEILINGS, PARTITIONS, ETC.), PROVIDE ULC-LISTED AND/OR APPROVED FIRESTOPPING OF ALL PENETRATIONS.







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ELECTRICAL MECHANICAL LIGHTING COMMUNICATION SECURITY



HAMILTON-WENTWORTH DISTRICT SCHOOL

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3.	RE-ISSUED FOR TENDER	JAN. 17, 2025
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LISGAR ELEMENTARY SCHOOL HAMILTON - WENTWORTH DISTRICT SCHOOL BOARD 110 ANSON AVENUE HAMILTON, ONTARIO

HVAC PLANS

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RS	SS
DATE:	JOB No.:
NOVEMBER 2024	24-244
SCALE:	SHEET No.:
AS SHOWN	M4

	LIGHTING LEGEND
A1	STANDARD TYPE 'A1' LIGHT FIXTURE AS SCHEDULED
	TYPE 'A1' LIGHT FIXTURE AS SCHEDULED, CONNECTED TO THE EMERGENCY POWER SOURCE (INVERTER OR GENERATOR)
B1	WALL-MOUNTED TYPE 'B1' LIGHT FIXTURE AS SCHEDULED
\$	LOW-VOLTAGE, TOGGLE LIGHT SWITCH, AS SPECIFIED.
\$D	LOW-VOLTAGE, TOGGLE & DIMMER LIGHT SWITCH, AS SPECIFIED.
\$к	LOW-VOLTAGE, KEY-SWITCH TYPE LIGHT SWITCH, AS SPECIFIED.
\$MS	LOW-VOLTAGE, KEY-SWITCH TYPE, MASTER LIGHT SWITCH, AS SPECIFIED. CONTROLS ALL CORRIDOR, WASHROOM AND VESTIBULE LIGHTING
\$os	LOW-VOLTAGE LIGHT SWITCH COMPLETE WITH INTEGRAL OCCUPANCY SENSOR, AS SPECIFIED.
os	CORNER/WALL-MOUNTED, LOW-VOLTAGE OCCUPANCY SENSOR, AS SCHEDULED
(OS)	CEILING-MOUNTED, LOW-VOLTAGE OCCUPANCY SENSOR, AS SCHEDULED
О	EXTERIOR-GRADE, WALL-MOUNTED LIGHT FIXTURE
□-0	EXTERIOR-GRADE, LIGHT STANDARD COMPLETE WITH CONCRETE BASE
×	EMERGENCY LIGHTING BATTERY UNIT C/W NO REMOTE HEADS
×	EMERGENCY LIGHTING BATTERY UNIT C/W DUAL-HEAD REMOTE HEADS
•_•	EMERGENCY LIGHTING DUAL-HEAD REMOTE HEAD
\blacksquare	EMERGENCY LIGHTING, WALL-MOUNTED EXIT SIGN
	EMERGENCY LIGHTING, CEILING-MOUNTED EXIT SIGN

	POWER DEVICES & EQUIPMENT LEGEND
Ф	SINGLE RECEPTACLE MOUNTED AT STANDARD HEIGHT; USE AND RATING FOR THE PURPOSE INTENDED
Ø	SINGLE RECEPTACLE MOUNTED AT HIGH LEVEL; USE AND RATING FOR TH PURPOSE INTENDED
ф	15A, 120V DUPLEX RECEPTACLE MOUNTED AT STANDARD HEIGHT. 'T' DENOTES 20A, T-SLOT TYPE RECEPTACLE
\$	15A, 120V DUPLEX RECEPTACLE MOUNTED AT HIGH LEVEL. 'T' DENOTES 20A, T-SLOT TYPE RECEPTACLE
*	15A, 120V, GFI DUPLEX RECEPTACLE MOUNTED AT HIGH LEVEL. 'T' DENOTES 20A, T-SLOT TYPE RECEPTACLE
	DIRECT POWER CONNECTION
	UNFUSED DISCONNECT SWITCH
ď	FUSED DISCONNECT SWITCH
	DIRECT POWER CONNECTION COMPLETE UNFUSED DISCONNECT SWITCH
早	BLANK COVERPLATE COMPLETE WITH WIRING, CONDUIT, AND BACKBOX
J	ROUND JUNCTION BOX COMPLETE WITH COVERPLATE
J	SQUARE JUNCTION BOX COMPLETE WITH COVERPLATE
	RECESSED ELECTRICAL PANEL, AS SCHEDULED
	SURFACE-MOUNTED ELECTRICAL PANEL, AS SCHEDULED
	MANUAL STARTER
CC-1	DEVICE/EQUIPMENT CONNECTED TO CIRCUIT #1 IN PANEL 'CC'

	COMMUNICATIONS (VOICE/DATA) LEGEND
∇	DATA OUTLET MOUNTED AT STANDARD HEIGHT COMPLETE WITH CATEGORY 6, FT6 CABLING TO THE HUB ROOM
▼	TELEPHONE OUTLET MOUNTED AT STANDARD HEIGHT COMPLETE WITH CATEGORY 6, FT6 CABLING TO THE HUB ROOM
\forall	DATA OUTLET MOUNTED AT HIGH LEVEL COMPLETE WITH CATEGORY 6, FT6 CABLING TO THE HUB ROOM
*	TELEPHONE OUTLET MOUNTED AT HIGH LEVEL COMPLETE WITH CATEGORY 6, FT6 CABLING TO THE HUB ROOM
WAP	WIRELESS ACCESS POINT COMPLETE WITH CATEGORY 6, FT6 CABLING TO THE HUB ROOM

	SYSTEMS DEVICE & EQUIPMENT LEGEND
	MODULAR CONTROL PANEL, SUPPLIED AND INSTALLED BY DIVISION 26
•	DOOR OPERATOR ACTUATOR BUTTON
KS	KEY SWITCH, TIED TO THE DOOR OPERATOR SYSTEM
HD	HAND DRYER, SUPPLIED AND INSTALLED BY DIVISION 26
PL	PUSH-TO-LOCK BUTTON TIED TO THE WASHROOM DOOR OPERATOR SYSTEM
<u></u>	'OCCUPIED-WHEN-LIT' LED ANNUNCIATOR TIED TO THE WASHROOM DOOR OPERATOR SYSTEM
EH	VISUAL INDICATOR TIED TO THE CALL-FOR-ASSISTANCE SYSTEM
E	EMERGENCY PUSH-BUTTON TIED TO THE CALL-FOR-ASSISTANCE SYSTEM
Ē	AUDIBLE/VISUAL INDICATOR TIED TO THE CALL-FOR-ASSISTANCE SYSTEM

FIRE ALARM SYSTEM LEGEND

	RATE-OF-RISE HEAT DETECTOR							
	FIXED TEMPERATURE HEAT DETECTOR							
•	SMOKE DETECTOR							
	PULL STATION C/W TAMPERPROOF, POLYCARBONATE COVER							
	FIRE ALARM SPEAKER							
	FIRE ALARM SPEAKER/STROBE							
	DUCT SMOKE DETECTOR							
TL	REMOTE TROUBLE INDICATOR							
FS	SPRINKLER/STANDPIPE FLOW SWITCH							
SV	SPRINKLER/STANDPIPE SUPERVISED VALVE							
	FIRE ALARM ANNUNCIATOR							
	FIRE ALARM CONTROL PANEL							
ACCESS CONTROL SYSTEM LEGEND								
CR	CARD READER							
ES	ELECTRIC STRIKE							
[a]	HOUSE HESTER STITION							

