

ELECTRICAL SYMBOLS

NOTE: ALL SYMBOLS MAY NOT BE USED

LIGHTING		POWER	
	LIGHT FIXTURE TYPE AS INDICATED		WALL MOUNTED RECEPTACLE (15A-120V)
	LIGHT FIXTURE (HATCHING DENOTES NIGHTLIGHT)		WALL MOUNTED T-SLOT RECEPTACLE (20A-120V)
	CEILING OR WALL MOUNTED LIGHT FIXTURE TYPE AS INDICATED		T-SLOT RECEPTACLE MTD. ABOVE COUNTER (20A-120V)
	WALL MOUNTED EXIT LIGHT SHADING INDICATES FACE		RECEPTACLE MTD. ABOVE COUNTER S=SPLIT (15A-120V)
	CEILING MOUNTED EXIT LIGHT ARROWS DENOTE DIRECTION SHADING INDICATES FACE		DIRECT CONNECTION
	CEILING MOUNT BATTERY UNIT C/W INTEGRAL EMERGENCY FIXTURES		JUNCTION BOX
	SINGLE OR TWIN EMERGENCY LIGHTING FIXTURE		PANEL AS INDICATED
	SINGLE POLE SWITCH (3=3 WAY, 4=4 WAY, P=PILOT LIGHT, K=KEYED, DM=DIMMER, M=MOTOR RATED)		DUAL VOLTAGE RELAY
	OCCUPANCY SENSOR (PASSIVE)	GENERAL	
	CEILING MOUNTED MOTION SENSOR	ER	INDICATED EXISTING ITEM TO REMAIN
	DIGITAL ROOM CONTROLLER	D	INDICATES EXISTING ITEM TO BE DELETED
	DIGITAL WALL STATION ("X" DENOTES NUMBER OF CONTROL BUTTONS IN SINGLE GANG)	R	INDICATES EXISTING ITEM TO BE RELOCATED/IN RELOCATED POSITION
COMMUNICATIONS		CLG	CEILING MOUNTED
	SINGLE WALL MOUNTED TELEPHONE OUTLET C/W 3/4" (13mm) C TO CABLE MANAGEMENT SYSTEM	(X)	NOTE INDICATOR
	SINGLE COMPUTER OUTLET C/W 3/4" (21mm) C TO CABLE MANAGEMENT SYSTEM	(X)	MECHANICAL ITEM NO.
	COMBINATION SINGLE VOICE/ SINGLE COMPUTER OUTLET UNLESS OTHERWISE NOTED C/W 1" (27mm) C TO CABLE MANAGEMENT SYSTEM		FIRE ALARM
	WIRELESS ACCESS POINT. PROVIDE 3/4" (21mm) C TO CABLE MANAGEMENT SYSTEM		HEAT DETECTOR (135 DEGREE RATE OF RISE AND FIXED TEMPERATURE)
	CLOCK AS PER SPECIFICATIONS		SMOKE DETECTOR (RL=RELAY BASE)
	HANGER SYSTEM (REFER TO DETAILS)		COMBINATION HORN/STROBE
	CEILING MOUNTED SPEAKER		DOOR HOLD OPEN DEVICE
	AUXILIARY ROUGH-IN FOR USE AS NOTED.		
	WALL MOUNTED SPEAKER (CS=COLUMN SPEAKER)		

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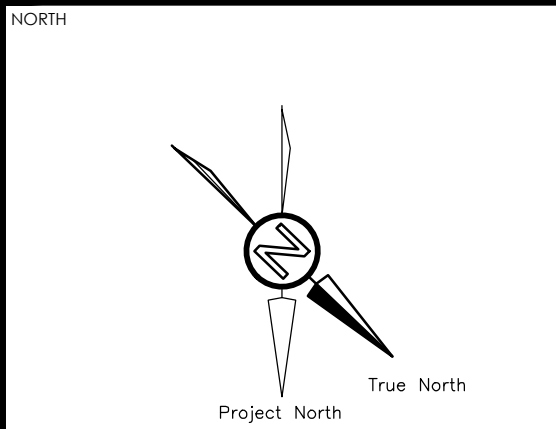
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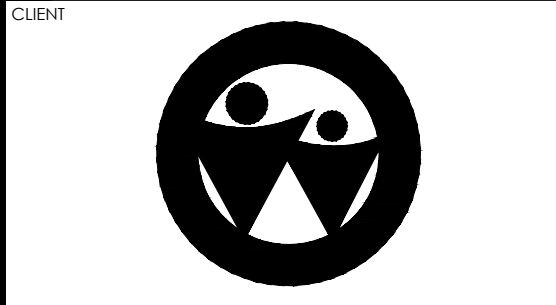
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No.	REVISIONS	DATE
01	ISSUED FOR REVIEW	2024.12.16
02	ISSUED FOR BUILDING PERMIT	2025.01.24
03	ISSUED FOR TENDER	2025.02.14



