STEPHEN G. SAYWELL PUBLIC SCHOOL

OSHAWA, ONTARIO

THE DURHAM DISTRICT SCHOOL BOARD

CLIENT

SUSAN FRIEDRICH ARCHITECT INC.

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STRUCTURAL ENGINEERS

CIMA+

MECHANICAL AND ELECTRICAL ENGINEERS

LIST OF DRAWINGS

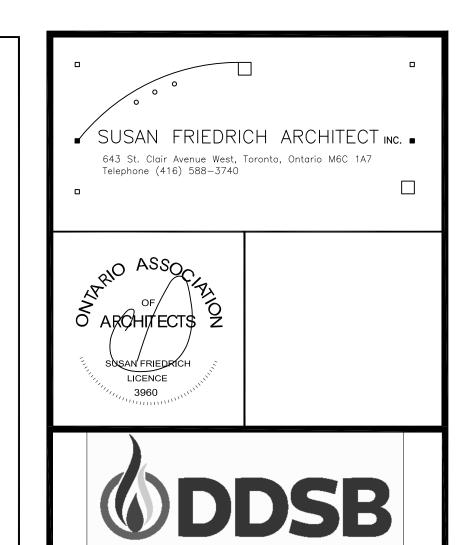
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DO NOT SCALE DRAWINGS.

2 JAN 31 2025 ISSUED FOR PERMIT AND TENDER 1 JAN 22 2025 ISSUED FOR CLIENT REVIEW Revisions, Issues

WASHROOM RENOVATIONS STEPHEN G. SAYWELL PS 855 ROUNDELAY DR. OSHAWA, ON L1J 7V1 T25-10

TITLE PAGE

As Noted JAN 2 2025 24-50

DATE PLOTTED: JAN 31 2025

STANDARD ABBREVIATIONS

MANY WORDS OR EXPRESSIONS THAT ARE REPEATED FREQUENTLY ON THE DRAWINGS ARE ABBREVIATED TO REDUCE THE AMOUNT OF WORDING THAT MIGHT ABSCURE THE DETAILING. TO AVOID MISINTERPRETATION, THESE ABBREVATIONS ARE LISTED, WITH THEIR FULL MEANING, IN THIS SECTION.

- REFER ALSO TO MECHANICAL AND ELECTRICAL DRAWINGS AND SPECIFCATIONS FOR OTHER ABBREVIATIONS USED IN MECHANICAL AND ELECTRICAL DOCUMENTS.
- ABBREVIATIONS NOT LISTED HERE MAY BE USED IN TECHNICAL SECTIONS OF THE SPECIFICATIONS AND ARE DEFINED. IN THE SPECIFCATION SECTIONS WHERE THEY ARE USED.

PT — porcelain tile

— resilient (base or flooring),

— radius, radiator

— roof drain

REV — revised or revision RFG — rigid fiberglass (insul.)

— rubber flooring

___ roof hopper

—— rubber tile

--- rubber

SCA, SCB — special coating

SD — soap dispenser

SPEC ____ specifications

SS — stainless steel,

SQ — square

STD — standard STM — storm

STR or ___ structural STRUC or STRUCT

SW — switch

SWBD — switchboard

TB — tackboard

TEL ____ telephone ___ terrazzo

T/0 ____ top of

TRANSF — transformer

T'STAT — thermostat

TYP — typical

UC — undercut

U/F — unfinished

UFD — underfloor duct

U/P or UP—— under painted U/S — underside

VAT — vinyl asbestos tile

VERT ____ vertical

VEST — vestibule

VOL ____ volume VWP — vinyl wall panel

VF — vinyl faced

WBLKG — wood blocking

WPG — wired plate glass

WR — washroom

VT ____ vinyl tile

WD — wood

WIN — window

WDW — window WP ____ waterproof WPFG ____ waterproofing

W/ with

VENT — ventilated, ventilator or

ventilation

UNO ___ unless noted otherwise

____ variable or varies

— vinyl composition tile

U — up

VAR

TT — terrazzo tile

TDD — towel dispenser

SFPRG — sprayed fireproofing SGL — single glazed

SND — sanitary napkin disposal

SPD — standard proctor density SPF — sports surface flooring

SRC — semi-recessed convector

or slop sink

— sheet vinyl flooring

— tread or terrazzo

T & G —— tongued and grooved

TD ____ toilet tissue dispenser

— tilted mirror TME ____ to match existing

— telephone pole

TRR — temperature rise rating

and disposal unit

SAN — sanitary

SECT — section

___ rough opening — receptacle panel

___ rainwater leader

(Type A,B, etc.)

SNV ___ sanitary napkin vendor/dispenser

---- stain ---- safety flooring

— resilient sheet flooring

— rubber sports flooring

REC ____ recessed RECP — receptacle REINF ____ reinforced

REQ, REQ'D - required

— recessed convector

— rubber continuous base

receptacle riser, or radius

QT — quarry tile

RCB

RUB

B						
## Comment of the control of the con	ΔR		anchor holt	FGB		folding grab bar
Maintain						
ACCUPATION Accused the prototy of the prototy o	A/C		air conditioning			
ACCOUNTS ACT	ACT	—	Acoustic tile			
		—				=
### ACC			· -	FPRG		fire proofing
AURUS, AL,				FRR	—	fire resistance rating
ASPM — consolate when when the content w						5
AP			anodized			
ASSPA	AP					
AND AVAILS	ASPH		asphalt			-
December Content Con	AVB, A/VE	3 ——	air/vapour barrier	GWB		_
Bar	BD		board	GWB-R		water resistant gypsum boo
200	BE		baked enamel	GBBH		gypsum board bulkhead
SILID	ВН		bulkhead			-
BUCK	BLDG		building			·
	BLK		block	GRND		ground
Bell	BLKG	—	blocking			
Bot						•
BS. E/5		—				
BOY						
SUR				HORIZ		horizontal
BUR					—	
File						
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CEM — cement CH — coothook CL — control joint CL — control joint CL — control joint CL — control ine CL — control CL — cont	C/C					
CH control joint CJ control joint CJ control joint CL centre line CLC centre CL	,					•
C	СН		coat hook			
C. JT	CJ		control joint			
CLC	C JT		construction joint		_	. ,
CLIS	CL	—	centre line			· ·
CLK	CLG		ceiling			
CLK	CLNG		ceiling			•
CLSS closet LSS light standard CON cleanout LSSJ long-span steel joist CON column M metres CONC concrete MACH mechine COND conduit MACH mechine CONN connector Construction MAX maximum CONV convector MECH mechanical CONV convector MECH mechanical COPC coment planet MEMB membrane CPC coment planet MEMB membrane CRC cold relled thanel MEMB membrane CRC cold relled thanel MEMB membrane CRS coversiones shelf MFR manufacture(r)/min. free reling CRC cold relled thanel MEZZ mezzonic CSK countersunk MFR manufacture(r)/min. free reling CT certic ME MFR manufacture(r)/min. free reling CW	CLK		caulk(ing)			
CO		—	closet			
COUL column CONC concrete COND conduit CONN connect or connection CONST construction CONST construction CONST construction CONST control panel CON convector COP control panel COP control panel COP control panel COP convenience shelf COP countersunk COP convenience shelf COP countersunk COP convenience shelf COP convenience shelf COP convenience shelf COP convenience shelf COP cold value COP coptatione waterproofing COP convenience wall tile COP coptatione waterproofing COP coptatione COP coptatione waterproofing COP coptatione COP copt				LSSJ		long-span steel joist
CONC concrete M metres COND conduit MACH monthine CONN connect or connection MAX maximum CONST construction MAX meximum CONY convector MECH methodine CP control panel MEL methodine CPC control panel MEL methodine CPC control panel MEL methodine CRC cold rolled chanel MEMB method CRS courses MEZZ mezzanne CSS countersunk MFR monufactured(r)/min. CSK countersunk MFR monufactured(r)/min. CTR centre MGTME make goad mothod CWP crystalline waterpraafing MR mine make goad mothod CWP crystalline waterpraafing MR mine make goad mothod DB1, DB2 decorative block MMSD minimum BB1, DB2<				LWB	_	lightweight concrete block
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CRC cold rolled chanel CRS courses CS convenience shell CSK countersunk CT ceramic tile CW cold water CWT ceramic wall tile DB1, DB2 decorative block DBT drinking fountain DG door grille DGL double glozed DIA dimension DIV division DD ditto DD ditto DD ditto DD ditto DD diston DD down DD down DD down DD down DD down DD down DD drain DC downspout DC downspout DC downspout DC dectrical change table ECC energency call system DC electrical change table ECC energency ELEC electrical ELEC electrical ELEC electrical ECC equal ECC equal ECC equal ECC electrical ECC equal ECC electrical ECC equal ECC electrical ECC epison ECC electrical ECC electrical ECC electrical ECC epison ECC epison ECC epison ECC electrical ECC epison ECC episo	CP		control panel	MEL	—	melamine
CRC courses CS — conversience shelf CSK — courtersunk CT — ceramic tile CTR — centre CW — cold water CWP — crystolline waterproofing CMT — ceramic block DB1 DB2 — decorative block DCT — detail DG — door grille DG — door grille DG — door grille DIM — dimension DIV — division DN — down DN — down DR — drain DR — d	CPC		cement plaster ceiling		_	
CRS — courses CS — convenience shelf CSK — countersunk CT — ceramic tile CTR — centre CW — cold water CWT — ceramic wall tile DB1, DB2 — decorative block DCT — detail DG — door grille DGL — double glazed DIA — diameter DIM — dimension DIV — division DIV — division DIV — down NTS — not to scale DR — drain DR — drain DR — drain DR — downspout DR — drain DR — dr	CRC		cold rolled chanel			
CS — converience shelf CSK — countersunk CT — ceramic tile	CRS	—	courses			
CSK countersunk CT ceramic tile CTR centre CW cold water CW cold water CW crystelline waterproofing CWT ceramic wall tile DB1, DB2 decorative block DET detail DG door grille DG door grille DG door grille DG door grille DG door door ditto DIM dimension DIV division DN down DR drain DS downspout DR drain DR			convenience shelf			
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CW cold water CWP crystalline waterproofing CWT ceramic wall tile DB1, DB2 decorative block DET detail DF detail DF done glazed DG door grille DG dobe glazed DIA diameter DIM dimension DIV division DN down DN down DR drowing EC emergency call system ECT electrical change table ELEC electrical ELEC erregency EMERG emergency EMERG emergency EMERG emergency EMERG equal EQUIP equipment EWC electric water cooler EWC electric water cooler EWC esterior EXT exterior FA fire alarm FD floor drain, or fire damper FDN foundation MR mannhole MIR minima MIS misclellaneus MIS moisture resistance MIR mosture resistance MIR misclellaneus MIS moisture resistance MIR mosture MIS moisture resistance MIS moisture resistance MIS moisture resistance MIT mosture MIS moisture resistance MIT mosture MIS not of sincle unable tile MR moisture resistance MIT mosture MIS moisture resistance MIT mosture MIS moisture MIS moisture resistance MIT mosture MIS not of sincle unable MIT mosture MID not not property MID on to included in contract NO not number not oscale MID not not poscale MID not not not sole MID not not poscale MID not not not sole MID not not sole					—	-
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DO	DIV		division			
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DS		—				
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FA — fire alarm PLAM — plastic laminate FD — floor drain, or PLT — plate fire damper PLSTR — plaster FDN — foundation PLYWD — plywood	EXT	_	exterior	PL		plaster, plate, or property line
fire damper PLSTR — plaster FDN — foundation PLYWD — plywood		—		PLAM		plastic laminate
FDN — foundation PLYWD — plywood	FD	—				· ·
DNI	EDN					
	F D N F E	_	fire extinguisher		_	panel

PTN — partition

PTD ____ paper towel dispenser

FE ____ fire extinguisher FEC ____ fire extinguisher cabinet

FF — force flow heater

F.F. — Finished Floor

GENERAL NOTES

- ALL DRAWINGS ARE THE PROPERTY OF THE ARCHITECT. DRAWINGS MUST NOT BE SCALED, THE CONTRACTOR IS TO VERIFY ALL DIMENSIONS AND CONDITIONS ON SITE PRIOR TO PROCEEDING. DISCREPANCIES ARE TO BE REPORTED TO THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK AFFECTED, FOR DIRECTION.
- ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO REQUIREMENTS OF THE ONTARIO BUILDING CODE LATEST EDITION AND THE OCCUPATIONAL HEALTH AND SAFETY ACT/REGULATIONS FOR CONSTRUCTION PROJECTS. COMPLY WITH ALL MUNICIPAL REGULATIONS.
- CONFORM TO OWNER'S GENERAL SPECIFICATIONS INCLUDING ALL SAFETY REQUIREMENTS.
- NOTIFY THE CONSULTANT PRIOR REMOVING ANY PORTION OF THE BUILDING THAT APPEARS TO BE STRUCTURAL REGARDLESS OF THE NOTATION ON THE DRAWINGS AND SPECIFICATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE EXISTING BUILDING AND EQUIPMENT AND REPAIR SAME TO THE SATISFACTION OF THE OWNER AND CONSULTANT. REPAIR ALL EXISTING JOINTS, FINISHES, ADJACENT SURFACES, ETC. WHERE NEW WORK JOINS. PROTECT EXISTING FROM DAMAGE DURING WORK. REPAIR ANY

DAMAGE THAT SHOULD OCCUR.

KEEP THE SITE THROUGHOUT THE WORK AREA IN A CLEAN AND ORDERLY CONDITION AT ALL TIMES TO THE SATISFACTION OF THE OWNER.

DEMOLITION NOTES

- ALL EXISTING ITEMS NOT INCORPORATED INTO THE REVISED LAYOUT TO BE REMOVED AND DISPOSED.
- 2. DISPOSE OF MATERIALS IN LEGAL LANDFILL OR RECYCLING SITES IN ACCORDANCE WITH THE REGION OF YORK REGULATIONS.
- 3. ALL EXISTING SURFACES AND PARTITIONS ETC. WHICH ARE TO REMAIN SHALL BE PROTECTED DURING DEMOLITION.
- 4. MAKE GOOD ALL DISTURBED SURFACES, ADJACENT FLOORS, WALLS AND CEILINGS TO MATCH EXISTING AFTER COMPLETION OF WORK, UNLESS OTHERWISE NOTED.

CONSTRUCTION NOTES

- MAINTAIN ANY EXISTING FIRE RATED SEPARATIONS & ASSEMBLIES. MAKE GOOD ANY FIREPROOFING DISTURBED BY CONSTRUCTION.
- 2. GENERAL CONTRACTOR SHALL CUT WALLS, FLOOR ETC., FOR MECHANICAL AND ELECTRICAL ACCESS AND SERVICES TO SUIT REQUIRED DIMENSIONS.
- 3. FILL ALL OPENINGS & CRACKS DUE TO REMOVAL OF EXISTING PIPES, DUCTS, CONDUITS &
- FITMENTS PRIOR TO FINISHING FLOORS & WALLS. MAKE COOD ALL DENETRATIONS THROUGH FIRE SEDARATIONS ALL DENETRATIONS TO BE SEALED WITH RATED MATERIAL. REPAIR EXISTING SPRAYED ON FIREPROOFING AT ALL

EXISTING DAMAGED AREAS AND WHERE DISTURBED BY THE WORK OF THIS CONTRACT.

