PARKDALE ELEMENTARY SCHOOL ACCESSIBILITY RENOVATIONS

139 PARDALE AVE N, HAMILTON, ONTARIO

GRAPHIC SYMBOLS LEGEND

- 1 / A2.00 — INDICATES DETAIL NUMBER; INDICATES DRAWING SHEET ON WHICH DETAIL IS SHOWN
- B / A2.00 — INDICATES DIRECTION OF SECTION; INDICATES SECTION NUMBER OR LETTER; INDICATES DRAWING SHEET ON WHICH DETAIL IS SHOWN
- C1 — CONSTRUCTION NOTE
- W1 — W-EXTERIOR WALL TYPE; DESIGNATION OF TYPE
- D / B 1 A2.20 C / A — INDICATES DIRECTION OF ELEVATION; INDICATES ELEVATION NUMBER; INDICATES DRAWING SHEET ON WHICH ELEVATION IS SHOWN
- D1 — DEMOLITION NOTE
- P1 — P-INTERIOR WALL AND PARTITION TYPES; DESIGNATION OF TYPE
- FIXTURE COUNT
- 1M/F — FIXTURE TYPE: M - MALE, F - FEMALE

GENERAL NOTES

1. CAUSE NO DAMAGE TO EXISTING CONSTRUCTION TO REMAIN. TAKE CARE NOT TO ENCROACH ON ADJACENT OCCUPIED AREAS OR AREAS NOT WITHIN THE SCOPE OF WORK. PROTECT ALL EXISTING FINISHES, DOORS, FRAMES, ETC., WHICH ARE TO REMAIN, PATCH AND MAKE GOOD ALL EXISTING ADJACENT SURFACES FINISHES & MATERIALS WHERE DISTURBED BY NEW CONSTRUCTION AT NO EXTRA COST TO THE PROJECT.
2. MECHANICAL AND ELECTRICAL ITEMS SHOWN, I.E. DUCTWORK, PIPING, ELECTRICAL CONDUITS, LIGHT FIXTURES, ETC. ARE FOR REFERENCE ONLY AND ARE NOT INCLUSIVE. REFER TO MECHANICAL AND ELECTRICAL DRAWING FOR ALL RELATED NEW AND DEMOLITION WORK REQUIRED.
3. CONNECTIONS OF ALL NON STRUCTURAL ELEMENTS AND EQUIPMENT TO SUPPORTING STRUCTURE TO BE DESIGNED TO COMPLY WITH ARTICLE 4.1.8.18 OF THE 2012 ONTARIO BUILDING CODE FOR SEISMIC LOADS. CONTRACTOR TO SUBMIT SHOP DRAWINGS SHOWING THESE CONNECTIONS STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER FOR APPROVAL BY ARCHITECT PRIOR TO ANY WORK BEING EXECUTED.
4. IF CONTRACTOR ENCOUNTERS ANY SUSPECTED ASBESTOS CONTAINING MATERIALS (ACM) MATERIALS, THEY ARE TO ADVISE ARCHITECT & CLIENT IMMEDIATELY FOR FURTHER CONFIRMATION & INSTRUCTIONS.
5. TRANSITIONS BETWEEN NEW AND EXISTING FLOOR FINISHES TO BE MADE SMOOTH AND CONTINUOUS. GRIND EXISTING FLOOR SLAB ACROSS DOOR THRESHOLDS TO SUIT THICKNESS OF NEW MATERIALS AND ENSURE NEW MATERIAL IS INSTALLED FLUSH WITH EXISTING.
6. ALL PATCHING AND REPAIRING OF SURFACES ARE NOT NECESSARILY SHOWN. PATCH AND REPAIR ALL EXISTING SURFACES SCHEDULED TO RECEIVE NEW FINISHES TO THAT ALL SURFACES WHEN COMPLETE RESEMBLE A NEW INSTALLATION.
7. CONTRACTOR TO ALLOW FOR PATCHING AND REPAIR AND REFINISHING OF ALL EXISTING ADJACENT MATERIALS, SURFACES & FINISHES.
8. CONTRACTOR TO ALLOW FOR PATCHING AND REPAIR OF ADJACENT MATERIALS AT ALL ELECTRICAL LIGHTING, EQUIPMENT, CONDUIT, RACEWAYS, MECHANICAL PLUMBING, PIPING, ETC. TO BE REMOVED, RELOCATED, REPLACED, INSTALLED. REFER TO ELECTRICAL DRAWINGS. PREPARE ALL SURFACES FOR NEW FINISHES.
9. CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL EXISTING FLOOR FINISHES TO REMAIN, WALLS AND WALL MOUNTED EQUIPMENT FOR THE DURATION OF THE PROJECT.
10. CONTRACTOR IS RESPONSIBLE FOR SWEEPING THE SITE DAILY AND CONDUCTING A FINAL CLEANING AT THE END OF THE PROJECT. THE FINAL CLEANING INCLUDES A COMPLETE PRE-MOVE CLEANING; WIPING DOWN ALL WALLS, ALL NEW FIXTURES AND MILLWORK, ALL NEW DOOR FRAMES AND SILLS, SWEEPING AND MOPPING THE FLOORS. THE CONTRACTOR WILL PROVIDE ALL EQUIPMENT NECESSARY TO CLEAN THE SITE PRIOR TO CLIENT OCCUPANCY. THE CONTRACTOR WILL NOT BE PERMITTED TO USE CLIENTS CARE TAKING TOOLS AND EQUIPMENT; MOPS, BROOMS, BAGS, BINS, ETC.
11. COORDINATE WITH MECHANICAL & ELECTRICAL DOCUMENTS FOR FULL EXTENT OF ALTERATIONS TO EXISTING PLUMBING, HEATING, VENTILATION, SPRINKLER SYSTEMS, ELECTRICAL PANELS, FIXTURES, CONDUITS, ETC. WITHIN EXISTING TO REMAIN.
12. WHERE EXISTING SURFACES ARE DISTURBED DUE TO DEMOLITION OR ALTERATIONS, AND NOT REQUIRED TO BE COVERED WITH NEW FINISHES, SUCH SURFACES SHALL BE MADE GOOD TO MATCH EXISTING ADJACENT MATERIALS AND FINISHES.
13. MAKE GOOD ALL MATERIALS AND FINISHES WHERE DISTURBED AND WHERE ALTERATIONS OCCUR. REFER TO ALL DOCUMENTS FOR EXTENT OF WORK REQUIRED. MAKING GOOD INCLUDES ALL WORK ASSOCIATED WITH THE REMOVAL OF EXISTING AND INSTALLATION OF NEW SERVICES, ETC. (EXAMPLES: PLUMBING / HEATING MODIFICATIONS IN EXISTING BUILDING, INSTALLATION OF NEW DUCTS IN EXISTING BUILDING, ETC.)
14. WHERE EXISTING WALLS, PARTITIONS / FURRINGS, BUILDING FITMENTS, HOUSEKEEPING PADS, ETC., ARE BEING REMOVED, MAKE GOOD SUBSTRATES TO RECEIVE NEW SPECIFIED MATERIALS AND FINISHES.
15. AT WALL IN FILLS, SAWTOOTH BLOCK AND BRICK AS REQUIRED. CLEANLY SAW CUT WITH SINGLE SCORE AT EX VERTICAL COURSING JOINTS. NEW BLOCK AND BRICK INFILL TO MATCH EX BLOCK / BRICK THICKNESS AND COURSING AND KEEP FLUSH.
16. UNDERSIDE OF EXISTING STRUCTURE AT (FIELD VERIFY):
    a) SECOND FLOOR IS APPROXIMATELY 4158mm AFF.
    b) ROOF IS APPROXIMATELY 4155mm AFF.
17. DIMENSIONS W/ "HOLD" DENOTES CRITICAL DIMENSIONS THAT MUST BE MAINTAINED.

NAME OF PRACTICE: GRGURIC ARCHITECTS INCORPORATED
CERTIFICATE OF PRACTICE NUMBER: 4760
CONTACT: **JOHN GRGURIC**
28 KING STREET EAST, UNIT B, STONEY CREEK, ON L8G 1J8
TEL: 905-664-8735

NAME OF PROJECT:
PARKDALE ELEMENTARY SCHOOL - ACCESSIBILITY UPGRADES

LOCATION:
139 PARKDALE AVE N, HAMILTON, ONTARIO

Item	Ontario's 2012 Building Code Data Matrix Parts 3 or 9		OBC Reference (References are to Division B unless noted [A] for Division A or [C] for Division C)	
1	Project Description: **RENOVATIONS TO THE EXISTING GROUND AND SECOND FLOORS TO CONSTRUCT A NEW PASSENGER ELEVATOR, UNIVERSAL WASHROOM AND BARRIER FREE WASHROOM.** ☐ New ☐ Addition ■ Alteration ☐ Change of Use	■ Part 11 (11.1 to 11.4)	☐ Part 3 1.1.2. [A]	☐ Part 9 1.1.2 [A] & 9.10.1.3
2	Major Occupancy(s)	**A-2 - ASSEMBLY**	3.1.2.1.(1)	9.10.2
3	Building Area	Existing **1,797.1 m²** New **0 m²**	1.4.1.2.[A]	1.4.1.2.[A]
4	Gross Area	Existing **2,921.9 m²** New **0 m²** Renovation Area **92.4 m²**	1.4.1.2.[A]	1.4.1.2.[A]
5	Number of storeys **2**	Above grade **2** Below grade **0**	1.4.1.2.[A] & 3.2.1.1	1.4.1.2.[A] & 9.10.4
7	Number of Streets/ Fire Fighter Access	**1 STREET ACCESS**	3.2.2.10 & 3.2.5	9.10.20.
8	Building Classification	**EXISTING**	11.2.1	9.10.2.
9	Sprinkler System Proposed **n/a**	☐ entire building ☐ selected compartments ☐ selected floor areas ☐ basement ☐ in lieu of roof rating ☐ not required	3.2.2.24 3.2.1.5. 3.2.2.17. INDEX	9.10.8.2 INDEX
10	Standpipe required	☐ Yes ■ No	3.2.9	N/A
11	Fire Alarm required	■ Yes ☐ No	3.2.4	9.10.18
12	Water Service/Supply is Adequate	■ Yes ☐ No	3.2.5.7.	N/A
13	High Building	☐ Yes ■ No	3.2.6	N/A
14	Permitted Construction / Actual Construction	☐ Combustible permitted ■ Non-combustible required ☐ Both / ☐ Combustible ■ Non-combustible ☐ Both	3.2.2.20.-83	9.10.6
15	Mezzanine(s) Area m 2		3.2.1.1.(3)-(8)	9.10.4.1
16	Occupant load based on	☐ m² /person ■ design of building **EXISTING**	3.1.17	9.9.1.3
	1st Floor	Occupancy **ASSEMBLY** Load **249** persons		
	2nd Floor	Occupancy **ASSEMBLY** Load **249** persons		
		Occupancy _____ Load _____ persons		
		Total **498** persons		
17	Barrier-free Design	■ Yes ☐ No (Explain)	3.8	9.5.2
18	Hazardous Substances	☐ Yes ■ No	3.3.1.2. & 3.3.1.19	9.10.1.3(4)
19	Required Fire Resistance Rating (FRR) **EXISTING**	Horizontal Assemblies FRR (Hours) / Listed Design No. or Description (SG-2)	3.2.2.24 & 3.2.1.4	9.10.8. 9.10.9.
	Floors **1** Hours	PLASTER CEILING (SB-2 Table 2.3.4.D) (EXISTING)		
	Roof **3/4** Hours	PLASTER CEILING (SB-2 Table 2.3.4.D) (EXISTING)		
	Mezzanine **-** Hours	-		
	FRR of Supporting Members / Listed Design No. or Description (SG-2)			
	Floors **1** Hours	HOLLOW TILE BLOCK (SB-2 Table 2.1.1) (EXISTING)		
	Roof **3/4** Hours	HOLLOW TILE BLOCK (SB-2 Table 2.1.1) (EXISTING)		
	Mezzanine **-** Hours	-		

19 Spatial Separation - Construction of Exterior Walls **N/A EXISTING** — 3.2.3 — 9.10.14

Wall	Area of EBF (m²)	L.D. (m)	L/H or H/L	Permitted Max. % of Openings	Proposed % of Openings	FRR (Hours)	Listed Design or Description	Comb. Constr.	Comb. Constr. Nonc. Cladding	Non-comb. Constr.
North	-	-	-	-	-	-	-	-	-	-
South	-	-	-	-	-	-	-	-	-	-
East	-	-	-	-	-	-	-	-	-	-
West	-	-	-	-	-	-	-	-	-	-

20 Plumbing Fixture Requirements

Male / Female Count @ **50** % / **50** % except as noted otherwise

1st Floor: Occupancy **Assembly** — Occupancy _____
2nd Floor: Occupancy **Assembly** — Occupancy _____ Occupancy _____ Occupancy _____
Total

Occupant Load	BC Table Number	Fixtures Required Male	Fixtures Required Female	Fixtures Provided Male	Fixtures Provided Female	Building Code Reference ☐ Part 3	☐ Part 9
132	3.7.4.3. (14)					3.7.4.2. - 3.7.4.3	
366	3.7.4.3. (14)					3.7.4.2. - 3.7.4.3	
	3.7.4.3. (14)					3.7.4.2. - 3.7.4.3	
498		9	10	18	18		

+1 ADDITIONAL FIXTURE IN UNIVERSAL WASHROOM FOR MALE AND FEMALES

21 Travel Distance to Exits (Refer to Drawings)

Ontario Building Code Data Matrix Part 11 -- Renovation of Existing Building — **Building Code Reference**

11.1	Existing Building classification:	Describe Existing Use: **ELEMENTARY SCHOOL**; Construction Index: **6**; Hazard Index: **6**; ■ Not Applicable (no major change of occupancy)	11.2.1 T 11.2.1.1A T 11.2.1.1B to N
11.2	Alteration to Existing Building is:	Basic Renovation ■; Extensive Renovation ☐	11.3.3.1 11.3.3.2
11.3	Reduction in Performance Level:	Structural: ■ No ☐ Yes; By Increase in occupant load: ■ No ☐ Yes; By change of major occupancy: ■ No ☐ Yes; Plumbing: ■ No ☐ Yes; Sewage System: ■ No ☐ Yes	11.4.2 11.4.2.1 11.4.2.2 11.4.2.3 11.4.2.4 11.4.2.5
11.4	Compensating Construction:	Structural: ■ No ☐ Yes (explain; Increase in occupant load: ■ No ☐ Yes (explain); Change of major occupancy: ■ No ☐ Yes (explain); Plumbing: ■ No ☐ Yes (explain); Sewage system: ■ No ☐ Yes (explain)	11.4.3 11.4.3.2 11.4.3.3 11.4.3.4 11.4.3.5 11.4.3.6
11.5	Compliance Alternatives Proposed:	■ No ☐ Yes	11.4.2

HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

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Summit Engineering Inc.
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TORONTO, ON, M4A 1P5
TEL. 416-488-8899
ELECTRICAL ENGINEER

DFE
DOYTCH & FILO ENGINEERING INC.
Structural Engineers
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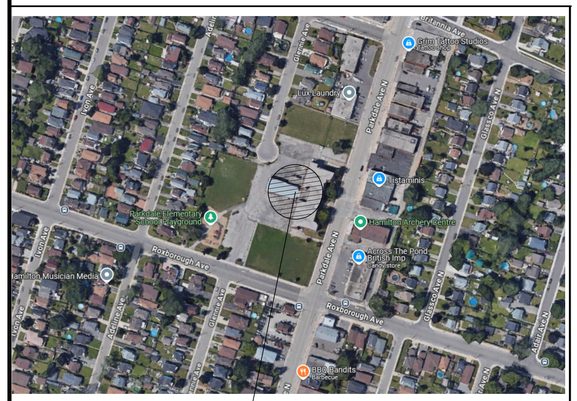
TEL. 647-836-4805
EMAIL: todor@doytchandfilo.com
www.doytchandfilo.com
STRUCTURAL ENGINEER



KEY PLAN - PROJECT LOCATION
N.T.S.

DRAWING LIST:

ARCHITECTURAL

STRUCTURAL

MECHANICAL

ELECTRICAL

ISSUED FOR TENDER

2024-12-11

PROJECT NUMBER
2024-15

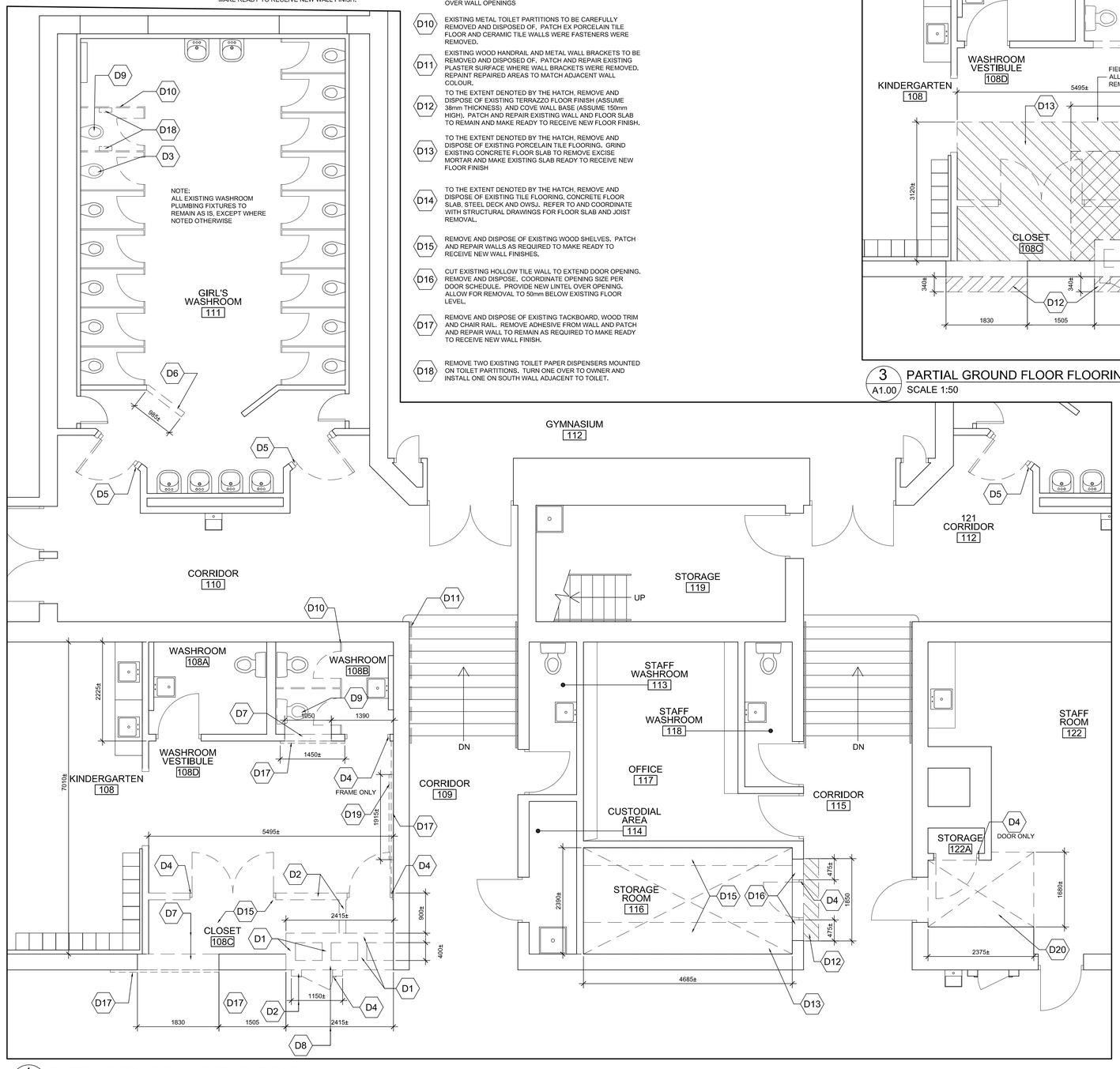
SHEET NUMBER
A 0.00

GENERAL DEMOLITION NOTES

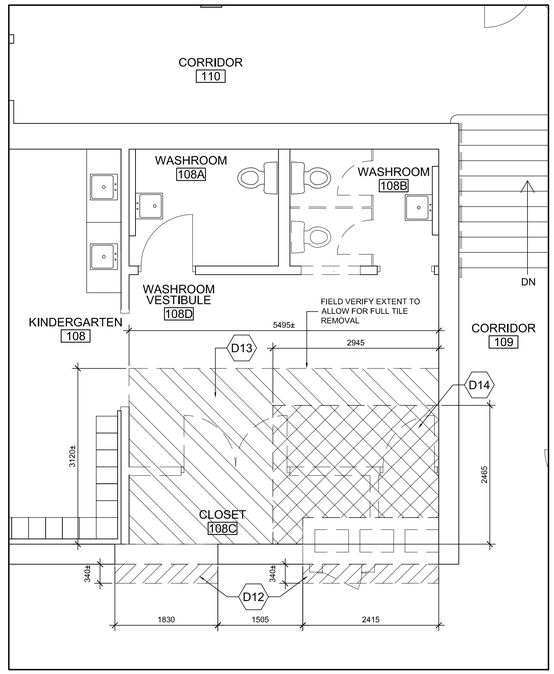
1. GENERAL CONTRACTOR IS TO COORDINATE AND PROVIDE ALL NEW ELEVATOR PIT FOUNDATION WORK AS SHOWN INCLUDING EXCAVATION AND SHORING REFER TO PLANS AND STRUCTURAL DRAWINGS.
2. GENERAL CONTRACTOR IS TO COORDINATE AND PROVIDE SHORING AS NEEDED TO SUIT NEW STRUCTURAL MODIFICATIONS INCLUDING CUTTING AND REMOVALS OF EX CONCRETE FLOOR AND OWSJ. REFER TO PLANS AND STRUCTURAL DRAWINGS.
3. THE EXISTING LOAD BEARING WALLS ABOVE THE CONCRETE FOUNDATION WALLS ARE CONSTRUCTED OF CLAY HOLLOW TILE BLOCKS OF VARYING WIDTHS, AND ARE REFERRED TO ON THESE DRAWINGS AS HOLLOW TILE.

DEMOLITION NOTES

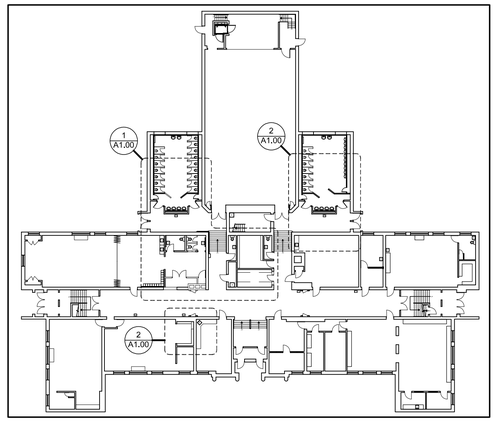
- D1 EXISTING HOLLOW TILE TO BE CAREFULLY CUT AS NEEDED, REMOVED AND DISPOSED OF TO EXTENT SHOWN. PATCH AND REPAIR ADJACENT WALLS TO REMAIN AS REQUIRED AND MAKE READY TO RECEIVE NEW FINISHES.
- D2 EXISTING WOOD STUD WALLS AND PLASTER FINISH TO BE REMOVED AND DISPOSED OF.
- D3 EXISTING PLUMBING FIXTURES TO BE REMOVED AND DISPOSED OF. REFER TO AND COORDINATE WITH MECHANICAL DRAWINGS FOR CONNECTION REMOVAL.
- D4 EXISTING WOOD DOORS AND FRAMES TO BE REMOVED AND DISPOSED OF. PATCH AND REPAIR ANY WALL TO REMAIN.
- D5 EXISTING HOLLOW METAL DOOR AND FRAME TO BE REMOVED AND DISPOSED OF. REMOVE AND DISPOSE OF EXISTING ORIGINAL WOOD DOOR FRAME AND TRIM. PATCH AND REPAIR EXISTING WALLS TO REMAIN AND MAKE READY TO RECEIVE NEW WALL FINISH.
- D6 EXISTING METAL STUD AND GYPSUM BOARD WALL W/ CERAMIC TILE FINISH TO BE REMOVED AND DISPOSED OF. PATCH AND REPAIR EXISTING WALLS TO REMAIN AS REQUIRED.
- D7 CUT NEW DOORWAY OPENING IN EXISTING HOLLOW TILE WALL. REMOVE AND DISPOSE. COORDINATE OPENING SIZE PER DOOR SCHEDULE. PROVIDE NEW LINTEL OVER OPENING. ALLOW FOR REMOVAL TO 100mm BELOW EXISTING FLOOR LEVEL.
- D8 CUT NEW OPENING IN EXISTING HOLLOW TILE WALL. REMOVE AND DISPOSE. HEIGHT OF OPENING TO BE 2210mm. PROVIDE NEW LINTEL OVER OPENING. ALLOW FOR REMOVAL TO 100mm BELOW EXISTING FLOOR LEVEL.
- D9 EXISTING PLUMBING FIXTURES TO BE REMOVED AND DISPOSED OF. REFER TO AND COORDINATE WITH MECHANICAL DRAWINGS FOR WATER CONNECTION REMOVCAL. REMOVE EXISTING TOILET FLANGE AND PROVIDE CONCRETE PATCH TO EXISTING FLOOR OPENING. PROVIDE METAL COVER PLATE OVER WALL OPENINGS
- D10 EXISTING METAL TOILET PARTITIONS TO BE CAREFULLY REMOVED AND DISPOSED OF. PATCH EX PORCELAIN TILE FLOOR AND CERAMIC TILE WALLS WERE FASTENERS WERE REMOVED.
- D11 EXISTING WOOD HANDRAIL AND METAL WALL BRACKETS TO BE REMOVED AND DISPOSED OF. PATCH AND REPAIR EXISTING PLASTER SURFACE WHERE WALL BRACKETS WERE REMOVED. REPAINT REPAIRED AREAS TO MATCH ADJACENT WALL COLOUR.
- D12 TO THE EXTENT DENOTED BY THE HATCH, REMOVE AND DISPOSE OF EXISTING TERRAZZO FLOOR FINISH (ASSUME 38mm THICKNESS) AND COVE WALL BASE (ASSUME 150mm HIGH). PATCH AND REPAIR EXISTING WALL AND FLOOR SLAB TO REMAIN AND MAKE READY TO RECEIVE NEW FLOOR FINISH.
- D13 TO THE EXTENT DENOTED BY THE HATCH, REMOVE AND DISPOSE OF EXISTING PORCELAIN TILE FLOORING. GRIND EXISTING CONCRETE FLOOR SLAB TO REMOVE EXCISE MORTAR AND MAKE EXISTING SLAB READY TO RECEIVE NEW FLOOR FINISH
- D14 TO THE EXTENT DENOTED BY THE HATCH, REMOVE AND DISPOSE OF EXISTING TILE FLOORING, CONCRETE FLOOR SLAB, STEEL DECK AND OWSJ. REFER TO AND COORDINATE WITH STRUCTURAL DRAWINGS FOR FLOOR SLAB AND JOIST REMOVAL.
- D15 REMOVE AND DISPOSE OF EXISTING WOOD SHELVES. PATCH AND REPAIR WALLS AS REQUIRED TO MAKE READY TO RECEIVE NEW WALL FINISHES.
- D16 CUT EXISTING HOLLOW TILE WALL TO EXTEND DOOR OPENING. REMOVE AND DISPOSE. COORDINATE OPENING SIZE PER DOOR SCHEDULE. PROVIDE NEW LINTEL OVER OPENING. ALLOW FOR REMOVAL TO 50mm BELOW EXISTING FLOOR LEVEL.
- D17 REMOVE AND DISPOSE OF EXISTING TACKBOARD, WOOD TRIM AND CHAIR RAIL. REMOVE ADHESIVE FROM WALL AND PATCH AND REPAIR WALL TO REMAIN AS REQUIRED TO MAKE READY TO RECEIVE NEW WALL FINISH.
- D18 REMOVE TWO EXISTING TOILET PAPER DISPENSERS MOUNTED ON TOILET PARTITIONS. TURN ONE OVER TO OWNER AND INSTALL ONE ON SOUTH WALL ADJACENT TO TOILET.
- D19 EXISTING LOW WALL (APPROXIMATELY 150mm HIGH) AND RUBBER BASE TO BE REMOVED AND DISPOSED OF. PATCH AND REPAIR EXISTING WALL TO REMAIN WITH NEW PLASTER / GYPSUM BOARD FINISH AND MAKE READY TO RECEIVE NEW WALL FINISH.
- D20 EXISTING VINYL TILE TO BE REMOVED AND DISPOSED OF. GRIND EXISTING CONCRETE FLOOR TO REMOVE ADHESIVE. PATCH AND REPAIR AS REQUIRED TO MAKE READY TO RECEIVE NEW FLOOR FINISH.
- D21 REMOVE AND DISPOSE OF EXISTING WOOD BENCH. WOOD UPPER SHELF AND COAT HOOKS ON WOOD BACKING TO THE EXTENT SHOWN. PROVIDE NEW 19mm GABLE END PANELS AT CUT ENDS. PATCH AND REPAIR WALLS TO REMAIN AND PREPARE THEM TO RECEIVE A NEW WALL FINISH



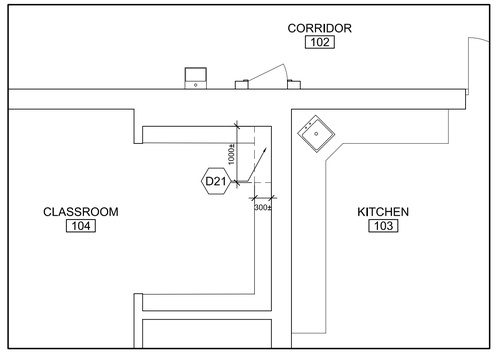
1 A1.00 PARTIAL GROUND FLOOR DEMOLITION PLAN
SCALE 1:50



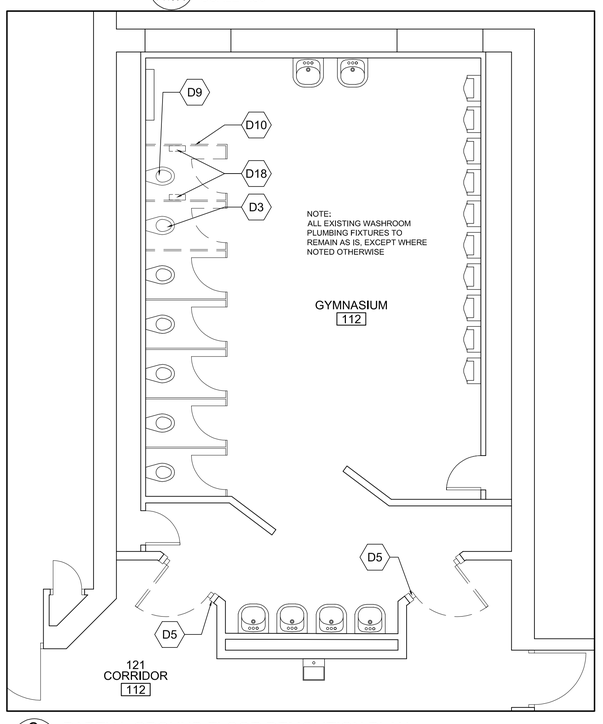
3 A1.00 PARTIAL GROUND FLOOR FLOORING REMOVAL PLAN
SCALE 1:50



GROUND FLOOR KEY PLAN



4 A1.00 PARTIAL GROUND FLOOR DEMOLITION PLAN
SCALE 1:50



2 A1.00 PARTIAL GROUND FLOOR DEMOLITION PLAN
SCALE 1:50

HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

TRUE NORTH
PROJECT NORTH

LEGEND
OWSJ OPEN WEB STEEL JOIST
W/ WITH

NO	REVISIONS	DATE
2	ISSUED FOR TENDER	2024-12-11
1	ISSUED FOR PERMIT	2024-11-15

PARKDALE ELEMENTARY SCHOOL
ACCESSIBILITY RENOVATIONS
139 PARKDALE AVE N,
HAMILTON, ONTARIO

GROUND FLOOR DEMOLITION PLANS

GRGURIC ARCHITECTS INCORPORATED
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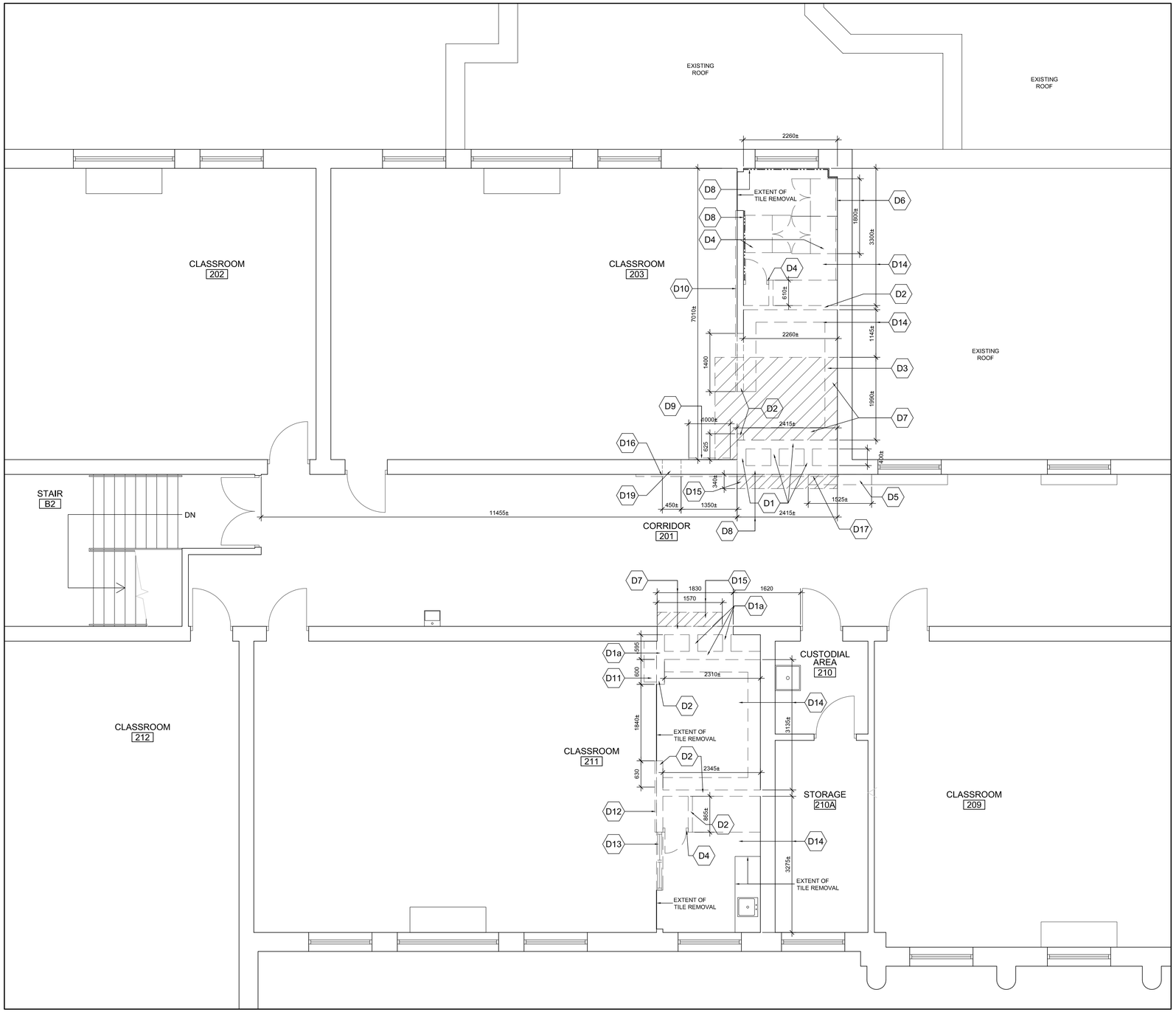
Web: www.2gai.com

SCALE: AS NOTED	PROJECT: 2024-15
DATE: JAN-2023	
DRAWN DW	DRAWING A1.00
CHECKED WP	
PRINT DATE	12/11/24

S:\Data\2024\2024-15-HWDSB-Parkdale-ES_Accessibility\05Drawings\12-Working Drawing\A1.00-DemoBGrn_Ground_Floor_Plan.dwg



1 A1.05 PARTIAL SECOND FLOOR DEMOLITION PLAN
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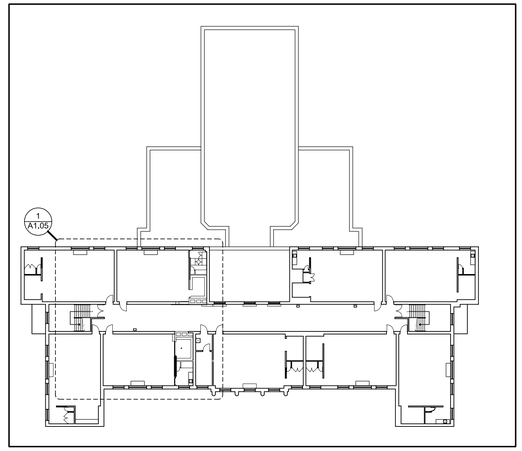

SECOND FLOOR KEY PLAN

GENERAL DEMOLITION NOTES

1. GENERAL CONTRACTOR IS TO COORDINATE AND PROVIDE ALL NEW ELEVATOR PIT FOUNDATION WORK AS SHOWN INCLUDING EXCAVATION AND SHORING REFER TO PLANS AND STRUCTURAL DRAWINGS.
2. GENERAL CONTRACTOR IS TO COORDINATE AND PROVIDE SHORING AS NEEDED TO SUIT NEW STRUCTURAL MODIFICATIONS INCLUDING CUTTING AND REMOVALS OF EX CONCRETE FLOOR AND OWSJ. REFER TO PLANS AND STRUCTURAL DRAWINGS.
3. THE EXISTING LOAD BEARING WALLS ABOVE THE CONCRETE FOUNDATION WALLS ARE CONSTRUCTED OF CLAY HOLLOW TILE BLOCKS OF VARYING WIDTHS, AND ARE REFERRED TO ON THESE DRAWINGS AS HOLLOW TILE.

DEMOLITION NOTES

- D1 EXISTING HOLLOW TILE WALL TO BE REMOVED AND DISPOSED OF TO EXTENT SHOWN. PATCH AND REPAIR ADJACENT WALLS TO REMAIN AS REQUIRED AND MAKE READY TO RECEIVE NEW FINISHES.
- D1a EXISTING HOLLOW TILE WALL TO BE REMOVED AND DISPOSED OF TO EXTENT SHOWN. PATCH AND REPAIR ADJACENT WALLS TO REMAIN AS REQUIRED AND MAKE READY TO RECEIVE NEW FINISHES. REMOVE WALL TO 3200mm AFF AND 76mm BELOW FINISHED FLOOR.
- D2 EXISTING WALL AND PLASTER FINISH TO BE REMOVED AND DISPOSED OF TO UNDERSIDE OF EXISTING CEILING (3755mm ±)
- D3 TO THE EXTENT DENOTED BY THE HATCH, REMOVE AND DISPOSE OF EXISTING VT FLOORING, CONCRETE FLOOR SLAB, STEEL DECK AND OWSJ. REFER TO AND COORDINATE WITH STRUCTURAL DRAWINGS FOR FLOOR SLAB AND JOIST REMOVAL.
- D4 EXISTING MILLWORK CABINETS TO BE REMOVED AND DISPOSED OF. PATCH AND REPAIR ANY WALLS TO REMAIN AND MAKE READY TO RECEIVE NEW WALL FINISH.
- D5 EXISTING GYPSUM BOARD ENCLOSURE AT FLOOR LEVEL TO BE REMOVED AND DISPOSED OF. REFER TO MECHANICAL FOR RELATED HEAT PIPE MODIFICATIONS.
- D6 EXISTING WALL MOUNTED TACKBOARD AND WOOD FRAME TO BE REMOVED AND DISPOSED OF. PATCH AND REPAIR EXISTING WALL TO REMAIN AND MAKE READY TO RECEIVE NEW WALL FINISH.
- D7 EXISTING BENCH SEATS, CHAIR RAIL, SHELF AND UPPER CABINETS TO BE REMOVED AND DISPOSED OF. PATCH AND REPAIR EXISTING WALL TO REMAIN AND MAKE READY TO RECEIVE NEW WALL FINISH
- D8 DASHED LINE DENOTES EXTENT OF EXISTING WOOD CHAIR RAIL TO BE REMOVED AND DISPOSED OF. PATCH AND REPAIR EXISTING WALL TO REMAIN AND MAKE READY TO RECEIVE NEW WALL FINISH
- D9 CAREFULLY REMOVE EXISTING FRAME END PIECE AND SAVE FOR REUSE. REMOVE AND DISPOSE OF THE EXISTING LOWER TACK BOARD IN ITS ENTIRETY. REMOVE AND DISPOSE OF THE EXISTING FRAMING BETWEEN THE LOWER TACK BOARD AND CHALKBOARD. CUTBACK THE UPPER TACK BOARD TO THE EXTENT SHOWN. EDGE OF UPPER TACK BOARD TO BE INLINE WITH EDGE OF CHALKBOARD BELOW. PATCH AND REPAIR WALL BEHIND REMOVED TACK BOARD AS REQUIRED AND MAKE READY TO RECEIVE NEW WALL FINISH.
- D10 REMOVE AND DISPOSE OF EXISTING UPPER TACK BOARD, LOWER CHALKBOARD, WOOD FRAME AND CHALK TROUGH.
- D11 REMOVE EXISTING WOOD SHELF AND STORE IN A SAFE PLACE FOR REUSE.
- D12 REMOVE AND DISPOSE OF EXISTING TACK BOARD
- D13 EXISTING GLASS SCREEN W/ WOOD FRAME TO BE REMOVED AND DISPOSED OF.
- D14 REMOVE AND DISPOSE OF EXISTING VT FLOORING. GRIND EXISTING FLOOR TO REMOVE ANY ADHESIVE. PATCH AND REPAIR EXISTING CONCRETE FLOOR AS REQUIRED AND MAKE READY TO RECEIVE NEW FLOOR FINISH.
- D15 TO THE EXTENT DENOTED BY THE HATCH, REMOVE AND DISPOSE OF EXISTING TERRAZZO FLOOR FINISH (ASSUME 38mm THICKNESS) AND COVE WALL BASE (ASSUME 150mm HIGH). PATCH AND REPAIR EXISTING WALL AND FLOOR SLAB TO REMAIN AND MAKE READY TO RECEIVE NEW FLOOR FINISH.
- D16 REMOVE AND DISPOSE OF EXISTING TACKBOARD. REMOVE ADHESIVE FROM WALL, PATCH AND REPAIR WALL AS REQUIRED. REPAINT AREA (APPROX 2500mm X 1250mm)
- D17 REMOVE AND DISPOSE OF EXISTING MAP RAIL.
- D18 CUT NEW OPENING IN EXISTING HOLLOW TILE WALL. REMOVE AND DISPOSE. HEIGHT OF OPENING TO BE 2685mm. PROVIDE NEW LINTEL OVER OPENING. ALLOW FOR REMOVAL TO 100mm BELOW EXISTING FLOOR LEVEL.
- D19 CUT NEW OPENING IN EXISTING HOLLOW TILE WALL. REMOVE AND DISPOSE. HEIGHT OF OPENING TO BE 450mm. COORDINATE WITH MECHANICAL DRAWINGS FOR SIZE OF OPENING. OPENING TO BE TIGHT TO THE UNDERSIDE OF THE EXISTING PLASTER CEILING (APPROX 3325mm TO U/S OF OPENING) PROVIDE NEW LINTEL OVER OPENING. REFER TO STRUCTURAL DRAWINGS FOR LINTEL SIZES.

HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

TRUE NORTH
PROJECT NORTH

LEGEND

AFF	ABOVE FINISHED FLOOR
OWSJ	OPEN WEB STEEL JOIST
VT	VINYL TILE
W/	WITH

NO	REVISIONS	DATE
2	ISSUED FOR TENDER	2024-12-11
1	ISSUED FOR PERMIT	2024-11-15

PARKDALE ELEMENTARY SCHOOL
ACCESSIBILITY RENOVATIONS
139 PARKDALE AVE N,
HAMILTON, ONTARIO

SECOND FLOOR DEMOLITION PLANS

GRGURIC ARCHITECTS INCORPORATED
28 KING STREET EAST, UNIT B
STONEY CREEK, ONTARIO, L8G 1J8
Tel. 905-664-8735 Fax. 905-664-8737
Web: www.2gai.com

SCALE: AS NOTED	PROJECT: 2024-15
DATE: JAN-2023	
DRAWN DW	DRAWING A1.05
CHECKED WP	
PRINT DATE	01/24/25

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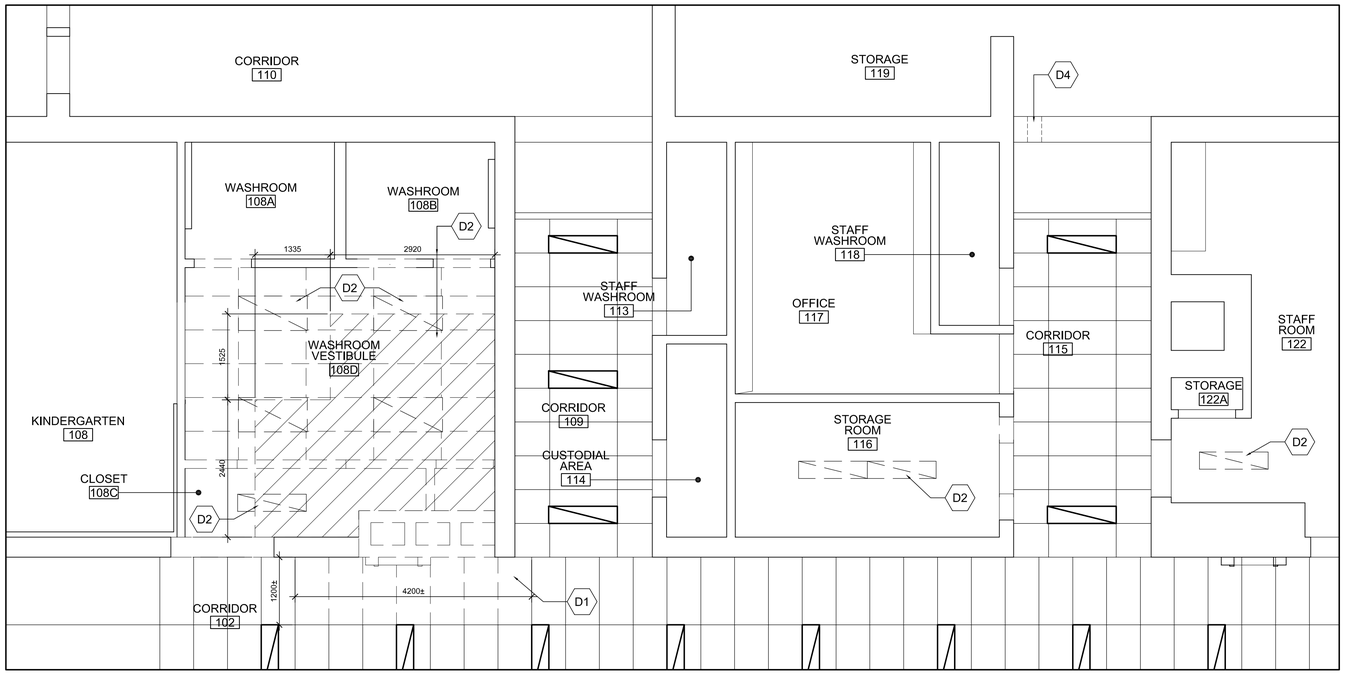
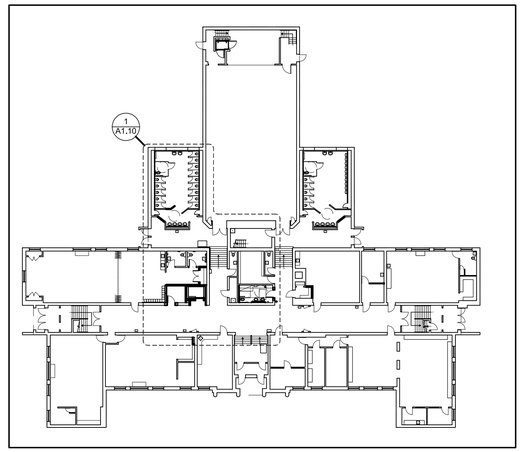


1 A1.10 PARTIAL GROUND FLOOR DEMOLITION REFLECTED CEILING PLAN
SCALE 1:50

GRAPHIC RCP LEGEND

NOTE:
- REFER TO ELECTRICAL DRAWINGS FOR ACTUAL FIXTURE TYPES
- MECHANICAL AND ELECTRICAL ITEMS SHOWN, I.E. DUCTWORK, PIPING, LIGHT FIXTURES, ETC. **ARE FOR REFERENCE ONLY AND ARE NOT INCLUSIVE**, REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ALL RELATED WORK.

- 600×1200 LIGHT FIXTURE
- 300×1200 LIGHT FIXTURE
- RECESSED DOWN LIGHT FIXTURE
- WALL MOUNT LIGHT FIXTURE
- SUSPENDED LIGHT FIXTURE
- DIFFUSER
- RETURN AIR GRILLE
- EXHAUST FAN
- NEW GYPSUM BOARD CEILING OR BULKHEAD
- 600x1200 ACOUSTIC CEILING TILE
- 600x1200 ACOUSTIC CEILING TILE



GROUND FLOOR KEY PLAN

DEMOLITION NOTES

D1 EXISTING ACOUSTIC CEILING TILE AND GRID TO BE REMOVED AND DISPOSED OF, PROVIDE TEMPORARY SUPPORT OF THE EXISTING LIGHTS TO REMAIN.

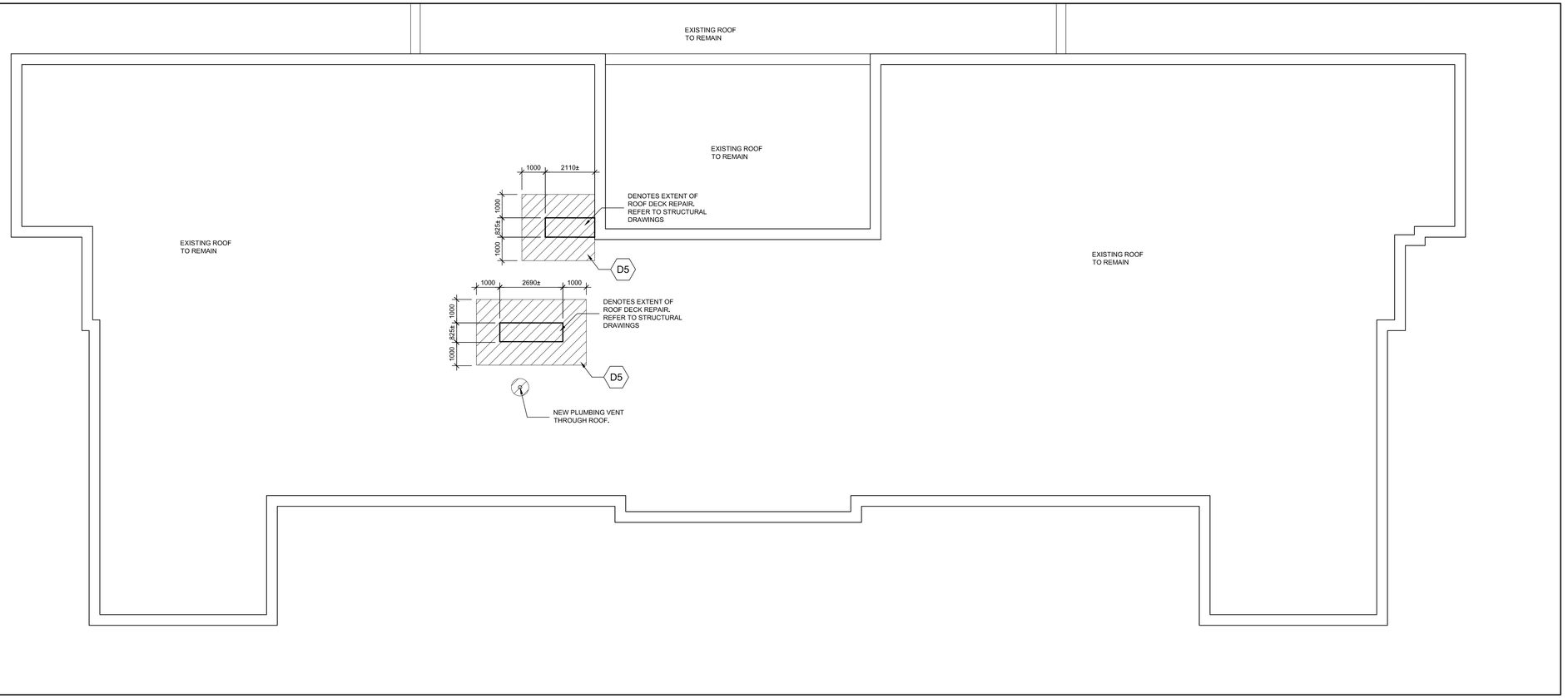
D2 EXISTING LIGHTS TO BE REMOVED AND DISPOSED OF, REFER TO AND COORDINATE WITH ELECTRICAL DRAWINGS. PATCH AND REPAIR EXISTING PLASTER CEILING AS REQUIRED AND MAKE READY TO RECEIVE NEW FINISHES.

D3 HATCH AREA DENOTES EXTENTS OF EXISTING PLASTER AND LATH CEILING TO BE REMOVED AND DISPOSED OF.

D4 PROVIDE OPENING IN WALL FOR MECHANICAL WALL BOX, COORDINATE WITH MECHANICAL DRAWINGS FOR THE SIZE OF OPENING REQUIRE. COORDINATE LOCATION OF OPENING WITH EXISTING WINDOW OPENING AND EXISTING LOW ROOF. OPENING TO BE POSITIONED 600mm (MIN) ABOVE LOW ROOF LEVEL

D5 HATCHED AREA DENOTES THE EXTENT OF THE EXISTING ROOF TO BE REMOVE. REMOVAL INCLUDES BUT IS MOT LIMITED TO THE ROOFING MEMBRANES, PROTECTION BOARD, WOOD CANTS AND INSULATION. PROVIDE NEW INFILL ROOF REPAIR AS PER DETAIL 6/A3.05

D6 TYPICAL AT ALL VENT LOCATIONS. REMOVE EXISTING ROOF MATERIAL (ROOFING MEMBRANE, INSULATION, ETC) TO AN AREA 300mm PAST THE SIZE OF THE VENT. PROVIDE NEW FLANGE AND ROOFING MATERIAL AROUND NEW VENT. REFER TO DETAIL 5/A3.05



2 A1.10 ROOF PLAN
SCALE 1:100

HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

TRUE NORTH
PROJECT NORTH

NO	REVISIONS	DATE
2	ISSUED FOR TENDER	2024-12-11
1	ISSUED FOR PERMIT	2024-11-15

PARKDALE ELEMENTARY SCHOOL
ACCESSIBILITY RENOVATIONS
139 PARKDALE AVE N,
HAMILTON, ONTARIO

GROUND FLOOR DEMOLITION RCP AND ROOF PLAN

GRGURIC ARCHITECTS INCORPORATED
28 KING STREET EAST, UNIT B
STONEY CREEK, ONTARIO, L8G 1J8
Tel. 905-664-8735 Fax. 905-664-8737
Web: www.2gai.com

SCALE: AS NOTED	PROJECT: 2024-15
DATE: JAN-2023	
DRAWN DW	DRAWING A1.10
CHECKED WP	
PRINT DATE	12/11/24

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GRAPHIC RCP LEGEND

NOTE:
- REFER TO ELECTRICAL DRAWINGS FOR ACTUAL FIXTURE TYPES
- MECHANICAL AND ELECTRICAL ITEMS SHOWN, I.E. DUCTWORK, PIPING, LIGHT FIXTURES, ETC. **ARE FOR REFERENCE ONLY AND ARE NOT INCLUSIVE.** REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ALL RELATED WORK.

600×1200 LIGHT FIXTURE

300×1200 LIGHT FIXTURE

DOWN LIGHT FIXTURE

WALL MOUNT LIGHT FIXTURE

SUSPENDED LIGHT FIXTURE

DIFFUSER

RETURN AIR GRILLE

EXHAUST FAN

NEW GYPSUM BOARD CEILING OR BULKHEAD

600x1200 ACOUSTIC CEILING TILE

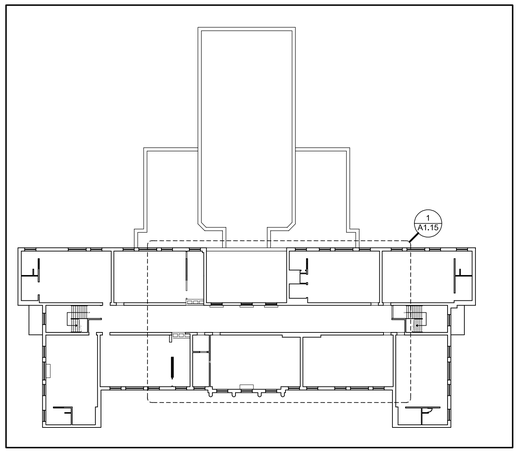
600x1200 ACOUSTIC CEILING TILE

DEMOLITION NOTES

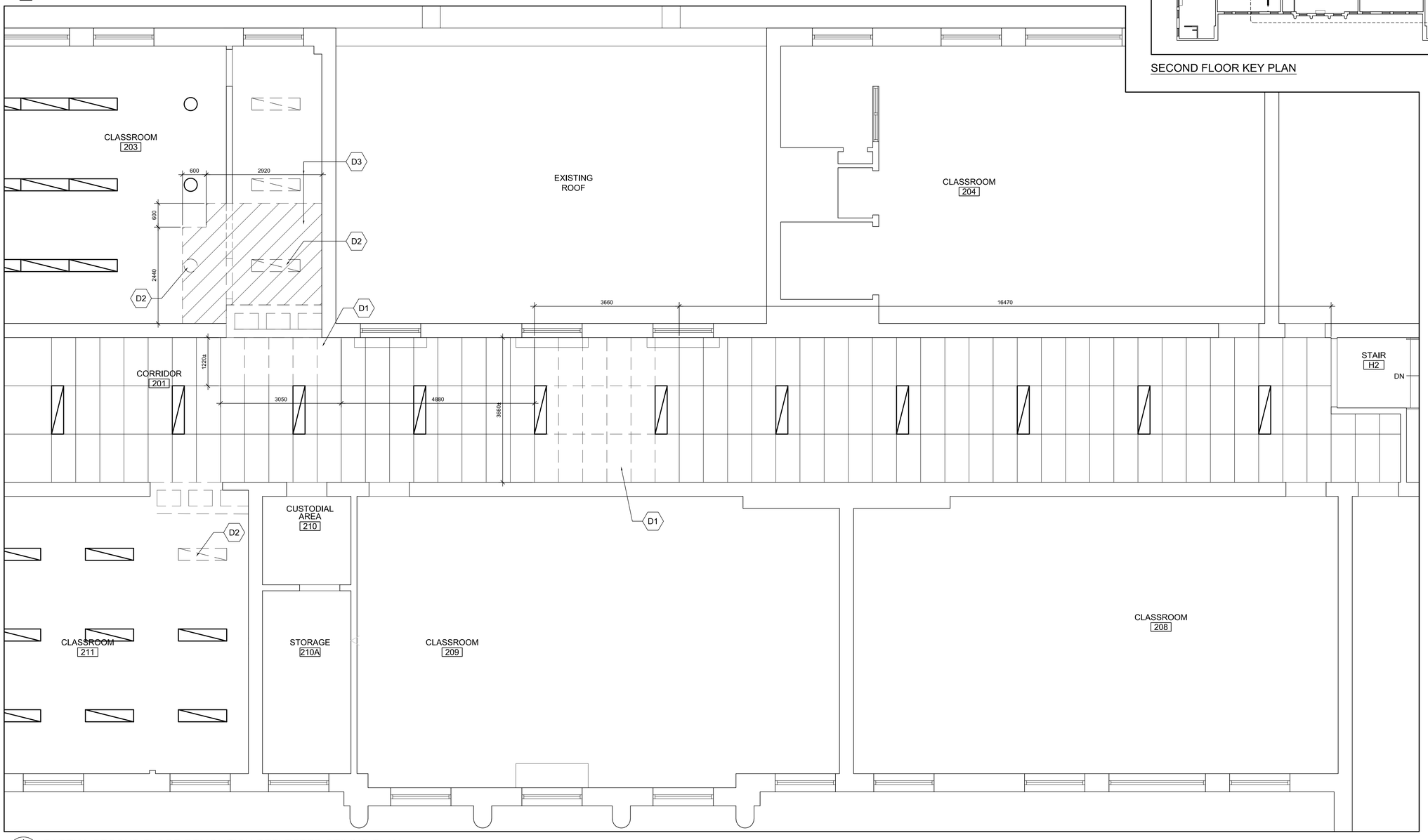
D1 EXISTING ACOUSTIC CEILING TILE AND GRID TO BE REMOVED AND DISPOSED OF. PROVIDE TEMPORARY SUPPORT OF THE EXISTING LIGHTS TO REMAIN.

D2 EXISTING LIGHTS TO BE REMOVED AND DISPOSED OF. REFER TO AND COORDINATE WITH ELECTRICAL DRAWINGS. PATCH AND REPAIR EXISTING PLASTER CEILING AS REQUIRED AND MAKE READY TO RECEIVE NEW FINISHES.

D3 HATCH AREA DENOTES EXTENTS OF EXISTING PLASTER AND LATH CEILING TO BE REMOVED AND DISPOSED OF.



SECOND FLOOR KEY PLAN



1 / A1.15 PARTIAL SECOND FLOOR DEMOLITION REFLECTED CEILING PLAN
SCALE 1:50

HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

TRUE NORTH
PROJECT NORTH

NO	REVISIONS	DATE
2	ISSUED FOR TENDER	2024-12-11
1	ISSUED FOR PERMIT	2024-11-15

PARKDALE ELEMENTARY SCHOOL
ACCESSIBILITY RENOVATIONS
139 PARKDALE AVE N,
HAMILTON, ONTARIO

SECOND FLOOR DEMOLITION REFLECTED CEILING PLAN

GRGURIC ARCHITECTS INCORPORATED
28 KING STREET EAST, UNIT B
STONEY CREEK, ONTARIO, L8G 1J8
Tel. 905-664-8735 Fax. 905-664-8737
Web: www.2gai.com

SCALE: AS NOTED	PROJECT: 2024-15
DATE: JAN-2023	
DRAWN DW	DRAWING A1.15
CHECKED WP	
PRINT DATE	12/11/24

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GENERAL CONSTRUCTION NOTES

1) PROVIDE CEMENTITIOUS FIRE PROOFING TO EXPOSED SURFACES OF STEEL IN FIRE RATED ASSEMBLIES WHEN NOT COVERED BY GYPSUM BOARD CONSTRUCTION. FIRE PROOFING TO BE APPLIED IN THICK REQUIRED TO ACHIEVE THE REQUIRED FIRE RATING. REFER TO A5.00 AND A5.10 FOR FIRE RATINGS.