LOCAL DOOR CONTACT SUPPLIED AND INSTALLED BY DIVISION 16; TIED TO

AUDIBLE/VISUAL ANNUNCIATOR TIED TO THE LOCAL DOOR ALARM SYSTEM

AIPHONE MASTER STATION

AIPHONE DOOR STATION

AIPHONE SUB-MASTER STATION

THE LOCAL DOOR ALARM SYSTEM

	SECURITY SYSTEM LEGEND
M	MOTION DETECTOR
DC	MAGNETIC DOOR CONTACT
KP	KEYPAD
ES	ELECTRIC STRIKE

	CLOCK SYSTEM LEGEND
_	ANALOG CLOCK, 120V PLUG-IN TYPE COMPLETE WITH SINGLE RECEPTACL - WALL-MOUNTED
→Φ →	ANALOG CLOCK, 120V PLUG-IN TYPE COMPLETE WITH SINGLE RECEPTACL - WALL-MOUNTED
Фмс	ANALOG CLOCK TIED TO THE MASTER CLOCK SYSTEM - WALL-MOUNTED
-⊕ -MC	DUAL-FACE ANALOG CLOCK TIED TO THE MASTER CLOCK SYSTEM - WALL-MOUNTED
∲во	ANALOG CLOCK, BATTERY OPERATED — WALL—MOUNTED
→ B0	DUAL-FACE ANALOG CLOCK, BATTERY OPERATED - WALL-MOUNTED
MC	MASTER CLOCK SYSTEM CONTROLLER

AUDIO/VISUAL SYSTEM LEGEND	
2-HDMI OUTLET	

	PUBLIC ADDRESS (P.A.) SYSTEM LEGEND						
S	P.A. SPEAKER - FLUSH CEILING-MOUNTED						
SH	P.A. SPEAKER — WALL—MOUNTED						
- S	P.A. SPEAKER, DUAL-FACE TYPE - WALL-MOUNTED						
DSH	P.A. EXTERIOR HORN — WALL—MOUNTED						
OZ	WEATHERPROOF PROGRAM BELL C/W ENCLOSURE						
HSH	P.A. HANDSET — WALL—MOUNTED						
HS	P.A. HANDSET — DESK-MOUNTED						
\$PC	P.A. PRIVACY CALL SWITCH						
\$HS	P.A. HANDSET C/W INTEGRAL PRIVACY CALL SWITCH						
ACC	P.A. ADMINISTRATIVE HANDSET						
NR	P.A. NIGHT RINGER						
A P.A. LOCKDOWN 'AMBER' STROBE							
≱ B	P.A. INCOMING CALL 'BLUE' STROBE						
VC	P.A. WALL-MOUNTED VOLUME CONTROL SWITCH						
Ф	P.A. RED LOCKDOWN BUTTON C/W POLYCARBONATE LIFT-ABLE COVER						
ScH	P.A. SPEAKER C/W INTEGRATED CALL SWITCH						
<u></u>	P.A. COMBINATION SPEAKER AND CLOCK UNIT — WALL—MOUNTED						
PA	P.A. HEAD-END EQUIPMENT RACK						
SR	P.A. SATELLITE EQUIPMENT RACK						

ACRONYM LEGEND DESCRIPTION ABOVE FINISHED FLOOR CONNECT TO EXISTING DENOTES EXISTING DEVICE OR EQUIPMENT TO BE RELOCATED DENOTE EXISTING DEVICE OR EQUIPMENT TO REMAIN DENOTE DEVICE OR EQUIPMENT WITH GFI PROTECTION DENOTES DEVICE OR EQUIPMENT AT HIGH LEVEL LOW VOLTAGE DENOTES NEW DEVICE OR EQUIPMENT DENOTES NIGHT LIGHT FIXTURE DENOTES EXISTING DEVICE OR EQUIPMENT TO BE REMOVED DENOTES RELOCATED POSITION OF AN EXISTING DEVICE OR EQUIPMENT DENOTES EXISTING DEVICE OR EQUIPMENT TO BE REPLACED

GENERAL NOTES

DENOTES ROOFTOP DEVICE OR EQUIPMENT

DENOTES TAMPERPROOF DEVICE OR EQUIPMENT
DENOTES DEVICE OR EQUIPMENT WITH A WIREGUARD
DENOTES WEATHERPROOF TYPE DEVICE OR EQUIPMENT

T-SLOT, 20A, DEVICE

- 1. IT IS HIGHLY SUGGESTED AND RECOMMENDED FOR THE ELECTRICAL CONTRACTOR TO VISIT THE SITE PRIOR TO BIDDING AND REVIEW EXISTING CONDITIONS AND DEMOLITION SCOPE OF WORK TO SUIT EXISTING ARCHITECTURAL, STRUCTURAL AND MECHANICAL SITE CONDITIONS, DRAWINGS, SPECIFICATIONS AND ALL CONTRACT DOCUMENTS. NO EXTRA WILL SUBSEQUENTLY BE ALLOWED TO COVER ANY SUCH ERROR, OMISSION AND/OR OVERSIGHT FOR NOT HAVING MADE A THOROUGH INSPECTION OF THE GROUNDS, EXISTING CONDITIONS, DRAWINGS, SPECIFICATION AND DESIGN INTENT. THE ELECTRICAL CONTRACTOR SHALL NOTE THAT THE EXISTING BUILDING WILL REMAIN IN OPERATION THROUGHOUT DEMOLITION/CONSTRUCTION. ALLOW FOR ANY WORK REQUIRED TO BE DONE WHICH MAY AFFECT POWER SUPPLY AND OPERATION OF THE BUILDING MANAGEMENT. PROVIDE TEMPORARY SERVICES AS REQUIRED TO ENSURE CONTINUED OPERATION AT ALL TIMES.
- 2. CAREFULLY EXAMINE OTHER EXISTING UTILITY LINES SUCH AS GAS, WATER ETC. PRIOR TO START THE ELECTRICAL CONSTRUCTION WORKS AND COORDINATE WITH OTHER TRADES AND REPORT OF ANY DISCREPANCY PRIOR TO PROCEEDING.
- 3. IT IS MANDATORY THAT ELECTRICAL WORK CONFORM TO ALL APPLICABLE CODES (INCLUDING THE ONTARIO BUILDING, FIRE, AND ONTARIO ELECTRICAL SAFETY CODE), BASE BUILDING (BOARD) STANDARDS, AND THE STANDARDS SET BY ANY AND ALL LOCAL AUTHORITIES HAVING JURISDICTION.
- 4. ALL ELECTRICAL WORK SHALL BE INSPECTED BY THE ELECTRICAL SAFETY AUTHORITY (ESA). ARRANGE AND PAY FOR ALL INSPECTIONS REQUIRED FOR THE DURATION OF
- 5. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR HIRING A FIRE WATCH AS REQUIRED BY CODE, LOCAL AUTHORITIES HAVING JURISDICTION, AND DURING ANY ALTERATION OR DOWNTIME OF THE FIRE ALARM SYSTEM. FIRE WATCH SHALL BE PRESENT THROUGHOUT THE DOWNTIME DURATION.
- 6. THE ELECTRICAL CONTRACTOR SHALL LABEL ALL NEW AND EXISTING LIGHT SWITCHES, RECEPTACLES AND JUNCTION BOXES COVERPLATES WITH THE PANEL NAME AND BREAKER IT IS FED FROM. ALL LABELING OF ELECTRICAL DEVICES SHALL BE DONE SO WITH A LABELMAKER ONLY. NO HAND WRITTEN LABELS WILL BE PERMITTED.
- 7. WHERE NEW PARTITIONS ARE BEING CONSTRUCTION, ALL WIRING AND RACEWAYS SHALL BE EMBEDDED IN THE CONSTRUCTION OF THE NEW WALLS AND ALL BACKBOXES SHALL BE RECESSED. WHERE NEW DEVICES/SYSTEMS ARE PROPOSED ON EXISTING BLOCK WALLS, UTILIZE WIREMOLD 500/700 SERIES AS RACEWAY FOR ALL NEW WIRING. PROVIDE WIREMOLD BACKBOXES FOR SURFACE MOUNTED, INTERIOR APPLICATIONS. THE USE OF SHEET METAL BOXES WILL NOT BE PERMITTED.
- 8. IN THE EVENT OF ANY DISCREPANCY BETWEEN THE ELECTRICAL DRAWINGS AND SPECIFICATIONS, ALLOW FOR THE HIGHEST-PRICED OPTION IN THE TENDER PRICE.
- 9. ALL WIRING USED ON THIS PROJECT SHALL BE RUN IN RACEWAYS. NO USE OF ARMOURED (BX) CABLE WILL BE PERMITTED WITH THE EXCEPTION OF RUNS NOT TO EXCEED 5' BETWEEN A LIGHT FIXTURE AND THE RESPECTIVE JUNCTION BOX.