5. MODIFY TELEPHONE, ELECTRICAL, ALARM & HVAC AS REQUIRED REFER TO M&E

MAXIMUM FLAME - SPREAD RATING OF 150 FOR ALL INTERIOR FINISHES.

- 6. ALL EXPOSED DUCTWORK, CONDUIT AND M/E EQUIPMENT TO BE PAINTED TO MATCH ADJACENT SURFACES UNLESS SPECIFICALLY NOTED. CONFIRM ALL FINISHES WITH ARCHITECT PRIOR TO
- 7. SEE M & E DRAWINGS FOR RE-LOCATION AND/OR REMOVAL OF OBSOLETE EQUIPMENT. PATCH & MAKE GOOD AND FINAL FINISH TO MATCH NEW CONDITION
- 8. HAZARDOUS AND DESIGNATED SUBSTANCES IF HAZARDOUS MATERIALS / DESIGNATED SUBSTANCES ARE ENCOUNTERED DURING CONSTRUCTION, OWNER IS TO BE NOTIFIED IMMEDIATELY. MATERIALS ARE NOT TO BE REMOVED BY CONTRACTOR, CONTRACTOR TO COORDINATE W/ OWNER AND OWNER'S CONTRACTOR.
- SYSTEM, PATCH OVER AND SEAL, ALL CUTTING, DRILLING AND BORING OF EXISTING FLOOR OR STRUCTURAL CEILING SLAB MUST ENSURE INTEGRITY OF STRUCTURAL SYSTEM (IE. REBAR, STEEL, ETC.) FIRE PROTECTION AND AIR TIGHTNESS ARE MAINTAINED. 10. COORDINATE ALL CUTTING AND PATCHING AROUND SERVICES ETC. PENETRATING EXISTING OR NEW WALLS TO MAINTAIN STRUCTURAL. FIRESTOPPING AIR TIGHTNESS INTEGRITY AND

PROVIDE COVERS FOR ALL OPENINGS, SOCKETS, ETC, TO EXISTING UNDER FLOOR RACEWAY

- APPEARANCE, FINISH ALL OPENINGS AROUND DUCTS & OTHER OPENINGS, ETC WITH DRYWALL PRIOR TO DUCT PLACEMENT-TAPE, SEAL & PRIME. PROVIDE FIRE STOPPING / AIR BARRIER SEALANT BETWEEN DUCT, ETC. AND DRYWALL PERIMETER. MAKE GOOD ALL SURFACES FOR FINAL FINISH.
- 11. ALL EQUIPMENT LOCATIONS TO BE COORDINATED WITH THE OWNER, EQUIPMENT LOCATIONS INDICATED ARE FOR INFORMATION ONLY - CONTRACTOR TO COORDINATE INTERACTING TRADES TO FACILITATE FULL OPERATION WHEN THE EQUIPMENT IS INSTALLED BY OWNER.
- 12. MODIFY CEILING & LIGHTING AT EXISTING AREAS AS REQ'D

ENTIRE FLOOR AREA:

- 13. CONTRACTOR SHALL CHALK LINE ALL PARTITIONS AND EQUIPMENT POSITIONS FOR REVIEW & APPROVAL BY OWNER PRIOR TO COMMENCEMENT OF WORK. IF CONFLICT ARISES BETWEEN DRAWINGS AND FIELD MEASUREMENTS THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE ARCHITECT FOR DIRECTION. AT NO TIME SHALL THE CONTRACTOR PROCEED IN UNCERTAINTY.
- 14. ALL ELECTRICAL BOXES, PENETRATIONS, ETC. THROUGH WALLS DESIGNATED TO BE AIR-TIGHT TO BE AIR SEALED.
- 15. ELECTRONIC COPIES OF THE ARCHITECTURAL DRAWINGS FOR THIS PROJECT FOR USE IN THE PREPARATION OF SHOP DRAWINGS AND AS-BUILT DRAWINGS (AND FOR NO OTHER PURPOSE) ARE AVAILABLE DRAWINGS ARE IN AUTOCAD (LATEST VERSION) FILE FORMATS. THE DRAWINGS ARE AVAILABLE AS-IS AND AT A COST OF \$100.00 PER DRAWING WITH A MINIMUM OF \$400.00 PER THE DRAWINGS WILL BE PROVIDED WITHOUT ANY TITLE BLOCKS OR SEALS.

DRAWING SYMBOL LEGEND

NOTE: NOT ALL TYPES ARE NECESSARILY USED ON THIS PROJECT. REFER TO FLOOR PLANS.



BUILDING CROSS SECTION, SECTION NO. AND SHEET DRAWN ON



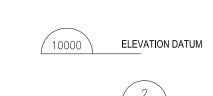
WALL CROSS SECTION, SECTION NO. AND SHEET DRAWN ON



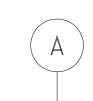
INTERIOR ELEVATION REFERENCE NUMBERS INDICATE VIEW NUMBER

WALL

TYPE



DETAIL REFERENCE BUBLE, DETAIL NO. AND SHEET DRAWN



GRID LINE AND BUBBLE REFERENCE



DETAIL REFERENCE BUBLE, CEILING TYPE AND CEILING HEIGHT A.F.F.



DOOR NUMBER - FIRST FLOOR AT ROOM NO. A105



SCREEN NUMBER

ROOF TYPE

WINDOW NUMBER

WALL TYPE



NAME

ROOM NAME AND NUMBER



COMMENCING CONSTRUCTION



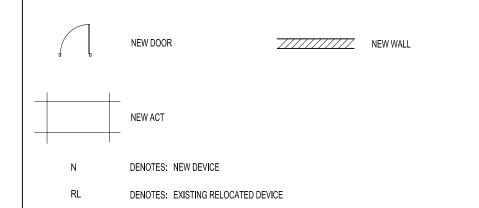
EXISTING FINISH FLOOR ARE APPROXIMATE; SITE VERIFY PRIOR TO

DEMOLITION LEGEND

	EXISTING DOOR TO REMAIN	EXISTING WALL TO REMAIN
	DOOR TO BE DEMOLISHED	 WALL TO BE DEMOLIS
	ACT TO BE DEMOLISHED	EXISTING ACT TO REMAIN

- DENOTES: EXISTING DEVICE TO REMAIN
- DENOTES: EXISTING DEVICE TO BE RELOCATED
- DENOTES: EXISTING DEVICE TO BE REMOVED AND DISPOSED
- REFER TO MECHANICAL & ELECTRICAL DRAWINGS FOR LIGHT FIXTURES, GRILLES, DIFFUSERS & DEVICES, LOCATIONS TO BE CONFIRMED.

CONSTRUCTION LEGEND



WALL TYPE SCHEDULE

CONSTRUCTION

- ALL PENETRATIONS IN FIRE RATED WALLS & JUNCTIONS TO BE FIRESTOPPED & SEALED WITH RATED MATERIAL. ALL FIRE SEPARATION PARTIONS (INCLUDED 0HR RATED WALLS AT CORRIDORS) TO EXTEND TO U/S OF SLAB OR MTL. DECK AND TO BE FIRESTOPPED & SEALED WITH
- RATED MATERIAL TO DECK, SLAB & ADJ. WALLS. ALL PARTITIONS TO EXTEND TO U/S OF SLAB OR MTL. DECK UNLESS OTHERWISE NOTED. ALL EXPOSED MASONRY CORNERS TO BE BULLNOSED - TYPICAL.

CONCRETE BLOCK 90mm 75% SOLID 140mm STANDARD 140mm 75% SOLID 190mm 75% SOLID

DESCRIPTION

140mm CONCRETE BLOCK

FIRE SHIELD ALL SIDES.

140mm CONCRETE BLOCK

NOTE: HEIGHT AS PER INTERIOR

INTERIOR LIGHT WEIGHT MASONRY WALL

NOTE: WALL TO BE EXTENDED TO U/S

INTERIOR LIGHT WEIGHT MASONRY WALL

ELEVATIONS — USE BULL NOSED UNITS AT EXPOSED CORNERS

INTERIOR ACOUSTIC WALL PARTITION

±92mm METAL STUDS @ 400mm O.C.

NOTE: WALL EXTENDED TO U/S STRUCTURAL DECK. PLYWOOD TO EXTEND 100MM ABOVE

INTERIOR ACOUSTIC WALL PARTITION

±92mm METAL STUDS @ 400mm O.C.

NOTE: WALL EXTENDED TO U/S STRUCTURAL DECK. PLYWOOD TO EXTEND 100MM ABOVE

16mm IMPACT-RESISTANT GWB

16mm IMPACT-RESISTANT GWB

±89mm ACOUSTIC BATTS

±89mm ACOUSTIC BATTS

16mm IMPACT-RESISTANT GWB

INTERIOR ACOUSTIC WALL PARTITION

±92mm METAL STUDS @ 600mm O.C.

16mm IMPACT-RESISTANT GWB

16mm IMPACT-RESISTANT GWB

NOTE: WALL TO BE EXTENDED TO

UNDERSIDE OF SLAB.

±89mm ACOUSTIC BATTS

19mm PLYWOOD

19mm PLYWOOD

19mm PLYWOOD

CEILING.

OF STRUCTURAL DECK + SMOKE AND

MINIMUM FIRE RATING

TRANSMISSION CLASS

1 HR. FIRE RATING

2.1.1. TABLE 2.2.1

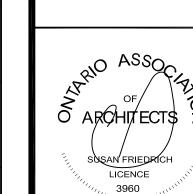
1HOUR FIRE RATING

SOUND: NRC TL-93-324

ULC DESIGN W415

O.B.C. SB-2 SUPP.STD.

AND SOUND





SUSAN FRIEDRICH ARCHITECT INC. .

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Telephone (416) 588-3740

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JAN 31 2025 ISSUED FOR PERMIT AND TENDER 1 JAN 22 2025 ISSUED FOR CLIENT REVIEW Revisions, Issues

WASHROOM RENOVATIONS STEPHEN G. SAYWELL PS

855 ROUNDELAY DR. OSHAWA, ON L1J 7V1

EGEND AND GENERAL NOTES

As Noted JAN 2 2025

DATE PLOTTED: JAN 31 2025

24-50

Name of Practice: Susan Friedrich Architect Inc. 643 St. Clair Ave. West Toronto ON M6C 1A7

Name of Project: Stephen G. Saywell Public School – Washroom Renovations

Location: 855 Roundelay Dr., Oshawa, ON L1J 7V1

Date: January 31, 2025



	20	24 Ontario Buil Part 11	ding Code Dat – Renovation	a Matrix			Building Code Reference ¹
11.00	Building Code Version:	O. Reg. 163/24	Last Amen	dment	O. Reg. 4	147/24	
11.01	Project Type:	☐ Addition ☐ Change of use Description: <u>Int</u>	☑ Renovation erior Renovation to \ ■ The state of		dition and rer at 2 nd Floor	novation	[A] 1.3.3.3B.
11.02	Major Occupancy Classification:	Occupancy A2	Use Elementary Sch	ool			3.1.2.1.(1), 2.1.4.1.(1), and 11.2.1.
11.03	Superimposed Major Occupancies:	⊠ No □ Yes Description:					11.2 , 3.2.2.5. to 3.2.2.8., and 2.2.1.
11.04	Building Area (m²) Insert additional lines as needed	Description: Stephen G. Saywe proposed renovation		3050 0 0 0 0	0	Total 3050 0 0 0 3050	[A] 1.4.1.2., 11.2 and 11.3.
11.05	Building Height		reys above grade reys below grade	0	(m) Above	grade	[A] 1.4.1.2., 3.2.1.1., 2.2.2.2., and 11.3.
11.06	Number of Streets/ Firefighter Access	1_street(s)					3.2.2.10., 3.2.5., 2.2.4.1., and 11.3.
11.07	Building Size	☐ Small ☐	Medium 🗆 L	arge	□ > Large		11.2.1.1., and T.11.2.1.1.B-N.

Ontario Building Code Data Matrix, Part 11
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11.08	Existing Building Classification:	Change in Major Occup	ancy: Yes Not Applicable (no change of major occupanc	10.1.1.2., 11.2.1.1.
		Construction Index:	0	T 11.2.1.1.A
		Hazard Index:	0	T 11.2.1.1.B to N
		Importance Category :	□ Low □ Normal □ High □ Post-disaster	4.1.2.1.(3), 2.3.1., and 5.2.2.1.(2)
11.09	Renovation Type:	⊠ Basic Renovation	☐ Extensive Renovation	11.3.3.1., and 11.3.3.2.
11.10	Occupant Load	Floor Level/Area	Occupancy <u>Based On</u> Occupant <u>Type</u> (Persons)	
	EXISTING			<u>o</u> _
				0
				0
	Insert additional lines as needed			0_
11.11 a	Plumbing Fixture Requirements	Ratio: <u>M:F = 50:</u>	0 Except as otherwise noted	3.7.4., 11.3.4., 11.3.5., 11.4.2.4 and 11.4.2.5.
		Floor Level/Area	Occupant OBC WCs WCs Load Reference Required Property	<u>Os</u> ovided
		2 nd Floor	Existing 3.7.4.3.(14) 0 7 (new)_
			0 0	0
	Insert additional lines as			0
	needed		0	0
11.11 b	Plumbing Fixture Requirements continued:	(repeated)	Barrier-free <u>Barrier-free</u> <u>Universal</u> <u>Universal</u> <u>Universal</u> <u>Universal</u> <u>Washrooms</u> <u>Washrooms</u> <u>Washrooms</u> <u>Provided</u> <u>Required</u> <u>Provi</u>	rooms and 3.8.2.3.B
		2 nd Floor	1 2 0	0
			00	0
	Insert additional lines as needed		00	0_
			00	0
11.12	Barrier-free Design:	existin	dual Barrier Free Washrooms proposed to repla B/F WC stall in Girls WR and 1 existing B/F W WR (total 2).	
	Barrier-free Entrances:	Number EXIST	NG	