CHRONOLOGY	DATE



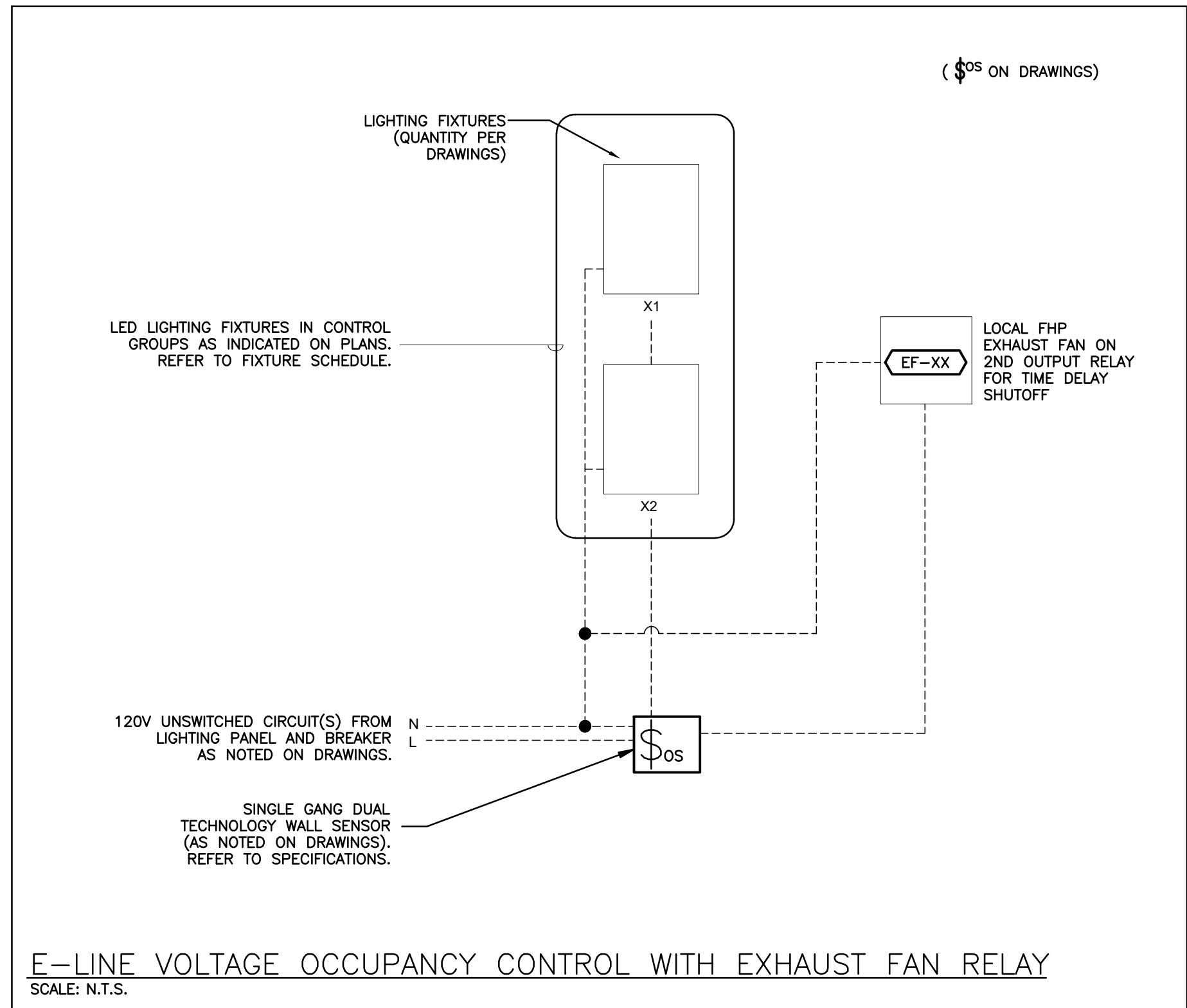
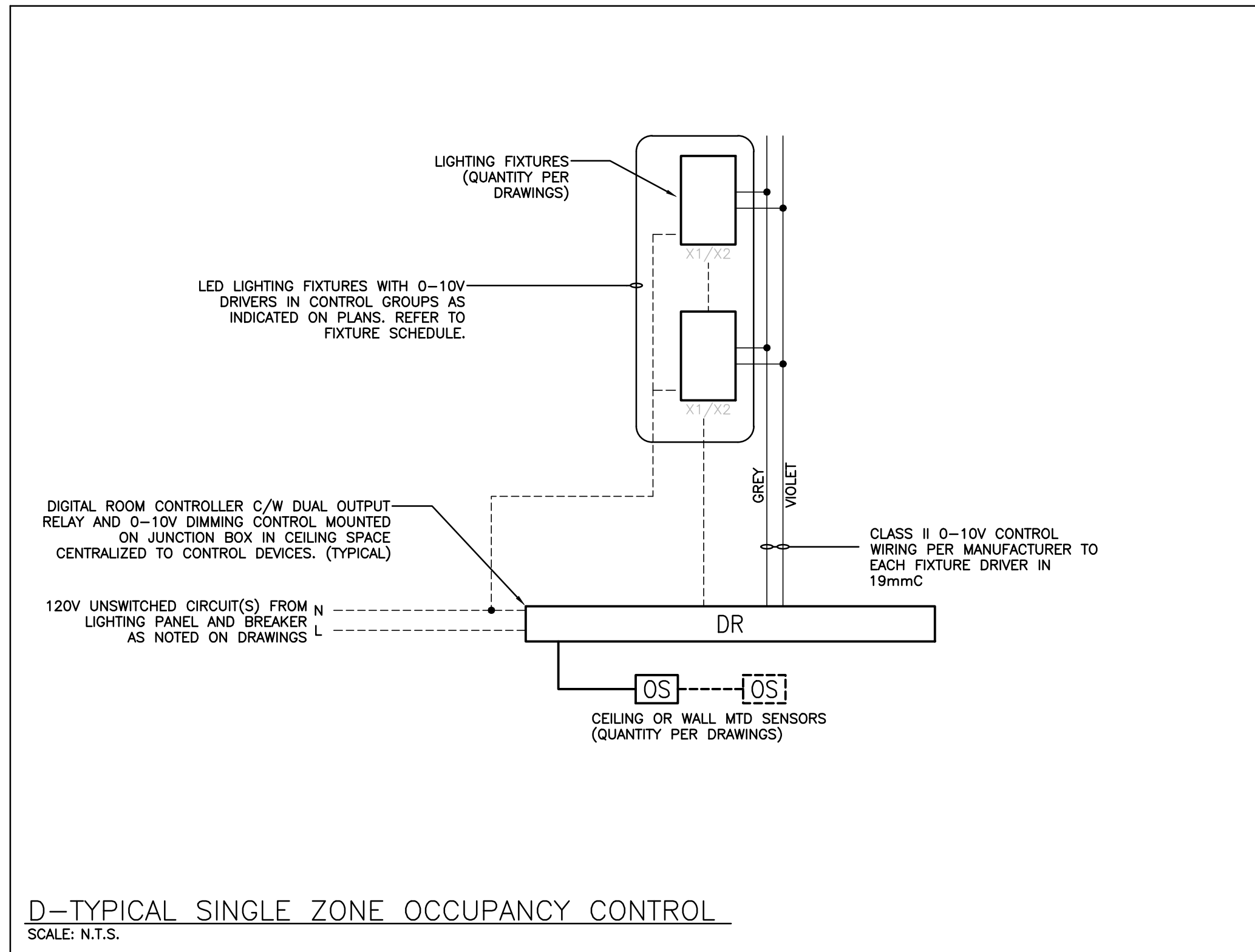
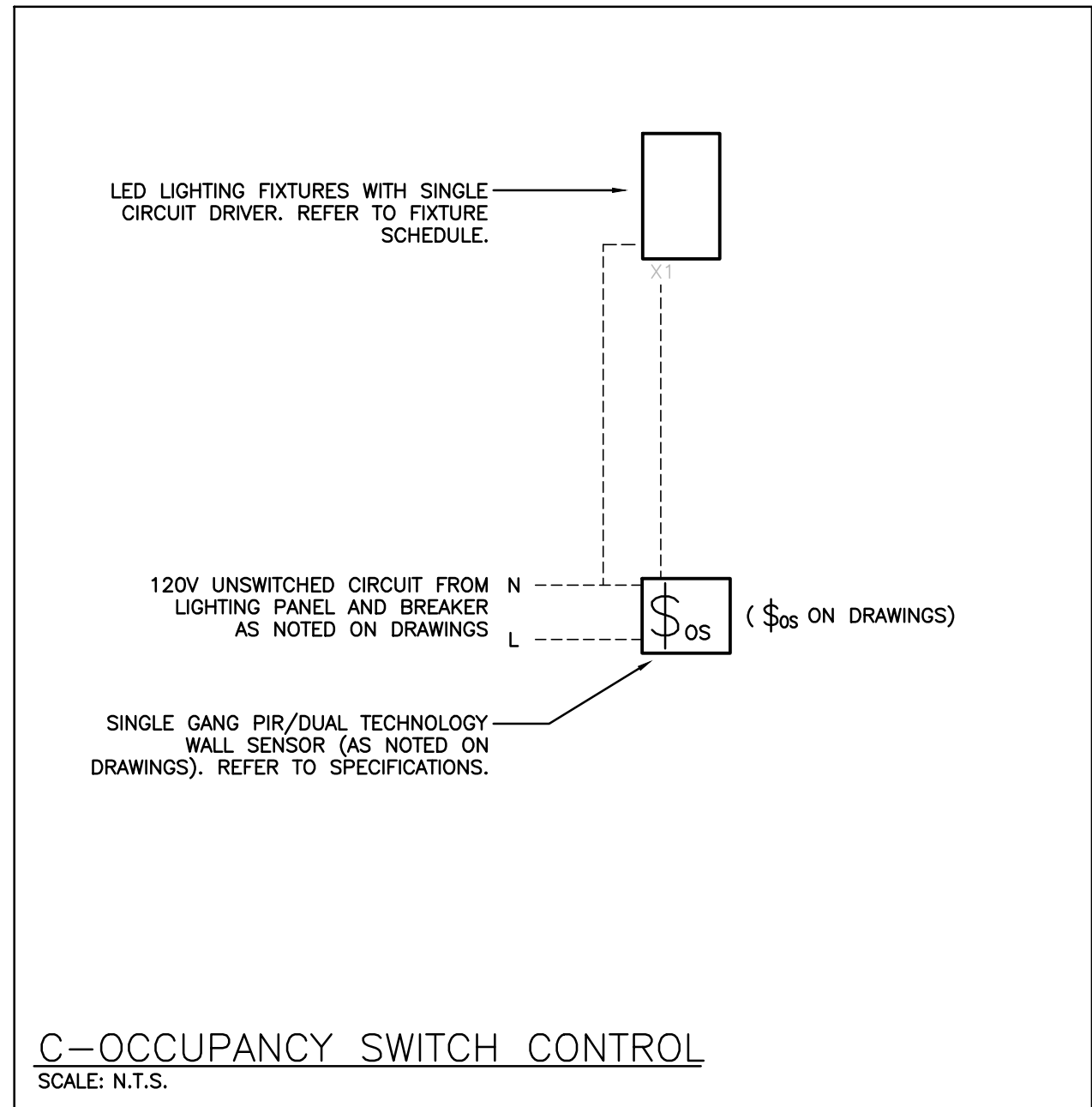
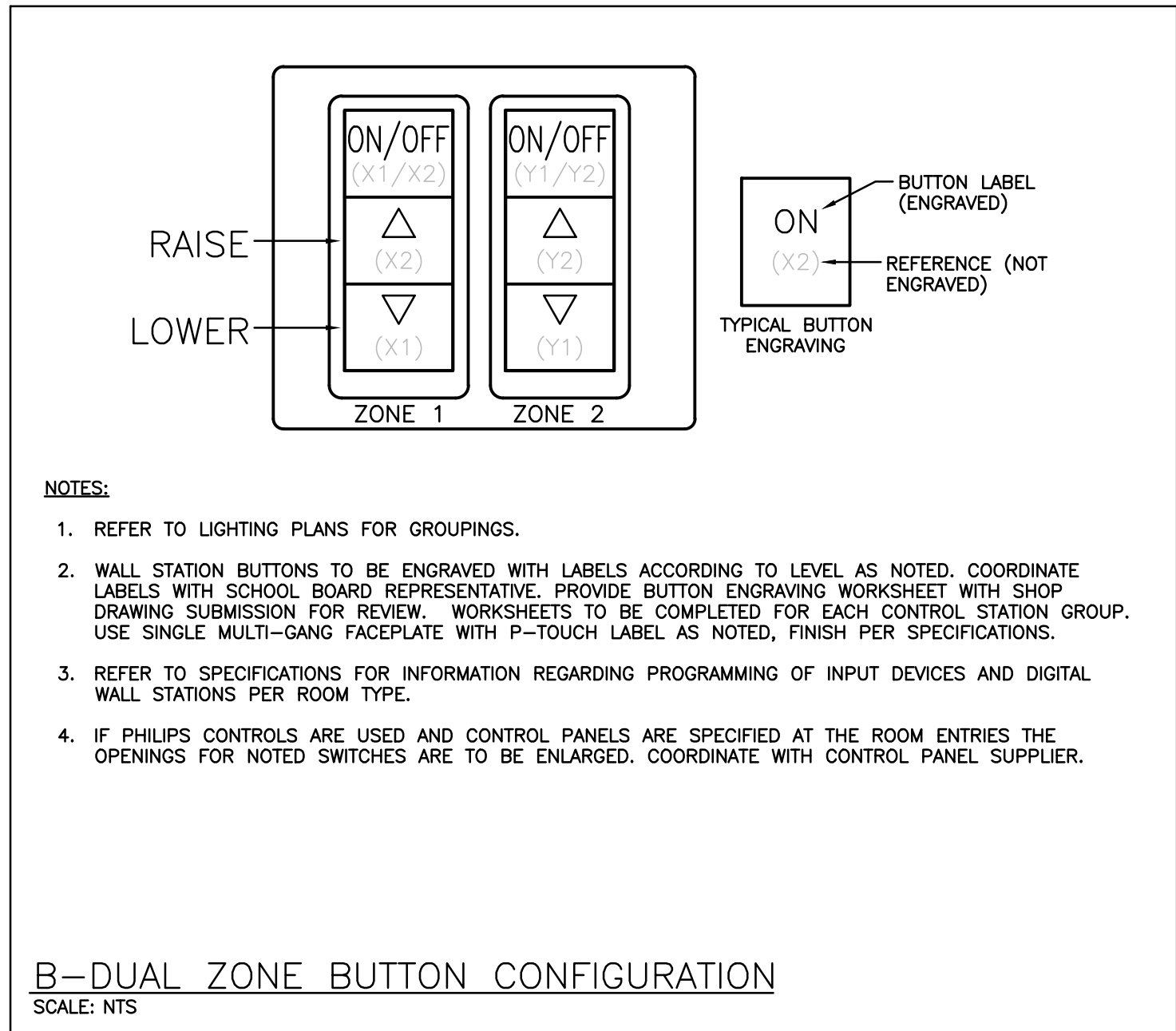
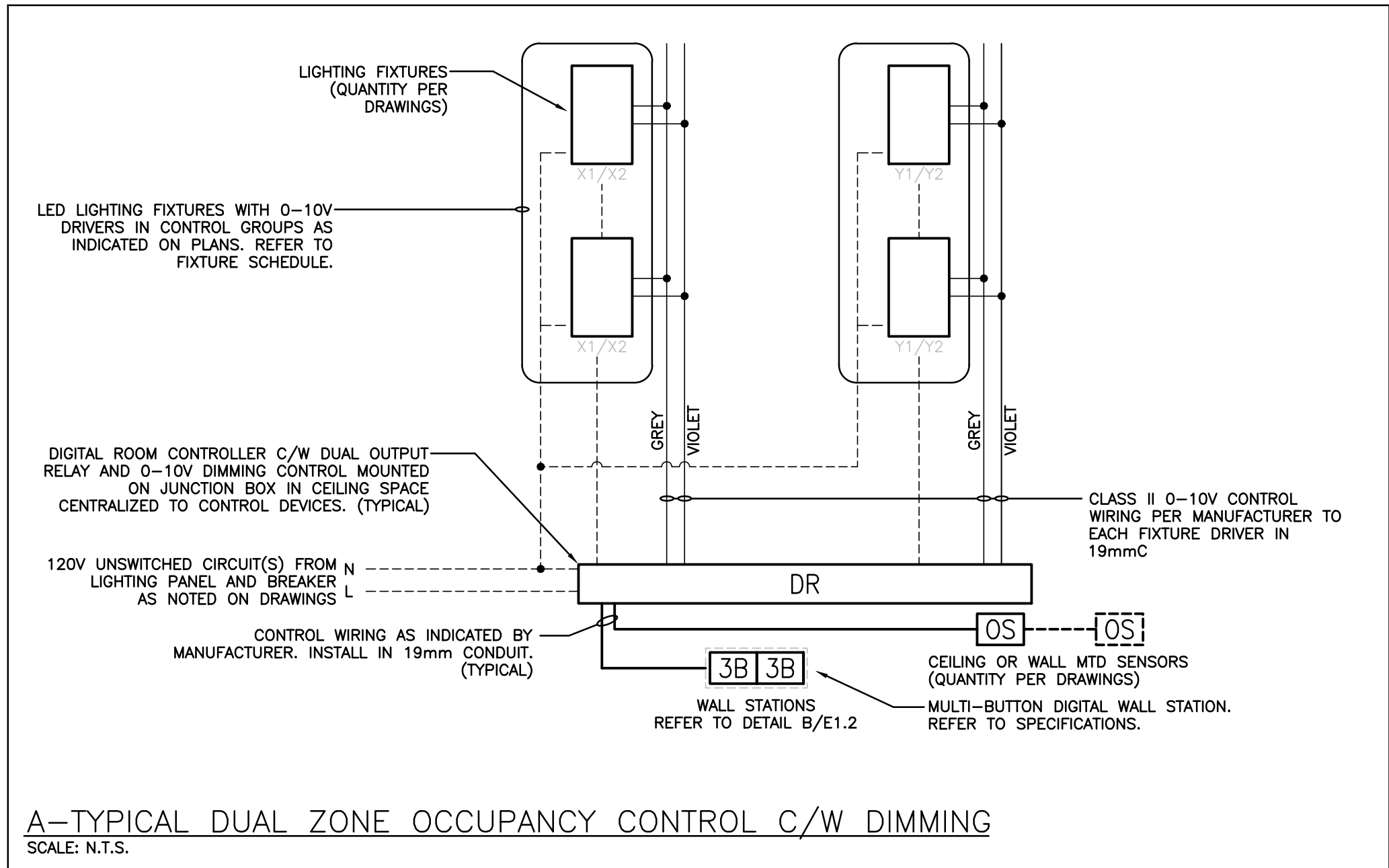
PROJECT NAME

COURTLAND PUBLIC SCHOOL
PHASE 2 MECH UPGRADES
107 COURTLAND AVE. E., KITCHENER, ON. N2G 2T9

DRAWING TITLE

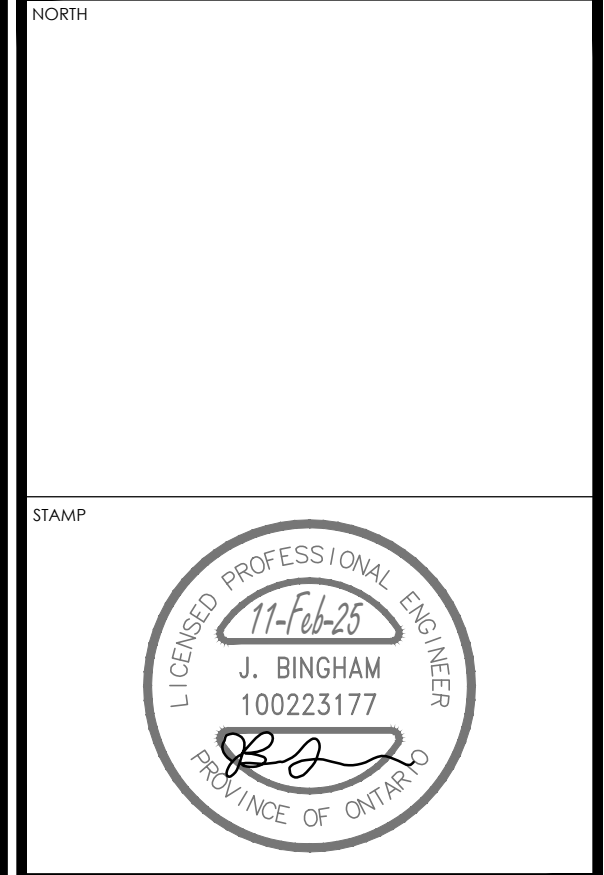
LEGEND, KEY PLAN
AND DETAILS

SCALE	DRAWING NUMBER
AS NOTED	E1.1
SHEET SIZE	
PROJECT NUMBER	



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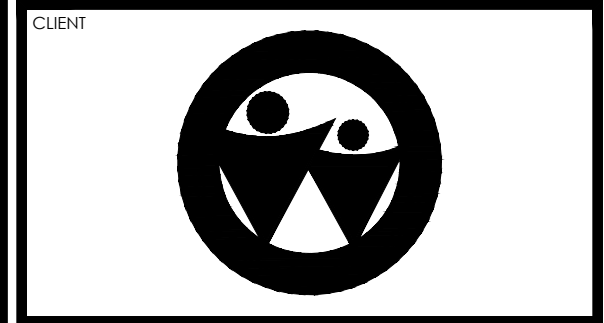
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PROJECT NAME