2) THE EXISTING LOAD BEARING WALLS ABOVE THE CONCRETE FOUNDATION WALLS ARE CONSTRUCTED OF CLAY HOLLOW TILE BLOCKS OF VARYING WIDTHS, AND ARE REFERRED TO ON THESE DRAWINGS AS HOLLOW TILE.

INTERIOR WALL PARTITION TYPES

NOTES
- REFER TO STRUCTURAL FOR MASONRY REINFORCING
- BULL-NOSE BLOCKS AT ALL EXPOSED CORNERS

NO.	DESCRIPTION	REMARKS
P1	- 190mm CONC. BLOCK	• EXTEND TO U/S OF DECK ABOVE • BULL-NOSE BLOCKS AT ALL EXPOSED CORNERS • 1 HR FIRE RATED (OBC SB-2 TABLE 2.1.1)
P2	- 190mm CONC. BLOCK - 22mm FURRING HAT CHANNEL - 16mm GYPSUM BOARD	• EXTEND TO U/S OF DECK ABOVE • BULL-NOSE BLOCKS AT ALL EXPOSED CORNERS • 1 HR FIRE RATED (OBC SB-2 TABLE 2.1.1)
P2a		• EXTEND TO 2300mm AFF • PROVIDE 13mm TILE BACKER BOARD IN LIEU OF GYPSUM • ON EX WALL IN LIEU OF NEW CONCRETE BLOCK
P3 P3a P3b P3c P3d	**GYPSUM BOARD PARTITION** - 16mm GYPSUM BOARD - METAL STUDS AT 400mm O/C - 16mm GYPSUM BOARD	P3 • EXTEND PARTITION TO U/S OF DECK • 150mm METAL STUDS AT 400mm O/C P3a • 1 HR FIRE RATED (ULC W407) • EXTEND PARTITION TO U/S OF DECK • 150mm METAL STUDS AT 400mm O/C • 16mm TYPE 'X' GYPSUM BOARD P3b • EXTEND PARTITION TO U/S OF DECK AND FILL ALL VOIDS WITH SOUND BATTS • SOUND SEAL AT ALL JOINTS. • 150mm METAL STUDS AT 400mm O/C P3c • EXTEND PARTITION TO U/S OF DECK. • 92mm METAL STUDS AT 400mm O/C. P3d • EXTEND PARTITION TO U/S OF DECK. • PROVIDE 13mm TILE BACKER BOARD TO 2100mm AFF AND 13mm GYPSUM BOARD ABOVE. BOTH SIDES • 92mm METAL STUDS AT 400mm O/C.
P4 P4a	**GYPSUM BOARD PARTITION** - 13mm TILE BACKER BOARD - 92mm METAL STUDS AT 400mm O/C	P4 • EXTEND TO U/S OF DECK ABOVE P4a • EXTEND TO U/S OF DECK ABOVE • 16mm GYPSUM BOARD IN LIEU OF TILE BACKER
P5	**GYPSUM BOARD PARTITION** - 13mm GYPSUM BOARD - 92mm METAL STUDS AT 400mm O/C - 38mm HORIZONTAL FURRING CHANNELS AT 400mm O/C -13mm TILE BACKER BOARD	• EXTEND TO T/O EXISTING OPENING (APPROX 2100mm AFF) • SITE VERIFY AND ADJUST FURRING / SHIM AS NEEDED TO MATCH WIDTH OF EXISTING WALL AND FINISHES.

CONSTRUCTION NOTES

C1 PATCH AND REPAIR EX MASONRY WALL AND MAKE READY TO RECEIVE NEW FINISH.

C2 PROVIDE NEW TERRAZZO FLOOR FINISH (APPROX 38mm THICK) AND COVE BASE (APPROX 150mm HIGH) TO MATCH THE EXISTING FLOOR FINISH.

C3 PROVIDE NEW STAIR LIFT ON EXISTING CONCRETE STAIRS. CHAIR LIFT GUIDE RAILS ARE TO BE SUPPORTED ON TOWER POSTS MOUNTED TO EXISTING STAIR TREADS. TOWER POSTS TO COME C/W 38mm Ø STAINLESS STEEL HANDRAIL.

C4 PROVIDE NEW HEADRAIL BRACED METAL TOILET PARTITION TO MATCH EXISTING. SUPPLY NEW PILASTER ON FRONT OF END STALL TO SUIT NEW BARRIER FREE STALL CONFIGURATION. PATCH AND REPAIR HOLES IN EXISTING TILES (MIN 8 PER STALL)

C5 INFILL EXISTING DOOR OPENING (APPROX 2100mm) W/ PARTITION TYPE SHOWN. PROVIDE NEW MATCHING CWT FINISH ON WASHROOM SIDE W/ METAL EDGE STRIP TO MATCH EX (SCHLUTER JOLLY STAINLESS STEEL). HEIGHT OF CWT TO MATCH EXISTING (APPROX 2100mm AFF). PROVIDE NEW 150mm PT BASE ON BOTH SIDES OF THE WALL. CORRIDOR SIDE OF WALL TO BE PAINTED TO MATCH EXISTING.

C6 ON NEW PARTITION PROVIDE NEW CWT FINISH W/ METAL EDGE STRIP TO MATCH EX (SCHLUTER JOLLY STAINLESS STEEL). HEIGHT OF CWT TO MATCH EXISTING (APPROX 2100mm AFF). PROVIDE NEW 150mm PT BASE ON BOTH SIDES OF THE WALL. PAINT WALL ABOVE CWT.

C7 NOT USED

C8 PROVIDE 290mm CONCRETE BLOCK ON BOTH SIDES OF NEW DOOR OPENING. GROUT SOLID. BLOCK TO EXTEND THE HEIGHT OF THE DOOR OPENING. COORDINATE HEIGHT OF OPENING WITH DOOR SCHEDULE. APPLY PLASTER / COMPOUND OVER EXPOSED SURFACES OF NEW MASONRY ADJACENT TO EX PLASTER. BLEND SMOOTH.

C9 PROVIDE 240mm CONCRETE BLOCK ON BOTH SIDES OF NEW DOOR OPENING. BLOCK TO EXTEND THE HEIGHT OF THE DOOR OPENING. COORDINATE HEIGHT OF OPENING WITH DOOR SCHEDULE. APPLY PLASTER / COMPOUND OVER EXPOSED SURFACES OF NEW MASONRY ADJACENT TO EX PLASTER. BLEND SMOOTH.

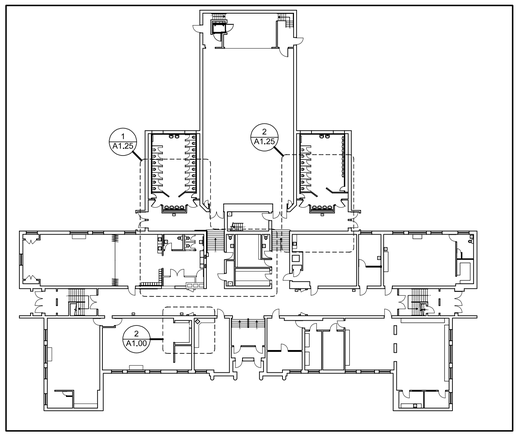
C10 AREA OF HATCH DENOTES EXTENT OF NEW PORCELAIN TILE FLOOR FINISH

C11 PATCH AND REPAIR EXISTING TERRAZZO FLOOR AS REQUIRED AT LOCATION OF REMOVED WALL. ALLOW FOR LOCAL SURFACE CLEANING AND POLISHING.

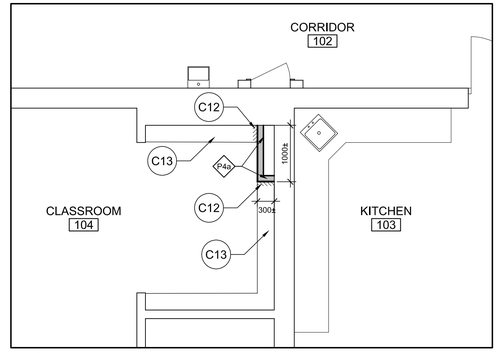
C12 PROVIDE 19mm THICK MELAMINE END GABLES AT CUT ENDS OF EXISTING LOWER SEATING AND UPPER SHELVES. FIELD VERIFY SIZE OF END GABLE REQUIRED.

C13 TEMPORARILY DISMANTLE EXISTING WOOD BENCH TO ALLOW FOR INSTALLATION OF CHASE WALL. REASSEMBLE BENCH WHEN WORK IS COMPLETED.

C14 PROVIDE NEW 1200mm X 2400mm WALL MOUNTED TACK BOARD AT 1000mm AFF. FINAL LOCATION TO BE DETERMINED ON SITE WITH OWNER

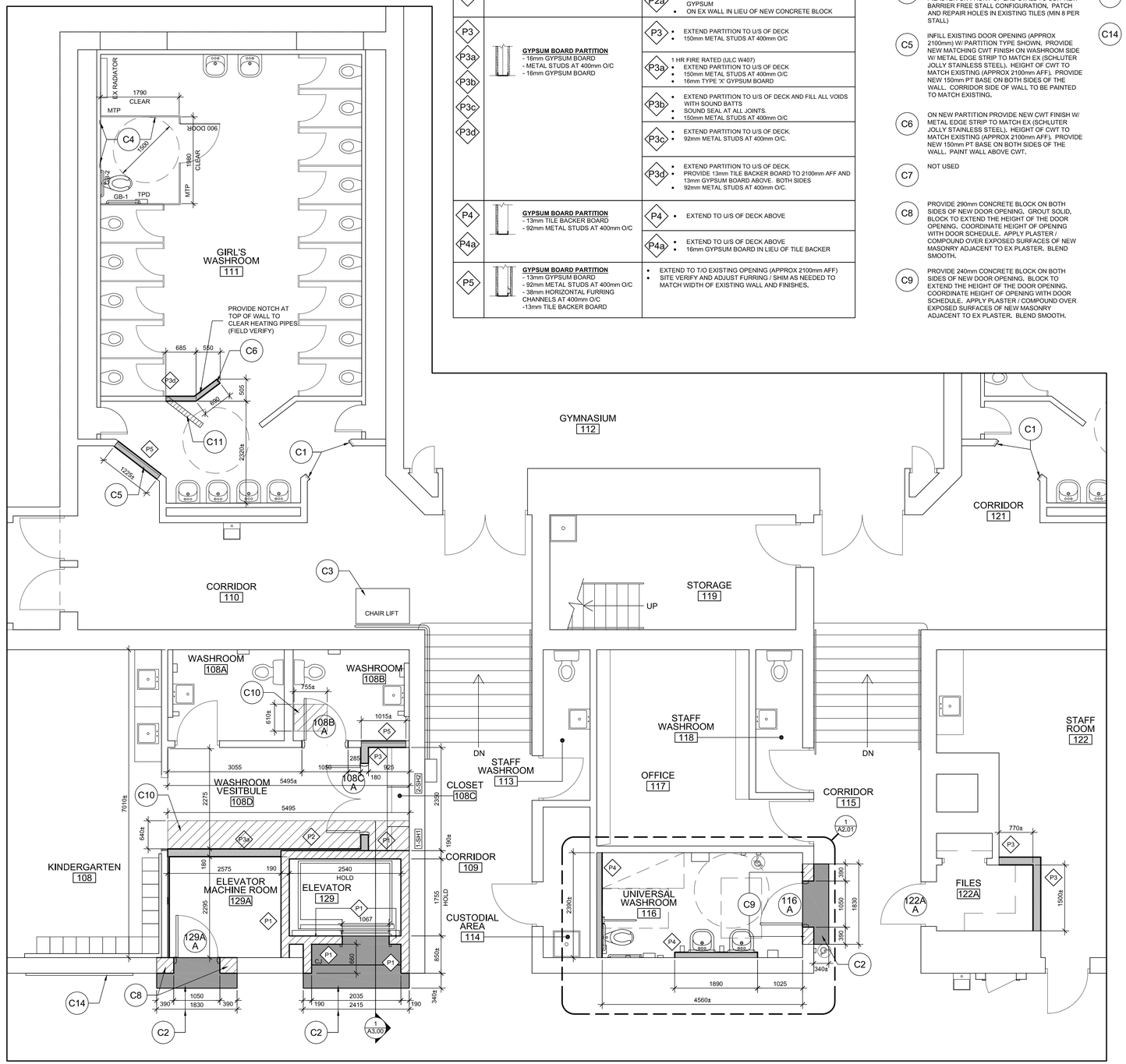


GROUND FLOOR KEY PLAN



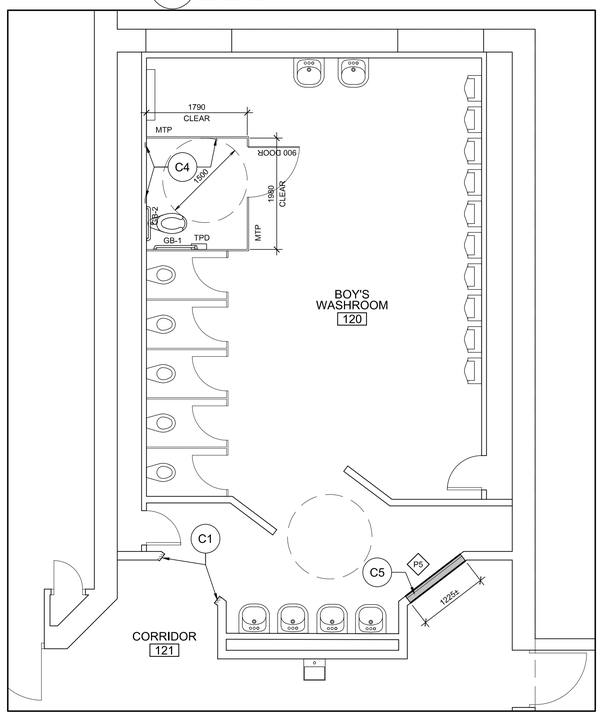
LEGEND

AFF	ABOVE FINISHED FLOOR
APPROX	APPROXIMATELY
C/J	CONTROL JOINT
CONC	CONCRETE
CWT	CERAMIC WALL TILE
C/W	COMPLETE WITH
EX	EXISTING
GB-x	GRAB BAR
HCPB	HANDICAP PUSH BUTTON
HR	HOUR
MTP	METAL TOILET PARTITION
ND	NAPKIN DISPOSAL
OWSJ	OPEN WEB STEEL JOIST
O/C	ON CENTER
PT	PORCELAIN TILE
TPD	TOILET PAPER DISPENSER
U/S	UNDERSIDE
W/	WITH



1 A1.25 PARTIAL GROUND FLOOR PLAN
SCALE 1:50

4 A1.25 PARTIAL GROUND FLOOR PLAN
SCALE 1:50



2 A1.25 PARTIAL GROUND FLOOR PLAN
SCALE 1:50

2	ISSUED FOR TENDER	2024-12-11
1	ISSUED FOR PERMIT	2024-11-15
NO	REVISIONS	DATE

HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

TRUE NORTH
PROJECT NORTH

PARKDALE ELEMENTARY SCHOOL
ACCESSIBILITY RENOVATIONS
139 PARKDALE AVE N,
HAMILTON, ONTARIO

GROUND FLOOR PLANS

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SCALE: AS NOTED	PROJECT: 2024-15
DATE: JAN-2023	
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CHECKED WP	
PRINT DATE	12/11/24

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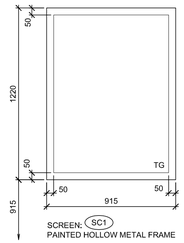
INTERIOR WALL PARTITION TYPES

NOTES
- REFER TO STRUCTURAL FOR MASONRY REINFORCING
- BULL-NOSE BLOCKS AT ALL EXPOSED CORNERS

NO.	DESCRIPTION	REMARKS
P1	- 190mm CONC. BLOCK	• EXTEND TO U/S OF STRUCTURE ABOVE • BULL-NOSE BLOCKS AT ALL EXPOSED CORNERS
P2	- 190mm CONC. BLOCK - 22mm FURRING HAT CHANNEL - 16mm GYPSUM BOARD	• EXTEND TO U/S OF STRUCTURE ABOVE
P3 P3a P3b P3c	**GYPSUM BOARD PARTITION** - 16mm GYPSUM BOARD - 150mm METAL STUDS AT 400mm O/C - 16mm GYPSUM BOARD	
P3a		• 1 HR FIRE RATED (U/C W407) • EXTEND PARTITION TO U/S OF DECK • 16mm TYPE 'X' GYPSUM BOARD
P3b		• EXTEND PARTITION TO U/S OF DECK AND FILL ALL VOIDS WITH SOUND BATTS • SOUND SEAL AT ALL JOINTS.
P3C		• EXTEND PARTITION TO 2440mm AFF

NO.	DESCRIPTION	REMARKS
P4	**GYPSUM BOARD PARTITION** - 16mm GYPSUM BOARD - 200mm METAL STUDS AT 400mm O/C. FILL ALL VOIDS WITH SOUND BATTS - 16mm GYPSUM BOARD	• EXTEND TO U/S OF DECK
P5 P5a	**GYPSUM BOARD PARTITION** - 13mm TILE BACKER BOARD - METAL STUDS AT 400mm O/C	
P5		• EXTEND TO U/S OF DECK ABOVE • 92mm METAL STUDS
P5a		• EXTEND TO U/S OF DECK ABOVE • 150mm METAL STUDS

SCREEN SCHEDULE



GENERAL CONSTRUCTION NOTES

1) PROVIDE CEMENTITIOUS FIRE PROOFING TO EXPOSED SURFACES OF STEEL IN FIRE RATED ASSEMBLIES WHEN NOT COVERED BY GYPSUM BOARD CONSTRUCTION. FIRE PROOFING TO BE APPLIED IN THICK REQUIRED TO ACHIEVE THE REQUIRED FIRE RATING. REFER TO A5.00 AND A5.10 FOR FIRE RATINGS.

CONSTRUCTION NOTES

C1 PATCH AND REPAIR EX MASONRY WALL AND MAKE READY TO RECEIVE NEW FINISH.

C2 PROVIDE NEW TERRAZZO FLOOR FINISH (APPROX 38mm THICK) AND COVE BASE (APPROX 150mm) TO MATCH THE EXISTING FLOOR FINISH. TERRAZZO FLOORING TO EXTEND UNDER THE NEW DOOR. PROVIDE TRANSITION STRIP BETWEEN FLOORING.

C3 PROVIDE NEW CONCRETE FLOOR ON METAL DECK (REFER TO STRUCTURAL DRAWINGS). PROVIDE NEW TERRAZZO FLOOR FINISH (APPROX 38mm THICK) AND COVE BASE (APPROX 150mm) TO MATCH THE EXISTING FLOOR FINISH.

C4 PROVIDE NEW CONCRETE FLOOR ON METAL DECK (REFER TO STRUCTURAL DRAWINGS). PROVIDE NEW TERRAZZO FLOOR FINISH (APPROX 38mm THICK) AND COVE BASE (APPROX 150mm) TO MATCH THE EXISTING FLOOR FINISH.

C5 REINSTALL EX EDGE TRIM ALONG EDGE OF EX CHALKBOARD. MODIFY THE EX TOP AND BOTTOM TRIM PIECES AS REQUIRED TO SUIT THE PROFILE OF THE EDGE TRIM. CUT BACK THE MID TRIM AS REQUIRED.

C6 PROVIDE 150mm HIGH PT WALL BASE. WIDTH OF WALL BASE TO SUIT WIDTH OF WALL REMOVED (APPROX. 150mm)

C7 EX SHELF UNIT. PROVIDE WOOD BLOCKING BEHIND UNIT AND SECURE UNIT TO WALL.

C8 PROVIDE 190mm CONCRETE BLOCK ON BOTH SIDES OF NEW DOOR OPENING. GROUT SOLID. BLOCK TO EXTEND THE HEIGHT OF THE DOOR OPENING. COORDINATE HEIGHT OF OPENING WITH DOOR SCHEDULE. APPLY PLASTER / COMPOUND OVER EXPOSED SURFACES OF NEW MASONRY ADJACENT TO EX PLASTER. BLEND SMOOTH.

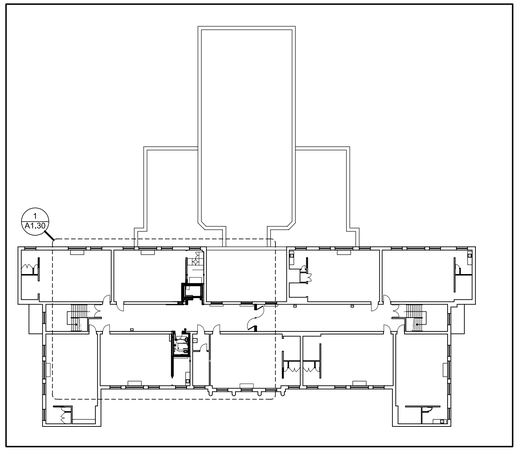
C9 PROVIDE FLOOR MOUNTED ELECTROMAGNETIC DOOR HOLDER. DEVICE TO BE PROVIDED AS PART OF CASH ALLOWANCE.

C10 LAMINATE 16mm GYPSUM BOARD TO EACH SIDE OF CONCRETE BLOCK WALL. FACE OF GYPSUM BOARD TO ALIGN W/ EX PLASTER FINISH ABOVE

C11 PROVIDE NEW WALL MOUNTED TACK BOARD AT 1000mm AFF. FINAL LOCATION TO BE DETERMINED ON SITE WITH OWNER. REFER TO FLOOR PLAN FOR SIZES

C12 INFILL EX OPENING IN HOLLOW TILE WALL W/ 290mm CONCRETE BLOCK (APPROX 600mm X 600mm). APPLY PLASTER / COMPOUND OVER EXPOSED SURFACES OF NEW MASONRY ADJACENT TO EX PLASTER. BLEND SMOOTH.

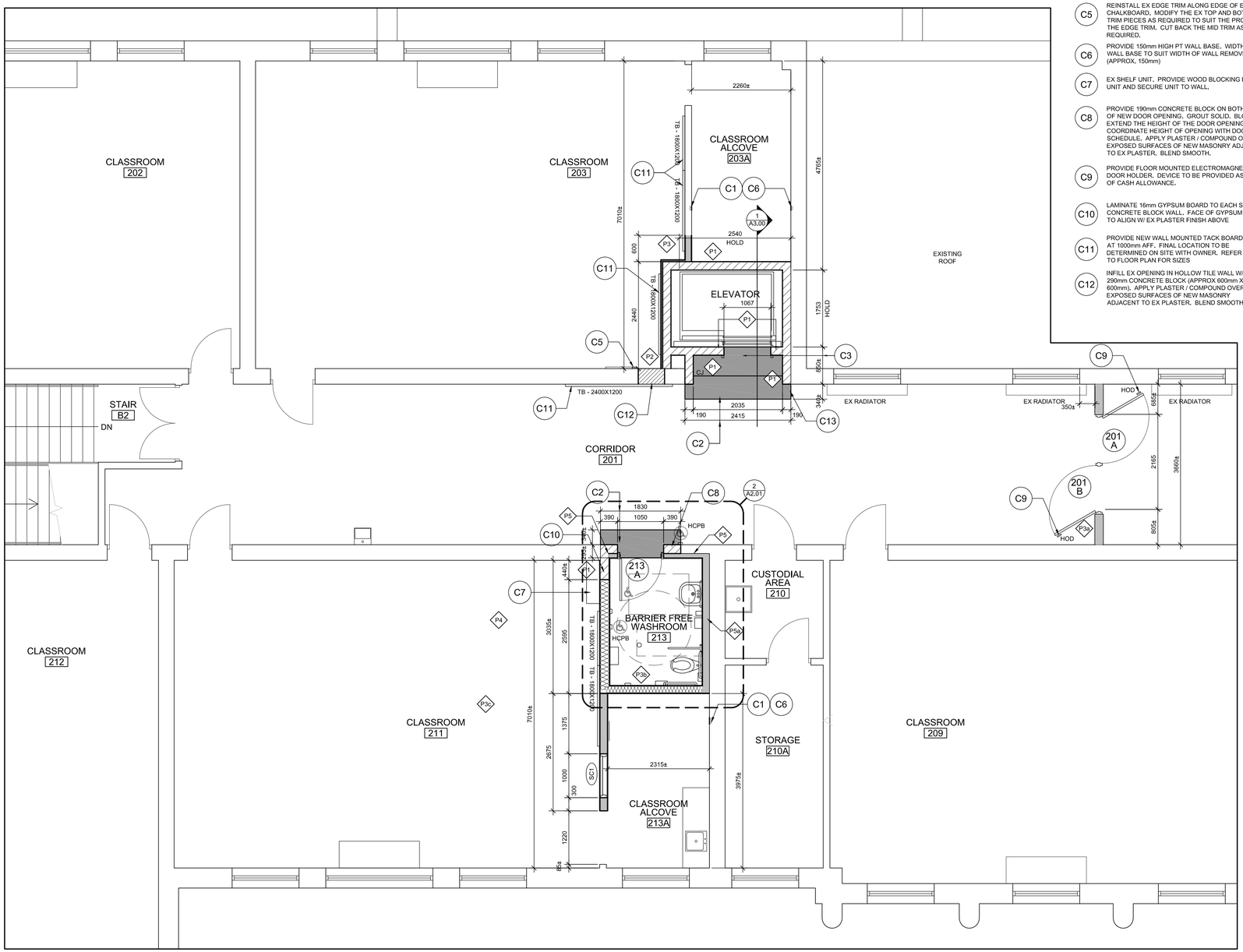
C13 ALLOW FOR FILLING W/ NON-SHRINK GROUT 2 - 38mm DIA HOLES IN FLOOR AT LOCATIONS WHERE THE EXISTING PIPES WERE REMOVED. DEPTH OF GROUT TO BE 50mm MIN (1 HR FIRE RATED UL C-AJ-0062). PROVIDE A SMOOTH FINISH AND MAKE READY TO RECEIVE NEW TERRAZZO FLOOR FINISH.



SECOND FLOOR KEY PLAN

LEGEND

AFF	ABOVE FINISHED FLOOR
APPROX	APPROXIMATELY
CJ	CONTROL JOINT
CONC	CONCRETE
CWT	CERAMIC WALL TILE
C/W	COMPLETE WITH
EX	EXISTING
FIN	FINISHED
GB-x	GRAB BAR
HCPB	HANDICAP PUSH BUTTON
HOD	HOLD OPEN DEVICE
HR	HOUR
MAX	MAXIMUM
MTP	METAL TOILET PARTITION
ND	NAPKIN DISPOSAL
OWSJ	OPEN WEB STEEL JOIST
O/C	ON CENTER
PT	PORCELAIN TILE
TB	TACK BOARD
TPD	TOILET PAPER DISPENSER
U/S	UNDERSIDE
W/	WITH



1 / A1.30 PARTIAL SECOND FLOOR PLAN
SCALE 1:50

HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

TRUE NORTH
PROJECT NORTH

NO	REVISIONS	DATE
2	ISSUED FOR TENDER	2024-12-11
1	ISSUED FOR PERMIT	2024-11-15

DRAWINGS ARE NOT TO BE SCALED. CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS ON THE PROJECT AND MUST REPORT ANY DISCREPANCIES TO THE ARCHITECTS BEFORE PROCEEDING WITH THE WORK.
THE USE OF THIS DRAWING OR PART THEREOF IS FORBIDDEN WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECTS.

PARKDALE ELEMENTARY SCHOOL ACCESSIBILITY RENOVATIONS
139 PARKDALE AVE N, HAMILTON, ONTARIO

SECOND FLOOR PLAN

GRGURIC ARCHITECTS INCORPORATED
28 KING STREET EAST, UNIT B
STONEY CREEK, ONTARIO, L8G 1J8
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Web: www.2gai.com

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DATE: JAN-2023	
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CHECKED WP	
PRINT DATE	01/23/25

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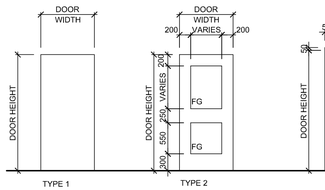
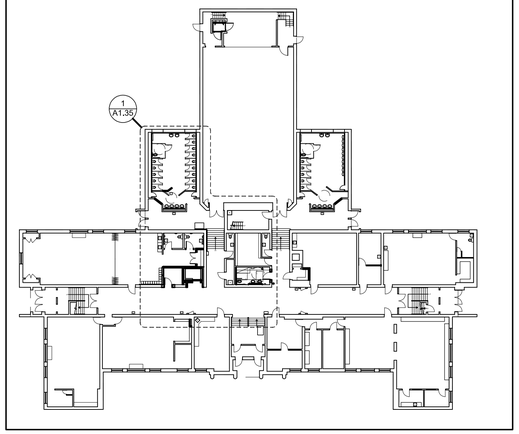
DOOR SCHEDULE

ROOM NAME	DOOR NO.	DOORS WIDTH	HEIGHT	THK.	FIRE	TYPE	MAT'L	FINISH	GLASS	FRAMES TYPE	MAT'L	FINISH	GLASS	PANIC BAR	DOOR CLOSER	REMARKS
GROUND FLOOR																
WASHROOM	108B A	950	2150	44	-	1	HM	PAINT	-	A	HM	PAINT	-			
CLOSET	108C A	(2) 763	2150	44	-	1	HM	PAINT	-	B	HM	PAINT	-			
UNIVERSAL WASHROOM	116 A	915 (EX)	2150 (EX)	44	3/4 hr	1	HM	PAINT	-	A	HM	PAINT	-		●	CL, PDO, HCPB
FILES	122 A	EX	EX	EX	-	EX	WD (EX)	PAINT	-	EX	WD (EX)	PAINT	-			
ELEVATOR MACHINE ROOM	129A A	950	2150	44	3/4 hr	1	HM	PAINT	-	A	HM	PAINT	-		●	CL
SECOND FLOOR																
CORRIDOR	201 A	1065	2150	44	3/4 hr	2	HM	PAINT	FG	C	HM	PAINT	-		●	CL, HOD
CORRIDOR	201 B	1065	2150	44	3/4 hr	2	HM	PAINT	FG	C	HM	PAINT	-		●	CL, HOD
UNIVERSAL WASHROOM	213 A	950	2150	44	3/4 hr	1	HM	PAINT	-	A	HM	PAINT			●	CL, PDO, HCPB

DOOR TYPES



FRAME TYPES



GROUND FLOOR KEY PLAN

1 / A1.35 PARTIAL GROUND FLOOR REFLECTED CEILING PLAN
SCALE 1:50

ROOM FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR FINISH	BASE	WALL MAT'L	WALL FINISH	CEILING MAT'L.	CEILING FINISH	CEILING HEIGHT	REMARKS
GROUND FLOOR									
108C	CLOSET	EX PT	RB	GYP. BD CONC. BLK.	PAINT PAINT	GYP. BD.	PAINT	2745mm	
108D	WASHROOM VESTIBULE	EX PT	RB	GYP. GB.	PAINT	ACT-1	-	3250mm	
116	UNIVERSAL WASHROOM	PT	-	GYP. BD.	CT	ACT-1	-	2745mm	
122A	FILES	VCT	RB	GYP. BD	PAINT	ACT-1	-	2745mm	
129	ELEVATOR	PT		FINISHES BY ELEVATOR MANUFACTURER					
129A	ELEVATOR MACHINE ROOM	VCT	RB	GYP. BD.	PAINT	ACT-1	-	2745mm	
SECOND FLOOR									
203A	CLASSROOM ALCOVE	VCT	RB	GYP. BD	PANIT	EX GYP. BD	PAINT	3770mm	
211A	CLASSROOM ALCOVE	VCT	RB	GYP. BD	PAINT	EX GYP. BD	PAINT	3770mm	
213	BARRIER FREE WASHROOM	PT	--	GYP. BD	CWT	ACT-1	-	2590	

GRAPHIC RCP LEGEND

NOTE:
- REFER TO ELECTRICAL DRAWINGS FOR ACTUAL FIXTURE TYPES
- MECHANICAL AND ELECTRICAL ITEMS SHOWN, I.E. DUCTWORK, PIPING, LIGHT FIXTURES, ETC. **ARE FOR REFERENCE ONLY AND ARE NOT INCLUSIVE**, REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ALL RELATED WORK.

600×1200 LIGHT FIXTURE
300×1200 LIGHT FIXTURE
RECESSED DOWN LIGHT FIXTURE
WALL MOUNT LIGHT FIXTURE
SUSPENDED LIGHT FIXTURE
DIFFUSER
RETURN AIR GRILLE
EXHAUST FAN
NEW GYPSUM BOARD CEILING OR BULKHEAD
600x1200 ACOUSTIC CEILING TILE
600x1200 ACOUSTIC CEILING TILE

CONSTRUCTION NOTES

C1 PATCH AND REPAIR EXISTING PLASTER CEILING AS REQUIRED AT LOCATION OF REMOVED WALL. MAKE READY TO RECEIVED NEW PAINT FINISH, REPAINT AREA WHERE WALL WAS REMOVED.

C1A ALLOW FOR CUTTING AND PATCHING TO SUIT ABOVE CEILING ELECTRICAL RELOCATION / MODIFICATION OF EXISTING BX CABLE AND BOX, COORDINATE W/ ELECTRICAL

C2 HATCH DENOTES THE EXTENTS OF THE AREA TO ALLOW FOR INSTALLATION OF NEW 1 HR FIRE RATED CEILING AT LEVEL OF EX PLASTER CEILING. CONTRACTOR IS TO COORDINATE CUTTING EX PLASTER CEILING ALONG STRAIGHT EVEN EDGES, CEILING TO BE 2 LAYERS OF 16mm TYPE 'X' GYPSUM BOARD ON 65mm HORIZONTAL METAL STUDS AT 400mm O/C SECURED TO U/S OF EXISTING JOISTS (1 HR FRR - SB-2 TABLE 2,3,4.B). 2ND LAYER OF GYPSUM BOARD TO EXTEND 50mm PAST EDGE OF FIRST LAYER ON EX CEILING AND CONTINUOUSLY FIRE CAULK AROUND PERIMETER OF ALL EDGES.

C3 HATCH DENOTES EXTENT OF ACT REPLACEMENT, NEW CEILING TILE TO MATCH EXISTING. ALLOW FOR THE REPLACEMENT OF THE EX SUSPENSION GRID WITH NEW TO MATCH EX.

LEGEND

ACT	ACOUSTIC CEILING TILE
APPROX	APPROXIMATELY
BD	BOARD
BLK	BLOCK
CL	CLOSER
CONC	CONCRETE
CT	CERAMIC WALL TILE
C/W	COMPLETE WITH
EX	EXISTING
FG	FIRE GLASS
FRR	FIRE RESISTANCE RATING
GYP	GYPSUM
HCPB	HANDICAP PUSH BUTTON
HM	HOLLOW METAL
HOD	HOLD OPEN DEVICE
HR	HOUR
MA'TL	MATERIAL
O/C	ON CENTER
PDO	POWER DOOR OPERATOR
PT	PORCELAIN TILE
RB	RUBBER BASE
THK	THICKNESS
U/S	UNDERSIDE
VCT	VINYL COMPOSITE TILE
WD	WOOD
W/	WITH

HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

TRUE NORTH / PROJECT NORTH

NO	REVISIONS	DATE
2	ISSUED FOR TENDER	2024-12-11
1	ISSUED FOR PERMIT	2024-11-15

PARKDALE ELEMENTARY SCHOOL
ACCESSIBILITY RENOVATIONS
139 PARKDALE AVE N,
HAMILTON, ONTARIO

GROUND FLOOR REFLECTED CEILING PLANS

GRGURIC ARCHITECTS INCORPORATED
28 KING STREET EAST, UNIT B
STONEY CREEK, ONTARIO, L8G 1J8
Tel. 905-664-8735 Fax. 905-664-8737
Web: www.2gai.com

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DATE: JAN-2023	
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CHECKED WP	
PRINT DATE	12/11/24

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GRAPHIC RCP LEGEND

NOTE:
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- MECHANICAL AND ELECTRICAL ITEMS SHOWN, I.E, DUCTWORK, PIPING, LIGHT FIXTURES, ETC. **ARE FOR REFERENCE ONLY AND ARE NOT INCLUSIVE.** REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ALL RELATED WORK.

600×1200 LIGHT FIXTURE

300×1200 LIGHT FIXTURE

RECESSED DOWN LIGHT FIXTURE

WALL MOUNT LIGHT FIXTURE

SUSPENDED LIGHT FIXTURE

DIFFUSER

RETURN AIR GRILLE

EXHAUST FAN

NEW GYPSUM BOARD CEILING OR BULKHEAD

600x1200 ACOUSTIC CEILING TILE

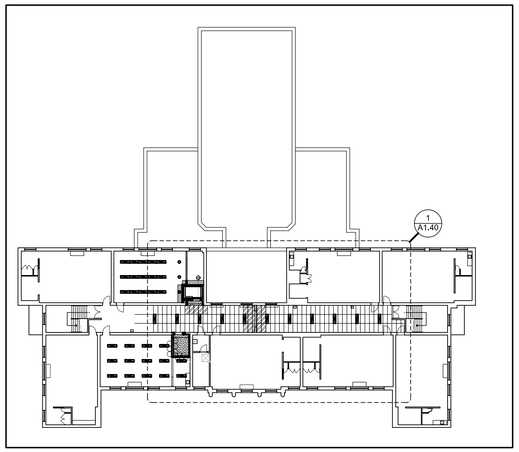
600x1200 ACOUSTIC CEILING TILE

CONSTRUCTION NOTES

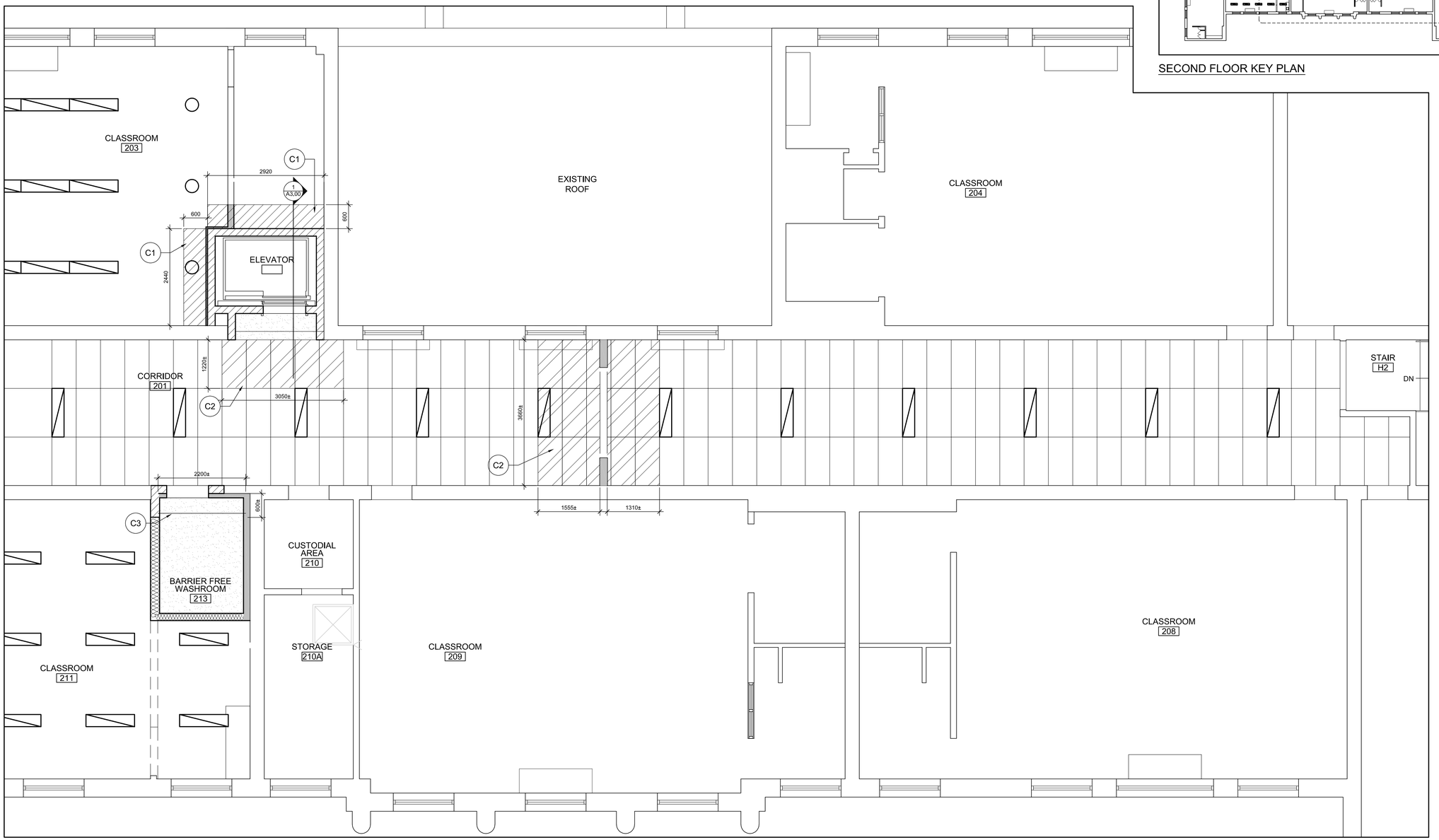
C1 HATCH DENOTES THE EXTENTS OF THE AREA TO ALLOW FOR INSTALLATION OF NEW 45 min FIRE RATED CEILING AT LEVEL OF EX PLASTER CEILING. CEILING TO BE 16mm TYPE 'X' GYPSUM BOARD ON 65mm HORIZONTAL METAL STUDS AT 400mm O/C SECURED TO U/S OF EXISTING JOISTS (45 min FRR - SB-2 TABLES 2,3,4.B AND 2,3,4,F).

C2 HATCH DENOTES EXTENT OF ACT REPLACEMENT. NEW CEILING TILE TO MATCH EXISTING. ALLOW FOR THE REPLACEMENT OF THE EX SUSPENSION GRID WITH NEW TO MATCH EX.

C3 NEW STEEL LINTEL TO BE INSTALLED AT HEIGHT OF 3000mm TO THE UNDERSIDE. REFER TO STRUCTURAL FOR LINTEL SIZING AND SUPPORT. ALL EXPOSED FACES OF LINTEL TO RECEIVE SPRAYED FIBRE FIRE PROOFING (ULC N810). THICKNESS TO ACHIEVE A 45 min FIRE RATING



SECOND FLOOR KEY PLAN



1 / A1.40 PARTIAL SECOND FLOOR REFLECTED CEILING PLAN
SCALE 1:50

HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

TRUE NORTH
PROJECT NORTH

LEGEND

ACT	ACOUSTIC CEILING TILE
EX	EXISTING
FRR	FIRE RESISTANCE RATING
HR	HOUR
min	MINUTE
O/C	ON CENTER

NO	REVISIONS	DATE
2	ISSUED FOR TENDER	2024-12-11
1	ISSUED FOR PERMIT	2024-11-15

PARKDALE ELEMENTARY SCHOOL
ACCESSIBILITY RENOVATIONS
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HAMILTON, ONTARIO

SECOND FLOOR REFLECTED CEILING PLAN

GRGURIC ARCHITECTS INCORPORATED
28 KING STREET EAST, UNIT B
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Tel. 905-664-8735 Fax. 905-664-8737
Web: www.2gai.com

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DATE: JAN-2023	
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CHECKED WP	
PRINT DATE	01/23/25

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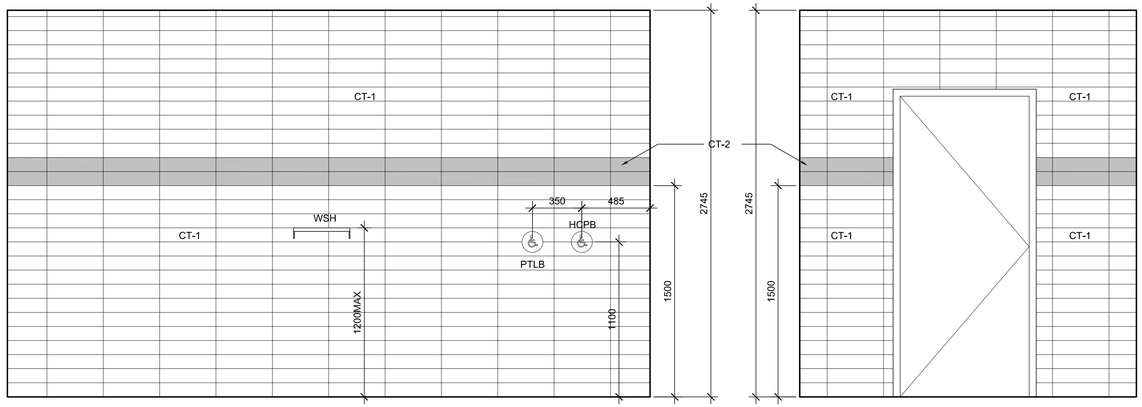
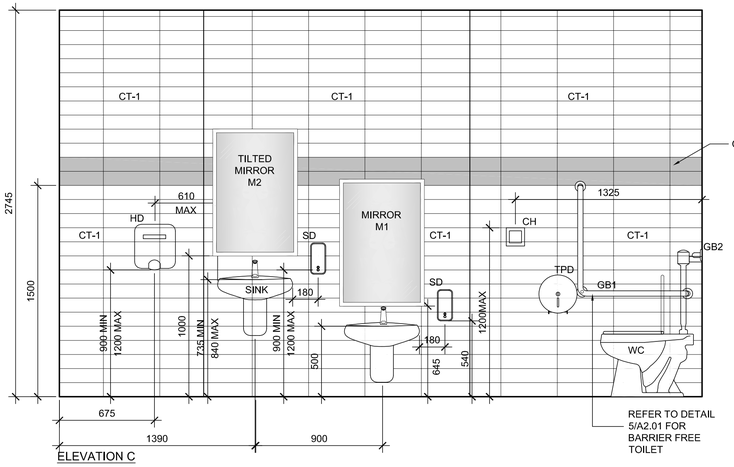
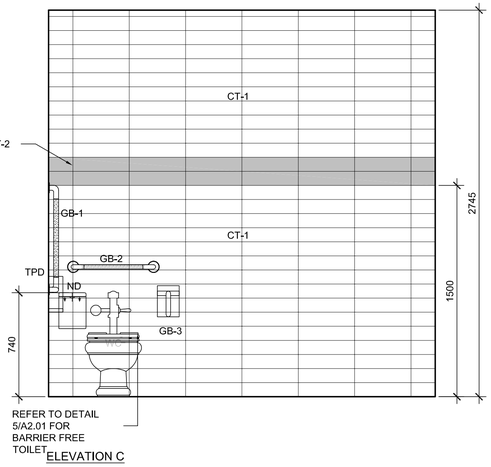


ELEVATION A

ELEVATION B



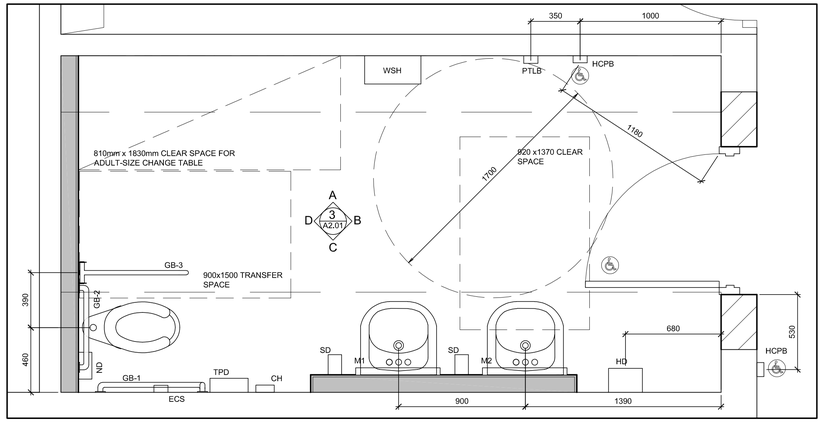
ELEVATION C



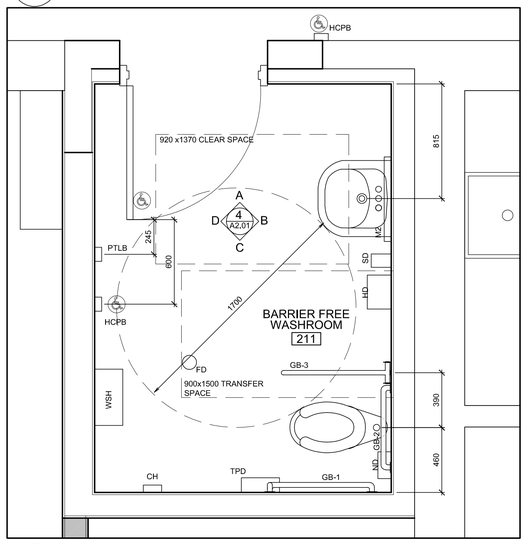
REFER TO DETAIL 5/A2.01 FOR BARRIER FREE TOILET

ELEVATION C

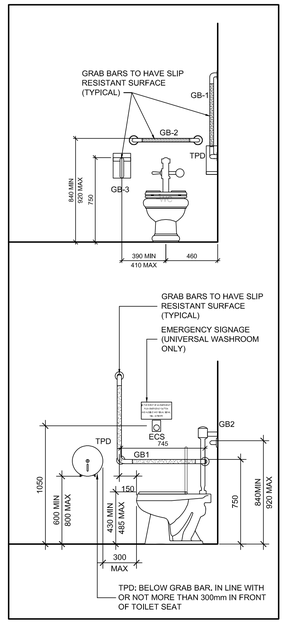
3 A2.01 INTERIOR ELEVATION - UNIVERSAL WASHROOM
SCALE 1:20



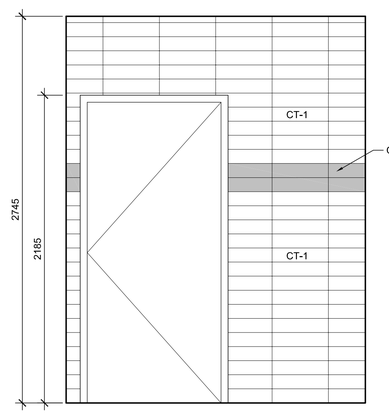
1 A2.01 GROUND FLOOR UNIVERSAL WASHROOM
SCALE 1:20



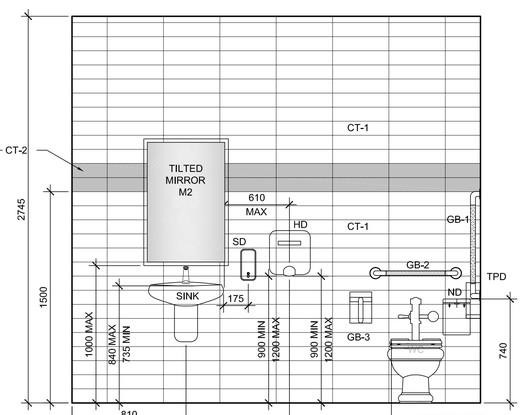
2 A2.01 SECOND FLOOR BARRIER FREE WASHROOM
SCALE 1:20



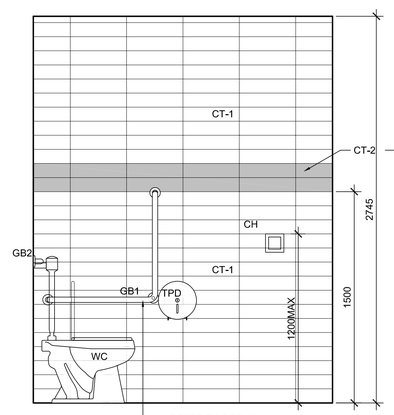
5 A2.01 TYPICAL BARRIER FREE TOILET ELEVATIONS
SCALE 1:25



ELEVATION A

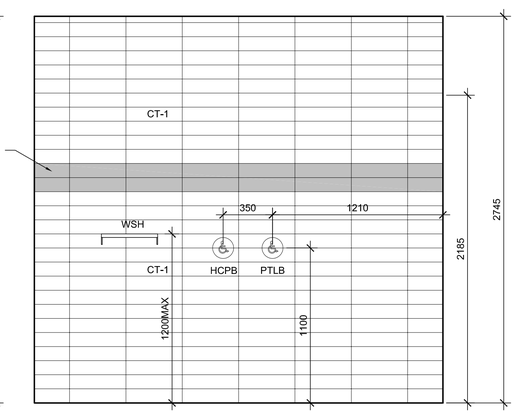


ELEVATION B



REFER TO DETAIL 5/A2.01 FOR BARRIER FREE TOILET

ELEVATION C



ELEVATION D

4 A2.01 INTERIOR ELEVATION - BARRIER FREE WASHROOM
SCALE 1:20

HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

LEGEND

AFF	ABOVE FINISHED FLOOR
APPROX	APPROXIMATELY
CH	COAT HOOK
CT-x	CERAMIC WALL TILE
C/W	COMPLETE WITH
ECS	EMERGENCY CALL SWITCH
FD	FLOOR DRAIN
GB-x	GRAB BAR
HCPB	HANDICAP PUSH BUTTON
HD	HAND DRYER
Mx	MIRROR
MAX	MAXIMUM
MIN	MINIMUM
MTP	METAL TOILET PARTITION
ND	NAPKIN DISPOSAL
O/C	ON CENTER
PNT	PAINT
PT	PORCELAIN TILE
PTLB	PUSH TO LOCK BUTTON
SD	SOAP DISPENSER
TPD	TOILET PAPER DISPENSER
U/S	UNDERSIDE
W/C	WATER CLOSET
WSH	WALL SHELF
W/	WITH

NO	REVISIONS	DATE
2	ISSUED FOR TENDER	2024-12-11
1	ISSUED FOR PERMIT	2024-11-15

PARKDALE ELEMENTARY SCHOOL
ACCESSIBILITY RENOVATIONS
139 PARKDALE AVE N,
HAMILTON, ONTARIO

ENLARGED WASHROOM PLANS AND ELEVATION

GRGURIC ARCHITECTS INCORPORATED
28 KING STREET EAST, UNIT B
STONEY CREEK, ONTARIO, L8G 1J8
Tel. 905-664-8735 Fax. 905-664-8737
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DATE: JAN-2023	
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CHECKED WP	
PRINT DATE	12/11/24

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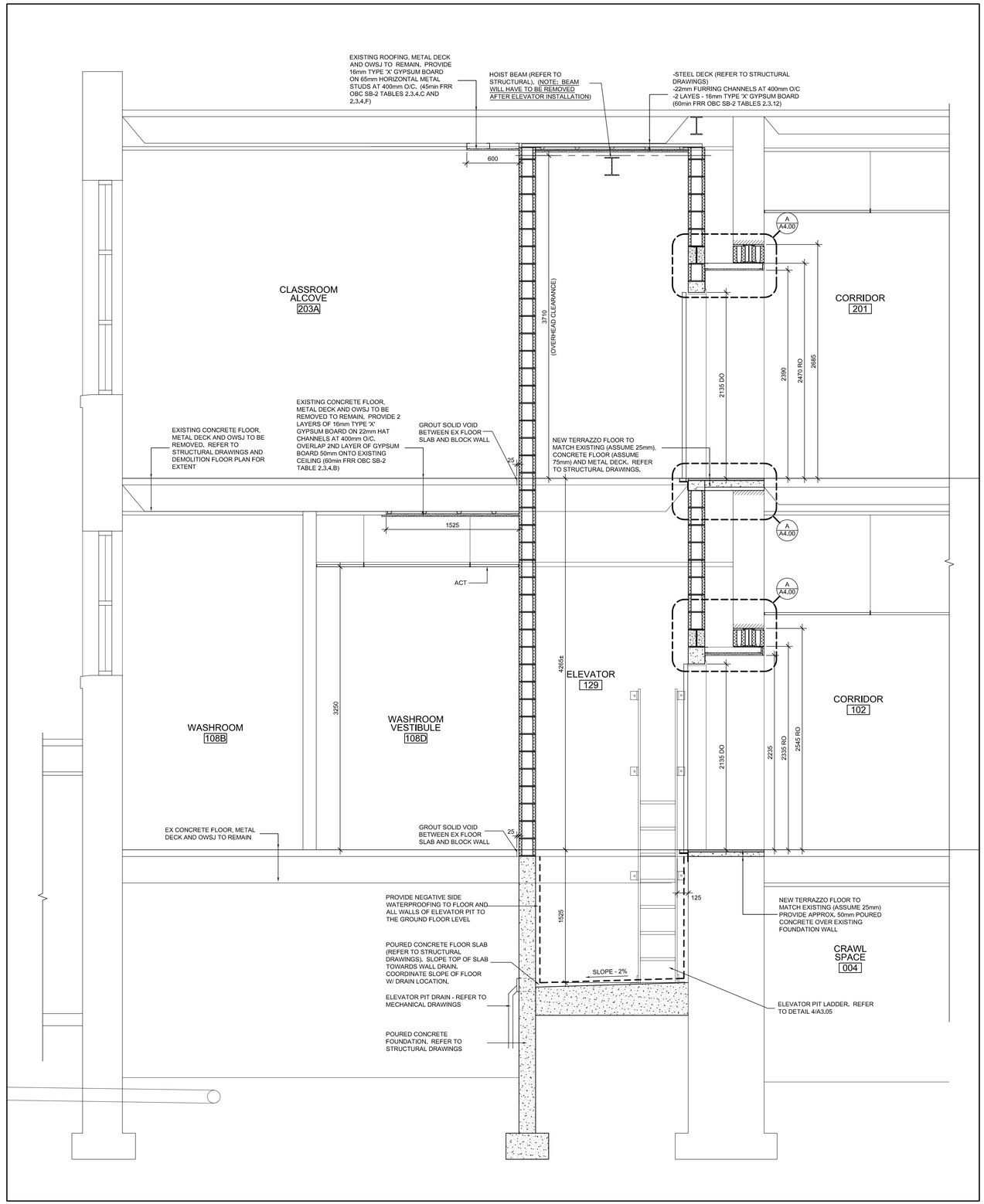
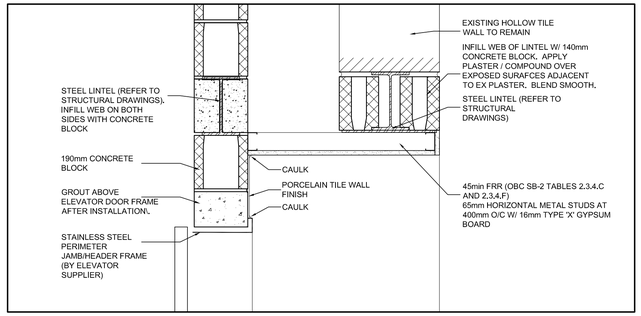
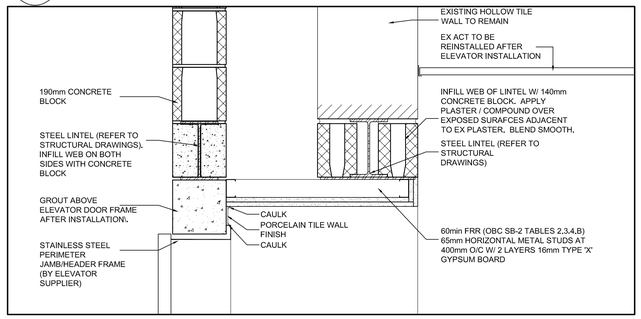


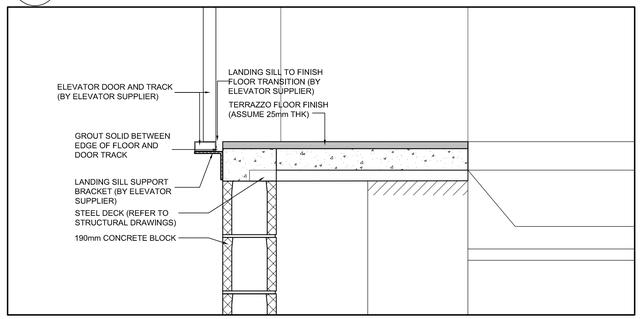
1 A3.00 PARTIAL BUILDING SECTION - ELEVATOR HOISTWAY
SCALE 1:25



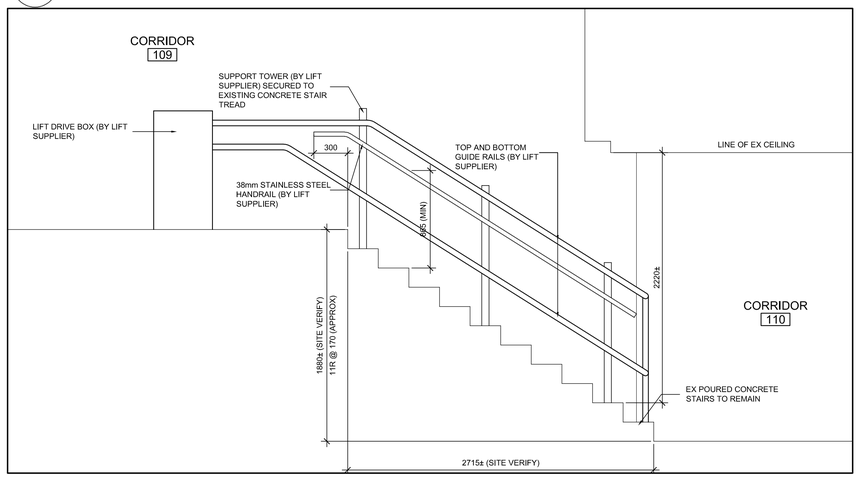
5 A3.00 DETAIL - SECOND FLOOR HEAD OF ELEVATOR ENTRANCE
SCALE 1:10



4 A3.00 DETAIL - GROUND FLOOR HEAD OF ELEVATOR ENTRANCE
SCALE 1:10



3 A3.00 DETAIL - SECOND FLOOR - FLOOR SLAB INFILL
SCALE 1:10



2 A3.00 PARTIAL INTERIOR ELEVATION - CHAIR LIFT
SCALE 1:25

HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

NO	REVISIONS	DATE
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1	ISSUED FOR PERMIT	2024-11-15

PARKDALE ELEMENTARY SCHOOL
ACCESSIBILITY RENOVATIONS
139 PARKDALE AVE N,
HAMILTON, ONTARIO

SECTION AND DETAILS

GRGURIC ARCHITECTS INCORPORATED
28 KING STREET EAST, UNIT B
STONEY CREEK, ONTARIO, L8G 1J8
Tel. 905-664-8735 Fax. 905-664-8737
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DATE: JAN-2023	
DRAWN DW	DRAWING A3.00
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PRINT DATE	12/11/24

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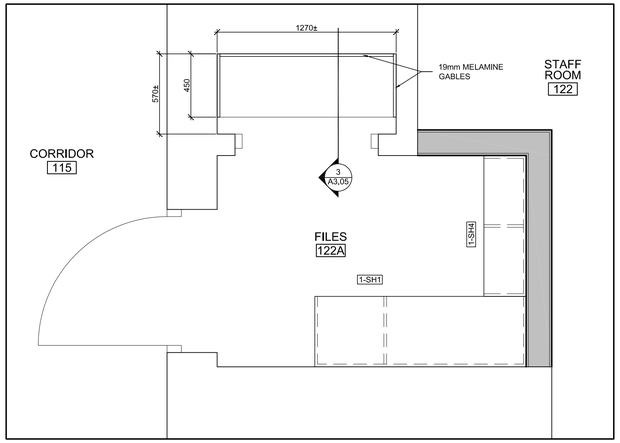
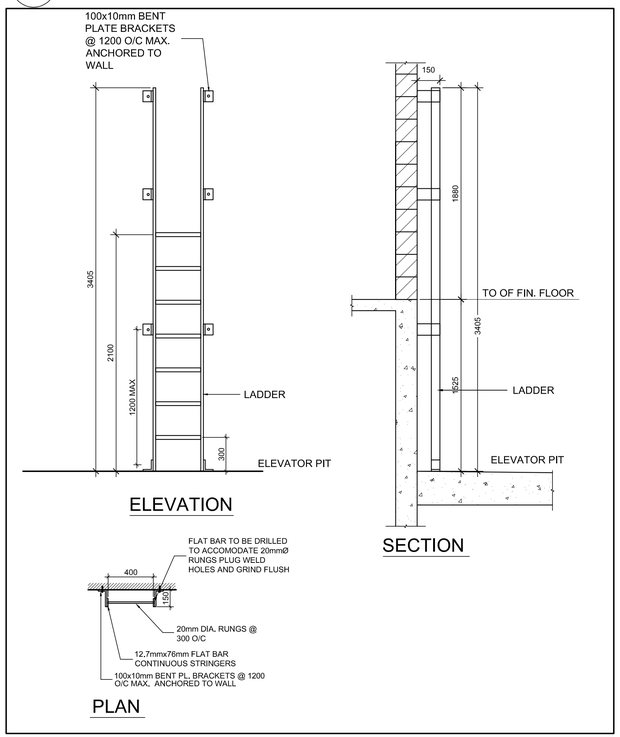
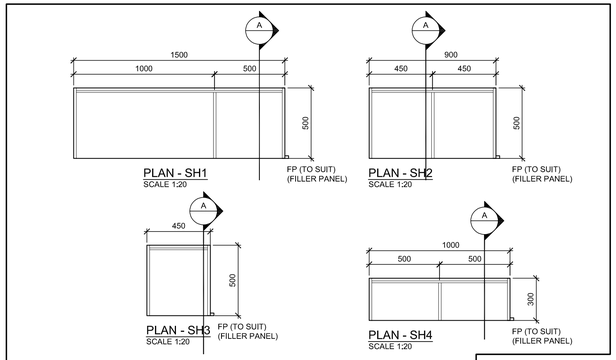
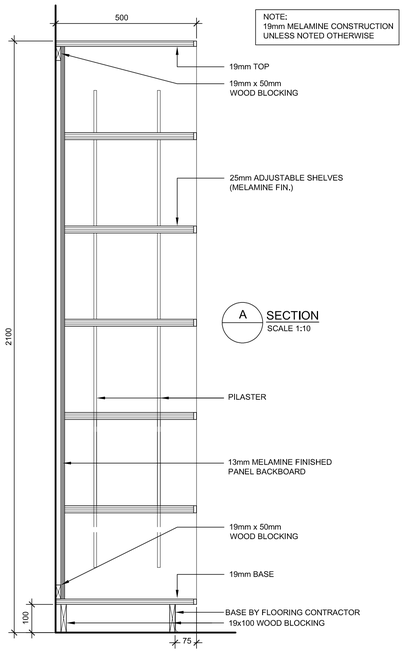


1 A3.05 MILLWORK FLOOR PLAN - FILES ROOM 122A
SCALE 1:20

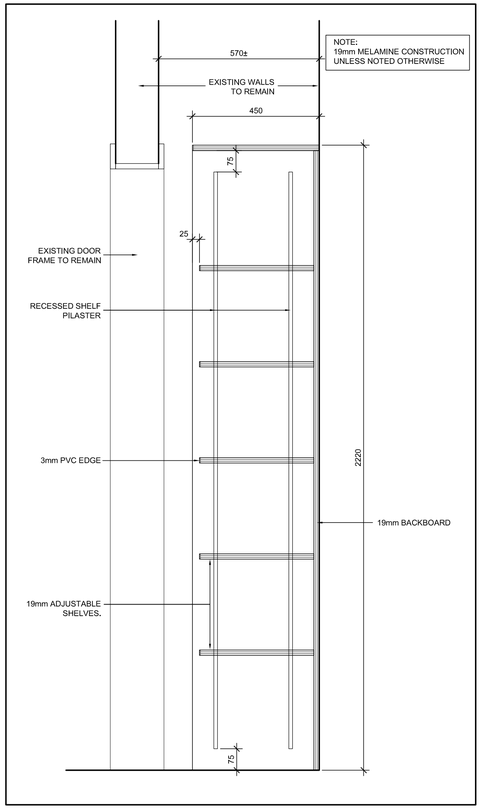


4 A3.05 DETAIL - ELEVATOR PIT LADDER
SCALE 1:25

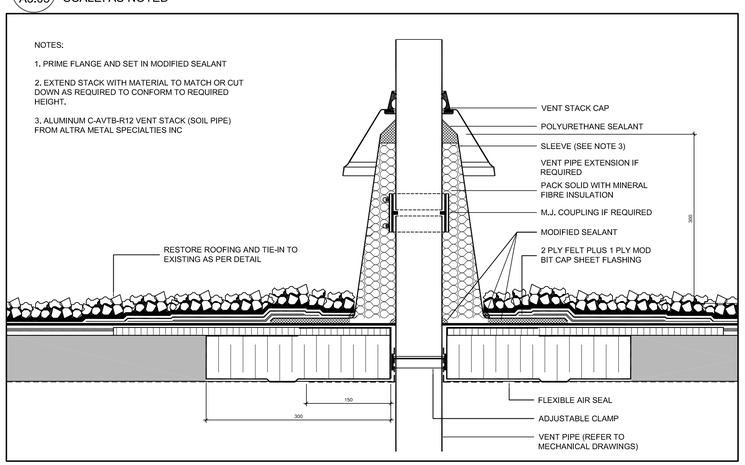




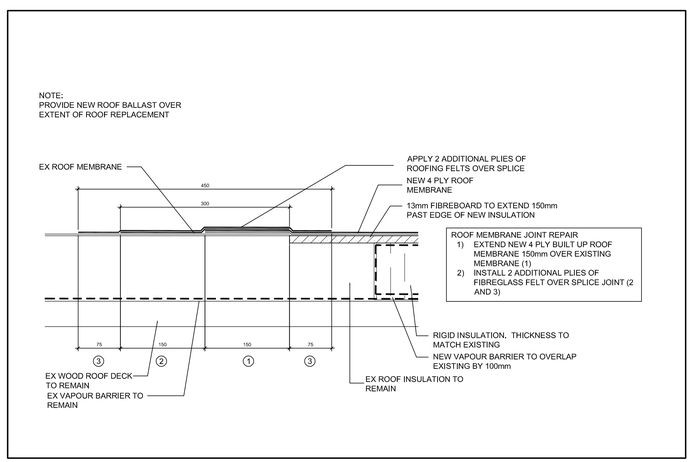
2 A3.05 DETAIL - MILLWORK ITEMS SH1, SH2, AND SH3
SCALE: AS NOTED



3 A3.05 DETAIL - CUPBOARD MILLWORK
SCALE 1:10



5 A3.05 DETAIL - TYPICAL VENT ROOF FLASHING
SCALE 1:5



6 A3.05 DETAIL - TYPICAL ROOFING TIE-IN
SCALE 1:5

HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

NO	REVISIONS	DATE
2	ISSUED FOR TENDER	2024-12-11
1	ISSUED FOR PERMIT	2024-11-15

DRAWINGS ARE NOT TO BE SCALED. CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS ON THE PROJECT, AND MUST REPORT ANY DISCREPANCIES TO THE ARCHITECTS BEFORE PROCEEDING WITH THE WORK.