Ontario Building Code Data Matrix, Part 11
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11.13	Reduction in	Structural:	⊠ No	□ Yes	11.4.2.1.
	Performance Level:	By Increase in occupant load:	⊠ No	□ Yes	11.4.2.2.
		By change of major occupancy:	⊠ No	□ Yes	11.4.2.3.
		Plumbing:	⊠ No	□ Yes	11.4.2.4.
		Sewage-systems:	⊠ No	□ Yes	11.4.2.5.
		Extension of buildings of combustible construction:	⊠ No	□ Yes	11.4.2.6.
11.14	Compensating Construction:	⊠ No □ Yes			11.4.3.1.
	Construction.	Structural:	□ Yes	(Describe)	11.4.3.2.
		Increase in occupant load: No	□ Yes	(Describe)	11.4.3.3.
		Change of major occupancy: ☐ No	□ Yes	(Describe)	
		Plumbing:	☐ Yes	(Describe)	11.4.3.5.
		Sewage systems: □ No	□ Yes	(Describe)	11.4.3.6.
		Extension of buildings of combustible construction:	□ Yes	(Describe)	11.4.3.7.
11.15	Compliance Alternatives Proposed:	⊠ No □ Yes			11.5.1.
	Insert additional lines as needed				_
11.16	Alternative Solutions				[A] 1.2.1.1., a
	Insert additional lines as needed			,	
11.17	Notes:			,	
				,	
	Insert additional lines as needed				—

1 All references are to Division B of the OBC, unless preceded by [A] for Division A and [C] for Division C.

Ontario Building Code Data Matrix, Part 11
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January 2025

NOTES ON WC REQUIREMENTS:

TOTAL OCCUPANT LOAD: 213 FEMALE 213 MALE

TOTAL PROPOSED STUDENT WC'S

AFTER RENOVATION:

11 FEMALE 10 MALE

TOTAL CAPACITY PER 3.7.4.3.(14): 286 FEMALE 300 MALE

PROPOSED WASHROOMS ON 2ND FL + EXISTING WASHROOMS ON GROUND FL EXCEED OBC REQUIREMENTS BASED ON OCCUPANT LOAD SUSAN FRIEDRICH ARCHITECT INC. 643 St. Clair Avenue West, Toronto, Ontario M6C 1A7 Telephone (416) 588-3740





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Revisions, Issues

WASHROOM RENOVATIONS

STEPHEN G. SAYWELL PS

855 ROUNDELAY DR. OSHAWA, ON L1J 7V1

OBC DATA MATRIX

As Noted JAN 7 2025

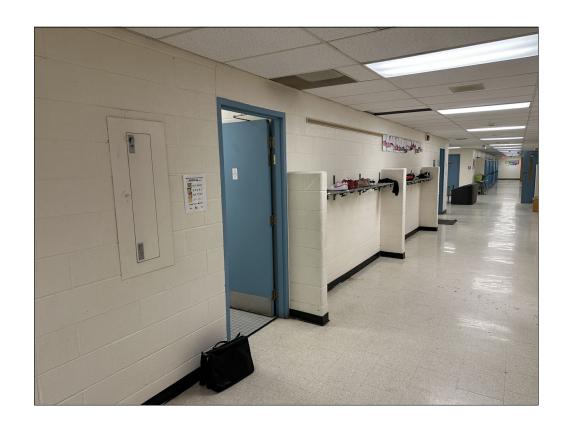
24-50

T25-10 🖔 🖔

DATE PLOTTED: FEB 05 2025









3 EXISTING PHOTOS - CORRIDOR 221







2 EXISTING BOYS WR 216







1 EXISTING GIRLS WR 217







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OSHAWA, ON L1J 7V1

Revisions, Issues

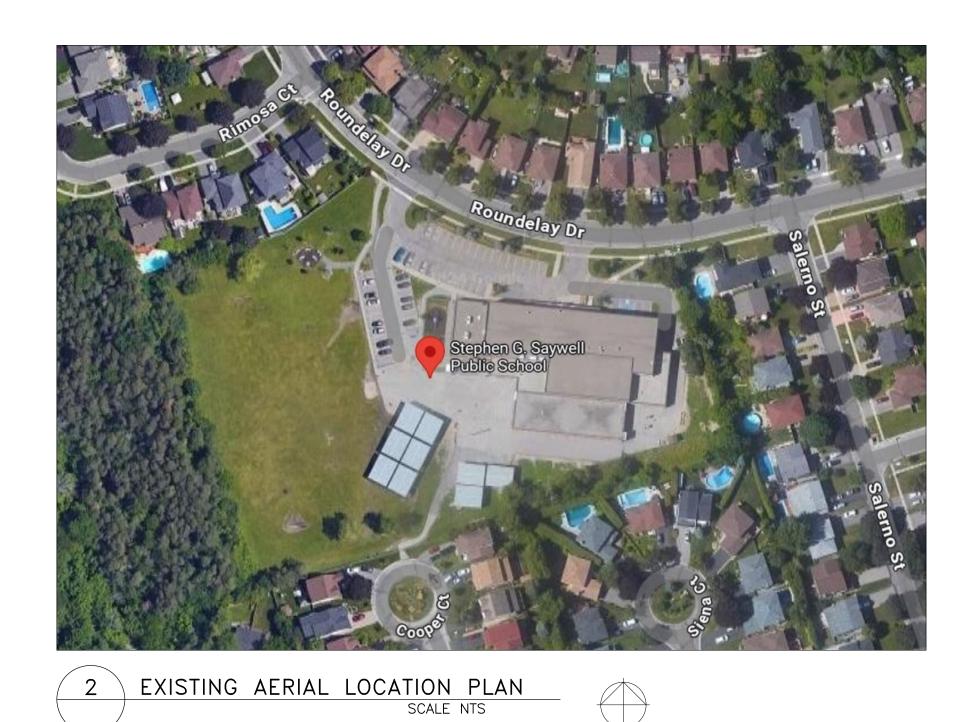
EXISTING PROJECT PHOTOS

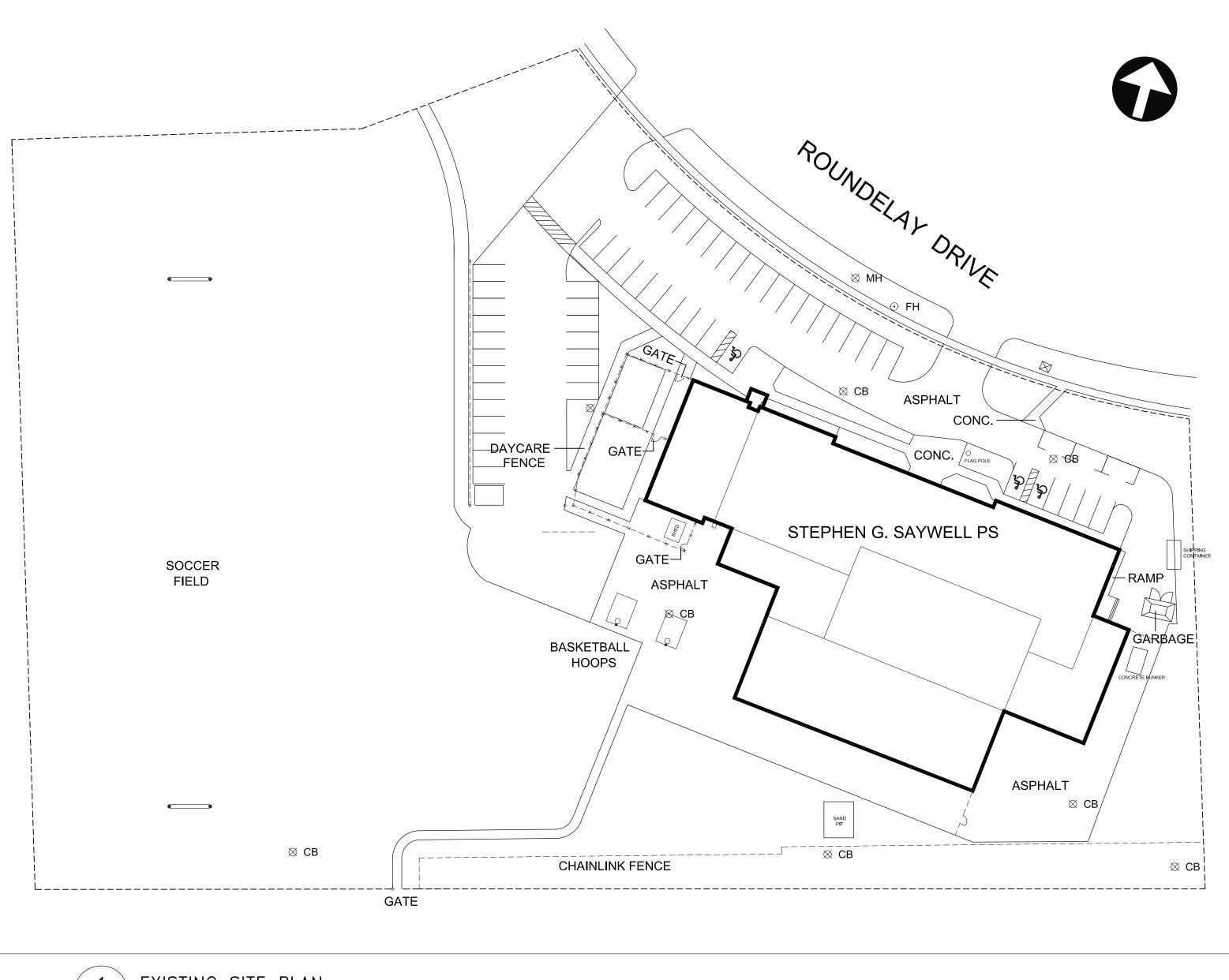
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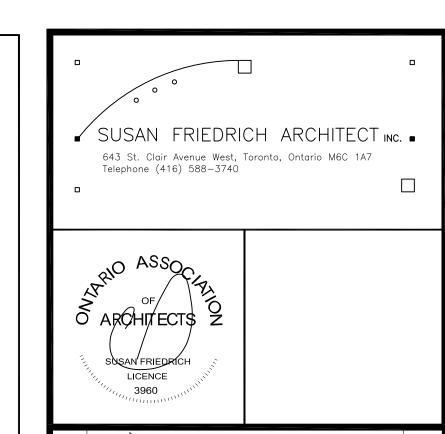
[-1.0

DATE PLOTTED: JAN 31 2025





1 EXISTING SITE PLAN
SCALE 1:500





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Revisions, Issues

EXISTING SITE PLAN

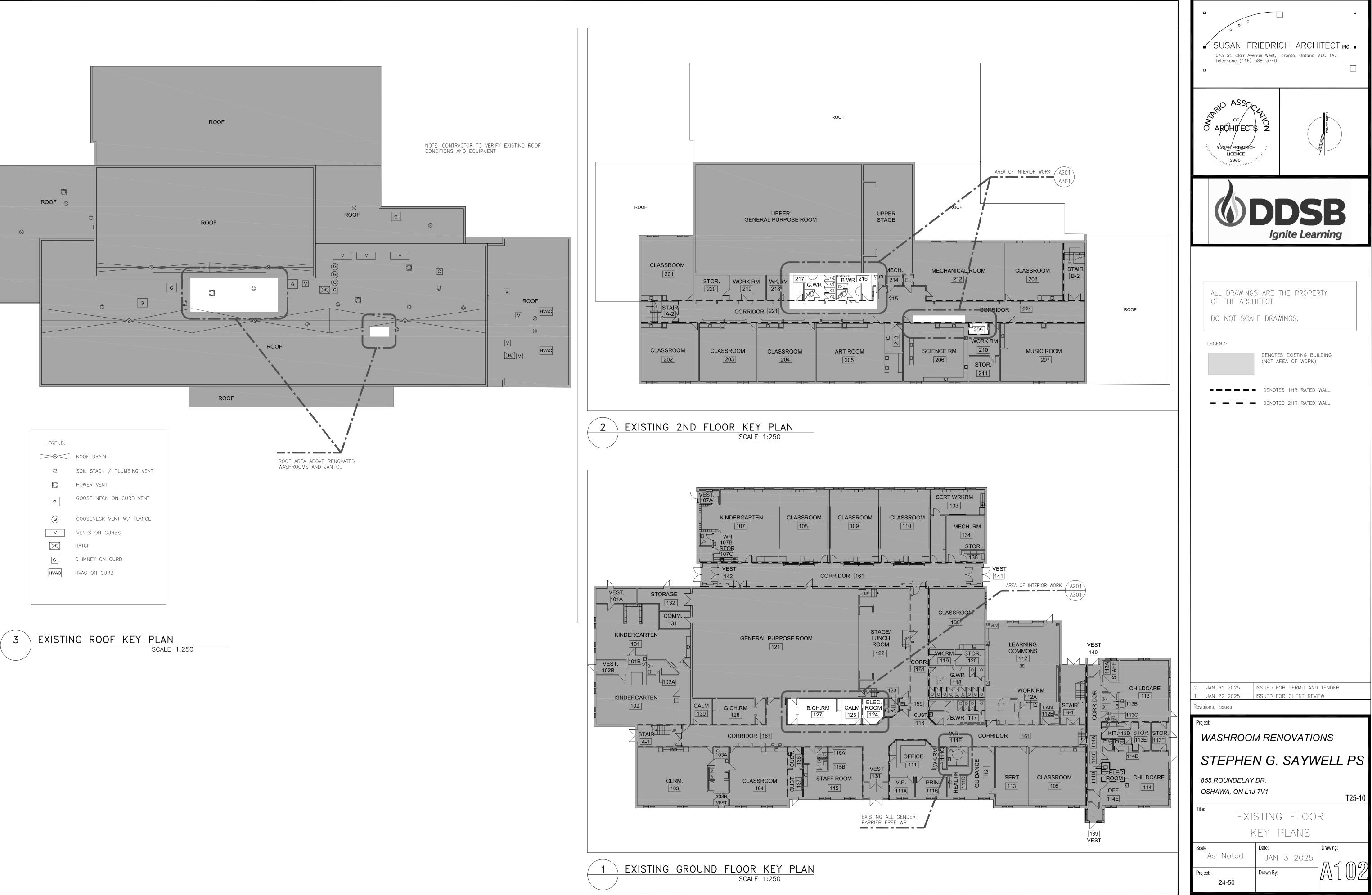
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 Date:

 As Noted
 JAN 6 202

 Project:
 Drawn By:

DATE PLOTTED: JAN 31 2025

PLOT SCALE: 1:1 AT 24"x36" SHEET SIZE. READ DRAWING ACCORDINGLY.