COURTLAND PUBLIC SCHOOL
PHASE 2 MECH UPGRADES
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DRAWING TITLE

LIGHTING CONTROL DETAILS

SCALE	DRAWING NUMBER
AS NOTED	
SHEET SIZE	
24x36	
PROJECT NUMBER	
24323	

E1.2

EQUIPMENT WIRING SCHEDULE																														E = ELECTRICAL M = MECHANICAL O = OTHERS														
Description				Electrical Data		Generator		Starter			Ctrl Device		Isolating Device		Remote Items										Other	Interlock																		
Mechanical Item	Description	Provided By	Voltage	Size hp/kW/Amps	Phase	MOCP	Emergency – Life Safety	Emergency – Smoke Movement & Venting	Standby (Non-Life Safety)	Magnetic	Manual	Combination	Contactors	VFD	ECM	Hand/Off/Auto	On/Off Selector	High/Low/Off	Pilot Light	Disconnect	WP Disconnect	Breaker/Fuse	Starter/Device Wired by	Thermostat	RA Thermostat	Programmable Time Clock	Variable Speed Control	Current Sensor	Occ Sensor	Dual Voltage Relay	Interval Timer	VRF System Control Panel	Smoke Control System Panel	Control Panel	Wired by	Bldg Auto System	Wired By	Miscellaneous 1	Miscellaneous 2	Interlock to	Interlock by	Remarks		
EF-1	INLINE EXHAUST FAN (OFFICE 86)	M	120	0.7 MCA	1	15														E	E	E																		LIGHTS	E			
EF-2	INLINE EXHAUST FAN (OFFICE 87)	M	120	0.7 MCA	1	15														E	E	E																			LIGHTS	E		
EF-3	INLINE EXHAUST FAN (CLASSROOM 6)	M	120	5.1 MCA	1	15														E	E	E							M				M/E	M	M					UV-9	M			
UV-9	FLOOR MOUNTED UNIT VENTILATOR (CLASSROOM 6)	M	120	4.5 MCA	1	15														E	E	E	M											M	M	M					HP-9	M		
UV-10	FLOOR MOUNTED UNIT VENTILATOR (CLASSROOM 5)	M	120	4.5 MCA	1	15														E	E	E	M											M	M	M					HP-10	M		
UV-11	FLOOR MOUNTED UNIT VENTILATOR (SPEC ED. ROOM 16)	M	120	4.5 MCA	1	15														E	E	E	M											M	M	M					HP-11	M		
UV-12	FLOOR MOUNTED UNIT VENTILATOR (CLASSROOM 15)	M	120	4.5 MCA	1	15														E	E	E	M											M	M	M					HP-12	M		
UV-13	FLOOR MOUNTED UNIT VENTILATOR (CLASSROOM 14)	M	120	4.5 MCA	1	15														E	E	E	M											M	M	M					HP-13	M		
UV-14	FLOOR MOUNTED UNIT VENTILATOR (CLASSROOM 13)	M	120	4.5 MCA	1	15														E	E	E	M											M	M	M					HP-14	M		
HP-9	OUTDOOR ROOF MOUNTED	M	208	17 MCA	3	25															E	E	E																			UV-9	M	
HP-10	OUTDOOR ROOF MOUNTED	M	208	17 MCA	3	25															E	E	E																			UV-10	M	
HP-11	OUTDOOR ROOF MOUNTED	M	208	17 MCA	3	25															E	E	E																			UV-11	M	
HP-12	OUTDOOR ROOF MOUNTED	M	208	17 MCA	3	25															E	E	E																			UV-12	M	
HP-13	OUTDOOR ROOF MOUNTED	M	208	17 MCA	3	25															E	E	E																			UV-13	M	
HP-14	OUTDOOR ROOF MOUNTED	M	208	17 MCA	3	25															E	E	E																			UV-14	M	

LIGHTING CONTROL SYSTEMS SEQUENCE OF OPERATION			
Space Type	Room Names	Control Sequence / Control Device(s):	Control System
Offices	TYPICAL	Sequence: ON: Lights turned on automatically via occupancy sensor switch. OFF: 10 minutes after the room has been vacated, the lights will automatically turn off.	OCCUPANCY SENSOR SWITCH
Classrooms	TYPICAL	Sequence: ON: Lights turned on automatically via occupancy sensor. ADJUST: The occupant manually adjusts lighting within the room to desired level or preset in each group via wall dimmer. OFF: 10 minutes after the room has been vacated, the lights will automatically turn off.	DIGITAL ROOM CONTROL SYSTEM
SYSTEM DESCRIPTIONS:		DIGITAL ROOM CONTROL (DLM) SYSTEM DIGITAL ROOM CONTROL RELAY POWER PACKS C/W PLUG AND PLAY DIGITAL SENSORS AND WALL MOUNT CONTROL STATIONS. REFER TO SPECIFICATIONS SECTION 26 51 16.	

LIGHT FIXTURE SCHEDULE							
Item	Manufacturer/Catalog Number	Voltage	Lamp	Mounting	CRI	Description	
A	COOPER CAT. #2GR-LD1-48-A-UNV-LB40-CD1 LITHONIA CAT. #2GTL4-48L-EZ1-LP840 SIGNIFY CAT. #2TG48LB40-4-FS-O2F-UNV-DIM	120V	LED 4800 LUMENS 4000K 45W	RECESSED	80	2' X 4' (610mmX1220mm) LED TROFFER C/W PATTERN 12 LENS, 0-10V DIMMING DRIVER AND WHITE FINISH.	
A1	METALUX CAT. #24FPSL2SCT3 LITHONIA CAT. #CPX 2X4 AL08 80CRI SWW7 SIGNIFY CAT. #2SPB3550LB0CS-4-UNV-DIM	120V	LED 4000 LUMENS 4000K 24.7W	RECESSED	80	2'X4' (610mmX1220mm) RECESSED SELECTABLE LUMEN FLAT PANEL LED FIXTURE C/W RIBBED FROSTED ACRYLIC LENS AND 0-10V DIMMING DRIVER SUITABLE FOR T-BAR CEILING. NOTE: SET FIXTURE TO NOMINAL LUMENS AS INDICATED ON FIXTURE SCHEDULE.	
A1A	METALUX CAT. #24FPSL2SCT3-FPXSURF24 LITHONIA CAT. #CPX 2X4 AL08 80CRI SWW7 MVOLT-2X4SMKSH SIGNIFY CAT. #2SPB3550LB0CS-4-UNV-DIM-FSF24	120V	LED 4000 LUMENS 4000K 24.7W	SURFACE	80	2'X4' (610mmX1220mm) SURFACE MOUNT SELECTABLE LUMEN FLAT PANEL LED FIXTURE C/W RIBBED FROSTED ACRYLIC LENS, 0-10V DIMMING DRIVER AND SURFACE MOUNT KIT. NOTE: SET FIXTURE TO NOMINAL LUMENS AS INDICATED ON FIXTURE SCHEDULE.	
S	LITHONIA CAT. #TRUW-48-AL026-FMP-BSWW2-ZT-MVOLT ELITE CAT. #4-QW-LED-ML-OCT. COOPER CAT. #4WSNLED-LD4-56HL-F-UNV-LB40-CD1	120V	LED 5500 LUMENS 4000K 40W	SURFACE	80	1 1/4' x 4' (375mmX1220mm) VOLUMETRIC LED FIXTURE C/W UNIFORM MICROPRISMATIC DIFFUSER, 10% 0-10V DIMMING DRIVER, WHITE FINISH, AND SURFACE MOUNT KIT.	
EMERGENCY BATTERY UNIT	AIMLITE CAT. #EBWL-EM-WHT-2-ATD-VDR C/W KIT-BKT497 STANPRO CAT. #SWL-EM-WH-W-AT-TP C/W KIT-BKT497 LUMACELL CAT. #LBL-EM	12V/ 120V	LED 14W	SURFACE	80	LONG LIFE, SEALED RECHARGABLE VANDAL RESISTANT BATTERY C/W ADJUSTABLE 14W LED MODULES, POLYCARBONATE BODY, 90 MINUTE BATTERY DURATION, SURFACE MOUNT AS SHOWN ON PLANS, AND AUTOTEST FEATURE.	
EMERGENCY BATTERY UNIT (RECESSED T-BAR)	AIMLITE CAT. #EBWL-EM-WHT-TB-2-ATD-VDR C/W KIT-BKT497 STANPRO CAT. #SWL-EM-WH-TB-W-AT-TP C/W KIT-BKT497 LUMACELL CAT. #LBL-EM C/W KIT-5R-L	12V/ 120V	LED 14W	RECESSED	80	LONG LIFE, SEALED RECHARGABLE VANDAL RESISTANT BATTERY C/W ADJUSTABLE 14W LED MODULES, POLYCARBONATE BODY, 90 MINUTE BATTERY DURATION, SUITABLE FOR T-BAR CEILING AS SHOWN ON PLANS, AND AUTOTEST FEATURE.	
NOTES: ① LED LUMEN VALUES QUOTED FOR FIXTURES ARE TO BE CONSIDERED MINIMUM, AND AS ABSOLUTE OR DELIVERED LUMENS. LUMEN VALUES SHOULD NOT EXCEED MORE THAN 10% OF SPECIFIED OUTPUT.							
② WHERE NOTED ABOVE THAT FIXTURES ARE TO HAVE FINISH TO SUIT ARCHITECT THE FINISH WILL BE SELECTED FROM MANUFACTURER'S OPTIONAL COLOUR CHART (i.e. RAL COLOURS OR EQUAL). PROVIDE THIS COLOUR CHART WITH SHOP DRAWING SUBMITTAL.							
③ IF THERE ARE ANY DISCREPANCIES BETWEEN THE FIXTURE PART NUMBER AND DESCRIPTION, IT IS THE RESPONSIBILITY OF THIS CONTRACTOR TO BRING THESE TO THE ELECTRICAL CONSULTANT'S ATTENTION PRIOR TO TENDER CLOSE. NO EXTRAS WILL BE ENTERTAINED FOR FAILURE TO DO SO. FINAL FIXTURE CHARACTERISTICS AND DESCRIPTION WILL BE MARKED BY CONSULTANT AT TIME OF SHOP DRAWING REVIEW.							

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NORTH

STAMP

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CLIENT

PROJECT NAME

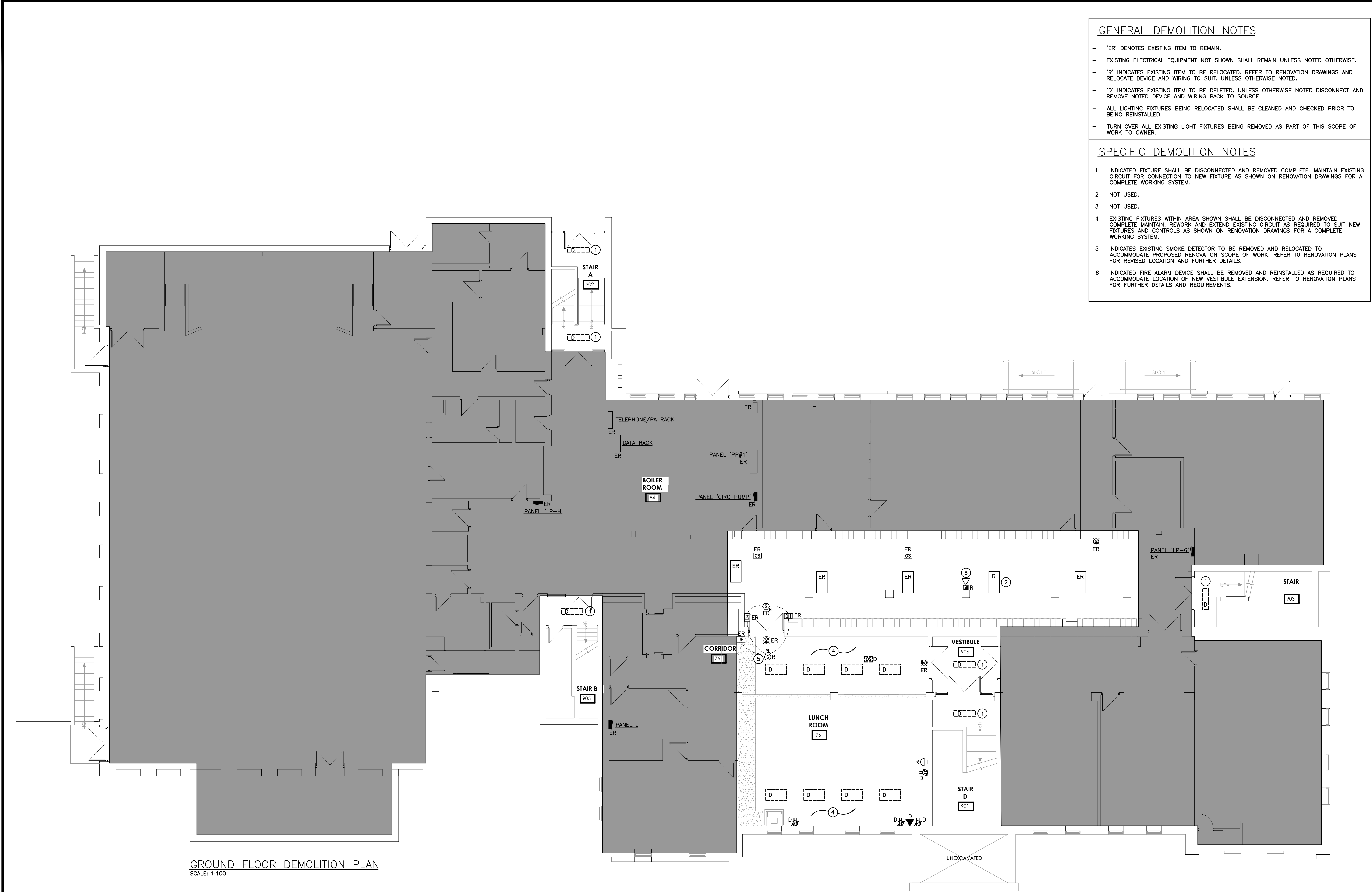
COURTLAND PUBLIC SCHOOL
PHASE 2 MECH UPGRADES
107 COURTLAND AVE. E., KITCHENER, ON. N2G 2Y9

DRAWING TITLE

SCHEDULES

SCALE
AS NOTED
SHEET SIZE
24x36
PROJECT NUMBER
24323

DRAWING NUMBER
E1.3



GROUND FLOOR DEMOLITION PLAN
SCALE: 1:100

GENERAL DEMOLITION NOTES

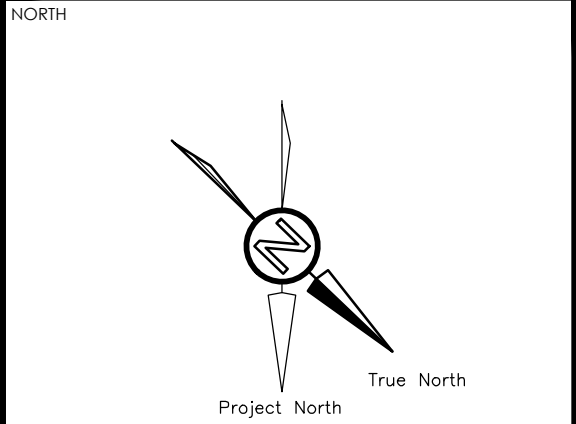
- 'ER' DENOTES EXISTING ITEM TO REMAIN.
- EXISTING ELECTRICAL EQUIPMENT NOT SHOWN SHALL REMAIN UNLESS NOTED OTHERWISE.
- 'R' INDICATES EXISTING ITEM TO BE RELOCATED. REFER TO RENOVATION DRAWINGS AND RELOCATE DEVICE AND WIRING TO SUIT. UNLESS OTHERWISE NOTED.
- 'D' INDICATES EXISTING ITEM TO BE DELETED. UNLESS OTHERWISE NOTED DISCONNECT AND REMOVE NOTED DEVICE AND WIRING BACK TO SOURCE.
- ALL LIGHTING FIXTURES BEING RELOCATED SHALL BE CLEANED AND CHECKED PRIOR TO BEING REINSTALLED.
- TURN OVER ALL EXISTING LIGHT FIXTURES BEING REMOVED AS PART OF THIS SCOPE OF WORK TO OWNER.