PARKDALE ELEMENTARY SCHOOL
ACCESSIBILITY RENOVATIONS
139 PARKDALE AVE N, HAMILTON, ONTARIO

DETAILS

GRGURIC ARCHITECTS INCORPORATED
28 KING STREET EAST, UNIT B
STONEY CREEK, ONTARIO, L8G 1J8
Tel. 905-664-8735 Fax. 905-664-8737
Web: www.2gal.com

SCALE: AS NOTED	PROJECT: 2024-15
DATE: JAN-2023	
DRAWN DW	DRAWING A3.05
CHECKED WP	
PRINT DATE	01/23/25

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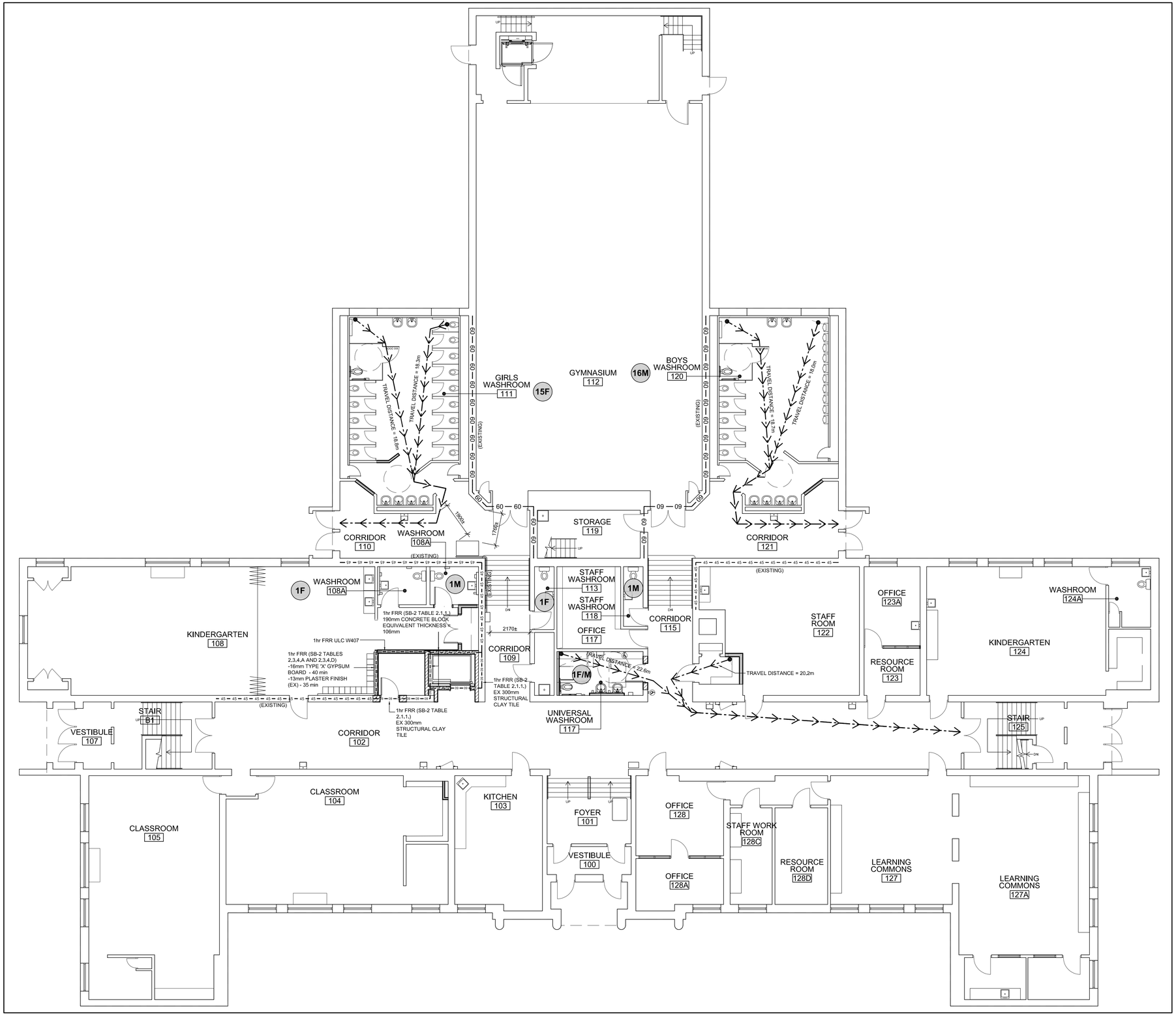

1 / A1.00 PARTIAL GROUND FLOOR DEMOLITION PLAN
SCALE 1:50

FIRE RESISTANCE RATING SCHEDULE

- 3/4 HR FIRE SEPARATION
- 1 HR FIRE SEPARATION
- 3/4 HR FIRE SEPARATION (EXISTING) (EXISTING)
- 1 HR FIRE SEPARATION (EXISTING) (EXISTING)

TRAVEL DISTANCE

- LINE OF EGRESS ROUTE + TRAVEL DISTANCE
- ARROWS DENOTE DIRECTION OF TRAVEL
- START POINT AT DOOR
- MAXIMUM 30m TRAVEL DISTANCE FROM EGRESS DOORWAY OF ROOM OR FLOOR AREA TO NEAREST EXIT

GENERAL LIFE SAFETY NOTES:

1. THE FOLLOWING GENERAL NOTES ON THIS DRAWING PROVIDE AN OVERVIEW AND SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL, STRUCTURAL MECHANICAL AND ELECTRICAL DRAWINGS, DETAILS AND SPECIFICATIONS.
2. REFER TO FIRE SEPARATION LOCATIONS INDICATED ON PLANS OF THIS DRAWING AND BUILDING SECTIONS.
3. GROUND FLOOR IS SLAB ON GRADE CONSTRUCTION UNLESS OTHERWISE NOTED
4. ENSURE CONTINUITY OF FIRE SEPARATION FRR BEHIND ALL BUILT-IN MECHANICAL AND ELECTRICAL WORK. INCREASE WALL THICKNESS LOCALLY FOR FULL HEIGHT OF WALL TO SUIT INSTALLATION OF MECHANICAL AND ELECTRICAL WORK
5. BARRIER FREE PATH OF TRAVEL SHALL HAVE AN UNOBSTRUCTED WIDTH OF 1.1m
6. PORTABLE FIRE EXTINGUISHERS SHALL BE PROVIDED IN ACCORDANCE WITH OBC 3.2.5.17. (1). (REFER TO MECH DWGS FOR LOCATIONS)
7. BARRIER FREE DOORS & HARDWARE TO COMPLY WITH THE REQUIREMENT OF THE 2012 OBC 3.8.3.3. & 3.8.2.1.
8. FIRE ALARM TO BE PROVIDED IN ACCORDANCE WITH OBC (REFER TO ELECTRICAL DRAWINGS FOR LOCATIONS)
9. EVERY DOOR IN A FIRE SEPARATION SHALL BE EQUIPPED WITH A SELF CLOSING DEVICE & POSITIVE LATCHING MECHANISM AS PER OBC 3.1.8.11 & 3.1.8.13.
10. ALL DOOR LOCKING HARDWARE IN AN ACCESS TO EXITS ARE TO BE IN COMPLIANCE WITH OBC 3.3.1.12. DOORS SHALL BE READILY OPENABLE IN TRAVELLING TO AN EXIT WITHOUT REQUIRING KEYS, SPECIAL DEVICES, OR SPECIALIZED KNOWLEDGE OF THE DOOR OPENING MECHANISM.
11. CONNECTIONS OF ALL NON STRUCTURAL ELEMENTS AND EQUIPMENT TO SUPPORTING STRUCTURE TO BE DESIGNED TO COMPLY WITH ARTICLE 4.1.8.18 OF THE 2012 ONTARIO BUILDING CODE FOR SEISMIC LOADS. CONTRACTOR TO SUBMIT SHOP DRAWINGS SHOWING THESE CONNECTIONS STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER IF APPLICABLE.

GENERAL PROJECT NOTES

1. MECHANICAL AND ELECTRICAL ITEMS SHOWN, I.E. DUCTWORK, PIPING, LIGHT FIXTURES, ETC. ARE FOR REFERENCE ONLY AND ARE NOT INCLUSIVE. REFER TO MECHANICAL AND ELECTRICAL DRAWING FOR ALL RELATED NEW AND DEMOLITION WORK REQUIRED.
2. TRANSITIONS BETWEEN FLOOR FINISHES TO BE MADE SMOOTH, CONTINUOUS & FLUSH, GRIND DOWN EXISTING FLOOR SLAB ACROSS DOOR THRESHOLDS WHERE APPLICABLE TO SUIT THICKNESS OF NEW MATERIALS AND ENSURE NEW MATERIALS ARE INSTALLED FLUSH THROUGHOUT
4. CONTRACTOR TO ALLOW FOR PATCHING AND REPAIR OF ALL EXISTING ADJACENT MATERIALS, SURFACES & FINISHES AT SLAB CUTTING & TRENCHING OF ALL PLUMBING FIXTURES AS WELL AS MECHANICAL EQUIPMENT TO BE REMOVED OR RELOCATED, REFER TO MECHANICAL DRAWINGS. PREPARE ALL SURFACES FOR NEW FINISHES,
5. CONTRACTOR TO ALLOW FOR PATCHING AND REPAIR OF ADJACENT MATERIALS AT ALL ELECTRICAL LIGHTING, EQUIPMENT, CONDUIT, RACEWAYS, ETC, TO BE REMOVED OR RELOCATED, REFER TO ELECTRICAL DRAWINGS. PREPARE ALL SURFACES FOR NEW FINISHES.
6. CAUSE NO DAMAGE TO EXISTING CONSTRUCTION TO REMAIN, TAKE CARE NOT TO ENCROACH ON ADJACENT OCCUPIED AREAS OR AREAS NOT WITHIN THE SCOPE OF WORK. PROTECT ALL EXISTING FINISHES, DOORS, FRAMES, ETC. WHICH ARE TO REMAIN, PATCH AND MAKE GOOD ALL EXISTING ADJACENT SURFACES FINISHES & MATERIALS WHERE DISTURBED BY NEW CONSTRUCTION.

HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

TRUE NORTH
PROJECT NORTH

LEGEND

ACT	ACOUSTIC CEILING TILE
DWGS	DRAWINGS
EX	EXISTING
FRR	FIRE RESISTANCE RATING
hr	HOUR
MECH	MECHANICAL
min	MINUTE
O/C	ON CENTER
U/S	UNDERSIDE

NO	REVISIONS	DATE
2	ISSUED FOR TENDER	2024-12-11
1	ISSUED FOR PERMIT	2024-11-15

PARKDALE ELEMENTARY SCHOOL
ACCESSIBILITY RENOVATIONS
139 PARKDALE AVE N,
HAMILTON, ONTARIO

LIFE SAFETY - GROUND FLOOR PLAN

GRGURIC ARCHITECTS INCORPORATED
28 KING STREET EAST, UNIT B
STONEY CREEK, ONTARIO, L8G 1J8
Tel. 905-664-8735 Fax. 905-664-8737
Web: www.2gal.com

SCALE: AS NOTED	PROJECT: 2024-15
DATE: JAN-2023	
DRAWN DW	DRAWING A5.00
CHECKED WP	
PRINT DATE	12/11/24

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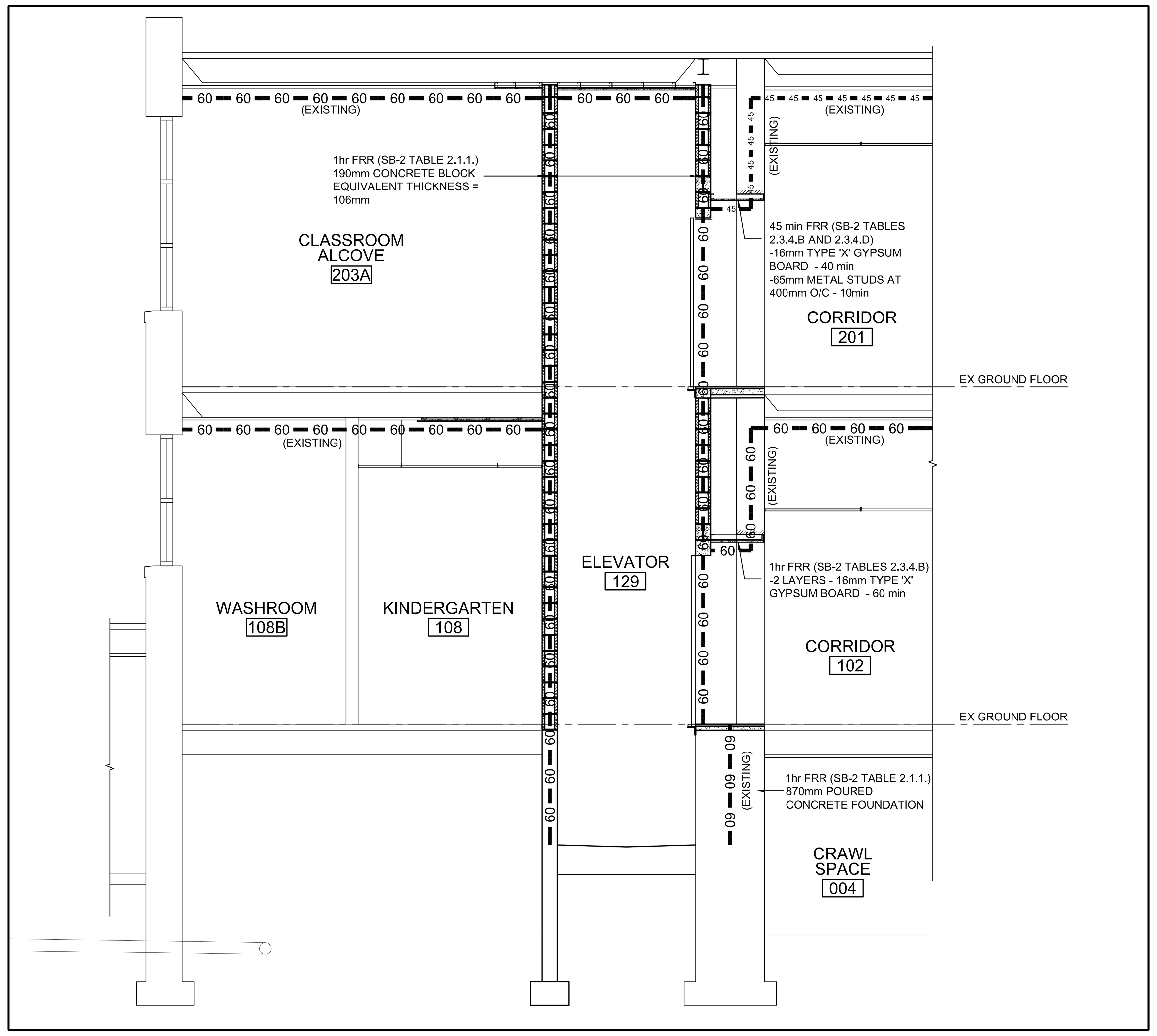

1 / A1.00 PARTIAL GROUND FLOOR DEMOLITION PLAN
SCALE 1:50

FIRE RESISTANCE RATING SCHEDULE	
3/4 HR FIRE SEPARATION	— 45 — 45 — 45 —
1 HR FIRE SEPARATION	— 60 — 60 — 60 —
3/4 HR FIRE SEPARATION (EXISTING)	— 45 — 45 — 45 — (EXISTING)
1 HR FIRE SEPARATION (EXISTING)	— 60 — 60 — 60 — (EXISTING)
TRAVEL DISTANCE	
LINE OF EGRESS ROUTE + TRAVEL DISTANCE ARROWS DENOTE DIRECTION OF TRAVEL	— · — · — · — > > > >
START POINT AT DOOR	— · — · —●
MAXIMUM 30m TRAVEL DISTANCE FROM EGRESS DOORWAY OF ROOM OR FLOOR AREA TO NEAREST EXIT	●— · — · —

GENERAL LIFE SAFETY NOTES:

1. THE FOLLOWING GENERAL NOTES ON THIS DRAWING PROVIDE AN OVERVIEW AND SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL, STRUCTURAL MECHANICAL AND ELECTRICAL DRAWINGS, DETAILS AND SPECIFICATIONS.
2. REFER TO FIRE SEPARATION LOCATIONS INDICATED ON PLANS OF THIS DRAWING AND BUILDING SECTIONS.
3. GROUND FLOOR IS SLAB ON GRADE CONSTRUCTION UNLESS OTHERWISE NOTED
4. ENSURE CONTINUITY OF FIRE SEPARATION FRR BEHIND ALL BUILT-IN MECHANICAL AND ELECTRICAL WORK. INCREASE WALL THICKNESS LOCALLY FOR FULL HEIGHT OF WALL TO SUIT INSTALLATION OF MECHANICAL AND ELECTRICAL WORK
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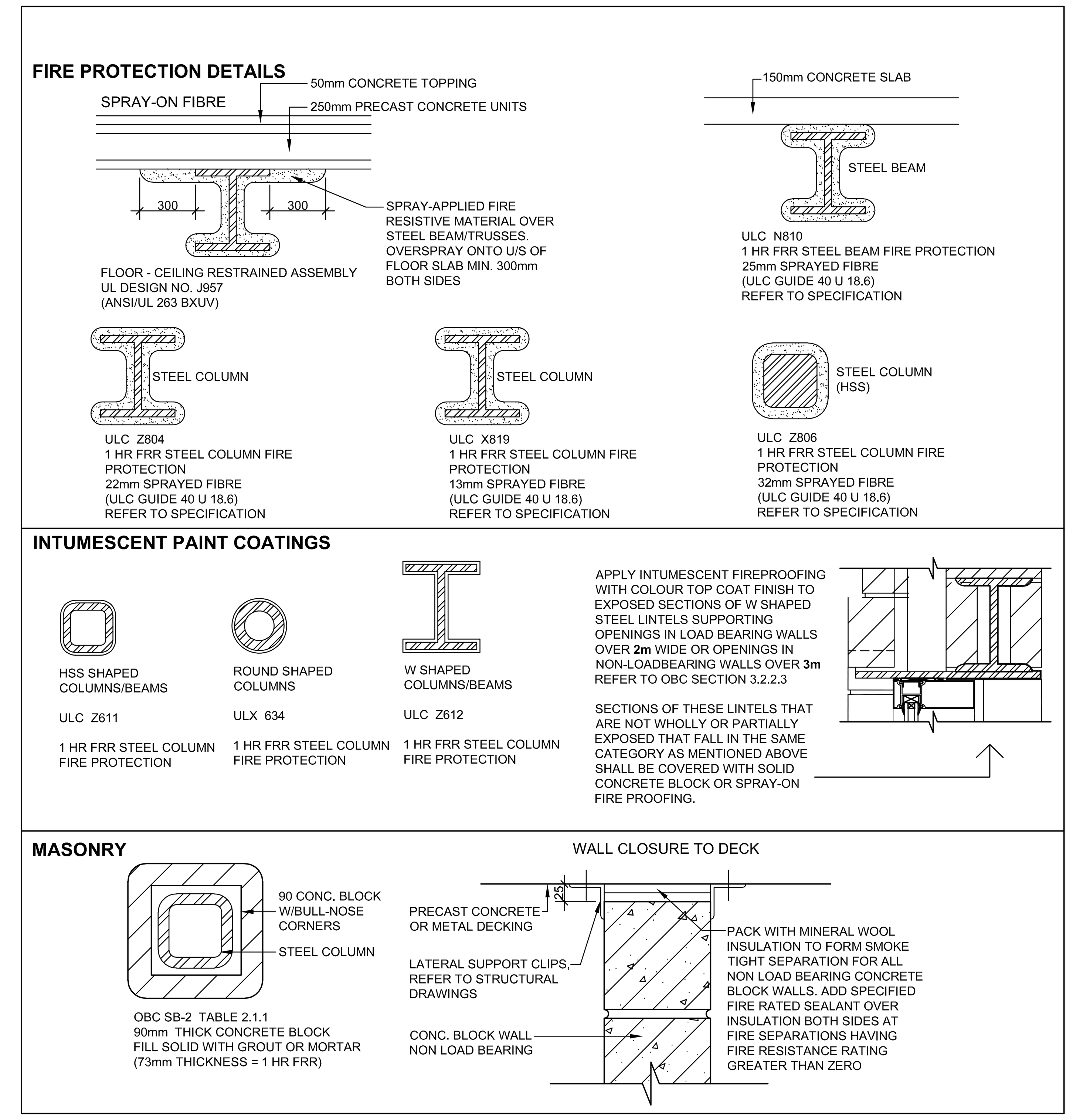
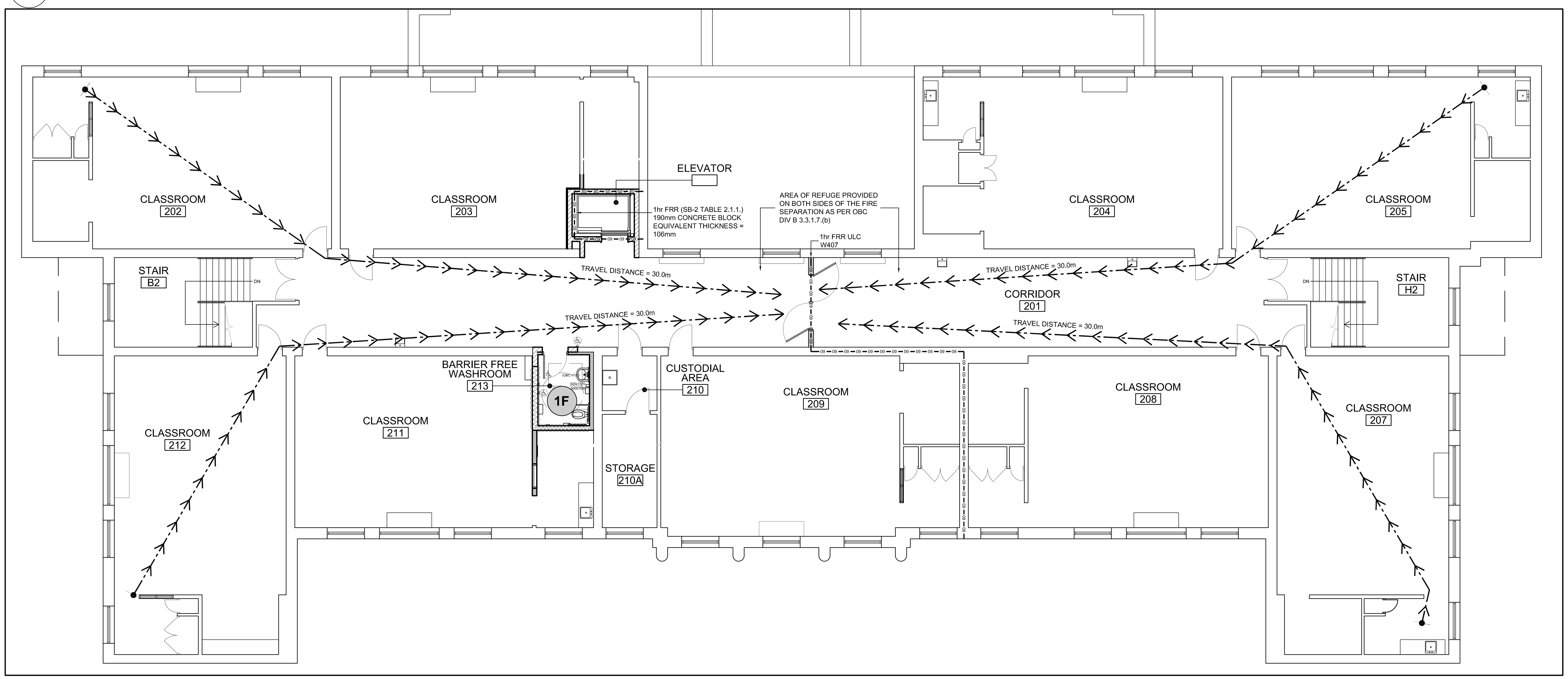
11. CONNECTIONS OF ALL NON STRUCTURAL ELEMENTS AND EQUIPMENT TO SUPPORTING STRUCTURE TO BE DESIGNED TO COMPLY WITH ARTICLE 4.1.8.18 OF THE 2012 ONTARIO BUILDING CODE FOR SEISMIC LOADS. CONTRACTOR TO SUBMIT SHOP DRAWINGS SHOWING THESE CONNECTIONS STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER IF APPLICABLE.





1 / A1.00 PARTIAL GROUND FLOOR DEMOLITION PLAN
SCALE 1:50

HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

LEGEND

ACT	ACOUSTIC CEILING TILE
DWGS	DRAWINGS
EX	EXISTING
FRR	FIRE RESISTANCE RATING
hr	HOUR
MECH	MECHANICAL
min	MINUTE
O/C	ON CENTER
U/S	UNDERSIDE

NO	REVISIONS	DATE
2	ISSUED FOR TENDER	2024-12-11
1	ISSUED FOR PERMIT	2024-11-15

PARKDALE ELEMENTARY SCHOOL ACCESSIBILITY RENOVATIONS
139 PARKDALE AVE N,
HAMILTON, ONTARIO

LIFE SAFETY - SECOND FLOOR PLAN AND SECTION

GRGURIC ARCHITECTS INCORPORATED
28 KING STREET EAST, UNIT B
STONEY CREEK, ONTARIO, L8G 1J8
Tel. 905-664-8735 Fax. 905-664-8737
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SCALE: AS NOTED	PROJECT: 2024-15
DATE: JAN-2023	
DRAWN DW	DRAWING A5.10
CHECKED WP	
PRINT DATE	12/11/24

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A5.10-Life_Safety_Plans.dwg

GENERAL NOTES

1. THESE DOCUMENTS ARE TO BE USED ONLY BY THE PARTY WITH WHOM DFE HAS ENTERED INTO A CONTRACT.
2. THE USE OF THESE DRAWINGS IS LIMITED TO THAT IDENTIFIED IN THE REVISION COLUMN.
3. THE STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2024 ONTARIO BUILDING CODE (OBC) LATEST EDITION INCLUDING ALL THE LATEST STANDARDS REFERENCED THEREIN, AND ANY APPLICABLE ACTS OF AUTHORITY. CONSTRUCTION PRACTICES SHALL BE ACCORDING TO THE SAME. USE THE LATEST VERSIONS OF STANDARDS AND CODES LISTED BELOW. ELEMENTS OF STRUCTURES AND NON-STRUCTURAL COMPONENTS AND EQUIPMENT AND THEIR CONNECTIONS TO BE DESIGNED PER OBC LATEST EDITION.
4. DO NOT SCALE THESE DRAWINGS. ERRORS MADE BECAUSE OF SCALING THESE DRAWINGS ARE RESPONSIBILITY OF THE PARTY WHO USED THE DRAWINGS.
5. WHERE DISCREPANCIES EXIST, THE MOST STRINGENT SHALL PREVAIL. NOTIFY THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
6. STRUCTURAL DRAWINGS TO BE USED TOGETHER WITH ALL OTHER SPECIFICATIONS AND CONTRACT DOCUMENTS.
7. REFER TO ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR LOCATIONS AND SIZES OF HOLES, SUMP PITS, TRENCHES, CURBS, BOLTS, SLEEVES, OPENINGS, ETC.
8. THE CONTRACTOR SHALL BECOME FAMILIARIZED WITH THE PROJECT ON SITE, INCLUDING EXISTING CONSTRUCTION. ANY ALTERATIONS FROM ASSUMED IN THE DRAWINGS MUST BE REPORTED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
9. THE ENGINEER MUST APPROVE SUBSTITUTIONS FOR SPECIFIED PRODUCTS AND MATERIALS.
10. ALL WORK IS TO BE PERFORMED IN ACCORDANCE WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS - O.REG. 213/91.
11. THE CONTRACTOR SHALL PROVIDE DESIGN AND CONSTRUCTION OF HORIZONTAL AND VERTICAL SHORING AND TEMPORARY BRACING AS PER O.REG 213/91. THE CONTRACTOR SHALL PROVIDE BRACING, SHORING, SHEET PILING ETC. TO PROTECT EXISTING OR ADJACENT STRUCTURES AFFECTED BY THIS WORK.
12. AN INDEPENDENT INSPECTION AND TESTING COMPANY SHALL PROVIDE TESTS TO PROVE THAT CONSTRUCTION IS IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS. REQUIRED TESTING SHALL BE AS PER THE TESTING AND INSPECTION TABLE BELOW.
13. DOYTCH & FILO ENGINEERING WILL PROVIDE GENERAL REVIEW OF CONSTRUCTION. DOYTCH & FILO ENGINEERING WILL REVIEW SHOP DRAWINGS FOR GENERAL CONFORMITY WITH THE CONTRACT DOCUMENTS PREPARED BY "DOYTCH & FILO". THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PERFORMANCE OF THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. "DOYTCH & FILO" IS NOT RESPONSIBLE FOR THE FAILURE OF THE CONTRACTOR TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. REVIEWED SHOP DRAWINGS DO NOT RELIEVE CONTRACTORS FROM RESPONSIBILITY FOR THEIR MISTAKES.
14. SHOP DRAWINGS MUST BE SEALED BY PROFESSIONAL ENGINEER BEFORE BEING SUBMITTED TO DFE FOR REVIEW, U.N.O.
15. THE OWNER AND THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF CONSTRUCTION PROGRESS, AND THEY SHALL INVITE THE ENGINEER TO COMPLETE GENERAL REVIEWS.

TESTING AND INSPECTION

1. THE FOLLOWING ITEMS REQUIRE TESTING OR INSPECTION BY A CERTIFIED INDEPENDENT TESTING OR INSPECTION AGENCY UNLESS NOTED OTHERWISE. THE AGENCY SHALL SEND COPIES OF ALL STRUCTURAL TESTING AND INSPECTION REPORTS TO THE ENGINEER FOR REVIEW.

ITEM	REQ'D	COMMENTS
SOIL BEARING CAPACITY	YES	BY SOILS ENGINEER
SOIL COMPACTION	YES	BY SOILS ENGINEER
REINFORCING STEEL PLACMENT	YES	INSPECT FINAL PLACEMENT
CONC. COMPRESSIVE TESTS	YES	MIN. 2 SETS PER 100 CUBIC METRES
CONCRETE SLUMP	YES	
STRUCTURAL STEEL BOLTING	YES	
STRUCTURAL STEEL WELDING	YES	INSPECT ALL FIELD WELDS
MORTAR CUBES	YES	

2. IT IS THE RESPONSIBILITY OF BOTH THE OWNER AND THE CONTRACTOR TO NOTIFY THE ENGINEER OF CONSTRUCTION PROGRESS AND INVITE THE ENGINEER TO COMPLETE GENERAL REVIEWS.
3. STRUCTURAL CONSULTANTS WILL PROVIDE GENERAL REVIEW OF CONSTRUCTION TO DETERMINE WHETHER THE CONSTRUCTION OF THAT WORK SHOWN ON THE DRAWINGS IS IN GENERAL CONFORMITY WITH THE PLANS, SKETCHES, DRAWINGS, AND SPECIFICATIONS FORMING PART OF THE CONTRACT DOCUMENTS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR QUALITY CONTROL AND THE PERFORMANCE OF THE WORK IN ACCORDANCE WITH THE CONTRACT. STRUCTURAL CONSULTANTS SHALL NOT BE RESPONSIBLE FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUB-CONTRACTOR, OR ANY OTHER PERSON PERFORMING ANY OF THE WORK OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

REQUIRED SUBMITTALS

1. THE FOLLOWING ITEMS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION WHERE APPLICABLE.
2. REVIEW OF THE SHOP DRAWINGS IS FOR THE SOLE PURPOSE OF ASCERTAINING CONFORMANCE WITH THE GENERAL DESIGN CONCEPT AND IS NOT AN APPROVAL OF THE DETAIL DESIGN INHERENT IN THE SHOP DRAWINGS, RESPONSIBILITY FOR WHICH SHALL REMAIN WITH THE CONTRACTOR SUBMITTING THEM. SUCH REVIEW SHALL NOT REL`IEVE THE CONTRACTOR OF THEIR RESPONSIBILITY FOR ERRORS AND OMISSIONS IN THE SHOP DRAWINGS OR FOR MEETING ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR INFORMATION PERTAINING TO THE FABRICATION PROCESS TECHNIQUES OF CONSTRUCTION AND INSTALLATION AND FOR COORDINATION OF THE WORK OF ALL SUB-TRADES.
3. THE APPROVAL OF SHOP DRAWINGS DOES NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY OF THE FITTING OF BUILDING COMPONENTS. ANY DISCREPANCIES IN THE SHOP DRAWINGS ARE THE RESPONSIBILITY OF THE CONTRACTOR.

ITEM	REEQ'D SUBMITTAL?	ENGINEER'S STAMP REQ'D?	NOTES
REBAR SHOP DRAWINGS	YES	NO	INCL CONC BLOCK REINF
CONCRETE MIX DESIGNS	YES	NO	
MASONRY GROUT MIX DESIGN	YES	NO	
BLOCK MILL REPORT	YES	NO	
STRUCTURAL STEEL SHOP DRAWINGS	YES	YES	FOR CONNECTIONS ONLY
MISCELLANEOUS STEEL SHOP DRAWINGS	YES	YES	STAMP FOR STAIRS, LADDERS AND GUARDS
STEEL DECK SHOP DRAWINGS	YES	YES	
COLD FORMED STEEL FRAMING SHOP DWGS.	YES	YES	
FALL ARREST ANCHORS	YES	YES	
PRECAST SHOP DRAWINGS	YES	YES	

FOUNDATIONS

1. NO SOIL INVESTIGATION WAS UNDERTAKEN FOR THIS SITE. THE MIN SOIL BEARING CAPACITY HAS BEEN ASSUMED AS PER NOTE#2 . CONTRACTOR TO RETAIN A GEOTECHNICAL ENGINEER TO CONFIRM THE MINIMUM BEARING CAPACITY. ALL DISCREPANCIES TO BE REPORTED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
2. ALL FOOTINGS SHALL BEAR DIRECTLY ON NATURALLY CONSOLIDATED, UNDISTURBED SOIL, WITH A MINIMUM SOIL BEARING CAPACITY OF 100 kPa (SLS) AND 150 kPa (ULS) AT MIN. 1.2m BELOW GROUND.
3. BOTTOM OF THE FOOTINGS SHALL BE BELOW THE LEVEL OF FREEZING DEPTH, BUT A MINIMUM 1200 mm (4'-0") BELOW FINISHED EXTERIOR GRADE, UNLESS NOTED OTHERWISE.
4. PROTECT ALL SOIL FROM FREEZING ADJACENT TO AND BELOW ALL FOUNDATIONS DURING CONSTRUCTION.
5. INSULATION IS SHOWN WHERE REQUIRED FOR PROTECTION OF THE FOUNDATIONS FROM DAMAGE DUE TO FROST ACTION ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR FOUNDATION INSULATION NOT SHOWN ON THE STRUCTURAL DRAWINGS.
6. THE BEARING SOIL HAS MUST BE APPROVED BY THE GEOTECHNICAL ENGINEER BEFORE POURING THE FOOTINGS.
7. ALL ORGANIC TOPSOIL AND LOOSE FILL TO BE REMOVED FROM THE SITE BEFORE CONSTRUCTION.
8. WHERE APPROVED, GRANULAR FILL UNDER ALL FOOTINGS ON GRADE SHALL BE COMPACTED IN 150 mm (6") LAYERS TO SPECIFIED IN THE SOILS REPORT STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMDD).
9. PLACE BOTTTOM OF NEW FOOTINGS AT THE SAME ELEVATION AS THE EXISTING ADJACENT FOOTINGS, UNLESS NOTED OTHERWISE. THE LINE OF SLOPE BETWEEN ADJACENT FOOTINGS OR ALONG STEPPED FOOTINGS SHALL NOT EXCEED 1 VERT. TO 2 HOR.(COORD. W/ SOIL'S CONSULTANT), AND MAX HEIGHT OF ONE STEP TO BE 600mm.
10. SLABS ON GRADE

   A. PLACE SLABS ON GRADE ON MATERIAL CAPABLE OF SAFELY SUPPORTING 25 kPa WITHOUT SETTLEMENT RELATIVE TO THE BUILDING FOUNDATIONS.
   B. PROOF-ROLL EXISTING FILL MATERIAL. REMOVE ANY LOOSE OR SOFTENED AREAS BENEATH SLAB-ON-GRADE BEFORE PLACING GRANULAR FILL.
   C. APPROVED GRANULAR FILL UNDER ALL SLABS ON GRADE SHALL BE COMPACTED IN 150 mm (6") LAYERS TO 100% STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMDD).
   D. BEFORE CASTING THE SLAB PLACE 200 mm (8") OF 19 mm (3/4") CLEAR CRUSHED STONE OVER THE SUB-BASE AND THOROUGHLY ROLL AND CONSOLIDATE TO THE LEVELS REQUIRED.
11. FOUNDATION WALLS WITH BACKFILL ON BOTH SIDES TO BE BACKFILLED SYMMETRICALLY, UNLESS TEMPORARY SHORING FOR THE WALL IS PROVIDED.
12. ANY HORIZONTAL CONSTRUCTION JOINTS IN FOUNDATION WALLS TO BE APPROVED BY THE ENGINEER.
13. DO NOT PLACE BACKFILL AGAINST WALLS RETAINING EARTH (OTHER THAN CANTILEVERED RETAINING WALLS) UNTIL THE WALLS AND THE FLOOR CONSTRUCTIONS AT THE TOP AND BOTTOM OF THE WALLS HAVE BEEN CAST AND HAVE ATTAINED 100% OF THEIR DESIGN STRENGTH.

CAST-IN-PLACE CONCRETE AND REINFORCING

1. ALL CONCRETE WORK TO CONFORM TO THE LATEST REQUIREMENTS OF CSA STANDARDS A23.1, A23.2 & A23.3.

CONCRETE MIX PROPERTIES TABLE

CONCRETE	MIN.28 DAYS STRENGTH (MPa)	SLUMP mm	AIR CONTENT (%)	MAX. AGGREGATE SIZE (in)	EXPOSURE CLASS
EXPOSED FOUNDATION WALLS, RETAINING WALLS, CAISSONS	35	80 (±30)	4-7	3/4"	F-2
INTERIOR COLUMNS / WALLS/ PILE CAPS, FOUNDATION WALLS/ BEAMS / SLABS	35	80 (±30)	0	3/4"	N
INT. S.O.G.	25	80 (±30)	0	3/4"	N
FREEZE THAW EXPOSURE	25	80 (±30)	4-7	3/4"	F-2
EXTERIOR SLAB (UNREINFORCED)	32	80 (±30)	5-8	3/4"	C-2
EXTERIOR SLAB (REINFORCED)	35	80 (±30)	5-8	3/4"	C-1
NON-SHRINKABLE GROUT	30	AS PER MANUF. RECOMEND.	0	-	N
LEAN MIX CONCRETE	4	80 (±30)	0	-	N
SPREAD FOOTINGS	25	80 (±30)	0	3/4"	N
STRIP FOOTINGS, MATT PADS	25	80 (±30)	0	3/4"	N

2. WELDED WIRE FABRIC SHALL CONFORM TO CAN/CSA G30.5 WITH A MINIMUM YIELD STRENGTH OF FY = 450 MPa. WELDED WIRE FABRICK SHEETS SHALL BE LAPPED A MINIMUM OF 150mm (6") AT JOINTS (U.N.O.).
3. REINFORCING BARS SHALL CONFORM TO LATEST CAN/CSA G30.18 GRADE 400W FOR REINFORCING STEEL WITH MINIMUM YIELD STRENGTH OF FY = 400 MPa.
4. INSTALLATION OF THE REINFORCING STEEL SHALL CONFORM TO THE REINFORCING STEEL INSTITUTE OF CANADA "MANUAL OF STANDARD PRACTICE".
5. ALL REINFORCING LAP SPLICES SHALL CONFORM TO THE LATEST CSA STANDARD A23.3 AND ALL BAR SPLICES SHALL BE CLASS "B" TENSION SPLICES (U.N.O.).
   a. NO BAR SPLICES SHALL BE LESS THAN IN THE TABLE BELOW.
   b. INCREASE HORIZONTAL SPLICE LENGTHS IN THE TABLE BY 1.3 WHERE MORE THAN 300mm (12") OF FRESH CONCRETE IS CAST BELOW THE SPLICE.

CONCRETE / REBAR SIZE	TENSION SPLICE 25 MPa	TENSION SPLICE 30 MPa	TENSION SPLICE 35 MPa	COMPRESSION SPLICE
10M	400 (16")	400 (16")	400 (16")	450 (18")
15M	600 (24")	600 (24")	600 (24")	450 (18")
20M	800 (32")	800 (32")	800 (32")	600 (24")
25M	1200 (48")	1100 (44")	1000 (40")	750 (30")
30M	1400 (56")	1300 (52")	1200 (48")	900 (36")
35M	1650 (66")	1500 (60")	1400 (56")	1050 (42")

6. EMBEDMENT OF DOWELS SHALL BE MIN. EQUAL TO TENSION SPLICE LENGTH, UNLESS NOTED OTHERWISE.
7. REINFORCING BARS TO BE SYMMETRIC OVER SUPPORTS AND SYMMETRIC IN SPANS, UNLESS NOTED OTHERWISE.
8. REINFORCING STEEL SHALL BE FIXED IN PLACE DURING PLACEMENT OF CONCRETE. BAR SUPPORTS SHALL SHALL BE STEEL, CONCRETE OR PLASTIC.
9. THE REINFORCING STEEL SHALL BE CLEANED FROM OIL, GREASE, RUST AND DEBRIS BEFORE PLACEMENT OF CONCRETE.
10. CONCRETE PROPERTIES:
    a. ALL CONCRETE SHALL HAVE A 28 DAY MINIMUM COMPRESSIVE STRENGTH OF 35MPa UNLESS OTHERWISE SPECIFIED.
11. THE SLUMP SHOWN IN THE TABLE MAY BE INCREASED WHEN SUPER-PLASTICIZER IS USED.
12. DO NOT ADD WATER TO CONCRETE UNLESS WRITTEN APPROVAL GIVEN BY THE ENGINEER. IF HIGHER SLUMP CONCRETE IS DESIRED, CONCRETE SUPPLIER SHALL DESIGN AND SUPPLY ACCORDINGLY.
13. CONCRETE FORMWORK TOLERANCES SHALL CONFORM TO LATEST CSA STANDARD A23.1, UNLESS NOTED OTHERWISE.

CONCRETE AND REINFORCING (cont'd)

14. CURING OF CONCRETE SHALL BE IN ACCORDANCE WITH LATEST CSA A23.1.
15. VIBRATE ALL CONCRETE AT THE TIME OF POURING.
16. CONTROL JOINTS IN SLABS ON GRADE SHALL BE MIN. t/3 (SEE TYP DETAIL). MAX. DISTANCE BETWEEN CONTROL JOINTS IN SLABS-ON-GRADE SHALL BE LESS THAN THE GREATER OF 25 x t OR 3000 mm (10'-0") UNLESS NOTED OTHERWISE.
17. SUPPLY AND SET ANCHOR BOLTS, P.C. CONNECTIONS, SLEEVES, PIPE HANGERS, JOISTS AND OTHER INSERTS AND OPENINGS AS INDICATED OR SPECIFIED ELSEWHERE.
    FOR BEAMS AND COLUMNS: NO SLEEVES, DUCTS, PIPES OR OTHER OPENINGS SHALL PASS VERTICALLY OR HORIZONTALLY EXCEPT WHERE EXPRESSLY DETAILED ON STRUCTURAL DRAWINGS OR WHERE APPROVED IN ADVANCE BY ENGINEER.
    FOR SLABS AND WALLS: : ALL SLEEVES AND OPENINGS GREATER THAN 100 mm (4) IN ANY DIMENSION OR REQUIRING THE CUTTING OF ANY REINFORCEMENT, AND NOT INDICATED ON STRUCTURAL DRAWINGS, MUST BE APPROVED BY THE ENGINEER.
    FOR MULTIPLE OPENINGS OR SLEEVES: IF WITHIN 600mm (24) OF EACH OTHER CONSULT ENGINEER FOR DIRECTION. DO NOT MAKE HOLES IN SLABS CLOSER THAN 24" TO EDGE OF COLUMNS.
18. CAST IN ANCHOR BOLTS SHALL CONFORM TO THE LATEST CSA STANDARD G40.21 OR ASTM F1554 WITH A MINIMUM YIELD STRENGTH OF 250 MPa AND SHALL BE SET TRUE AS TO LOCATION, ELEVATION AND PROJECTION TO THE FOLLOWING TOLERANCES:
    ANCHOR BOLT LOCATION = ± 3mm (1/8").
    ANCHOR BOLT PROJECTION = ± 6mm (1/4").
19. CONSTRUCTION JOINTS FOR WALLS ARE BASED UPON VERTICAL JOINTS AT A MAXIMUM SPACING OF 10000mm (30'-0"). UNLESS CONTROL JOINTS ARE PROVIDED AS PER TYPICAL DETAIL. TOTAL LENGTH OF POUR TO BE DISCUSSED WITH ENGINEER PRIOR TO PROCEEDING.
20. CONSTRUCTION JOINTS FOR WALLS, SLABS, AND BEAMS NOT SHOWN ON THE DRAWINGS SHALL BE APPROVED BY THE STRUCTURAL CONSULTANT BEFORE CONSTRUCTION. GENERALLY JOINTS IN SLABS SHALL BE AT RIGHT ANGLES TO THE SPANS, AT MID SPAN IF POSSIBLE AND BE CLEAR OF SUPPORTS AND POINT LOADS.
21. INSERTS, FRAME-OUTS, SLEEVES, BRACKETS, CONDUITS AND FASTENING DEVICES, SHALL BE INSTALLED AS REQUIRED BY THE DRAWINGS AND SPECIFICATIONS IN A MANNER THAT SHALL NOT IMPAIR THE STRUCTURAL STRENGTH OF THE SYSTEM, BE SO INSTALLED THAT THEY SHALL NO REQUIRE THE CUTTING, BENDING, OR DISPLACEMENT OF THE REINFORCING OTHER THAN AS SHOWN ON THE TYPICAL DETAILS.
22. ELECTRICAL CONDUITS SHALL NOT PASS THROUGH A COLUMN, SHALL NOT BE LARGER IN OUTSIDE DIAMETER THAN 1/3 SLAB THICKNESS OR WALL OR BEAM WHICH IT IS EMBEDDED, SHALL NOT BE SPACED CLOSER THAN 3 DIAMETERS ON CENTER UNLESS APPROVED AND HAVE A MINIMUM CONCRETE COVER OF 25mm (1") AND UNLESS SPECIFICALLY PERMITTED OTHERWISE, SHALL NOT RUN HORIZONTALLY IN A CONCRETE WALL.
23. CONFORM TO THE CONCRETE COVER REQUIREMENTS OF LATEST CSA A23.1 AND THE FOLLOWING, UNLESS NOTED OTHERWISE:
    - FOR CONCRETE CAST AGAINST EARTH AND PERMANENTLY EXPOSED TO EARTH - 75mm

NOTES:
a. THE SLAB COVERS IN TABLE 1, 2 AND 3 ARE FOR CONCRETE NOT PROTECTED BY A MEMBRANE OR A CORROSION INHIBITOR. FOR PARKING GARAGE SLABS - SEE TABLE 4.
b. FOR COLUMN COVERS (TO MAIN REINFORCEMENT) EXCEEDING 63mm WITH 4 HOUR FIRE RATING PROVIDE WIRE MESH USING 1.57mmØ 100mm EA WAY.
c. THE COVER FOR A BUNDLE OF BARS SHALL BE THE SAME AS THAT FOR A SINGLE BAR WITH AN EQUIVALENT AREA.
d. PROVIDE COVER FOR MINIMUM 2 HOURS FIRE RATING UNLESS OTHERWISE NOTED
e. REINFORCED CONCRETE WALLS WHICH MAY BE EXPOSED TO FIRE ON BOTH SIDES SIMULTANEOUSLY SHALL HAVE THE MINIMUM COVER REQUIREMENTS FOR COLUMNS.

TABLE 1
MINIMUM CONCRETE COVER FOR ELEMENTS NOT EXPOSED TO CHLORIDES NOR FREEZING AND THAWING (mm)

ELEMENTS		COMMENTS	BAR SIZE	FIRE RATING <= 2	FIRE RATING 3	FIRE RATING 4
WALLS	FOUNDATION WALLS, RETAINING WALLS	NOT CAST AGAINST CONC. FORMWORK (CAST AGAINST LAGGING, CAISSON, WALL)	ALL BAR SIZES	50		
WALLS	FOUNDATION WALLS, SHEAR WALLS (e) RETAINING WALLS AND MISC. WALLS		Ø <= 25M	25		
			30M	30		
			35M	35		
COLUMNS	COLUMNS		Ø <= 30M	40		55
			35M			
SLABS AND BEAMS	SLABS		Ø <= 25M	25	35	40
			30M	30		
			35M	35		
SLABS AND BEAMS	BEAMS		Ø <= 25M	30		40
			30M			
			35M	35		
			45M	45		

TABLE 2
MINIMUM CONCRETE COVER FOR ELEMENTS EXPOSED TO FREEZING AND THAWING (mm)

ELEMENTS		COMMENTS	BAR SIZE	FIRE RATING <= 3	FIRE RATING 4
WALLS	FOUNDATION WALLS, RETAINING WALLS	NOT CAST AGAINST CONC. FORMWORK (CAST AGAINST LAGGING, CAISSON, WALL)	ALL BAR SIZES	50	
WALLS	FOUNDATION WALLS, SHEAR WALLS (e) RETAINING WALLS AND MISC. WALLS		Ø <= 25M	40	
			30M	45	
			35M	55	
COLUMNS	COLUMNS		Ø <= 30M	45	55
			35M	55	
SLABS AND BEAMS	SLABS AND BEAMS		Ø <= 25M	40	
			30M	45	
			35M	55	
			45M	70	

TABLE 3
MINIMUM CONCRETE COVER FOR ELEMENTS EXPOSED TO CHLORIDES (mm)

ELEMENTS		COMMENTS	BAR SIZE	FIRE RATING <=4
WALLS	FOUNDATION WALLS, SHEAR WALLS AND MISC. WALLS (e)		Ø <= 25M	60
			30M	60
			35M	70
			45M	90
COLUMNS	COLUMNS		Ø <= 30M	60
			35M	
			45M	80
			55M	105
SLABS AND BEAMS	SLABS AND BEAMS		Ø <= 25M	60
			30M	
			35M	70
			45M	90

TABLE 4
MINIMUM CONCRETE COVER FOR ELEMENTS OF PARKING GARAGE PROTECTED BY MEMBRANE AND CORROSION INHIBITOR "MI"

ELEMENTS		COMMENTS	BAR SIZE	TOP COVER NORM./SEVERE FIRE RATING <=4	BOT. COVER NORM./SEVERE FIRE RATING <=2	BOT. COVER 3	BOT. COVER 4
SLABS AND BEAMS	SLAB AND BEAMS		Ø <= 20M	40	30	35	40
			25M		40		
			30M	45			
			35M	55			

STRUCTURAL STEEL

1. ALL STRUCTURAL STEEL AND JOIST DESIGN CONNECTIONS AND DETAILS SHALL BE IN ACCORDANCE WITH THE LATEST CSA STANDARD S16.
   a. REFER ALSO TO NOTES UNDER PLANS.
2. STRUCTURAL STEEL SHALL CONFORM TO LATEST CAN/CSA-G40.20, AND CAN/CSA-G40.21
   a. GRADE 350W CLASS C FOR H.S.S.
   b. GRADE 350W FOR W SHAPES, S SHAPES, AND TEES.
   c. GRADE 300W FOR CHANNELS, ANGLES, PLATES, RODS
3. BOLTED CONNECTIONS SHALL USE ASTM A325 BOLTS. ALL BOLTS, NUTS AND WASHERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A325. ANCHOR RODS SHALL BE FABRICATED FROM STEEL ROD CONFORMING TO CSA STANDARD G40.21 GRADE 300W.
4. SHEAR STUDS TO CONFORM LATEST ASTM A108.
5. WELDING MATERIALS TO CONFORM TO LATEST CSA W48.
6. WELDING OF STRUCTURAL STEEL SHALL CONFORM TO THE REQUIREMENTS OF LATEST CSA STANDARD W59.
7. FILLET WELDS SHALL BE 6mm (1/4") MIN. U.N.O. BOLTS SHALL BE A325 19mm (3/4") MIN. U.N.O. BOLTED CONNECTIONS SHALL HAVE MIN. OF TWO BOLTS IN EACH CONNECTED PIECE. BOLTED CONNECTIONS SHALL BE DESIGNED AS BEARING CONNECTIONS U.N.O.
8. STEEL COATINGS - STRUCTURAL STEEL SHALL BE CLEANED AND PREPARED TO CONFORM TO CSA LATEST STANDARD S16:
   a. INTERIOR STRUCTURAL STEEL SHALL BE PRIMED AND PAINTED AS PER LATEST CSA/CAN-S16.
   b. EXPOSED STEEL TO BE HOT DIP GALVANIZED IN ACCORDANCE TO LATEST CAN/CSA-G164. TOUCH UP OF WELDS AND CUTS OF GALVANIZED MEMBERS TO BE DONE WITH A MINIMUM OF 3 COATS OF ZINC RICH PAINT.
   c. INTERIOR STEEL MREMBERS THAT ARE TO BE PROTECTED BY A CEMENTIOUS FIRE PROOFING SHALL BE CLEANED AND REMAIN UNCOATED.
9. FABRICATOR SHALL DESIGN CONNECTIONS IN ACCORDANCE WITH THE 2012 OBC FOR THE FORCES SHOWN ON THE DRAWINGS. BEAM CONNECTIONS SHALL BE DESIGNED FOR A MINIMUM OF 50% OF THE BEAM SHEAR CAPACITY IF FACTORED DESIGN FORCES ARE NOT SHOWN ON THE DRAWINGS.
10. MOMENT FRAMES CONNECTIONS TO BE CONTINUOUS COLUMN / INTERRUPTED BEAM TYPE U.N.O.
11. WHERE MOMENT CONNECTIONS ARE CALLED FOR BUT VALUES ARE NOT INDICATED, DESIGN CONNECTIONS FOR 100% SECTION CAPACITY OF THE SMALLER MEMBER JOINED.
12. COLUMN CAP PLATES TO BE MIN. 16mm (5/8") THICK U.N.O. COLUMN BASE PLATES TO BE MIN. 20mm (3/4") THICK U.N.O. HSS COLUMNS TO HAVE MIN. 10mm (3/8") THICK CAP PLATE WELDED ALL-AROUND U.N.O.
13. ALL BEAMS CANTILEVERED OR CONTINUOUS OR SUPPORTED OVER A COLUMN OR OTHER SUPPORT, AND BEAMS SUPPORTING POINTS OF CONCENTRATED LOAD, SHALL HAVE A MIN. OF 2-10 mm (3/8") STIFFENERS EACH SIDE OF WEB U. N.O.
14. TOP OF COLUMNS WHICH ARE NOT BRACED BY JOISTS OR BEAMS SHALL BE BRACED DIAGONALLY TO THE ROOF OR FLOOR BY A MINIMUM OF 4-L76 x 76 x 6.4 mm (L3 x 3 x 1/4") ANGLES FOR INTERIOR COLUMNS; A MINIMUM 2-L76 x 76 x 6.4mm (L3 x 3 x 1/4") ANGLES FOR EXTERIOR COLUMNS. BRACING SHALL BE BETWEEN TOP OF COLUMN AND TOP CHORD OF JOISTS.
15. COLUMNS BUILT INTO MASONRY, ABUTTED BY, OR FACED WITH MASONRY WALLS SHALL HAVE ADJUSTABLE ANCHORS AT 400 mm (16") O.C. SPACED VERTICALLY. WHERE STEEL PROVIDES LATERAL BRACING ONLY TO MASONRY, ANCHORS SHALL ALLOW VERTICAL MOVEMENT BETWEEN STEEL MEMBERS AND MASONRY.
16. BEARING PLATES ARE TO BE CENTRED BELOW ALL BEAMS OR LINTELS U.N.O ON THE DRAWINGS. WELD TO BEARING PLATE WITH A MINIMUM 50 mm x 5 mm (2" x 3/16") FILLET ON BOTH SIDES OF BEAM.
17. STEEL BEAMS AND LINTELS SHALL HAVE 200 mm (8") MINIMUM END BEARING ON MASONRY AND 65 mm (2 1/2") MINIMUM BEARING ON STEEL UNLESS INDICATED OTHERWISE.
18. WHERE BACK-TO-BACK ANGLES ARE USED AS LINTELS OR SUPPORTS. STITCH WELD TOGETHER AT A MAXIMUM SPACING OF 300mm (12") O.C.
19. ALL ROOF OPENINGS TO BE REINFORCED BY FRAMES PER TYP. DETAIL UNLESS NOTED OTHERWISE. MAXIMUM SPAN 2000 mm (6'-8"). FOR LARGER OPENING CONSULT STRUCTURAL ENGINEER. COORDINATE WITH MECHANICAL, ELECTRICVAL AND SUB-TRADES TO AVOID INTERFERENCE WITH STRUCTURAL MEMBERS.
20. PROVIDE TEMPORARY BRACING TO KEEP STRUCTURE SAFE AND PLUMB UNTIL PERMANENT BRACING SHOWN ON DRAWINGS INCLUDING FLOORS AND ROOFS IS CONSTRUCTED.