DATE PLOTTED: JAN 31 2025

EXISTING FLOOR

KEY PLANS

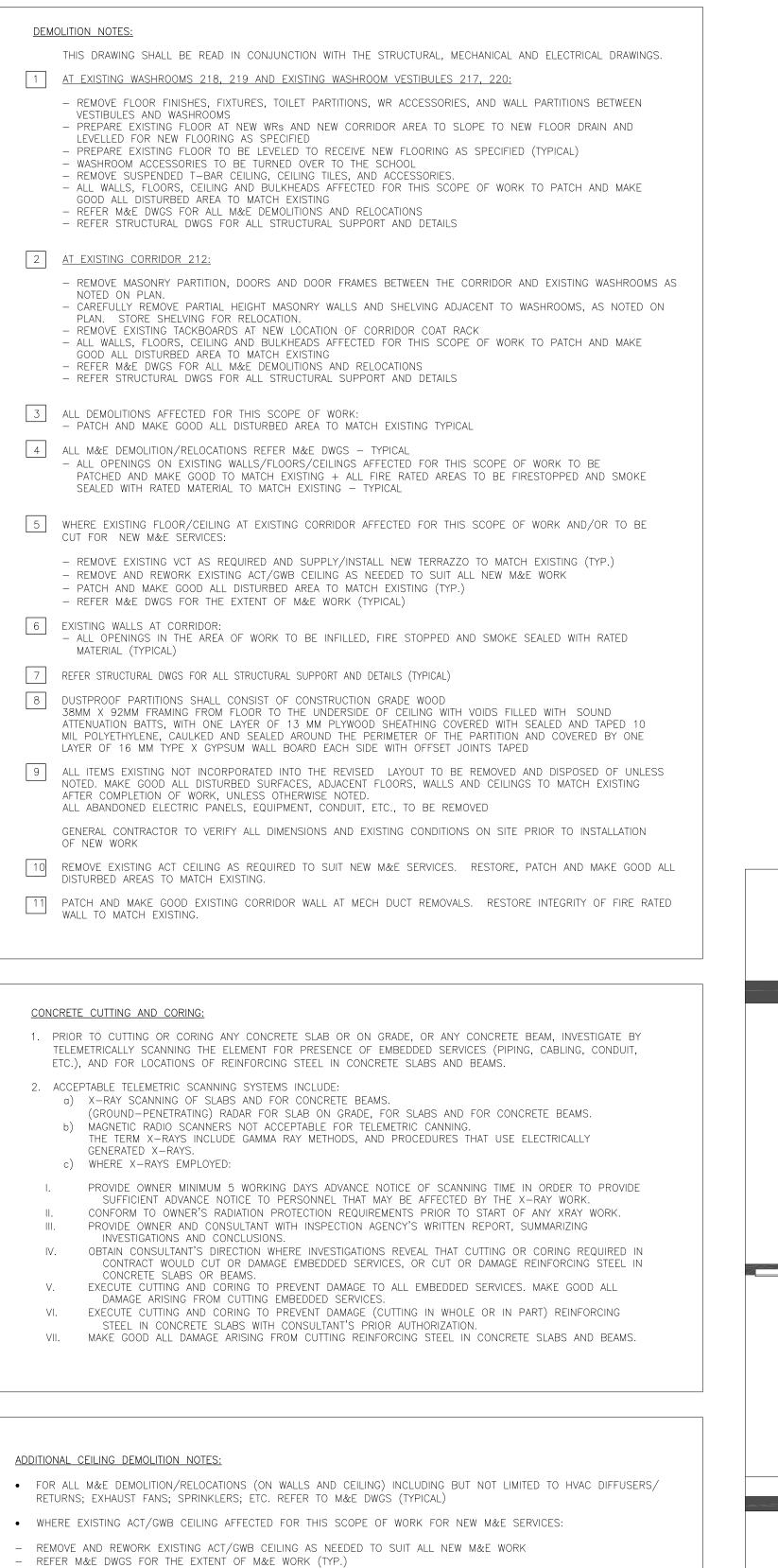
JAN 3 2025

T25-10

Ignite Learning

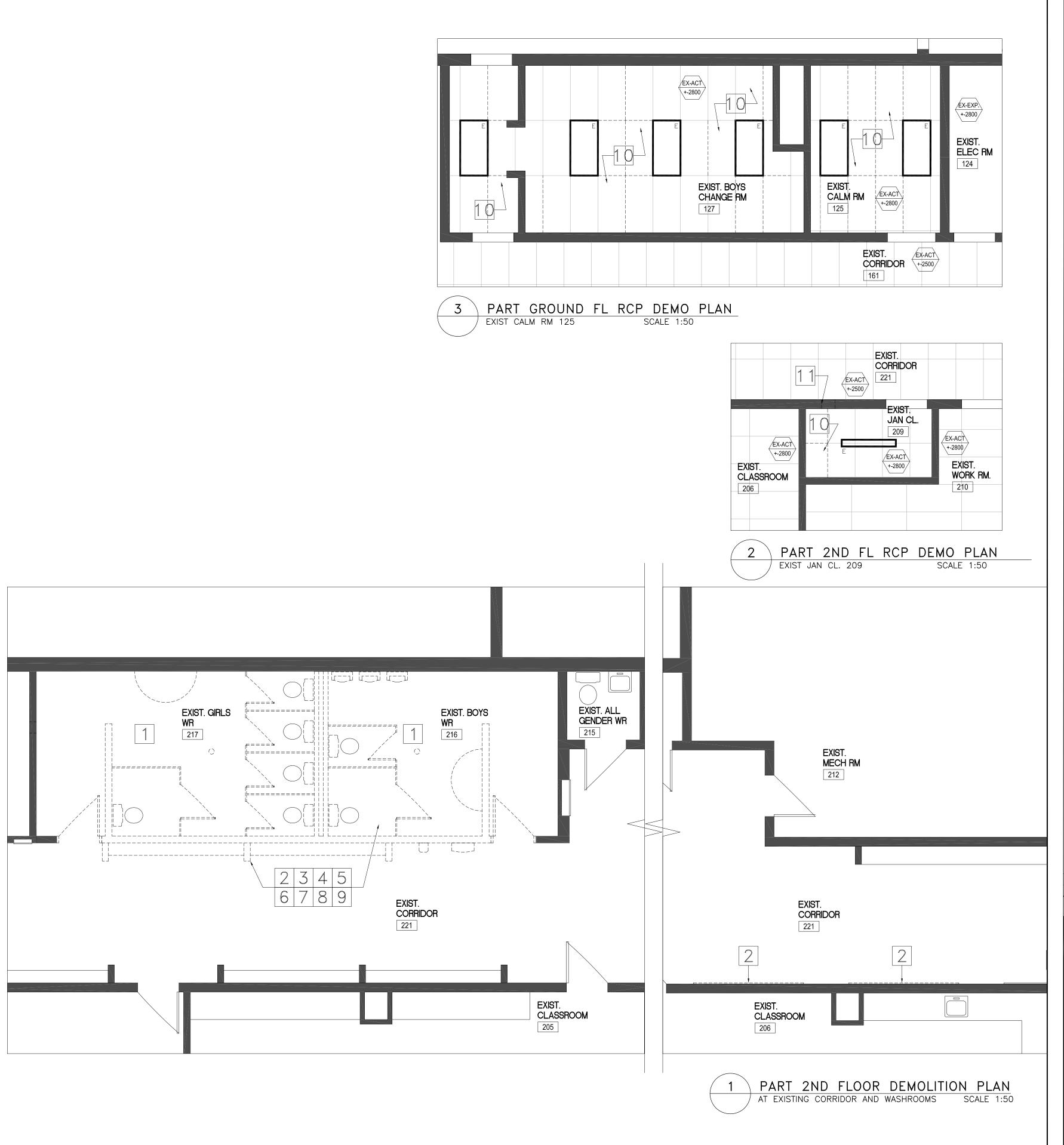
DENOTES EXISTING BUILDING

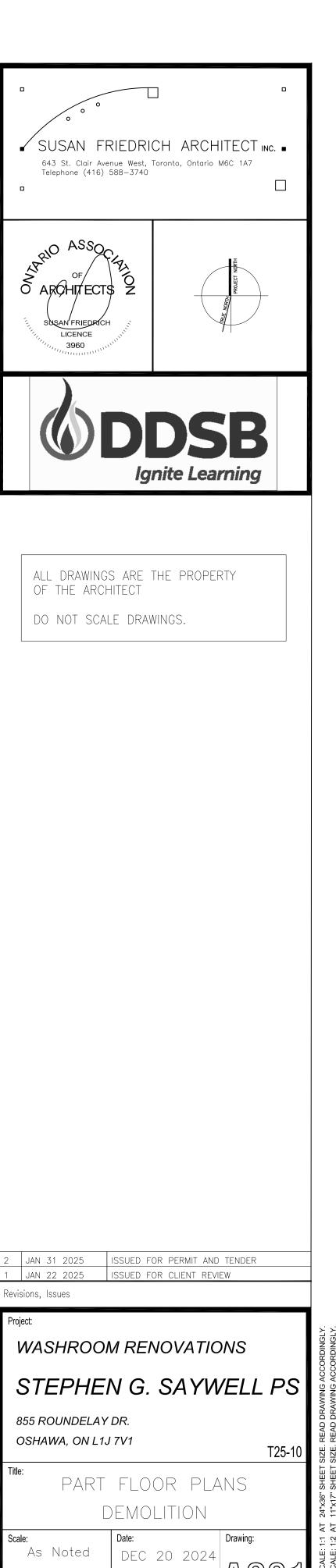
(NOT AREA OF WORK)



PATCH AND MAKE GOOD ALL DISTURBED AREA TO MATCH EXISTING (TYP.)

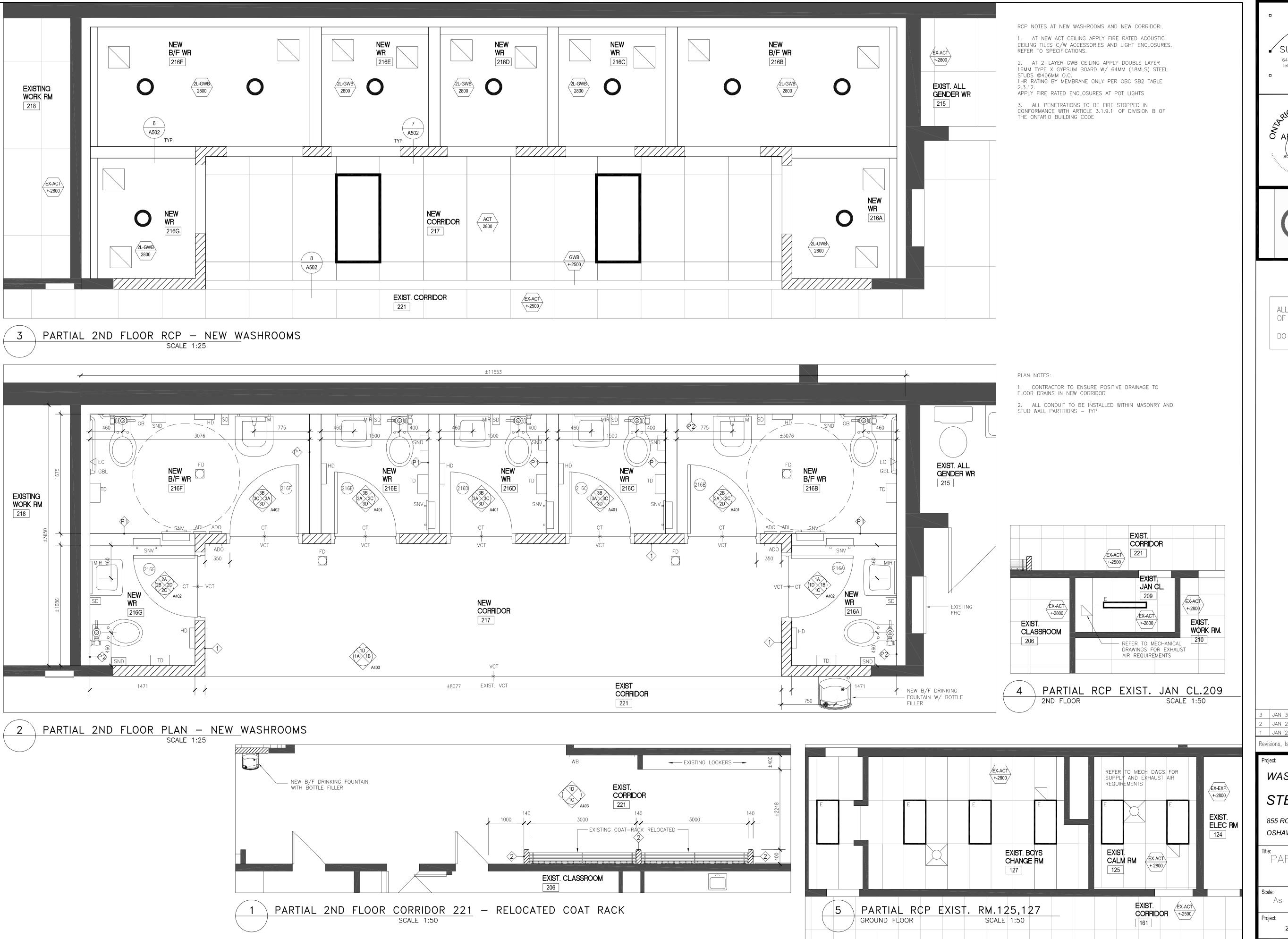
ALL DISTURBED FIREPROOFING AREA TO BE RESTORED, FIRE-STOPPED AND SMOKE SEALED TO MATCH EXISTING TYP.