SPECIFIC DEMOLITION NOTES

- 1 INDICATED FIXTURE SHALL BE DISCONNECTED AND REMOVED COMPLETE. MAINTAIN EXISTING CIRCUIT FOR CONNECTION TO NEW FIXTURE AS SHOWN ON RENOVATION DRAWINGS FOR A COMPLETE WORKING SYSTEM.
- 2 NOT USED.
- 3 NOT USED.
- 4 EXISTING FIXTURES WITHIN AREA SHOWN SHALL BE DISCONNECTED AND REMOVED COMPLETE. MAINTAIN, REWORK AND EXTEND EXISTING CIRCUIT AS REQUIRED TO SUIT NEW FIXTURES AND CONTROLS AS SHOWN ON RENOVATION DRAWINGS FOR A COMPLETE WORKING SYSTEM.
- 5 INDICATES EXISTING SMOKE DETECTOR TO BE REMOVED AND RELOCATED TO ACCOMMODATE PROPOSED RENOVATION SCOPE OF WORK. REFER TO RENOVATION PLANS FOR REVISED LOCATION AND FURTHER DETAILS.
- 6 INDICATED FIRE ALARM DEVICE SHALL BE REMOVED AND REINSTALLED AS REQUIRED TO ACCOMMODATE LOCATION OF NEW VESTIBULE EXTENSION. REFER TO RENOVATION PLANS FOR FURTHER DETAILS AND REQUIREMENTS.

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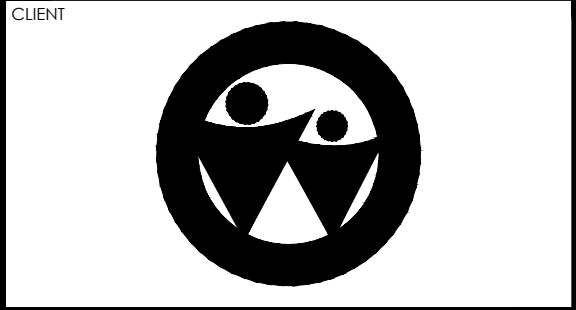
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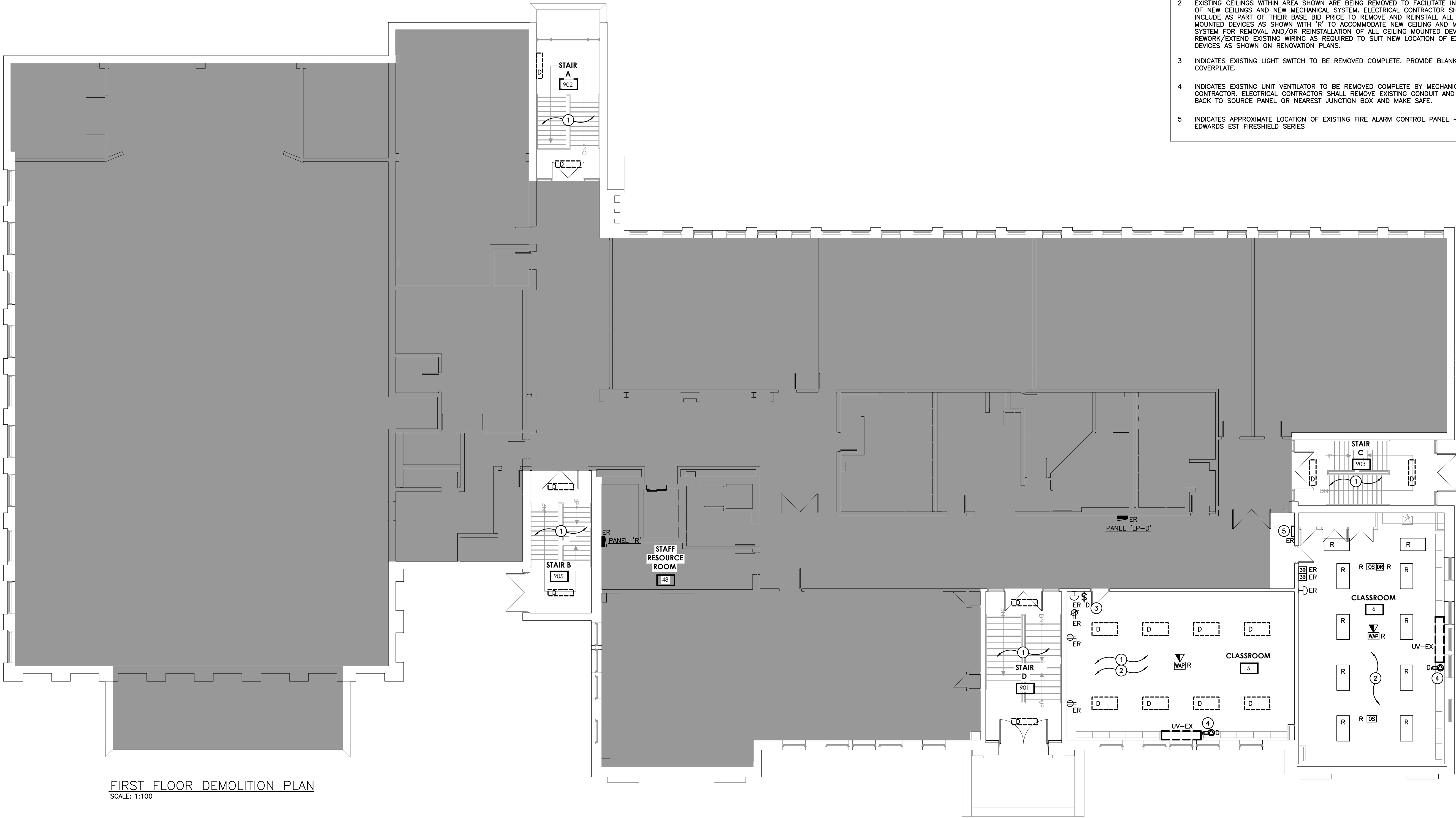
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COURTLAND PUBLIC SCHOOL
PHASE 2 MECH UPGRADES
107 COURTLAND AVE. E., KITCHENER, ON. N2G 2Y9

DRAWING TITLE

GROUND FLOOR
ELECTRICAL
DEMOLITION PLAN

SCALE	DRAWING NUMBER
AS NOTED	E2.1
SHEET SIZE	
PROJECT NUMBER	



FIRST FLOOR DEMOLITION PLAN
SCALE: 1:100

GENERAL DEMOLITION NOTES

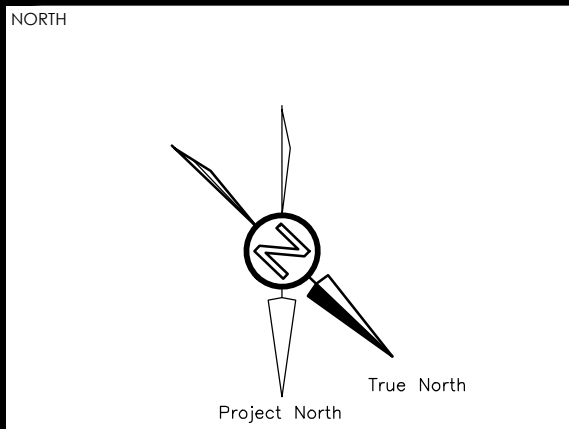
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- 2 EXISTING CEILINGS WITHIN AREA SHOWN ARE BEING REMOVED TO FACILITATE INSTALLATION OF NEW CEILINGS AND NEW MECHANICAL SYSTEM. ELECTRICAL CONTRACTOR SHALL INCLUDE AS PART OF THEIR BASE BID PRICE TO REMOVE AND REINSTALL ALL CEILING MOUNTED DEVICES AS SHOWN WITH 'R' TO ACCOMMODATE NEW CEILING AND MECHANICAL SYSTEM FOR REMOVAL AND/OR REINSTALLATION OF ALL CEILING MOUNTED DEVICES. REWORK/EXTEND EXISTING WIRING AS REQUIRED TO SUIT NEW LOCATION OF EXISTING DEVICES AS SHOWN ON RENOVATION PLANS.
- 3 INDICATES EXISTING LIGHT SWITCH TO BE REMOVED COMPLETE. PROVIDE BLANK COVERPLATE.
- 4 INDICATES EXISTING UNIT VENTILATOR TO BE REMOVED COMPLETE BY MECHANICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL REMOVE EXISTING CONDUIT AND WIRING BACK TO SOURCE PANEL OR NEAREST JUNCTION BOX AND MAKE SAFE.
- 5 INDICATES APPROXIMATE LOCATION OF EXISTING FIRE ALARM CONTROL PANEL - EDWARDS EST FIRESHIELD SERIES

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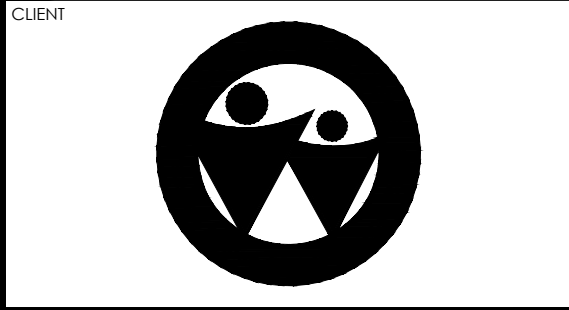
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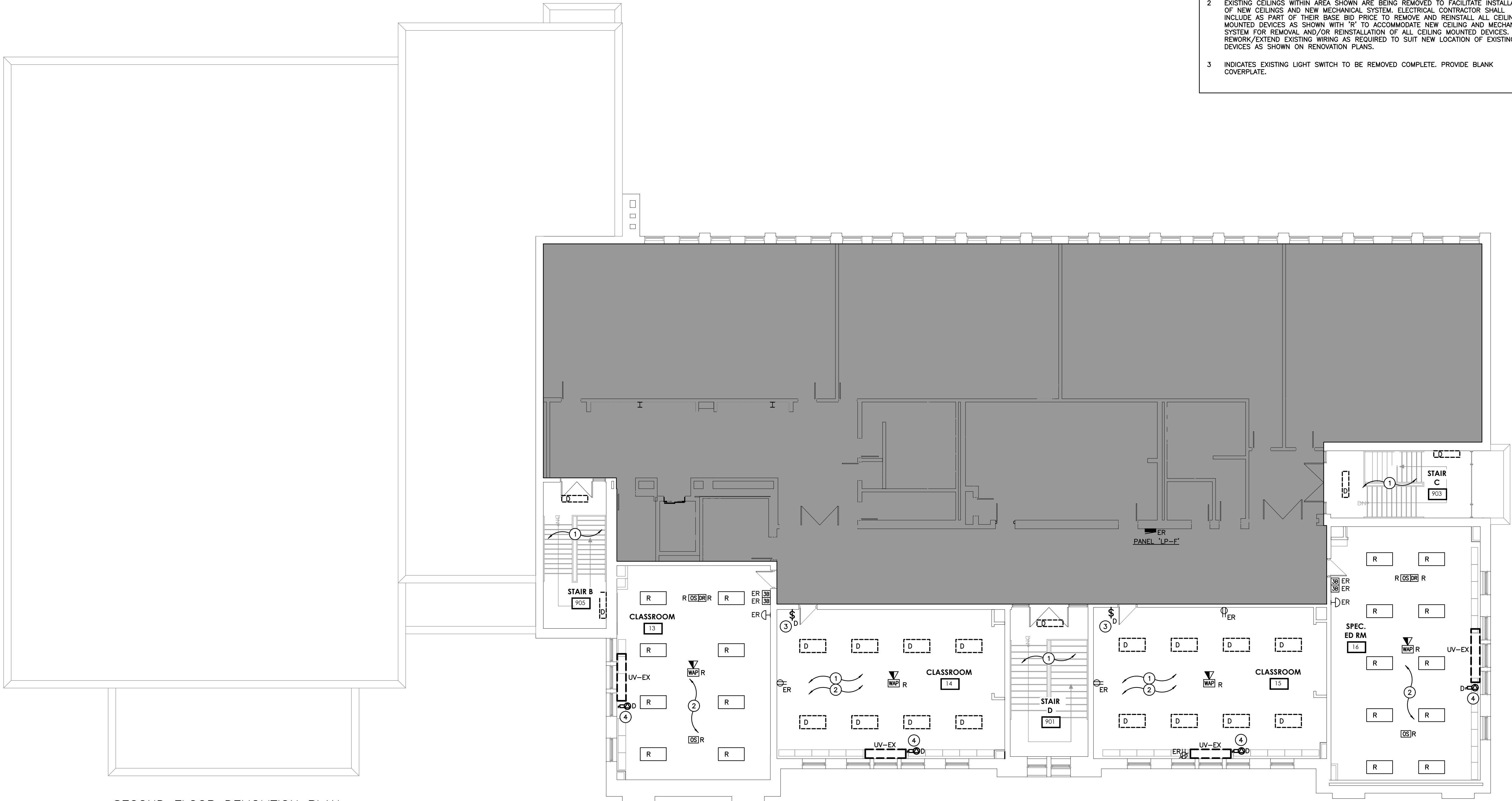
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DRAWING TITLE
FIRST FLOOR
ELECTRICAL
DEMOLITION PLAN

SCALE AS NOTED	DRAWING NUMBER
SHEET SIZE 24x36	E2.2
PROJECT NUMBER 24323	



SECOND FLOOR DEMOLITION PLAN
SCALE: 1:100

GENERAL DEMOLITION NOTES

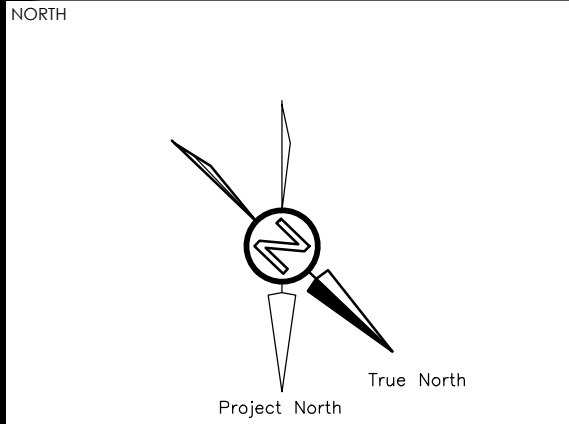
- 'ER' DENOTES EXISTING ITEM TO REMAIN.
- EXISTING ELECTRICAL EQUIPMENT NOT SHOWN SHALL REMAIN UNLESS NOTED OTHERWISE.
- 'R' INDICATES EXISTING ITEM TO BE RELOCATED. REFER TO RENOVATION DRAWINGS AND RELOCATE DEVICE AND WIRING TO SUIT. UNLESS OTHERWISE NOTED.
- 'D' INDICATES EXISTING ITEM TO BE DELETED. UNLESS OTHERWISE NOTED DISCONNECT AND REMOVE NOTED DEVICE AND WIRING BACK TO SOURCE.
- ALL LIGHTING FIXTURES BEING RELOCATED SHALL BE CLEANED AND CHECKED PRIOR TO BEING REINSTALLED.
- TURN OVER ALL EXISTING LIGHT FIXTURES BEING REMOVED AS PART OF THIS SCOPE OF WORK TO OWNER.