DRAWING LIST								
DRAWING NUMBER	DESCRIPTION							
E1	ELECTRICAL LEGEND, NOTES AND SCHEDULES							
E2	FIRST FLOOR KEY PLAN							
E3	POWER & SYSTEMS PLANS							
E4	LIGHTING PLANS							

MECHANICAL EQUIPMENT WIRING SCHEDULE

EQUIPMENT DESCRIPTION	STARTER LOCATION	STARTER TYPE	MCA/HP/KW	VOLTS/PH./ FREQUENCY	BREAKER SIZE OR FUSE SIZE	FEEDER SIZE	PANEL AND CCT. NOS.	REMARKS	FIRE ALARM FAN SHUTDOWN [AHU/EF ONLY]	TIED TO BAS SYSTEM?
WALL-MOUNTED AC UNIT, AC-1	INTEGRAL TO UNIT	INTEGRAL	_	208V/1PH/60Hz	15A-2P	2#12 RW90+G IN 19mmC	PANEL 'MR'	ELECTRICAL DIVISION SHALL PROVIDE POWER CONNECTION TO THE UNIT. PROVIDE LOCAL DISCONNECT SWITCH.	NO	YES
WALL-MOUNTED AC UNIT, AC-2	INTEGRAL TO UNIT	INTEGRAL	_	208V/1PH/60Hz	15A-2P	2#12 RW90+G IN 19mmC	PANEL 'MR'	ELECTRICAL DIVISION SHALL PROVIDE POWER CONNECTION TO THE UNIT. PROVIDE LOCAL DISCONNECT SWITCH.	NO	YES
CONDENSING UNIT, CDU-1	INTEGRAL TO UNIT	INTEGRAL	_	208V/1PH/60Hz	75A-2P	2#4 RW90+G IN 27mmC	PANEL 'MR'	ELECTRICAL DIVISION SHALL PROVIDE POWER CONNECTION TO THE UNIT. PROVIDE LOCAL DISCONNECT SWITCH.	NO	YES

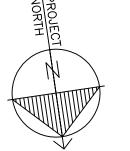
- 1. PROVIDE POWER CONNECTION TO ALL MECHANICAL EQUIPMENT LISTED IN THE SCHEDULE FOR A FULL OPERATIONAL SYSTEM. REFER TO MECHANICAL LAYOUTS AND SCHEDULES FOR EXACT LOCATION OF EQUIPMENT. PROVIDE SEPARATE BREAKER FOR INDIVIDUAL MECHANICAL EQUIPMENT. SIZE AS INDICATED IN THE SCHEDULE.
- 2. PROVIDE A LOCAL DISCONNECT SWITCH FOR ALL MECHANICAL EQUIPMENT IN THIS SCHEDULE, UNLESS IT IS NOTED THAT THE DISCONNECT SWITCH IS TO BE PROVIDED BY THE EQUIPMENT MANUFACTURER. DISCONNECT SWITCH SHALL BE SEPARATE FROM THE STARTER SERVING THE RESPECTIVE EQUIPMENT. NOTE THAT DISCONNECT SWITCHES ARE NOT ILLUSTRATED ON THE FLOOR PLAN (FOR CLARITY), HOWEVER MUST BE SUPPLIED AND INSTALLED BY DIVISION 26 FOR ALL MECHANICAL EQUIPMENT LISTED IN THE ABOVE SCHEDULE.
- 3. THE ELECTRICAL CONTRACTOR WILL BE RESPONSIBLE FOR REVIEWING ALL MECHANICAL SHOP DRAWINGS WITH RESPECT TO RELEVANT ELECTRICAL INFORMATION PRIOR TO THE SHOP DRAWINGS BEING SUBMITTED TO THE MECHANICAL AND ELECTRICAL ENGINEER FOR REVIEW. NO EQUIPMENT SHALL BE ORDERED PRIOR TO SUBMITTING SHOP DRAWINGS AND RECEIVING SHOP DRAWINGS BACK APPROVED BY BOTH THE MECHANICAL EQUIPMENT AND ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR WORKING WITH EACH MANUFACTURER OR MECHANICAL EQUIPMENT AND GATHERING THE MECHANICAL EQUIPMENT PRIOR TO SUBMITTING SHOP DRAWINGS FOR REVIEW.

NEW PANEL 'A' 120V/208V, 3PH, 4W		TYPE: 1 MAINS: 60A MAIN BKR: —							MOUNTING: RECESSED LOCATION: MUSIC CLASSROOM	
WATTS DESCRIPTION		PROT. CIRCUITS F		PROT.	DESCRIPTION	WATTS				
	EXISTING LOAD	15A	1	+	F	+	2	15A	EXISTING LOAD	
	EXISTING LOAD	15A	3	$oxed{+}$	┢	+	4	15A	EXISTING LOAD	
	SPARE	15A	5		╀	╅	6	15A	SPARE	
	SPARE	15A	7	-	╀	+	8	15A	SPARE	
NOTES: 1. PROVIDE PANELBOARD C/W COVERS AND FULL NEUTRAL COPPER BUS. 2. VERIFY IF THE EXISTING PANEL IS A 120/208V, 3ø, 4W PANEL OR A 120/240V, 1ø, 3W PANEL. PROVIDE NEW TO MATCH EXISTING VOLTAGE (1ø VS. 3ø). MODIFY AND RECONNECT THE EXISTING FEEDER TO THE NEW PANEL.										