DATE PLOTTED: FEB 06 2025

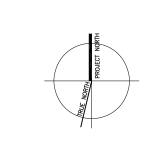
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Revisions, Issues

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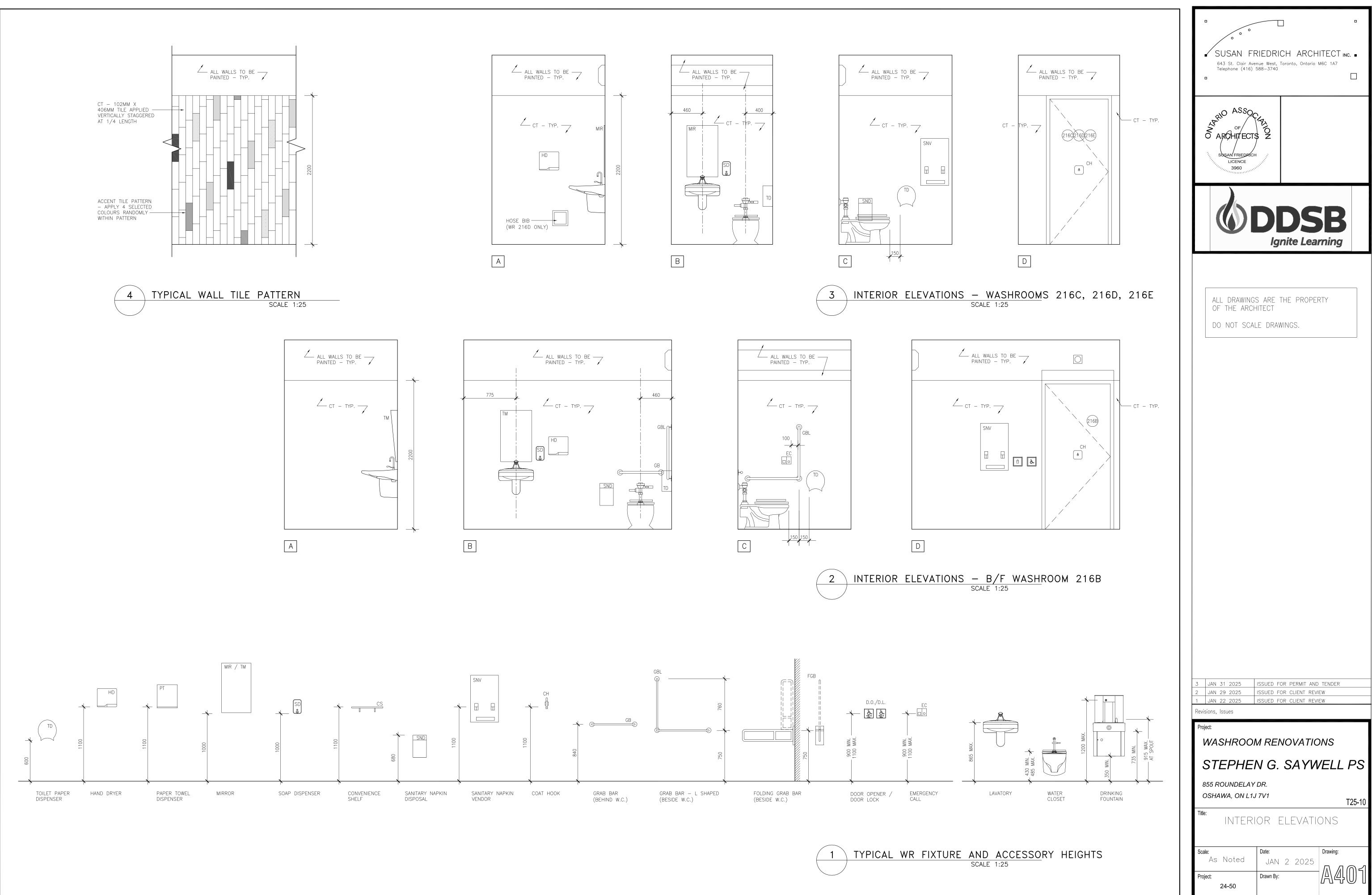
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PART FLOOR PLANS + RCP

As Noted Date:
DEC 20 2024
Project:
Drawn By:

DATE PLOTTED: JAN 31 2025



DATE PLOTTED: JAN 31 2025

24-50

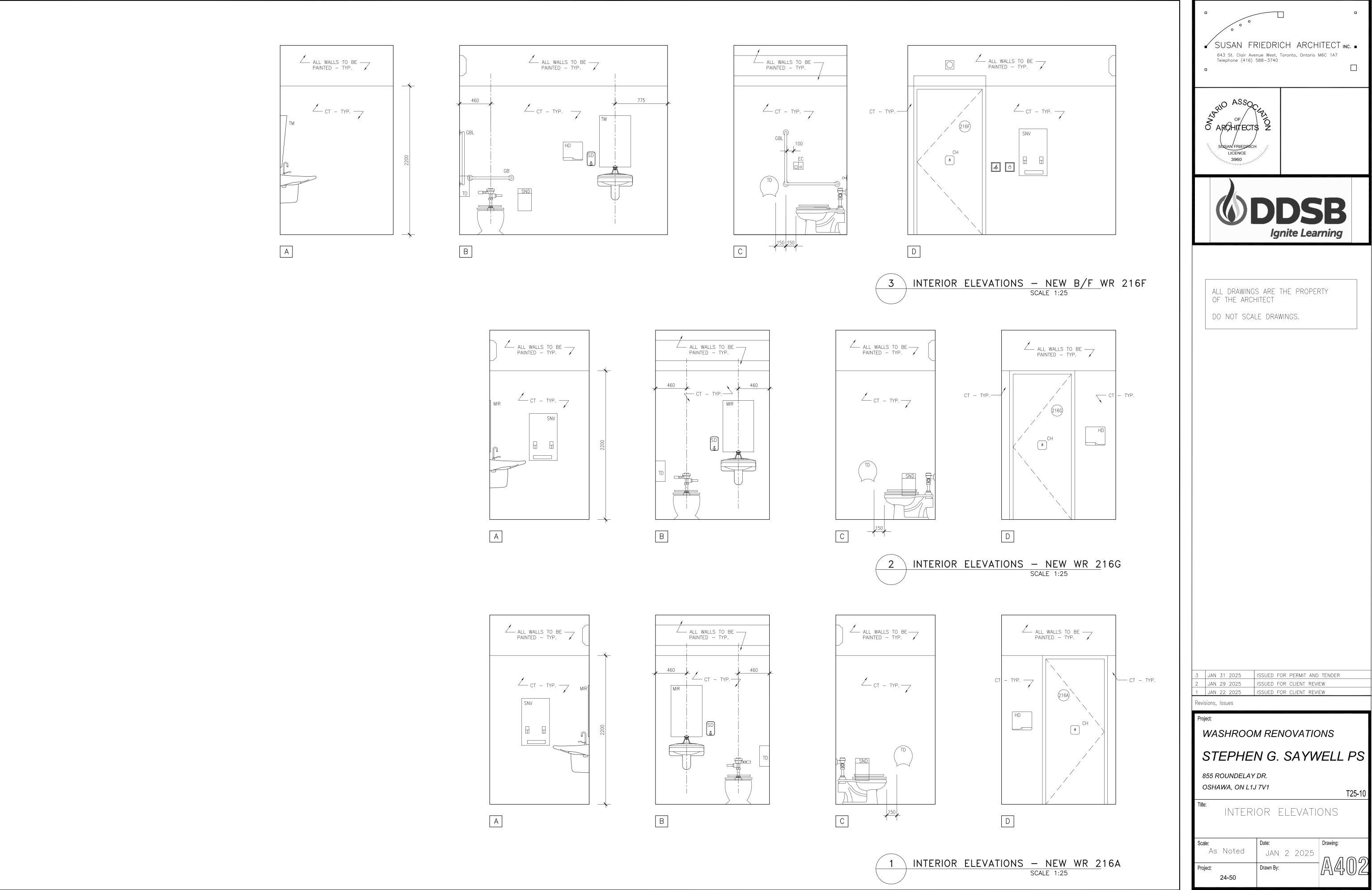
ISSUED FOR CLIENT REVIEW

INTERIOR ELEVATIONS

JAN 2 2025

T25-10

Ignite Learning



DATE PLOTTED: JAN 31 2025

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T25-10

Ignite Learning

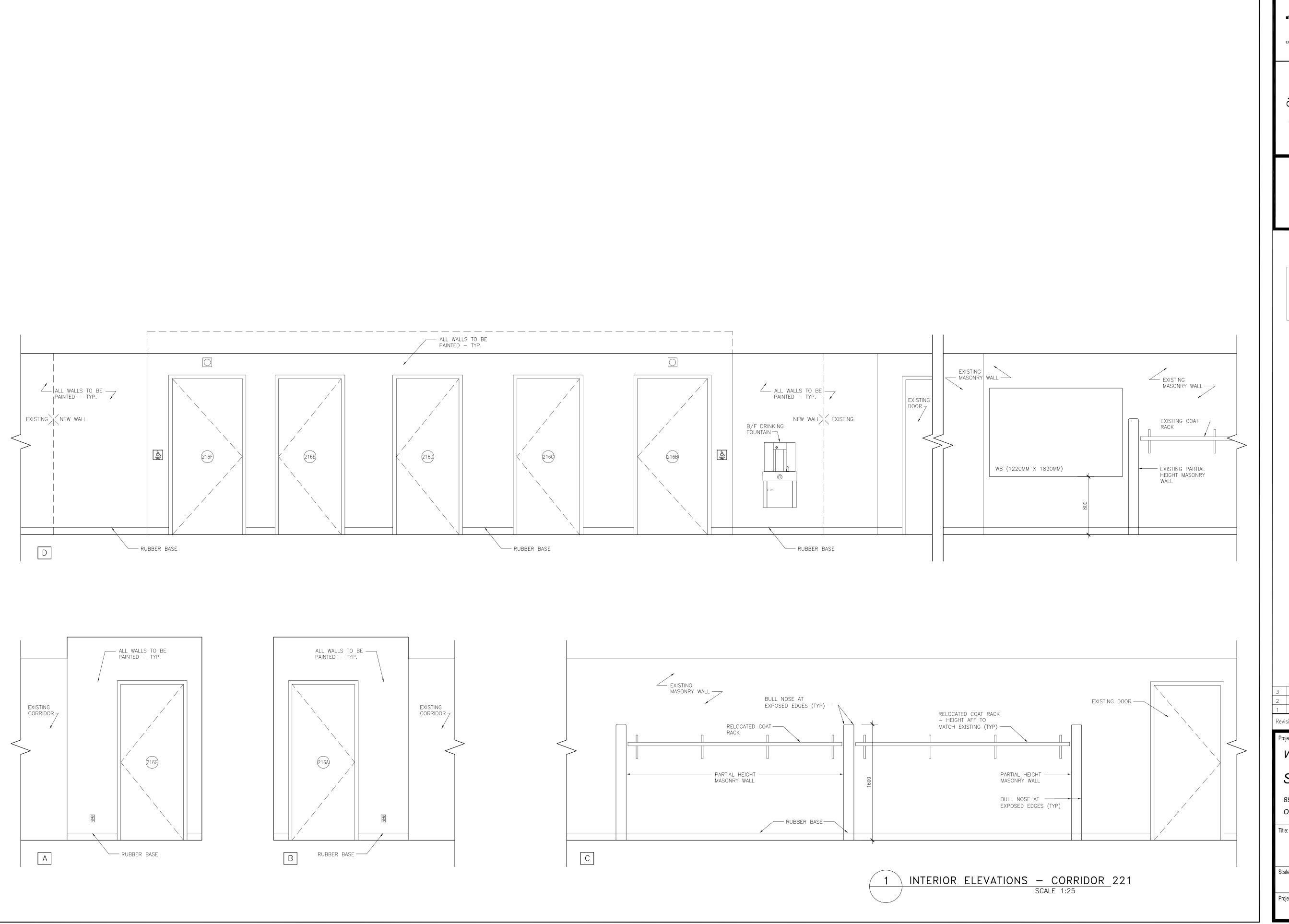
ISSUED FOR PERMIT AND TENDER

ISSUED FOR CLIENT REVIEW

INTERIOR ELEVATIONS

JAN 2 2025

LICENCE



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Revisions, Issues

WASHROOM RENOVATIONS

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INTERIOR ELEVATIONS

Scale: Date: Drawing

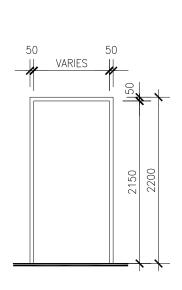
As Noted JAN 6 2025

Project: Drawn By:

DATE PLOTTED: JAN 31 2025

		CEIL	lng		W	ALL														F	LOC)R				[BAS	ŝΕ					REMARKS
			_ L		N.			E					S.			W.							lul l							BASE			
ROOM NUMBER	ROOM NAME	T-BAR/ACT SUSP. CEILING GWB CLNG. PAINTED	EXISTING T-BAR/ACT CLG. MAKE GOOD FXISTING GWR CLG	GOOD AND PAINT	GWB-FAINTED CMU - PAINTED		CERAMIC TILE EXIST.	MAKE GOOD GWB-PAINTED	CMU - PAINTED	PT. EXIST. WALL MAKE GOOD	CERAMIC TILE	EXISI. MAKE GOOD	GWB-PAINTED CMU - PAINTED	MAKE GOOD CERAMIC TILE	MAKE GOOD	GWB-PAINTED CMU - PAINTED		CERAMIC TILE	EXIST. MAKE GOOD	12 21	VCT RESILIENT FLOOR	C	MIC	RESILIENT GOOD	EXIST. VCT MAKE GOOD	NONE	RESILIENT BASE		CERAMIC TILE	EXTRACTOR EXIST BANAKE GOOD	EXIST. TILE BASE MAKE GOOD	EXIST. TERRAZZO MAKE GOOD	
25	CALMING ROOM										(C)		
:09	JANITOR CLOSET										(0											C			
:16A	NEW WR					(\bigcirc		C			C)																CERAMIC WALL TILE TO 2200MM AFF
16B	NEW B/F WR					(\bigcirc	(\bigcirc																				CERAMIC WALL TILE TO 2200MM AFF
16C	NEW WR					(\bigcirc		C			\supset																	CERAMIC WALL TILE TO 2200MM AFF
16D	NEW WR					(\bigcirc		C																				CERAMIC WALL TILE TO 2200MM AFF
16E	NEW WR					(\bigcirc		C																				CERAMIC WALL TILE TO 2200MM AFF
16F	NEW B/F WR					((\bigcirc																				CERAMIC WALL TILE TO 2200MM AFF
16G	NEW WR					(\Box																				CERAMIC WALL TILE TO 2200MM AFF
17	NEW CORRIDOR				C											C)																
21	EXISTING CORRIDOR)		

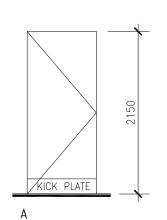
	DOOR SCH	EDULE	L	EGEND:	ALUM CA FR/MP HM HCW PT	FIRE-F	ANODIZED	TAL PANEL	IGU IM SCW ST TGL FRG	INS SOL STA TEM	ULATED G ULATED M LID CORE IIN— URET IPERED G E—RATED	WOOD HANE LASS	ALL DOOR CLOSERS TO BARRIER FREE STANDARD • ALL DOOR FRAMES SPECIFIED WITH ALUM. CLADDING — ISOLATE DISSIMILAR METALS • ALL FINGER GUARDS NGP 2248A TYPICAL. NO SUBSTITUTIONS LENGTH 50MM LESS THAN OPENING HEIGHT.
DOOR NO.	GROUND FLOOR PLAN	SIZE	TYPE	FIRE RATING		RIAL OF FRAME	FINISH	SELF CLOSER	LATCH	LOCK	PANIC	GLAZING	REMARKS
216A	NEW WR 216A	864x2150x44	А	45 MIN	НМ	НМ	PT						DOOR SWEEP, KICKPLATE
216B	NEW B/F WR 212B	965x2150x44	А	45 MIN	НМ	НМ	PT			0			AUTO DOOR OPERATOR, PRIVACY LOCK DOOR SWEEP, KICKPLATE
216C	NEW WR 216C	864x2150x44	А	45 MIN	НМ	НМ	PT						DOOR SWEEP, KICKPLATE
216D	NEW WR 216D	864x2150x44	А	45 MIN	НМ	НМ	PT						DOOR SWEEP, KICKPLATE
216E	NEW WR 216E	864x2150x44	А	45 MIN	НМ	НМ	PT	0					DOOR SWEEP, KICKPLATE
216F	NEW B/F WR 216F	965×2150×44	А	45 MIN	НМ	НМ	PT						AUTO DOOR OPERATOR, PRIVACY LOCK DOOR SWEEP, KICKPLATE
216G	NEW WR 216G	864x2150x44	А	45 MIN	НМ	НМ	PT						DOOR SWEEP, KICKPLATE



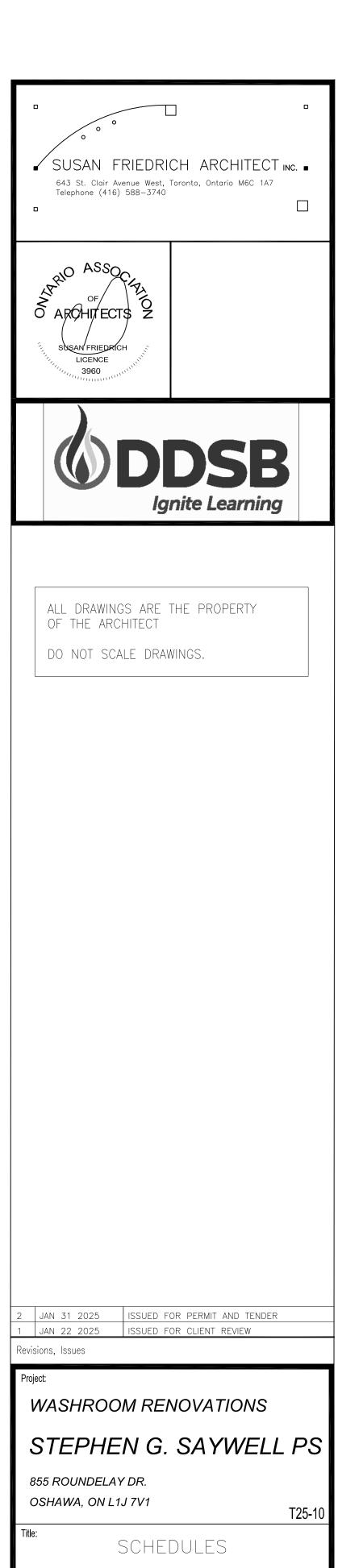
2 FRAME TYPE

SCALE 1:50

ALL KICK PLATE 200 AND LOCK SET AT 950 TYP.