SPECIFIC DEMOLITION NOTES

- 1 EXISTING FIXTURES WITHIN AREA INDICATED SHALL BE DISCONNECTED AND REMOVED COMPLETE. MAINTAIN, REWORK AND EXTEND EXISTING CIRCUIT AS REQUIRED TO SUIT NEW FIXTURES AND CONTROLS AS SHOWN ON RENOVATION DRAWINGS FOR A COMPLETE WORKING SYSTEM.
- 2 EXISTING CEILINGS WITHIN AREA SHOWN ARE BEING REMOVED TO FACILITATE INSTALLATION OF NEW CEILINGS AND NEW MECHANICAL SYSTEM. ELECTRICAL CONTRACTOR SHALL INCLUDE AS PART OF THEIR BASE BID PRICE TO REMOVE AND REINSTALL ALL CEILING MOUNTED DEVICES AS SHOWN WITH 'R' TO ACCOMMODATE NEW CEILING AND MECHANICAL SYSTEM FOR REMOVAL AND/OR REINSTALLATION OF ALL CEILING MOUNTED DEVICES. REWORK/EXTEND EXISTING WIRING AS REQUIRED TO SUIT NEW LOCATION OF EXISTING DEVICES AS SHOWN ON RENOVATION PLANS.
- 3 INDICATES EXISTING LIGHT SWITCH TO BE REMOVED COMPLETE. PROVIDE BLANK COVERPLATE.

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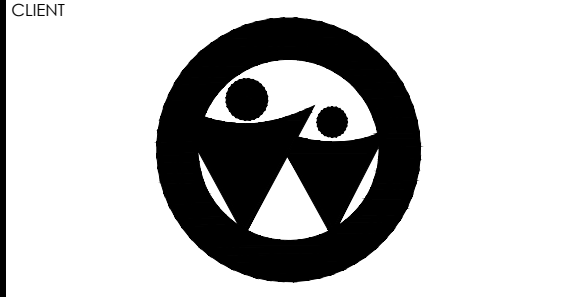
No.	REVISIONS	DATE
01	ISSUED FOR REVIEW	2024.12.16
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03	ISSUED FOR TENDER	2025.02.14



CHRONOLOGY	DATE

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Phone: 519-735-3555
Website: deiassociates.ca
Project Number: 24323

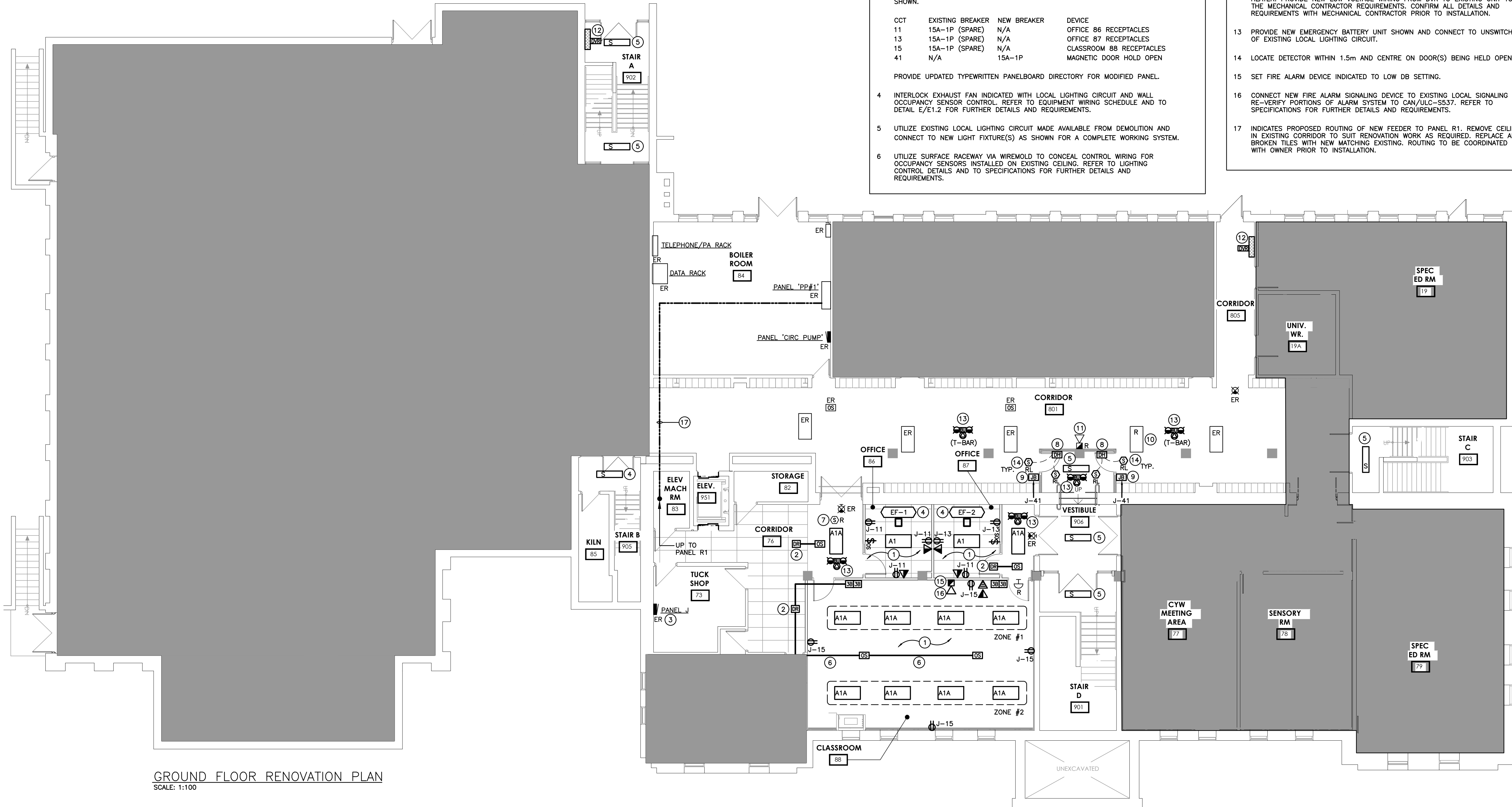
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101 Randsel Drive, Unit B, Waterloo ON, N2L 2T1 | www.aboarchitects.ca
CLIENT



PROJECT NAME
COURTLAND PUBLIC SCHOOL
PHASE 2 MECH UPGRADES
107 COURTLAND AVE. E., KITCHENER, ON. N2G 2Y9

DRAWING TITLE
SECOND FLOOR
ELECTRICAL
DEMOLITION PLAN

SCALE AS NOTED	DRAWING NUMBER E2.3
SHEET SIZE 24x36	
PROJECT NUMBER 24323	



GROUND FLOOR RENOVATION PLAN
SCALE: 1:100

GENERAL RENOVATION NOTES

- 'ER' INDICATES EXISTING ITEM TO REMAIN.
- 'R' INDICATES EXISTING ITEM IN RELOCATED POSITION.
- EXISTING DEVICES NOT SHOWN SHALL REMAIN UNLESS OTHERWISE NOTED.
- MAINTAIN SERVICE TO ALL EXISTING DEVICES TO REMAIN.
- REVISE PANEL DIRECTORIES TO SUIT CHANGES (TYPED).

SPECIFIC RENOVATION NOTES

- UTILIZE EXISTING LOCAL LIGHTING CIRCUIT MADE AVAILABLE FROM DEMOLITION AND CONNECT TO NEW LIGHT FIXTURE(S) AND CONTROLS AS SHOWN FOR A COMPLETE WORKING SYSTEM.
- INDICATES DIGITAL ROOM CONTROLLER TO BE INSTALLED IN ACCESSIBLE CEILING SPACE FOR CONTROL OF NOTED OCCUPANCY SENSORS AND LIGHT FIXTURES. REFER TO LIGHTING CONTROL DETAILS FOR FURTHER REQUIREMENTS.
- WITHIN EXISTING RECEPTACLE PANEL J - 120/208V, 3PH 4W, 10kAIC, SQ D NO. PANEL BOARD 1) UTILIZE THE FOLLOWING SPARE BREAKERS AVAILABLE AND PROVIDE NEW FEEDERS AS SHOWN AND 2) PROVIDE NEW BREAKERS AND FEEDERS AS SHOWN.

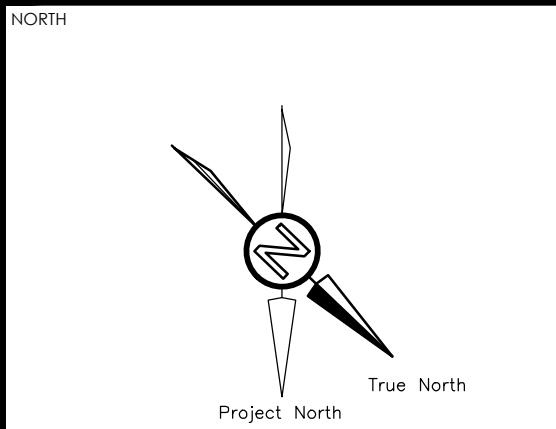
CCT	EXISTING BREAKER	NEW BREAKER	DEVICE
11	15A-1P (SPARE)	N/A	OFFICE 86 RECEPTACLES
13	15A-1P (SPARE)	N/A	OFFICE 87 RECEPTACLES
15	15A-1P (SPARE)	N/A	CLASSROOM 88 RECEPTACLES
41	N/A	15A-1P	MAGNETIC DOOR HOLD OPEN

PROVIDE UPDATED TYPEDWRITTEN PANELBOARD DIRECTORY FOR MODIFIED PANEL.
- INTERLOCK EXHAUST FAN INDICATED WITH LOCAL LIGHTING CIRCUIT AND WALL OCCUPANCY SENSOR CONTROL. REFER TO EQUIPMENT WIRING SCHEDULE AND TO DETAIL E/E1.2 FOR FURTHER DETAILS AND REQUIREMENTS.
- UTILIZE EXISTING LOCAL LIGHTING CIRCUIT MADE AVAILABLE FROM DEMOLITION AND CONNECT TO NEW LIGHT FIXTURE(S) AS SHOWN FOR A COMPLETE WORKING SYSTEM.
- UTILIZE SURFACE RACEWAY VIA WIREMOLD TO CONCEAL CONTROL WIRING FOR OCCUPANCY SENSORS INSTALLED ON EXISTING CEILING. REFER TO LIGHTING CONTROL DETAILS AND TO SPECIFICATIONS FOR FURTHER DETAILS AND REQUIREMENTS.