NEW F 120V/	TYPE: MAINS: MAIN B	KR:		1 1004 1004	А А—ЗР		MOUNTING: SURFACE—MOUNTED LOCATION: SEE KEY PLAN	
WATTS	DESCRIPTION	PROT.		CIR	CUIT	S	PROT.	DESCRIPTION WATTS
	MUSIC CLASSROOM AC UNITS 'AC-1' & 'AC-2'	15A	1	-		2	75A	MUSIC CLASSROOM CONDENSING UNIT 'CDU-1'
	7.0 1 & 7.0 2	2P	3	1	1	4	2P	GONDENGING ONLY ODG T
	RECEPTACLES	15A	5	†	╁┪	6	15A	RECEPTACLES
	RECEPTACLE	15A	7	+	+	8	15A	SPARE
	SPARE	15A	9	\mathbb{H}	+	10	15A	SPARE
	SPARE	15A	11	\mathbb{H}	\dashv	12	15A	SPARE
	SPARE	15A	13	-	\blacksquare	14	15A	SPARE
	SPARE	15A	15	\mathbb{H}	\dashv	16	15A	SPARE
	SPARE	15A	17	\mathbb{H}	\dashv	18	15A	SPARE
	SPARE	15A	19	-		20	15A	SPARE
	SPARE	15A	21	\blacksquare	\dashv	22	15A	SPARE
	SPARE	20A	23	\mathbb{H}	\mathbb{H}	24	15A	SPARE
	SPARE	15A	25	+	\mathbb{H}	26	15A	SPARE
	SPARE	20A	27	+	\dashv	28	20A	SPARE
	SPARE	20A	29	$oxed{\bot}$	┦┩	30	20A	SPARE

NOTES:

- 1. PROVIDE PANELBOARD C/W COVERS AND FULL NEUTRAL COPPER BUS.
- PROVIDE PRINTED PANEL DIRECTORY WITH CIRCUIT NUMBER, TYPE AND LOCATION OF ALL LOADS. ALL SPARE BREAKERS SHALL BE LABELED WITH PENCIL FOR FUTURE UPDATE. PROVIDE LABEL INSIDE PANEL COVER STATING YEAR OF INSTALLATION, PANEL SOURCE LOCATION, OVERCURRENT PROTECTION AND FEEDER SIZE.
- 3. PROVIDE A NEW 100A—3P BREAKER IN THE MAIN DISTRIBUTION PANEL IN THE MAIN ELECTRICAL ROOM ROOM TO FEED THIS NEW PANEL 'MR'. PROVIDE A NEW FEEDER 4#3 RW90+G IN 35mmC FROM THE MAIN DISTRIBUTION PANEL TO THE NEW PANEL 'MR'. INSTALL THE FEEDER ENTIRELY ABOVE DROP CEILINGS.





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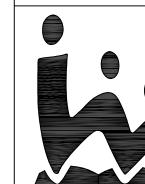
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MECHANICAL & ELECTRICAL CONSULTANT:

SURI & ASSOCIATES LTD. ENGINEERING CONSULTANTS

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ELECTRICAL MECHANICAL LIGHTING COMMUNICATION SECURITY



RE-ISSUED FOR TENDER

RE-ISSUED FOR TENDER

RE-ISSUED FOR TENDER

JAN. 17, 2025

ISSUED FOR TENDER

NOV. 20, 2024

HAMILTON-

DISTRICT

WENTWORTH

OCT. 30, 2024

DATE

LISGAR ELEMENTARY SCHOOL HAMILTON — WENTWORTH DISTRICT SCHOOL BOARD

ISSUED FOR 100% REVIEW

ELECTRICAL LEGEND, NOTES AND SCHEDULES

110 ANSON AVENUE HAMILTON, ONTARIO

CHECKED BY:

RS

SS

DATE:

NOVEMBER 2024

SCALE:

AS SHOWN

CHECKED BY:

SS

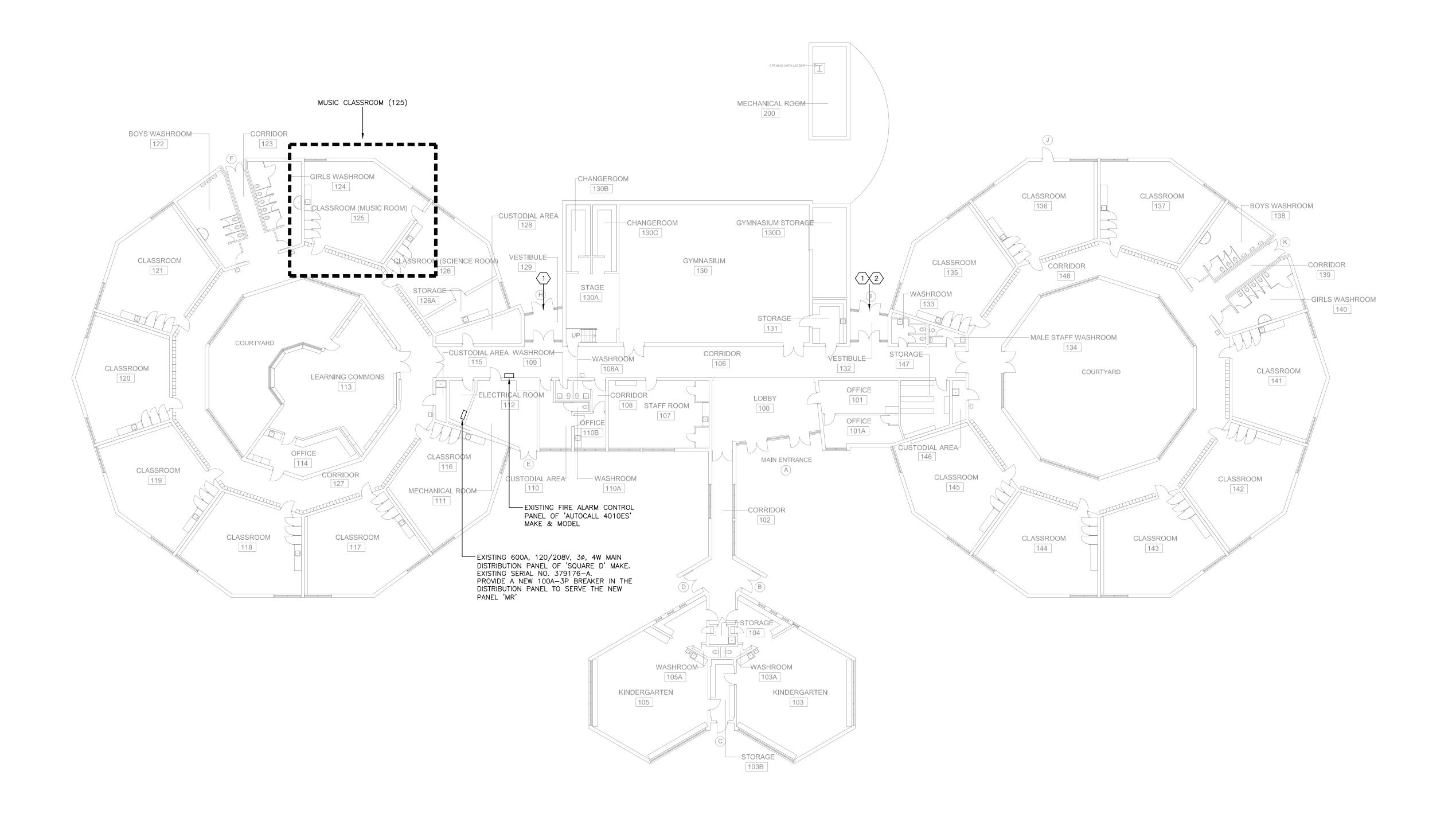
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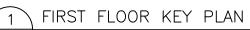
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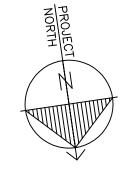
DRAWING NOTES:

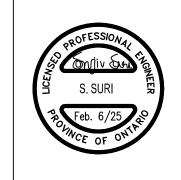
- TEMPORARILY REMOVE THE EXISTING DOOR CONTACT(S) AT THE EXTERIOR DOOR AS NECESSARY TO FACILITATE REPLACEMENT OF THE EXTERIOR DOOR/FRAMES WITH NEW. PULL BACK WIRING/RACEWAYS AS NECESSARY. RE—INSTATE THE DOOR CONTACT(S) AT THE NEW DOOR/FRAME. TEST OPERATION OF THE DOOR CONTACT(S) UPON RE—INSTALLATION.
- TEMPORARILY REMOVE THE EXISTING CARD READER AND ELECTRIC STRIKE AT THE EXTERIOR DOOR AS NECESSARY TO FACILITATE REPLACEMENT OF THE EXTERIOR DOOR/FRAMES WITH NEW. PULL BACK WIRING/RACEWAYS AS NECESSARY. RE-INSTATE THE CARD READER AND ELECTRIC STRIKE AT THE NEW DOOR/FRAME. TEST OPERATION OF THE CARD READER AND ELECTRIC STRIKE UPON RE-INSTALLATION.