METAL DECK

1. DESIGN METAL DECK IN CONFORMANCE WITH THE REQUIREMENTS OF LATEST CSA S136 FOR THE LOADS INDICATED ON THE DRAWINGS
2. UNLESS NOTED OTHERWISE, ROOF DECK SHALL BE 38 mm x 0.91 mm (1.5" x .036") VIC WEST STEEL INC. RD 938 (OR APPROVED EQUAL), MINIMUM 3 SPANS CONTINUOUS.
3. UNLESS NOTED OTHERWISE, FLOOR DECK SHALL BE 38 mm x 0.76 mm (1.5"x .030") VIC WEST STEEL INC. HB938 (OR APPROVED EQUAL), MINIMUM 3 SPANS CONTINUOUS.
4. METAL DECK SHALL BE LIGHT ZINC COATED STRUCTURAL STEEL SHEET FABRICATED AND ERECTED IN ACCORDANCE WITH LATEST CSSBI 10M, CAN/CSA-S136. THE MINIMUM ZINC COATING DESIGNATION SHALL BE ZF075 (U.N.O.).
5. DECK SHALL OVERLAP A MINIMUM OF 50 mm (2") AT ALL END JOINTS AND HAVE A MINIMUM BEARING LENGTH OF 50 mm (2") ON ALL STRUCTURAL STEEL.
6. DECK HAS BEEN DESIGNED FOR DIAPHRAGM ACTION AND SHALL BE FASTENED AS FOLLOWS U.N.O.:
   WELD DECK TO SUPPORTING STEEL WITH 20 mm (3/4") DIAMETER PLUG WELD AT
   TRANSVERSE WELD SPACING =300 mm (12") O.C.
   PERIMETER WELD SPACING =300 mm (12") O.C.
   SIDE LAP BUTTON PUNCHING =300 mm (12") O.C.
   LONGITUDINAL WELD SPACING =300 mm (12") O.C
7. DECK WELDS SHALL BE TOUCHED UP WITH APPROVED PAINT BY THE DECK ERECTOR.
8. STEEL DECK WORK SHALL INCLUDE THE SUPPLY AND INSTALLATION OF ALL SHEET STEEL ANGLES, COVER PLATES, CLOSURES, STIFFENERS AND ANY OTHER ACCESSORIES REQUIRED.
9. CUT OPENINGS AND REINFORCE EDGES AS REQUIRED FOR PIPES, DUCTS, ETC.
   A. THE MAXIMUM SIZE OF AN UNREINFORCED OPENING IS 150 mm (6").
   B. REINFORCE ALL OPENINGS LARGER THAN 150mm (6"), BUT NOT EXCEEDING 450 mm (18"), AS INDICATED BY THE METAL DECK SUPPLIER.
   C. FOR OPENINGS GREATER THAN 450mm (18") NOT SHOWN ON THE DRAWINGS, CONTACT ENGINEER FOR DIRECTION.
10. HANGER WIRE FOR SUSPENDED CEILINGS SHOULD PIERCE BOTH SIDES OF THE FLUTE AND BE LOOPED AROUND AND TIED.

OPEN WEB STEEL JOISTS

1. OPEN WEB STEEL JOISTS (OWSJ'S) SHALL CONFORM TO CSA STANDARDS S16 AND CAN/CSA-S136.
2. WELDING OF STRUCTURAL STEEL SHALL CONFORM TO THE REQUIREMENTS OF CSA STANDARD W59 AND SHALL BE UNDERTAKEN BY A FABRICATOR AND ERECTOR FULLY APPROVED BY THE CANADIAN WELDING BUREAU TO THE REQUIREMENTS OF CSA STANDARD W47, DIVISION 1 AND DIVISION 2. FABRICATOR TO SUPPLY CERTIFICATION OF FUSION WELDING AND WELDING MAY ONLY BE CARRIED OUT IN ACCORDANCE WITH OWNER'S SAFETY REGULATIONS REGARDING WELDING.
3. JOISTS TO BE DESIGNED FOR THE LOADS AS SPECIFIED ON DRAWINGS AND IN ACCORDANCE WITH THE 2012 OBC. DESIGN OF JOISTS SHALL ALSO INCLUDE ALL LOADS FROM MECHANICAL EQUIPMENT SUCH AS ROOF TOP UNITS, DUCTS AND PIPING.
4. SHOP DRAWINGS OF JOIST DETAILS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW BEFORE FABRICATION. JOIST DESIGN AND DETAILS SHALL BE STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN ONTARIO. JOIST DESIGN CALCULATIONS SHALL BE SUBMITTED FOR RECORD PURPOSES.
5. PROVIDE SUFFICIENT CAMBER TO JOISTS TO ENSURE "0" CAMBER AFTER APPLICATION OF ALL DEAD LOADS SHOWN. ADJUST STIFFNESS AND REQUIRED CAMBER OF JOISTS ADJACENT TO MASONRY WALLS, STEEL BEAMS OF SHORTER SPAN AND THE LIKE TO PERMIT THE PROPER FASTENING OF THE STEEL DECK. AS A GUIDE, LIMIT THE DIFFERENTIAL DEFLECTION OF THE ADJACENT JOIST, UNDER ALL DEAD LOADS, TO L/120, WHERE 'L' IS THE SPAN OF THE STEEL DECK PERPENDICULAR TO THE JOISTS.
6. "TJ" ON PLANS DENOTES "TIE JOIST". BOTTOM CHORD TO BE FRAMED INTO COLUMNS, BEAMS OR WALLS. ALL JOISTS AT COLUMNS TO BE TIE JOISTS UNLESS OTHERWISE NOTED. TIE JOIST CONNECTIONS SHALL BE BOLTED.
7. WHERE TIE JOISTS ARE INDICATED, DESIGN TOP AND BOTTOM CHORDS AND CONNECT TO COLUMNS TO SAFELY DEVELOP LOADS SHOWN OR A MINIMUM OF A 25 kN SPECIFIED LOAD IN TENSION OR COMPRESSION.
8. DESIGN AND INSTALLATION OF ALL OWSJ BRIDGING SHALL BE IN ACCORDANCE WITH CSA S16. COMBINED DIAGONAL AND HORIZONTAL BRIDGING SHALL BE PROVIDED AT THE ENDS OF BRIDGING LINES AS REQUIRED. ENDS OF BRIDGING LINES SHALL BE ANCHORED TO STEEL, MASONRY OR OTHERWISE SHOWN AND BE CAPABLE OF RESISTING AN AXIAL LOAD OF AT LEAST 3 kN.
9. BRIDGING SHOWN ON THE DRAWINGS IS INTENDED AS A GUIDELINE ONLY. DESIGN AND PROVIDE BRIDGING FOR ALL OWSJ AND TRUSSES AS PER CSA S16.
10. OWSJ'S SHALL HAVE 100 mm (4") SHOE (U.N.O.)
11. FOR OWSJ BEARING ON MASONRY, JOIST SUPPLIER SHALL DESIGN AND SUPPLY ALL BEARING PLATES AND BEARING PRESSURE SHALL NOT EXCEED 1.2 MPa (175 psi).
12. ALL STEEL JOISTS SHALL BE WELDED TO STEEL BEAMS OR BEARING PLATES WITH A MINIMUM 50 mm x 5 mm (2" x 3/16") FILLET ON BOTH SIDES OF SHOES.
13. ALL HANGERS, STUB COLUMNS, TRAPEZE BARS, ETC. THAT SUPPORT MECHANICAL, ELECTRICAL OR STRUCTURAL EQUIPMENTS, PIPES, DUCTS, CATWALKS, ETC. MUST BE CONNECTED TO AN OWSJ PANEL POINT OR WHERE THE WEB OF THE JOIST MEETS THE CHORD OF THE JOIST.

NON-STRUCTURAL AND SECONDARY STRUCTURAL ELEMENTS

1. "NON-STRUCTURAL" OR "SECONDARY STRUCTURAL" ELEMENTS ARE NOT PART OF THE STRUCTURAL DESIGN SHOWN ON THESE DRAWINGS. SUCH ELEMENTS ARE DESIGNED, DETAILED AND REVIEWED IN THE FIELD BY OTHERS. THEY APPEAR ON DRAWINGS OTHER THAN THESE DRAWINGS OF DFE INC., WHERE STRUCTURAL ENGINEERING RESPONSIBILITY IS REQUIRED FOR THESE ELEMENTS, THIS SHALL BE PROVIDED BY SPECIALTY STRUCTURAL ENGINEERS, WHO SHALL ALSO PROVIDE ANY LETTERS REQUIRED BY BUILDING PERMIT AUTHORITIES.
2. EXAMPLES OF NON-STRUCTURAL ELEMENTS INCLUDE, BUT ARE NOT LIMITED TO:
3. A. ARCHITECTURAL COMPONENTS SUCH AS GUARDRAILS, HANDRAILS, FLAG POSTS, CANOPIES, CEILINGS, MILLWORK, ETC.
   B. LANDSCAPE ELEMENTS SUCH AS BENCHES, LIGHT POSTS, PLANTERS, ETC.
   C. CLADDING, GLAZING, WINDOW MULLIONS, NON - VERTICAL LOAD INTERIOR AND EXTERIOR STUD WALLS, INCLUDING WALLS SERVING AS OR SUPPORTING GUARDS.
   D. ARCHITECTURAL PRECAST, PRECAST CLADDING.
   E. SKYLIGHTS.
   F. MECHANICAL AND ELECTRICAL EQUIPMENT, COMPONENTS, AND THEIR ATTACHMENT DETAILS.
   G. WINDOW WASHING EQUIPMENT AND ITS ATTACHMENTS.
   H. ESCALATORS, ELEVATORS, AND CONVEYING SYSTEMS.
   I. GLASS BLOCK AND ITS ATTACHMENTS.
   J. BRICK OR BLOCK VENEERS AND THEIR ATTACHMENTS.
   K. NON - VERTICAL LOAD BEARING MASONRY, INCLUDING WALLS SERVING AS OR SUPPORTING GUARDS.
   L. NON- STRUCTURAL CONCRETE TOPPINGS.
4. SHOP DRAWINGS FOR NON-STRUCTURAL ELEMENTS WHICH MAY AFFECT THE PRIMARY STRUCTURAL SYSTEM SHALL BE SUBMITTED TO DFE INC. THESE DRAWINGS WILL BE REVIEWED ONLY FOR THE EFFECT OF THE ELEMENT ON THE PRIMARY STRUCTURAL SYSTEM.
5. THE DESIGN WIND LOADS TO BE USED FOR GLAZING, EXTERIOR STUDS AND EXTERIOR CLADDING SHAL BE CALCULATED BY OTHERS BASED ON WIND LOAD SHOWN IN DESIGN DATA TABLE AND PER OBC LATEST EDITION AND COMMENTARIES TO OBC. THE LOADS TO BE DEFINED FOR ULTIMATE LIMIT STATES AND SERVICABILITY LIMIT STATES.
6. FOR STONE OR MASONRY CLADDING, SEISMIC FORCES MAY GOVERN.
7. THE DESIGN WIND LOAD TO BE USED FOR INTERIOR STUDS AND PARTITIONS IS 0.5 kPa (UNFACTORED) UNLESS NOTED OTHERWISE.
8. THE MAXIMUM ALLOWABLE DEFLECTIONS FOR GLAZING, STUDS, PARTITIONS AND CLADDING UNDER THE WIND LOADS SHOWN ABOVE SHALL MEET THE ARCHITECTURAL SPECIFICATIONS, THE NATIONAL BUILDING CODE AND THE MANUFACTURER'S SPECIFICATIONS.

NOTE TO CONTRACTOR:

THE OWNER/ARCHITECT/CONTRACTOR IS ADVISED THAT D.F.ENGINEERING INC. CANNOT CERTIFY ANY COMPONENT OF THE SITE WORKS NOT INSPECTED DURING CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO NOTIFY D.F.ENGINEERING INC. PRIOR TO COMMENCEMENT OF CONSTRUCTION TO ARRANGE FOR INSPECTION.

ISSUED FOR TENDER	3	2024 - 12 - 06
ISSUED FOR PERMIT	2	2024 - 11 - 13
ISSUED FOR REVIEW	1	2024 - 11 - 08

DFE
DOYTCH & FILO ENGINEERING INC.
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PROJECT
PARKDALE ELEMENTARY SCHOOL ACCESSIBILITY RENOVATION
139 PARKDALE AVE. HAMILTON, ON.

DRAWING
GENERAL NOTES AND SCHEDULES

Design By:	TD/AF	Date:	2024-10-29
		Project No.:	24062701
Drawn By:	AF	Drawing No.:	S0.0
Scale:	AS NOTED		

MASONRY

1. CONCRETE MASONRY UNITS SHALL CONFORM TO THE LATEST CSA CAN/CSA-A165 AND SHALL HAVE A MINIMUM COMPRESIVE STRENGTH OF 15MPa BASED ON NET CROSS-SECTIONAL AREA.

2. REINFORCING BARS SHALL CONFORM TO CAN/CSA G30.18 GRADE 400W FOR REINFORCING STEEL WITH MINIMUM YIELD STRENGTH OF FY = 400 MPa.

3. TYPE S MORTAR SHALL BE USED THROUGHOUT FOR LOAD BEARING BLOCK. TYPE N MORTAR SHALL BE USED FOR BRICK VENEER OR DECORATIVE NON-LOAD BEARING BLOCK.
   MORTAR TYPE S: MIN. COMPRESSIVE STRENGTH - 12.0 MPa
   MORTAR TYPE N: MIN. COMPRESSIVE STRENGTH - 7.5 MPa
   GROUT SHALL CONFORM TO CAN/CSA A179
   GROUT MIN. COMPRESSIVE STRENGTH - 20 MPa

4. ALL MASONRY CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF LATEST CSA STANDARDS CAN/CSA-A370, CAN/CSA-A371 AND CSA S304.

5. ALL MASONRY WALLS SHALL BE HORIZONTALLY REINFORCED. MINIMUM REQUIREMENTS WITH (4.76 mm Ø) HEAVY DUTY "LADDER" TYPE JOINT REINFORCEMENT (OR APPROVED EQUAL) AND CONTINUOUS REINFORCEMENT AT EVERY SECOND COURSE (400 mm/16").
   a. ALL JOINT REINFORCEMENT SHALL BE HOT-DIPPED GALVANIZED.
   b. REINFORCEMENT SHALL BE LAPPED A MINIMUM OF 300mm (12") AT ALL JOINTS.
   c. PREFABRICATED CORNER AND TEE REINFORCEMENT SHALL BE USED AT ALL WALL INTERSECTIONS.
   d. REINFORCEMENT SHALL BE PLACED AS TO PROVIDE 16 mm (5/8") MORTAR COVER ON THE EXTERIOR FACE OF WALL AND 12 mm (1/2") COVER ON THE INTERIOR FACE OF WALL.

6. UNLESS NOTED OTHERWISE, PROVIDE CONTINUOUS BOND BEAMS (REINFORCED WITH 1-15M) AT UNDERSIDE OF EACH FLOOR, ROOF AND AT TOP OF PARAPETS. ALSO PROVIDE BOND BEAMS AT TOP AND BOTTOM OF OPENINGS AND EXTEND 600mm PAST CORNERS. REINFORCE BOTTOM BOND BEAM WITH 1-15M . REINFORCE TOP BOND BEAM AS FOLLOWS:
   - SPANS LESS THAN 1500 mm
   200 mm DEEP BOND BEAM c/w 1-15M FULL LENGTH
   - SPANS 1500 mm TO 3000 mm
   400 mm DEEP BOND BEAM c/w 2-15M FULL LENGTH

7. IN SEISMIC ZONES, IN ADDITION TO NOTE # 6 PROVIDE CONTINUOUS BOND BEAMS (REINFORCED WITH 1-15M) AT MAXIMUM VERTICAL INTERVALS OF 2400 mm O/C.

8. ALL TIES FOR MASONRY VENEER SHALL BE DESIGNED AND SUPPLIED BY THE MASONRY CONTRACTOR IN ACCORDANCE WITH LATEST CSA STANDARDS S304 AND CAN/CSA-A370.

9. ALL BLOCK MASONRY UNITS SHALL BE CONSTRUCTED WITH FULL HEAD JOINTS, AND FULL BED JOINTS UNDER THE FULL BEARING AREAS OF THE FACE SHELLS, AND UNDER WEBS SURROUNDING THOSE CELLS TO BE FILLED WITH GROUT.

10. WHERE MASONRY THICKNESS CHANGES, GROUT 100% SOLID MIN. 200mm (8") THE LOWER/THICKER PORTION OF THE WALL.

11. GROUT 100% SOLID BLOCKS AT PARAPETS.

12. THE INTERSECTION OF ALL MASONRY WALLS SHALL BE TOOTHED OR CONTINUOUSLY REINFORCED WITH JOINT REINFORCEMENT.

13. ALL MASONRY BENEATH CONCENTRATED LOADS (SUCH AS BEAMS, LINTELS, AND JOISTS) SHALL BE SOLID BLOCKS OR 100% GROUTED BLOCKS FOR A MINIMUM DEPTH OF 400 mm (16") OR 3 TIMES THE LENGTH OF BEARING AND PROJECTING A MINIMUM OF 200 mm (8") OR THE LENGTH OF BEARING BEYOND EACH EDGE OF BEARING, UNLESS OTHERWISE NOTED OR SHOWN.

14. MAINTAIN SUPPORT OF MASONRY LINTELS FOR A MINIMUM OF SEVEN DAYS OR UNTIL SUFFICIENT STRENGTH IS GAINED TO SAFELY SUPPORT LOADS IMPOSED.

15. WHERE STEEL BEARING PLATES ARE SHOWN ON THE DRAWINGS, THEY SHALL BE ANCHORED WITH A MINIMUM OF TWO 15M X 300mm LONG + 75mm HOOKED ANCHOR RODS WELDED TO THE PLATES AND EMBEDDED INTO GROUT FILL AS NOTED ABOVE.

16. SEE PLANS AND SCHEDULES REGARDING LINTEL SIZES FOR MASONRY WALLS AND VENEER.
    FOR ALL OPENINGS OR RECESSES IN MASONRY NOT SHOWN ON DRAWINGS GREATER THAN 300mm (12") AND UP TO 1200mm (4 FT.), INCLUDING THOSE FOR MECHANICAL OR ELECTRICAL SERVICES OR EQUIPMENT, PROVIDE ONE L89X89X6.4 (L3 1/2 X 3 1/2 X 1/4") ANGLE FOR EACH 100 mm (4") THICKNESS OF WALL.

17. ALL MASONRY WALLS SHALL BE ADEQUATELY BRACED DURING CONSTRUCTION UNTIL ADEQUATE DIAPHRAGM ACTION CAN BE DEVELOPED BY INSTALLED FLOOR AND ROOF STRUCTURAL COMPONENTS.

18. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF MASONRY CONTROL JOINTS. SPACING OF CONTROL JOINTS IN ALL WALLS SHALL BE CONSTRUCTED AS PER PLAN, BUT SHALL NOT EXCEED 6000 mm (20'-0") O.C. ALL REINFORCING TO BE DISCONTINUOUS AT CONTROL JOINTS. CONTROL JOINTS SHALL BE CAULKED WITH FOAM BACKER ROD AND SHALL NOT BE FILLED WITH MORTAR.

19. REINFORCED MASONRY:
    a. CELLS TO BE REINFORCED SHALL BE KEPT CLEAN OF MORTAR.
    b. GROUT FOR REINFORCED CELLS, BOND BEAMS, LINTELS AND CELLS CONTAINING DOWELS, ANCHOR BOLTS AND INSERTS PER NOTE #3.
    c. PROVIDE MINIMUM 2-15M VERTICALS FULL HEIGHT AT ALL WALL ENDS, CORNERS, INTERSECTIONS AND OPENINGS UNLESS OTHERWISE NOTED ON DRAWINGS.
    d. PROVIDE 1-15M VERTICAL FULL HEIGHT EACH SIDE OF MOVEMENT JOINTS.
    e. DOWELS FROM FOUNDATIONS/ SUPPORTING STRUCTURES TO MATCH VERTICAL REINFORCEMENT IN WALL.
    f. PROVIDE THE FOLLOWING LAPS FOR THE REINFORCEMENT INDICATED:
       - 10M BARS = 450 mm (18")
       - 15M BARS = 600 mm (24")
       - 20M BARS = 900 mm (36")
    EMBEDDED ITEMS ARE NOT TO INTERFERE WITH THE INTEGRITY OF THE MASONRY WALL OR LOCATION OF REINFORCEMENT. PROVIDE FULLY GROUTED LINTEL BEAM FOR CONDUITS AND PIPES RUNNING HORIZONTALLY WITHIN WALL.

20. PROVIDE COLD WEATHER PROTECTION AS REQUIRED BY CAN/CSA-A371.

21. PROVIDE MOVEMENT JOINTS PER ARCHITECTURAL DRAWINGS. MAXIMUM DISTANCE BETWEEN MOVEMENT JOINTS TO BE 6000mm (20'-0"). COORDINATE LOCATION WITH ENGINEER.

BRICK VENEER LINTEL SCHED.
(max.4" thickness)

MAX. CLEAR SPAN	SIZE		REMARKS
UP TO 1200 (4'-0)	L89x89x7.9	L3 1/2" x 3 1/2" x 5/16"	
1201 TO 1800 (4'-0 TO 6'-0)	L127x89x8 (LLV)	L5" x 3 1/2" x 5/16" (LLV)	
1801 TO 2400 (6'-0 TO 8'-0)	L152x89x8 (LLV)	L6" x 3 1/2" x 5/16" (LLV)	
2400 TO 3000 (8'-0 TO 10'-0)	L152x89x9.5 (LLV)	L6" x 3 1/2" x 3/8" (LLV)	

NOTES:
1. LINTEL BEARING LENGTH TO BE MIN. 6".
2. ALL STRUCTURAL STEEL MEMBERS TO BE HOT DIPPED GALVANIZED.
3. SEE ARCHITECTURAL DRAWINGS FOR SPANS.

ABBREVIATIONS

A.B	ANCHOR BOLT	HD.	HOOKED
ALT.	ALTERNATE	I.D.	INSIDE DIAMETER
ALUM.	ALUMINUM	kN.	KILONEWTON
ANCH'S	ANCHORS	kPa	KILOPASCAL
APPROX.	APPROXIMATELY	L	ANGLE
ARCH.	ARCHITECTURAL	L.L.H.	LONG LEG HORIZONTAL
B/F	BOTTOM FACE	L.L.V.	LONG LEG VERTICAL
B.PL	BASE PLATE	L.P.	LOW POINT
BLK.	BLOCK	LG.	LONG
BM.	BEAM	MAX.	MAXIMUM
BOT.	BOTTOM	MECH/MECHANICAL	
BRG.	BEARING	MET'L/METAL	
BT.PL.	BENT PLATE	MIN.	MINIMUM
C/W	COMPLETE WITH	MISC.	MISCELLANEOUS
C/C.	CENTRE TO CENTRE	m	METRE
C.J.	CONTROL JOINT	mm	MILLIMETRE
CLG.	CEILING	MPa	MEGAPASCAL
COL.	COLUMN	N.I.C.	NOT IN CONTRACT
CONC.	CONCRETE	N.T.S.	NOT TO SCALE
CONN.	CONNECTION	No.	NUMBER
CONSTR'N	CONSTRUCTION	O.C.	ON CENTRE
CONT.	CONTINUOUS	O.D.	OUTSIDE DIAMETER
DEMO.	DEMOLITION	O.H.	OVERHEAD
DET.	DETAIL	OWSJ/OPEN WEB STEEL JOIST	
DIA.	DIAMETER	PART'N	PARTITION
DIM.	DIMENSION	PL.	PLATE
DO.	DITTO	R.C.	REINFORCED CONCRETE
DP.	DEEP	R.D.	ROOF DRAIN
DWG.	DRAWING	R.O.	ROUGH OPENING
DWL.	DOWEL	REF.	REFERENCE
E.F.	EACH FACE	REINF.	REINFORCED
E.J.	EXPANSION JOINT	REQ'D/REQUIRED	
ELEC.	ELECTRICAL	S.C.	SAWCUT
EMBED.	EMBEDMENT	S.D.F.	STEP DOWN FOOTING
E.S.	EACH SIDE	SECT.	SECTION
E.W.	EACH WAY	S.L.H	SHORT LEG HORIZONTAL
EA.	EACH	S.L.V.	SHORT LEG VERTICAL
EL.	ELEVATION	S.O.G.SLAB ON GRADE	
EQ.	EQUAL	STL.	STEEL
EXTG.EXISTING		STIFF.	STIFFENER
F.F	FACE TO FACE	STRUCT.	STRUCTURAL
FIN.	FINISHED	T/O	TOP OF
FLR.	FLOOR	T.L.L.	TOP LOWER LAYER
FNDN.	FOUNDATION	T.U.L.	TOP UPPER LAYER
FTG.	FOOTING	TYP.	TYPICAL
Ga	GAUGE	U.N.O/UNLESS NOTED OTHERWISE	
GALV/GALVANIZED		U/S	UNDERSIDE
GRD.	GRADE	VERT./VERTICAL	
H.D.	HEAVY DUTY	V.E.F.	VERTICAL EACH FACE
H.D.G.	HOT DIPPED GALVANIZED	V.I.F.	VERTICAL INSIDE FACE
H.E.F.	HORIZONTAL EACH FACE	V.O.F.	VERTICAL OUTSIDE FACE
H.O.F/HORIZONTAL OUTSIDE FACE		W.P.	WORKING POINT
HORIZ.	HORIZONTAL	W.W.M.	WELDED WIRE MESH
H.P.	HIGH POINT	@	SPACED AT
HSS	HOLLOW STRUCTURAL STEEL		

DESIGN LOAD:

1. SNOW LOAD
   Ss = 1.1 kPa ; Sr = 0.4 kPa ; S = 1.44 kPa
   FOR SNOW ACCUMULATION SEE PLAN

2. WIND HOURLY PRESSURE
   $q_{(\frac{1}{50})}$ = 0.46 kPa

3. SEISMIC LOAD
   $S_a(0.2)_{(C)}$ = 0.406 ; $S_a(0.5)_{(C)}$ = 0.325
   $S_a(1.0)_{(C)}$ = 0.181 ; $S_a(2.0)_{(C)}$ = 0.0828 ;
   $S_a(5.0)_{(C)}$ = 0.0213 ; $S_a(10.0)_{(C)}$ = 0.00653;
   $PGA(X)_{(C)}$ = 0.257 ; $PGV(X)_{(C)}$ = 0.212
   SEISMIC CATEGORY= SC3

SITE CLASSIFICATION : SITE CLASS "D"

CONCRETE BLOCK WALL SCHEDULE

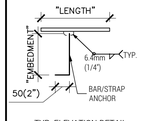
MARK	DESCRIPTION
W1 U.N.O.	- 190 CONC. BLOCK FULLY GROUTED - BLOCK COMP. STRENGTH = 15 MPa - 15M @ 400 VERT. - HEAVY DUTY BLOCK-LOK TRUSS / LADDER AT EVERY SECOND COURSE
W2	- 290 CONC. BLOCK FULLY GROUTED - BLOCK COMP. STRENGTH = 15 MPa - 15M @ 400 VERT. - HEAVY DUTY BLOCK-LOK TRUSS / LADDER AT EVERY SECOND COURSE

NOTES:
1. FULLY GROUT ALL REINFORCED CORES.
2. ALL WALLS NOTED FULLY GROUTED ARE TO BE 100% FILLED WITH GROUT.
3. CO-ORDINATE ALL WALL OPENINGS WITH ARCH. DWGS. AND MECHANICAL CONTRACTOR.
4. PROVIDE ADDITIONAL BAR/ MATCHING WALL REINF. SIZE. FULL HEIGHT @ ALL WALL ENDS. INTERSECTIONS AND OPENINGS UNLESS OTHERWISE NOTED ON DRAWINGS.
5. PROVIDE STANDARD TENSION SPLICES FOR ALL HORIZONTAL AND VERTICAL WALL REINFORCEMENT.
6. ALL BARS CONNECTING BETWEEN FLOORS TO BE TIED TOGETHER (REFER TO SECTION DETAILS).
7. SOLID FILLED VOIDS TO BE MADE WITH 20MPa FLOWABLE GROUT (MORTAR FILL NOT PERMITTED).
8. PROVIDE DOWELS FROM THE FOOTING TO WALLS ABOVE TO MATCH VERTICAL WALL REINFORCEMENT.

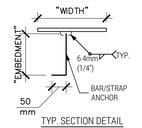
WALL PLATE SCHED.

MARK	DESCRIPTION
WPL.1	200 x 12 x 230 c/w HILTI HIT-HY 200V3 + (2) HAS-E 5/8 Ø ANCHORS 120mm EMBEDMENT
WPL.2	180 x 10 x 160 NO ANCHORS (SEE NOTE ON PLAN) FULLY GROUT (2) MASONRY COURSES 600mm LG. (SEE GENERAL NOTES)
WPL.3	180 x 10 x 160 c/w (2) 15mmØ x 250 EMBEDMENT ANCHOR ROD FULLY GROUT (2) MASONRY COURSES 600mm LG. (SEE GENERAL NOTES)

NOTES:
1. CONCRETE FILL SOLID (3) MASONRY COURSES MIN. BENEATH ALL BEARING PLATES.
2. PLATE DIMENSION NOTED AS "LENGTH" TO BE PARALLEL WITH BEAM WEB.
3. FIELD WELD BEAM TO BEARING PLATE w/(2) 6.4mmx40mm LG. FILLET WELDS (EACH SIDE)



TYP. ELEVATION DETAIL @ WALL PLATE (N.T.S.)



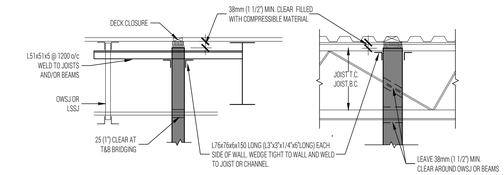
TYP. SECTION DETAIL @ CONT. WELD PLATE (N.T.S.)

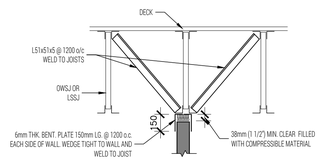
NON-LOAD BEARING BLOCK LINTEL SCHED.

WIDTH	<1220 (<4'-0")		<1830 (<6'-0")		<2440 (<8'-0")		<3080 (<10'-0")	<3660 (<12'-0")	SECTION DETAIL
	VER 1	VER 2	VER 1	VER 2					
100 (4")	(1) L89x89x6 (1) L3 1/2x3 1/2x1/4	(2) Ls 45x45x5 (2) Ls 3 3/4x3 3/4x2/16	(1) L 125x89x8 (LLV) (1) L 5x3 1/2x5/16 (LLV)	(2) Ls 55x35x6 (2) Ls 4 1/2x3 1/2x1/4	(1) L 125x89x8 (LLV) (1) L 5x3 1/2x5/16 (LLV)				
150 (6")	VER 1	VER 2	VER 1	VER 2	VER 1	VER 2			
	(1) L 125x89x8 (LLV) (1) L 5x3 1/2x5/16 (LLV)	(2) Ls 65x65x6 (2) Ls 2 1/2x2 1/2x1/4	(1) L 125x125x8 (LLV) (1) L 5x5x5/16 (LLV)	(2) Ls 89x65x6 (2) Ls 3 1/2x2 1/2x1/4	(1) L 125x125x8 (LLV) (1) L 5x5x5/16 (LLV)	(2) Ls 89x65x6 (2) Ls 3 1/2x2 1/2x1/4	(1) L 125x125x8 (LLV) (1) L 5x5x5/16 (LLV)		
200 (8")	(2) Ls 89x89x6 (2) Ls 3 1/2x3 1/2x1/4		(2) Ls 125x89x8 (L.L.V.) (2) Ls 5x3 1/2x5/16 (LLV)		(2) Ls 125x89x8 (L.L.V.) (2) Ls 5x3 1/2x5/16 (LLV)		W200x21 + PL 175x6 BOT. W8x14 + PL 7x1/4 BOT.	W200x21 + PL 175x6 BOT. W8x14 + PL 7x1/4 BOT.	
250 (10")	(2) Ls 102x89x6 (LL.H.) (2) Ls 4x3 1/2x1/4 (LL.H.)		(2) Ls 102x102x8 (2) Ls 4x4x5/16		(2) Ls 152x102x8 (LLV) (2) Ls 6x4x5/16 (LLV)		W200x21 + PL 225x6 BOT. W8x14 + PL 9x1/4 BOT.	W200x21 + PL 225x6 BOT. W8x14 + PL 9x1/4 BOT.	
300 (12")	(3) Ls 89x89x6 (3) Ls 3 1/2x3 1/2x1/4		(3) Ls 125x89x8 (L.L.V.) (3) Ls 5x3 1/2x5/16 (LLV)						

NOTES:
1. STRUCTURAL STEEL SHALL BE G40.21.
2. BEARING LENGTH = 6" AT EACH END.
3. CONNECT ANGLES @ 24" o/c BY WELDING or BOLTING FOR ANGLES WITH A TOTAL LENGTH OF 6'-0" OR MORE.

LATERAL SUPPORT AT TOP OF NON-LOADBEARING PARTITION WALLS





LATERAL RESTRAINT OF CONC. BLOCK WALL

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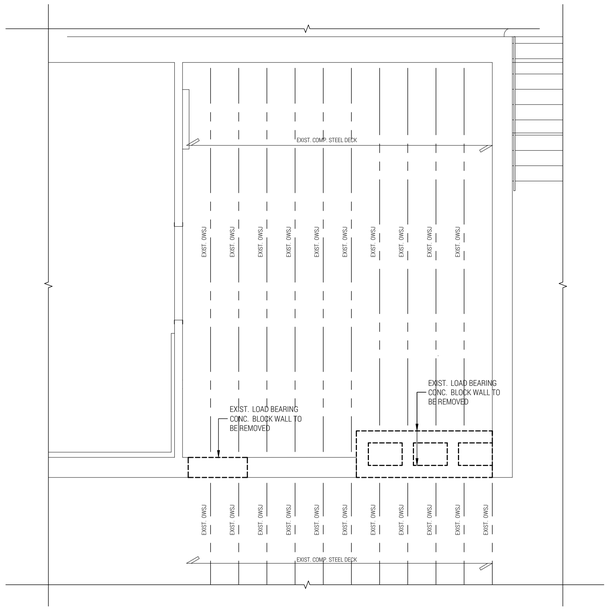
ISSUED FOR TENDER	3	2024 - 12 - 06
ISSUED FOR PERMIT	2	2024 - 11 - 13
ISSUED FOR REVIEW	1	2024 - 11 - 08

DOYTCH & FILO ENGINEERING INC.
Structural Engineers
Phones: (647) 836-4805 ; (905) 719-1482

PROJECT
PARKDALE ELEMENTARY SCHOOL ACCESSIBILITY RENOVATION
139 PARKDALE AVE. HAMILTON, ON.

DRAWING
GENERAL NOTES AND SCHEDULES

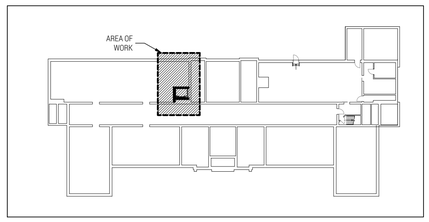
Design By: TD/AF	Date: 2024-10-29
	Project No.: 24062701
Drawn By: AF	Drawing No.: S0.1
Scale: AS NOTED	



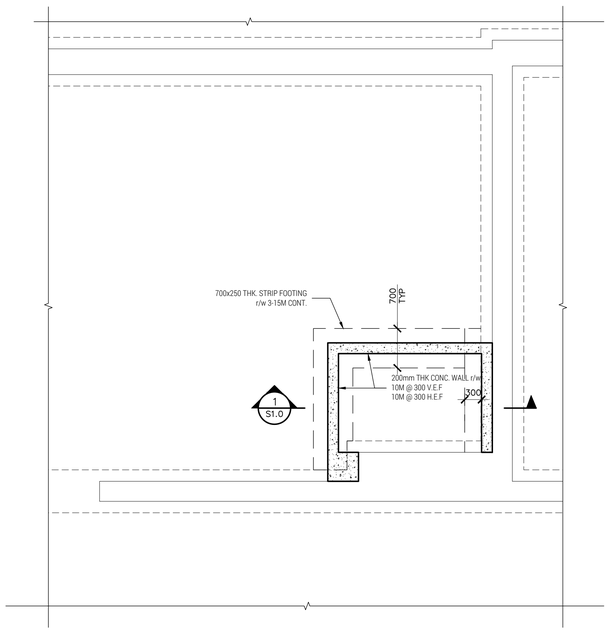
PLAN

PARTIAL PLAN 1:50

DEMOLITION OF GROUND FLOOR WALLS.
EXISTING SECOND FLOOR FRAMING PLAN.

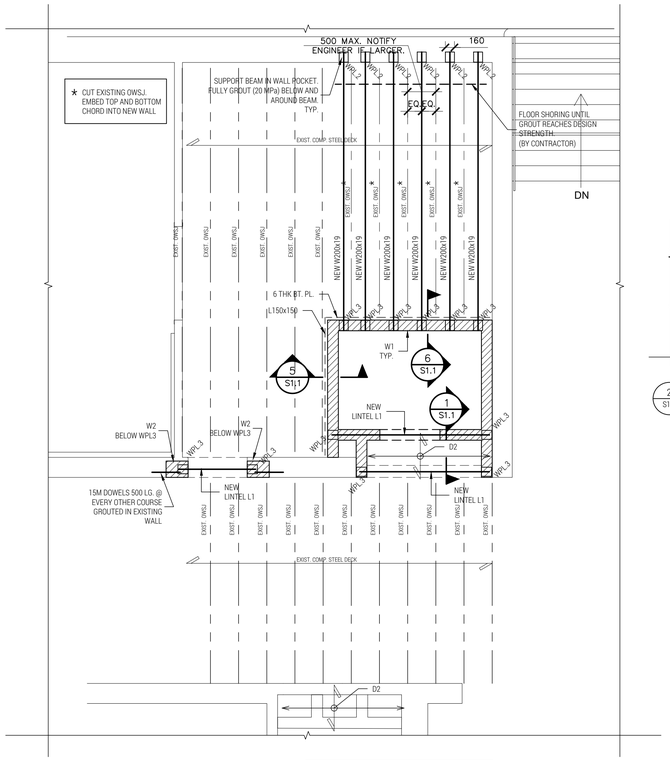


CRAWL FLOOR KEY PLAN



PLAN

PARTIAL FOUNDATION PLAN 1:50



PLAN

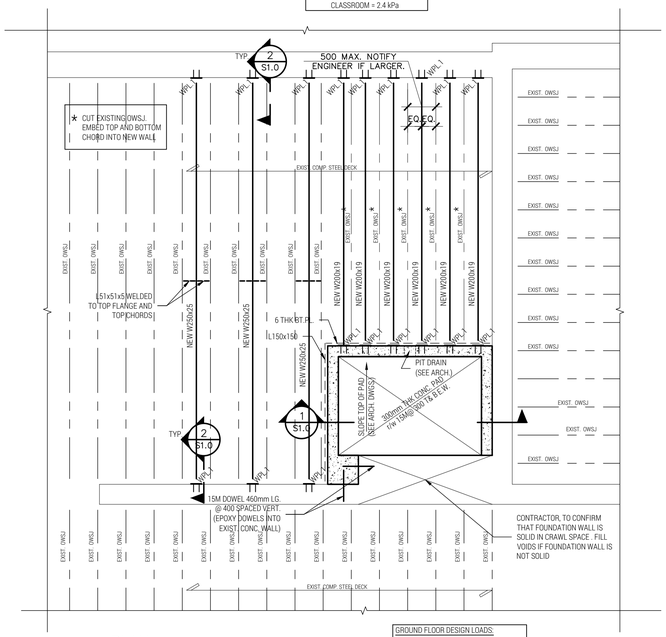
PARTIAL SECOND FLOOR FRAMING PLAN 1:50

NEW LINTEL L1 FOR WALL UP TO 8' WIDE:
W200x27 + 8mm PLATE AT BOT. FLANGE, WIDTH TO SUIT.
MIN. 150mm BEARING LENGTH AT EACH END.

NEW LINTEL L1 FOR WALL MORE THAN 8' WIDE:
W200x27 + 8mm PLATE AT TOP & BOT. FLANGE, WIDTH TO SUIT, c/w 8mm STIFFENERS @ 500 O.C AND AT EA. END.
MIN. 150mm BEARING LENGTH AT EACH END.

D1 - 38x0.76mm LZC 'RD938 VICWEST' METAL DECK
D2 - COMP. DECK 38x0.76mm HB938 VICWEST' METAL DECK (CONC. THK. TO MATCH EXISTING SLAB) c/w 6x6 6x6 W.W.F CENTER OF SLAB DEPTH

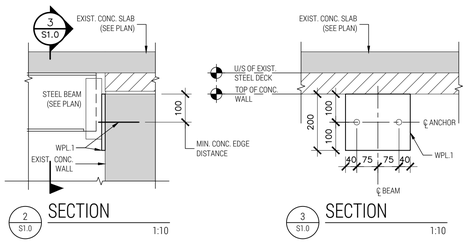
SECOND FLOOR DESIGN LOADS:
- DEAD LOAD = 4.5 kPa
- LIVE LOAD:
  CORRIDORS = 4.8 kPa
  CLASSROOM = 2.4 kPa



PLAN

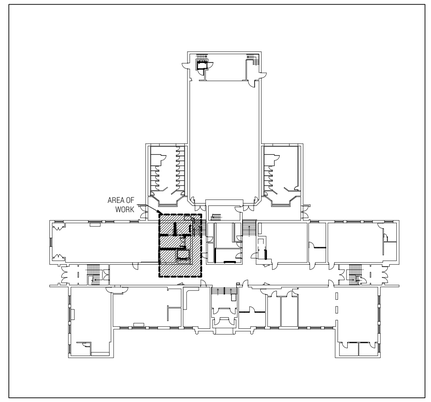
CRAWL SPACE WALLS 1:50
PARTIAL GROUND FLOOR FRAMING PLAN

GROUND FLOOR DESIGN LOADS:
- DEAD LOAD = 4.5 kPa
- LIVE LOAD:
  CORRIDORS = 4.8 kPa
  CLASSROOM = 2.4 kPa

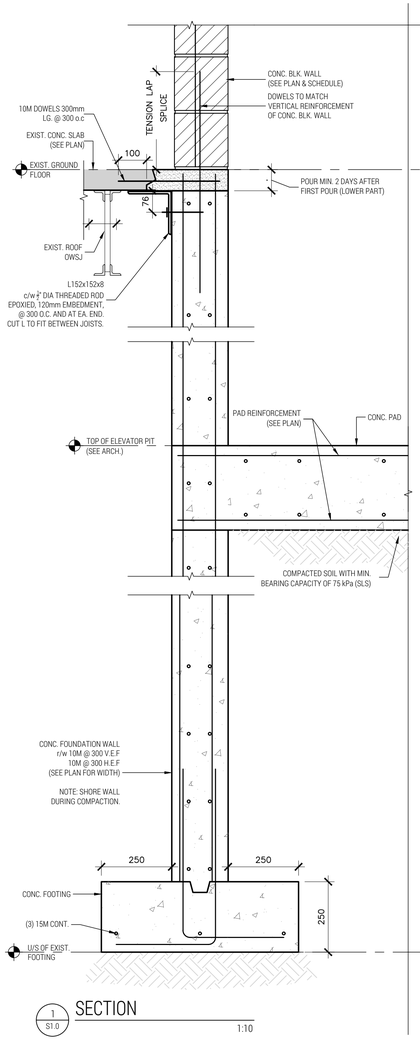


2 S1.0 SECTION 1:10

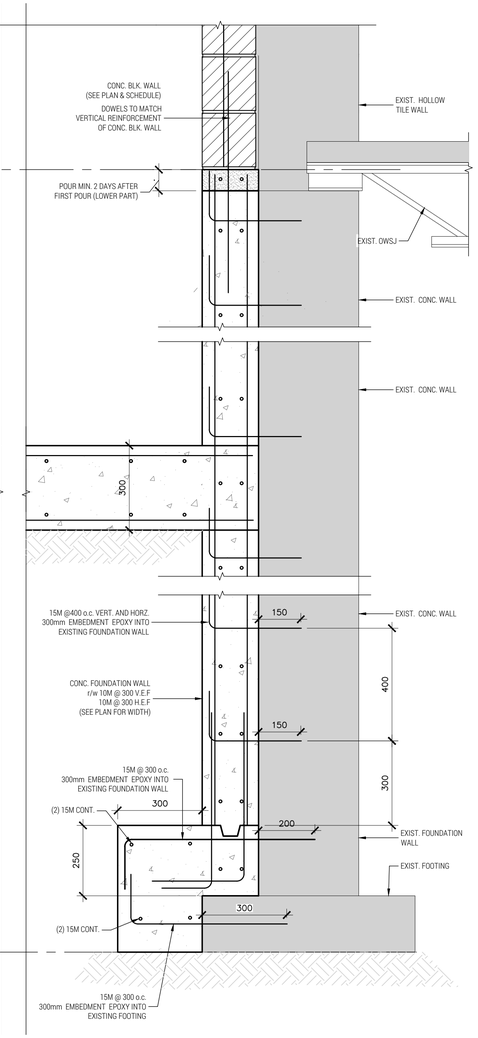
3 S1.0 SECTION 1:10



GROUND FLOOR KEY PLAN



1 S1.0 SECTION 1:10



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PROJECT

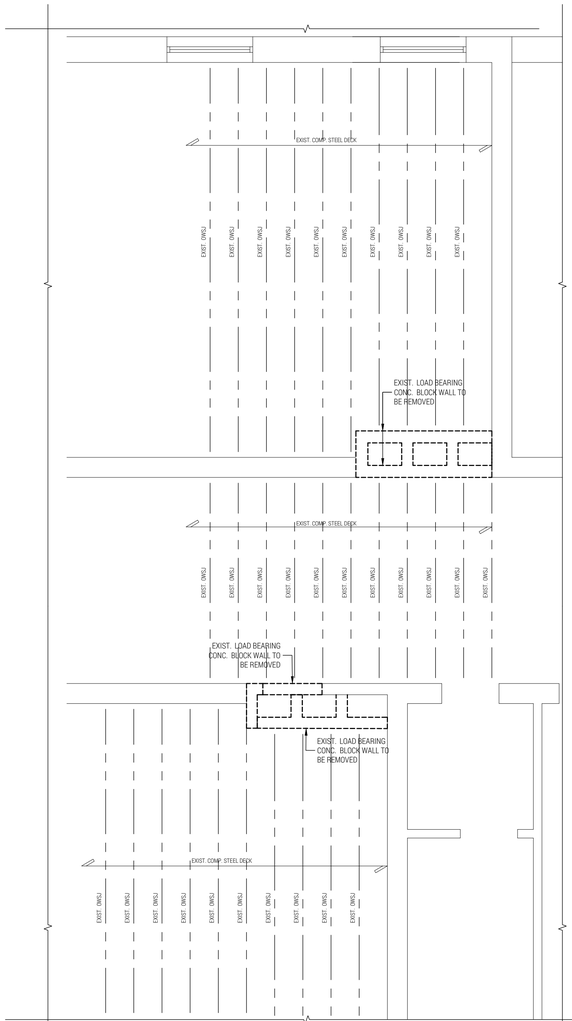
PARKDALE ELEMENTARY SCHOOL ACCESSIBILITY RENOVATION

139 PARKDALE AVE. HAMILTON, ON.

DRAWING

ROOF FRAMING PLAN, SCHEDULES AND DETAILS

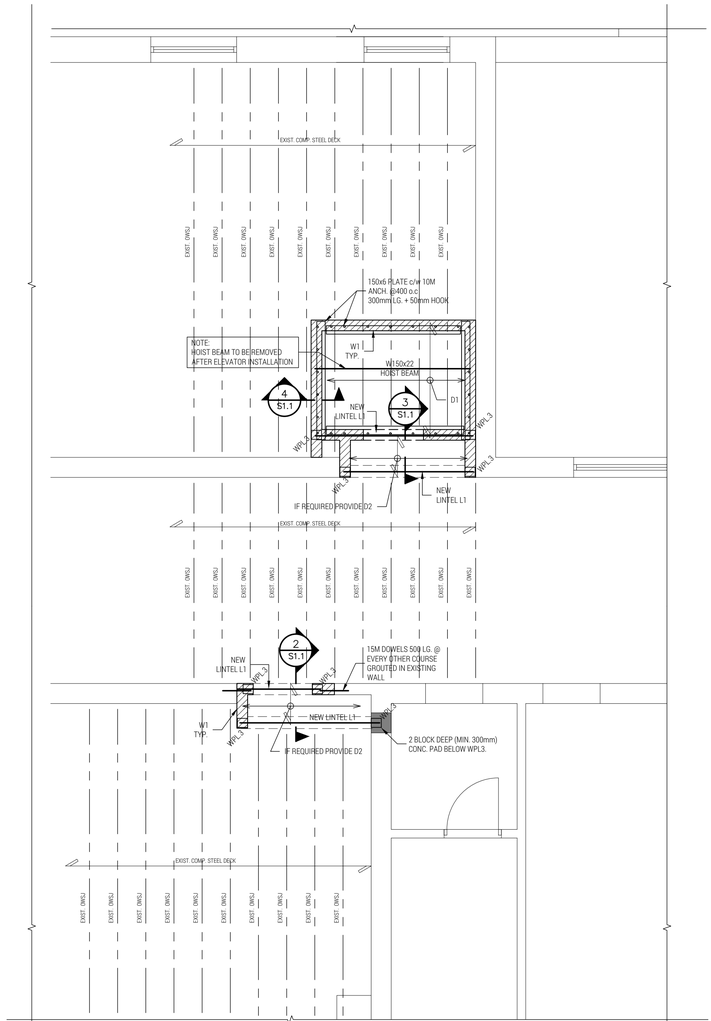
Design By: TD/AF	Date: 2024-10-29
	Project No.: 24062701
Drawn By: AF	Drawing No.: S1.0
Scale: AS NOTED	



PLAN

PARTIAL PLAN 1:50

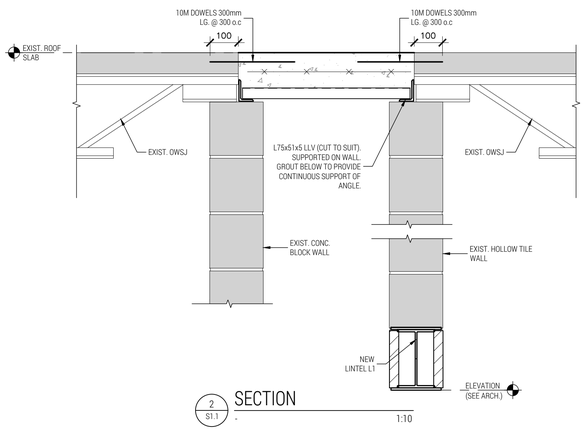
DEMOLITION OF SECOND FLOOR WALLS.
EXISTING ROOF FRAMING PLAN.



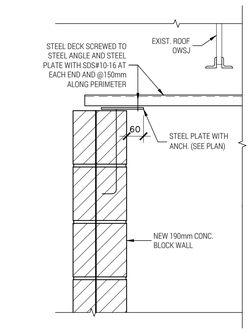
PLAN

PARTIAL ROOF FRAMING PLAN 1:50

ROOF DESIGN LOADS:
- DEAD LOAD = 4.5 kPa
- SNOW LOAD: SEE DWG. S0.1



2 S1.1 SECTION - 1:10



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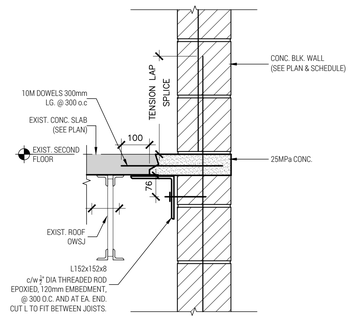

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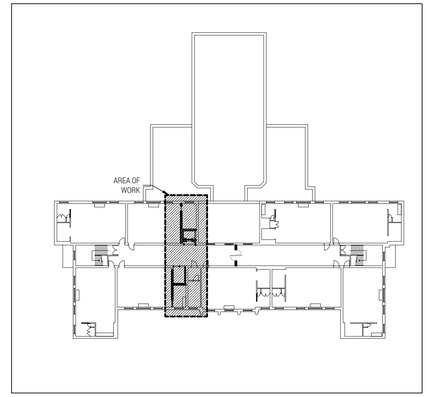
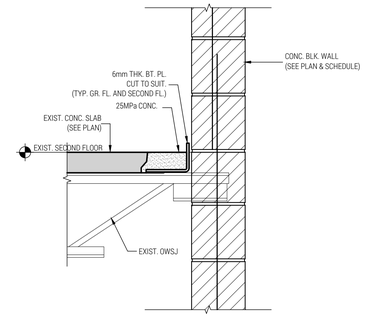
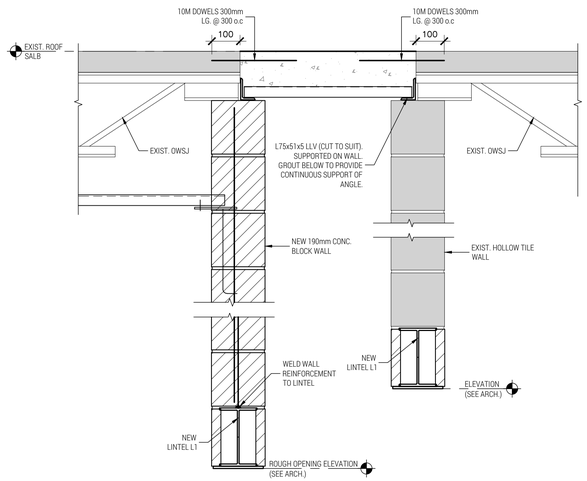


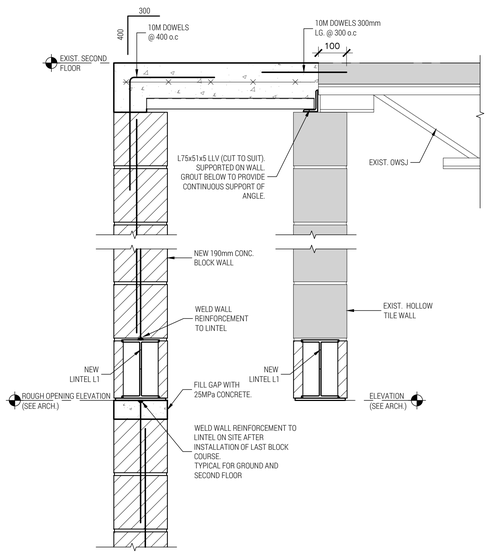
SECOND FLOOR KEY PLAN



6 S1.1 SECTION 1:10



3 S1.1 SECTION - 1:10



1 S1.1 SECTION - 1:10

NOTE TO CONTRACTOR:

DO NOT SCALE DRAWINGS. CONTRACTORS MUST CHECK AND VERIFY ALL DIMENSIONS AND REPORT ANY DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK. ALL DRAWINGS REMAIN THE PROPERTY OF THE ENGINEER AND SHALL NOT BE REPRODUCED OR REUSED WITHOUT THE ENGINEER'S WRITTEN PERMISSION.

THE OWNER/ARCHITECT/CONTRACTOR IS ADVISED THAT D.F.ENGINEERING INC. CANNOT CERTIFY ANY COMPONENT OF THE SITE WORKS NOT INSPECTED DURING CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO NOTIFY D.F.ENGINEERING INC. PRIOR TO COMMENCEMENT OF CONSTRUCTION TO ARRANGE FOR INSPECTION.

ISSUED FOR TENDER	3	2024 - 12 - 06
ISSUED FOR PERMIT	2	2024 - 11 - 13
ISSUED FOR REVIEW	1	2024 - 11 - 08

DOYTCH & FILO ENGINEERING INC.
Structural Engineers
Phones: (647) 836-4805 ; (905) 719-1482

PROJECT

PARKDALE ELEMENTARY SCHOOL
ACCESSIBILITY RENOVATION
139 PARKDALE AVE. HAMILTON, ON.

DRAWING

SECTIONS AND DETAILS.
ROOF FRAMING PLAN.

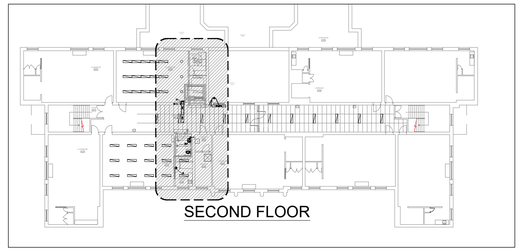
Design By:	TD/AF	Date:	2024-10-29
		Project No.:	24062701
Drawn By:	AF	Drawing No.:	S1.1
Scale:	AS NOTED		

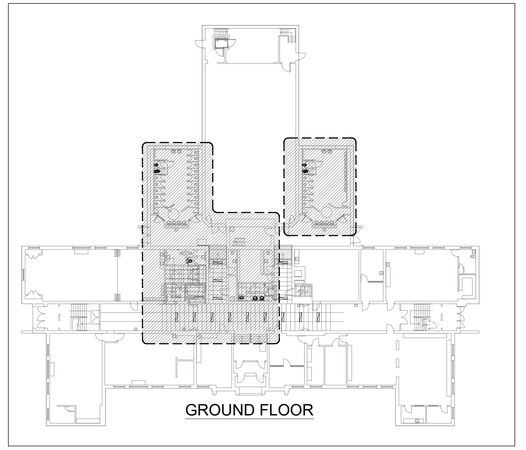
PARKDALE ELEMENTARY SCHOOL
ACCESSIBILITY RENOVATIONS

HWDSB PROJECT NO: P02106

139 PARKDALE AVE N
HAMILTON, ONTARIO

CONTENT	ISSUED FOR	DATE	FILE No.
MECHANICAL DRAWINGS	TENDER	DECEMBER 6, 2024	-- M000 COVER PAGE





1 M000 KEY PLANS N.T.S.

KEY PLAN
AREA IN CONTRACT

DRAWING #	DESCRIPTION	DRAWING SCALE	PLOT SCALE
M000	COVER PAGE	N.T.S.	N.T.S.
M100	SPECIFICATIONS AND LEGEND	N.T.S.	N.T.S.
M101	MECHANICAL SCHEDULES	N.T.S.	N.T.S.
M102	MECHANICAL DETAILS	N.T.S.	N.T.S.
M200	PARTIAL CRAWL SPACE PLAN – PLUMBING NEW AND DEMOLITION	1:50	1:1
M201	PARTIAL GROUND AND SECOND FLOOR PLAN – PLUMBING DEMOLITION	1:50	1:1
M202	PARTIAL GROUND AND SECOND FLOOR PLAN – NEW PLUMBING	1:50	1:1
M300	PARTIAL GROUND AND SECOND FLOOR PLAN – HVAC DEMOLITION	1:50	1:1
M301	PARTIAL GROUND AND SECOND FLOOR PLAN – HVAC MODIFICATIONS	1:50	1:1

HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

NO	REVISIONS	DATE
3	ISSUED FOR TENDER	2024-12-06
2	ISSUED FOR PERMIT	2024-11-14
1	ISSUED FOR COORDINATION	2024-11-07

LICENSED PROFESSIONAL ENGINEER
DEC 6,2024
D. BEREZOWSKI
100222827
PROVINCE OF ONTARIO

DYNAMIS ENGINEERING INC
222 ISLINGTON AVE, SUITE 260
TORONTO, ONTARIO
www.dynamiseng.com

PARKDALE ELEMENTARY SCHOOL ACCESSIBILITY RENOVATIONS
139 PARKDALE AVENUE
HAMILTON, ONTARIO

COVER PAGE

GRGURIC ARCHITECTS INCORPORATED
28 KING STREET EAST, UNIT B
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Tel. 905-664-8735 Fax. 905-664-8737
Web: www.2gai.com

SCALE: AS NOTED	PROJECT: 24-293
DATE: NOV-2024	
DRAWN RG	DRAWING M000
CHECKED DB	
PRINT DATE	

GENERAL NOTES

1. GENERAL SCOPE OF WORK
- 1.1. SUPPLY AND INSTALL ALL THE ITEMS, ARTICLES, MATERIALS, INCLUDE ALL LABOUR, EQUIPMENT, TOOLS, NECESSARY TO COMPLETE ALL SYSTEMS SHOWN ON THE DRAWINGS AND SPECIFICATIONS, PROVIDING A COMPLETE AND OPERATING INSTALLATION.
- 1.2. THE CONTRACTOR SHALL PERFORM THE WORK STIPULATED IN THE CONTRACT AND ANY OR ALL CONTRACT CHANGES AND CHANGE DIRECTIVES, AND SHALL FURNISH, UNLESS OTHERWISE PROVIDED IN THE CONTRACT, EVERYTHING NECESSARY FOR THE PROPER PERFORMANCE AND COMPLETION OF THE WORK.
- 1.3. GENERAL CONTRACTOR TO COORDINATE SCOPE OF WORK BETWEEN ALL TRADES. TRADES INCLUDE, BUT ARE NOT LIMITED TO, MECHANICAL, ELECTRICAL, CONTROLS, ENVIRONMENTAL, BASE BUILDING SERVICES (SPRINKLER/FIRE PROTECTION, ELEVATOR, ETC.).
- 1.4. ALL WORK SHALL BE FULLY COMPLETED, TESTED, COMMISSIONED AND IN GOOD WORKING ORDER AT TIME OF HAND-OVER.
- 1.5. DISCONNECT, RECONNECT OR RELOCATE EXISTING EQUIPMENT OR SERVICES AS REQUIRED TO PERMIT NEW WORK TO BE INSTALLED WITHOUT INTERFERENCES. ENSURE THAT REQUIRED SERVICES ARE MAINTAINED.
- 1.6. MAKE GOOD ANY DAMAGES TO EXISTING EQUIPMENT AND/OR SYSTEM(S).
- 1.7. MATERIALS AND WORK WHICH FAILS TO MEET SPECIFIED REQUIREMENTS WILL BE REJECTED BY THE ENGINEER WHENEVER FOUND AT ANY TIME PRIOR TO FINAL ACCEPTANCE AND REGARDLESS OF PREVIOUS INSPECTIONS. WHEN REJECTED, DEFECTIVE MATERIALS OR WORK SHALL BE PROMPTLY REMOVED, REPLACED OR REPAIRED TO THE SATISFACTION OF THE ENGINEER AT NO EXPENSE TO THE OWNER.
- 1.7. DEMOLISH EXISTING PLUMBING FIXTURES AND PIPING SERVICES AS INDICATED ON DRAWINGS.
- 1.8. PROVIDE NEW PLUMBING FIXTURES, SPECIALTIES AND PIPING SERVICES FOR FULLY FUNCTIONING SYSTEMS.
- 1.9. PROVIDE NEW DOMESTIC HOT/COLD SUPPLY PIPING FROM SERVICE TUNNEL AT UPPER LEVEL DOWN TO EACH AREA OF WORK AS INDICATED ON DRAWINGS. CUT EXISTING BLOCK WALLS FOR VERTICAL PIPE DROPS FROM UPPER LEVEL DOWN TO EACH WASHROOM AS INDICATED, PATCH AND REPAIR WALLS TO MATCH EXISTING AND PROPOSED FINISHES. FIELD VERIFY EXACT ROUTING ON SITE.
- 1.10. ALL PIPING SHALL BE INSULATED. PROVIDE WHITE PVC JACKETING AND LABELING IN ALL EXPOSED AREAS.
- 1.11. REPLACE EXISTING EXHAUST FANS AS INDICATED ON DRAWINGS.
- 1.12. DEMOLISH AND MODIFY OR PROVIDE NEW DUCTWORK DISTRIBUTION C/W DAMPERS, GRILLES, SUPPORTS AND ACCESSORIES.
- 1.13. PROVIDE ALL NECESSARY SAW CUTTING OF FLOOR SLAB AND BLOCK WALLS TO INSTALL NEW PIPING. ALL PLUMBING SERVICES WITHIN WASHROOMS AND CHANGE ROOMS SHALL BE CONCEALED. WHERE PIPING CHASE IS NOT PROVIDED, CONTRACTOR SHALL SAW CUT BLOCK WALLS VERTICALLY AS REQUIRED TO INSTALL ALL PIPING WITHIN WALL CAVITY.
- 1.14. PROVIDE SCANNING AND X-RAY OF EXISTING FLOORS AND WALLS PRIOR TO DRILLING AND CUTTING TO AVOID INTERFERENCE OR DAMAGE OF CONCEALED SERVICES.
- 1.15. INFILL ALL UNUSED FLOOR, CEILING AND WALL OPENING AS A RESULT OF DEMOLITION WORK.