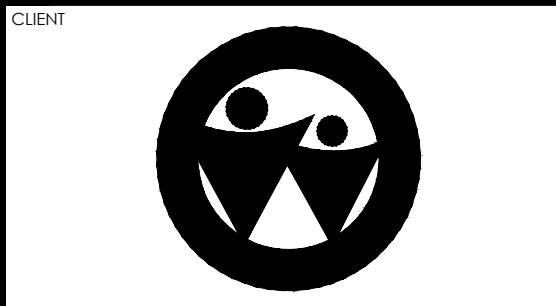
- INDICATES EXISTING SMOKE DETECTOR IN RELOCATED POSITION. REWORK AND EXTEND EXISTING CONDUIT AND WIRING AS REQUIRED TO SUIT REVISED LOCATION. EXISTING DEVICE SHALL BE RE-VERIFIED IN CONFORMANCE WITH CAN/ULC-S537 "VERIFICATION OF FIRE ALARM SYSTEMS" TO ENSURE SATISFACTORY OPERATION.
- MAGNETIC HOLD OPEN DEVICE PROVIDED AS PART OF THIS SCOPE OF WORK MUST RELEASE UPON SIGNAL FROM FIRE ALARM SYSTEM. REFER TO DETAIL A/E1.1 AND TO SPECIFICATIONS FOR FURTHER DETAILS AND REQUIREMENTS. COORDINATE EXACT LOCATION TO INSTALL MAGNETIC HOLD OPEN DEVICE WITH ARCHITECT AND DOOR SWING.
- PROVIDE 120V 15A HARDWIRED CONNECTION C/W JUNCTION BOX AND STEP DOWN TRANSFORMER (120V:24V) ABOVE ACCESSIBLE CEILING SPACE AND LOW VOLTAGE WIRING TO MAGNETIC DOOR HOLD OPEN DEVICES. REFER TO DETAIL A/E1.1 AND TO SPECIFICATIONS FOR FURTHER DETAILS AND REQUIREMENTS.
- INDICATES EXISTING LIGHT FIXTURE IN RELOCATED POSITION. REWORK AND EXTEND EXISTING CONDUIT AND WIRING TO SUIT NEW LOCATION AS SHOWN ON RENOVATION PLAN FOR A COMPLETE WORKING SYSTEM.
- INDICATED FIRE ALARM DEVICE SHALL BE REMOVED AND REINSTALLED AS REQUIRED TO SUIT LOCATION OF NEW VESTIBULE EXTENSION. EXISTING DEVICE SHALL BE RE-VERIFIED IN CONFORMANCE WITH CAN/ULC-S537 "VERIFICATION OF FIRE ALARM SYSTEMS" TO ENSURE SATISFACTORY OPERATION.
- INDICATES NEW DVR (DUAL VOLTAGE RELAY) TO BE SUPPLIED BY MECHANICAL CONTRACTOR AND INSTALLED BY ELECTRICAL CONTRACTOR FOR EXISTING FORCE FLOW HEATER. PROVIDE NEW LOW VOLTAGE WIRING FROM DVR TO EXISTING UNIT TO SUIT THE MECHANICAL CONTRACTOR REQUIREMENTS. CONFIRM ALL DETAILS AND REQUIREMENTS WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.
- PROVIDE NEW EMERGENCY BATTERY UNIT SHOWN AND CONNECT TO UNSWITCHED SIDE OF EXISTING LOCAL LIGHTING CIRCUIT.
- LOCATE DETECTOR WITHIN 1.5m AND CENTRE ON DOOR(S) BEING HELD OPEN.
- SET FIRE ALARM DEVICE INDICATED TO LOW DB SETTING.
- CONNECT NEW FIRE ALARM SIGNALING DEVICE TO EXISTING LOCAL SIGNALING CIRCUIT. RE-VERIFY PORTIONS OF ALARM SYSTEM TO CAN/ULC-S537. REFER TO SPECIFICATIONS FOR FURTHER DETAILS AND REQUIREMENTS.
- INDICATES PROPOSED ROUTING OF NEW FEEDER TO PANEL R1. REMOVE CEILING TILES IN EXISTING CORRIDOR TO SUIT RENOVATION WORK AS REQUIRED. REPLACE ANY BROKEN TILES WITH NEW MATCHING EXISTING. ROUTING TO BE COORDINATED ON SITE WITH OWNER PRIOR TO INSTALLATION.

The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work.
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CHRONOLOGY	DATE



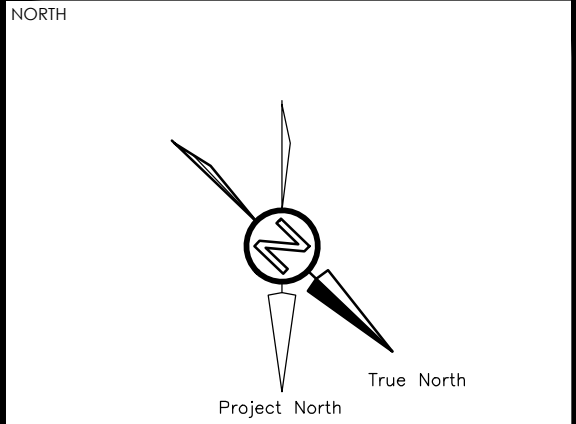
PROJECT NAME
COURTLAND PUBLIC SCHOOL
PHASE 2 MECH UPGRADES
107 COURTLAND AVE. E., KITCHENER, ON. N2G 2Y9

DRAWING TITLE
GROUND FLOOR
ELECTRICAL
RENOVATION PLAN

SCALE AS NOTED	DRAWING NUMBER
SHEET SIZE 24x36	E3.1
PROJECT NUMBER 24323	

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CHRONOLOGY	DATE

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Phone: 519-735-3555
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Project Number: 24323

aba architects inc.
101 Ronald Drive, Unit B, Waterloo ON, TEL: 519-884-2711 www.abarchitects.ca



PROJECT NAME

COURTLAND PUBLIC SCHOOL
PHASE 2 MECH UPGRADES
107 COURTLAND AVE. E., KITCHENER, ON. N2G 2Y9

DRAWING TITLE

FIRST FLOOR
ELECTRICAL
RENOVATION PLAN

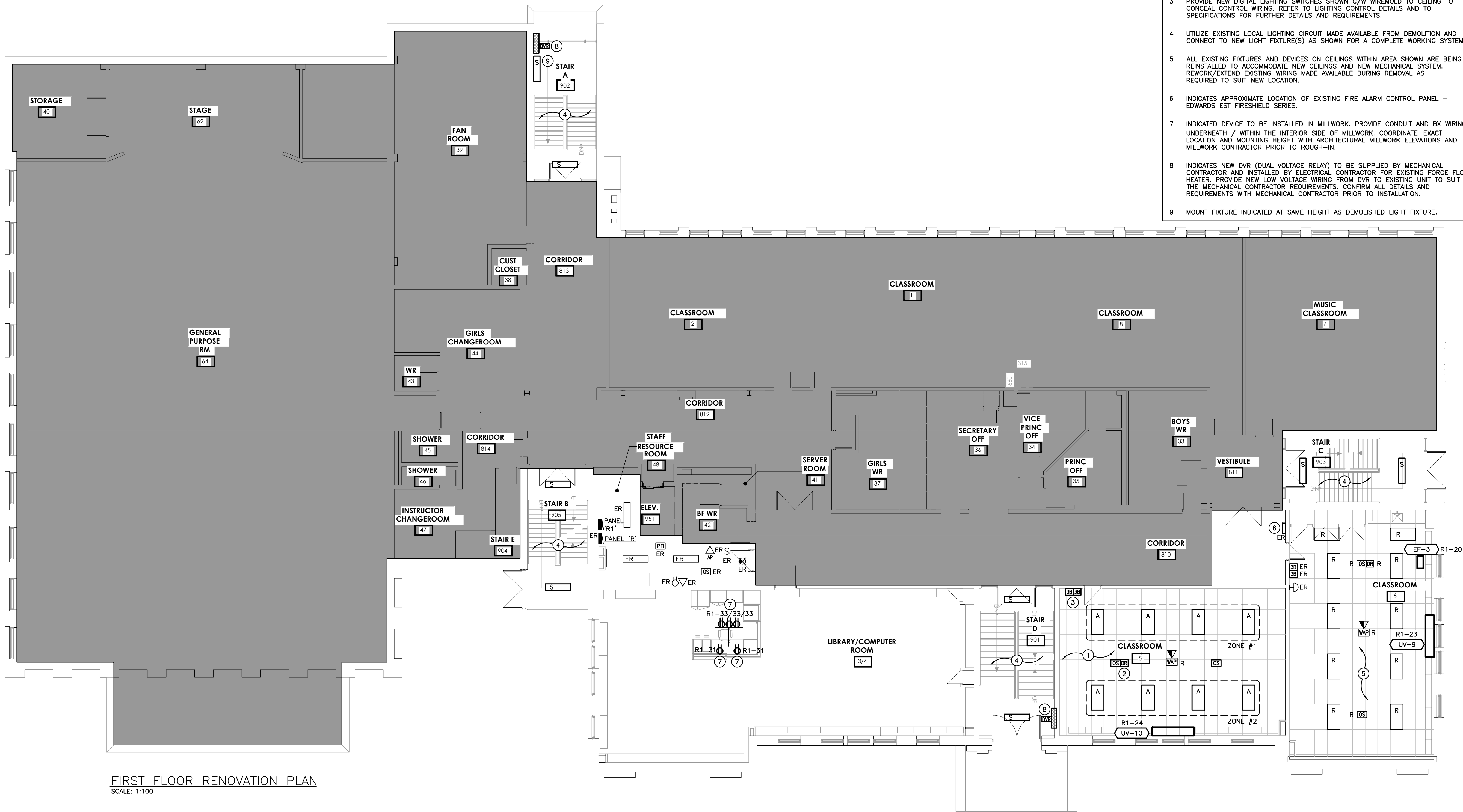
SCALE	DRAWING NUMBER
AS NOTED	E3.2
SHEET SIZE	
PROJECT NUMBER	

GENERAL RENOVATION NOTES

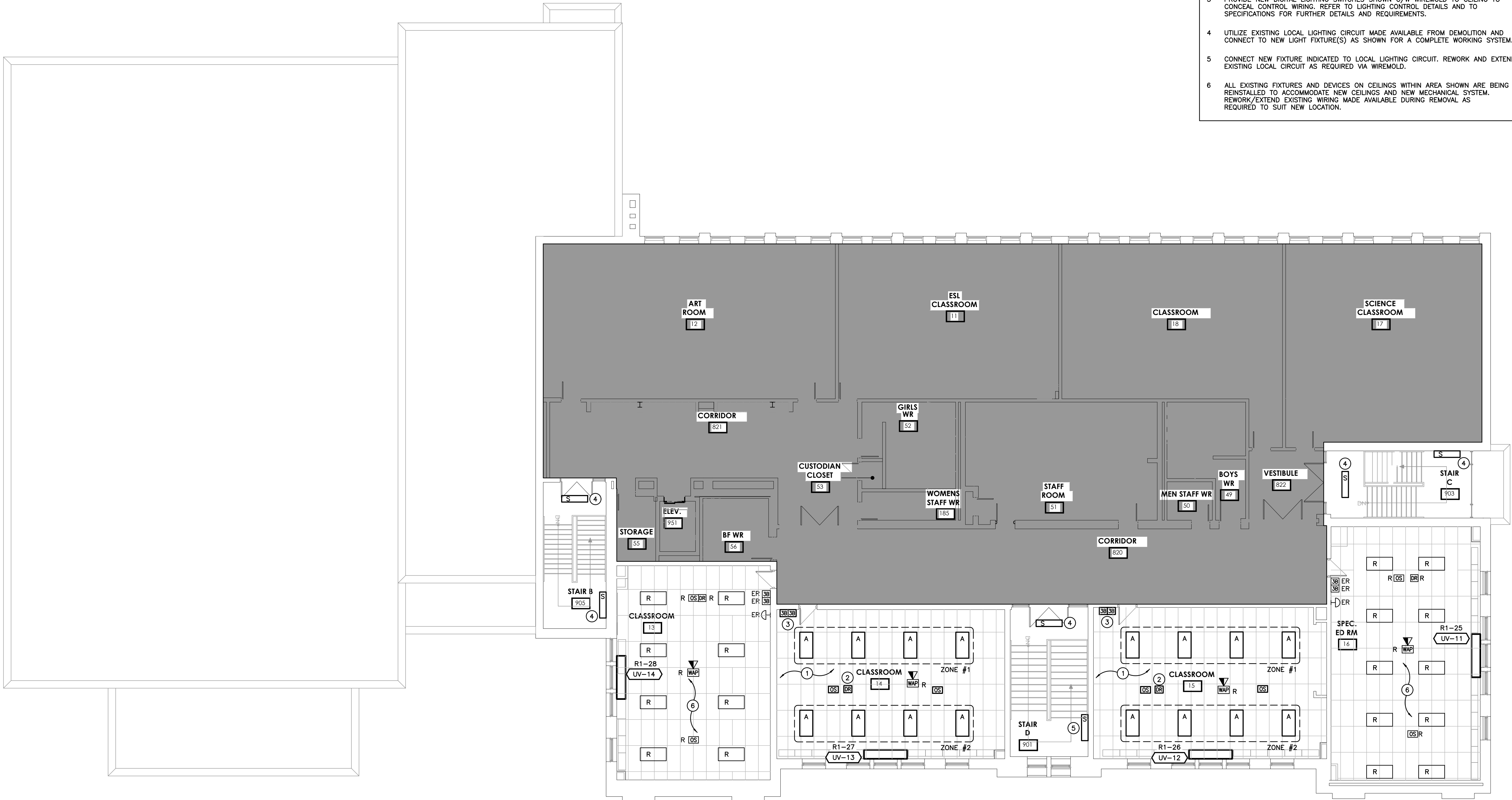
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- ALL DEVICES SHOWN ARE NEW UNLESS OTHERWISE NOTED.
- EXISTING ELECTRICAL EQUIPMENT NOT SHOWN SHALL REMAIN UNLESS OTHERWISE NOTED.
- MAINTAIN SERVICE TO ALL EXISTING DEVICES TO REMAIN.
- REVISE PANEL DIRECTORIES TO SUIT CHANGES (TYPED).