E2 SCALE: 1/16" = 1'-0"





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ELECTRICAL MECHANICAL LIGHTING COMMUNICATION SECURITY



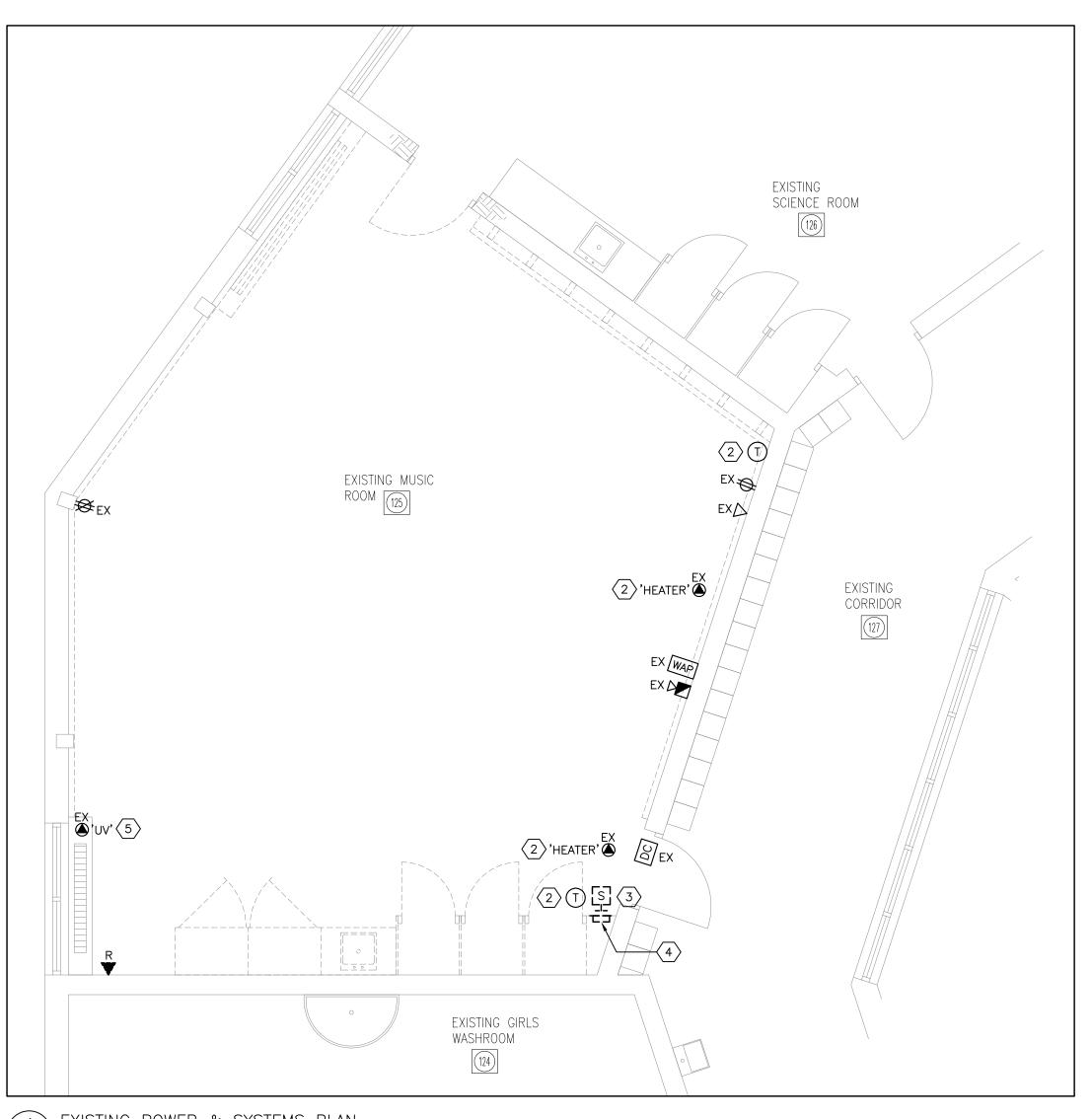
HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

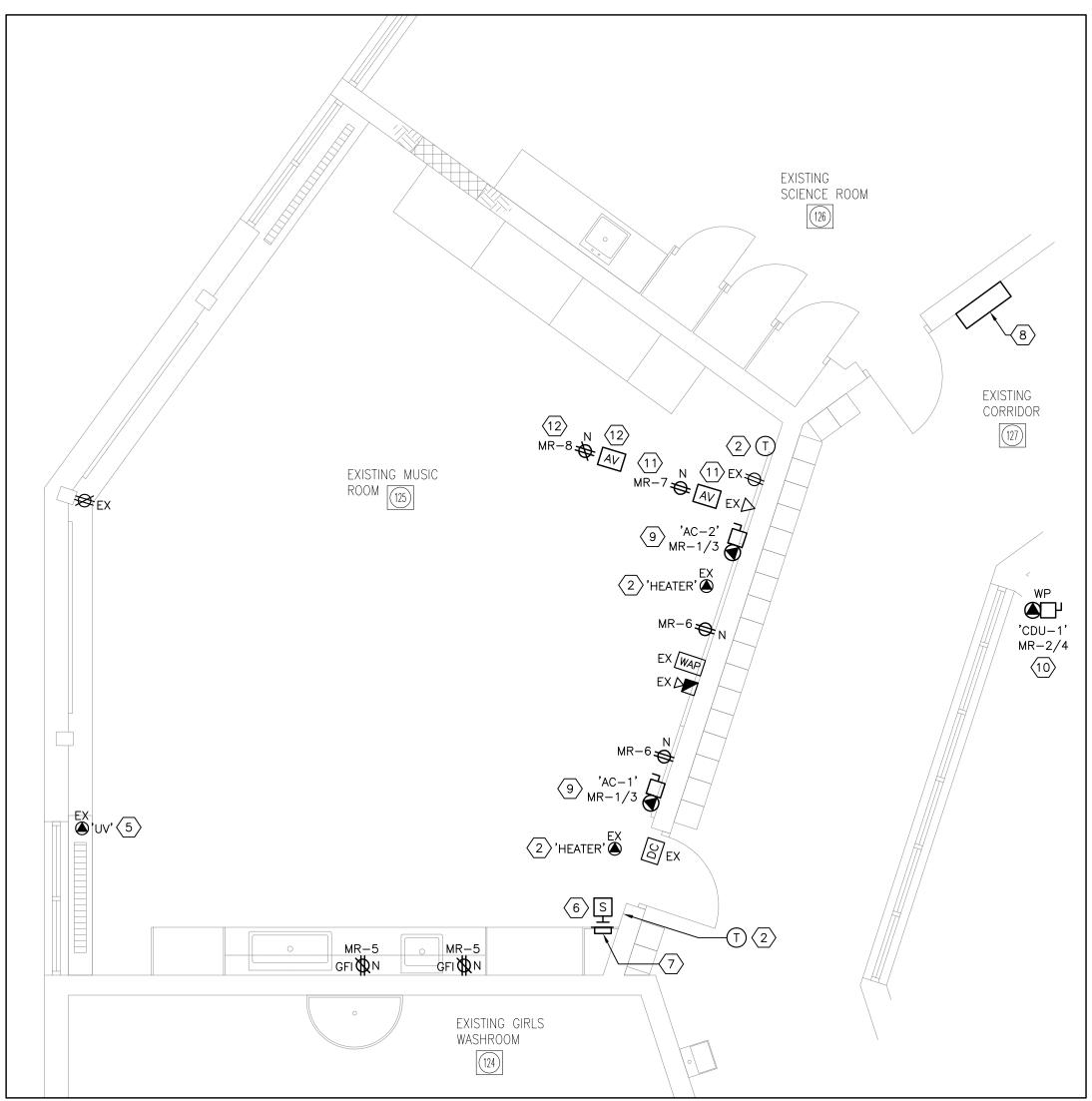
4. RE—ISSUED FOR TENDER FEB. 6, 2025
3. RE—ISSUED FOR TENDER JAN. 17, 2025
2. ISSUED FOR TENDER NOV. 20, 2024
1. ISSUED FOR 100% REVIEW OCT. 30, 2024
No. REVISIONS DATE