2. CONTRACT DOCUMENTS (DRAWINGS AND SPECIFICATIONS)
- 2.1. DRAWINGS SHOW GENERAL INTENT OF THE WORK AND PROPOSED ROUTING ONLY.
- 2.2. DRAWINGS DO NOT SHOW ALL PIPING OFFSETS AND FITTINGS, CONTRACTOR SHALL PROVIDE ALL REQUIRED SPECIALTIES. CONFIRM FINAL ROUTING AND INSTALLATION OF THE MECHANICAL EQUIPMENT AND SERVICES WITH SITE CONDITIONS.
- 2.3. COMPLY WITH THE GENERAL AND APPLICABLE SECTIONS OF THE GENERAL CONTRACT SPECIFICATIONS.
- 2.4. CONTRACTOR SHALL CONFIRM ALL DIMENSIONS BY FIELD MEASUREMENT BEFORE PROCEEDING WITH THE WORK.
- 2.5. CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING POSSIBLE INTERFERENCES AND INFORMING THE ENGINEER PRIOR TO STARTING ANY WORK.
- 2.6. ENGINEERING DRAWINGS SHALL NOT BE SCALED.

3. STANDARDS AND REGULATIONS
- 3.1. ALL WORK SHALL BE COMPLIANT WITH THE MOST RECENT ISSUES OF THE APPLICABLE CODES, STANDARDS, BY-LAWS, REGULATIONS AND BASE BUILDING SPECIFICATIONS FOR GENERAL CONDITIONS, MATERIALS AND WORKMANSHIP.
- 3.2. ALL EQUIPMENT AND MATERIALS SHALL BE NEW COMMERCIAL GRADE AND BE CSA, ULC OR CGA APPROVED UNLESS OTHERWISE INDICATED
- 3.3. ONLY FIRST CLASS WORKMANSHIP WILL BE ACCEPTED WITH RESPECT TO STANDARD PRACTICES, SAFETY, ACCESSIBILITY, DURABILITY AND NEATNESS OF INSTALLATION WORK.
- 3.4. MATERIALS USED IN PLENUMS SHALL HAVE FLAME SPREAD RATING OF NOT GREATER THAN 25 AND SMOKE DEVELOPMENT CLASSIFICATION OF NO GREATER THAN 50.

4. PERMITS
- 4.1. OBTAIN ALL REQUIRED PERMITS AND APPROVALS. ARRANGE FOR INSPECTION OF THE WORK BY INSPECTION AUTHORITY.
- 4.2. RETAIN ALL INSPECTION CERTIFICATES. PROVIDE FINAL CERTIFICATES TO THE OWNER.
- 4.3. PAY FOR ALL PERMIT AND INSPECTION FEES.

5. EXISTING CONDITIONS
- 5.1. EXAMINE SITE CONDITIONS TO ENSURE THAT WORK CAN BE SATISFACTORILY CARRIED OUT AS SHOWN. IF SITE EXAMINATION REVEALS ANY DIFFICULTIES THAT WILL PREVENT THE WORK FROM BEING CARRIED OUT AS DESIGNED, THESE MUST BE INDICATED IN THE TENDER PRICE AND BROUGHT TO THE ATTENTION OF THE ENGINEER.
- 5.2. THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY ADDITIONAL DIFFICULTIES, INTERFERENCES AND SITE CONSTRAINTS THAT MAY BE IDENTIFIED DURING THE CONSTRUCTION PERIOD.
- 5.3. ROUTING OF NEW SERVICES MAY BE ADJUSTED TO ACCOMMODATE EXISTING SERVICES AND CONDITIONS PROVIDED THAT THE INTENT OF THE DRAWINGS IS MET AND THE ORIGINAL STANDARDS ARE MAINTAINED.
- 5.4. PROVIDE DRAWINGS OF PROPOSED REVISIONS TO ENGINEER FOR APPROVAL BEFORE BEGINNING ANY WORK. INCORPORATE ALL CHANGES IN AS BUILT DRAWINGS.
- 5.5. COORDINATE ALL ROUTING CHANGES WITH OTHER TRADES THAT MAY BE AFFECTED PRIOR TO ANY WORK.
- 5.6. ENGINEER TO BE ADVISED PRIOR TO CHANGES WHERE CHANGES COULD BE SIGNIFICANT.
- 5.7. ALL ASSOCIATED COSTS OF SUCH WILL BE PASSED TO THE CONTRACTOR.

6. SITE CONSTRUCTION MANAGEMENT
- 6.1. COORDINATE SITE ACCESS AND DELIVERIES WITH HWDSB.
- 6.2. COORDINATE WORK AND WORKING HOURS WITH THE FACILITY MANAGEMENT AND OTHER TRADES TO MINIMIZE DISRUPTION.
- 6.3. THE CONTRACTOR IS TO TAKE EXTRA CARE DURING THIS INSTALLATION NOT TO DISTURB THE OPERATIONS OF THE FACILITY. ALL NOISY WORK SHALL BE PERFORMED AFTER NORMAL BUSINESS HOURS: BETWEEN 6PM AND 7AM, MONDAY THROUGH FRIDAY; AND ON WEEKENDS, FRIDAY 6PM THROUGH MONDAY 7AM.
- 6.4. COORDINATE WITH THE FACILITY MANAGEMENT BEFORE INTERRUPTING ANY ESSENTIAL SERVICES. PROVIDE METHOD OF PROCEDURE FOR ANY SHUTDOWNS OR INTERRUPTIONS OF THE EXISTING SERVICES FOR FACILITY MANAGEMENT AND ENGINEER REVIEW AND ACCEPTANCE.
- 6.5. OPEN FLAMES AND WELDING
  - 6.5.1. NO OPEN FLAMES OR WELDING IS PERMITTED WITHIN THE BUILDING WITHOUT WRITTEN PERMISSION BY THE OWNER AND/OR THE ENGINEER.
  - 6.5.2. HOT WORK PERMIT MUST BE VISIBLE AT ALL TIMES.
  - 6.5.3. ADEQUATE NUMBER OF FIRE EXTINGUISHERS MUST BE PROVIDED DURING THE OPEN FLAME PROCESS.
  - 6.5.4. FUME VENTILATION AND FILTRATION UNITS SHALL BE PROVIDED FOR ANT WELDING WITHIN THE FACILITY.
  - 6.5.5. WELDING SHALL BE UNDERTAKEN BY A COMPANY CERTIFIED BY CANADIAN WELDING BUREAU UNDER REQUIREMENTS OF CAN/CSA W47.1.
  - 6.5.6. WELDING SHALL BE PERFORMED IN ACCORDACNE WITH ANSI/ASME B31.1, B31.1, BOILER AND PRESSURE VESSELS CODE.
  - 6.5.7. SUBMIT WELDER'S QUALIFICATIONS AND WELDING PROCEDURES PRIOR TO ANY WORK.
  - 6.5.8. WELDING AND OTHER SMOKE/DUST GENERATING WORK IN MECHANICAL ROOMS USED AS AN AIR PLENUM OF AIR HANDLING SYSTEM SHALL BE COMPLETED DURING AFTER HOURS OR OUTSIDE OF EQUIPMENT OCCUPANCY SCHEDULE. CONTRACTOR SHALL VERIFY OPERATING SCHEDULE WITH THE FACILITY MANAGEMENT. COMPLETE THOROUGH CLEANING OF THE ROOM AND/OR PLENUM PRIOR TO REINSTATING AIR HANDLING EQUIPMENT IN SERVICE.
- 6.6. CLEANING
  - 6.6.1. CLEAN PREMISES DAILY AT THE END OF EACH WORK DAY.
  - 6.6.2. DO NOT ACCUMULATE EQUIPMENT, TOOLS, DEBRIS AND WASTE MATERIALS ON SITE. REMOVE FROM SITE DAILY.
  - 6.6.3. COMPLETELY REMOVE ALL DEBRIS AND RUBBISH FROM SPACE ONCE WORK IS COMPLETE.
  - 6.6.4. ALL MATERIALS TO BE DISPOSED OF CONSTRUCTION SITE IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.

7. SHOP DRAWINGS
- 7.1. SUBMIT SHOP DRAWINGS, ELECTRONICALLY IN PDF FORMAT, FOR ENGINEER'S REVIEW.
- 7.2. SHOP DRAWINGS SHALL BE ISSUED BY EQUIPMENT OR MATERIAL SUPPLIER, SHOP DRAWINGS CREATED BY CONTRACTOR WILL NOT BE REVIEWED.
- 7.3. SUBMIT SHOP DRAWINGS AND PRODUCT DATA FOR ENGINEER'S REVIEW COVERING ALL RELEVANT DETAILS, DIMENSIONS AND PERFORMANCE. SUBMITTAL MUST CLEARLY IDENTIFY PROPOSED EQUIPMENT AND SELECTED OPTIONS, FEATURES, ACCESSORIES. GENERIC SUBMITTALS WILL NOT BE ACCEPTED.
- 7.4. SHOP DRAWINGS MUST BE REVIEWED, STAMPED AND SIGNED BY THE CONTRACTOR AND THE GENERAL CONTRACTOR PRIOR TO SUBMITTING TO CONSULTANT / ENGINEER FOR REVIEW.
- 7.5. CO-ORDINATE ALL DIMENSIONS WITH THE EQUIPMENT SHOP DRAWINGS.

8. CUTTING, PATCHING AND PAINTING REQUIREMENTS
- 8.1. PROVIDE CUTTING, PATCHING AND PAINTING FOR ALL OPENINGS. USE QUALIFIED TRADES FOR THIS WORK. RESTORE FINISHES TO MATCH EXISTING SURROUNDINGS.
- 8.2. REPAIR ALL FLOOR, WALL AND CEILING FINISHES TO MATCH EXISTING DUE TO REMOVAL OF THE EQUIPMENT OR SERVICES TO PRESERVE VISUAL AESTHETICS.
- 8.3. SUPPLY AND INSTALL APPROVED FIRESTOPS AS REQUIRED TO MAINTAIN FIRE RATING.
- 8.4. PIPING AND VENTS THROUGH WALL AND ROOF SHALL BE BY THE MECHANICAL DIVISION CONTRACTOR, INCLUDING ALL PATCHING.

GENERAL NOTES

9. CORING REQUIREMENTS
- 9.1. FOR ALL CORING LESS THEN 3" DIA. CONTRACTOR SHALL BE RESPONSIBLE FOR SCANNING AREA PRIOR TO CORING THROUGH FLOORS/CEILINGS.
- 9.2. FOR ALL CORING GREATER THEN 3" DIA. CONTRACTOR SHALL BE RESPONSIBLE FOR X-RAYING AREA PRIOR TO CORING THROUGH FLOORS/CEILINGS. X-RAY ACTIVITIES SHALL BE CARRIED OUT ONLY AFTER HOURS, ONCE ADJACENT FLOORS AND SPACES HAVE BEEN CONFIRMED TO BE FULLY UNOCCUPIED. COORDINATE WITH FACILITY MANAGEMENT.
- 9.3. CONTRACTOR SHALL SURVEY FLOOR/CEILING OR WALL SURFACE ON THE OPPOSITE SIDE OF THE CORE TO CONFIRM TO OBSTRUCTIONS, ALLOW FOR OFFSETS WITH THE PERMISSION FROM ENGINEER TO AVOID ANY OBSTRUCTIONS.

10. PENETRATIONS THROUGH FLOORS AND WALLS
- 10.1. WHERE PIPING PASS THROUGH FIRE PARTITIONS, FIRE WALLS, SMOKE PARTITIONS, OR FLOORS, PROVIDE A FIRE STOP THAT PROVIDES AN EFFECTIVE BARRIER AGAINST THE SPREAD OF FIRE, SMOKE, AND GASES.
- 10.2. FIRESTOPPING SYSTEMS SHALL BE TESTED AND LISTED TO CAN/ULC S115, STANDARD METHOD OF FIRE TESTS OF FIRESTOP SYSTEMS.
- 10.3. FIRE STOPPING MATERIALS SHALL BE PROVIDED BY A SINGLE MANUFACTURER; FOR ANY WORK IN EXISTING BUILDING, CONFIRM STANDARD FIRESTOPPING SUPPLIER WITH THE FACILITY MANAGEMENT.
- 10.4. FIRESTOPPING CAULKING SHALL BE "3M FIRE BARRIER" FIRETEMP CAULK OR APPROVED EQUIVALENT.
- 10.5. APPLY FIRESTOP SYSTEMS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- 10.6. ALL FIRE STOPPING SYSTEMS SHALL MEET OR EXCEED RATINGS FOR THE PARTICULAR FIRE RATING OF THE PENETRATED SURFACE.
- 10.7. FIRESTOPPING CONTRACTOR MUST BE A LICENSED 3M CERTIFIED INSTALLER WITH A MINIMUM 3 YEARS OF EXPERIENCE IN PROJECTS OF SIMILAR SCOPE AND SCALE, PROVIDE CERTIFICATIONS AND QUALIFICATIONS OF THE PERSONNEL PRIOR TO ANY WORK.
- 10.8. FIRESTOPPING MATERIALS SHALL BE FREE OF WATER SOLUBLE EXPANSION MATERIALS AND FREE OF ASBESTOS CONTAINING MATERIALS.
- 10.9. MATERIALS SHALL BE TESTED, LISTED AND LABELED BY ULC FOR INSTALLATION IN DESIGNATED FIRE STOPPING AND SMOKE SEAL SYSTEMS, TO PROVIDE A POSITIVE FIRE, WATER AND SMOKE SEAL AND A FIRE RESISTANCE RATING (FLAME, HOSE STREAM AND TEMPERATURE) NOT LESS THAN THE FIRE RATING FOR SURROUNDING CONSTRUCTION. MATERIALS SHALL BE COMPATIBLE WITH ABUTTING DISSIMILAR MATERIALS AND FINISHES.
- 10.10. PROVIDE SLEEVES FOR PIPE PENETRATIONS THRU FLOORS AND WALLS, COMPLETE WITH ADEQUATE REINFORCING AND SIZED TO ALLOW FOR MOVEMENT DUE TO EXPANSION. SLEEVES IN JANITOR CLOSETS, MECHANICAL ROOMS, PLENUM, SHAFTS AND OTHER SPACES SUBJECT TO WATER LEAKS AND ACCUMULATION SHALL EXTEND MINIMUM 50mm (2") ABOVE FLOOR. PROVIDE TIGHT FITTING CLAMPS ON EACH SIDE OF SLEEVE.
- 10.11. BELOW GRADE PIPING PENETRATIONS THRU WALLS SHALL BE SEALED WITH ELASTOMERIC MODULAR LINK SEAL ASSEMBLY.

11. AS BUILT DRAWINGS
- 11.1. MAINTAIN RECORD OF ALL REVISIONS AND PREPARE RED LINE RECORD DRAWINGS IN A NEAT MANNER SHOWING ALL ALTERATION IN WORK. SUBMIT PROGRESS RECORDS OF REVISIONS TO ENGINEER ON BI-WEEKLY BASIS.
- 11.2. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS REQUIRED TO MAKE CHANGES AND REVISIONS OF DRAWINGS IN AUTOCAD FORMAT; ISSUED FOR CONSTRUCTION AUTOCAD DRAWINGS WILL BE PROVIDED BY CONSULTANT FOR CONTRACTOR'S USE. COMPLY WITH OWNER'S CAD GUIDELINES AND STANDARDS. SUBMIT PREPARED AUTOCAD DRAWINGS TO OWNER'S AUTOCAD/RECORDS DEPARTMENT FOR REVIEW AND APPROVAL, MAKE ALL NECESSARY CHANGES REQUIRED FOR COMPLIANCE PRIOR TO SUBMISSION TO ENGINEER.
- 11.3. UPON COMPLETION OF WORK, SUBMIT ELECTRONIC FORMAT DRAWINGS (IN AUTOCAD 2020 FORMAT) FOR REVIEW AND APPROVAL OF ENGINEER.
- 11.4. MAKE CHANGES AS DIRECTED BY ENGINEER.
- 11.5. ONCE APPROVED, SUBMIT THREE HARD COPIES OF AS BUILT DRAWINGS IN FULL SIZE AND THREE USB DRIVES WITH AUTOCAD DRAWINGS AND INCLUDE IN O&M MANUALS.

12. OPERATION AND MAINTENANCE MANUALS
- 12.1. SUBMIT O&M MANUAL ELECTRONICALLY IN PDF FORMAT TO ENGINEER FOR REVIEW. MANUALS SHALL INCLUDE SHOP DRAWINGS OF ALL NEW EQUIPMENT, TEST AND BALANCING REPORTS, COMMISSIONING REPORTS, WARRANTIES, MAINTENANCE AND OPERATION PROCEDURES AND AS BUILT DRAWINGS.
- 12.2. UPON ENGINEER'S REVIEW AND ACCEPTANCE PROVIDE TWO(2) COMPLETE BINDERS INCLUDING ALL DOCUMENTS AND SOFT COPY TO THE OWNER.

13. WARRANTY
- 13.1. SUBMIT A "CERTIFICATE OF GUARANTEE" FOR WORKMANSHIP AND MATERIALS FOR **ONE YEAR** FROM DATE OF FINAL ACCEPTANCE; SUCH AS SUBSTANTIAL COMPLETION OR OCCUPANCY CERTIFICATE.
- 13.2. THIS GUARANTEE SHALL BIND THE CONTRACTOR TO CORRECT, REPAIR OR REPLACE PROMPTLY ANY DEFECTIVE EQUIPMENT OR WORKMANSHIP WITHOUT COST TO THE OWNER.
- 13.3. ASSUME FULL RESPONSIBILITY FOR LAYOUT OF ALL WORK AND FOR ANY DAMAGE CAUSED TO OWNER OR OTHERS BY IMPROPER CARRYING OUT OF THE WORK.

SCOPE OF WORK:

1. PROVIDE ALL WORK IN ACCORDANCE WITH THE DRAWINGS, SPECIFICATIONS AND FRONT END TENDER DOCUMENTS.
2. PROVIDE ALL EQUIPMENT, MATERIALS, ACCESSORIES FOR A FULLY FUNCTIONING SYSTEM.
3. RETAIN SCHOOL APPROVED VENDORS FOR THE FOLLOWING TRADES:
   - 3.1. ROOFING – CONFIRM WITH HWDSB
4. DEMOLISH EXISTING PLUMBING FIXTURES, CAP DOMESTIC WATER AND SANITARY SERVICES AT MAIN IN WALL WHERE NOT BEING REUSED FOR CONNECTION TO NEW FIXTURE. REPAIR ALL FLOOR AND WALL FINISHES TO MATCH EXISTING OR ARCHITECT'S PROPOSED FINISHES.
5. LOCATION OF ALL EXISTING DOMESTIC, STORM AND SANITARY (BURIED AND ABOVE GROUND) SERVICES IS PROVIDED FOR REFERENCE ONLY. CONTRACTOR TO SITE VERIFY AND CONFIRM ROUTING, LOCATION, INVERTS AND SIZES OF ALL SERVICES PRIOR TO PROCEEDING WITH ANY WORK. CONTRACTOR TO ALLOW FOR ALL REQUIRED PROVISIONS INCUDING SYSTEMS ISOLATION, DRAINAGE, PRESSURE TESTING, FLUSHING/CLEANING AND STARTUP. INCLUDE FOR ALL REQUIRED LABOUR INCLUDING INVESTIGATIONS, CCTV CAMERA INVESTIGATION, LOCATING, ETC. PROVIDE REPORT WITH ANY DISCREPANCIES OR FINDINGS FOR ENGINEER'S REVIEW.
6. PROVIDE VENTING IN ACCORDANCE WITH OBC PART 7.
7. ALL NEW OR REPLACED FLOOR DRAINS SHALL BE EQUIPPED WITH TRAP SEAL PRIMER, PROVIDE PRIMING STATION AND EXTEND WATER SUPPLY PIPING FROM NEAREST SOURCE.
8. FOR ALL CONCEALED PIPING COMPONENTS REQUIRING ACCESS (CLEANOUT, VALVES, STRAINERS, BALANCING VALVES, ETC) PROVIDE A MINIMUM 300x300mm ACCESS PANEL WITH LOCKABLE DOOR.
9. PROVIDE NEW PLUMBING FIXTURES C/W ALL TRIM, ACCESSORIES AND MOUNTING HARDWARE.
10. CONNECT TO EXISTING PLUMBING SERVICES, MODIFY OR PROVIDE NEW SERVICES AS INDICATED ON DRAWINGS.
11. PROVIDE ALL REQUIRED CUTTING, PATCHING AND RESTORATION WORK.
9. PROVIDE NEW SPLIT AIR CONDITIONING UNIT FOR ELEVATOR MACHINE ROOM INCLUDING INDOOR EVAPORATOR, OUTDOOR CONDENSING UNIT, REFRIGERANT PIPING C/W CLOSED CELL INSULATION AND CONDENSATE DRAIN PIPING AS INDICATED ON DRAWINGS.
10. DEMOLISH EXISTING EXHAUST FANS AND DUCTWORK AS INDICATED, REPAIR ANY UNUSED WALL AND ROOF OPENINGS AS REQUIRED TO MATCH EXISTING WALL AND ROOF CONSTRUCTION.
11. PROVIDE NEW EXHAUST FANS C/W EXHAUST AIR DUCTWORK C/W HANGERS, GRILLES AS INDICATED. ALL DUCTWORK, GRILLES, HANGERS, HARDWARE AND ACCESSORIES SHALL BE PAINTED TO MATCH CEILING FINISHES. PROVIDE THERMAL INSULATION ON FIRST 15FT OF EXHAUST AIR DUCT CONNECTED TO EXTERIOR WALL OR ROOF.
12. CARRY OUT TESTING, ADJUSTING AND BALANCING (TAB) OF ALL EQUIPMENT AND SYSTEMS. SUBMIT REPORT FOR ENGINEER'S REVIEW.
13. PROVIDE AS-BUILT DRAWINGS INCORPORATING ALL CHANGES AND MODIFICATIONS IN AUTOCAD FORMAT. ENGINEER TO REVIEW AND APPROVE THE AUTOCAD AS-BUILTS SUBMITTED BY CONTRACTOR, OR OTHERWISE, PROVIDE COMMENTS FOR CORRECTIONS/REVISIONS BY THE CONTRACTOR. CONTRACTOR TO RE-SUBMIT THE AUTOCAD DRAWINGS FOR SUBSEQUENT REVIEW(S) AND APPROVAL(S) BY ENGINEER UNTIL SATISFACTORY.
14. COORDINATE ALL WORK WITH GENERAL AND ELECTRICAL TRADES.
15. TEST AND COMMISSION ALL SYSTEMS. PROVIDE TRAINING OF HWDSB O&M PERSONNEL PRIOR TO PROJECT HANDOVER.

PLUMBING SPECIFICATIONS

1. THE FINAL CONNECTION OF ALL PLUMBING FIXTURES AND EQUIPMENT SHALL BE BY THE PLUMBING CONTRACTOR.

2. PLUMBING INSTALLATION SHALL BE IN ACCORDANCE WITH PLUMBING CODES AND LOCAL AUTHORITIES HAVING JURISDICTION. REFER TO THE APPLICABLE BUILDING CODE, CITY, COUNTY, PROVINCIAL, AND FEDERAL REGULATIONS FOR ACCEPTABLE STANDARDS. CONTRACTOR SHALL ARRANGE FOR AND PAY FOR ALL INSPECTIONS BY MUNICIPAL INSPECTOR PRIOR TO PIPEWORK CONCEALMENT. PROVIDE ALL REQUIRED REPORTS AND APPLICATIONS.

3. ALL EQUIPMENT AND MATERIALS SHALL BE NEW COMMERCIAL GRADE UNLESS OTHERWISE NOTED. ALL WORK IS TO CONFORM TO BASE BUILDING STANDARDS AND SPECIFICATIONS FOR MATERIALS AND WORKMANSHIP.

4. ALL PIPING, VALVES, FITTINGS AND MATERIALS USED IN PLUMBING SYSTEM SHALL BE LEAD FREE, NSF 61 CERTIFIED AND RATED FOR POTABLE WATER APPLICATIONS.

5. DRAINAGE WASTE AND VENT PIPING
- 5.1. ABOVE GROUND SANITARY, STORM AND VENT LINES
  - 5.1.1. LESS THAN 75mm (3") SHALL BE SEAMLESS COOPER TUBE, TYPE DWV TO ASTM B306 WITH CAST BRASS OR WROUGHT COPPER FITTINGS TO CAN/CSA B125.3.
  - 5.1.2. 75mm (3") AND LARGER SHALL BE CAST IRON HUB AND SPIGOT PIPE IN ACCORDANCE WITH THE OBC FOR SOIL AND WASTE. JOINTS SHALL BE CAULKED WITH WHITE OAKUM AND SECURED WITH MOLTEN LEAD NOT LESS THEN 1" DEEP.
- 5.2. JOINTS FOR COPPER TUBE/ PIPE SHALL LEAD FREE TO ASTM B32.
- 5.3. BURIED (INSIDE BUILDING) SANITARY, STORM AND VENT PIPE AND FITTINGS SHALL BE MINIMUM 3", ABS TO CAN CSA B1800 & CAN ULC S102.2 OR CAST IRON TO CAN CSA B70.
- 5.4. PROVIDE TRAP SEAL PRIMER AT ALL FLOOR DRAINS AND WHERE REQUIRED, CONNECT TO NEAREST DOMESTIC WATER SUPPLY PIPING. PROVIDE ACCESS PANEL FOR SERVICING.
- 5.5. UNLESS OTHERWISE NOTED, SLOPE ALL DRAINAGE AT MIN 2% SLOPE FOR 75mm PIPING AND MIN 1% SLOPE FOR 100mm AND ABOVE. VERIFY INVERTS AND ROUTING OF ALL PIPING PRIOR TO ANY WORK.
- 5.6. COORDINATE CONNECTION TO MUNICIPAL STORM AND SANITARY SERVICE WITH SITE SERVICING CONTRACTOR.

6. DOMESTIC COLD AND HOT WATER PIPE
- 6.1. ABOVE GROUND DOMESTIC WATER PIPING – TYPE 'L' HARD COPPER TO ASTM B88.
- 6.2. BURIED DOMESTIC PIPING – TYPE 'K' SOFT COPPER TO ASTM B88, BENT TO SUIT AND WITHOUT JOINTS BELOW GROUND.
- 6.2. JOINTS SHALL BE SOLDERED PRESSURE FITTINGS WITH TIN/SILVER OR TIN/ANTIMONY SOLDER AND NON-CORROSIVE FLUX. ALL SOLDER SHALL BE LEAD FREE.
- 6.3. NO FERROUS PIPING, FITTINGS, BUSHINGS OR PLUGS SHALL BE USED.

7. VALVES (DOMESTIC WATER)
- 7.2. PROVIDE ISOLATION VALVES FOR EACH NEW FIXTURE. VALVES SHALL BE BY-PASS BALL VALVES WITH THREADED/SOLDERED ENDS, RATED FOR 400 CWP.
- 7.3. ALL VALVES 65mm (2-1/2"Ø) OR GREATER SHALL HAVE FLANGE CONNECTIONS.
- 7.4. ACCEPTABLE MANUFACTURER: JENKINS OR APPROVED EQUAL.
- 7.5. ALL COMPONENTS, FITTINGS, FIXTURES AND DEVICES USED IN POTABLE WATER SYSTEMS SHALL MEET THE REQUIREMENTS OF NSF 61, SECTION 9. ALL EQUIPMENT SHALL HAVE ADEQUATE LISTINGS AND APPROVALS.

8. CLEAN-OUTS AND VENTING
- 8.1. PROVIDE IN ACCORDANCE WITH OBC CHAPTER 7 AND AS INDICATED ON DRAWINGS.
- 8.2. ALL VENT PIPING IS TO BE GROUPED TOGETHER AND RUN TO NEAREST POINT OF CONNECTION OR THROUGH THE ROOF. VENTING IS TO BE INSTALLED AS PER THE OBC PART 7, LOCAL PLUMBING CODE RULES AND REGULATIONS. THE EXISTING CONDITIONS MUST BE VERIFIED AND CONFIRMED ON SITE BY CONTRACTOR.
- 8.3. PLUMBING VENTING SYSTEM IS NOT INDICATED ON DRAWINGS, CONTRACTOR SHALL INCLUDE FOR ALL LABOUR AND MATERIALS TO PROVIDE FULLY FUNCTIONING SYSTEM.

9. FIXTURES:
- 9.1. PROVIDE ALL NEW FIXTURES (AS INDICATED IN THE SCHEDULE).
- 9.2. NEW FIXTURES SHALL BE CSA APPROVED AND AODA APPROVED WHERE INDICATED..
- 9.3. FIXTURES SHALL MEET WATER EFFICIENCY REQUIREMENTS AS INDICATED IN OBC, PART 7.

10. PLUMBING FITTINGS TO BE AS SHOWN OR APPROVED EQUAL, PIPE SIZE SIZES AS INDICATED ON DRAWING
- 10.1. "FD-1" (FLOOR DRAIN) – JR SMITH 2005, 150mm DIA ROUND TOP, STAINLESS STEEL STRAINER IN SHOWER AREAS, NICKEL BRONZE STRAINER IN WASHROOMS, TRAP PRIMER CONNECTION, FLASHING FLANGE AND CLAMP.
- 10.2. "CO" (CLEAN OUT) – JR SMITH 4318, HEAVY DUTY 215mm ROUND COVER, BRONZE PLUG, FLASHING FLANGE AND CLAMP.
- 10.3. TRAP SEAL PRIMER – PRECISION PLUMBING PRODUCTS P1-500 FOR SINGLE APPLICATION AND PRECISION PLUMBING PRODUCTS PT-4 THRU PT-12 FOR COMBINED APPLICATION, SELECT MODEL NUMBER ACCORDINGLY TO NUMBER OF SERVED FIXTURES. PROVIDE ISOLATION VALVE ON INLET AND UNION ON OUTLET OF TRAP SEAL PRIMER MODULE FOR SERVICING PURPOSES. PROVIDE ACCESS PANEL FOR SERVICING AND ADJUSTING.
- 10.4. CLEANOUTS – PROVIDE AT BASE OF SOIL AND WASTE STACKS, RAINWATER LEADERS, LOCATIONS REQUIRED BY CODE AND AS INDICATED. PROVIDE ACCESS PANEL IN FINISHED AREAS, SIZE SUITABLE FOR COMPLETE REMOVAL OF CLEANOUT PLUG.

11. INSULATE ALL HOT AND COLD WATER PIPES WITH 25mm PREMOULDED FIBERGLASS INSULATION WITH VAPOUR BARRIER JACKET. SEAL ALL JOINTS OF VAPOUR BARRIER. PROVIDE PVC JACKETING ON ALL EXPOSED PIPING.

12. INSTALL POLISHED CHROME ESCUTCHEON PLATES ON ALL PIPES WHERE THEY PASS THROUGH WALLS/CEILINGS IN FINISHED AREAS OR MILLWORK.

13. PROVIDE ALL ACCESS DOORS TO MATCH WALL AND CEILING SURFACES FOR CONCEALED VALVES. HAVE THESE INSTALLED BY THE TRADES IN WHOSE WORK THE DOOR IS LOCATED.

14. PROVIDE PISTON TYPE, LEAD FREE WATER HAMMER ARRESTORS ON BRANCH SUPPLIES TO FIXTURES OR GROUP OF FIXTURES.

15. ALL PIPING SHALL BE ADEQUATELY SUPPORTED, INDEPENDENTLY FROM ANOTHER PIPING SYSTEMS AND EQUIPMENT.

16. PROVIDE DIELECTRIC UNIONS ON CONNECTIONS BETWEEN DISSIMILAR METALS.
- 16.1. PIPING 50mm (2") AND UNDER: PROVIDE INSULATION UNIONS.
- 16.2. PIPING 65mm (2 1/2") AND ABOVE: PROVIDE INSULATING FLANGES.
- 16.3. WHERE PIPING MATERIALS MAY COME IN CONTACT WITH DISSIMILAR METALS (HANGERS, SUPPORTS, STRUCTURAL JOISTS, STUDS, ETC) PROVIDE MEANS OF ISOLATION.

17. URINAL MATRIX FLUSHING SYSTEM (BOYS WASHROOM)
- 17.1. PROVIDE URINAL FLUSHING SYSTEM COMPRISED OF PROGRAMMABLE CONTROL UNIT, SOLENOID VALVE AND 120V TO 24V TRANSFORMER.
- 17.2. FIELD SUPPLY ALL REQUIRED FITTINGS, PIPING, WIRING AND ACCESSORIES FOR A FULLY FUNCTIONING SYSTEM IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- 17.3. PROVIDE ACCESS PANELS FOR SERVICING AND ADJUSTMENT OF CONTROLLER AND SOLENOID VALVE.
- 17.4. SYSTEM SHALL BE UTC SENTINEL.

LEGEND

SYMBOL	DESCRIPTION
—/——/——	EXISTING TO BE REMOVED
	EXISTING TO REMAIN
	NEW WORK
	DOMESTIC COLD WATER (DCW)
	DOMESTIC HOT WATER (DHW)
	DOMESTIC HOT WATER RECIRC. (DHWR)
— – SAN – —	SANITARY DRAIN (BELOW GRADE)
—— SAN ——	SANITARY DRAIN (ABOVE GRADE)
	PIPE DOWN
	PIPE UP
RD	ROOF DRAIN
FD	FLOOR DRAIN
FFD	FUNNEL FLOOR DRAIN
	P-TRAP
	END CAP
	PIPING BREAK/CONTINUATION
	CLEANOUT – FLOOR
	CLEANOUT – PLUG
	FLANGED UNION
	ISOLATION VALVE
	PUMP
SG	SUCTION GUIDE
	BALANCING VALVE
	CHECK VALVE
	PRESSURE REDUCING VALVE
	STRAINER
	PRESSURE RELIEF VALVE
LW	LOW WATER CUT OFF
FS	FLOW SWITCH
AV	MANUAL AIR VENT
AAV	AUTOMATIC AIR VENT
T	TEMPERATURE GAUGE
P	PRESSURE GAUGE
NG	NATURAL GAS REGULATOR
	BACKFLOW PREVENTER (DOUBLE CHECK VALVE ASSEMBLY)
	BACKFLOW PREVENTER (REDUCED PRESSURE ZONE ASSEMBLY)
AFF	ABOVE FINISHED FLOOR
BDD	BACK DRAFT DAMPER
CO	CLEANOUT
CTE	CONNECT TO EXISTING
FF	FINISHED FLOOR LEVEL
FD	FLOOR DRAIN
FFD	FLOOR FUNNEL DRAIN
FD	HUB DRAIN
VFD	VARIABLE FREQUENCY DRIVE
TYP	TYPICAL
	RETURN/EXHAUST DUCT UP
	RETURN/EXHAUST DUCT DOWN
	SUPPLY DUCT UP
	SUPPLY DUCT DOWN
	INTERNALLY LINED DUCT
	THERMALLY INSULATED DUCT
	DUCT ACCESS PANEL
	SQUARE CONE/PLAQUE DIFFUSER
	RETURN GRILLE
	AIRFLOW DIRECTION
BD	BALANCING DAMPER
	FIRE DAMPER
	COMBINATION FIRE & SMOKE DAMPER
M	MOTORIZED DAMPER

HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

NO	REVISIONS	DATE
3	ISSUED FOR TENDER	2024-12-06
2	ISSUED FOR PERMIT	2024-11-14
1	ISSUED FOR COORDINATION	2024-11-07

LICENSED PROFESSIONAL ENGINEER
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222 ISLINGTON AVE, SUITE 260
TORONTO, ONTARIO
www.dynamiseng.com

PARKDALE ELEMENTARY SCHOOL ACCESSIBILITY RENOVATIONS
139 PARKDALE AVENUE
HAMILTON, ONTARIO

SPECIFICATIONS AND LEGEND

GRGURIC ARCHITECTS INCORPORATED
28 KING STREET EAST, UNIT B
STONEY CREEK, ONTARIO, L8G 1J8
Tel. 905-664-8735 Fax. 905-664-8737
Web: www.2gai.com

SCALE: AS NOTED	PROJECT: 24-293
DATE: NOV-2024	
DRAWN RG	DRAWING M100
CHECKED DB	
PRINT DATE	

HVAC SPECIFICATIONS

1. DUCTWORK
 1.1. DUCTWORK SHALL BE CONSTRUCTED TO ASHRAE/SMACNA STANDARDS.
 1.2. DUCT SIZES ARE LISTED ON DRAWINGS. ALL DUCT SIZES SHOWN ARE CLEAR INSIDE DIMENSIONS.
 1.3. ALL FLEXIBLE DUCTWORK TO DIFFUSERS SHALL BE ALUMINUM SPIRAL, MAXIMUM LENGTH 5FT.
 1.4. SEAL ALL NEW LOW PRESSURE DUCTS (<2IN.WC.) AND LOW PRESSURE DUCT MODIFICATIONS TO SMACNA SEAL CLASS 'C' USING SEALANT OR ALUMINUM TAPE; OR A COMBINATION THEREOF.
 1.5. HIGH PRESSURE DUCTS (=>2IN.WC.) SHALL BE CONSTRUCTED OF FACTORY FABRICATED, SPIRAL WOUND, GALVANIZED STEEL WITH MATCHING FITTINGS AND SPECIALS TO SMACNA. USE SPLIT TYPE JOINTS WITH SEALANT FOR DUCTS UP TO 36IN.
 1.6. SEAL ALL NEW HIGH PRESSURE DUCTS (=>2IN.WC.) AND HIGH PRESSURE DUCT MODIFICATIONS TO SMACNA SEAL CLASS 'A' USING SEALANT.

2. ELBOWS
 2.1. FOR LOW PRESSURE SYSTEM: ELBOWS SHALL HAVE RADIUS OF NOT LESS THAN DUCT WIDTH, ELBOWS WITH RADIUS LESS THAN DUCT WIDTH SHALL BE PROVIDED WITH TURNING VANES (DUCTMATE OR APPROVED EQUAL).
 2.2. FOR HIGH PRESSURE SYSTEM: SMOOTH RADIUS AND/OR 5-PIECE (FOR 90°), 3-PIECE (FOR 45°) WITH CENTRELINE RADIUS AT 1.5 X DIAMETER. USE 45° CONICAL TRANSITIONS FOR BRANCH CONNECTIONS.

3. BALANCING DAMPERS
 3.1. BALANCING DAMPERS SHALL BE MANUALLY OPERATED OPPOSED BLADE OR SPLITTER TYPE. SPLITTER DAMPERS SHALL BE COMPLETE WITH CONTROL ROD, PIVOT BRACKET AND BALL JOINT FITTING WITH LOCKING SETSCREW.
 3.2. SPLITTER DAMPERS SHALL BE INSTALLED ON ALL BRANCH DUCT CONNECTIONS (OR TAKE-OFFS) FROM DUCTS.
 3.3. OPPOSED BLADE DAMPERS SHALL BE USED FOR ALL DIFFUSER/GRILLE BALANCING DAMPERS.

4. FIRE RATED DAMPERS (FRD)
 4.1. FIRE DAMPER (FRD) SHALL BE CURTAIN TYPE WITH 135°F FUSIBLE LINK SUITABLE FOR HORIZONTAL OR VERTICAL INSTALLATION, ULC RATED (FIRE RATING TO MATCH OR EXCEED ENCLOSURE FIRE RESISTANCE RATING).
 4.2. FRD SHALL BE RUSKIN MODEL DIBD2 STYLE B (OR EQUAL FOR DUCT HEIGHTS NOT EXCEEDING 305mm, AND DIBD2 STYLE A (OR EQUAL) FOR DUCT HEIGHTS EXCEEDING 305mm.
 4.3. PROVIDE ACCESS PANELS AT EACH FRD, MIN SIZE SHALL BE 300x300mm.

5. BALANCING
 5.1. EMPLOY THE SERVICES OF AABC OR NEBB CERTIFIED BALANCING COMPANY TO BALANCE THE AIR SYSTEMS TO ACHIEVE THE AIRFLOW SHOWN. THE BALANCING COMPANY SHALL SUBMIT A COMPLETE REPORT. ACCEPTANCE OF BALANCING AND REPORT WILL BE SUBJECT TO ON SITE MEASUREMENT AND/OR VERIFICATION OF THE REPORT BY THE ENGINEER.
 5.2. NOTIFY ENGINEER OF ANY DISCREPANCIES GREATER THAN ±5% OF DESIGN VALUES PRIOR OF SUBMISSION OF REPORT.

6. FLEXIBLE CONNECTIONS
 6.1. FLEXIBLE CONNECTIONS TO BE FIRE RESISTANT NEOPRENE COATED GLASS FABRIC.
 6.2. INSTALL DUCT FLEXIBLE CONNECTIONS AT INLETS AND OUTLETS OF SUPPLY AND EXHAUST AIR UNITS AND WHERE INDICATED ON DRAWINGS.

7. GRILLES, REGISTERS AND DIFFUSERS
 7.1. PROVIDE ALL REGISTERS, GRILLES AND DIFFUSERS WITH BAKED ENAMEL FINISH TO MATCH ADJACENT FINISHES.
  7.1.1. TYPE A – 19mm BLADE SPACING, DOUBLE DEFLECTION SUPPLY AIR STEEL REGISTER C/W OPPOSED BLADE DAMPER, EH PRICE 620 OR EQUIVALENT.
 7.2. ALL DIFFUSER/GRILLE/REGISTER COLOURS SHALL BE CONFIRMED AT THE SHOP DRAWING STAGE BY THE ARCHITECT OR INTERIOR DESIGNER. PROVIDE SAMPLES OF FINISHES WITHIN SHOP DRAWING.
 7.3. PROVIDE REQUIRED DUCT TRANSITIONS, ADAPTERS AND OTHER FITTINGS TO COMPLETE CONNECTION BETWEEN DUCTWORK AND GRILLES.
 7.4. REFER TO DRAWINGS FOR SIZES AND LOCATIONS.

8. THERMAL INSULATION FOR DUCTS
 8.1. INSULATION THICKNESS AND PERFORMANCE SHALL MEET ASHRAE 90.1-2013 REQUIREMENTS.
 8.2. BLANKET OR RIGID THERMAL INSULATION ON INDOOR DUCTS SHALL BE PROVIDED AND INSTALLED AS FOLLOWS UNLESS OTHERWISE INDICATED:
  8.2.1. INSULATE FULL LENGTH OF FRESH AIR SUPPLY DUCTS.
  8.2.2. INSULATE FIRST 4.6m (15 FT) OF EXHAUST DUCTS FROM EXTERIOR WALL OR ROOF.
  8.2.3. INSULATE FULL LENGTH OF SUPPLY AND RETURN DUCTS THAT ARE ROUTED THROUGH A NON-CONDITIONED SPACE.
  8.2.4. THERMAL INSULATION IS NOT REQUIRED ON SUPPLY AND RETURN DUCTS CONFINED WITHIN A CONDITIONED SPACE (INCLUDING RETURN PLENUM CEILINGS).
  8.2.5. USE RIGID INSULATION AND DRYWALL TYPE CORNER BEADS IN AREAS WHERE INSULATION IS EASILY SUSCEPTIBLE TO DAMAGE.
 8.3. INSULATION SHALL BE FOIL FACED HAVING FLAME SPREAD RATING OF 25 OR LESS AND A SMOKE DEVELOPMENT CLASSIFICATION OF 50 OR LESS.
 8.4. THERMAL INSULATION SHALL BE 1-1/2" THICK BLANKET MINERAL FIBER OR 1" THICK RIGID MINERAL FIBERBOARD FOR WARM AIR DUCTS AND DUCTS BETWEEN OUTSIDE WALLS AND MIXING PLENUMS.
 8.5. THERMAL INSULATION FOR COLD AIR DUCTS SHALL BE 1-1/2" THICK RIGID INSULATION, OR 2" THICK BLANKET MINERAL FIBRE.
 8.6. VAPOUR-RETARDER MEMBRANE SHALL BE INSTALLED WITH INSULATION ON COLD, DUAL-TEMP AND FRESH AIR AIR SUPPLY DUCTS.
 8.7. ACCEPTABLE BLANKET MINERAL FIBER SHALL BE JOHNS MANVILLE MICROLITE DUCT WRAP TYPE 100 OR EQUIVALENT.
 8.8. ACCEPTABLE RIGID MINERAL FIBERBOARD SHALL BE JOHNS MANVILLE 800 SERIES SPIN-GLASS TYPE OR EQUIVALENT.
 8.9. SEAL ALL JOINTS WITH ULC LISTED SELF-ADHESIVE INSULATION TAPE FOR INDOOR DUCTS AND INSULATION.
 8.10. USE RIGID INSULATION AND DRYWALL TYPE CORNER BEADS IN AREAS WHERE INSULATION IS EASILY SUSCEPTIBLE TO DAMAGE.
 8.11. EXTERIOR DUCTWORK INSULATION SHALL BE COVERED BY A .04" THICK ALUMINUM JACKET (FORMING THE DOUBLE SKIN). ALL LONGITUDINAL SEAMS SHALL BE FORMED ALONG THE BOTTOM. ENSURE THAT ALUMINUM JACKET IS FASTENED WITH SECURE, WATERTIGHT MECHANICAL CONNECTIONS. APPLY EXTERIOR GRADE SEALANT AT ALL SEAMS.

9. REFRIGERANT TUBING
 9.1. HARD COPPER TYPE ACR-B TO ASTM B280.
 9.2. FITTINGS SHALL BE BRAZED TYPE, TYPE ACR COPPER.
 9.3. JOINT SHALL BE COPPER-PHOSPHOROUS (95%CU-5%P) SOLDER AND NON-CORROSIVE FLUX.
 9.4. ALL REFRIGERANT PIPING, SPECIALTIES AND FITTINGS SHALL BE SUITABLE FOR PRESSURE RATING OF THE SYSTEM.
 9.5. PROVIDE STEEL PIPE SLEEVES SIZED FOR 6mm (1/4") CLEARANCE BETWEEN PIPE SLEEVE AND PIPE INSULATION.
 9.6. VALVES SHALL BE WELDED FULL FLOW BALL VALVE SUITABLE FOR REFRIGERANT SYSTEM, MINIMUM WORKING PRESSURE OF 4,500kPa (650PSIG).
 9.7. WHERE INDICATED ON DRAWINGS, PROPOSED PIPE ROUTING AND SIZES ARE FOR REFERENCE. REFRIGERANT PIPING SYSTEM SHALL BE DESIGNED BY LICENSED REFRIGERATION TECHNICIAN, SUBMIT SHOP DRAWING INDICATING EXACT PIPE ROUTING, INCLUDING OFFSETS AND VERTICAL RISERS, PIPE SIZES AND ALL FITTINGS, TRAPS, EXPANSION JOINTS AND SPECIALTIES SUPPLIED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. COORDINATE PIPE ROUTING WITH EXISTING CEILING SERVICES AND ALL PROPOSED WORK PRIOR TO SUBMITTING SHOP DRAWING.
 9.8. CONTRACTOR TO PRESSURE AND LEAK TEST THE SYSTEM AND PROVIDE FULL REFRIGERANT CHARGE.
 9.9. MINIMUM INSULATION THICKNESS SHALL BE IN ACCORDANCE WITH LATEST EDITION OF ASHRAE STD. 90.1. ALL REFRIGERANT PIPING SHALL BE INSULATED WITH 3/4" FLEXIBLE CLOSED CELL ELASTOMERIC THERMAL INSULATION ("ARMAFLEX ARMACELL AP" OR APPROVED EQUIVALENT). OUTDOOR JACKETING SHALL ALUMINUM CLADDING, INSIDE JACKETING SHALL BE PVC TO MATCH CEILING FINISHES (BLACK OR WHITE).
 9.10. CONTRACTOR TO PROVIDE TSSA REFRIGERANT PIPING CERTIFICATE TO CSA B31.5 AND ODP TAGS.

10. CONTROLS
 10.1. ALL CONTROLS WORK SHALL BE COMPLETED BY THE BASE BUILDING CONTROLS CONTRACTOR – SIEMENS CANADA.
 10.2. ALL LOW VOLTAGE CONTROL WIRING (<50V) SHALL BE BY THE CONTROL DIVISION.
 10.3. ALL NEW EQUIPMENT CONTROL SHALL BE COMPATIBLE WITH THE EXISTING BASE BUILDING CONTROL SYSTEM.
 10.4. PROVIDE ALL REQUIRED CONTROL DEVICES INCLUDED BUT NOT LIMITED DAMPER C/W ACTUATORS, RELAYS, CONTROLLERS, WIRING, CONDUIT, PNEUMATIC/DDC SIGNAL CONVERTER AND ACCESSORIES FOR A FULLY FUNCTIONING SYSTEM.
 10.5. REFER TO DRAWINGS FOR PROPOSED LOCATION OF THE EQUIPMENT, COORDINATE FINAL LOCATIONS WITH MECHANICAL AND ELECTRICAL CONTRACTORS.
 10.6. TEST AND VERIFY ALL DEVICES LOCALLY AT THE DEVICE LEVEL AND AT THE BAS GRAPHICS.
 10.7. CONTROLS CONTRACTOR SCOPE OF WORK SHALL INCLUDE SUPPLY AND INSTALL OF: CONTROL WIRING OR PNEUMATIC TUBING, INTERLOCKS, SEQUENCING AND BASE BUILDING AUTOMATION SYSTEM TIE-INS (AS REQUIRED AND SPECIFIED).
 10.8. PROVIDE TRAINING TO FACILITY OPERATIONS ON ALL NEW AND EXISTING (WHERE REUSED) EQUIPMENT.

PLUMBING FIXTURE SCHEDULE

TAG	FIXTURE	SPECIFICATION	PLUMBING SERVICES			
			DCW ø(mm)	DHW ø(mm)	SAN ø(mm)	VENT ø(mm)
WC-1	TOILET FLOOR MOUNTED	TOILET: AMERICAN STANDARD MODEL NO. 3451001 TOILET – MADERA FLOWISE, 15" RIM HEIGHT, FLOOR MOUNTED WITH FLOOR OUTLET, TOP SPUD, HIGH EFFICIENCY 4.2 LPF (1.1 GPF), WHITE FINISH VITREOUS CHINA, EVERCLEAN ANTIMICROBIAL SURFACE, ELONGATED BOWL, DIRECT-FED SIPHON JET ACTION, TWO (2) BOLT CAPS, 10" OR 12" ROUGH-IN – CONTRACTOR TO CONFIRM THE ROUGH-IN WITH THE EXISTING SITE CONDITION PRIOR TO ORDERING TOILETS. AMERICAN STANDARD #5905.100 EXTRA HEAVY DUTY OPEN FRONT SEAT LESS COVER. FLUSH VALVE: DELTA 81T201 MANUAL FLUSH VALVE – QUIET ACTION, EXPOSED DIAPHRAGM FLUSH VALVE, RIGHT HAND SUPPLY INSTALLATION, CHLORIMINE RESISTANT DIAPHRAGM, RENEWABLE SEAT, VACUUM BREAKEER, COVER TUBE WITH STAINLESS STEEL WALL FLANGE, ADJUST TO 4.8LPF (1.27 GPF).	25	--	75	50
WC-2	TOILET FLOOR MOUNTED BARRIER FREE DESIGN	TOILET: AMERICAN STANDARD MODEL NO. 3641.001 TOILET – RIGHT WIDTH FLOWISE, 17" RIM HEIGHT, FLOOR MOUNTED WITH FLOOR OUTLET, TOP SPUD, HIGH EFFICIENCY 4.9 LPF (1.28 GPF), WHITE FINISH VITREOUS CHINA, TESTED TO SUPPORT STATIC LOAD OF 908 kg (2,000 lbs), TWO (2) BOLT CAPS, 10" OR 12" ROUGH-IN – CONTRACTOR TO CONFIRM THE ROUGH-IN WITH THE EXISTING SITE CONDITION PRIOR TO ORDERING TOILETS. AMERICAN STANDARD #5905.100 EXTRA HEAVY DUTY OPEN FRONT SEAT LESS COVER. FLUSH VALVE: DELTA 81T201 MANUAL FLUSH VALVE – QUIET ACTION, EXPOSED DIAPHRAGM FLUSH VALVE, RIGHT HAND SUPPLY INSTALLATION, CHLORIMINE RESISTANT DIAPHRAGM, RENEWABLE SEAT, VACUUM BREAKEER, COVER TUBE WITH STAINLESS STEEL WALL FLANGE, ADJUST TO 4.9LPF (1.3 GPF).	25	--	75	50
L-1	LAVATORY WALL MOUNTED	SINK: AMERICAN STANDARD DECOURM SERIES MODEL NO. 9024.004EC – 20"X18" VITREOUS CHINA LAVATORY, WHITE FINISH, REAR OVERFLOW, 4" CENTRES, RECESSED SELF-DRAINING DECK WITH MINIMAL BACKSPLASH, C/W WALL SUPPORT AND DRAIN GRID, ADA AND TAS COMPLIANT, SUPPLIES, 1-1/4" TRAP.HEAVY DUTY CAST BRASS CENTERSET. FAUCET: DELTA MODEL NO. 591-TFLGHGMHDF – HANDS FREE (TOUCHLESS) ACTIVATION, ALL METAL FAUCET CONSTRUCTION, INTERGATED FAUCET HOSE, 1.9 LPM (0.5 GPM) VANDAL RESISTANT LAMINAR OUTLET, 45 SECOND MAXIMUM RUNTIME, 102mm (4" CENTRES) WITH COVER PLATE WITH LOCKING MECHANISM, PLUG-IN POWER (PART NO. 061405A), TRANSFORMER, 600mm (24") EXTENSION CABLE.	15	15	40	40
L-2	LAVATORY WALL MOUNTED	SINK: AMERICAN STANDARD MURRO SERIES MODEL NO. 0954004EC – 22-1/16"X17-5/8" VITREOUS CHINA LAVATORY, WHITE FINISH, REAR OVERFLOW, 4" CENTRES, RECESSED SELF DRAINED DECK, CONCEALED ARM OR WALL SUPPORT, ACRYLIC SHROUD/KNEE GUARD (PART NO 0062.000), ADA AND TAS COMPLIANT, SUPPLIES, 1-1/4" TRAP, HEAVY DUTY CAST BRASS CENTERSET. FAUCET: DELTA MODEL NO. 591-TFLGHGMHDF – HANDS FREE (TOUCHLESS) ACTIVATION, ALL METAL FAUCET CONSTRUCTION, INTERGATED FAUCET HOSE, 1.9 LPM (0.5 GPM) VANDAL RESISTANT LAMINAR OUTLET, 45 SECOND MAXIMUM RUNTIME, 102mm (4" CENTRES) WITH COVER PLATE WITH LOCKING MECHANISM, PLUG-IN POWER (PART NO. 061405A), TRANSFORMER, 600mm (24") EXTENSION CABLE.	15	15	40	40

– COORDINATE FIXTURE FINISHES WITH ARCHITECT AT SHOP DRAWING STAGE

EXHAUST FAN SCHEDULE

TAG	SERVICE	LOCATION	MANUFACTURER	MODEL	PERFORMANCE		MOTOR			WEIGHT (KG)	NOTES
					AIR FLOW (L/s)	ESP (Pa)	W	RPM	POWER		
EF-1	VARIOUS, REFER TO DRAWINGS	CEILING	GREENHECK	SP-B80	33	62	18	900	120/1/60	9	C/W ISOLATION KIT, ALUMINUM GRILLE, INTERLOCK OPERATION WITH LIGHT SWITCH

HEAT PUMP SYSTEM SCHEDULE

TAG	MANUF.	REFERENCE. MODEL	QTY / TYPE	AIR FLOW LOW/MED/HIGH (CFM)	CAPACITY COOLING (BTU/HR)	SOUND LEVEL LOW/MED/HIGH (dB[A])	REFRIGERANT CONNECTION SIZE		CONDENSATE CONNECTION SIZE mm (IN)	ELECTRICAL SERVICE			DIMENSIONS WxLxH (IN)	WEIGHT (LB)	FILTER	ACCESSORIES
							LIQUID LINE (IN)	GAS LINE (IN)		(V/PH/Hz)	MCA	MOCP				
IDU-1	MITS AIR OR EQUAL.	MSY-GS09NA-U1	(1) INDOOR WALL MOUNTED	134-222-381	9,000	19-30-43	1/4	3/8	16 (5/8)	208/1/60	1	–	9 1/8 x 31 7/16 x 11 5/8	23	PP HONEYCOMB	– INDOOR UNIT C/W REMOTE WIRED THERMOSTAT. – C/W CONDENSATE PUMP, REFERENCE MODEL: DELTA PACK DP10ULO2UN23 – C/W WIRED CONTROLLER PAR-41MAA
COND-1	MITS AIR OR EQUAL.	MUY-GS09NA-U1	(1) ROOF MOUNTED	584-1,156-1,152	9,000	47	1/4	3/8	--	208/1/60	19	26	11 1/4 x 31 1/2 x 21 5/8	79	--	– ROOF MOUNTED – REFRIGERANT PIPING WITH ARMAFLEX INSULATION AND ALL ACCESSORIES PER MANUFACTURER SPECIFICATION.

1. UNIT SHALL BE INSTALLED BY CERTIFIED REFRIGERATION TECHNICIAN.
2. PROVIDE REFRIGERANT LINES, INSULATION AND REQUIRED ACCESSORIES PER MANUFACTURER INSTRUCTIONS.
3. REFRIGERANT LINES SCHEMATIC INCLUDING PIPE SIZES SHALL BE SUBMITTED AS PART OF THE SHOP DRAWING SUBMITTAL.
4. PROVIDE CONNECTION TO THE BAS FOR STATUS.