SPECIFIC RENOVATION NOTES

- 1 UTILIZE EXISTING LOCAL LIGHTING CIRCUIT MADE AVAILABLE FROM DEMOLITION AND CONNECT TO NEW LIGHT FIXTURE(S) AND CONTROLS AS SHOWN FOR A COMPLETE WORKING SYSTEM.
- 2 INDICATES DIGITAL ROOM CONTROLLER(S) TO BE INSTALLED WITHIN ACCESSIBLE CEILING SPACE FOR CONTROL OF NOTED OCCUPANCY SENSOR(S) AND LIGHT FIXTURES, REFER TO LIGHTING CONTROL DETAILS FOR FURTHER REQUIREMENTS.
- 3 PROVIDE NEW DIGITAL LIGHTING SWITCHES SHOWN C/W WIREMOLD TO CEILING TO CONCEAL CONTROL WIRING. REFER TO LIGHTING CONTROL DETAILS AND TO SPECIFICATIONS FOR FURTHER DETAILS AND REQUIREMENTS.
- 4 UTILIZE EXISTING LOCAL LIGHTING CIRCUIT MADE AVAILABLE FROM DEMOLITION AND CONNECT TO NEW LIGHT FIXTURE(S) AS SHOWN FOR A COMPLETE WORKING SYSTEM.
- 5 ALL EXISTING FIXTURES AND DEVICES ON CEILINGS WITHIN AREA SHOWN ARE BEING REINSTALLED TO ACCOMMODATE NEW CEILINGS AND NEW MECHANICAL SYSTEM. REWORK/EXTEND EXISTING WIRING MADE AVAILABLE DURING REMOVAL AS REQUIRED TO SUIT NEW LOCATION.
- 6 INDICATES APPROXIMATE LOCATION OF EXISTING FIRE ALARM CONTROL PANEL - EDWARDS EST FIRESHIELD SERIES.
- 7 INDICATED DEVICE TO BE INSTALLED IN MILLWORK. PROVIDE CONDUIT AND BX WIRING UNDERNEATH / WITHIN THE INTERIOR SIDE OF MILLWORK. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH ARCHITECTURAL MILLWORK ELEVATIONS AND MILLWORK CONTRACTOR PRIOR TO ROUGH-IN.
- 8 INDICATES NEW DVR (DUAL VOLTAGE RELAY) TO BE SUPPLIED BY MECHANICAL CONTRACTOR AND INSTALLED BY ELECTRICAL CONTRACTOR FOR EXISTING FORCE FLOW HEATER. PROVIDE NEW LOW VOLTAGE WIRING FROM DVR TO EXISTING UNIT TO SUIT THE MECHANICAL CONTRACTOR REQUIREMENTS. CONFIRM ALL DETAILS AND REQUIREMENTS WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.
- 9 MOUNT FIXTURE INDICATED AT SAME HEIGHT AS DEMOLISHED LIGHT FIXTURE.



FIRST FLOOR RENOVATION PLAN
SCALE: 1:100



SECOND FLOOR RENOVATION PLAN
SCALE: 1:100

GENERAL RENOVATION NOTES

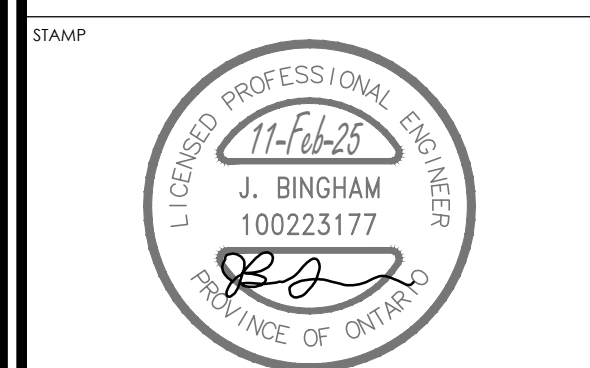
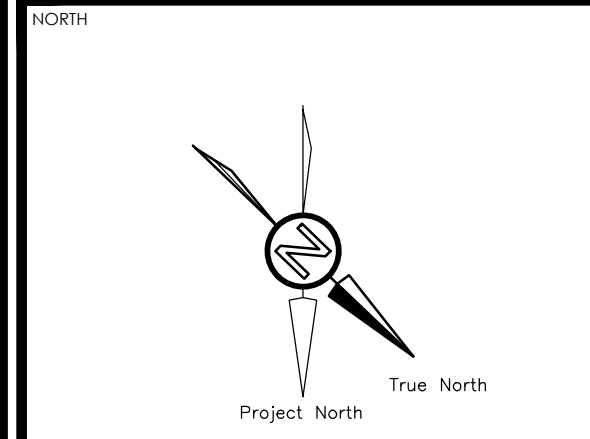
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SPECIFIC RENOVATION NOTES

- 1 UTILIZE EXISTING LOCAL LIGHTING CIRCUIT MADE AVAILABLE FROM DEMOLITION AND CONNECT TO NEW LIGHT FIXTURE(S) AND CONTROLS AS SHOWN FOR A COMPLETE WORKING SYSTEM.
- 2 INDICATES DIGITAL ROOM CONTROLLER(S) TO BE INSTALLED WITHIN ACCESSIBLE CEILING SPACE FOR CONTROL OF NOTED OCCUPANCY SENSOR(S) AND LIGHT FIXTURES, REFER TO LIGHTING CONTROL DETAILS FOR FURTHER REQUIREMENTS.
- 3 PROVIDE NEW DIGITAL LIGHTING SWITCHES SHOWN C/W WIREMOLD TO CEILING TO CONCEAL CONTROL WIRING. REFER TO LIGHTING CONTROL DETAILS AND TO SPECIFICATIONS FOR FURTHER DETAILS AND REQUIREMENTS.
- 4 UTILIZE EXISTING LOCAL LIGHTING CIRCUIT MADE AVAILABLE FROM DEMOLITION AND CONNECT TO NEW LIGHT FIXTURE(S) AS SHOWN FOR A COMPLETE WORKING SYSTEM.
- 5 CONNECT NEW FIXTURE INDICATED TO LOCAL LIGHTING CIRCUIT. REWORK AND EXTEND EXISTING LOCAL CIRCUIT AS REQUIRED VIA WIREMOLD.
- 6 ALL EXISTING FIXTURES AND DEVICES ON CEILINGS WITHIN AREA SHOWN ARE BEING REINSTALLED TO ACCOMMODATE NEW CEILINGS AND NEW MECHANICAL SYSTEM. REWORK/EXTEND EXISTING WIRING MADE AVAILABLE DURING REMOVAL AS REQUIRED TO SUIT NEW LOCATION.

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CHRONOLOGY	DATE

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Project Number: 24323

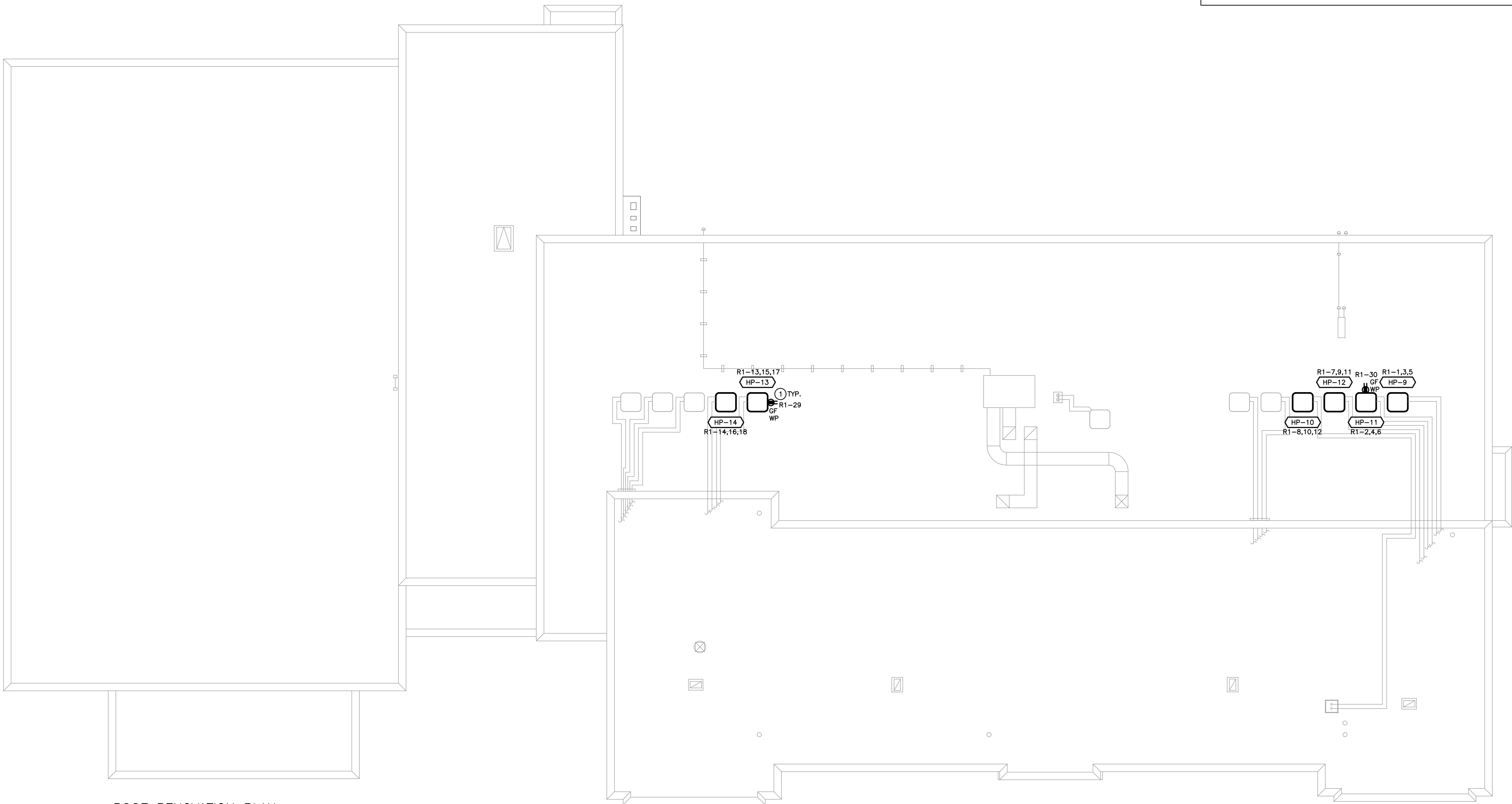
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101 Ronsdale Drive, Unit B, Waterloo ON, TEL: 519-884-2711 www.abarchitects.com



PROJECT NAME
**COURTLAND PUBLIC SCHOOL
PHASE 2 MECH UPGRADES**
107 COURTLAND AVE. E., KITCHENER, ON. N2G 2Y9

DRAWING TITLE
**SECOND FLOOR
ELECTRICAL
RENOVATION PLAN**

SCALE AS NOTED	DRAWING NUMBER E3.3
SHEET SIZE 24x36	
PROJECT NUMBER 24323	



ROOF RENOVATION PLAN
SCALE: 1:100

GENERAL RENOVATION NOTES

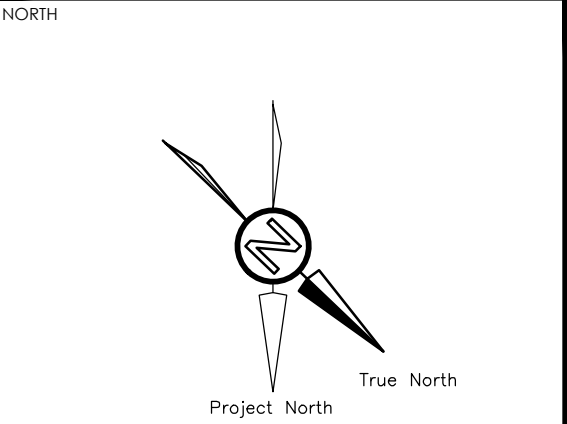
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- MAINTAIN SERVICE TO ALL EXISTING DEVICES TO REMAIN.
- REVISE PANEL DIRECTORIES TO SUIT CHANGES (TYPED).
- ALL ELECTRICAL FEEDERS FOR MECHANICAL ROOFTOP EQUIPMENT TO FOLLOW MECHANICAL PIPING THROUGH DOGHOUSES. REFER TO MECHANICAL DRAWINGS FOR LOCATION OF DOGHOUSES AND FURTHER DETAILS.

SPECIFIC RENOVATION NOTES

- 1 PROVIDE T-SLOT GROUND FAULT RECEPTACLE COMPLETE WITH "HEAVY DUTY IN-USE" WEATHERPROOF COVER. COORDINATE EXACT LOCATION TO INSTALL RECEPTACLE ON SITE WITH MECHANICAL CONTRACTOR. RECEPTACLE SHALL BE MOUNTED AT 36" (900mm) ABOVE FINISHED ROOF LEVEL.

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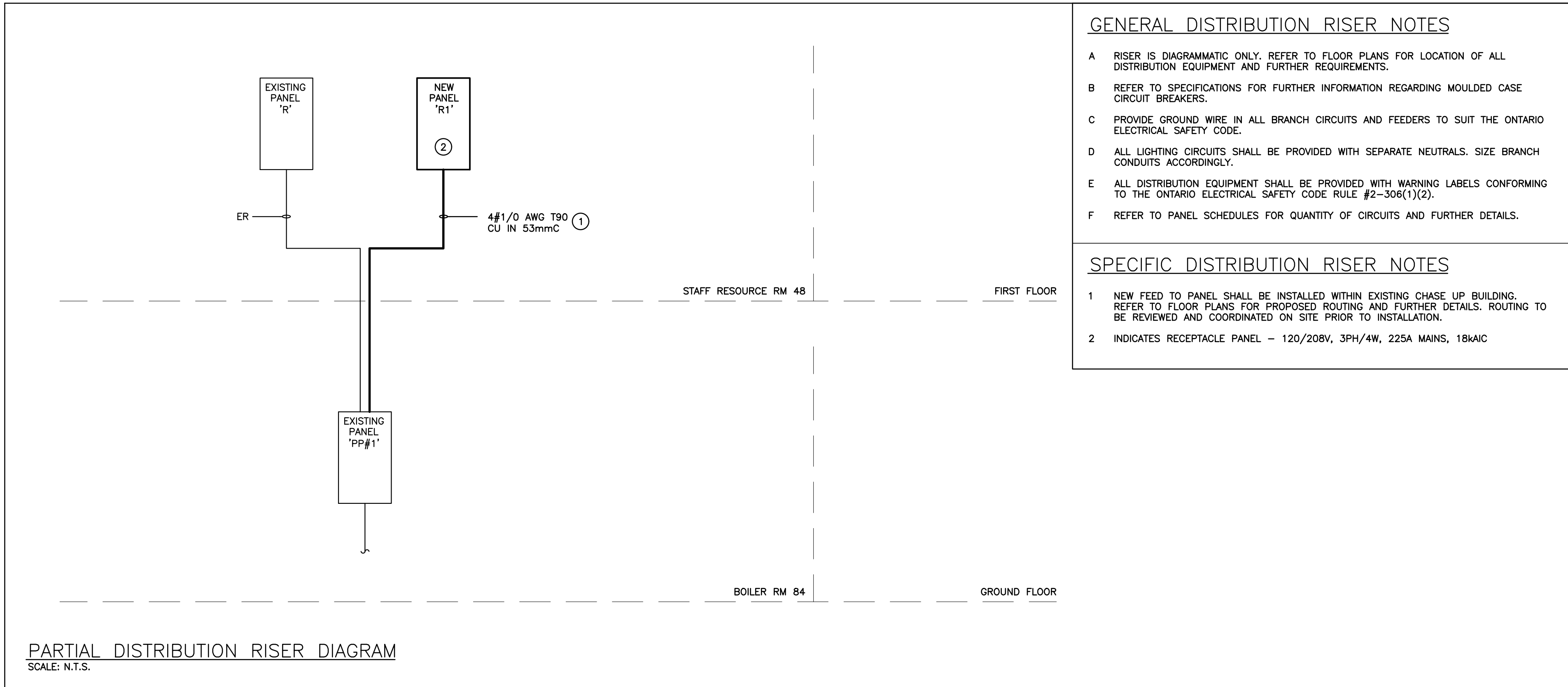
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PROJECT NAME
COURTLAND PUBLIC SCHOOL
PHASE 2 MECH UPGRADES
107 COURTLAND AVE. E., KITCHENER, ON. N2G 2Y9