LISGAR ELEMENTARY
SCHOOL
HAMILTON - WENTWORTH
DISTRICT SCHOOL BOARD
110 ANSON AVENUE
HAMILTON, ONTARIO

FIRST FLOOR KEY PLAN

DRAWN BY:	CHECKED BY:
RS	SS
DATE:	JOB No.:
NOVEMBER 2024	24-244
SCALE:	SHEET No.:
AS SHOWN	E2





2 NEW POWER & SYSTEMS PLAN

E3 SCALE: 1/4" = 1'-0"

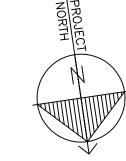
1 EXISTING POWER & SYSTEMS PLAN

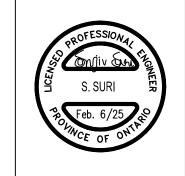
E3 SCALE: 1/4" = 1'-0"

DRAWING NOTES:

1. PROTECT ALL EXISTING TO REMAIN DEVICES AND EQUIPMENT IN THE AREA OF WORK THROUGHOUT CONSTRUCTION FROM DUST, DEBRIS AND DAMAGE.

- 2 EXISTING POWER CONNECTIONS TO THE ELECTRIC UNIT HEATERS ARE TO REMAIN AS IS. EXISTING WALL-MOUNTED THERMOSTAT IS TO REMAIN AS IS.
- REMOVE THE EXISTING P.A. SPEAKER (C/W INTEGRATED CALL SWITCH) TO FACILITATE DEMOLITION OF THE MILLWORK AND REPLACE WITH NEW. PULL BACK WIRING AS REQUIRED. RETAIN 'HAMILTON VIDEO AND SOUND' FOR ALL P.A. RELATED WORK.
- REMOVE THE EXISTING RECESSED, 4-CIRCUIT BREAKER PANEL 'A' SERVING THE CLASSROOM LOADS TO FACILITATE DEMOLITION OF THE MILLWORK AND REPLACE WITH NEW. PULL BACK WIRING/CONDUIT AS REQUIRED.
- 5 EXISTING POWER CONNECTIONS TO THE ELECTRIC UNIT HEATERS ARE TO REMAIN AS IS. EXISTING WALL-MOUNTED THERMOSTAT IS TO REMAIN AS IS.
- PROVIDE A NEW P.A. SPEAKER C/W INTEGRATED CALL SWITCH RECESSED IN THE NEW MILLWORK UNIT. TEST OPERATION OF THE SPEAKER AFTER REINSTATEMENT. MODIFY ALL WIRING/CONDUIT TO SUIT. RETAIN 'HAMILTON VIDEO AND SOUND' FOR ALL P.A. RELATED WORK.
- PROVIDE A NEW RECESSED, 8-CIRCUIT BREAKER PANEL 'A' IN THE NEW MILLWORK UNIT. TEST OPERATION OF ALL CIRCUITS AFTER REINSTATEMENT. MODIFY ALL WIRING/CONDUIT TO SUIT.
- NEW 120/208V, 3Ø, 4W ELECTRICAL PANEL 'MR' IN THE CORRIDOR. PROVIDE A NEW FEEDER (4#3 RW90+G IN 35mmC) FROM THE NEW 100A-3P BREAKER IN THE MAIN DISTRIBUTION PANEL IN THE ELECTRICAL ROOM SEE KEY PLAN FOR LOCATION.
- 9 PROVIDE 208V/10 POWER CONNECTION C/W LOCAL DISCONNECT SWITCH TO EACH HI-WALL AC UNIT 'AC-1'. COORDINATE ROUGH-IN AND FINAL CONNECTIONS WITH THE MECHANICAL CONTRACTOR. CONNECT TO THE CIRCUIT NOTED.
- PROVIDE 208V/10 POWER CONNECTION C/W LOCAL WEATHERPROOF DISCONNECT SWITCH FOR THE OUTDOOR CONDENSING UNIT 'CDU-1'. COORDINATE ROUGH-IN AND FINAL CONNECTIONS WITH THE MECHANICAL CONTRACTOR. CONNECT TO THE CIRCUIT NOTED.
- 11> PROVIDE A NEW DUPLEX RECEPACLE AND 2-HDMI OUTLET AT LOW-LEVEL BELOW THE NEW WHITEBOARDS SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION.
- PROVIDE A NEW DUPLEX RECEPACLE AND 2-HDMI OUTLET AT LOW-LEVEL BELOW THE NEW WHITEBOARDS SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION.
- 13. REPLACE ALL EXISTING RECEPTACLES WITH NEW WHITE DECORA TYPE RECEPTACLES COMPLETE WITH STAINLESS STEEL COVERPLATE.
- 14. ALL NEW SWITCHES AND RECEPTACLES SHALL BE OF WHITE DECORA TYPE WITH STAINLESS STEEL COVERPLATES.