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PARKDALE ELEMENTARY SCHOOL ACCESSIBILITY RENOVATIONS
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MECHANICAL SCHEDULES

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SCALE:	PROJECT:
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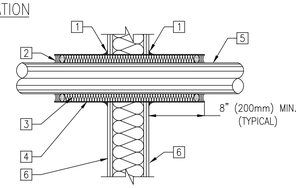
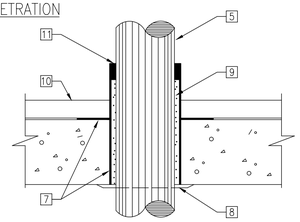
DETAIL 1 – FIRE STOP

NOT TO SCALE

WALL PENETRATION



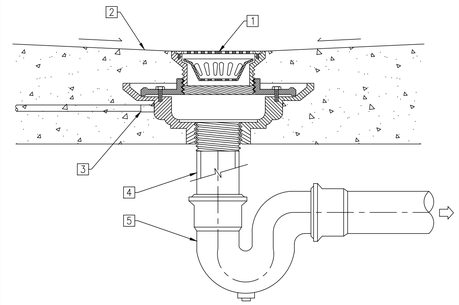
FLOOR PENETRATION



1. SEALANT. CONNECT TO STUD WITH "L" BRACKET IF NECESSARY (BOTH SIDES)
2. BACKER ROD & SEALANT
3. 1.3 (1/2") RIGID FIBERGLASS INSULATION
4. SHEET METAL SLEEVE (SCHEDULE 10 STEEL)
5. DUCT OR PIPE
6. WALL (TYPE VARIES – FOR CAVITY WALL USE SPLIT SLEEVE)
7. PIPE SLEEVE WITH ANCHOR RING
8. PIPE ESCUTCHEON PLATE
9. FIRE–STOPPING MATERIAL
10. FINISHED FLOOR
11. NON–HARDENING SEALANT

DETAIL 2 – FLOOR DRAIN

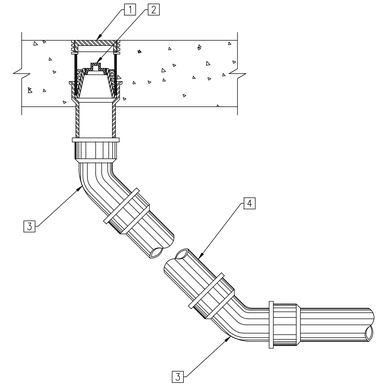
NOT TO SCALE



1. ADJUSTABLE STRAINER
2. FINISHED FLOOR, SLOPING AND WATER PROOFING AS SPECIFIED
3. TRAP SEAL PRIMER CONNECTION, PROVIDE TRAP SEAL PRIMER STATION C/W PIPING
4. CAST IRON CONNECTION TO SUIT P–TRAP SIZE
5. CAST IRON P–TRAP C/W CLEANING EYE

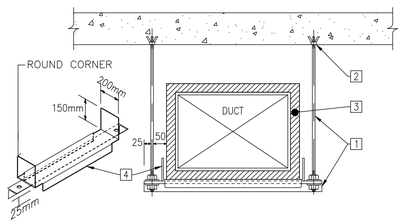
DETAIL 3 – FLOOR CLEANOUT

NOT TO SCALE



1. HEAVY DUTY CLEAN COVER C/W FRAME
2. COUNTER SUNK CLEANOUT PLUG
3. 45 DEG CAST IRON ELBOW
4. CAST IRON PIPE

DETAIL 4 – DUCT HANGER



1. PROVIDE THREADED RODS AND ANGLE SUPPORT AS FOLLOWS

DUCT SIZE (mm)	ANGLE SIZE (MM)	ROD SIZE (MM)
UP TO 750	25 X 25 X 3	6
751 TO 1500	40 X 40 X 3	10
1501 TO 2100	50 X 50 X 3	10
2101 TO 2400	50 X 50 X 5	10
2401 AND OVER	50 X 50 X 6	10

2. SUPPORT UPPER HANGER FROM STRUCTURE AS FOLLOWS:

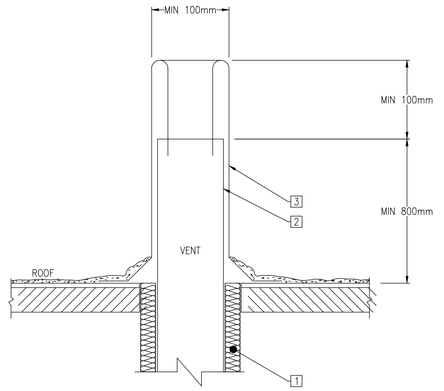
   CONCRETE: MANUFACTURED CONCRETE INSERTS
   STEEL JOIST: MANUFACTURED JOIST CLAMP
   STEEL BEAM: MANUFACTURED BEAM CLAMP

3. DUCT INSULATION, WHERE SPECIFIED.
4. PROVIDE 20 GAUGE GALVANIZED STEEL SUPPORT BELOW ALL INSULATED DUCTWORK.

GENERAL NOTES:
1. ALL STEEL SUPPORTS SHALL BE PAINTED WITH ZINC RICH PAINT. PROVIDE PAINT TO MATCH CEILING FINISHES (FINAL FINISH TO BE APPROVED BY CONSULTANT OR ARCHITECT) IN ALL EXPOSED AREAS.
2. HANGER SPACING SHALL BE IN ACCORDANCE WITH SMACNA AND AT MINIMUM EVERY 3m FOR DUCTS WIDTHS UNDER 1,500mm AND EVERY 2.5m FOR DUCTS WIDTHS ABOVE 1,500mm.

DETAIL 5 – PLUMBING VENT

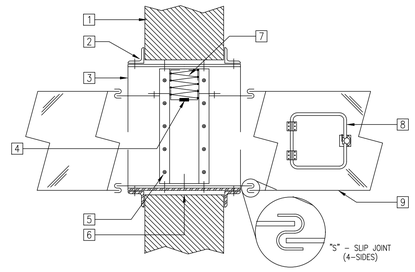
NOT TO SCALE



1. INSULATE FIRST 3m (10FT) OF VENT PIPE
2. VENT STACK, SIZE AND QUANTITY TO COMPLY WITH OBC PART 7
3. FLASHING BY BASEBUILDING ROOFING CONTRACTOR

DETAIL 7 – DUCT PENETRATION C/W FIRE DAMPER

NOT TO SCALE



1. WALL/FIRE SEPARATION
2. STEEL RETAINING ANGLES 38x38x3mm; ALL AROUND 4–SIDES. FASTEN TO COLLAR ONLY.
3. COLLAR
4. FUSIBLE LINK (71°C)
5. FIRE DAMPER SECURED TO COLLAR ALL AROUND.
6. MAINTAIN MIN. 6mm EXPANSION CLEARANCE ALL AROUND (SEE NOTE #3)
7. TYP. CURTAIN; GALVANIZED STEEL INTERLOCKING BLADES
8. AIR TIGHT ACCESS DOOR, c/w PIANO HINGE & SASH LOCK. MOUNT ON SIDE OR BOTTOM OF DUCT
9. DUCT THROUGH FIRE SEPARATION WALL.

NOTES:
1. FRAME, BLADES, AND COLLAR SHALL BE Min. 14 Ga (2.0mm thk) GALV. STEEL CONSTRUCTION.
2. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR THE INSTALLATION OF FIRE DAMPERS.
3. STANDARD OF ACCEPTANCE: RUSKIN MANUFACTURING, OR NAILOR INDUSTRIES INC.
4. DO NOT SEAL AROUND RETAINING ANGLES w FIRESTOP CAULKS and/or PUTTYS. DO NOT FILL ANNULAR SPACE (EX–PANSION VOID) WITH FIRESTOP MATERIAL.
5. HORIZONTAL INSTALLATION SIMILAR, c/w STAINLESS STEEL CLOSURE SPRING.
6. SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW PRIOR TO INSTALLATION.

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MECHANICAL
DETAILS

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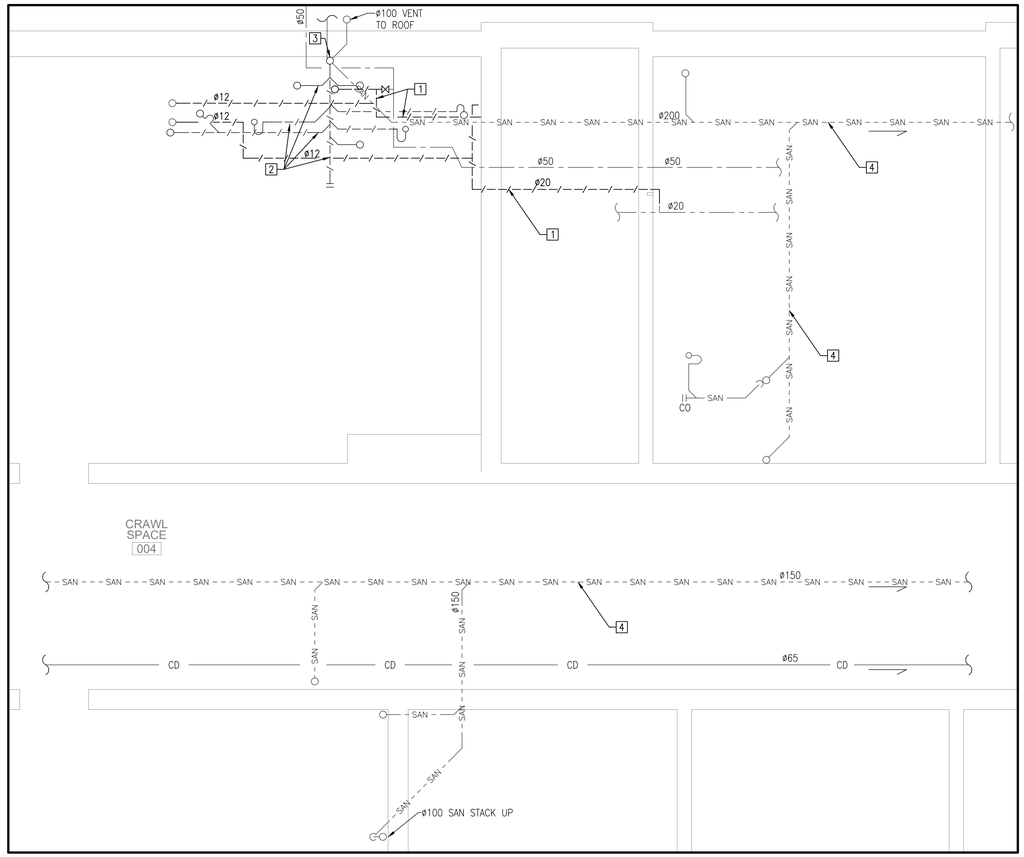
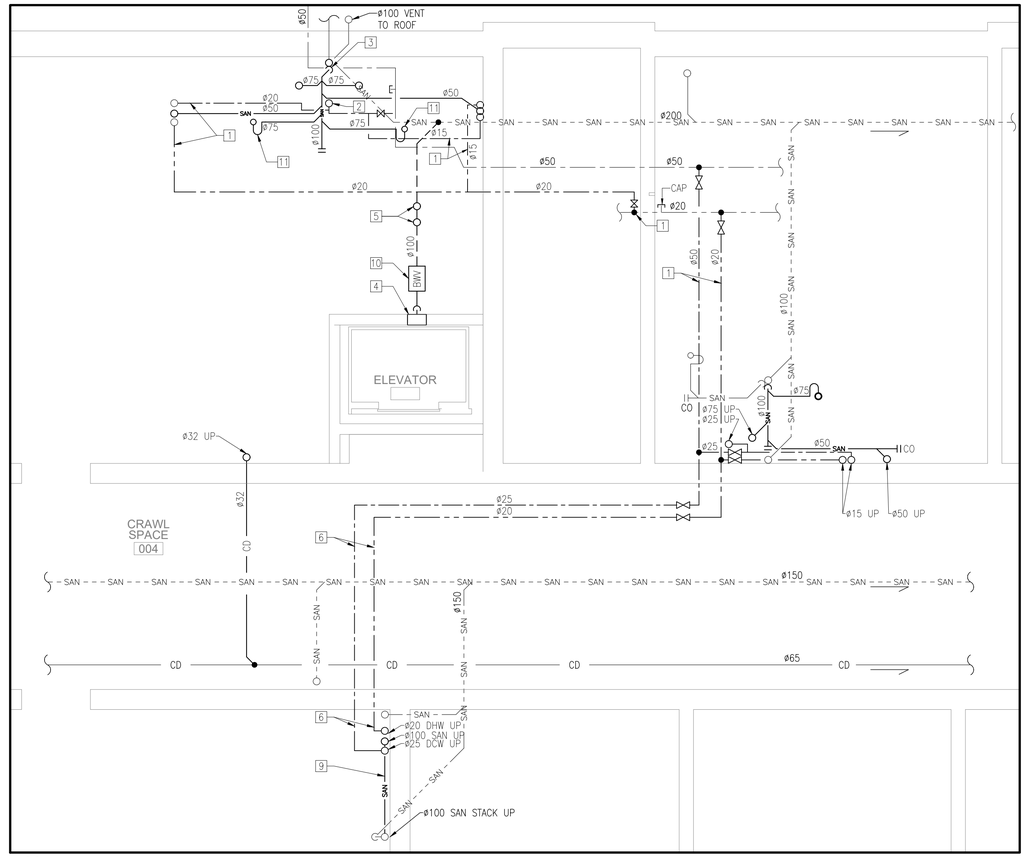


1 M200 PARTIAL CRAWL SPACE - PLUMBING DEMOLITION PLAN
SCALE 1:50



2 M200 PARTIAL CRAWL SPACE - NEW PLUMBING
SCALE 1:50

REFERENCE NOTES

1. DEMOLISH EXISTING DOMESTIC COLD AND HOT WATER PIPING IN CRAWL SPACE BELOW, CAP AT MAIN. CONTRACTOR TO ALLOW FOR PIPE FREEZING OR SITE WIDE SHUT DOWN TO COMPLETE THE WORK. PIPE ROUTING IS PROVIDED FOR REFERENCE ONLY, CONTRACTOR TO FIELD VERIFY ALL PIPE ROUTING AND SIZING PRIOR TO DEMOLITION WORK. DISCONNECT PIPING FROM SINKS BEING REUSED IN KINDERGARTEN.
2. DEMOLISH EXISTING SANITARY PIPING IN CEILING SPACE OF THE CRAWL SPACE, SEAL AND REPAIR ALL UNUSED FLOOR OPENINGS. PIPE ROUTING IS PROVIDED FOR REFERENCE ONLY, CONTRACTOR TO FIELD VERIFY ALL PIPE ROUTING AND SIZING PRIOR TO DEMOLITION WORK. DISCONNECT PIPING FROM ALL FIXTURES BEING REUSED INCLUDING KINDERGARTEN SINKS AND FLOOR DRAINS.
3. DEMOLISH EXISTING SANITARY STACK IN CRAWL SPACE DOWN TO CLEANOUT AT FLOOR LEVEL.
4. EXISTING BURIED SANITARY PIPING TO REMAIN, SHOWN FOR REFERENCE ONLY.

   NOTE: ALL SANITARY WATER SERVICES ARE SHOWN FOR REFERENCE ONLY, CONTRACTOR TO CARRY OUT DETAILED CCTV INSPECTION OF ALL BURIED SANITARY PIPING TO DETERMINE EXACT LOCATION, ROUTING, INVERTS PRIOR TO ANY WORK. SUBMIT REPORT FOR ENGINEER'S REVIEW.

REFERENCE NOTES

1. PROVIDE NEW DOMESTIC WATER SERVICES IN CRAWL SPACE, CONNECT TO EXISTING MAIN DISTRIBUTION AS NOTED. CONTRACTOR TO FIELD VERIFY EXACT LOCATION. ALLOW FOR PIPE FREEZING OR SITE WIDE SERVICES SHUT DOWN TO ALLOW FOR NEW CONNECTIONS.
2. EXTEND NEW ø50 DOMESTIC COLD WATER SERVICE AND RECONNECT TO EXISTING DISTRIBUTION TO TOILETS ON GROUND FLOOR.
3. PROVIDE NEW ø100 SANITARY STACK, CONNECT TO EXISTING ABOVE CLEANOUT AT FLOOR LEVEL. PROVIDE NEW SANITARY HORIZONTAL DISTRIBUTION IN CEILING OF THE CRAWL SPACE. RECONNECT TO ALL EXISTING FIXTURES INCLUDING SINKS IN KINDERGARTEN, FLOOR DRAINS IN WASHROOMS. SUPPLY NEW TRAP SEAL PRIMER AND CONNECT TO DOMESTIC WATER SERVICE FOR ALL FLOOR DRAIN AFFECTED BY THE PROJECT.
4. PROVIDE ELEVATOR PIT DRAIN SCUPPER DRAIN "ZURN 1717" OR EQUIVALENT. PROVIDE NEW BURIED SANITARY DISTRIBUTION AND CONNECT TO EXISTING BURIED SANITARY PIPING AS INDICATED. LOCATION OF EXISTING SANITARY SERVICE IS SHOWN FOR REFERENCE ONLY, CONTRACTOR TO CARRY OUT CCTV INSPECTION AND LOCATE EXISTING SANITARY SERVICES PRIOR TO ANY WORK.
5. PROVIDE RUNNING TRAP C/W CLEANOUTS, TRAP SEAL PRIMER AND VENTING IN ACCORDANCE WITH OBC PART 7.
6. EXTEND NEW DOMESTIC COLD/HOT WATER SERVICES UP TO NEW WASHROOM ON 2ND FLOOR, PROVIDE ALL REQUIRED CORING, SUPPORTS AND FIRE STOPPING. REFER TO DRAWING M202 ON THIS DRAWING FOR CONTINUATION.
7. PROVIDE NEW ø100 SANITARY CONNECTION TO EXISTING STACK IN CRAWL SPACE, EXTEND NEW ø100 SANITARY STACK TO 2ND FLOOR WASHROOM, PROVIDE ALL REQUIRED CORING, SUPPORTS AND FIRE STOPPING. REFER TO DETAIL 3 ON THIS DRAWING FOR CONTINUATION.
8. PROVIDE ø32 CONDENSATE DRAIN CONNECTION FOR NEW AC UNIT IN ELEVATOR MACHINE ROOM, CONNECT TO EXISTING CONDENSATE PIPING IN CRAWL SPACE, FIELD VERIFY EXACT LOCATION.
9. PROVIDE NEW ø100 SANITARY CONNECTION TO EXISTING STACK IN CRAWL SPACE, EXTEND NEW ø100 SANITARY STACK TO 2ND FLOOR WASHROOM, PROVIDE ALL REQUIRED CORING, SUPPORTS AND FIRE STOPPING. REFER TO DRAWING M202 FOR CONTINUATION. COORDINATE WORK WITH ARCHITECTURAL DRAWINGS.
10. PROVIDE BACKWATER VALVE ON CONNECTION TO ELEVATOR PIT DRAIN, ENSURE ACCESSIBILITY.
11. PROVIDE NEW FLOOR DRAIN BODY, P-TRAP C/W TRAP SEAL PRIMER.

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PARTIAL CRAWL SPACE PLAN PLUMBING NEW AND DEMOLITION

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DATE: NOV-2024	
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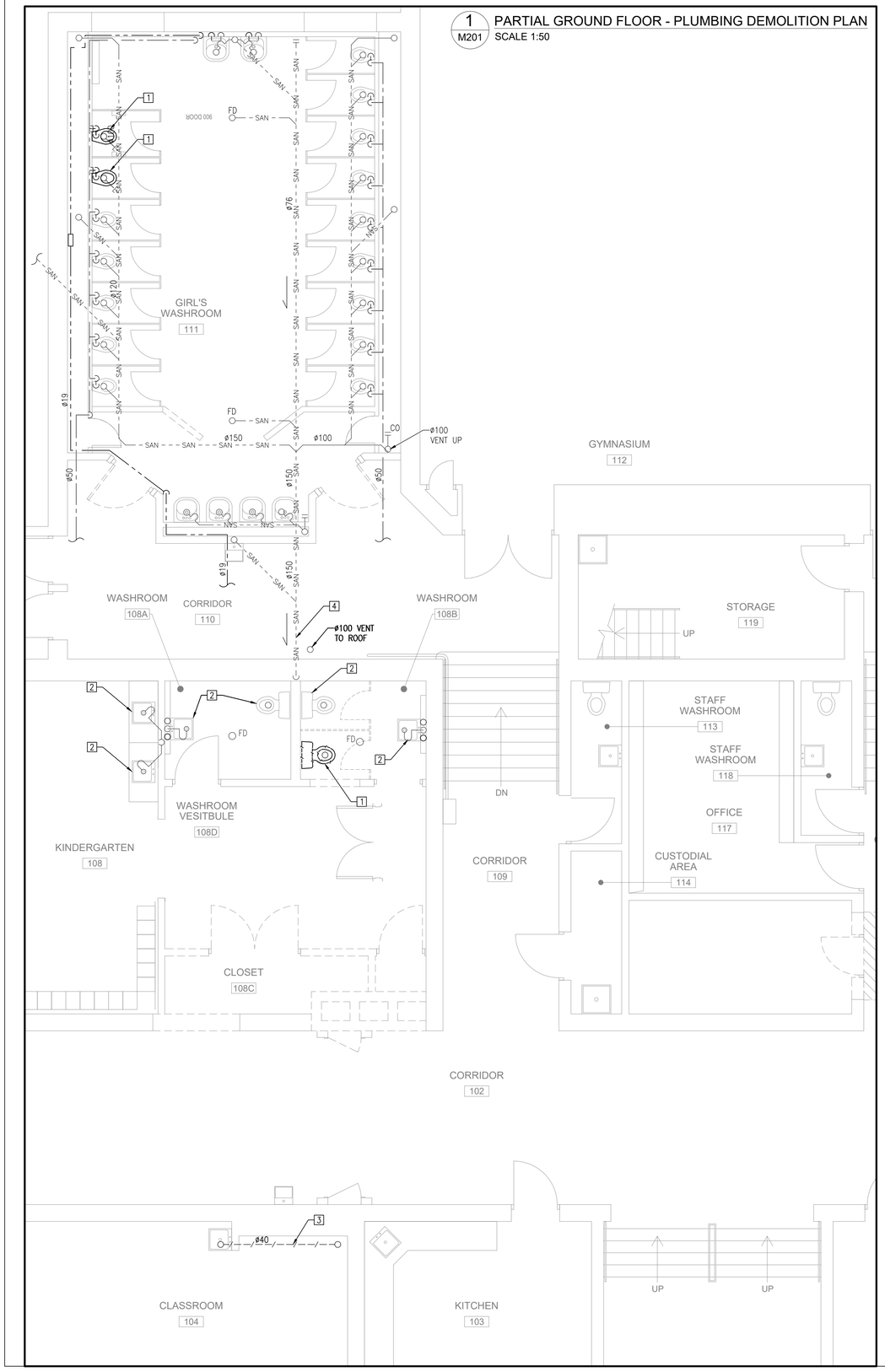
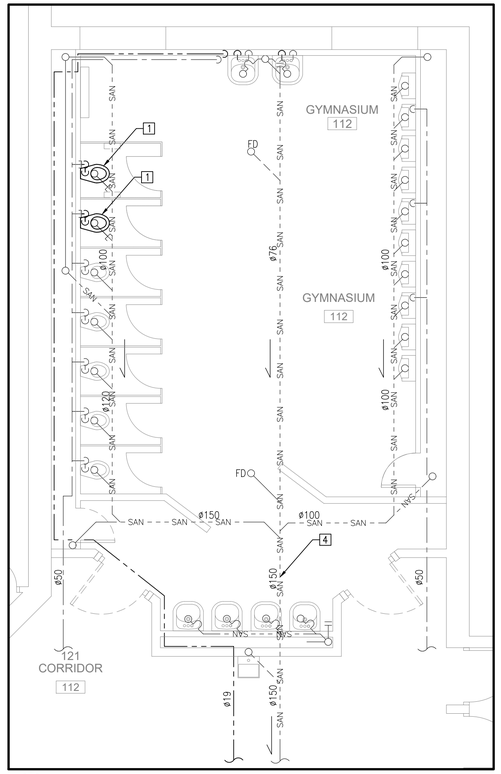
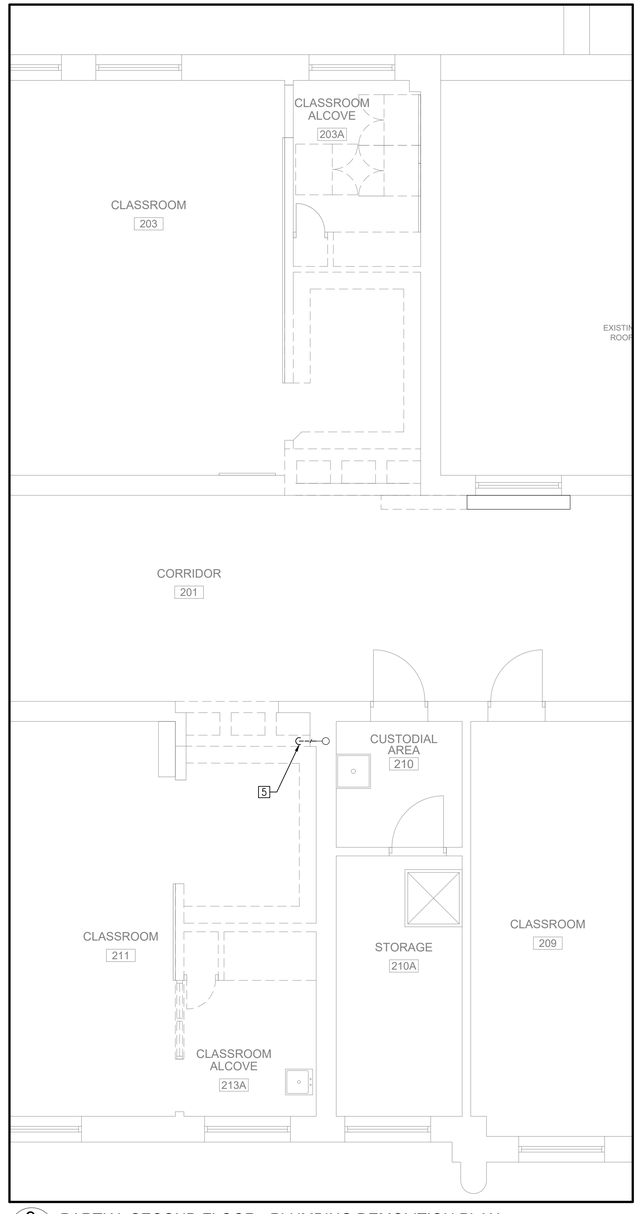
1 PARTIAL GROUND FLOOR - PLUMBING DEMOLITION PLAN
M201 SCALE 1:50



2 PARTIAL GROUND FLOOR - PLUMBING DEMOLITION PLAN
M201 SCALE 1:50



3 PARTIAL SECOND FLOOR - PLUMBING DEMOLITION PLAN
M201 SCALE 1:50



REFERENCE NOTES

1. REMOVE EXISTING PLUMBING FIXTURE C/W ASSOCIATED PIPING, VALVES, HANGERS, SUPPORTS, CAP DOMESTIC WATER AND SANITARY PIPING SERVICES IN WALL OR AT MAIN AS INDICATED WHERE NOT REUSED FOR NEW FIXTURE CONNECTION. REPAIR ANY UNUSED FLOOR AND WALL OPENINGS.
2. EXISTING FIXTURE TO REMAIN, DEMOLISH ASSOCIATED DOMESTIC COLD/HOT WATER AND SANITARY SERVICES IN CRAWL SPACE, REFER TO DRAWING M200 FOR MORE INFORMATION.
3. DEMOLISH EXISTING PLUMBING VENT FROM CLASSROOM SINK, INFILL ALL UNUSED OPENINGS.
4. EXISTING BURIED SANITARY PIPING TO REMAIN, SHOWN FOR REFERENCE ONLY.
5. DEMOLISH EXPOSED VENT PIPING FROM CLASSROOM 104 SINK, CAP IN WALL. REFER TO M202 FOR MODIFICATIONS.

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PARTIAL GROUND & SECOND FLOOR PLUMBING - DEMOLITION

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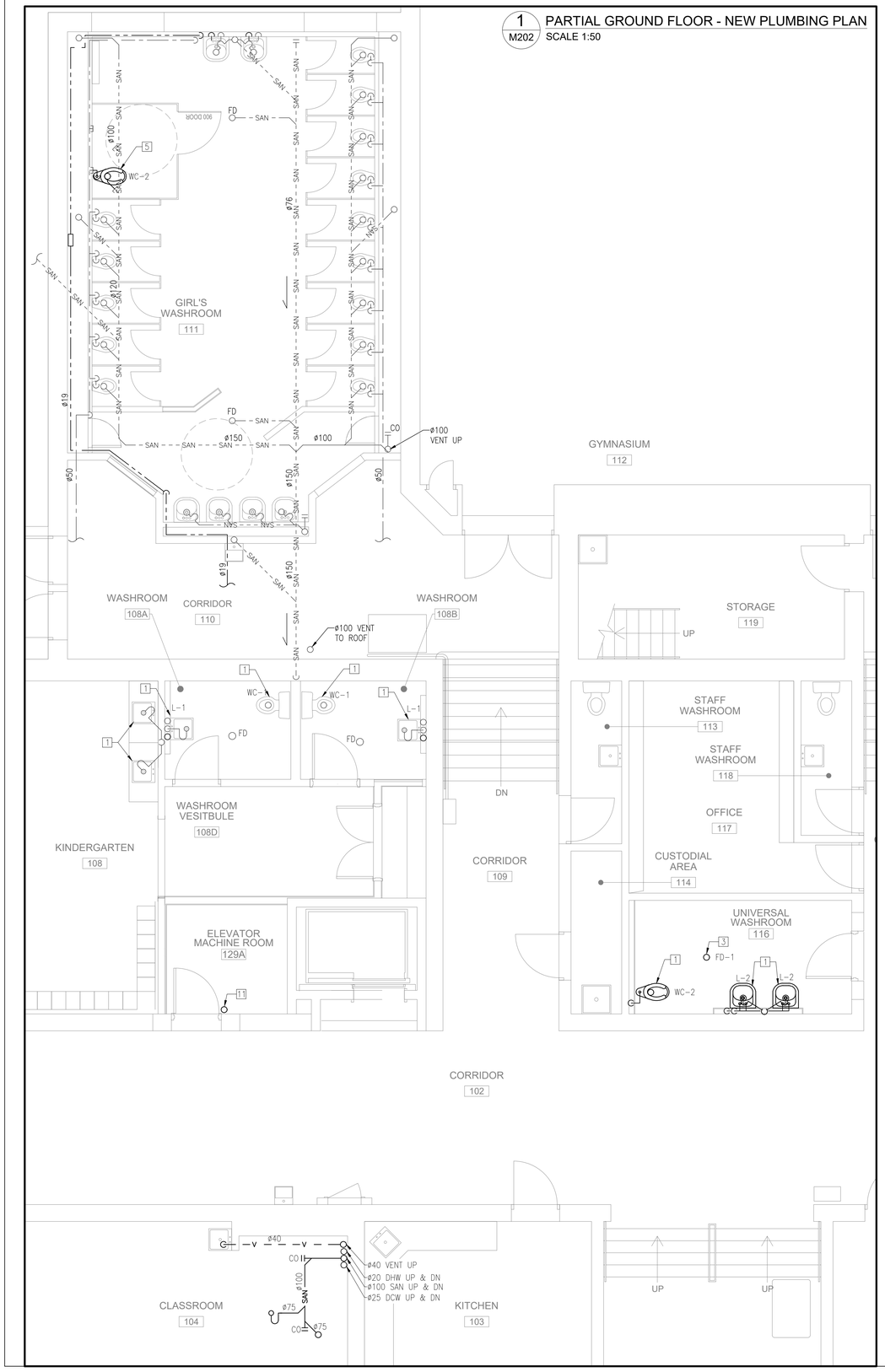
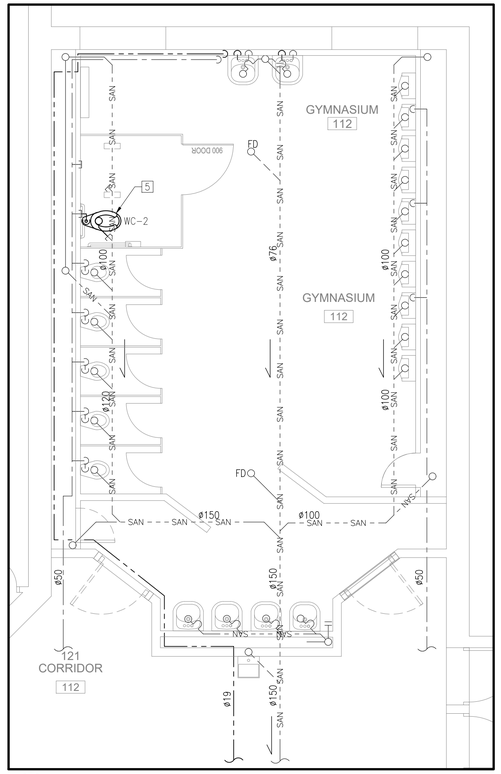
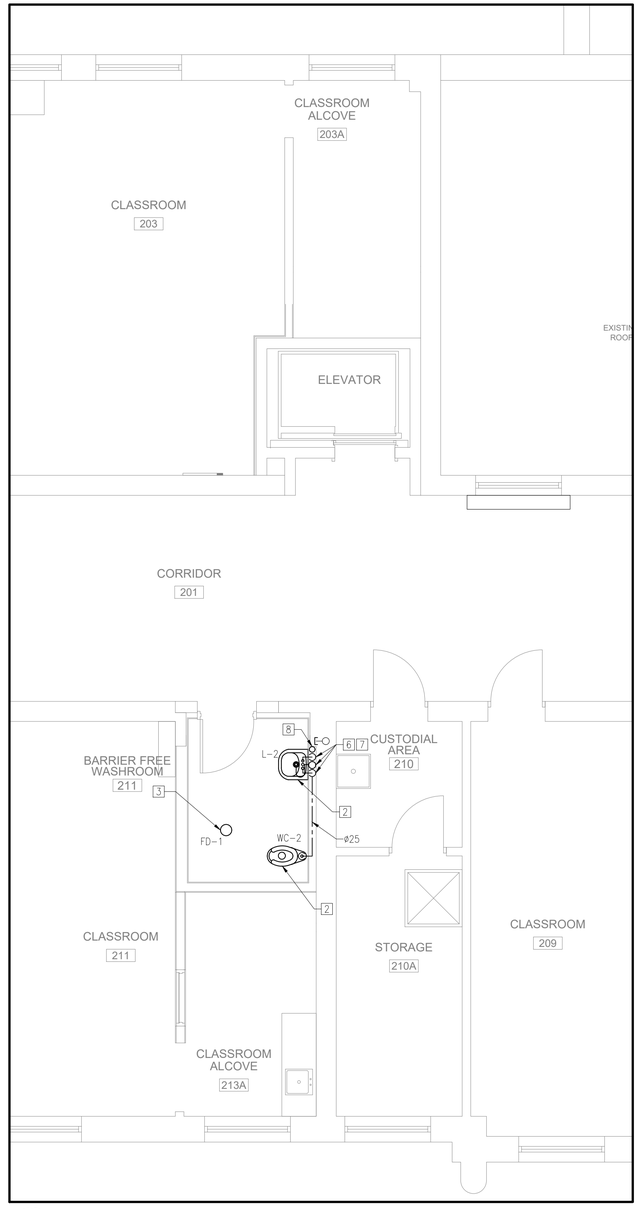


1 M202 PARTIAL GROUND FLOOR - NEW PLUMBING PLAN
SCALE 1:50



2 M202 PARTIAL GROUND FLOOR - NEW PLUMBING PLAN
SCALE 1:50



3 M202 PARTIAL SECOND FLOOR - NEW PLUMBING PLAN
SCALE 1:50

REFERENCE NOTES

1. EXISTING PLUMBING FIXTURE TO REMAIN, PROVIDE NEW DOMESTIC COLD/HOT WATER AND SANITARY SERVICES IN CRAWL SPACE AND RECONNECT TO EXISTING RISERS. REFER TO DRAWING M200 FOR MORE INFORMATION.
2. PROVIDE NEW PLUMBING FIXTURE, REFER TO SCHEDULES FOR MORE INFORMATION (TYPICAL). PROVIDE NEW DOMESTIC WATER AND SANITARY SERVICES CONNECTION FROM THE CRAWL SPACE OR AS NOTED.
3. PROVIDE NEW FLOOR DRAIN C/W TRAP SEAL PRIMER, REFER TO DETAILS FOR INSTALLATION.
4. EXISTING FLOOR DRAIN TO REMAIN, PROVIDE NEW TRAP WITH TRAP SEAL PRIMER AND VENTING IN ACCORDANCE WITH OBC PART 7.
5. PROVIDE NEW WATER CLOSET, REFER TO SCHEDULES FOR MORE INFORMATION. RECONNECT FIXTURE TO EXISTING UNDERGROUND SANITARY PIPING SERVICES AND DOMESTIC WATER SERVICES IN PLUMBING CHASE WALL. ALLOW FOR ALL REQUIRED SLAB AND WALL CUTTING, RESTORATION WORK.
6. PROVIDE NEW PLUMBING FIXTURE, REFER TO SCHEDULES FOR MORE INFORMATION (TYPICAL). PROVIDE NEW SANITARY PIPING IN CEILING OF CLASSROOM 104. ALLOW FOR ALL REQUIRED CEILING REMOVAL AND RESTORATION WORK, COORDINATE WITH ARCHITECTURAL DRAWINGS.
6. ø20 DHW, ø25 DCW WATER SERVICES DOWN TO MAIN DISTRIBUTION IN CRAWL SPACE. ø100 SANITARY RISER DOWN AND ø VENT THRU ROOF, REFER TO DETAILS FOR CONSTRUCTION.
7. PIPING TO BE EXTENDED IN CHASE WALL ON 2ND AND 1ST FLOORS, COORDINATION INSTALLATION WITH ARCHITECTURAL DRAWINGS.
8. ø40 PLUMBING VENT FROM CLASSROOM 104 SINK, REFER TO DETAIL 1 ON THIS DRAWING FOR CONTINUATION. CONNECT TO NEW ø100 VENT STACK WITHIN PLUMBING CHASE WALL.

HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

NO	REVISIONS	DATE
3	ISSUED FOR TENDER	2024-12-06
2	ISSUED FOR PERMIT	2024-11-14
1	ISSUED FOR COORDINATION	2024-11-07

LICENCED PROFESSIONAL ENGINEER
DEC 6,2024
D. BEREZOVSKI
100222327
PROVINCE OF ONTARIO

DYNAMIS ENGINEERING INC
222 ISLINGTON AVE, SUITE 260
TORONTO, ONTARIO
www.dynamiseng.com

PARKDALE ELEMENTARY SCHOOL ACCESSIBILITY RENOVATIONS
139 PARKDALE AVENUE
HAMILTON, ONTARIO

PARTIAL GROUND & SECOND FLOOR PLUMBING - NEW

GRGURIC ARCHITECTS INCORPORATED
28 KING STREET EAST, UNIT B
STONEY CREEK, ONTARIO, L8G 1J8
Tel. 905-664-8735 Fax. 905-664-8737
Web: www.2gai.com

SCALE: AS NOTED	PROJECT: 24-293
DATE: NOV-2024	
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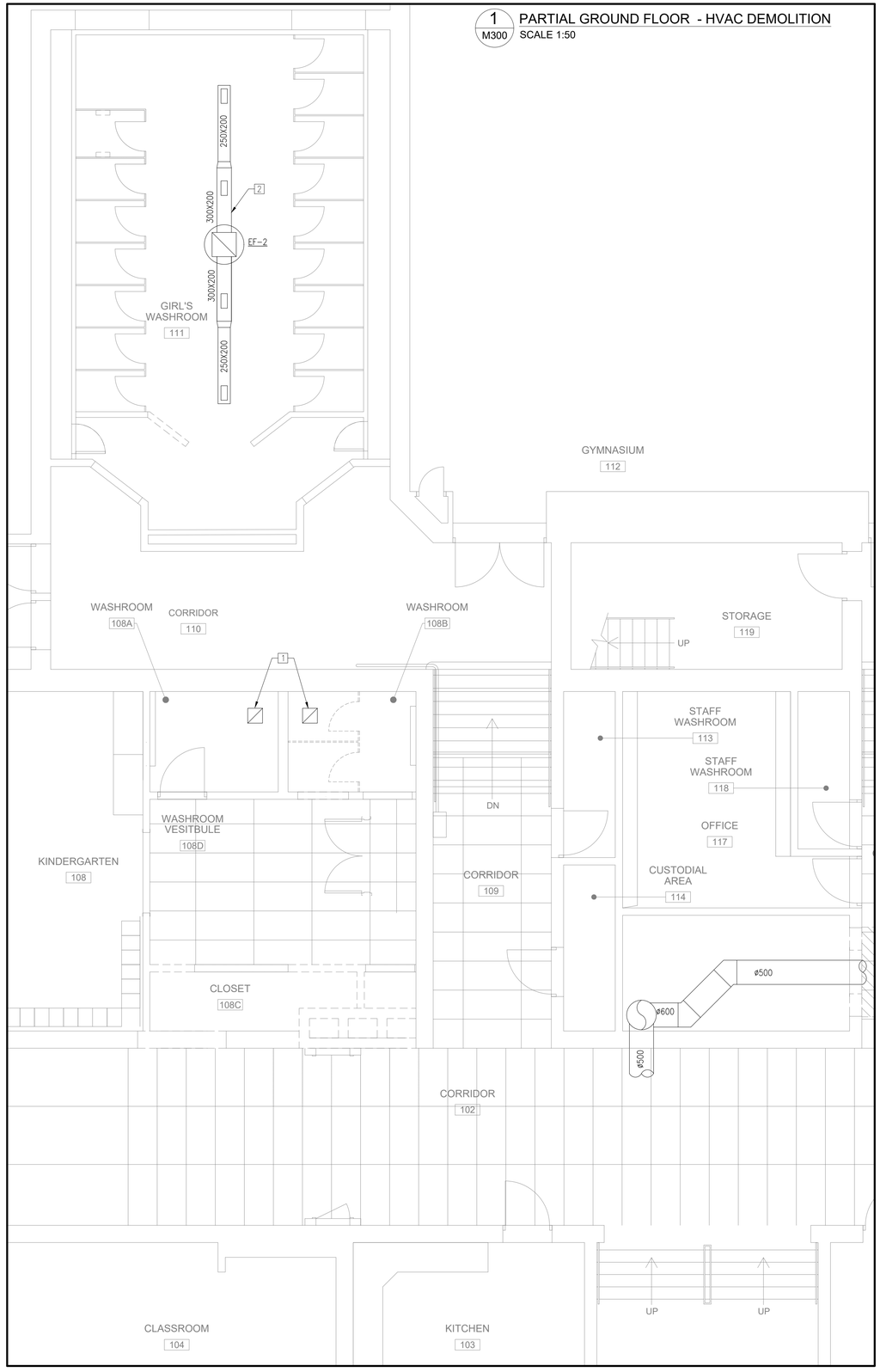
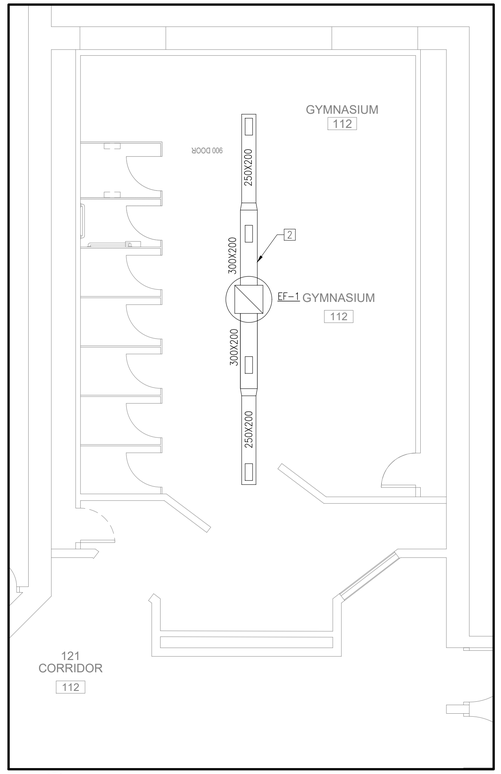
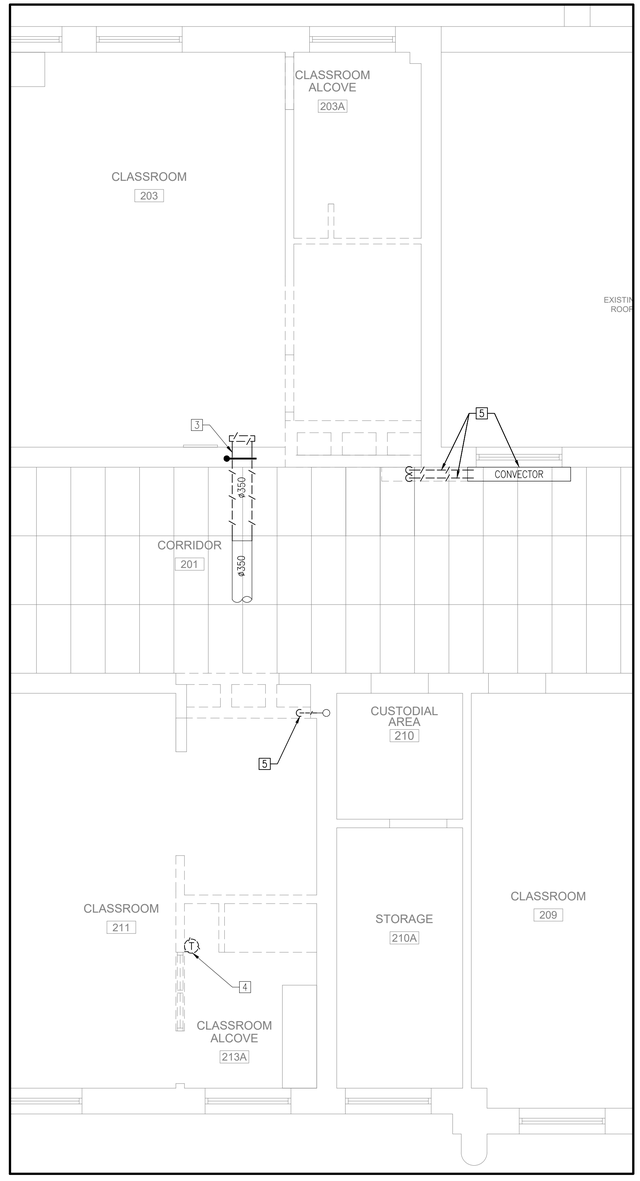
PRINT DATE	



1 M300 PARTIAL GROUND FLOOR - HVAC DEMOLITION
SCALE 1:50



2 M300 PARTIAL GROUND FLOOR - HVAC DEMOLITION
SCALE 1:50



3 M300 PARTIAL SECOND FLOOR - HVAC DEMOLITION
SCALE 1:50

REFERENCE NOTES

1. EXISTING EXHAUST FAN IN WASHROOM TO REMAIN, TEST AND VERIFY OPERATION.
2. EXISTING EXHAUST AIR DUCTWORK UP TO ROOF MOUNTED EXHAUST FAN TO REMAIN, FOR REFERENCE ONLY. TEST AND VERIFY OPERATION OF THE EXHAUST FAN.
3. DEMOLISH SECTION OF THE EXISTING SUPPLY AIR DUCT C/W FIRE&SMOKE DAMPER. FIELD VERIFY SIZE OF THE EXISTING DUCT AND GRILLE PRIOR TO DEMOLITION WORK.
4. EXISTING THERMOSTAT TO BE RELOCATED.
5. EXISTING CONVECTOR, CUT EXISTING ø20 PIPING AT ENCLOSURE AND REMOVE BRANCH PIPING AT FLOOR LEVEL DOWN TO PIPING IN CEILING OF FIRST FLOOR TO CLEAR WALL AREA FOR NEW ELEVATOR ENTRANCE. PROVIDE PIPE FREEZING TO ISOLATE BRANCH PIPING, REMOVE EXISTING ISOLATION VALVE (IF PRESENT) AND PROVIDE NEW ISOLATION VALVE ON BRANCH PIPING. FIELD VERIFY PIPE SIZING AND ROUTING ON SITE, ALLOW FOR REMOVAL AND REINSTATEMENT OF ACOUSTIC CEILING TILE ON 1ST FLOOR. INFILL FLOOR OPENINGS.

HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

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1	ISSUED FOR COORDINATION	2024-11-07

LICENSED PROFESSIONAL ENGINEER
DEC 6,2024
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PARKDALE ELEMENTARY SCHOOL ACCESSIBILITY RENOVATIONS
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HAMILTON, ONTARIO

PARTIAL GROUND & SECOND FLOOR HVAC - MODIFICATIONS

GRGURIC ARCHITECTS INCORPORATED
28 KING STREET EAST, UNIT B
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Web: www.2gai.com

SCALE: AS NOTED	PROJECT: 24-293
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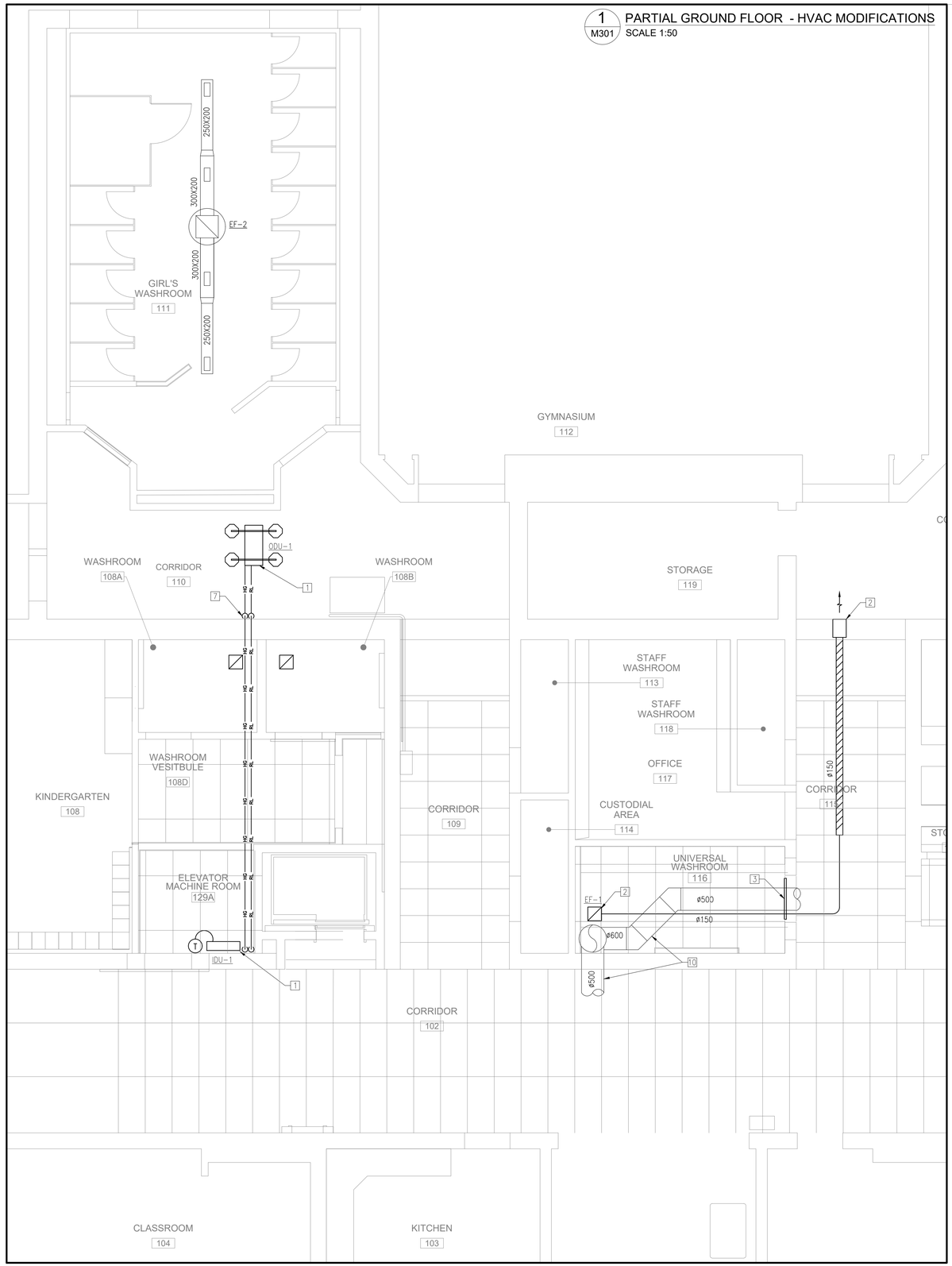
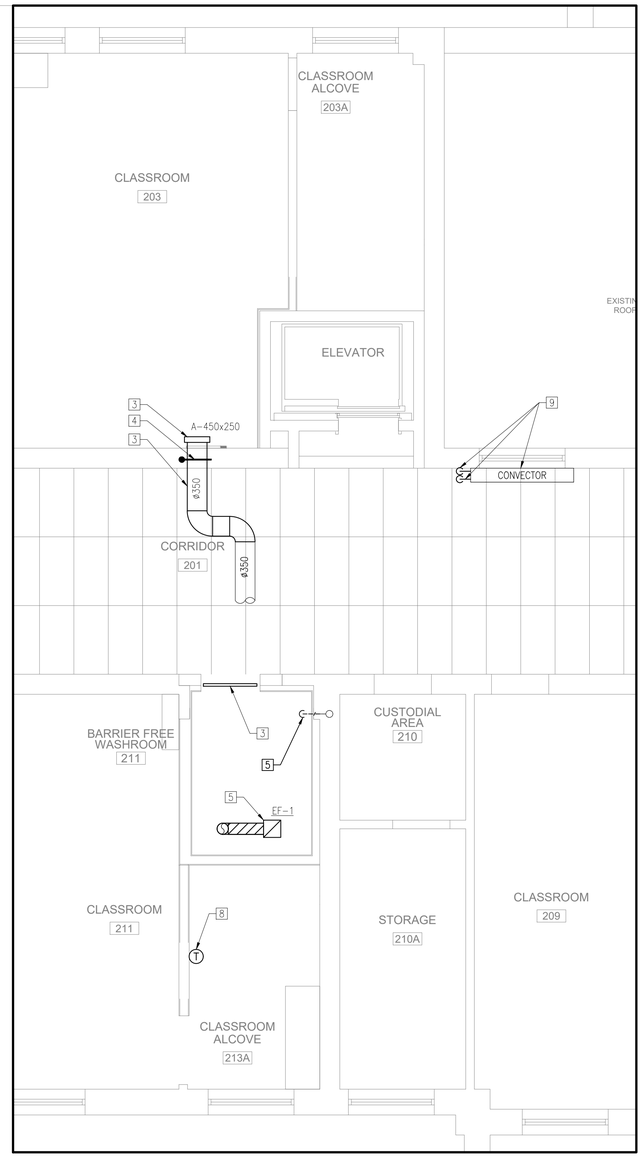


1 M301 PARTIAL GROUND FLOOR - HVAC MODIFICATIONS
SCALE 1:50



3 M301 PARTIAL SECOND FLOOR - HVAC MODIFICATIONS
SCALE 1:50

REFERENCE NOTES

1. PROVIDE NEW SPLIT UNIT INCLUDING INDOOR UNIT IDU-1 ON THE WALL AND OUTDOOR UNIT ODU-2 AT LOW ROOF LEVEL, REFER TO SCHEDULES FOR PERFORMANCE. PROVIDE REFRIGERANT PIPING C/W CLOSED CELL INSULATION 'ARMALFEX AP' OR EQUIVALENT AND WHITE PVC JACKETING IN ALL EXPOSED AREAS, ACCESSORIES IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. COORDINATE FINAL PIPE ROUTING ON SITE. ALL REFRIGERATION PIPING SHALL BE SIZED BY A LICENSED REFRIGERATION TECHNICIAN, PROVIDE SUBMITTAL FOR ENGINEER'S REVIEW PRIOR TO ANY WORK.
2. PROVIDE NEW EXHAUST FAN C/W DUCTWORK DISTRIBUTION AS INDICATED, REFER TO SCHEDULED FOR PERFORMANCE. THERMALLY INSULATE FIRST 4m OF EXHAUST AIR DUCTWORK FROM EXTERIOR WALL, TERMINATE WITH INSULATED WALLBOX WITH INTEGRAL BACKDRAFT DAMPER. FAN SHALL BE SUPPORTED FROM CEILING WITH ISOLATION HANGERS AND FLEXIBLE CONNECTOR AT FAN OUTLET.
3. PROVIDE 20mm DOOR UNDERCUT.
3. PROVIDE NEW SUPPLY AIR DUCT TO MATCH EXISTING SIZE, RECONNECT TO EXISTING DISTRIBUTION IN CORRIDOR. ALLOW FOR ALL REQUIRED REMOVAL AND REINSTATEMENT OF CEILING TILES AND DEVICES. PROVIDE ALL REQUIRED TRANSITION FITTINGS TO SUIT CONNECTION TO EXISTING DUCTWORK. TERMINATE IN CLASSROOM WITH DOUBLE DEFLECTION GRILLE (SIZE TO MATCH PREVIOUS INSTALLATION).
4. PROVIDE FIRE AND SMOKE DAMPER AT WALL PENETRATION, MODIFY EXISTING WALL OPENING TO SUIT, PROVIDE ALL REQUIRED FRAMING, ACCESS DOORS, ETC. IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND DETAILS. COORDINATE INSTALLATION WITH DIVISION 26 FOR FIRE ALARM INTEGRATION.
5. PROVIDE NEW EXHAUST FAN C/W ø150 DUCT THROUGH ROOF AND TERMINATE C/W GOOSENECK AND BIRD SCREEN AT MIN 600mm ABOVE ROOF LEVEL. INSULATE INDOOR DUCTWORK WITH 25mm THERMAL INSULATION WITH VAPOUR BARRIER. PROVIDE ROOF OPENING, REPAIR ROOFING MEMBRANE AND PROVIDE COUNTER FLASHING/WATERPROOFING AROUND DUCT PENETRATION. FAN SHALL BE SUPPORTED FROM ROOF STRUCTURE WITH ISOLATION HANGERS AND FLEXIBLE CONNECTOR AT FAN OUTLET.
6. 600mm CONDENSING UNIT SUPPORT.
7. DROP REFRIGERANT PIPING DOWN TO LOW ROOF LEVEL FLOOR, PROVIDE REQUIRED OPENINGS, CAULKING AND SECURE ALL HORIZONTAL AND VERTICAL PIPING.
8. RELOCATE EXISTING THERMOSTAT, PROVIDE NEW WIRING TO SUIT.
9. PROVIDE NEW ø20 HEATING WATER SUPPLY/RETURN PIPING FROM EXISTING CONVECTOR DOWN TO MAIN HEATING DISTRIBUTION IN 1ST FLOOR CEILING SPACE. PROVIDE CORING, NEW FLOOR OPENINGS, OFFSET PIPING AS REQUIRED.
10. EXISTING DUCTWORK DISTRIBUTION IN CEILING SPACE TO REMAIN.

HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

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LICENCED PROFESSIONAL ENGINEER DEC 6,2024 D. BERSZOWKI 100227 PROVINCE OF ONTARIO

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PARKDALE ELEMENTARY SCHOOL ACCESSIBILITY RENOVATIONS
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PARTIAL GROUND & SECOND FLOOR HVAC - MODIFICATIONS

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SCALE: AS NOTED	PROJECT: 24-293
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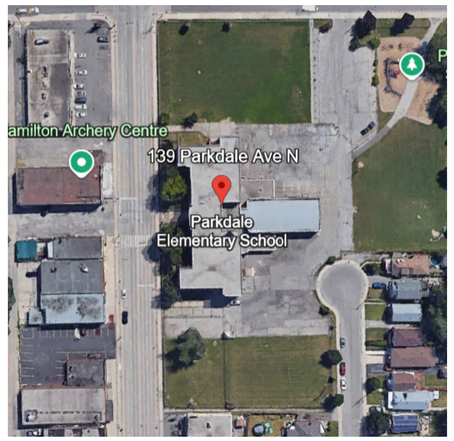
PARKDALE ELEMENTARY SCHOOL

HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

ACCESSIBILITY RENOVATIONS

139 PARKDALE AVE N,
HAMILTON, ONTARIO



PROJECT # 24-027

Summit Engineering Inc.
5 Pitcairn Crescent, Toronto, ON M4A 1P5
Tel. (416) 488-8899

DOCUMENTS	ISSUED	DATE
ELECTRICAL DRAWINGS	ISSUED FOR COORDINATION	2024.11.06
ELECTRICAL DRAWINGS	ISSUED FOR PERMIT	2024.11.15
ELECTRICAL DRAWINGS	ISSUED FOR TENDER	2024.12.06

DRAWING LIST

ELECTRICAL SPECIFICATIONS

ELECTRICAL GENERAL REQUIREMENTS

1 General Conditions

1.1 The clauses in the General Conditions, Labour Conditions, Supplementary Conditions and Instructions to Bidders shall be considered an integral part of these specifications and shall govern the electrical work to be done.

2 Codes and Regulations

2.1 All work shall be done in accordance with the latest editions of the Ontario Building Code, Ontario Electrical Safety Code, C.S.A. Standards, U.L.C., N.F.P.A., O.S.H.A. and local regulations and with the requirements of all applicable inspection Authorities Having Jurisdiction. Additionally, all work shall comply with Owner's requirements and conform to base building standards.

3 Permits and Approvals

3.1 Obtain and pay for all required approvals, permits and notices and pay all inspection fees, taxes and all other applicable costs whatsoever connected with the electrical work. Provide Certificate of Acceptance from the local ESA Inspection Department.

4 Intent

4.1 It is the intent of these drawings and specifications that the Contractor provide complete and fully operational systems. All miscellaneous items and ancillary components required to achieve this shall be provided and all costs shall be included in the tender price.

5 Definitions

5.1 The terms 'provide' or 'supply and install' shall be understood to mean that the Contractor shall supply and install, inclusive of all labour, materials and testing, for the equipment or system which is being referenced.

6 Site Visit

6.1 Study the electrical drawings and the documents of all other trades and visit the site during tender in order to establish the full extent of the work and to determine existing job conditions. Include in the tender price for the total scope of work including but not limited to removing, rerouting of all existing electrical equipment and wiring to successfully execute all work described. Include in bid for discrepancies, if any, shown on these drawings relating to existing conditions.

7 Insurance

7.1 Provide insurance for the duration of the project to protect the building Owner, Tenant and Trades from all claims. Submit at the time of the bid proof of an amount in accordance with the bid form requirements or acceptable to the Owner.

8 Workers Compensation

8.1 The Contractor shall provide the Owner with current certificates of clearance from the Workplace Safety and Insurance Board (WSIB) valid throughout the course of the contract.

9 Contract Documents

9.1 The drawings for the work of this division are diagrammatic in nature intended to convey the scope of work, general arrangement and sizes of equipment and approximate location of wiring devices and other devices.

9.2 Any discrepancies between the Architectural/Interior Design, Mechanical, Security, Audio-Visual, Communications, Food Service or other drawings and the Electrical drawings shall be reported to the Consultant prior to roughing in the electrical services.

9.3 Whenever differences occur between floor plans and details/diagrams or between drawings and specifications the maximum condition shall govern and be included in the tender price.

10 Site Measurements

10.1 All dimensions and measurements shall be determined on the site. Drawings are diagrammatic intended to show general arrangement and some technical details only and shall not be scaled for dimensions or measurements.

11 Demolition

11.1 Complete extent of demolition is not shown. Make allowances for any new or existing services, devices or equipment relocations necessary to complete the work. The Contractor is responsible for all device and fixture counts and shall supply sufficient quantities of new devices or fixtures to complete the work as intended by the drawings. Allow for all costs in the tender price.

12 Interruption to Building Services

12.1 All work shall be performed without power shutdown of any operating systems without the express written approval of the the work. The work shall be so arranged to keep the required number of shutdowns to a minimum. All required power shutdowns shall be performed during premium time, during overnight hours, and shall be pre-arranged at least five business days in advance with the Owner's representative. All allowances for same shall be included in tender price.

13 Temporary Power

13.1 The electrical trade shall be responsible for providing temporary power and lighting, as required by all other trades, to do the work. Coordinate requirements with phasing of work and make all necessary allowances.