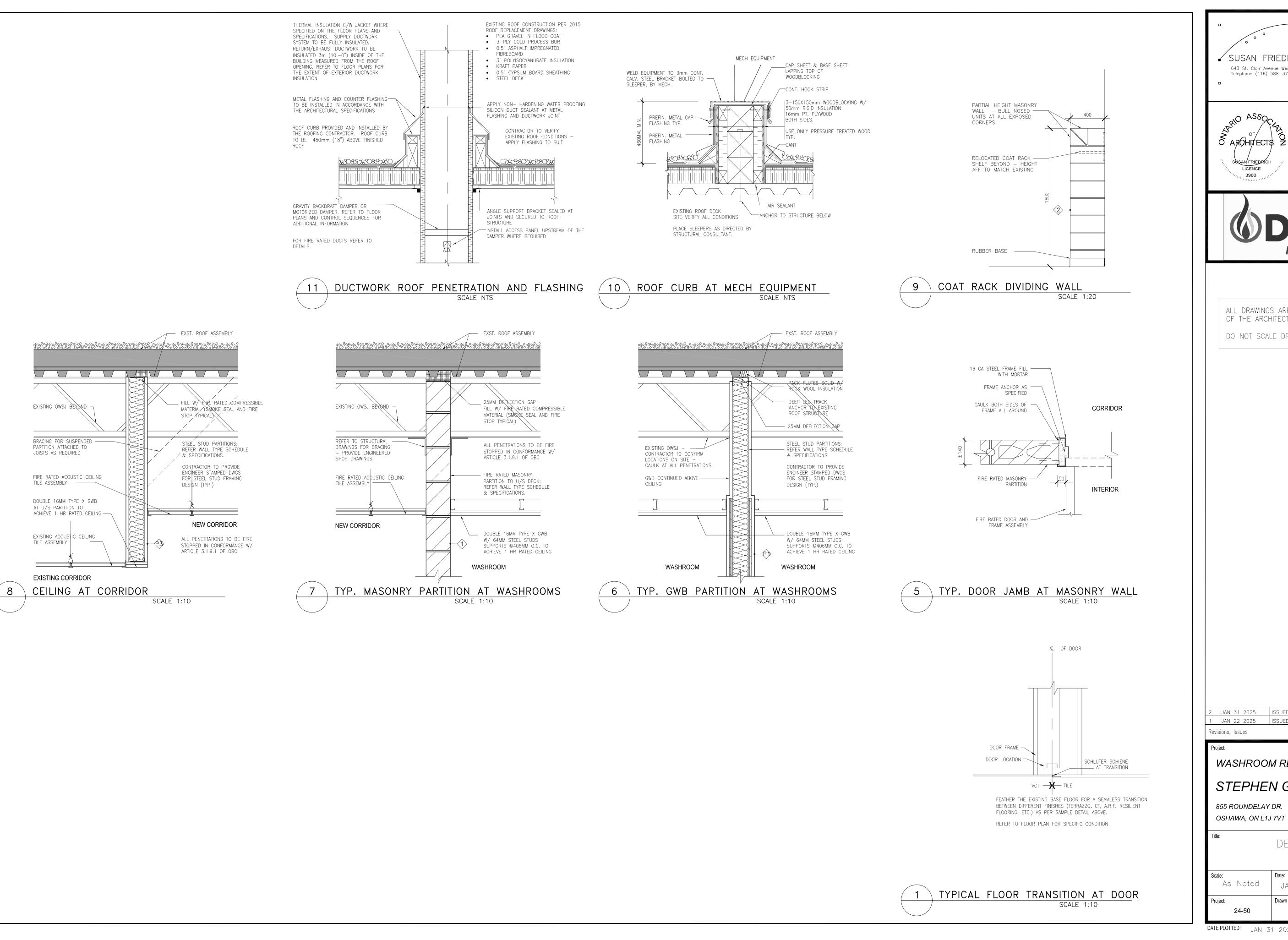
1 DOOR TYPE SCALE 1:50



DATE PLOTTED: JAN 31 2025

JAN 6 2025

As Noted



SUSAN FRIEDRICH ARCHITECT INC. . 643 St. Clair Avenue West, Toronto, Ontario M6C 1A7 Telephone (416) 588-3740 O ASSOC O ARCHITECTS LICENCE 3960 Ignite Learning ALL DRAWINGS ARE THE PROPERTY OF THE ARCHITECT DO NOT SCALE DRAWINGS. JAN 31 2025 ISSUED FOR PERMIT AND TENDER 1 JAN 22 2025 ISSUED FOR CLIENT REVIEW Revisions, Issues WASHROOM RENOVATIONS STEPHEN G. SAYWELL PS

DATE PLOTTED: JAN 31 2025

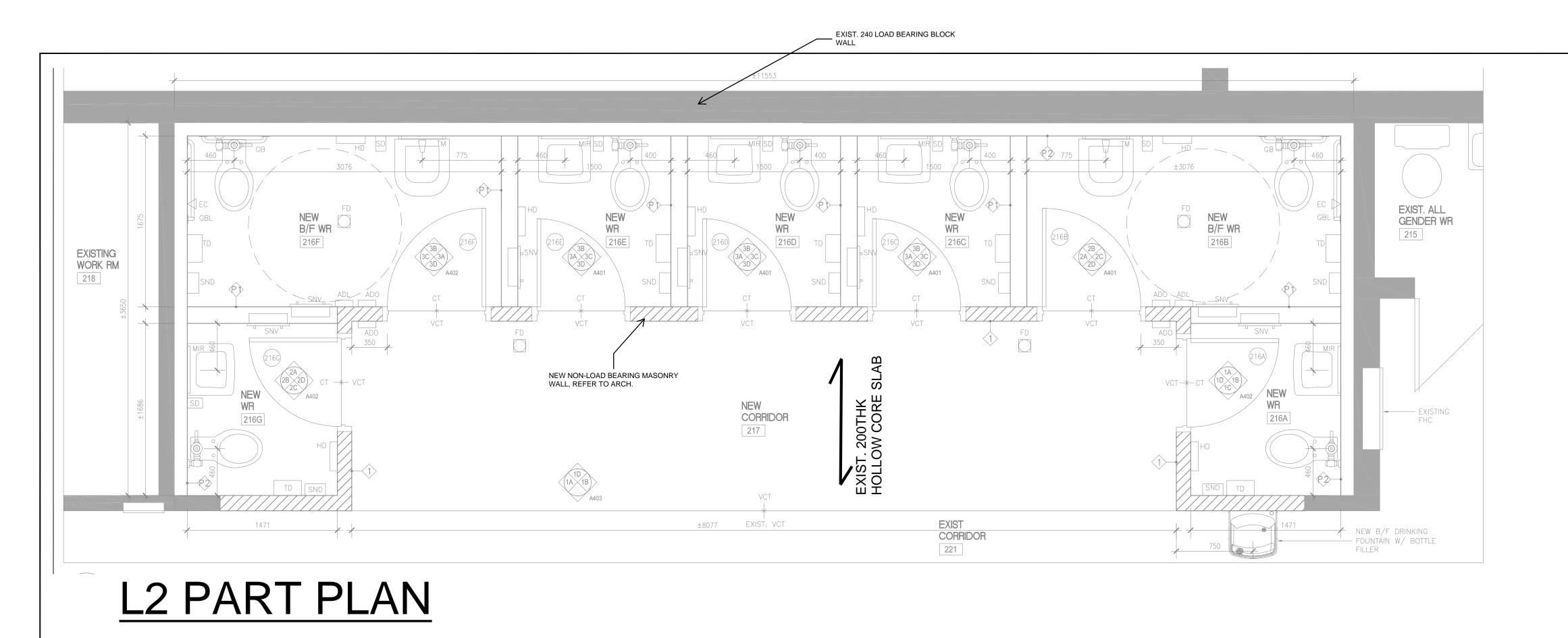
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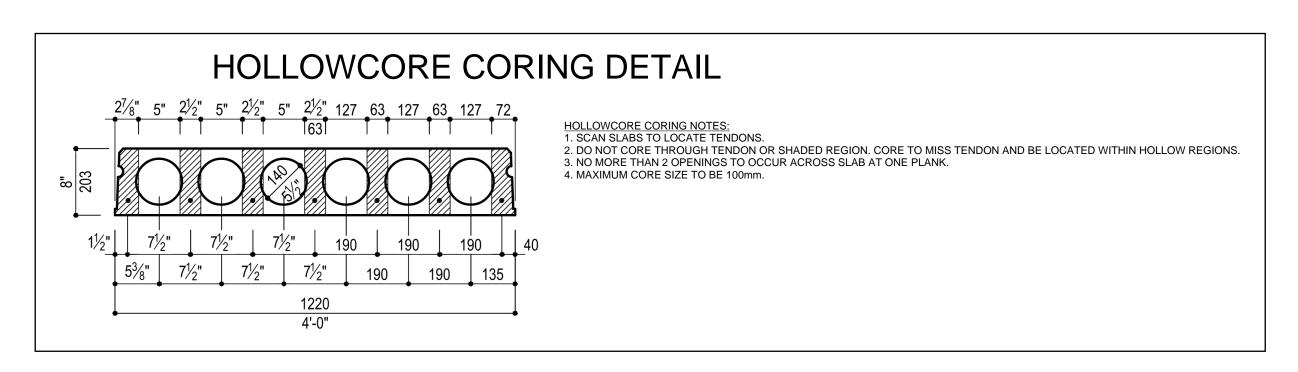
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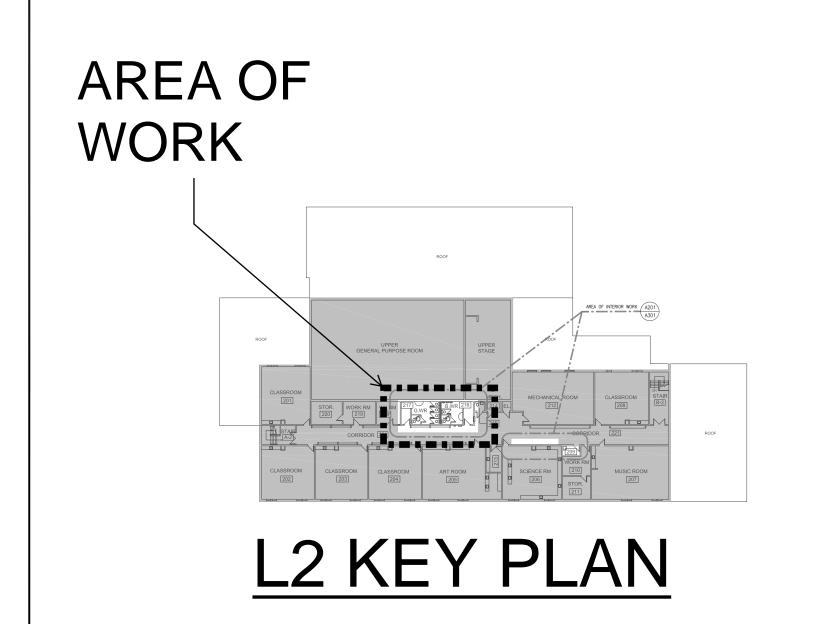
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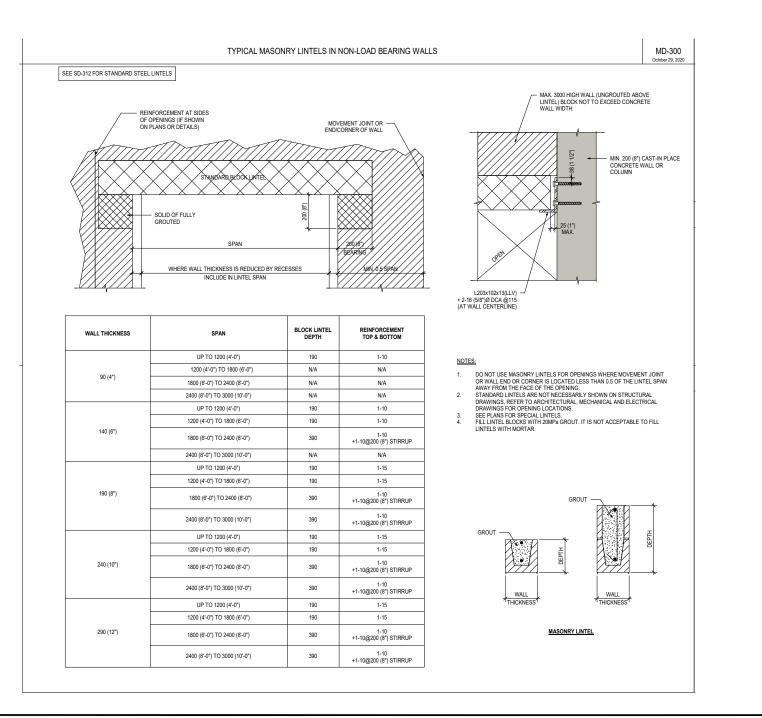
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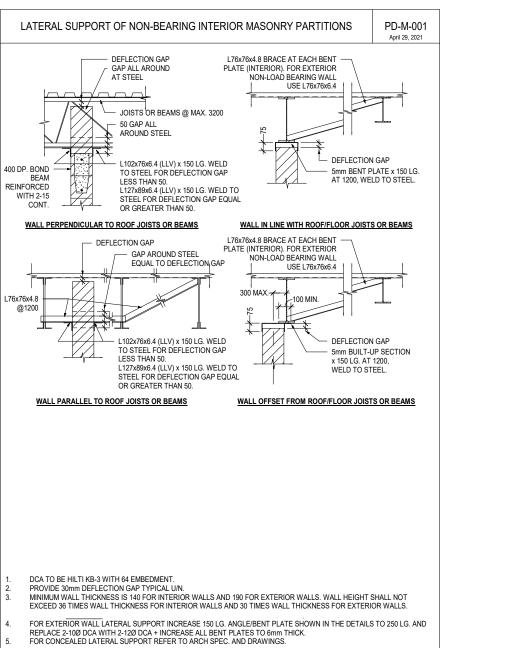
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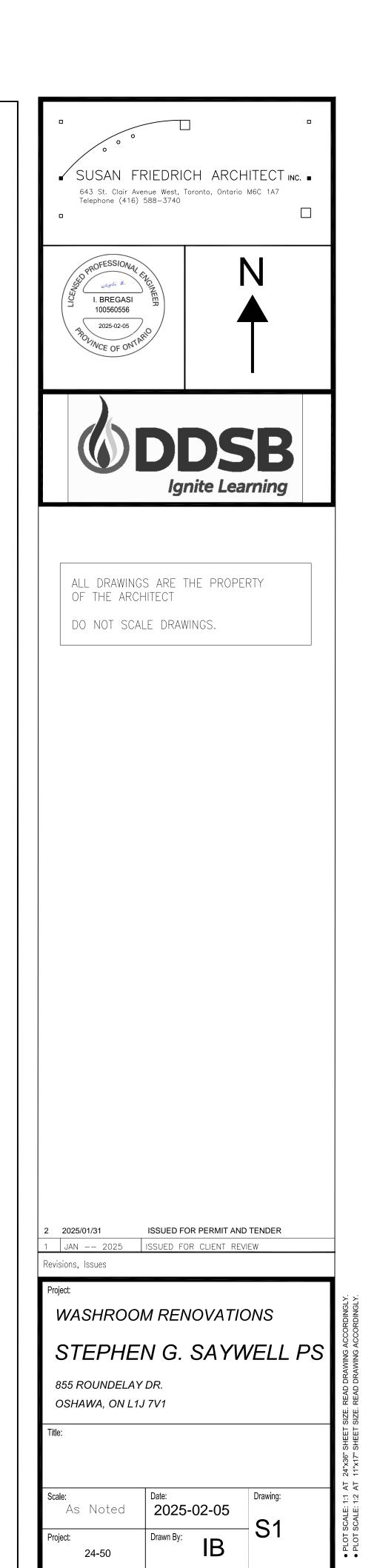