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HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

 4.
 RE-ISSUED FOR TENDER
 FEB. 6, 2025

 3.
 RE-ISSUED FOR TENDER
 JAN. 17, 2025

 2.
 ISSUED FOR TENDER
 NOV. 20, 2024

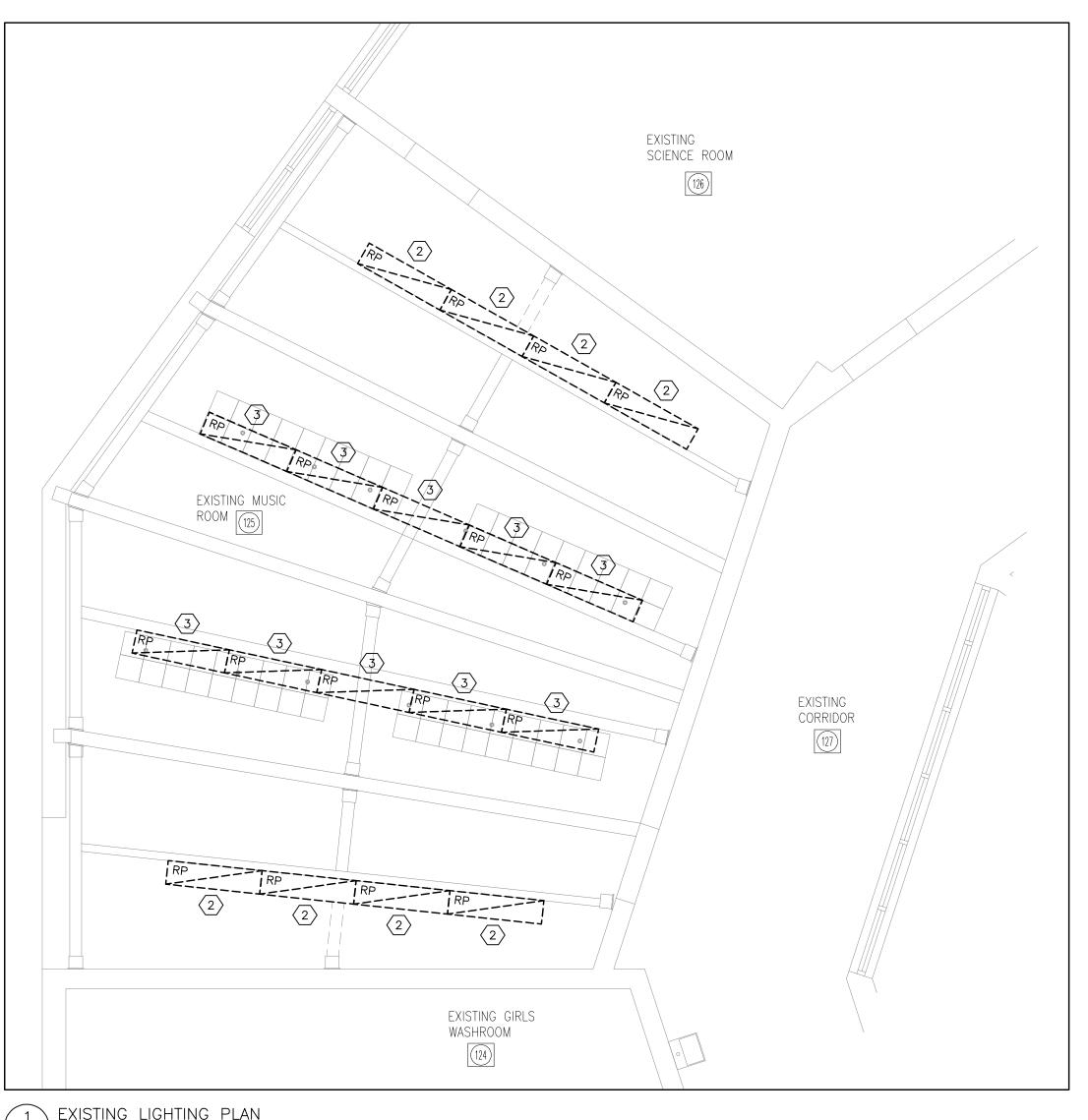
 1.
 ISSUED FOR 100% REVIEW
 OCT. 30, 2024

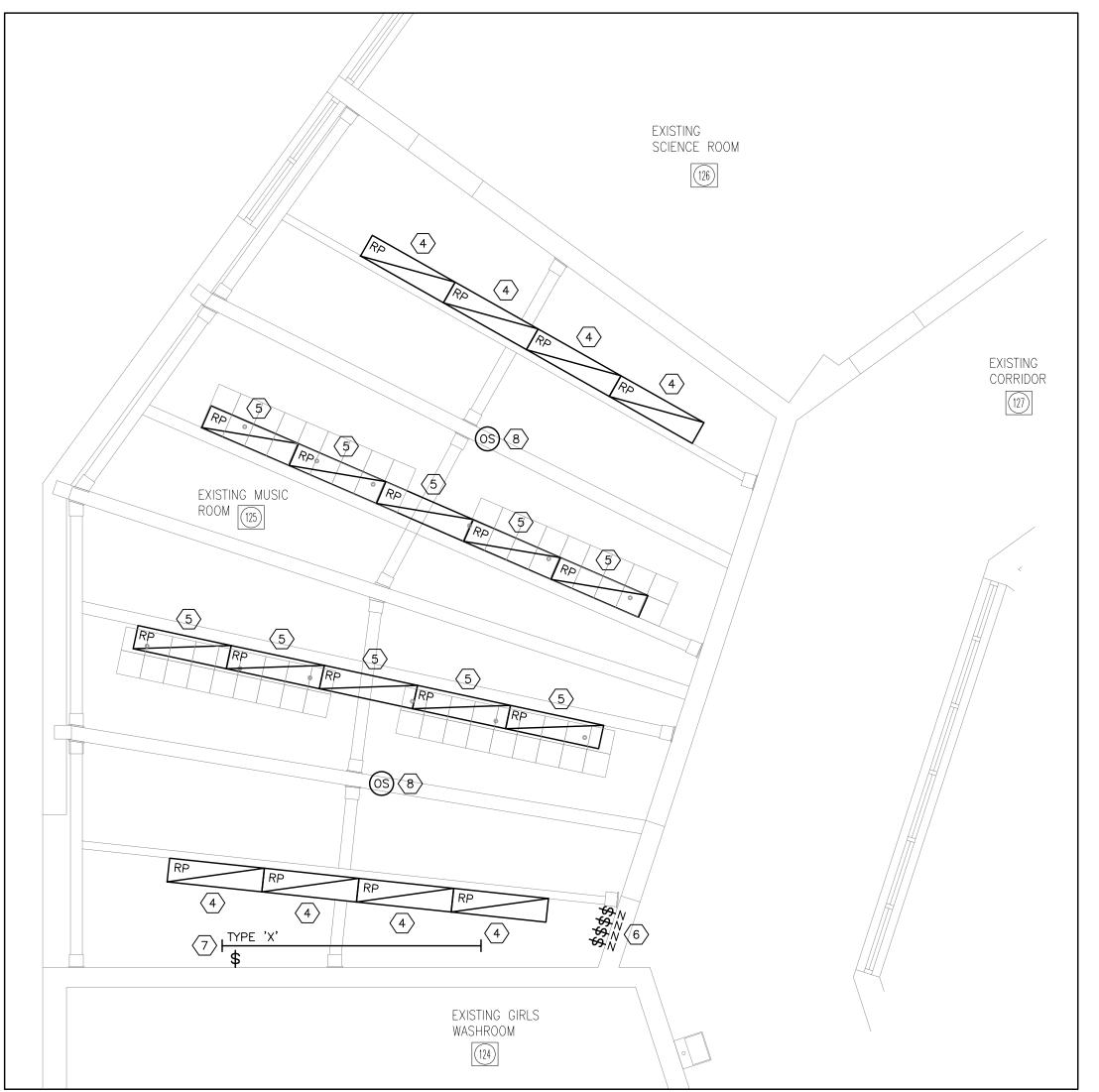
 No.
 REVISIONS
 DATE

LISGAR ELEMENTARY
SCHOOL
HAMILTON - WENTWORTH
DISTRICT SCHOOL BOARD
110 ANSON AVENUE
HAMILTON, ONTARIO

POWER & SYSTEMS PLANS

DRAWN BY:	CHECKED BY:
RS	SS
DATE:	JOB No.:
NOVEMBER 2024	24-244
SCALE:	SHEET No.:
AS SHOWN	E3





1 EXISTING LIGHTING PLAN

E4 SCALE: 1/4" = 1'-0"

DRAWING NOTES:

1. PROTECT ALL EXISTING TO REMAIN DEVICES AND EQUIPMENT IN THE AREA OF WORK THROUGHOUT CONSTRUCTION FROM DUST, DEBRIS AND DAMAGE.