14 Removal of Existing Equipment

14.1 Remove any abandoned wiring from the areas defined on the drawings. Wiring in walls and ceilings which are to be demolished shall also be removed as required. Wiring of circuits that are to be removed shall be removed all the way back to the corresponding circuit breaker panel or other overcurrent protective device. Any wiring which may become disconnected because of demolition, which is not intended to be removed, shall be reconnected.

14.2 Wiring, conduit and equipment which is required to maintain services to other parts of the building shall be temporarily supported or relocated as required.

14.3 Unless indicated otherwise, equipment, devices and materials that are stated or shown as "to be removed" shall become the property of the Contractor and shall be removed from the site. Unless indicated otherwise, light fixtures, exit lights, emergency remote heads, fire alarm system devices and wall dimmers that are to be removed shall be cartoned and turned over to Owner at a designated storage space in the building. Any other equipment that is shown to be retained by the Owner shall also be moved to a designated storage space in the building.

15 Relocation of Devices

15.1 Devices and outlets are shown on the drawings in the required locations. Notwithstanding the foregoing, it shall be understood that any electrical outlet, device or lighting fixture may be relocated by the Owner's Representative or the Consultant 15 feet from the location shown without additional charge providing such relocation is made before the affected conduits and boxes are roughed in. Additionally, verify that all existing devices that are to remain fall within the room shown on the new plans. Allow for relocation of existing devices where required.

15.2 Allow for removal and re-installation of existing wall devices to permit new architectural finishes, and for temporary removal of ceiling fixtures and devices where T-bar ceilings to be temporarily removed.

16 Scheduling and Delivery

16.1 All work during construction shall be properly scheduled and coordinated with the other Trades, the Owner and the Tenant. Include in the tender price for all necessary premium time to suit the Owner's or General Contractor's construction schedule.

16.2 A delivery schedule of all major equipment including lighting fixtures to be provided under this contract shall be submitted to the General Contractor at the beginning of the project. Failure to identify delivery problems or unnecessary delay in ordering equipment may result in delay claims against the Contractor.

17 Shop Drawings

17.1 Submit electronically in PDF format shop drawings for power distribution equipment, lighting fixtures, lighting controls, panelboards, disconnect switches, wiring devices, etc., prior to installation for approval.

17.2 Each shop drawing shall be reviewed and stamped as being correct by the General Contractor and the appropriate trade before submission to the Consultant for review. Shop drawings which are not stamped in this manner shall be returned 'not reviewed'.

18 As-built Drawings

18.1 Keep a record set of drawings on site at all times which shall clearly indicate the exact location of all outlets, devices, lighting fixtures, feeder runs, distribution equipment, junction boxes, pull boxes, EOL's, etc. The record drawings shall also include any deviations from the design drawings and all changes issued via change notice or site instruction or other changes made during the course of construction. The information on these drawings shall be incorporated onto the as-built drawings at the completion of the project.

18.2 Submit as-built drawings at the completion of the project in the form of AutoCAD release 2010 or later. Obtain and pay for a cad disk of drawing files. The Contractor may obtain the Consultant's AutoCAD drawing files at a cost of $125.00 per drawing. The as-built drawings shall incorporate all the information from the record drawings recorded during construction. Submit the completed record drawings and the cad files, in AutoCAD release 2010 or later, to the Consultant for review. Following the Consultant's review submit the record drawings, three (3) sets of prints of the as-builts and a USB or CD disk of the as-built drawings in CAD and PDF to the Landlord or Owner as part of the close-out documents.

18.3 The Consultant's stamp and logo shall be removed from the as-built drawings. The drawings shall be clearly marked as AS-BUILT and shall include the Contractor's name.

19 Close-out Documents

19.1 After completion of the project submit the following documents for Consultant's review.
- Electrical Safety Authority Inspection Report.
- Fire Alarm Installation Letter.
- Fire Alarm Verification Report and Certificate.
- Light Fixture Independent Support Letter.
- Emergency lighting conformance letter.
- Arc Flash and Short Circuit Coordination Studies
- Warranty letter.
- Maintenance Manuals including all Reviewed and Stamped shop drawings.

19.2 Following Consultant's review submit Close-out Documents including three (3) sets of the Maintenance Manuals to the Owner.

20 Warranty

20.1 The Contractor shall provide a one-year "parts and labour" warranty on all facilities, equipment and devices, effective on the date of acceptance of the work, even if the devices are installed and connected before this date. The warranty shall cover the complete installation.

20.2 The Contractor shall repair and/or replace at no extra cost any defects in materials or workmanship that occur during the warranty period. Work to be done at a time that is suitable to the Landlord or Tenant.

21 Final Inspection

21.1 At the completion of the work the Contractor shall contact the Owner's representative and Summit Engineering to perform a final inspection.

21.2 In areas where ceiling tiles have been installed it will necessary to remove portions of the ceiling tiles for inspection and then re-install them. Include for all costs in the tender price.

21.3 All equipment must be cleaned and tested before final acceptance by the Consultant.

22 Changes to the Contract

22.1 Where extra work of any kind is required obtain written instructions from the Owner or Architect/Design Consultant before proceeding. The Contractor will receive payment for authorized changes only.

22.2 For each change submit a quotation c/w breakdown of material, labour, overhead and profit. Labour units shall be based on the latest National Electrical Contractors Association (NECA) manual column one (1) for the duration of the project. Material pricing shall be based on the latest National Price Guide system with appropriate trade discounts.

22.3 Hourly labour rates shall be inclusive of all ancillary charges for supervision, electrical inspection, hand tools, as-builts, parking, clean-up, elevator downtime and additional bonding. No other ancillary charges will be permitted.

23 Underground Work

23.1 For all underground work it is the Contractor's responsibility to verify with the Owner and the local Utilities for locations of all existing underground services prior to digging. Include for all costs in tender price.

24 Noise and Vibration

24.1 All electrical equipment shall operate without objectionable noise or vibration and to the Owner's satisfaction.

25 Restrictions

25.1 Communications rooms and closets are designed for communications equipment and security DGP's. Do not locate any type of power distribution equipment or power risers within these rooms.

MATERIALS AND INSTALLATION

26 General Conditions

26.1 Unless otherwise specifically provided, all materials and equipment installed shall be new, unused, and bear approval or certification labels indicating conformity with CSA standards. All new materials and equipment shall match base building standards unless shown otherwise.

26.2 Provide all materials, equipment and labour necessary to perform the complete work as indicated.

26.3 All work shall be performed in a professional and expert manner to the satisfaction of the Architect/Design Consultant. Any work that is deemed to unsatisfactory shall be replaced without extra cost to the Owner.

26.4 Damage to any system occurring during execution of the work shall be rectified at the Contractor's expense.

26.5 The construction site shall be kept clean and any debris shall be removed from the site throughout the construction period and at completion of the work.

27 Routing of Equipment

27.1 All wiring shall be run concealed wherever possible. Where wiring is run exposed, it shall be installed parallel to the building structure and present a neat appearance.

27.2 In general, wiring shall be run concealed in finished areas and exposed in unfinished areas and mechanical and electrical room service spaces.

27.3 New conduits and shall be carefully routed to avoid interference with existing services. Routing of conduits within existing riser rooms shall be reviewed and approved by the building Owner prior to installation. Any existing services that interfere with the new installation shall be relocated under this contract. Become familiar with any such conditions during the contractor walk-through and allow for all costs in the tender price.

27.4 The routing of new conduits shall be approved by the Owner's representative or the Consultant before they are installed. They shall not be attached to mechanical or other equipment.

28 Cutting and Patching

28.1 All cutting, patching and painting required to perform the electrical work shall be included in this contract unless otherwise advised by the General Contractor.

29 Directories

29.1 Clearly amend all existing panelboard directories which may be affected by work done under this contract. Amended directories shall be typewritten. New panelboards shall be equipped with a typed directory of circuits showing room number, type of load and wattage.

30 Location of Luminaires

30.1 All luminaires shall be new and as specified on the drawings and specifications except where noted otherwise for existing luminaires to be re-used. Re-used luminaires shall be thoroughly cleaned and re-lamped prior to putting into use again.

30.2 All luminaires shall be supplied complete with all required accessory items such as yokes, trim rings, frame adjusters and other ancillary components as required for a complete and proper installation.

30.3 For exact location of all lighting fixtures and light switches refer to architectural reflected ceiling plans and details where applicable.

30.4 Ensure that all lighting fixtures within rooms are controlled by switches, where switches are shown. Where two or more switches are shown in one room and the room contains emergency fixtures, the switch closest to the door shall be on the emergency power circuit.

31 Lamps and Fuses

31.1 All luminaires shall be complete with suitable lamps in accordance with the luminaire schedule. Include a shop drawing of proposed lamp along with every luminaire shop drawing submitted.

31.2 Fluorescent, HID and LED lamps shall be guaranteed for a period of one year from the date of acceptance. Low voltage, halogen and incandescent lamps shall be guaranteed for a period of six months from the date of final acceptance.

31.3 At completion the job shall be left completely lamped and fused, including all existing and new fixtures and exit signs within the project boundary. Clean and repair all existing fixtures affected by this work. Provide new lenses in existing fixtures where lenses are missing or damaged.

32 Ballasts

32.1 Ballasts shall be manufactured to the latest applicable CSA standards and shall meet or exceed the requirements of the OEM manufacturers.

32.2 Ballast voltage shall be as noted in the luminaire schedule or as required to suit the circuiting shown on the drawings.

32.3 Submit ballast manufacturer's technical data with each luminaire shop drawing.

33 Exit Signs

33.1 Unless otherwise noted, all exit signs shall be new, pictogram style, LED type with voltage rating to suit the circuiting shown on the drawings, or to match existing exit lighting voltage.

33.2 Exit signs shall be single or double face with directional arrows as noted on the drawings.

33.3 (not used).

33.4 All exit signs shall have no light leakage from joints or fittings, have canopy and/or stem hanger to match the housing and shall meet the requirements of standard CSA C860.

33.5 Ensure that exit sign circuit breakers are locked in the 'ON' position.

33.6 Ensure that new or relocated exit signs are positioned to be clearly visible along the intended path of egress and that no ceiling or wall mounted obstructions interfere with or block the visibility of the exit sign. In the event that the building inspector or the consultant finds the sign is obstructed from view or interferes with other systems the contractor shall relocate the sign at no extra cost.

34 Occupancy Sensors

34.1 Provide a complete and fully operational occupancy sensing lighting control system as shown on the drawings and specified herein.

34.2 Locate all equipment in accordance with the manufacturer's recommendations and as indicated on the drawings.

34.3 All sensors to arrive on site factory preset to the maximum time delay setting.

34.4 Final sensitivity adjustment and time delay setting of all sensors shall be carried out 72 hours prior to substantial completion by the Contractor and as directed by the Consultant.

34.5 Adjust all occupancy sensors individually to operate as intended for the size and shape of the space where installed.

35 Core Drilling and Sealing

35.1 Before core drilling floor slab or structural walls, scan slab or walls and have the locations accepted by the building Owner and Structural Engineer in writing. Any existing building services damaged by core drilling must be repaired immediately at no cost to the Owner. Obtain all necessary approvals prior to scanning and core drilling. Include for all costs in tender price. X-raying and core drilling of floors to be carried out after normal working hours and at a time acceptable to the Owner. Schedule core drilling with Owner at least 10 days in advance of performing the work.

35.2 Where conduits pass through fire rated walls or floors, and/or where core drilling is performed, provide fire stopping material listed with, and bearing label of CSA and ULC, and maintain existing fire rating of building component penetrations.

36 Fastenings and Supports

36.1 Fasten exposed conduit or cables to building structure using steel straps or channels. Use beam clamps to secure conduit to exposed steel work. Suspended support systems: U shape, single channel (hot dip galvanized) to suit load to be carried, surface-mounted or suspended with threaded rod as indicated or required. Support equipment, conduit or cables using clips, spring-loaded bolts, cable clamps designed as accessories to basic channel members. Do not use wire lashing or perforated strap to support or secure raceways or cables.

36.2 Independently support from structure all new and relocated suspended, surface or T-bar mounted luminaires using two (2) or more lengths of Weldless 'Single Jack' bright zinc plated steel chain, Canadian Standard #10 gauge, 13 links per foot. Do not support lighting fixtures or other devices from the ceiling support system. Fixtures with linear lamps shall be supported with minimum two chains per 4' length of fixture. Downlight fixtures shall be supported with minimum one chain.

37 Access Doors

37.1 Provide all access doors where required to service all new and existing equipment. Access panels shall be equal to Lehage and shall be compatible with ceiling/wall type and finish. Access doors shall be recessed type with a drywall infill. Electrical services are to be coordinated to minimize the number of access panel locations required. Coordinate location and sizes with the Consultant. Submit installation drawing(s) to the Architect/Interior Designer for review indicating size and location of all proposed access locations prior to proceeding with the installation.

38 Lamacoids and Identification

38.1 All new equipment shall be identified with lamacoid nameplates. Colour shall be black background with white lettering for power distribution equipment and red background with white lettering for fire alarm DGP's and panels. Wording on all lamacoid plates shall be approved by the Consultant and the building Owner prior to engraving.

38.2 All conductors including neutrals and grounds shall be tagged in all junction boxes, device outlet boxes and panelboards for easy identification for testing and maintenance purposes.

39 Wire and Cable

39.1 Unless shown otherwise, all wires shall be copper with RW-90 insulation, 600V rating for 120/208V system and 1000V rating for 240/416V and 347/600V systems, and minimum #12 gauge or as specified. #12 and #10 shall be solid, #8 and larger shall be stranded. In damp locations, outside the building and underground, they shall be RWU-90 XLINK type. All conductors shall be sized for a maximum 2% voltage drop. Provide copper ground wire sized per Code in all branch and power feeder conduits whether or not same is shown on drawings.

39.2 Wiring between VFDs and motors shall be VFD rated cable, size as noted. Symmetrical design with (3) stranded tinned copper circuit conductors + (3) symmetrical bare copper grounds, 2 spiral copper tape shields (100% coverage), XLPE insulation, black PVC jacket; 1000V UL, equal to Belden type 2952. Install cable in EMT. Final connection to motor in flexible conduit.

39.3 Provide a separate neutral conductor for each circuit. Do not share neutrals.

39.4 Lugs for power feeders shall be solderless set screw type or long barrel double crimp type as required.

40 Conduits

40.1 All conduits indoors shall be steel EMT except as otherwise noted. EMT couplings and connectors shall be steel set-screw type or compression concrete tight, die cast set-screw type is not acceptable. Connectors shall be with nylon insulation.

40.2 Flexible armoured cable (BX) shall be permitted only for down-drops from junction boxes to luminaires and for vertical drops in partitions unless prohibited by Code or building standards. BX cable shall not be used in any exposed areas unless otherwise noted. BX cable runs in ceiling spaces shall not exceed 3m (10') in length. Do not terminate BX cable directly into panelboards.

40.3 Final connections to motors and transformers shall be made with flexible metal conduit (minimum 1m length).

40.4 Provide armoured cable "TECK" where shown. All wiring under access floors shall be in TECK or flexible sealtite conduit.

40.5 Outdoor conduits shall be rigid galvanized steel or rigid PVC.

40.6 Underground and concrete encased conduits shall be rigid PVC.

40.7 All conduits for communications wiring shall be installed with bushings at each end. Provide pull strings in all empty conduits.

40.8 Provide approved expansion joints where required by Code and/or as shown.

40.9 Painting of exposed conduits to match existing wall or ceiling finish shall be included in this contract unless otherwise advised by the General Contractor

41 Pull Boxes

41.1 Only certain pull boxes may be indicated on the drawings. Provide a minimum of one pull box for every 30m (100') of conduit run with each 90 degree bend equating to a 9m (30') run of conduit.

41.2 Do not install more than two (2) 90 degree bends between two pull boxes.

41.3 Provide identification nameplates on all pull boxes.

42 Pull Strings

42.1 Provide nylon pull strings in all empty conduits.

43 Grounding and Bonding

43.1 Provide all grounding as per the latest edition of the Ontario Electrical Safety Code and local regulations. Megger all power circuit feeders and isolated ground feeders. If resistance to ground on any feeder is below that required by CSA or other governing authorities, these feeders shall be considered defective and shall be replaced.

43.2 Perform ground continuity and resistance tests on the grounding system using method appropriate to site conditions and to approval of Engineer and local Authorities Having Jurisdiction over the installation. Perform all required tests before energizing the electrical system.

43.3 Provide separate green insulated ground conductor in every feeder and branch wiring power conduit.

43.4 Provide bonding conductor for non-current-carrying conductive parts of electrical equipment, metal raceway, armoured cable per O.E.S.C. and table 16.

43.5 Provide equipotential bonding for non-electrical equipment per O.E.S.C.

44 Mechanical Wiring

44.1 Coordinate all equipment supplied by other trades to ensure voltage and amperage compatibility with design documents prior to equipment being ordered and prior to rough-in of circuits to same.

44.2 Unless shown otherwise, Division 15 Contractor shall provide all starters and control wiring for HVAC equipment and all other equipment and systems provided under Division 15. Division 16 Contractor shall receive and install all starters and shall provide line side and load side line voltage wiring and required disconnect switches. Confirm all requirements and equipment locations with Division 15 Contractor prior to rough-in.

44.3 Control wiring including conduit for all mechanical equipment shall be supplied and installed by Division 15.

44.4 Fan switches shall be supplied by Division 15 for installation and wiring by Division 16.

45 Wiring Devices and Outlet Boxes

45.1 All wiring devices and coverplates shall be specification grade.

45.2 Duplex receptacles shall be decora style, specification grade, 15A, 120V unless otherwise noted. Refer to Architect/Interior Designer's power and communications plans for exact location and mounting height of receptacles and all other wiring devices and outlet boxes. In millwork areas refer to the Architect/Interior Designer's millwork details for this information. Where Architect/Interior Designer's power and communications plans are not available have the Architect/Interior Designer or Owner mark the locations on site prior to rough-in. Verify colour with Architect/Design Consultant prior to installation.

45.3 Local switches shall be decora style, specification grade, 20A with voltage rating as required to suit the voltage of the load being controlled. Verify exact location, mounting height and colour with the Architect/Design Consultant prior to installation.

45.4 Flush mounted devices shall have stainless steel coverplates unless otherwise noted.

45.5 Junction boxes on walls with acoustic panels shall be extended flush with finish of the acoustic panels.

45.6 Outlets shall not be installed back-to-back in partitions. Stagger to prevent sound transfer.

46 Wall Dimmers

46.1 Dimmers shall be fluorescent, LED or low voltage type as required to suit the load being controlled.

46.2 Individual dimmers shall be sized for the total load being controlled plus 25% spare capacity.

46.3 All dimmers and coverplates shall be specification grade.

47 Systems Furniture

47.1 Coordinate exact requirements for power and communication feeds to workstations with workstation supplier prior to rough-in. Provide all final power and voice/dataconnections and disconnections to workstations as required to suit the new layout. Allow for all costs in the tender price.

48 Fire Alarm System

48.1 All new devices shall match the existing system in manufacturer and types. Verify with the existing system manufacturer during the tender period all requirements, wiring and specifications for new devices shown on the drawings. Include for any new circuits, modules, amplifiers, programming and set-up that may be required in the existing fire alarm control panels. Obtain a verification certificate from the fire alarm system manufacturer or maintenance agent for all modifications to the fire alarm system and/or devices.

48.2 Unless otherwise shown, reconnect existing fire alarm system devices and retain in working order throughout construction.

48.3 Provide for all 120V power connections to suit the requirements of the fire alarm system.

48.4 Contractor and/or Owner to verify with the City prior to the fire alarm verification and coordinate if City Inspector wants to be present at the time of verification.

48.5 All fire alarm work shall conform to Standards CAN/ULC-S524, CAN/ULC-S536 and O.B.C. Fire alarm verification shall conform to Standards CAN/ULC-S537 and CAN/ULC-S1001 (Integrated Systems Testing of Fire Protection and Life Safety Systems).

49 Security System

49.1 Provide new or modify existing conduits, device back boxes, pull strings and conductors required for the modifications to the security system as shown on the drawings or required by the security system contractor. The Electrical Contractor shall coordinate all requirements with the Owner's Security Contractor during the tender period and shall include for all costs.

49.2 Provide for all 120V power connections to suit the requirements of the security system.

50 Circuiting

50.1 Circuiting shown is for grouping purposes only. Verify exact circuits available on site and provide new circuits and breakers as required. Indicate exact circuits used on the as-built drawings. Balance loads within 10% across all phases and submit test report for review by the Consultant.

50.2 Contractor shall re-use existing spare circuits within the space that may be found during demolition prior to running new circuits from panels.

50.3 Existing emergency and normal circuits for general lighting may not be as shown. Ensure final circuiting of all lighting, including normal circuits, emergency power circuits and night light fixtures to be as shown on the drawings.

50.4 The work shall be complete and shall include all junction and pull boxes, sockets, connections, raceways, fittings, supports, etc., and all the necessary and appropriate hardware, whether or not it is shown on the drawings for complete and fully operational systems. Identify each junction/pull box according to the panel and circuit number of the wires it contains.

51 Power Distribution Equipment – General

51.1 The products shall be of same manufacturer as base building unless approved otherwise by the Owner. Where approved otherwise products shall be as manufactured by Cutler-Hammer, Schneider or Siemens.

51.2 All transformers, distribution panels, and branch circuit panelboards shall be complete with copper bus (or windings), and shall be of same type and manufacture as existing in base building unless otherwise noted.

51.3 Provide sprinkler proof enclosures for all power distribution equipment in sprinklered buildings.

51.4 Ensure that all neutrals of all transformers are grounded to the building ground system in accordance with O.E.S.C. and table 16. Verify location of appropriate building grounding point on site during tender period.

51.5 All fuses shall be HRC type "J" with time delay unless shown otherwise.

51.6 Provide 4" high concrete housekeeping pad under all power distribution equipment that is to be floor mounted, whether or not same is shown on the drawings.

52. Not Used

53 Plywood Backboards

53.1 Plywood backboards shall be of the highest quality fire retardant fir, 19mm thick, primed and painted with fire retardant paint.

53.2 All electrical equipment shall be mounted on plywood backboards.

53.3 Provide plywood backboards in communications rooms, sized as noted on the drawings.

54. Cable Tray

54.1 The cable tray system shown on the drawings shall be CER 'BT' series Cable Tray System, or Wiremold Cablofil approved equal, comprised of 0.187" diam. zinc plated steel wire that has been welded into a 2" x 4" steel grid that can be custom cut to size on site.

54.2 Width shall be as noted on the drawings. Depth of tray system shall be 4". Refer to floor plan for routing.

54.3 Cable Tray shall be comprised of 10' sections, custom cut sections, 'L' connections and 'T' connections as required to suit layout shown on the floor plan. Inner bends of all turns shall be rounded to suit ease of cable pulling.

54.4 Finish shall be standard black finish.

54.5 All custom cuts shall be made in accordance with manufacturer's instructions.

54.6 The complete cable tray system shall be installed at the same elevation and be horizontally level. Confirm exact mounting height on site with Architect prior to commencing installation. Where changes in elevation are required due to obstructions on site, these shall be made in accordance with the manufacturer's instructions while maintaining the continuity of the cable tray system.

54.7 Provide all mounting hardware as required to suit installation.

54.8 Provide #2 AWG bare copper ground wire throughout cable tray system and connect to each section of tray using split bolt connector. Connect to building grounding system.

55 Testing

55.1 Provide all testing and start-up for each system to suit the manufacturer's requirements and to satisfactorily demonstrate to the Owner and Consultant that the system and/or equipment are operating in accordance with its intended purpose.

55.2 Provide all required testing to suit the local Authorities Having Jurisdiction.

55.3 All costs involved with all testing shall be fully borne by this Contractor. All testing and commissioning where same will cause electrical service interruptions to the building shall be performed during overnight hours.

55.4 Upon completion of installation turn off all non-emergency lighting in presence of the Consultant and demonstrate all luminaires that are intended to be on emergency power circuits are correctly connected to these circuits. Take emergency lighting readings with only the emergency lighting in operation and submit to the Consultant for review. Contractor and/or Owner to verify with the City prior to the emergency lighting testing and coordinate if City Inspector wants to be present at the time of testing.

56 Circuit Breaker:

Bolt-on moulded case circuit breaker, quick make, quick break type, for manual and automatic operation. Single handle for multi pole applications. Magnetic instantaneous trip elements to operate only when value of current reaches setting. Trip setting on breaker with adjustable trips to range from 3 to 8 times current rating. Interrupting capacity to match existing or as noted. Moulded case circuit breaker to operate by means of thermal and magnetic tripping devices to provide inverse time current tripping and instantaneous tripping for short circuit protection. For breaker over 150A, shall be complete with interchangeable trip. For breaker more than 200A shall be solid state type with LSI adjustable overload long time delay, short circuit short time delay and short circuit instantaneous trip.

58 Integrated Systems Testing (IST)

58.1 Provide Integrated Systems Testing as indicated in CAN/ULC-S1001 "Integrated Systems Testing of Fire Protection And Life Safety Systems.

58.2 Contractor shall engage with a 3rd party contractor to arrange for this work. The 3rd party contractor should either be ULC certified IST provider or a licensed Engineer with Professional Engineers Ontario with IST experience: Recommendation below,

Brosz Technical Services Inc.
1300 Rodick Road, Unit C
Markham ON L3R 8C3
905-472-6660
bid@brosz.net

58.3 In general, systems to be tested for proper integration with the fire alarm system are noted in CAN/ULC-S1001 and include but are not limited to elevators, cooking equipment fire suppression systems, hold-open devices, electromagnetic locks, smoke control systems, emergency generators, audio/visual and/or lighting controls, notification systems, sprinkler systems, standpipe systems, fire pumps, water supplies, water supply control valves, freeze protection systems, fixed fire suppression systems. For this project the integrated systems to be tested are: [consultant engineer to specify]

58.4 The test plan and proposed reports shall be submitted to the Consultant for approval prior to scheduling the IST.

58.5 Provide completed IST reports upon completion of fire alarm verification and submission of verification reports and other documentation that is required by the consultant engineer [and governmental Authority Having Jurisdiction (AHJ)] for the integrated systems testing of the project.

HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

NO	REVISIONS	DATE
3	TENDER	24/12/06
2	PERMIT	24/11/15
1	50% REVIEW	24/11/05

DYNAMIS ENGINEERING INC
222 ISLINGTON AVENUE, SUITE 260
TORONTO, ON M8V 3W7
www.dynamiseng.com

LICENSED PROFESSIONAL ENGINEER
P.A. COUILLARD
24/12/06
PROVINCE OF ONTARIO
24 027

Summit Engineering Inc.
5 Pitcairn Crescent, Toronto, ON M4A 1P5
Tel. (416) 488-8899

PARKDALE ELEMENTARY SCHOOL ACCESSIBILITY RENOVATIONS
139 PARKDALE AVE N, HAMILTON, ONTARIO

ELECTRICAL SPECIFICATIONS

GRGURIC ARCHITECTS INCORPORATED
28 KING STREET EAST, UNIT B
STONEY CREEK, ONTARIO, L8G 1J8
Tel. 905-664-8735 Fax. 905-664-8737
Web: www.2gai.com

SCALE: AS NOTED	PROJECT: 24-027
DATE: NOV-2024	
DRAWN DK	DRAWING E1.1
CHECKED PC	
PRINT DATE	

DRAWING GENERAL NOTES

1. REFER TO ARCHITECTURAL/INTERIOR DESIGN DRAWINGS FOR ALL FIRE RATED AND SMOKE RATED WALLS. SEAL ALL CONDUIT PENETRATIONS THROUGH SUCH WALLS IN ACCORDANCE WITH SPECIFICATIONS.
2. COORDINATE WORK WITH THE GENERAL CONTRACTOR TO LEAST INTERFERE WITH THE OWNER'S USE OF THE FACILITY. GENERAL CONTRACTOR MAY REQUIRE WORK INTERRUPTIONS DURING THE DAY AND MAY REQUIRE CERTAIN WORK TO BE PERFORMED ON PREMIUM TIME AT NIGHT OR ON WEEKENDS.
3. COMPLETE EXTENT OF DEMOLITION IS NOT SHOWN. TENDERERS SHALL REVIEW THE SITE TOGETHER WITH THE DOCUMENTS OF ALL OTHER TRADES TO DETERMINE THE FULL EXTENT OF DEMOLITION. MAKE ALL ALLOWANCES FOR ANY NEW OR EXISTING SERVICES, DEVICES, OR EQUIPMENT RELOCATIONS NECESSARY TO COMPLETE THE WORK AS INTENDED BY THE DRAWINGS. ALLOW FOR ALL COSTS.
4. VISIT AND EXAMINE CAREFULLY THE BUILDING SO AS TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND DIFFICULTIES THAT WILL AFFECT THE EXECUTION OF THE WORK, BEFORE SUBMITTING PROPOSALS. SUBMISSION OF A PROPOSAL WILL BE EVIDENCE THAT SUCH EXAMINATION HAS BEEN MADE AND LATER CLAIMS FOR LABOUR, EQUIPMENT OR MATERIALS BECAUSE OF DIFFICULTIES ENCOUNTERED, WILL NOT BE RECOGNIZED.
5. WHERE RELOCATION OF EXISTING LUMINAIRES AND DEVICES IS INVOLVED, ADDITIONAL LUMINAIRES AND DEVICES MAY BE REQUIRED. CONTRACTOR TO CONFIRM QUANTITIES REQUIRED. ADDITIONAL LUMINAIRES AND DEVICES REQUIRED SHALL BE SUPPLIED AND INSTALLED BY DIVISION 16 CONTRACTOR. LUMINAIRES AND DEVICES TO MATCH EXISTING BASE BUILDING STANDARD AND/OR AS SPECIFIED.
6. ALLOW FOR REMOVAL AND RE-INSTALLATION OF EXISTING DEVICES TO PERMIT NEW ARCHITECTURAL/INTERIOR DESIGN FINISHES. REMOVE AND RE-INSTALL ALL CEILING MOUNTED LUMINAIRES AND DEVICES WHERE T-BAR CEILING TILES ARE TO BE TEMPORARILY REMOVED OR REPLACED. REVIEW ARCHITECTURAL/INTERIOR DESIGN PLANS DURING TENDER PERIOD TO DETERMINE FULL EXTENT OF THE WORK.
7. CONTRACTOR SHALL NOT RE-USE RECEPTACLES AND SWITCHES FROM DEMOLITION. ALL RECEPTACLES AND SWITCHES INSTALLED SHALL BE NEW UNLESS OTHERWISE NOTED.
8. NOT ALL REQUIRED FEEDERS AND BRANCH CIRCUIT CONDUITS ARE SHOWN ON THE FLOOR PLANS. REFER TO SINGLE LINE DIAGRAM AND PANEL SCHEDULES FOR ADDITIONAL INFORMATION.
9. FOR X-RAY WORK GUIDELINES AND REQUIREMENTS REFER TO THE ELECTRICAL GENERAL REQUIREMENTS THAT FORM PART OF THE ELECTRICAL SPECIFICATIONS.
10. CIRCUITING IS SHOWN FOR GROUPING PURPOSES ONLY. EXISTING CIRCUITS THAT ARE TO REMAIN ARE NOT SHOWN ON PANEL SCHEDULES OR ON FLOOR PLANS. CONTRACTOR SHALL MAINTAIN/REWORK EXISTING CIRCUITS AS REQUIRED AND INSTALL NEW CIRCUITS IN REMAINING BREAKER POSITIONS IN PANELS. SHOW FINAL CIRCUIT NUMBERS USED ON FLOOR PLANS AND PROVIDE FINAL PANEL SCHEDULES ON THE AS-BUILT DRAWINGS AND PANEL DIRECTORIES IN THE PANELS. TYPICAL FOR ALL PANELS.
11. ALL REDUNDANT OR UNUSED BRANCH WIRING THAT IS REMOVED DURING DEMOLITION SHALL BE CUT BACK TO SOURCE PANEL AND DISCONNECTED FROM PANEL. THESE CIRCUITS SHALL BE IDENTIFIED AS SPARE AND BE MADE AVAILABLE FOR RE-USE.
12. REFER TO MECHANICAL DRAWINGS FOR EXACT SIZE, LOCATION, AND ELECTRICAL REQUIREMENTS FOR ALL MOTORS AND MECHANICAL EQUIPMENT. COORDINATE WITH MECHANICAL CONTRACTOR AND PROVIDE ELECTRICAL CONNECTIONS AS REQUIRED FOR A COMPLETE AND FULLY OPERABLE SYSTEM.
13. CONTRACTOR SHALL COORDINATE WITH ALL "VENDOR" TRADES FURNISHING EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS. CHECK CAREFULLY ALL CONSTRUCTION DRAWINGS AND SPECIFICATIONS THAT ARE PART OF THIS PROJECT TO ENSURE COMPLIANCE WITH VENDOR REQUIREMENTS. NO EXTRA CHARGES SHALL BE ACCEPTED BY OWNER, AFTER BIDDING FOR SUCH EQUIPMENT AND LABOR.
14. COORDINATE WORK WITH FIELD CONDITIONS AND OTHER TRADES AND INSTALL CONDUIT AND BOXES TO CLEAR EMBEDDED DUCTS, OPENINGS AND OTHER STRUCTURAL FEATURES.
15. NOT ALL OF THE REQUIRED BOXES, CONDUITS, WIRING AND SLEEVING ARE SHOWN ON THE DRAWINGS. ONLY MAJOR ITEMS ARE SHOWN. COORDINATE AND PROVIDE ALL WORK AS REQUIRED FOR PROPER DEMOLITION AND INSTALLATION.
16. NO WIRING SHALL BE DONE PRIOR TO THE CONTRACTOR'S REVIEW OF THE PROJECT EQUIPMENT SHOP DRAWINGS. COORDINATE FIELD CONDITIONS WITH THE DESIGN DOCUMENTS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ARCHITECT/INTERIOR DESIGNER/ENGINEER'S ATTENTION FOR FINAL RESOLUTION. WIRING THAT HAVE TO BE REPLACED DUE TO LACK OF PROPER SHOP DRAWING COORDINATION SHALL BE DONE AT CONTRACTOR'S EXPENSE.
17. ALL OUTLETS BOXES SHALL BE PROVIDED WITH PROPER COVER PLATES.
18. CIRCUITS ARE SIZED ASSUMING NO MORE THAN THREE CURRENT CARRYING CONDUCTORS IN A SINGLE CONDUIT. FOR CONDUITS CONTAINING MORE THAN THREE, PROVIDE APPROPRIATE DE-RATING OF CONDUCTORS PER APPLICABLE CODES.
19. CONTRACTOR SHALL ENSURE THAT ALL EXISTING DEVICES THAT ARE TO REMAIN IN THE ROOM SHOWN ON THE NEW PLANS AND DO NOT INTERFERE WITH NEW PARTITION WALLS. ALLOW FOR RELOCATION OF DEVICES WHERE REQUIRED.
20. CLEARLY MARK ALL EXPOSED CONDUITS, PULL BOXES, JUNCTION BOXES, ETC. TO INDICATE THE NATURE OF THE SERVICES AS PER BASE BUILDING STANDARDS.
21. ALL WORK ASSOCIATED WITH THE CORE DRILLING, POWER SHUTDOWNS, MODIFICATIONS TO BASE BUILDING LIFE SAFETY, EMERGENCY LIGHTING, LOW VOLTAGE LIGHTING CONTROL AND SECURITY SYSTEM SHALL BE PERFORMED AFTER REGULAR BUSINESS HOURS AND AT THE TIMES APPROVED BY THE LANDLORD.
22. ALL LIGHTING FIXTURES (EXISTING, RELOCATED, AND NEW) TO BE PROPERLY SUPPORTED FROM THE BUILDING STRUCTURE. PROVIDE CONFORMANCE LETTER AS PART OF CLOSE-OUT DOCUMENT.
23. ENSURE THAT ALL ELECTRICAL, LIFE SAFETY SERVICES AND SERVICES FOR EXISTING LUMINAIRES AND DEVICES THAT ARE REQUIRED TO REMAIN IN SERVICE SHALL DO SO.
24. BE RESPONSIBLE AND PAY FOR ANY DAMAGE TO THE BUILDING INCURRED BY WORK OF THIS CONTRACTOR OR REPAIR TO THE SATISFACTION OF THE OWNER AND CONSULTANT.
25. CARRY OUT THE WORK WITH A MINIMUM OF NOISE, DUST AND DISTURBANCE.
26. ENSURE TO RUN ALL CONDUITS IN OPEN CEILING AREAS TO BE AS CONCEALED AS POSSIBLE, RUN CLOSE TO THE DUCTS WHERE PRACTICAL AND TO PRESENT A NEAT APPEARANCE. WHERE THE CONDUIT RUNS ON EXISTING BLOCK/CONCRETE WALLS/COLUMNS, SURFACE MOUNT RACEWAY (LEGRAND WIREMOLD 500 OR 700) IS ALLOWED.

SPECIAL NOTES – FIRE ALARM SYSTEM

1. EXISTING FIRE ALARM SYSTEM IS MANUFACTURED BY EDWARDS(EST)–'QUICKSTART' SERIES. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL FIRE ALARM SYSTEM WORK INDICATED ON THE DRAWINGS.
2. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL, RELOCATION, SUPPLY AND INSTALLATION OF ALL FIRE ALARM SYSTEM DEVICES AND ANCILLARY EQUIPMENT. ALL NEW FIRE ALARM SYSTEM DEVICES AND EQUIPMENT SHALL MATCH EXISTING.
3. ALL FIRE ALARM FINAL TIE-IN, TESTING AND VERIFICATIONS SHALL BE PERFORMED BY THE BASE BUILDING FIRE ALARM MAINTENANCE CONTRACTOR. ELECTRICAL CONTRACTOR SHALL RETAIN THE SERVICES OF THE BASE BUILDING FIRE ALARM MAINTENANCE CONTRACTOR TO PERFORM THIS WORK AND SHALL INCLUDE AL THE COSTS IN THE TENDER.
4. ALL FIRE ALARM SYSTEM RE-PROGRAMMING SHALL BE PERFORMED BY THE BASE BUILDING FIRE ALARM MANUFACTURER. THE ELECTRICAL CONTRACTOR SHALL RETAIN THE SERVICES OF THE BASE BUILDING FIRE ALARM MANUFACTURER TO PERFORM THIS WORK AND SHALL INCLUDE ALL THE COSTS IN THE TENDER PRICE.
5. THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH FIRE ALARM MAINTENANCE CONTRACTOR AND MANUFACTURER DURING THE TENDER PERIOD TO CONFIRM ALL WIRING REQUIREMENTS NECESSARY TO PERFORM THE FIRE ALARM WORK. NO EXTRA COSTS WILL BE PERMITTED AS A RESULT OF FAILURE BY THE CONTRACTOR TO OBTAIN THE NECESSARY INFORMATION. ELECTRICAL CONTRACTOR SHALL PURCHASE ALL REQUIRED FIRE ALARM EQUIPMENT, DEVICES, AMPLIFIERS AND ANCILLARY COMPONENTS FROM BASE BUILDING FIRE ALARM MANUFACTURER.
6. ELECTRICAL CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE LANDLORD PRIOR TO ANY WORK ON THE FIRE ALARM SYSTEM.
7. REFER ALSO TO ELECTRICAL SPECIFICATIONS SECTION 48.
8. ALL LIFE SAFETY SYSTEMS INTEGRATED WITH THE FIRE ALARM SYSTEM MUST BE VERIFIED AND DOCUMENTED IN ACCORDANCE WITH O.B.C. 3.2.10.1 AND THE LATEST EDITION OF CAN/ULC-S1001-11, "STANDARD FOR INTEGRATED SYSTEMS TESTING OF FIRE PROTECTION AND LIFE SAFETY SYSTEMS" THE FOLLOWING IS TO BE PREPARED AND SUBMITTED BY THE ELECTRICAL CONTRACTOR AND SIGNED BY A P.ENG. TO THE CONSULTANT FOR REVIEW AT THE START OF THE PROJECT:

A. INTEGRATED TESTING PLAN – A WRITTEN SPECIFIC DOCUMENT PREPARED BY THE INTEGRATED TESTING COORDINATOR, OUTLINING THE REQUIRED TESTS AND NECESSARY FUNCTIONAL RESULTS TO CONDUCT INTEGRATED FIRE PROTECTION AND LIFE SAFETY SYSTEMS TESTING.

B. INTEGRATED TESTING REPORT – A WRITTEN PROJECT SPECIFIC DOCUMENT, PREPARED BY THE INTEGRATED TESTING COORDINATOR, DOCUMENTING THE IMPLEMENTATION OF THE INTEGRATED TESTING PLAN.

THE FOLLOWING SYSTEMS (WHERE APPLICABLE) ARE TO BE INTEGRATED INTO THE TESTING PLAN AND TESTING REPORT:

- .1 FIRE ALARM SYSTEM (INCLUDING SEQUENCE OF OPERATION)
- .2 MASS NOTIFICATION SYSTEM
- .3 ELEVATORS
- .4 EMERGENCY GENERATORS
- .5 AUDIO/VISUAL SYSTEM
- .6 LIGHTING CONTROL SYSTEM
- .7 NOTIFICATION SYSTEMS
- .8 FIRE PROTECTION SYSTEM INCLUDING SPRINKLER SYSTEM, STANDPIPE, ETC.
- .9 FREEZE PROTECTION SYSTEMS
- .10 FIRE SUPPRESSION SYSTEMS
- .11 SMOKE CONTROL PRESSURIZATION SYSTEMS
- .12 SMOKE CONTROL SMOKE EXHAUST SYSTEMS
- .13 HAZARDOUS PROTECTION MONITORING
- .14 SMOKE ALARMS
- .15 NURSE CALL SYSTEM
- .16 OTHER SYSTEM (WHERE APPLICABLE)

9. ELECTRICAL CONTRACTOR TO OBTAIN THE CONTACT PERSON OF THE BASE BUILDING FIRE ALARM MAINTENANCE CONTRACTOR FROM THE LANDLORD.
   Hamilton Fire Control:
   Telephone Number: 905-527-7042
   matt@hamiltonfirecontrol.ca
   Att'n: Matt Scarabacha

DISCRETIONARY PROVISIONS

DISCRETIONARY PROVISION;

THE ITEMS BELOW ARE TO BE INCLUDED IN THE TENDER PRICE AND MAY BE ADDED BY THE OWNERS DISCRETION DURING THE COURSE OF CONSTRUCTION. CONTRACTOR TO CARRY ALL ASSOCIATED COSTS THAT IMPACT THE REQUIRED INSTALLATION.

IDENTIFY PRICES IN BID BREAKDOWN IN THE EVENT THE OWNER OPTS TO NOT INITIATE THE INSTALLATION.

1. INCLUDE IN TENDER PRICE FOR THE SUPPLY AND INSTALLATION OF TWO (2) ADDITIONAL RUNNING MAN SIGNS C/W WIRING TO NEAREST AVAILABLE EXIT CIRCUIT (AC/DC) IN THE EVENT THAT THE BUILDING INSPECTOR REQUESTS ADDITIONAL SIGNS DURING FINAL INSPECTION BY THE CITY. ALLOW FOR MAXIMUM WIRING DISTANCE TO NEAREST SIGN.
2. INCLUDE IN TENDER PRICE FOR THE SUPPLY AND INSTALLATION OF ONE (1) EMERGENCY BATTERY UNIT FOR UPGRADE TO EXISTING BATTERY UNITS SERVING EMERGENCY LIGHTING HEADS C/W WIRING TO NEAREST AVAILABLE CIRCUIT IN THE EVENT THE CAPACITY IS EXCEEDED WITH NEW HEADS ADDED AS PART OF SCOPE. WIRE TO LOCAL EXISTING CIRCUIT SERVING EMERGENCY BATTERY

LIGHTING NOTES

1. WITHIN 10 WORKING DAYS OF CONTRACT AWARD, THE CONTRACTOR SHALL PROVIDE SUBMITTALS FOR ALL SPECIFIED LUMINAIRES FOR THE REVIEW BY THE DESIGN TEAM. THE SUBMITTALS SHALL INCLUDE LUMINAIRE CATALOG CUTS INDICATING THE FOLLOWING:
   - MANUFACTURER'S NAME AND COMPLETE CATALOG NUMBER
   - FIXTURE TYPE DESIGNATION
   - COMPLETE DIMENSIONS AND FINISHES
   - FIXTURE PHOTOMETRIC TEST DATA FROM AN INDEPENDENT TESTING LABORATORY.
   - ALL FIXTURE OPTIONS AND ACCESSORIES WHEN SPECIFIED
   - LAMP TYPE, QUANTITY PER LUMINAIRE, WATTAGE, LUMEN OUTPUT, RATED LIFE, COLOUR TEMPERATURE, COLOUR RENDERING INDEX AND BEAM SPREAD.
   - LED CHIPS DRIVER TYPE, VOLTAGE AND MANUFACTURER AS APPLICABLE
2. CONTRACTOR SHALL CONFIRM THAT LUMINAIRE VOLTAGES ARE COMPATIBLE WITH THEIR APPLICATION AND SYSTEM CIRCUITING PRIOR TO ORDERING FIXTURES.
3. LUMINAIRES, LAMPS AND RELATED DEVICES PROVIDED UNDER THIS CONTRACT SHALL CARRY THE APPROVAL LABEL OF CSA FOR THE SPECIFIC APPLICATION IN WHICH THEY ARE USED.
4. CONTRACTOR SHALL PROVIDE THE CORRECT SIZE OF THE CONDUCTORS TO KEEP VOLTAGE DROP IN THE SECONDARY WIRING BELOW 3% OF THE RATED VOLTAGE.
5. SUBMISSIONS SHALL COMPLY WITH ALL PERFORMANCE SPECIFICATIONS.
6. EQUALS OF THE SPECIFIED LUMINAIRES WILL BE CONSIDERED. ALTERNATES WILL NOT BE CONSIDERED.

ALL LUMINAIRES SHALL BEAR EITHER CSA OR cETL OR cUL MARK TO MEET CODE IN CANADA. LUMINAIRES WITH ETL OR UL MARK WILL NOT BE CONSIDERED TO SATISFY STANDARDS IN CANADA.

CONTRACTOR SHALL CONFIRM WITH LUMINAIRE SUPPLIER OR SHOP DRAWINGS TO SELECT PROPER DIMMER TO ENSURE THE DIMMING PROTOCOL (ELV OR 0-10V) BETWEEN DIMMER AND THE LUMINAIRE TO BE THE SAME PRIOR TO SUBMITTING SHOP DRAWINGS OF DIMMERS.

CONTRACTOR SHALL HAVE THE LIGHTING CONTROLS MANUFACTURER/SUPPLIER PROVIDE A FULL SET OF FLOOR PLANS DOCUMENTING ALL CONTROLS HARDWARE, COMPONENTS, WIRING, ETC FOR A COMPLETE AND OPERATIONAL SYSTEM AND INCLUDE ALL COSTS.

CONTRACTOR TO ADJUST THE SENSITIVITY AND AIMING DIRECTION OF OCCUPANCY SENSORS ON SITE TO ENSURE THE SENSORS ENGAGE THE LIGHTING FIXTURES AT APPROPRIATE DISTANCE AND ANGLE.

LUTRON–LIGHTING CONTROLS

#$O	#MAESTRO SERIES OCC/VAC
#$OD	#MAESTRO SERIES OCC/VAC/DIMMER (TO MATCH FIXTURE DIMMING PROTOCOL)
OCC	#LOS-CDT-WH (500, 1000, 2000 SF)
#$D	#DIVA DIMMER 0-10V

WHERE NOTED;
(#) INDICATES QTY OF DEVICES INSTALLED AT LOCATION
d(#) INDICATES DIMMER 'LEG' CONTROLLING FIXTURES.

CEILING SENSORS SHALL BE AISLEWAY STYLE FOR CORRIDOR APPLICATIONS

CONTRACTOR TO SUBMIT PLANS TO VENDOR TO COORDINATE LAYOUTS, COVERAGE, DEVICE SPECIFICATIONS, LUMINAIRE COMPATIBILITY, INTERCONNECTION DETAILS AND WIRING ETC... TO ENSURE A FULLY COORDINATED INSTALLATION.

VENDOR TO PROVIDE WIRING DIAGRAM SHOP DRAWINGS SUBMITTALS

CONTRACTOR TO FULLY COORDINATE PROGRAMMING OF ALL DEVICES AND SETUP TO ENSURE INTENDED/DESIRED OPERATION IS PROVIDED. INCLUDE DEMONSTRATION AND TRAINING TO OWNERS REPRESENTATIVE.

PROVIDE CORRESPONDING DIMMING PROTOCOL FOR LINE VOLTAGE AND 0-10V LUMINAIRES, REFER TO FIXTURE SCHEDULE.

ALL DEVICES SHALL BE MATCHING STYLE/FACE AND COVERPLATE.

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3	TENDER	24/12/06
2	PERMIT	24/11/15
1	50% REVIEW	24/11/05

DO NOT SCALE DRAWINGS. CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND CHECK ALL SITE CONDITIONS OF THE PROJECT BEFORE PROCEEDING WITH THE WORK.

COORDINATE WORK WITH ALL OTHER TRADES AND VERIFY FOR INTERFERENCES WITH WORK OF OTHER TRADES PRIOR TO ANY ROUGH-IN.

LATEST APPROVED DRAWINGS ISSUED FOR CONSTRUCTION TO BE USED FOR CONSTRUCTION.

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ELECTRICAL NOTES

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SCALE: AS NOTED	PROJECT: 24-027
DATE: NOV-2024	
DRAWN DK	DRAWING E1.2
CHECKED PC	
PRINT DATE	

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
	EXISTING LUMINAIRE TO REMAIN.
	EXISTING LUMINAIRE TO BE REMOVED OR RELOCATED.
	NEW LUMINAIRE OR EXISTING LUMINAIRE IN RELOCATED POSITION
	CROSS HATCHING DENOTES LUMINAIRE CONNECTED TO NIGHT LIGHT CIRCUIT OR EMERGENCY POWER SOURCE
	TRACK LIGHTING. LENGTH OF TRACK TO SCALE, QUANTITY OF FIXTURE HEADS AS INDICATED.
	COVE LIGHT.
	LINEAR OR STRIP LIGHT LUMINAIRE, CEILING MOUNTED.
	LINEAR OR STRIP LIGHT LUMINAIRE, WALL MOUNTED.
	WALL WASHER LUMINAIRE. CEILING MOUNTED (RECESSED OR SURFACE).
	DOWNLIGHT LUMINAIRE. CEILING MOUNTED (RECESSED OR SURFACE).
	WALL MOUNTED LUMINAIRE.
	PENDANT MOUNTED LUMINAIRE.
'A'	LUMINAIRE DESIGNATOR. LETTER DENOTES TYPE. REFER TO LUMINAIRE SCHEDULE.
	CEILING MOUNTED EXIT LIGHT C/W FACES AND ARROWS AS INDICATED. ARROWS INDICATE ILLUMINATED FACES AND DIRECTION. BARS INDICATE ILLUMINATED FACES ONLY.
	WALL MOUNTED EXIT LIGHT C/W FACES AND ARROWS AS INDICATED. ARROWS INDICATE ILLUMINATED FACES AND DIRECTION. BARS INDICATE ILLUMINATED FACES ONLY.
B.E.	EMERGENCY D.C. BATTERY UNIT C/W UNIT MOUNTED HEADS (QUANTITY OF HEADS AS INDICATED). MOUNTED AT 8'-0" A.F.F.
C C C	REMOTE EMERGENCY D.C. LAMP UNIT (NUMBER OF HEADS AS INDICATED). MOUNTED AT 8'-0" A.F.F. 'C' DENOTES CEILING MOUNT.
TAG	SINGLE POLE LINE VOLTAGE LIGHT SWITCH. VOLTAGE TO SUIT LOAD CONTROLLED.(TAG IDENTIFIES OTHER FUNCTION-SEE BELOW)
	3/4 – 3 or 4 WAY LINE VOLTAGE LIGHT SWITCH. VOLTAGE TO SUIT LOAD CONTROLLED.
	M – LIGHTING MASTER SWITCH FOR FLOOR AS INDICATED.
	F – EXHAUST FAN SWITCH, DECORA STYLE, COLOUR WHITE C/W WHITE COVERPLATE, SUPPLIED BY DIV. 15, INSTALLED BY DIV. 16.
	K – KEY OPERATED SWITCH.
	OS – WALL MOUNTED OCCUPANCY SENSOR . DUAL TECHNOLOGY OCCUPANCY SENSOR C/W 120V OR 347V POWER PACK AS REQUIRED AND ALL OTHER REQUIRED ACCESSORIES. VOLTAGE TO SUIT LOAD CONTROLLED.
	OD – WALL MOUNTED OCCUPANCY SENSOR DIMMER. DUAL TECHNOLOGY OCCUPANCY SENSOR C/W 120V OR 347V POWER PACK AS REQUIRED AND ALL OTHER REQUIRED ACCESSORIES. VOLTAGE TO SUIT LOAD CONTROLLED.
	D – DIMMER SWITCH (1 UNLESS NOTED OTHERWISE. RATING AND TYPE TO SUIT LOAD.(#) INDICATES QTY AT LOCATION d(#) INDICATES DIMMER/CIRCUIT CONTROLLING FIXTURES.
	PS – PROJECTION SCREEN SWITCH. SUPPLIED BY OTHERS AND INSTALLED C/W WIRING BY DIV. 16.
	LV – LOW VOLTAGE LIGHTING CONTROL STATION TIED TO LOW VOLTAGE LIGHTING CONTROL SYSTEM.
	B – MOTORIZED BLIND CONTROL SWITCH. SUPPLIED BY OTHERS AND INSTALLED C/W WIRING BY DIV. 16.
	GANGED SWITCHES.
'LZ-#'	CEILING MOUNTED OCCUPANCY SENSOR C/W 120V OR 347V POWER PACK AS REQUIRED AND ALL OTHER REQUIRED ACCESSORIES. TAG INDICATES 'ZONE' TO BE CONTROLLED (WHERE NOTED). OTHERWISE ALL SENSORS ACT IN UNISON FOR ALL AREA FIXTURES.
TS	LIGHTING CONTROL TOUCH SCREEN.
	INDICATES LEGS OR FIXTURE GROUPS CONTROLLED FROM WALL STATION.
	AUDIO VISUAL ROUGH-IN
TV	WALL MOUNTED CABLE TV OUTLET BOX. REFER TO DETAIL.
PJ	PROJECTOR, PROVIDE DUPLEX RECEPTACLE IN CEILING.
PS	PROJECTOR REGRESSED SCREEN, PROVIDE DUPLEX RECEPTACLE IN CEILING. WIRE CONTROL TO WALL SWITCH 'PS'
A B C	WALL MOUNTED OUTLETS GROUPING. REFER TO DETAILS FOR TYPES.
HD	HDMI DESIGNATED OUTLET, PROVIDE 1 GANG BOX AND 1" C TO CEILING VOID. WIRING BY AV CONTRACTOR. HD# INDICATES QTY. OF HDMI CABLES BY AV CONTRACTOR.
HD#	INDICATES QTY. OF HDMI CABLES BY AV CONTRACTOR.
CM	ZOOM MEETING CAMERA
SS	SOUND SYSTEM/ AV / PA SPEAKER

SYMBOL	DESCRIPTION
	POWER AND COMMUNICATIONS
	WALL MOUNTED DUPLEX RECEPTACLE, 15A, 120V UNLESS OTHERWISE NOTED.(20=20A, 120V T-SLOT (CSA 5-20R)
	WALL MOUNTED DUPLEX RECEPTACLE, ABOVE COUNTER OR SPECIAL HEIGHT AS NOTED.
	WALL MOUNTED DUPLEX SPLIT RECEPTACLE.
GFI	WALL MOUNTED DUPLEX RECEPTACLE WITH GROUND FAULT INTERRUPTER.
C	WALL OR POWER POLE MOUNTED SINGLE RECEPTACLE. 15A, 120V U-GROUND OR AS OTHERWISE INDICATED BY CSA CONFIGURATION OR VOLTAGE AND AMPERAGE AS INDICATED. 'C' DENOTES MOUNTED ABOVE T-BAR CEILING.
	WALL MOUNTED QUAD RECEPTACLE.
CL	SINGLE U-GROUND 15A, 120V RECESSED CLOCK RECEPTACLE, MOUNT AT HEIGHT INDICATED ON ARCHITECT'S DRAWINGS.
	FLUSH MOUNTED 'POKE THRU' FLOOR FITTING C/W 15A, 120V DUPLEX RECEPTACLES AND PROVISIONS FOR COMMUNICATIONS AND AV WHERE INDICATED. REFER TO DETAILS FOR TYPE. FLUSH MOUNTED IN CONCRETE.
	FLOOR MOUNTED DUPLEX RECEPTACLE, 15A, 120V.
	FLOOR MOUNTED QUADPLEX RECEPTACLE.
	FLOOR MOUNTED COMBINATION C/W 2- 120V DUPLEX RECEPTACLE(S) AND PROVISIONS FOR COMMUNICATIONS AND AV WHERE INDICATED. REFER TO DETAILS FOR TYPE.(LP=LOW PROFILE, FF=FLUSH FINISH)
F RC12,14 W P WF	DIRECT CONNECTION TO SYSTEMS FURNITURE. 'F' DENOTES FLOOR MOUNTED, 'W' DENOTES WALL BASE FEED, 'WF' DENOTES FLOOR MOUNTED FED FROM WIREMOLD, 'P' DENOTES PACK POLE SUPPLIED WITH SYSTEMS FURNITURE. REFER TO DETAILS AND SYSTEMS FURNITURE SCHEDULE WHERE APPLICABLE.
	WALL MOUNTED TELEPHONE OUTLET BOX. REFER TO DETAIL.
C	DATA OUTLET, WALL MOUNTED OR AS OTHERWISE SHOWN. REFER TO DETAILS. 'C' DENOTES MOUNTED ABOVE T-BAR CEILING.
WAP	WIRELESS ACCESS POINT
	WALL MOUNTED COMBINATION TELEPHONE/DATA OUTLET BOX. REFER TO DETAILS.
	VOICE/DATA OUTLETS MOUNTED IN TABLETOP MONUMENT. MONUMENT SUPPLIED BY OTHERS. PROVIDE JACKS AND TERMINATE COMMUNICATIONS CABLING AT MONUMENT. COORDINATE ALL WORK WITH AV CONTRACTOR AND CONFIGURATION OF TABLE.
P	POWER POLE WITH DEVICES AS SHOWN.
W	FLOOR OR WALL MOUNTED RACEWAY C/W QUANTITY OF DEVICES INDICATED AND BARRIER FOR 2-COMPARTMENTS. WIREMOLD 4000 SERIES WITH SCUFFCOAT FINISH COLOUR AS DIRECTED BY ARCHITECT, UNLESS OTHERWISE NOTED. FEED FROM RECESSED EMT OR FLEXIBLE CONDUITS INSIDE WALL/COLUMN FROM ACCESSIBLE CEILING SPACE, FOR POWER AND DATA.
	CONDUITS/WIRING IN FLOOR BELOW OR CONNECTRAC, AS INDICATED.
BOP	BARRIER FREE OPERATOR PUSHBUTTON. SUPPLIED BY OTHERS, INSTALLED AND WIRED BY DIV. 16.
	DIRECT CONNECTION TO EQUIPMENT AS INDICATED.
	SINGLE PHASE MOTOR CONNECTION (OR AS INDICATED ON PLANS).
	DISCONNECT SWITCH. PROVIDE SAFETY DISCONNECT AT ALL MOTORS WHERE REQUIRED BY CODE, WHETHER SHOWN OR NOT ON FLOOR PLANS.
30A/20AF	
	CONTACTOR.
	COMBINATION MAGNETIC STARTER BY DIV. 15..
VSD	VARIABLE SPEED DRIVE BY DIV. 15.
	PANEL (RECESSED OR SURFACE).
K13 HT	DISTRIBUTION TRANSFORMER. K13 OR HARMONIC MITIGATING AS INDICATED.
J	JUNCTION BOX
###	EQUIPMENT TAG
	MECHANICAL EQUIPMENT NOMENCLATURE
BBH	ELECTRIC BASEBOARD HEATER
FFH	ELECTRIC FORCE FLOW HEATER
EF	EXHAUST FAN
RTU	RTU/HVAC UNIT
WC	HANDS FREE WATER CLOSET
LV	HANDS FREE LAVATORY
UR	HANDS FREE URINAL
FA	HANDS FREE FAUCET
VAV	VAV BOX
LS	LEAK SENSOR
HWT	HOT WATER TANK
CH	WATER CHILLER
	APPLIANCES/FIXTURE NOMENCLATURE
RF	REFRIGERATOR
RG	RANGE/STOVE
CM	COFFEE MAKER
MW	MICROWAVE
DW	DISHWASHER
FR	REFRIGERATOR
H2	WATER FOUNTAIN/HYDRATION STATION
TL	UNIVERSAL WASHROOM TABLE LIFT
VM	VENDING MACHINE