DATE PLOTTED: JAN 21 2025

PLUMBING FIXTURE SCHEDULE

WC-1 FLOOR MOUNTED TOILET - VITREOUS CHINA - FLUSH VALVE - BARRIER FREE

American Standard Madera FloWise Right Height Elongated #3461.001 High Efficiency, Low consumption Toilet, white vitreous china with EverClean antimicrobial surface which inhibits the growth of stain and odor causing bacteria mold and mildew, elongated bowl, White Finish, Floor Mounted, siphon jet flush action, operates in the range of 4.2 L to 6 L (1.1 US Gal to 1.6 US Gal) per flush, condensate channel, 420mm rim height, 305 mm x 254 mm (12" x 10") water surface, elongated bowl, 54 mm (2-1/8") fully glazed internal trapway, 38 mm (1-1/2") dia. Top spud, floor outlet, bolt caps, Toilet seat not included.

Delta TECK 81T201-48 Manual Water Closet Flush Valve, piston-operated delivering 1.28gpf (4.8L/m) volume, non-hold open handle, cast-brass body and stop.

Centoco #820STS.407 Toilet Seat, extra heavy duty, black finish, For elongated bowl, open front, Solid plastic, With cover, stainless steel self-sustaining check hinges, metal flat washers stainless steel posts and nuts. McGuire #LFH166LKN3 Toilet Supply, Chrome plated finish polished brass, heavy duty angle stops, 13 mm (1/2") I.P.S. Inlet x 76 mm (3") long rigid horizontal nipples, V.P. Loose keys, Escutcheon and flexible copper risers.

Provide Floor Flange, (Same material as the connecting pipe drain), with all brass bolts and with rubber gasket.

WC-2 FLOOR MOUNTED TOILET - VITREOUS CHINA - FLUSH VALVE

American Standard Madera FloWise Elongated #3451.001 High Efficiency, Low consumption Toilet, white vitreous china with EverClean antimicrobial surface which inhibits the growth of stain and odor causing bacteria mold and mildew, elongated bowl, White Finish, Floor Mounted, siphon jet flush action, operates in the range of 4.2 L to 6 L (1.1 US Gal to 1.6 US Gal) per flush, condensate channel, 305 mm x 254 mm (12" x 10") water surface, elongated bowl, 54 mm (2-1/8") fully glazed internal trapway, 38 mm (1-1/2") dia. Top spud, floor outlet, bolt caps, Toilet seat not included.

Delta TECK 81T201-48 Manual Water Closet Flush Valve, piston-operated delivering 1.28gpf (4.8L/m) volume, non-hold

open handle, cast-brass body and stop.
Centoco #1500STSCCSS.407 Toilet Seat, extra heavy duty, for elongated bowl, black finish, open front, solid plastic, less cover, stainless steel self-sustaining check hinges, metal flat washers stainless steel posts and nuts.
McGuire #LFH166LKN3 Toilet Supply, Chrome plated finish polished brass, heavy duty angle stops, 13 mm (1/2") I.P.S. Inlet

x 76 mm (3") long rigid horizontal nipples, V.P. Loose keys, Escutcheon and flexible copper risers.

Provide Floor Flange, (Same material as the connecting pipe drain), with all brass bolts and with rubber gasket.

LV-1 WALL HUNG BASIN - SINGLE HANDLE FAUCET - BARRIER FREE

American Standard Murro with EverClean #0954.004EC.020/0062.000EC.020 Basin, 3 holes, 4" (102 mm) center, 540 mm x 520 mm x 165 mm (21-1/4" x 20-1/2" x 6-1/2") high, Vitreous china, White Finish, for carrier with concealed arms, Rear overflow, recessed self-draining faucet ledge, semi-pedestal P-trap cover.

Moen Commercial #8894 M-Press faucet with 4" deck plate, chrome plated brass construction, vandal resistant, ADA lever style handle, cycle time adjustment from 5 to 60 seconds, 0.5 gpm (1.9L/min) vandal-resistant multi-stream laminar flow limits water discharge to a maximum of 0.25 gpc (0.96L/cycle) @ 30 seconds or 0.20 gpc (0.76L/cycle) @ 24 seconds.

McGuire #LFH165LKN3 Faucet Supplies, Chrome plated finish polished brass, heavy duty angle stops, 10 mm (3/8") I.P.S. Inlet x 76 mm (3") long rigid horizontal nipples, V.P. Loose keys, Escutcheon and flexible copper risers.

McGuire #8872C P-Trap, heavy cast brass adjustable body, with slip nut, 32 mm (1-1/4") size, Shallow wall flange and

Seamless tubular wall bend.

McGuire PROWRAP #PW2000 Sanitary Covering vandal-resistant, flexible seamless moulded closed-cell PVC resin, formulated with anti-microbial additive to limit the growth of fungus and bacteria, to exposed piping (to protect against heat/contusions) as per local codes.

Watts #WCA-411 Basin Carrier, concealed arms, wall flanges to attach to backing plate secured in wall with locking device and levelling screws, heavy gauge steel uprights with integral welded feet. For one unit: 102 mm (4") for two to six units in a row: 152 mm (6") finished metal stud wall to back of pipe space.

LV-2 WALL HUNG BASIN - SINGLE HANDLE FAUCET

American Standard Lucerne #0355.912.020 Basin Sealed overflow, 3 holes, 4" (102 mm) center, 521 mm x 464 mm x 308 mm (20-1/2" x 18-1/4" x 12-1/8") high, Vitreous china, White Finish, for carrier with concealed arms, self-draining faucet ledge, contoured back and side splash shield. Moen Commercial #8894 M-Press faucet with 4" deck plate, chrome plated brass construction, vandal resistant, ADA lever style handle, cycle time adjustment from 5 to 60 seconds, 0.5 gpm (1.9L/min) vandal-resistant multi-stream laminar flow limits water discharge to a maximum of 0.25 gpc (0.96L/cycle) @ 30 seconds or 0.20 gpc (0.76L/cycle) @ 24 seconds. McGuire #PRODRAIN Open Grid Drain, cast brass one piece top, 17 GA. (1.5 mm) mm tubular 32 mm (1-1/4") tailpiece, Less overflow holes. McGuire #LFH170BV Faucet Supplies, Chrome plated finish polished brass, commercial duty 1/4 turn ball valve angle stops, 13 mm (1/2") I.D. Inlet x 127 mm (5") horizontal extension tubes, convertible 1/4 turn/loose key handles, Escutcheon and flexible copper risers. McGuire #8872C P-Trap, heavy cast brass adjustable body, with slip nut, 32 mm (1-1/4") size, Shallow wall flange and Seamless tubular wall bend. Watts #WCA-411 Basin Carrier, concealed arms, wall flanges to attach to backing plate secured in wall with locking device and levelling screws, heavy gauge steel uprights with integral welded feet. For one unit: 102 mm (4") for two to six units in a row: 152 mm (6") finished metal stud wall to back of pipe space.

DF-1 - COMBINATION DRINKING FOUNTAIN/BOTTLE FILLING

Murdock Model No. A191.8-UG-BF12, non-refrigerated, filtered, lead-free, wall mounted combination drinking fountain and bottle filling station with vandal resistant and anti-microbial flexible bubbler, stainless steel finish, stainless steel bowl, barrier free ADA compliant, 8 GPH delivery, push button activation.

TMV-1 - THERMOSTATIC MIXING VALVE - POINT-OF-USE

Lawler TMM-1070, bronze body construction, high temperature limit stop with shut off temperature of 118° (+/- 3°F), integral rubber duck-bill back-flow checks within inlets, temperature adjustment dial, thermostatic mechanical mixing valve with outlet temperature range within 95-115°F (35-46°C), ASSE 1070 approved, valve shall control temperature from a low of 1/2gpm, 1gpm at 10psi and 1.6gpm at 20psi drop across the valve, 3/8"Ø compression fit inlets and outlets, ASSE Lead Free

Alternates: Symmons, Powers, Leonard, RADA.

FD - FLOOR DRAINS - FINISHED AREA - ADJUSTABLE STRAINER

Watts #FD-100-C-7-A5-1 Floor Drain - epoxy coated, cast iron body, reversible flashing clamp with primary and secondary weepholes, trap primer connection with plug, no hub outlet. Watts-A5-1 5" (127mm) diameter, nickel bronze, adjustable, round strainer.

Alternates: Zurn, J.R. Smith

CO - CLEANOUTS / ACCESS COVERS - ADJUSTABLE CLEANOUTS

Watts #CO-200-R-34G Cleanout - epoxy coated, cast iron body, with 5" (127mm) round, adjustable, gasketed, nickel bronze top, ABS plug with neoprene gasket, no hub outlet.

Alternates: Zurn, J.R. Smith

ACCESS DOORS/COVERS - FLUSH ACCESS DOOR - UNIVERSAL

Acudor #UF-5000 Universal Access Doors, 14 GA. (1.7mm) steel, baked enamel prime coat, continuous concealed hinge, with positive and self-opening screwdriver operated lock. Doors in washroom shall be stainless steel. All other panels shall be baked enamel prime coated for field painting. Minimum size of panels shall be 12" x 18" (300mm x 450mm). Wherever possible 24" x 24" (600mm x 600mm) panels shall be used.

WATER HAMMER ARRESTORS - PPP SC SERIES

SMS INC. #SC Series Water Hammer Arrestors with brass piston in a type 'K' copper casing size according to manufacturer's recommendations to eliminate water hammer and shock from piping system. Provide Water Hammer Arrestors on hot and cold water supplies to all quick valves, solenoids, and plumbing fixtures, and locate in an upright position between the last two fixtures on a line, or horizontally at the end of line closest to supply source. On projects exceeding five stories in height, provide water hammer arrestors on domestic water risers as follows. Locate arrestors at the end of riser opposite supply source.

TSP - TRAP SEAL PRIMERS

Sioux Chief #695-ES01, surface mount electronic trap primer, single outlet, solenoid valve, vacuum breaker, configurable electronic primer controller, water hammer arrestor, 120VAC power, 1/2" (13mm) inlet and outlet. Provide manifold as required to suit number of traps.

HB-1 - HOSEBIBB

Watts #SC8-1 Hydrant - cast brass, wall mount, Watts Model 8B tamper-proof vacuum breaker with break-away screw, adjustable packing nut cartridge, no kink faucet, 1/2" (13 mm) male NPT of copper sweat connection with tee handle.

PLUMBING NOTES:

- PROVIDE BEFORE AND AFTER SCOPING/FLUSHING.
- 2. PROVIDE CLEANOUTS AS REQUIRED BY CODE. SIZE OF CLEANOUTS TO BE SAME SIZE AS SANITARY LINES.
- 3. PROVIDE ALL TRENCHING, EXCAVATING AND BACKFILL FOR UNDERGROUND PLUMBING. ALL SAW CUTTING AND RESTORATION OF CONCRETE FLOOR IS BY GENERAL CONTRACTOR. COORDINATE WITH SAME.
- 4. PROVIDE NEW PLUMBING VENTS THROUGH SECOND FLOOR AND THROUGH ROOF AS REQUIRED BY CODE OR TIE INTO EXISTING WHERE POSSIBLE. SUPPLY AND INSTALL ROOF VENTS AS PER SPECIFICATIONS. ALL ROOFING WORK INCLUDING CUTTING, FLASHING AND MODIFICATIONS TO ROOF MEMBRANE SHALL BE BY GENERAL CONTRACTOR. COORDINATE WITH SAME
- 5. PROVIDE ISOLATION VALVES AT ALL FIXTURES.

ACCORDANCE WITH CAN/ULC-S115

CONTRACTOR TO SUIT FLOOR SLOPE.