- REMOVE AND REPLACE THE EXISTING SURFACE-MOUNTED LIGHT FIXTURE. DISPOSE OF THE FIXTURE, LAMPS AND BALLASTS OFF SITE AS PER REGULATORY REQUIREMENTS. PROVIDE A COPY OF THE RECYCLING RECEIPT TO THE OWNER. MODIFY THE EXISTING CONDUITS SERVING THE LIGHTING TO SUIT THE NEW FIXTURES (NOTE THAT THE EXISTING ACOUSTIC TILES ARE ABESTOS CONTAINING; DO NOT FASTEN ANYTHING TO THE ACOUSTIC TILES). REMOVE ALL EXISTING WIRING BETWEEN THE PANEL AND THE LIGHT FIXTURES AND REPLACE WITH NEW.
- REMOVE AND REPLACE THE EXISTING SUSPENDED LIGHT FIXTURE. DISPOSE OF THE FIXTURE, LAMPS AND BALLASTS OFF SITE AS PER REGULATORY REQUIREMENTS. PROVIDE A COPY OF THE RECYCLING RECEIPT TO THE OWNER. MODIFY THE EXISTING CONDUITS SERVING THE LIGHTING TO SUIT THE NEW FIXTURES (NOTE THAT THE EXISTING ACOUSTIC TILES ARE ABESTOS CONTAINING; DO NOT FASTEN ANYTHING TO THE ACOUSTIC TILES). REMOVE ALL EXISTING WIRING BETWEEN THE PANEL AND THE LIGHT FIXTURES AND REPLACE WITH NEW.
- PROVIDE A NEW SURFACE-MOUNTED LIGHT FIXTURE OF TYPE 'F1' TO REPLACE THE EXISTING. CONNECT LIGHT FIXTURES TO BREAKER #1 IN PANEL 'A'. MODIFY THE EXISTING CONDUITS SERVING THE LIGHTING TO SUIT THE NEW FIXTURES (NOTE THAT THE EXISTING ACOUSTIC TILES ARE ABESTOS CONTAINING; DO NOT FASTEN ANYTHING TO THE ACOUSTIC TILES). PROVIDE NEW WIRING BETWEEN THE PANEL AND THE LIGHT FIXTURES. PROVIDE 0-10V DIMMING WIRING FROM THE NEW DIMMING LIGHT SWITCHES TO ALL FIXTURES; PROVIDE NEW RACEWAYS AS REQUIRED.
- 5 PROVIDE A NEW SUSPENDED LIGHT FIXTURE OF TYPE 'F2' TO REPLACE THE EXISTING. CONNECT LIGHT FIXTURES TO BREAKER #1 IN PANEL 'A'. PROVIDE NEW CONDUIT/WIRING FROM THE CIRCUIT TO THE LIGHT FIXTURES THROUGH THE NEW SWITCH. MODIFY THE EXISTING CONDUITS SERVING THE LIGHTING TO SUIT THE NEW FIXTURES (NOTE THAT THE EXISTING ACOUSTIC TILES ARE ABESTOS CONTAINING; DO NOT FASTEN ANYTHING TO THE ACOUSTIC TILES). PROVIDE NEW WIRING BETWEEN THE PANEL AND THE LIGHT FIXTURES. PROVIDE 0-10V DIMMING WIRING FROM THE NEW DIMMING LIGHT SWITCHES TO ALL FIXTURES.; PROVIDE NEW RACEWAYS AS REQUIRED.
- PROVIDE NEW LOW-VOLTAGE DIMMING ON/OFF/DIM UP/DIM DOWN SWITCHES ON THE WALL. EACH LIGHT SWITCH SHALL CONTROL ONE ROW OF LIGHTS. PROVIDE NEW WIRING TO SUIT. DIMMER SWITCH SHALL BE SUITABLE FOR 0-10V DIMMING (LUTRON OR APPROVED EQUAL).
- 7 PROVIDE A NEW UNDERCABINET LIGHT OF TYPE 'X' AS SPECIFIED UNDER THE NEW UPPER CABINETS. CONNECT TO BREAKER #1 IN PANEL 'A'. PROVIDE A LINE-VOLTAGE ON/OFF SWITCH TO CONTROL THE UNDERCABINET LIGHT.
- PROVIDE NEW LOW-VOLTAGE DUAL TECHNOLOGY OCCUPANCY SENSORS TO CONTROL THE GENERAL SPACE LIGHTING AND UNDERCABINET LIGHTING IN THE CLASSROOM. PROVIDE ALL NECESSARY POWER PACKS. POWER PACKS SHALL BE INSTALLED UPSTREAM OF THE LINE-VOLTAGE LIGHTING SWITCHES.

LIGHT FIXTURE TYPE 'F1' - LITHONIA CPX 1X4 AL07 SWW7 M4 COMPLETE WITH 1X4SMKSH MULTI-USE SURFACE MOUNT KIT 1X4, SHALLOW DEPTH. SET FIXTURE TO 4000K, HIGH LUMEN OUTPUT.

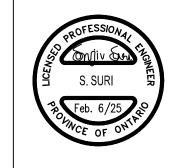
LIGHT FIXTURE TYPE 'F2' - LITHONIA CPX 1X4 AL07 SWW7 M4 COMPLETE WITH PAC 2DNF 36 PANEL AIR CRAFT KIT. SET FIXTURE TO 4000K, HIGH LUMEN OUTPUT.

SITE VERIFY THE EXISTING LIGHTING CIRCUIT VOLTAGE PRIOR TO ORDERING THE NEW LIGHTING.

LIGHT FIXTURE TYPE 'X' - OPTIC ARTS LL42-VHO-41K C/W KS CHANNEL WITH HALF (50%) FROSTED LENS [LENGTH AS PER DRAWING]. PROVIDE ALL NECESSARY POWER SUPPLIES, MOUNTING KITS, JOINING KITS, AND OTHER ACCESSORIES FOR A CONTINUOUS LINEAR LENGTH AND UNIFORM OPERATION.

OCCUPANY SENSORS - ACUITY nLIGHT nCM PDT 10 RJB AR (C/W 4 X nPP16-D-EFP POWER PACKS) OR EQUAL. ALL CABLING SHALL BE RUN IN CONDUIT. SUBMIT SHOP DRAWINGS FOR THE NEW LIGHT FIXTURES AND LIGHTING CONTROLS PRIOR TO ORDERING.

2 NEW LIGHTING PLAN E4 SCALE: 1/4" = 1'-0"



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COMMUNICATION



HAMILTON-WENTWORTH DISTRICT SCHOOL **BOARD**

RE-ISSUED FOR TENDER FEB. 6, 2025 RE-ISSUED FOR TENDER JAN. 17, 2025 ISSUED FOR TENDER NOV. 20, 2024 ISSUED FOR 100% REVIEW OCT. 30, 2024 DATE

LISGAR ELEMENTARY SCHOOL HAMILTON - WENTWORTH DISTRICT SCHOOL BOARD 110 ANSON AVENUE HAMILTON, ONTARIO

LIGHTING PLANS

DRAWN BY: CHECKED BY: JOB No.: NOVEMBER 2024 24-244 SHEET No.: AS SHOWN