SYMBOL	DESCRIPTION
	FIRE ALARM
FACP, FAAP	FIRE ALARM PANEL (RECESSED OR SURFACE). 'FACP' DENOTES FIRE ALARM CONTROL PANEL, 'FAAP' DENOTES FIRE ALARM ANNUNCIATOR PANEL 'FGP' FIRE ZONE GRAPHIC PLACARD
	FIRE ALARM PULL STATION(NC-NORMALLY CLOSED AUX CONTACTS).
	LIFE SAFETY SYSTEM STROBE LIGHT WALL OR CEILING MOUNTED
	LIFE SAFETY HORN CEILING OR WALL MOUNTED
C	LIFE SAFETY HORN-STROBE CEILING ('C') OR WALL MOUNTED
	IN BARRIER FREE/UNIVERSAL WASHROOM, SET dB LEVEL DOWN IF TOO HIGH DURING TESTING
FS	FIRE SYSTEM SPEAKER
	SMOKE DETECTOR - CEILING OR WALL MOUNTED
	THERMAL DETECTOR CEILING OR WALL MOUNTED
CO	CARBON MONOXIDE DETECTOR CEILING OR WALL MOUNTED
	DUCT TYPE SMOKE DETECTOR.
SA	120V POWERED SMOKE ALARM C/W A VISUAL SIGNALLING COMPONENT AND BATTERY BACKUP.
CO	120V POWERED CARBON MONOXIDE ALARM C/W A VISUAL SIGNALLING COMPONENT AND BATTERY BACKUP.
SA CO	120V POWERED COMBINATION OF SMOKE AND CARBON MONOXIDE ALARM C/W A VISUAL SIGNALLING COMPONENT AND BATTERY BACKUP.
PS	SPRINKLER SYSTEM FLOW SWITCH BY DIV. 15 CONNECTED TO FA SYSTEM BY DIV. 16.
PS	SPRINKLER SYSTEM LOW WATER PRESSURE SWITCH BY DIV. 15 CONNECTED TO FA SYSTEM BY DIV. 16.
CV	SPRINKLER SYSTEM ALARM CHECK VALVE BY DIV. 15 CONNECTED TO FA SYSTEM BY DIV. 16.
SV	SPRINKLER SYSTEM SUPERVISED VALVE BY DIV. 15 CONNECTED TO FA SYSTEM BY DIV. 16.
FCM	FIRE ALARM CONTROL MODULE
FMM	FIRE ALARM MONITOR MODULE
EDH	ELECTRO-MAGNETIC DOOR HOLD OPEN DEVICE
	SECURITY ROUGH-IN
CR	SECURITY CARD READER.
	SECURITY DOOR CONTACT.
	SECURITY SYSTEM EXIT PUSH BUTTON.
ML	SECURITY MAGLOCK.
ES	SECURITY ELECTRIC STRIKE.
SC	SECURITY CAMERA.
KP	SECURITY KEY PAD.
MS	SECURITY MOTION SENSOR.
	INTERCOM STATION ('M' DENOTES MASTER).
CT	SECURITY CURRENT TRANSFER DEVICE.
DB	DURESS BUTTON
PB	PUSH BUTTON
DO	POWERED DOOR OPERATOR
GB	GLASS BREAK SENSOR
RX	SECURITY REQUEST TO EXIT
	STRUCTURED CABLING/COMMS
D-	DATA/COMMS/POE INSTALLATION 'D-' INDICATES QTY. OF CABLES/JACKS
v	INDICATES TERMINATE AS A VoIP STYLE CONNECTION
	ADDITIONAL NOMENCLATURE
N-1	DENOTES REFER TO NOTE N-1.
E	DENOTES EXISTING EQUIPMENT TO REMAIN UNLESS OTHERWISE NOTED.
R	DENOTES EXISTING EQUIPMENT TO BE REMOVED.
ER	EXISTING IN RELOCATED POSITION
REL	DENOTES TO RELOCATE EXISTING DEVICE.
RE/RE	DENOTES REMOVE AND RE-INSTALL IN SIMILAR LOCATION
AFF	ABOVE FINISHED FLOOR.
F	DENOTES ROUGH-IN FOR FUTURE DEVICE.
TL	DENOTES TWISTLOCK RECEPTACLE.
OC	DENOTES MOUNTED ABOVE COUNTER OR OTHER LEVEL AS NOTED ON DESIGNER'S DRAWINGS.
U/C	DENOTES MOUNTED UNDER COUNTER OR OTHER LEVEL AS NOTED ON DESIGNER'S DRAWINGS.
C	DENOTES CEILING MOUNTED.
NL	DENOTES LUMINAIRE ON NIGHT LIGHT CIRCUIT.
SC	DENOTES SEPARATE CIRCUIT.
EM	DENOTES EMERGENCY POWER.
USB	DENOTES RECEPTACLE WITH USB POWER. LEVITON #T5633
EC.	DENOTES EMPTY CONDUIT COMPLETE WITH PULL STRING.
C/W	DENOTES COMPLETE WITH.
TV	WALL MOUNT DEVICES MOUNTED BEHIND TELEVISION/MONITOR , HEIGHT 65" OR AS NOTED. PROVIDE REGRESSED BOX/COVER. PASS & SEYMOUR 3 GANG, # TV3LWKITWCC2

LUMINAIRE SCHEDULE

SYMBOL	DESCRIPTION
'F1'	SURFACE/SUSPENDED LOW PROFILE WRAPAROUND LED FIXTURE, 120V, 0-10V DIMMING, 80 CRI, PROVIDE SURFACE SUSPENSION AS REQUIRED BASED ON CEILING TYPE. CHAIN HANG FIXTURES AT 9' AFF WHERE EXPOSED CEILING. CURVED FROSTED LENS, WHITE FINISH. ILP #DSC4L-3L-SE-U-35-FCL
'F2'	RECESSED ARCHITECTURAL 2x4 LED 'FLAT PANEL', SELECTABLE LUMEN, SET-4400LM, 37W, 3500K 120V, ILP# VPAN24-33L/44L/55L CCTS
'F3'	RECESSED ARCHITECTURAL 2x2 LED 'FLAT PANEL', SELECTABLE LUMEN, SET-4400LM, 37W, 3500K 120V, ILP# VPAN22-33L/44L/55L CCTS
	LUMINAIRE INSTALLATION NOTES
	CONTRACTOR TO CONFIRM CEILING TRIM FINISHES WITH ARCHITECTURAL CEILING TYPES AND ADJUST ACCORDINGLY
	WHERE SINGLE LINEAR FIXTURES SHOWN, TYPE IS INDICATED WITH FIXTURE LENGTH FOR PRICING PURPOSES, LENGTH SHOWN IS NOMINAL AND EXACT FINAL LENGTHS TO BE COORDINATED WITH MANUFACTURER.
	i.e 'L5-6' INDICATES 6' LONG FIXTURE.
	WHERE CONTINUOUS LINEAR FIXTURES SHOWN AS A CONTIGUOUS SHAPE (RECTANGLE, SQUARE ETC.) LENGTH FOR PRICING PURPOSES, LENGTH SHOWN IS NOMINAL AND EXACT FINAL LENGTHS TO BE COORDINATED WITH MANUFACTURER. PROVIDE FINISHED CORNERS AS REQUIRED BY MANUFACTURER.
	ALL DIMMER AND DRIVER TYPES TO BE VERIFIED FOR COMPATIBILITY BY CONTRACTOR AND VENDORS, ADJUST ACCORDINGLY.
'EXIT'	EXTRUDED ALUMINUM RUNNING MAN STYLE LED EXIT SIGN C/W HIGH OUTPUT LED LAMPS, 120AC, 6V-24V UNIVERSAL DC, CB60 APPROVED, CSA 22.2 No. 141-10 STANDARD. SINGLE OR DOUBLE-FACE WITH DIRECTIONAL INDICATORS AND MOUNTING AS REQUIRED. UNIVERSAL MOUNTING. WHERE EXIT SIGN IS REQUIRED TO BE SUSPENDED, PROVIDE ALL REQUIRED MOUNTING ACCESSORIES FOR A COMPLETE INSTALLATION. EXACT HOUSING COLOUR SHALL BE DETERMINED BY THE ARCHITECT/INTERIOR DESIGNER DURING THE SHOP DRAWING REVIEW STAGE. LUMACELL #'LA' SERIES, OR STANPRO OR BEGHELLI APPROVED EQUAL
	EMERGENCY LIGHTING SINGLE REMOTE HEAD, 7W MR16 LED LAMP, 24VDC, DIE CAST ALUMINUM HOUSING. EXACT COLOUR/FINISH SHALL BE DETERMINED BY THE ARCHITECT/INTERIOR DESIGNER DURING THE SHOP DRAWING REVIEW STAGE. LUMACELL #'DR' SERIES, OR STANPRO OR BEGHELLI APPROVED EQUAL
	EMERGENCY LIGHTING DOUBLE REMOTE HEADS, 2x7W MR16 LED LAMP, 24VDC, DIE CAST ALUMINUM HOUSING. EXACT COLOUR/FINISH SHALL BE DETERMINED BY THE ARCHITECT/INTERIOR DESIGNER DURING THE SHOP DRAWING REVIEW STAGE. LUMACELL #'DR' SERIES, OR STANPRO OR BEGHELLI APPROVED EQUAL
B.E.	EMERGENCY LIGHTING STEEL BATTERY UNIT, 20 GAUGE STEEL CABINET, WHITE FINISH, SUITABLE FOR WALL MOUNTING C/W STEEL MOUNTING SHELF, 2x7W MR16 LED UNIT MOUNTED LAMPS, 120VAC INPUT VOLTAGE, 24VDC OUTPUT VOLTAGE, TAMPERPROOF SCREWS, CABTIRE CORD SET. UNIT SHALL BE RATED FOR 360 WATT AT 30 MINUTES AND WITH AUTO TEST SELF DIAGNOSTICS OPTION. PROVIDE BREAKER LOCKING DEVICES ON CIRCUIT BREAKER IN PANEL. LUMACELL #'RGS' SERIES, OR STANPRO OR BEGHELLI APPROVED EQUAL

HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

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ELECTRICAL LEGEND & LUMINAIRE SCHEDULE

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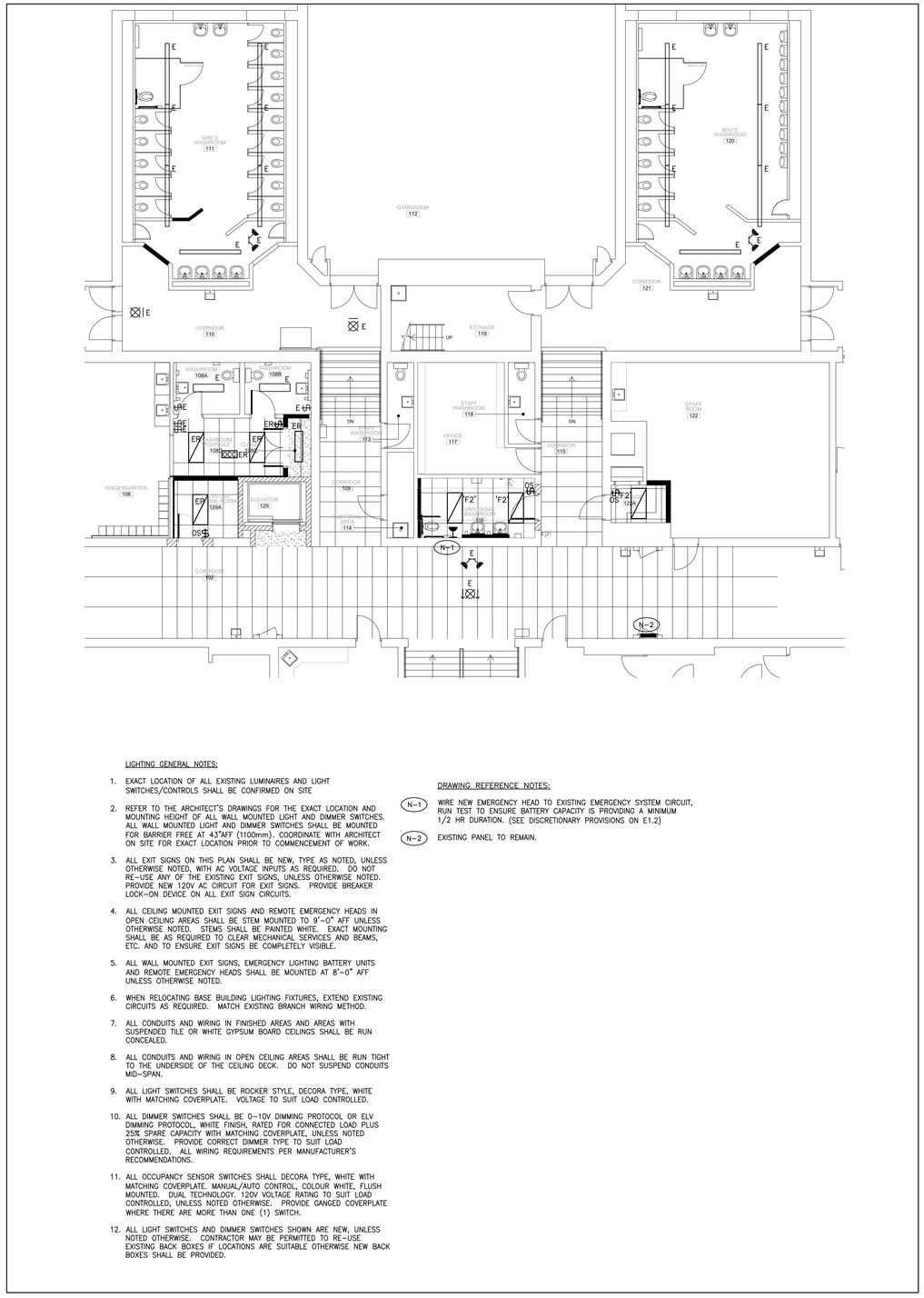


LIGHTING GENERAL NOTES:

1. EXACT LOCATION OF ALL EXISTING LUMINAIRES AND LIGHT SWITCHES/CONTROLS SHALL BE CONFIRMED ON SITE
2. REFER TO THE ARCHITECT'S DRAWINGS FOR THE EXACT LOCATION AND MOUNTING HEIGHT OF ALL WALL MOUNTED LIGHT AND DIMMER SWITCHES. ALL WALL MOUNTED LIGHT AND DIMMER SWITCHES SHALL BE MOUNTED FOR BARRIER FREE AT 4.3"FF (1100mm). COORDINATE WITH ARCHITECT ON SITE FOR EXACT LOCATION PRIOR TO COMMENCEMENT OF WORK.
3. ALL EXIT SIGNS ON THIS PLAN SHALL BE NEW, TYPE AS NOTED, UNLESS OTHERWISE NOTED, WITH AC VOLTAGE INPUTS AS REQUIRED. DO NOT RE-USE ANY OF THE EXISTING EXIT SIGNS, UNLESS OTHERWISE NOTED. PROVIDE NEW 120V AC CIRCUIT FOR EXIT SIGNS. PROVIDE BREAKER LOCK-ON DEVICE ON ALL EXIT SIGN CIRCUITS.
4. ALL CEILING MOUNTED EXIT SIGNS AND REMOTE EMERGENCY HEADS IN OPEN CEILING AREAS SHALL BE STEM MOUNTED TO 9'-0" AFF UNLESS OTHERWISE NOTED. STEMS SHALL BE PAINTED WHITE. EXACT MOUNTING SHALL BE AS REQUIRED TO CLEAR MECHANICAL SERVICES AND BEAMS, ETC. AND TO ENSURE EXIT SIGNS BE COMPLETELY VISIBLE.
5. ALL WALL MOUNTED EXIT SIGNS, EMERGENCY LIGHTING BATTERY UNITS AND REMOTE EMERGENCY HEADS SHALL BE MOUNTED AT 8'-0" AFF UNLESS OTHERWISE NOTED.
6. WHEN RELOCATING BASE BUILDING LIGHTING FIXTURES, EXTEND EXISTING CIRCUITS AS REQUIRED. MATCH EXISTING BRANCH WIRING METHOD.
7. ALL CONDUITS AND WIRING IN FINISHED AREAS AND AREAS WITH SUSPENDED TILE OR WHITE GYPSUM BOARD CEILINGS SHALL BE RUN CONCEALED.
8. ALL CONDUITS AND WIRING IN OPEN CEILING AREAS SHALL BE RUN TIGHT TO THE UNDERSIDE OF THE CEILING DECK. DO NOT SUSPEND CONDUITS MID-SPAN.
9. ALL LIGHT SWITCHES SHALL BE ROCKER STYLE, DECORA TYPE, WHITE WITH MATCHING COVERPLATE. VOLTAGE TO SUIT LOAD CONTROLLED.
10. ALL DIMMER SWITCHES SHALL BE 0-10V DIMMING PROTOCOL OR ELV DIMMING PROTOCOL, WHITE FINISH, RATED FOR CONNECTED LOAD PLUS 25% SPARE CAPACITY WITH MATCHING COVERPLATE, UNLESS NOTED OTHERWISE. PROVIDE CORRECT DIMMER TYPE TO SUIT LOAD CONTROLLED. ALL WIRING REQUIREMENTS PER MANUFACTURER'S RECOMMENDATIONS.
11. ALL OCCUPANCY SENSOR SWITCHES SHALL DECORA TYPE, WHITE WITH MATCHING COVERPLATE. MANUAL/AUTO CONTROL, COLOUR WHITE, FLUSH MOUNTED. DUAL TECHNOLOGY. 120V VOLTAGE RATING TO SUIT LOAD CONTROLLED, UNLESS NOTED OTHERWISE. PROVIDE GANGED COVERPLATE WHERE THERE ARE MORE THAN ONE (1) SWITCH.
12. ALL LIGHT SWITCHES AND DIMMER SWITCHES SHOWN ARE NEW, UNLESS NOTED OTHERWISE. CONTRACTOR MAY BE PERMITTED TO RE-USE EXISTING BACK BOXES IF LOCATIONS ARE SUITABLE OTHERWISE NEW BACK BOXES SHALL BE PROVIDED.

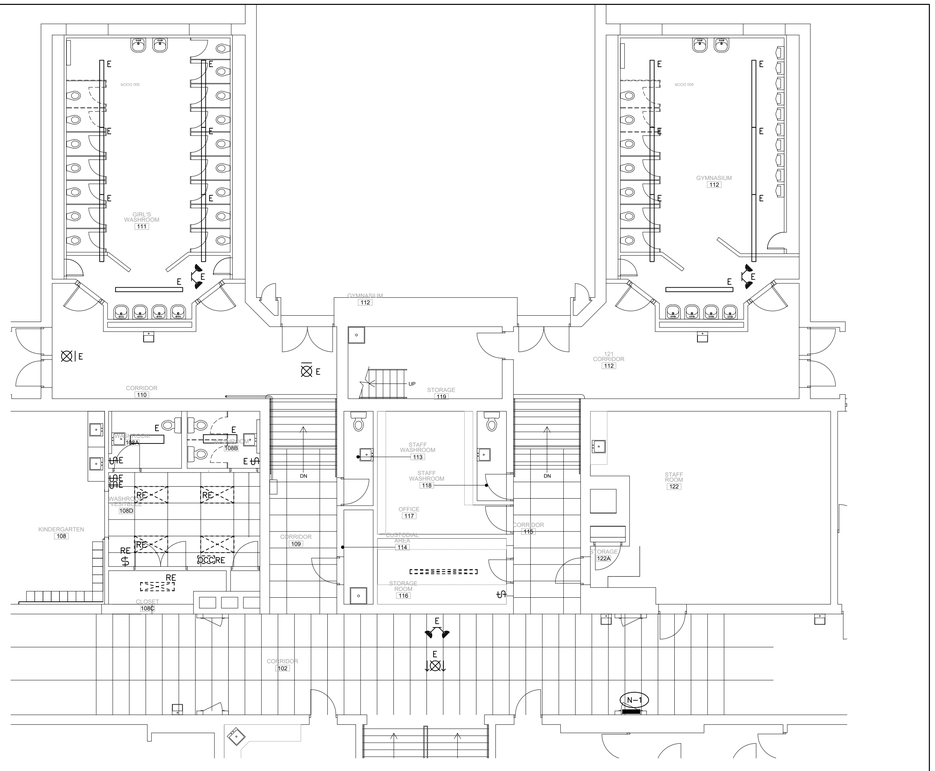
DRAWING REFERENCE NOTES:

(N-1) WIRE NEW EMERGENCY HEAD TO EXISTING EMERGENCY SYSTEM CIRCUIT, RUN TEST TO ENSURE BATTERY CAPACITY IS PROVIDING A MINIMUM 1/2 HR DURATION. (SEE DISCRETIONARY PROVISIONS ON E1.2)

(N-2) EXISTING PANEL TO REMAIN.

1 E2.1 GROUND FLOOR ELECTRICAL -NEW

SCALE: 1:100



GENERAL DEMOLITION NOTES:

1. EXACT LOCATION OF ALL EXISTING LUMINAIRES, LIGHT SWITCHES, DIMMERS, RECEPTACLES AND OTHER DEVICES/EQUIPMENT SHALL BE CONFIRMED ON SITE.
2. ALL LUMINAIRES, LIGHT SWITCHES, DIMMERS, RECEPTACLES AND OTHER DEVICES/EQUIPMENT SHOWN ON THIS DRAWING ARE EXISTING TO BE DISCONNECTED AND REMOVED UNLESS NOTED OTHERWISE. CUT BACK AND REMOVE CONDUIT AND WIRING BACK TO SOURCE. DEVICES DENOTED WITH AN 'E' ARE EXISTING TO REMAIN IN PLACE AND OPERATIONAL. DEVICES NOTED WITH AN 'RE' ARE TO BE RELOCATED TO NEW POSITION AS NOTED ON NEW PLANS AND CONNECTED AS NOTED. WHERE THE REMOVAL OF DEVICES AFFECTS THE OPERATION OF DEVICES REQUIRED TO REMAIN, REPLACE BRANCH WIRING AS REQUIRED TO MAINTAIN THE CONTINUITY OF ELECTRICAL SERVICES TO THOSE DEVICES.
3. ALL EXISTING LUMINAIRES, LIGHT SWITCHES, DIMMERS, RECEPTACLES AND DEVICES/EQUIPMENT ON WALLS TO BE DEMOLISHED SHALL ALSO BE REMOVED. THESE DEVICES MAY NOT ALL NECESSARILY BE INDICATED ON THIS PLAN. CONTRACTOR SHALL VISIT THE SITE DURING TENDER PERIOD TO ASCERTAIN THE FULL SCOPE OF DEMOLITION. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL SUCH ITEMS AS REQUIRED TO FACILITATE THE COMPLETE DEMOLITION.
4. WHERE LUMINAIRES, LIGHT SWITCHES, DIMMERS, RECEPTACLES AND DEVICES/EQUIPMENT ARE REMOVED CUT BACK AND REMOVE CONDUIT AND WIRING THAT IS NO LONGER REQUIRED BACK TO SOURCE PANEL.
5. ALL EXISTING ELECTRICAL DEVICES/EQUIPMENT WHICH ARE NO LONGER REQUIRED SHALL BE REMOVED AND DISPOSED OF OFF SITE, UNLESS NOTED OTHERWISE.
6. REMOVE ALL REDUNDANT LINE VOLTAGE AND LOW VOLTAGE CONDUIT AND WIRING IN CEILING SPACE WHICH IS NOT IN USE.
7. INCLUDE FOR THE REMOVAL OF ALL EXISTING HORIZONTAL COMMUNICATIONS CABLING. CABLING NOT SHOWN. VERIFY EXTENT OF THE WORK DURING TENDER PERIOD. COORDINATE WITH GENERAL CONTRACTOR TO HAVE THE COMMUNICATIONS CONTRACTOR VERIFY IF ANY EXISTING CABLING IS LIVE AND SHOULD REMAIN.
8. ENSURE THAT ALL ELECTRICAL, LIFE SAFETY SERVICES AND SERVICES FOR EXISTING EQUIPMENT THAT ARE REQUIRED TO REMAIN IN SERVICE SHALL DO SO.
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10. CARRY OUT THE WORK WITH A MINIMUM OF NOISE, DUST AND DISTURBANCE.
11. REFER TO THE MECHANICAL DRAWINGS FOR EXTENT OF MECHANICAL DEMOLITION WORK. DISCONNECT EXISTING MECHANICAL EQUIPMENT WHICH IS BEING REMOVED. CUT BACK CONDUIT AND WIRING TO SOURCE ELECTRICAL PANEL. MAINTAIN ELECTRICAL SERVICES TO EXISTING MECHANICAL EQUIPMENT WHICH IS TO REMAIN IN SERVICE. REPLACE BRANCH WIRING AS NEEDED.
12. REFER TO NEW PLANS FOR NEW LOCATION OF RELOCATED LUMINAIRES, DEVICES AND EQUIPMENT.

DRAWING REFERENCE NOTES:

(N-1) EXISTING PANEL TO REMAIN.

2 E2.1 GROUND FLOOR ELECTRICAL -DEMO

SCALE: 1/8"=1'-0"

HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

NO	REVISIONS	DATE
3	TENDER	24/12/06
2	PERMIT	24/11/15
1	50% REVIEW	24/11/05

DYNAMIS ENGINEERING INC
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ACCESSIBILITY RENOVATIONS
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LIGHTING PLANS

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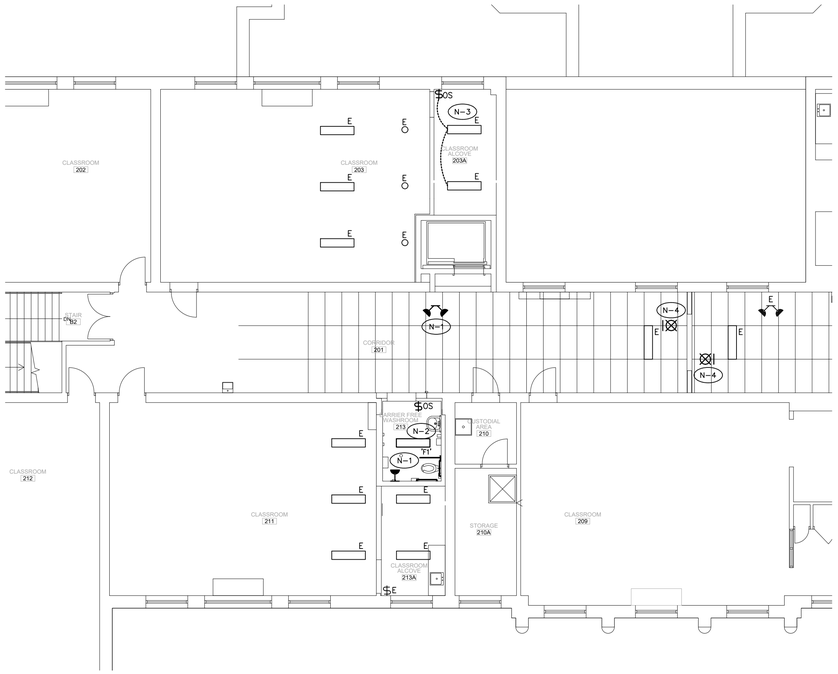

LIGHTING GENERAL NOTES:

1. EXACT LOCATION OF ALL EXISTING LUMINAIRES AND LIGHT SWITCHES/CONTROLS SHALL BE CONFIRMED ON SITE
2. REFER TO THE ARCHITECT'S DRAWINGS FOR THE EXACT LOCATION AND MOUNTING HEIGHT OF ALL WALL MOUNTED LIGHT AND DIMMER SWITCHES. ALL WALL MOUNTED LIGHT AND DIMMER SWITCHES SHALL BE MOUNTED FOR BARRIER FREE AT 43"AFF (1100mm). COORDINATE WITH ARCHITECT ON SITE FOR EXACT LOCATION PRIOR TO COMMENCEMENT OF WORK.
3. ALL EXIT SIGNS ON THIS PLAN SHALL BE NEW, TYPE AS NOTED, UNLESS OTHERWISE NOTED, WITH AC VOLTAGE INPUTS AS REQUIRED. DO NOT RE-USE ANY OF THE EXISTING EXIT SIGNS, UNLESS OTHERWISE NOTED. PROVIDE NEW 120V AC CIRCUIT FOR EXIT SIGNS. PROVIDE BREAKER LOCK-ON DEVICE ON ALL EXIT SIGN CIRCUITS.
4. ALL CEILING MOUNTED EXIT SIGNS AND REMOTE EMERGENCY HEADS IN OPEN CEILING AREAS SHALL BE STEM MOUNTED TO 9'-0" AFF UNLESS OTHERWISE NOTED. STEMS SHALL BE PAINTED WHITE. EXACT MOUNTING SHALL BE AS REQUIRED TO CLEAR MECHANICAL SERVICES AND BEAMS, ETC. AND TO ENSURE EXIT SIGNS BE COMPLETELY VISIBLE.
5. ALL WALL MOUNTED EXIT SIGNS, EMERGENCY LIGHTING BATTERY UNITS AND REMOTE EMERGENCY HEADS SHALL BE MOUNTED AT 8'-0" AFF UNLESS OTHERWISE NOTED.
6. WHEN RELOCATING BASE BUILDING LIGHTING FIXTURES, EXTEND EXISTING CIRCUITS AS REQUIRED. MATCH EXISTING BRANCH WIRING METHOD.
7. ALL CONDUITS AND WIRING IN FINISHED AREAS AND AREAS WITH SUSPENDED TILE OR WHITE GYPSUM BOARD CEILINGS SHALL BE RUN CONCEALED.
8. ALL CONDUITS AND WIRING IN OPEN CEILING AREAS SHALL BE RUN TIGHT TO THE UNDERSIDE OF THE CEILING DECK. DO NOT SUSPEND CONDUITS MID-SPAN.
9. ALL LIGHT SWITCHES SHALL BE ROCKER STYLE, DECORA TYPE, WHITE WITH MATCHING COVERPLATE. VOLTAGE TO SUIT LOAD CONTROLLED.
10. ALL DIMMER SWITCHES SHALL BE 0-10V DIMMING PROTOCOL OR ELV DIMMING PROTOCOL, WHITE FINISH, RATED FOR CONNECTED LOAD PLUS 25% SPARE CAPACITY WITH MATCHING COVERPLATE, UNLESS NOTED OTHERWISE. PROVIDE CORRECT DIMMER TYPE TO SUIT LOAD CONTROLLED. ALL WIRING REQUIREMENTS PER MANUFACTURER'S RECOMMENDATIONS.
11. ALL OCCUPANCY SENSOR SWITCHES SHALL DECORA TYPE, WHITE WITH MATCHING COVERPLATE. MANUAL/AUTO CONTROL, COLOUR WHITE, FLUSH MOUNTED. DUAL TECHNOLOGY. 120V VOLTAGE RATING TO SUIT LOAD CONTROLLED, UNLESS NOTED OTHERWISE. PROVIDE GANGED COVERPLATE WHERE THERE ARE MORE THAN ONE (1) SWITCH.
12. ALL LIGHT SWITCHES AND DIMMER SWITCHES SHOWN ARE NEW, UNLESS NOTED OTHERWISE. CONTRACTOR MAY BE PERMITTED TO RE-USE EXISTING BACK BOXES IF LOCATIONS ARE SUITABLE OTHERWISE NEW BACK BOXES SHALL BE PROVIDED.

DRAWING REFERENCE NOTES:

- (N-1) WIRE NEW EMERGENCY HEAD TO EXISTING EMERGENCY SYSTEM CIRCUIT, RUN TEST TO ENSURE BATTERY CAPACITY IS PROVIDING A MINIMUM 1/2 HR DURATION. (SEE DISCRETIONARY PROVISIONS ON E1.2)
- (N-2) WIRE NEW FIXTURE TO EXISTING CIRCUIT, MODIFY WIRING TO SUIT NEW CONTROL IN WASHROOM.
- (N-3) MODIFY WIRING TO SUIT NEW CONTROL AS SHOWN FOR EXISTING LIGHTING.
- (N-4) WIRE NEW EXIT SIGN TO EXISTING EXIT SIGN CIRCUITS (AC & DC POWER)

1 / E2.2 SECOND FLOOR ELECTRICAL -NEW
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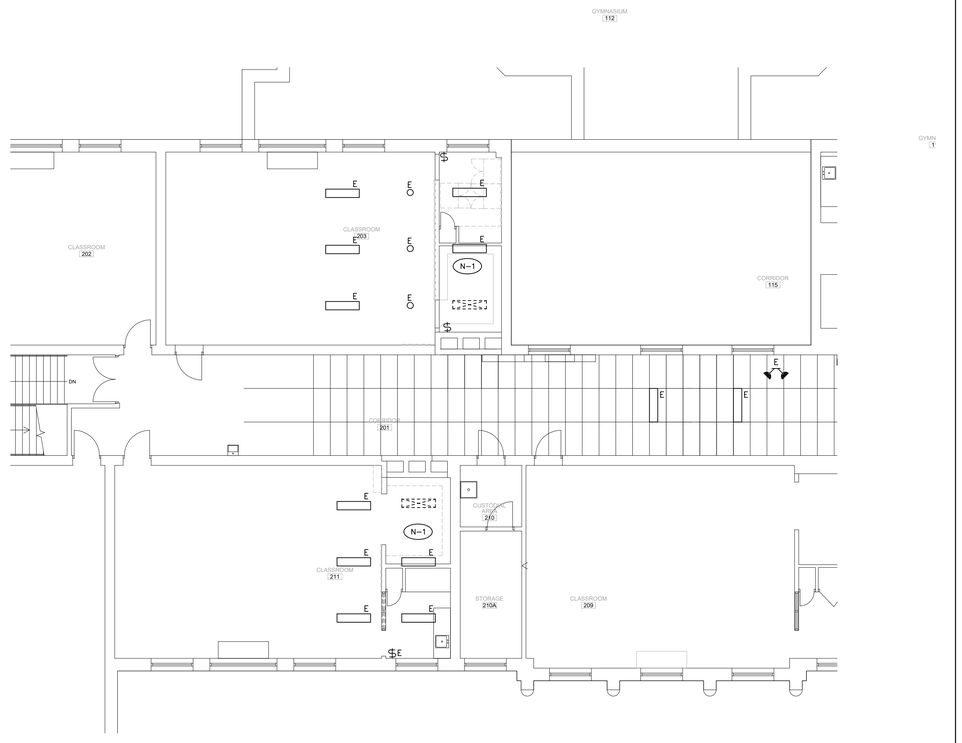

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12. REFER TO NEW PLANS FOR NEW LOCATION OF RELOCATED LUMINAIRES, DEVICES AND EQUIPMENT.

DRAWING REFERENCE NOTES:

- (N-1) MAINTAIN EXISTING CIRCUITS FOR NEW/MODIFIED WIRING. SEE NEW PLANS.

2 / E2.1 SECOND FLOOR ELECTRICAL -DEMO
SCALE: 1/8"=1'-0"

HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

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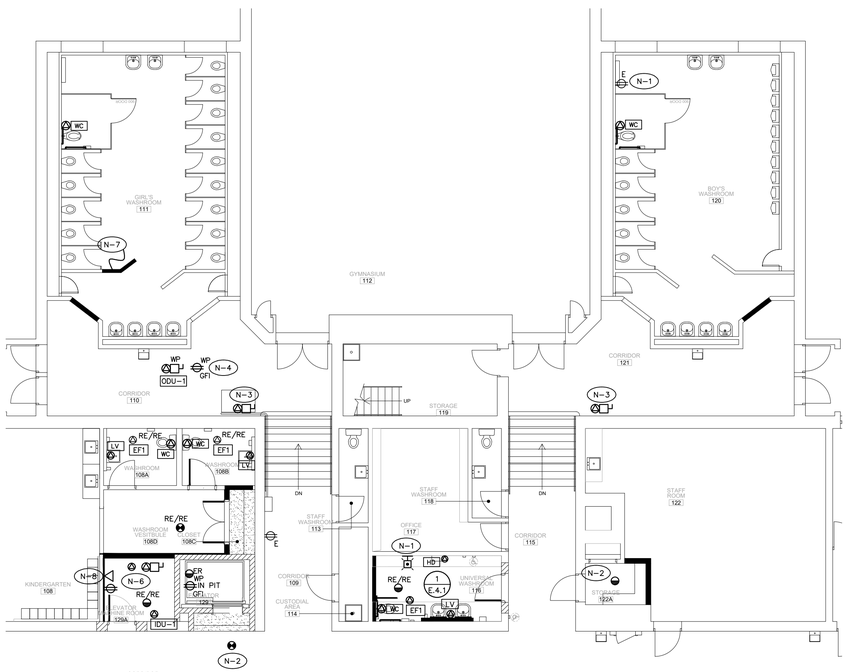


DRAWING GENERAL NOTES:

1. REFER TO THE ARCHITECT'S DRAWINGS FOR THE EXACT LOCATION AND MOUNTING HEIGHT OF ALL RECEPTACLES AND COMMUNICATIONS OUTLET BOXES. WHERE THIS INFORMATION IS NOT INDICATED HAVE THE OWNER OR ARCHITECT VERIFY EXACT LOCATIONS ON SITE PRIOR TO ROUGHING IN. DO NOT SCALE LOCATIONS FROM ELECTRICAL DRAWINGS. OUTLETS INSTALLED WITHOUT APPROVED LOCATIONS SHALL BE RELOCATED AT THE CONTRACTOR'S EXPENSE.
2. ALL RECEPTACLES AND COMMUNICATIONS OUTLET BOXES SHALL BE MOUNTED AT 16" AFF AS MEASURED TO THE CENTRE-LINE OF THE DEVICE UNLESS OTHERWISE NOTED IN ARCHITECTURAL DRAWINGS.
3. REPORT ANY DISCREPANCIES BETWEEN THIS PLAN AND THE ARCHITECT'S POWER AND COMMUNICATIONS PLAN TO THE CONSULTANT PRIOR TO ROUGHING IN ANY SERVICES.
4. ALL DUPLEX RECEPTACLES SHALL BE DECORA TYPE, WHITE FINISH. PROVIDE WITH MATCHING WHITE COLOUR COVERPLATE. REPLACE ALL EXISTING DUPLEX RECEPTACLES THAT ARE TO REMAIN WITH NEW DECORA RECEPTACLES AND COVERPLATES AS SPECIFIED.
5. WHERE POWER AND COMMUNICATIONS OUTLET BOXES ARE SHOWN ADJACENT TO EACH OTHER PROVIDE GANGED COVERPLATE SIZE AS REQUIRED. REFER TO DETAIL.
6. DO NOT INSTALL OUTLETS BACK TO BACK.
7. ALL WALL MOUNTED WIRING DEVICE BACK BOXES SHALL BE FLUSH MOUNTED WITH CONDUIT VERTICALLY CONCEALED AND HORIZONTAL CONDUITS SHALL BE TIGHT TO UNDERSIDE OF DECK/SLAB UNLESS OTHERWISE NOTED. IN OPEN CEILING AREAS, TAKE SPECIAL CARE TO NEATLY RUN THE CONDUITS TO NOT BE VISIBLE AS MUCH AS POSSIBLE. SELECT CONDUIT ROUTINGS ACCORDINGLY.
8. IN AREAS WHERE COUNTERS OR OTHER MILLWORK ARE PROVIDED, COORDINATE EXACT LOCATION OF OUTLETS AND WIRING WITH MILLWORK AND ARCHITECT.
9. FOR PLUG-IN EQUIPMENT, CONFIRM CSA CONFIGURATION OF REQUIRED RECEPTACLE PRIOR TO PURCHASE AND INSTALLATION.
10. SUPPLY AND INSTALL EQUIPMENT DISCONNECT SWITCHES IN STRICT COMPLIANCE WITH CODE REQUIREMENTS (NOT ALL LOCAL DISCONNECT SWITCHES ARE SHOWN).
11. PROVIDE ALL EMPTY CONDUITS C/W PULL STRINGS AND BACK BOXES AS REQUIRED TO SUIT THE COMPLETE INSTALLATION OF THE COMMUNICATIONS SYSTEMS (VOICE, DATA, CATV) AND SECURITY SYSTEMS (ACCESS CONTROL AND CCTV).
12. REFER TO MECHANICAL DRAWINGS FOR EXACT LOCATION AND MOUNTING HEIGHT OF ALL HVAC AND PLUMBING EQUIPMENT. CONFIRM EXACT LOCATION OF ALL MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO ROUGHING IN ELECTRICAL SERVICES.

DRAWING REFERENCE NOTES:

(N-1) PROVIDE NEW FIRE ALARM STROBE AND CONNECT TO THE NEAREST EXISTING FIRE ALARM CIRCUIT. ENSURE TO NOT OVERLOAD THE EXISTING CIRCUIT. BALANCE THE LOAD ON EXISTING CIRCUITS IF NEEDED. PROVIDE FIRE ALARM VERIFICATION.

(N-2) PROVIDE NEW FIRE DETECTOR AND CONNECT TO THE NEAREST EXISTING FIRE ALARM CIRCUIT. PROVIDE FIRE ALARM VERIFICATION.

(N-3) PROVIDE POWER FOR STAIR LIFT CHAIR SYSTEM.

(N-4) PROVIDE NEW 5-20R GFCI/WP RECEPTACLE, RECEPTACLE ON ROOF. INSTALL AS PER OESC RULE 26-710.

MOUNT BOX ON VERTICAL STANCHION MOUNT, THALER TYPE MEF-1 ROOF FLASHING, SUITABLE FOR 3/4" RGS CONDUIT. MOUNT DEVICE TO CONDUIT.

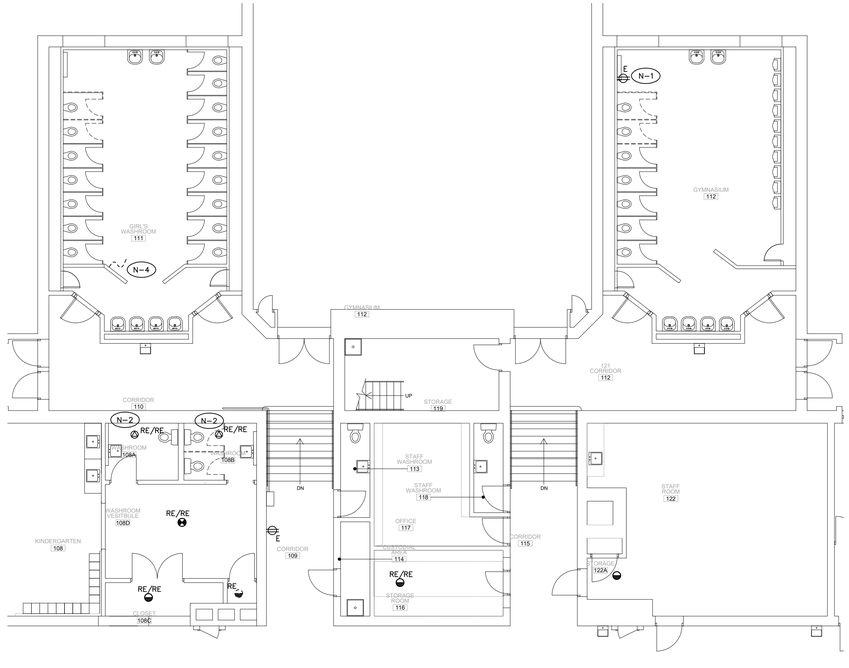
(N-5) EXISTING PANEL TO REMAIN. PROVIDE BREAKERS;
1-15A 2P-IDU-1/ODU-1 SPLIT SYSTEM
1-20A 1P, HAND DRYER
1-50A 3P, ELEVATOR
4-15A 1P, CAB LIGHTS, EF1, RECEPTACLES, ELEV RM RECEPT.
2-15A 1P, WC & FA VALVES, BF WRM ADD & CONTROLLER
2-20A 2P-STAIR CHAIR LIFTS
1-20A 1P, ROOFTOP RECEPT.

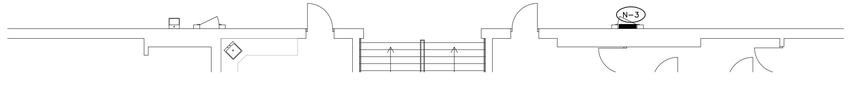
(N-6) PROVIDE POWER TO ELEVATING DEVICE EQUIPMENT
1-15A CIRCUIT FOR LIGHTS
1-50A 3P CIRCUIT FOR HYDRAULIC UNIT

(N-7) EXISTING WIRING AND CONDUIT IN WALL, SERVING PIPING CONTROLS, TO BE REWORKED AND REWIRED. PROVIDE NEW FLUSH MOUNTED JUNCTION BOX AND EXTEND WIRING, RECONNECT AS PREVIOUSLY FUNCTIONING.

(N-8) PROVIDE DEDICATED OUTLET FOR ELEVATOR TELECOM , COORDINATE LOCATION WITH ELEVATOR INSTALLER. TERMINATE CONDUIT IN TBAR CEILING. OWNER TO ARRANGE FOR WIRING FROM MAIN PHONE SYSTEM.

1 E3.1 GROUND FLOOR ELECTRICAL -NEW
SCALE: 1:100





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12. REFER TO NEW PLANS FOR NEW LOCATION OF RELOCATED LUMINAIRES, DEVICES AND EQUIPMENT.

DRAWING REFERENCE NOTES:

(N-1) EXISTING RECEPTACLE AT HIGH LEVEL IS HANGING LOOSE AND SHALL BE REINSTALLED,

(N-2) POWER SUPPLY FOR EXHAUST FAN TO BE DISCONNECTED AND MAINTAINED FOR RECONNECTION TO NEW

(N-3) EXISTING PANEL TO REMAIN.

(N-4) EXISTING WIRING AND CONDUIT IN WALL, SERVING PIPING CONTROLS, TO BE DISCONNECTED AND RELOCATED, SEE NEW PLAN.

2 E3.1 GROUND FLOOR ELECTRICAL -DEMO
SCALE: 1:100

HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

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POWER & SYSTEMS PLAN - NEW

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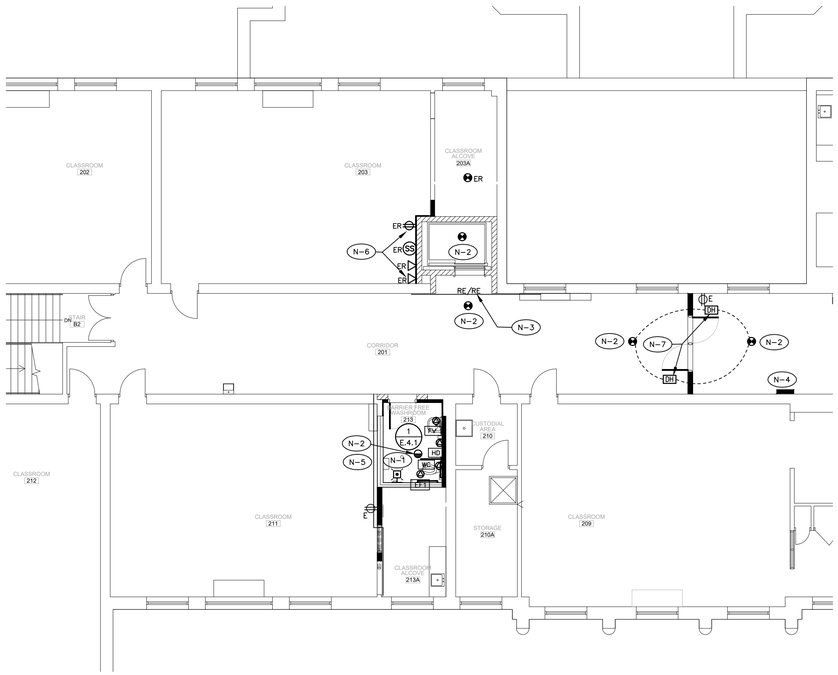

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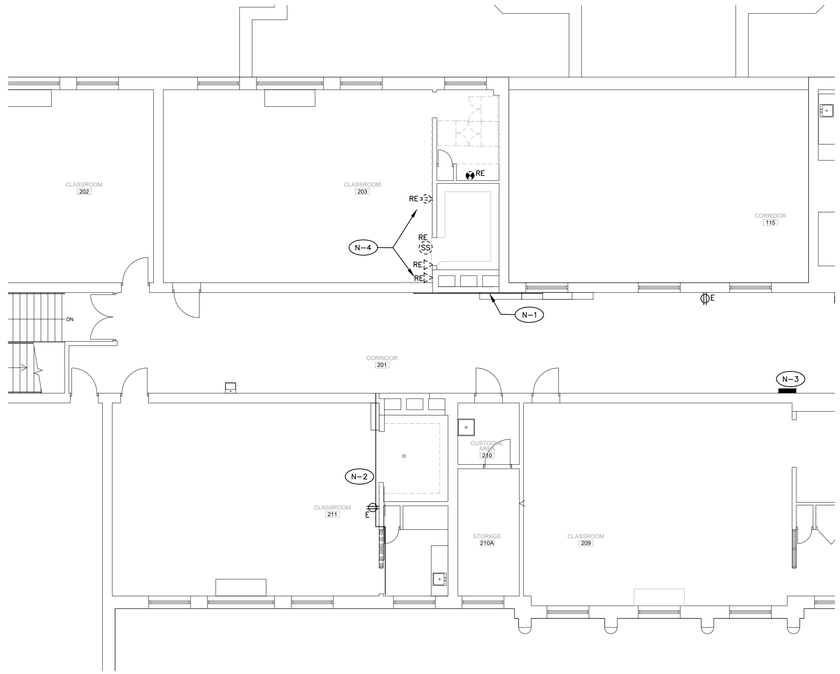
8. IN AREAS WHERE COUNTERS OR OTHER MILLWORK ARE PROVIDED, COORDINATE EXACT LOCATION OF OUTLETS AND WIRING WITH MILLWORK AND ARCHITECT.
9. FOR PLUG-IN EQUIPMENT, CONFIRM CSA CONFIGURATION OF REQUIRED RECEPTACLE PRIOR TO PURCHASE AND INSTALLATION.
10. SUPPLY AND INSTALL EQUIPMENT DISCONNECT SWITCHES IN STRICT COMPLIANCE WITH CODE REQUIREMENTS (NOT ALL LOCAL DISCONNECT SWITCHES ARE SHOWN).
11. PROVIDE ALL EMPTY CONDUITS C/W PULL STRINGS AND BACK BOXES AS REQUIRED TO SUIT THE COMPLETE INSTALLATION OF THE COMMUNICATIONS SYSTEMS (VOICE, DATA, CATV) AND SECURITY SYSTEMS (ACCESS CONTROL AND CCTV).
12. REFER TO MECHANICAL DRAWINGS FOR EXACT LOCATION AND MOUNTING HEIGHT OF ALL HVAC AND PLUMBING EQUIPMENT. CONFIRM EXACT LOCATION OF ALL MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO ROUGHING IN ELECTRICAL SERVICES.

DRAWING REFERENCE NOTES:

- (N-1) PROVIDE NEW FIRE ALARM HORN/STROBE AND CONNECT TO THE NEAREST EXISTING FIRE ALARM CIRCUIT. ENSURE NOT OVERLOAD THE EXISTING CIRCUIT. BALANCE THE LOAD ON EXISTING CIRCUITS IF NEEDED. PROVIDE FIRE ALARM VERIFICATION.
- (N-2) PROVIDE NEW FIRE DETECTOR AND CONNECT TO THE NEAREST EXISTING FIRE ALARM CIRCUIT. PROVIDE FIRE ALARM VERIFICATION.
- (N-3) EXISTING SURFACE MOUNTED CONDUIT, TO BE CUT AND REWORKED TO SUIT NEW OPENING FOR LIFT DOORWAY. PROVIDE ALL NEW BOXES/WIRING AND JUNCTIONS AS REQUIRED.
- (N-4) EXISTING PANEL TO REMAIN. PROVIDE BEAKERS; 3-15A 1P-EF1, WC & FA VALVES, BF WRM ADO & CONTROLLER 1-20A 1P, HAND DRYER
- (N-5) EXISTING SURFACE MOUNTED CONDUITS TO BE REWORKED AND REWIRED TO SUIT NEW WALL CONSTRUCTION, REWORK DEVICE BOXES AND REINSTALL ALL WIRING IN NEW WALL, PROVIDE NEW AS REQUIRED.
- (N-6) EXISTING OUTLETS, COMMS AND A/V EQUIPMENT AND ASSOCIATED SURFACE CONDUITS ON WALL RELOCATED TO NEW WALL, REINSTALL/RECONNECT WIRING AND CIRCUITS AS PREVIOUSLY FUNCTIONING.
- (N-7) NEW DOOR HOLD OPEN DEVICES TO BE FLOOR MOUNTED TYPE. PROVIDE POWER AND WIRE TO LOCAL FIRE ALARM ZONE TO RELEASE ON ALARM SIGNAL. WIRE DOOR HOLDERS TO RELEASE ON SIGNAL FROM FIRE ALARM AND LOCAL SMOKE DETECTORS. DETECTORS C/W AUX CONTACTS TO OPEN ON DETECTION. PROVIDE AUXILIARY RELAY AND WIRE TO SYSTEM. COORDINATE WITH SCHOOL APPROVED FIRE ALARM VENDOR

1 E3.2 SECOND FLOOR ELECTRICAL -NEW

SCALE: 1:100



GENERAL DEMOLITION NOTES:

1. EXACT LOCATION OF ALL EXISTING LUMINAIRES, LIGHT SWITCHES, DIMMERS, RECEPTACLES AND OTHER DEVICES/EQUIPMENT SHALL BE CONFIRMED ON SITE.
2. ALL LUMINAIRES, LIGHT SWITCHES, DIMMERS, RECEPTACLES AND OTHER DEVICES/EQUIPMENT SHOWN ON THIS DRAWING ARE EXISTING TO BE DISCONNECTED AND REMOVED UNLESS NOTED OTHERWISE. CUT BACK AND REMOVE CONDUIT AND WIRING BACK TO SOURCE. DEVICES DENOTED WITH AN 'E' ARE EXISTING TO REMAIN IN PLACE AND OPERATIONAL. DEVICES NOTED WITH AN 'RE' ARE TO BE RELOCATED TO NEW POSITION AS NOTED ON NEW PLANS AND CONNECTED AS NOTED. WHERE THE REMOVAL OF DEVICES AFFECTS THE OPERATION OF DEVICES REQUIRED TO REMAIN, REPLACE BRANCH WIRING AS REQUIRED TO MAINTAIN THE CONTINUITY OF ELECTRICAL SERVICES TO THOSE DEVICES.
3. ALL EXISTING LUMINAIRES, LIGHT SWITCHES, DIMMERS, RECEPTACLES AND DEVICES/EQUIPMENT ON WALLS TO BE DEMOLISHED SHALL ALSO BE REMOVED. THESE DEVICES MAY NOT ALL NECESSARILY BE INDICATED ON THIS PLAN. CONTRACTOR SHALL VISIT THE SITE DURING TENDER PERIOD TO ASCERTAIN THE FULL SCOPE OF DEMOLITION. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL SUCH ITEMS AS REQUIRED TO FACILITATE THE COMPLETE DEMOLITION.
4. WHERE LUMINAIRES, LIGHT SWITCHES, DIMMERS, RECEPTACLES AND DEVICES/EQUIPMENT ARE REMOVED CUT BACK AND REMOVE CONDUIT AND WIRING THAT IS NO LONGER REQUIRED BACK TO SOURCE PANEL.
5. ALL EXISTING ELECTRICAL DEVICES/EQUIPMENT WHICH ARE NO LONGER REQUIRED SHALL BE REMOVED AND DISPOSED OF OFF SITE, UNLESS NOTED OTHERWISE.
6. REMOVE ALL REDUNDANT LINE VOLTAGE AND LOW VOLTAGE CONDUIT AND WIRING IN CEILING SPACE WHICH IS NOT IN USE.
7. INCLUDE FOR THE REMOVAL OF ALL EXISTING HORIZONTAL COMMUNICATIONS CABLING. CABLING NOT SHOWN. VERIFY EXTENT OF THE WORK DURING TENDER PERIOD. COORDINATE WITH GENERAL CONTRACTOR TO HAVE THE COMMUNICATIONS CONTRACTOR VERIFY IF ANY EXISTING CABLING IS LIVE AND SHOULD REMAIN.
8. ENSURE THAT ALL ELECTRICAL, LIFE SAFETY SERVICES AND SERVICES FOR EXISTING EQUIPMENT THAT ARE REQUIRED TO REMAIN IN SERVICE SHALL DO SO.
9. BE RESPONSIBLE AND PAY FOR ANY DAMAGE TO THE BUILDING INCURRED BY WORK OF THIS CONTRACTOR OR REPAIR TO THE SATISFACTION OF THE OWNER AND CONSULTANT.
10. CARRY OUT THE WORK WITH A MINIMUM OF NOISE, DUST AND DISTURBANCE.
11. REFER TO THE MECHANICAL DRAWINGS FOR EXTENT OF MECHANICAL DEMOLITION WORK. DISCONNECT EXISTING MECHANICAL EQUIPMENT WHICH IS BEING REMOVED. CUT BACK CONDUIT AND WIRING TO SOURCE ELECTRICAL PANEL. MAINTAIN ELECTRICAL SERVICES TO EXISTING MECHANICAL EQUIPMENT WHICH IS TO REMAIN IN SERVICE. REPLACE BRANCH WIRING AS NEEDED.
12. REFER TO NEW PLANS FOR NEW LOCATION OF RELOCATED LUMINAIRES, DEVICES AND EQUIPMENT.

DRAWING REFERENCE NOTES:

- (N-1) EXISTING SURFACE MOUNTED CONDUIT, TO BE CUT AND REWORKED TO SUIT NEW OPENING FOR LIFT DOORWAY. PROVIDE AL NEW BOXES/WIRING AND JUNCTIONS AS REQUIRED.
- (N-2) EXISTING CONDUITS ON WALL TO BE PROTECTED DURING RENOVATIONS, MAINTAIN CIRCUITS FOR PRESENT USE. REWORK AS NOTED IN NEW PLAN
- (N-3) EXISTING PANEL TO REMAIN.
- (N-4) EXISTING OUTLETS, COMMS AND A/V EQUIPMENT AND ASSOCIATED SURFACE CONDUITS ON WALL TO BE REMOVED AND WIRING MAINTAINED FOR REWORK AS NOTED IN NEW PLAN.

2 E3.2 SECOND FLOOR ELECTRICAL -DEMO

SCALE: 1:100

HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

NO	REVISIONS	DATE
3	TENDER	24/12/06
2	PERMIT	24/11/15
1	50% REVIEW	24/11/05

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TORONTO, ON M8V 3W7
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P.A. COUILLARD 24/12/06 PROVINCE OF ONTARIO
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Summit Engineering Inc.
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PARKDALE ELEMENTARY SCHOOL ACCESSIBILITY RENOVATIONS
139 PARKDALE AVE N, HAMILTON, ONTARIO

POWER & SYSTEMS PLANS

GRGURIC ARCHITECTS INCORPORATED
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STONEY CREEK, ONTARIO, L8G 1J8
Tel. 905-664-8735 Fax. 905-664-8737
Web: www.2gai.com

SCALE: AS NOTED	PROJECT: 24-027
DATE: NOV-2024	
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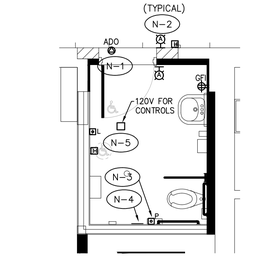
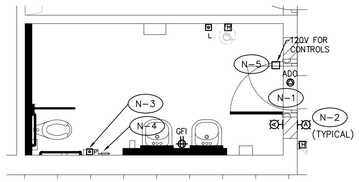
CHECKED PC	
PRINT DATE	



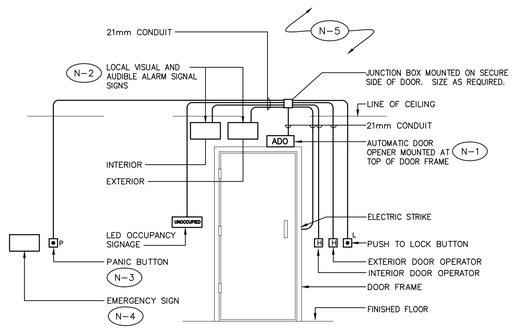
PLAN VIEW – SECOND FLOOR



PLAN VIEW – GROUND FLOOR

SEQUENCE OF OPERATION

1. OUTSIDE DOOR OPERATOR PUSH BUTTON OPENS DOOR WHEN UNOCCUPIED.
2. INSIDE PUSH TO LOCK BUTTON
   a) LOCKS ELECTRIC STRIKE
   b) TURNS ON OUTSIDE LED 'OCCUPIED' SIGN, AND
   c) DEACTIVATES OUTSIDE DOOR OPERATOR PUSH BUTTON.
3. PUSHING INSIDE DOOR OPERATOR PUSH BUTTON OR TURNING DOOR LEVER DEACTIVATES ELECTRIC STRIKE AND RESETS OPENING TO UNLOCKED CONDITION.



SCHEMATIC

DRAWING GENERAL NOTES

1. EACH UNIVERSAL WASHROOM SHALL BE PROVIDED WITH THE REQUIRED INFRASTRUCTURE (CONDUIT, BACK BOXES, LINE AND LOW VOLTAGE WIRING) AS REQUIRED TO ENSURE A COMPLETE AND FULLY OPERATIONAL AUTOMATIC DOOR OPERATOR SYSTEM AND CALL FOR ASSISTANCE SYSTEM. AUTOMATIC DOOR OPERATOR SYSTEM, CALL FOR ASSISTANCE SYSTEM AND ASSOCIATED DEVICES SHALL BE PROVIDED BY THE HARDWARE CONTRACTOR. THIS CONTRACTOR TO COORDINATE WITH HARDWARE CONTRACTOR FOR EXACT REQUIREMENTS PRIOR TO COMMENCEMENT OF WORK.
2. ALL CONDUITS SHALL BE MARKED CLEARLY AT BOTH ENDS.
3. MINIMUM CONDUIT SIZE SHALL BE 3/4" (21mm) UNLESS OTHERWISE NOTED.
4. CONFIRM EXACT LOCATION AND MOUNTING HEIGHT OF ALL BACK BOXES WITH THE ARCHITECT/DESIGNER ON SITE PRIOR TO INSTALLATION.
5. PROVIDE ALL LINE VOLTAGE AND LOW VOLTAGE ELECTRICAL SERVICES FOR COMPLETE INSTALLATION AND OPERATION OF HANDICAP OPERATOR SYSTEM. INCLUDE FOR ALL CONDUIT AND WIRING AND FOR FINAL CONNECTIONS TO MOTORS, HANDICAP PUSHBUTTONS, ELECTRIC STRIKE, DOOR LOCK BUTTON, AND ALL ANCILLARY DEVICES. COORDINATE EXACT REQUIREMENTS WITH HARDWARE CONTRACTOR.
6. NOT ALL DEVICES NECESSARILY SHOWN ON FLOOR PLANS. COORDINATE EXACT LOCATIONS AND MOUNTING HEIGHT ON SITE AND WITH ARCHITECTURAL DRAWINGS.

DRAWING REFERENCE NOTES:

(N-1) PROVIDE ALL LINE VOLTAGE AND LOW VOLTAGE ELECTRICAL SERVICES FOR COMPLETE INSTALLATION AND OPERATION OF HANDICAP DOOR OPERATOR SYSTEM. INCLUDE FOR ALL CONDUIT AND WIRING AND FOR FINAL CONNECTIONS TO MOTORS, HANDICAP PUSHBUTTONS, ELECTRIC STRIKE, DOOR LOCK BUTTON, AND ALL ANCILLARY DEVICES. COORDINATE EXACT REQUIREMENTS WITH HARDWARE CONTRACTOR.

(N-2) LOCAL VISUAL AND AUDIBLE ALARM SIGNAL SIGNS LOCATED INSIDE AND OUTSIDE OF UNIVERSAL WASHROOM.

(N-3) PANIC BUTTON SHALL BE LOCATED NEAR TOILET, ACCESSIBLE BY INDIVIDUALS UNDER DISTRESS. PROVIDE ALL INTERCONNECTION WIRING AND CONDUIT BETWEEN PANIC BUTTON AND LOCAL VISUAL AND AUDIBLE ALARM SIGNAL SIGNS TO ENSURE A COMPLETE AND FULLY OPERABLE INSTALLATION.

(N-4) WHITE FINISH EMERGENCY SIGN WITH BLACK WORDING TO READ "IN THE EVENT OF AN EMERGENCY PUSH EMERGENCY BUTTON AND AUDIBLE AND VISUAL SIGNAL WILL ACTIVATE" IN LETTERS AT LEAST 1" HIGH WITH A 1/5" STROKE. POST SIGN ABOVE THE PANIC BUTTON. SIGN SHALL COMPLY WITH OBC ARTICLE 3.8.3.12.

(N-5) PROVIDE 120V–24VAC TRANSFORMER TO POWER ALL DEVICES. CONNECT LINE SIDE OF TRANSFORMER TO CIRCUIT SHOWN FOR AUTOMATIC DOOR OPERATOR AT THE SAME DOOR. TRANSFORMER SHALL BE LOCATED IN ACCESSIBLE CEILING SPACE.

1 / E4.1 UNIVERSAL WASHROOM DETAIL

SCALE: NTS

HAMILTON-WENTWORTH DISTRICT SCHOOL BOARD

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