DRAWING TITLE
ROOF ELECTRICAL
RENOVATION PLAN

SCALE	DRAWING NUMBER
AS NOTED	E3.4
SHEET SIZE	
PROJECT NUMBER	



GENERAL DISTRIBUTION RISER NOTES

- A RISER IS DIAGRAMMATIC ONLY. REFER TO FLOOR PLANS FOR LOCATION OF ALL DISTRIBUTION EQUIPMENT AND FURTHER REQUIREMENTS.
- B REFER TO SPECIFICATIONS FOR FURTHER INFORMATION REGARDING MOULDED CASE CIRCUIT BREAKERS.
- C PROVIDE GROUND WIRE IN ALL BRANCH CIRCUITS AND FEEDERS TO SUIT THE ONTARIO ELECTRICAL SAFETY CODE.
- D ALL LIGHTING CIRCUITS SHALL BE PROVIDED WITH SEPARATE NEUTRALS. SIZE BRANCH CONDUITS ACCORDINGLY.
- E ALL DISTRIBUTION EQUIPMENT SHALL BE PROVIDED WITH WARNING LABELS CONFORMING TO THE ONTARIO ELECTRICAL SAFETY CODE RULE #2-306(1)(2).
- F REFER TO PANEL SCHEDULES FOR QUANTITY OF CIRCUITS AND FURTHER DETAILS.

SPECIFIC DISTRIBUTION RISER NOTES

- 1 NEW FEED TO PANEL SHALL BE INSTALLED WITHIN EXISTING CHASE UP BUILDING. REFER TO FLOOR PLANS FOR PROPOSED ROUTING AND FURTHER DETAILS. ROUTING TO BE REVIEWED AND COORDINATED ON SITE PRIOR TO INSTALLATION.
- 2 INDICATES RECEPTACLE PANEL - 120/208V, 3PH/4W, 225A MAINS, 18kAIC

PANEL 'R1'

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 225A
NEUTRAL BUS: FULL
MOUNTING: SURFACE
NOTES: FED FROM PANEL PP-1

* INDICATES 33mA GROUND FAULT STYLE BREAKER

THE CONTRACTOR IS TO COORDINATE ROOM NAMES AND NUMBERS NOTED WITH THE FINAL ROOM INFORMATION ISSUED DURING CONSTRUCTION AND ADJUST DIRECTORIES TO SUIT.

HP-9	ROOF HP-9	25A	1	2	25A	ROOF HP-11	HP-11
			3	4			
			5	6			
HP-12	ROOF HP-12	25A	7	8	25A	ROOF HP-10	HP-10
			9	10			
			11	12			
HP-13	ROOF HP-13	25A	13	14	25A	ROOF HP-14	HP-14
			15	16			
			17	18			
			19	20			
	SPARE	15A	21	22	15A	SPARE	
UV-9	CLASSROOM 6	15A	23	24	15A	CLASSROOM 5	UV-10
UV-11	SPEC. ED 16	15A	25	26	15A	CLASSROOM 15	UV-12
UV-13	CLASSROOM 14	15A	27	28	15A	CLASSROOM 13	UV-14
	ROOF RECEPTACLE	20A	29	30	20A	ROOF RECEPTACLE	
	LIBRARY MILLWORK RECEPTACLES	15A	31	32			
	LIBRARY MILLWORK RECEPTACLES	15A	33	34			
			35	36			
			37	38			
			39	40			
			41	42			
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			57	58			
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			63	64			
			65	66			
			67	68			
	SPARE	15A	69	70	15A	SPARE	
	SPARE	15A	71	72	15A	SPARE	
			73	74			
			75	76			
			77	78			
			79	80			
			81	82			
			83	84			

NOTE: THE INDICATED PANEL ASSEMBLY MUST HAVE AN INTERRUPTING CAPACITY OF 18000 A. PROVIDE BY EITHER FULLY RATED BREAKERS OR INTEGRATED EQUIPMENT RATING WITH THE UPSTREAM BREAKER.

EXISTING PANEL 'PP#1' SCHEDULE

VOLTAGE: 120/208 VOLTS
PHASE: 3P, 4W
MAINS: 600A
NEUTRAL BUS: FULL
MOUNTING: SURFACE
NOTES: EXISTING CDP FEDERAL PIONEER

ER	BOILER ROOM	200A	1	2	125A	OFFICE PANEL	ER
			3	4			
			5	6			
ER	PANEL LP-E	70A	7	8	100A	PANEL LP-J	ER
			9	10			
			11	12			
ER	FAN ROOM	100A	13	14	100A	CIRC PUMP PANEL	ER
			15	16			
			17	18			
ER	PANEL LP-G	100A	19	20	70A	PANEL LP-F	ER
			21	22			
			23	24			
ER	WOOD SHOP PP2	50A	25	26	70A	LP-A/B	ER
			27	28			
			29	30			
ER	PP#3	100A	31	32	100A	PANEL LP-D	ER
			33	34			
			35	36			
ER	PANEL LP-H	100A	37	38	30A	DUST COLLECTOR	ER
			39	40			
			41	42			
ER	AIR COMPRESSOR	15A	43	44	15A	OUTSIDE LIGHTS	ER
			45	46	15A	CHUBB SECURITY	ER
			47	48	15A	FIRE ALARM	ER
ER	PORTABLE OFF	100A	49	50	2P		ER
			51	52	15A	OUTSIDE LIGHTS	ER
			53	54	15A	E/L	ER
ER	BOILER ROOM UPS REC.	30A	55	56	15A	OFF EXIT/EMERGENCY LIGHTS	ER
ER	BELL	15A	57	58	15A	CIRC PUMP, HOT WATER	ER
ER	BELL	15A	59	60	15A	CIRC PUMP, HOT WATER	ER
ER	ELEVATOR DISCONNECT	40A	61	62	15A	OFF OIL PUMP	ER
			63	64	25A	ROOF TOP A/C	ER
			65	66	2P		ER
ER	PANEL R	100A	67	68		SPACE	ER
			69	70		SPACE	ER
			71	72		SPACE	ER
			73	74		SPACE	ER
ER	SPACE		75	76		SPACE	ER
ER	SPACE		77	78		SPACE	ER
ER	SPACE		79	80		SPACE	ER
ER	SPACE		81	82		SPACE	ER
ER	SPACE		83	84		SPACE	ER

PROPOSED PANEL 'PP#1' SCHEDULE

AT THE COMPLETION OF THE PROJECT, PROVIDE A NEW TYPE WRITTEN PANEL DIRECTORY AND INCLUDE A COPY IN THE MAINTENANCE MANUALS

ER	BOILER ROOM	200A	1	2	125A	OFFICE PANEL	ER
			3	4			
			5	6			
ER	PANEL LP-E	70A	7	8	100A	PANEL LP-J	ER
			9	10			
			11	12			
ER	FAN ROOM	100A	13	14	100A	CIRC PUMP PANEL	ER
			15	16			
			17	18			
ER	PANEL LP-G	100A	19	20	70A	PANEL LP-F	ER
			21	22			
			23	24			
ER	WOOD SHOP PP2	50A	25	26	70A	LP-A/B	ER
			27	28			
			29	30			
ER	PP#3	100A	31	32	100A	PANEL LP-D	ER
			33	34			
			35	36			
ER	PANEL LP-H	100A	37	38	30A	DUST COLLECTOR	ER
			39	40			
			41	42			
ER	AIR COMPRESSOR	15A	43	44	15A	OUTSIDE LIGHTS	ER
			45	46	15A	CHUBB SECURITY	ER
			47	48	15A	FIRE ALARM	ER
ER	PORTABLE OFF	100A	49	50	2P		ER
			51	52	15A	OUTSIDE LIGHTS	ER
			53	54	15A	E/L	ER
ER	BOILER ROOM UPS REC.	30A	55	56	15A	OFF EXIT/EMERGENCY LIGHTS	ER
ER	BELL	15A	57	58	15A	CIRC PUMP, HOT WATER	ER
ER	BELL	15A	59	60	15A	CIRC PUMP, HOT WATER	ER
ER	ELEVATOR DISCONNECT	40A	61	62	15A	OFF OIL PUMP	ER
			63	64	25A	ROOF TOP A/C	ER
			65	66	2P		ER
ER	PANEL R	100A	67	68	150A	PANEL R1	NB
			69	70			
			71	72			
			73	74			
ER	SPACE		75	76		SPACE	ER
ER	SPACE		77	78		SPACE	ER
ER	SPACE		79	80		SPACE	ER
ER	SPACE		81	82		SPACE	ER
ER	SPACE		83	84		SPACE	ER

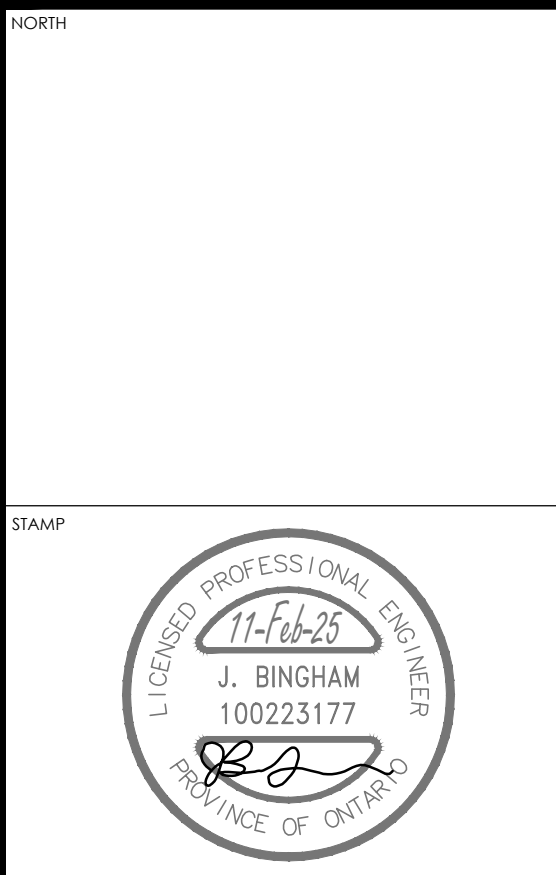
DESIGNATION

'ER' INDICATES EXISTING SERVICE AND BREAKER THAT SHOULD REMAIN UNTOUCHED
'SP' INDICATES EXISTING BREAKER THAT MAY BECOME SPARE DUE TO DEMOLITION. (CONFIRM ON SITE)
'RW' INDICATES EXISTING BREAKER THAT SHOULD BE REWIRED TO SERVICE DEVICES INDICATED ON PLAN
'SB' INDICATES SPARE BREAKER TO BE USED FOR NEW SERVICE INDICATED.
'NB' INDICATES NEW BREAKER AND WIRING TO SERVICE INDICATED. PROVIDE MOUNTING HARDWARE AS REQUIRED.
'D' INDICATES EXISTING BREAKER TO BE REMOVED COMPLETE. PROVIDE FILLER PLATES AS REQUIRED.

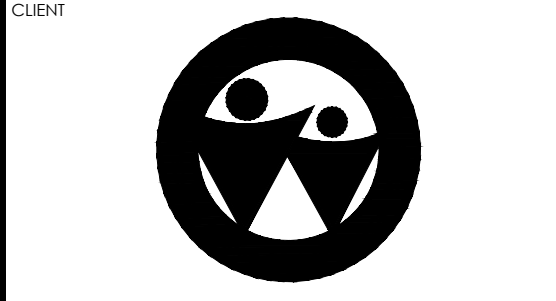
NOTES: THIS CONTRACTOR IS TO INVESTIGATE BREAKERS AND REVISE PANEL SCHEDULES TO SUIT RENOVATION, NOTING ANY BREAKERS THAT BECOME SPARE DUE TO DEMOLITION. THIS CONTRACTOR IS ALSO TO NOTIFY THE CONSULTANT OF ANY BREAKERS THAT ARE INDICATED TO BE DEMOLISHED OR REUSED, BUT WHICH ARE IN USE BY OTHER DEVICES OR SERVICES.

The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of work.
The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.
The drawings do not indicate all offsets fitting and accessories which may be required. Provide the same to meet the required conditions.
Drawings and specifications, etc., prepared and issued by the Consultant are the property of the Consultant and must be returned at the completion of the project. These documents are not to be duplicated or copied without the consent of the Consultant.
Do not scale this drawing.
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No.	REVISIONS	DATE
01	ISSUED FOR REVIEW	2024.12.16
02	ISSUED FOR BUILDING PERMIT	2025.01.24
03	ISSUED FOR TENDER	2025.02.14



CHRONOLOGY	DATE



PROJECT NAME

COURTLAND PUBLIC SCHOOL
PHASE 2 MECH UPGRADES
107 COURTLAND AVE. E., KITCHENER, ON. N2G 2T9

DRAWING TITLE

PANEL SCHEDULES
AND DISTRIBUTION
RISER

SCALE	DRAWING NUMBER
AS NOTED	
SHEET SIZE	
24x36	E4.1
PROJECT NUMBER	
24323	