- INSULATE ALL NEW DOMESTIC HOT, COLD AND TEMPERED WATER PIPING WITH 1"(25mm) INSULATION. PROVIDE PVC JACKET OVER INSULATION IN EXPOSED AREAS.
- 7. ALL NEW HOSE BIBBS TO BE COMPLETE WITH VACUUM BREAKERS.
- 8. PROVIDE BALANCING VALVES AT START OF EACH BRANCH OF ALL HOT OR TEMPERED WATER RECIRCULATION LOOPS.
- 9. PROVIDE SLEEVES FOR PIPES THROUGH ALL NEW BLOCK WALLS. FILL VOIDS AROUND PIPES. ENSURE NO CONTACT BETWEEN DISSIMILAR METALS.
- PROVIDE FIRE STOPPING AROUND ALL PIPING THROUGH FIRE SEPARATIONS IN
- COORDINATE EXACT LOCATION OF NEW FLOOR DRAINS WITH GENERAL
- 12. PROVIDE TRAP SEAL PRIMER FOR ALL FLOOR DRAINS USING PRIMER SPECIFIED IN PLUMBING FIXTURE SCHEDULE. PRIMERS SHALL BE CONCEALED. MOUNT IN CEILING SPACE AND RUN LINE CONCEALED DOWN WALL AND UNDER FLOOR TO DRAIN.
- 13. LABEL ALL NEW PIPING COMPLETE WITH SERVICE AND FLOW ARROWS. LABELS SHALL BE MAX 3m(10') SPACING AND ON EITHER SIDE OF WALLS.
- 14. SUPPLY ACCESS DOORS WHERE REQUIRED AND TURN OVER TO GENERAL CONTRACTOR FOR INSTALLATION. REFER TO PLUMBING FIXTURE SCHEDULE.
- 15. PROVIDE ESCUTCHEONS AROUND WATER AND SANITARY PIPING THROUGH WALL, FLOOR OR MILLWORK AT ALL FIXTURES.
- 16. LABEL CEILING GRID AT ACCESS TO ALL DEVICES.
- 17. FLUSH AND PERFORM A VIDEO INSPECTION OF ALL UNDERGROUND PIPING SYSTEMS AFTER CONSTRUCTION AND IMMEDIATELY PRIOR TO APPLYING FOR SUBSTANTIAL COMPLETION.
- 18. PERFORM DOMESTIC WATER QUALITY TEST AFTER ALL NEW PLUMBING WORK. SUBMIT CERTIFICATE OF ANALYSIS FROM CERTIFIED TESTING AGENCY TO CONSULTANT AND INCLUSION IN CLOSEOUT DOCUMENTATION.

PLUMBING SPECIFICATIONS:

- 1. ALL PLUMBING PRODUCTS SHALL BE "LEAD-FREE" CERTIFIED TO ANSI/NSF 372.
- 2. ALL NEW ABOVE GROUND WATER PIPING SHALL BE TYPE 'L' HARD COPPER, CERTIFIED TO ASTM B88, WITH SOLDER JOINTS. EXCEPT DOMESTIC HOT WATER RECIRCULATION PIPING SHALL BE TYPE 'K' HARD COPPER.
- DRAINAGE SYSTEM (ABOVE GROUND):
 .1 2-1/2"(63mm) AND OVER CAST IRON MJ PIPE WITH MJ FITTINGS AND
- STAINLESS STEEL CLAMPS.

 2"(50mm) AND UNDER COPPER DWV PIPE WITH WROUGHT COPPER SOLDER FITTINGS OR IPEX XFR OR PVC DWV.

DRAINAGE SYSTEM (UNDERGROUND): .1 PIPE UP TO AND INCLUDING 75mm(3") SHALL BE:

- .1 ULC CERTIFIED PVC 40 DWV PIPE TO CAN/CSA B181.2 COMPLETE WITH PVC DWV FITTINGS TO CAN/CSA B181.2 WITH SOLVENT WELD JOINT.

 .2 PIPE 75mm(3") UP TO AND INCLUDING 100mm(4") SHALL BE:

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

 ULC CERTIFIED PVC 40 DWV PIPE TO CAN/CSA B181.2 COMPLETE WITH

 PVC DWV FITTINGS TO CAN/CSA B182.1 COMPLETE

 WITH PVC BDS FITTINGS TO CAN/CSA B182.2 WITH SOLVENT WELD
- JOINTS.

 3 PIPE 125mm(6") AND UP SHALL BE:

 1 ULC CERTIFIED PVC SDR 28/35 SEWER PIPE TO CAN/CSA B182.2
 COMPLETE WITH PVC FITTINGS TO CAN/CSA B182.2 WITH RING GASKET
- 5. VENTS PASSING THROUGH ROOF SHALL USE HEAVY GAUGE, SEAMLESS, SPUN ALUMINUM PRE-INSULATED, VANDAL PROOF VENT FLASHING AS SUPPLIED BY NATIONAL ROOFING SUPPLY OR THALER METAL.
- . ALL NEW PIPE HANGERS SHALL BE:
 .1 EPOXY COATED CLEVIS TYPE WITH THREADED SUSPENSION RODS WHERE

HANGER DIRECTLY TOUCHES PIPING

- .2 ADJUSTABLE WROUGHT IRON CLEVIS TYPE AND/OR ADJUSTABLE RING WITH THREADED SUSPENSION RODS WHERE HANGERS WRAP AROUND OUTSIDE OF PIPE INSULATION. PROVIDE SADDLES TO PREVENT CRUSHING OF INSULATION.EXCEPT FOR SIZES LESS THAN/EQUAL TO 1-1/4"Ø. INSULATION CAN WRAP AROUND HANGERS.
- .3 PIPE HANGER SPACING
 -SIZES UP TO 1-1/4"(32mm) = 8'(2.5m) SPACING
 -SIZES 1-1/2"(38mm) TO 2"(50mm) = 10'(3m) SPACING
 -SIZES 2-1/2"(63mm) AND OVER = 12'(3.5m) SPACING
- -SIZES 2-1/2 (65Mm) AND OVER = 12 (3.5m) SPACING

 4 PROVIDE HANGER WITHIN 12"(300mm) OF EVERY ELBOW
- 7. PROVIDE A SUPPLY SHUT OFF VALVE ON HOT, COLD AND/OR TEMPERED WATER SUPPLY TO EACH FIXTURE. SUPPLY SHUT OFF SHALL BE EQUAL TO MCGUIRE H165. ALL VALVES SHALL BE LINE SIZE.
- 8. VALVE TYPE: .1 2" AND UNDER: BALL VALVE
- 9. BALL VALVES SHALL BE LEAD FREE WITH SOLDERED OR THREADED ENDS. BALL VALVES SHALL BE EQUAL TO KITZ #858 & #859. ALL VALVES SHALL BE LINE SIZE.
- 10. CHECK VALVES SHALL BE LEAD FREE. CHECK VALVES 2" AND SMALLER SHALL BE EQUAL TO KITZ #822 & #823 WITH SOLDER OR THREADED ENDS.
- 11. CIRCUIT BALANCING VALVES SHALL BE LEAD FREE. PROVIDE A CBV ON EACH DOMESTIC RECIRCULATION LOOP. CIRCUIT BALANCING VALVES SHALL BE IMI TA BBV LF OR 76X SERIES (NO ALTERNATES ACCEPTABLE). MOUNT WITH PORTS UPRIGHT OR AT LEAST 90° UP FROM BOTTOM. SUBMIT SHOP DRAWINGS COMPLETE WITH VALVE SIZING SCHEDULE (CBVS MAY BE SMALLER THAN LINE SIZE).
- 12. FLEXIBLE SUPPLIES ARE NOT ACCEPTABLE FOR FLUSH TANK TOILETS OR ANY EXPOSED INSTALLATION, WHERE SUPPLIES ARE INSTALLED UNDER COUNTER OR BEHIND SHROUDS FLEXIBLE SUPPLIES ARE ACCEPTABLE.
- 13. REFER TO PLUMBING FIXTURE SPECS INCLUDING FIXTURES, TRAP SEAL PRIMERS, WATER HAMMER ARRESTORS, ACCESS DOORS, ETC.

I INSULATION:

- .1 EXTERNAL PIPE INSULATION SHALL BE RIGID, SECTIONAL FIBERGLASS TYPE
 AND BE COMPLETE WITH FACTORY APPLIED ALL PURPOSE VAPOUR
 BARRIER. PRE-FORMED INSULATION SHALL BE USED AT PIPE FITTINGS,
 VALVES, ETC. PROVIDE NON-CRUSHING INSULATION AT ALL PIPE HANGERS
 AND PROVIDE SADDLES.
- INSULATE DCW, DHW, DRW AND DTW PIPING.
 INSULATE VENT LINES 1.5m BACK FROM ROOF.
 INSULATION THICKNESS: 1"(25mm)

15. ACCESS DOORS/COVERS

.1 FLUSH ACCESS DOOR - UNIVERSAL: ACUDOR #UF-5000 UNIVERSAL
ACCESS DOORS, 14 GA. (1.7mm) STEEL, BAKED ENAMEL PRIME COAT,
CONTINUOUS CONCEALED HINGE, WITH POSITIVE AND SELF-OPENING
SCREWDRIVER OPERATED LOCK. DOORS IN WASHROOMS SHALL BE
STAINLESS STEEL. ALL OTHER PANELS SHALL BE BAKED ENAMEL PRIME
COATED FOR FIELD PAINTING. MINIMUM SIZE OF PANELS SHALL BE 12"x18"
(300mmx450mm). WHEREVER POSSIBLE 24"x24" (600mmx600mm) PANELS

SHALL BE USED.

2 RECESSED ACCESS DOOR - DRYWALL AREA: ACUDOR #DW-5015 SERIES RECESSED ACCESS DOOR, 16 GA. (1.5mm) STEEL, BAKED ENAMEL PRIME COAT, WITH CONCEALED PIVOTING ROD TYPE HINGE AND SELF-OPENING SCREWDRIVER OPERATED LOCK. DOOR TO BE RECESSED 5/8" (14mm) TO RECEIVE DRYWALL. FLANGE OF DOOR TO BE GALVANIZED STEEL FOR FIELD PAINTING TAPING BEADING TO PROVIDE FINISH OF DRYWALL JOINTS.

GENERAL NOTES:

WORK TO BE COMPLETED OUTSIDE REGULAR HOURS:
 .1 ANY WORK THAT CREATES DISRUPTION TO REGULAR SCHOOL OR OCCUPANT ACTIVITIES AND OPERATIONS SHALL BE DONE OUTSIDE OF REGULAR SCHOOL HOURS. THIS INCLUDES BUT IS NOT LIMITED TO SERVICE INTERRUPTIONS.

WORK THAT GENERATES NOISE, WORK THAT GENERATES VIBRATIONS, WORK

- THAT GENERATES FUMES/SMELLS, ETC.

 2 ANY WORK INSIDE OR OUTSIDE, THAT CREATES RISK TO BUILDING
 OCCUPANTS SHALL BE DONE OUTSIDE OF REGULAR SCHOOL HOURS.
- OCCUPANTS SHALL BE DONE OUTSIDE OF REGULAR SCHOOL HOL

 .3 ANY WELDING SHALL BE DONE OUTSIDE REGULAR SCHOOL
- OBTAIN, ARRANGE AND PAY FOR ALL REQUIRED PERMITS AND INSPECTIONS.
- 3. THE CONTRACTOR AND ITS SUB-TRADES SHALL ATTEND BI-WEEKLY SITE MEETINGS OR AS ARRANGED BY CONSULTANT OR OWNER.
- COORDINATE ANY DESIGNATED SUBSTANCE ISSUES WITH THE CLIENT PRIOR TO ANY WORK BEING DONE.

 5. PROVIDE SHOP DRAWINGS ELECTRONICALLY IN PDF FORMAT TO CONSULTANT FOR

REVIEW. ALL SHOP DRAWINGS MUST BE REVIEWED, STAMPED AND SIGNED BY THE

MECHANICAL CONTRACTOR PRIOR TO SUBMITTING TO THE CONSULTANT. REVIEW

OBTAIN AND REVIEW THE DESIGNATED SUBSTANCE REPORT FROM THE CLIENT AND

- SHALL INCLUDE BUT NOT BE LIMITED TO: VERIFYING UNIT VOLTAGE WITH ELECTRICIAN AND/OR SITE, EQUIPMENT PERFORMANCE, DIMENSIONS AND CLEARANCES.
- THOROUGHLY REVIEW AND COORDINATE WITH SITE CONDITIONS AND COMPLETE DRAWING SET PRIOR TO PRICING AND INSTALLATION.
- 7. INSTALL ALL WORK IN CONFORMANCE WITH MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS.
- 8. DO NOT USE ANY NEW PERMANENT EQUIPMENT FOR TEMPORARY USE DURING CONSTRUCTION WITHOUT WRITTEN APPROVAL. WHERE SYSTEMS ARE USED AND ARE CONTAMINATED BY DUST OR DIRT, THE CONTRACTOR SHALL CLEAN IN A MANNER ACCEPTABLE TO THE CONSULTANT.
- 9. MAINTAIN AS-BUILT DRAWINGS ON AN ON-GOING BASIS. DRAWINGS SHALL BE AVAILABLE FOR PERIODIC REVIEW BY THE CONSULTANT DURING CONSTRUCTION.
- 10. ALL WORK SHALL COMPLY WITH APPLICABLE CODES.
- REMOVE ALL REDUNDANT EQUIPMENT, MATERIALS AND GARBAGE FROM SITE AND DISPOSE OF IN AN APPROVED MANNER. REDUNDANT EQUIPMENT AND MATERIALS SHALL NOT BE ABANDONED IN PLACE.
- ALL CUTTING AND CORING SHALL BE BY THIS CONTRACTOR. COORDINATE PATCHING WITH GENERAL CONTRACTOR. TRENCHING, EXCAVATION AND BACKFILL FOR UNDERGROUND PLUMBING SHALL BE BY THIS CONTRACTOR. ALL SAW CUTTING AND RESTORATION OF CONCRETE FLOOR BY GENERAL CONTRACTOR. COORDINATE WITH SAME.
- 13. COORDINATE ROOFING FOR DUCT AND PIPE ROOF PENETRATIONS WITH GENERAL CONTRACTOR. PROVIDE PITCH POCKETS FOR ALL SERVICES THROUGH ROOF UNLESS SERVICES CAN BE FED THROUGH BASE OF EQUIPMENT.
- 14. ANY FEED TO NEW ROOFTOP EQUIPMENT SHALL BE INSTALLED WITH GOOSENECK STYLE PITCH POCKET EQUAL TO THALER METAL MEF-2A OR DOGHOUSE. SIZE AS REQUIRED TO SUIT FEED.
- 15. MAINTAIN REQUIRED ACCESS AND CLEARANCE TO ALL EQUIPMENT AND SYSTEMS AS REQUIRED BY CODE AND AS PER MANUFACTURER'S REQUIREMENTS.
- 16. TAG ALL EQUIPMENT WITH LAMACOID NAMEPLATES. TAG ALL VALVES WITH LAMACOID NAMEPLATES OR BRASS TAGS ON CHAINS.
- LABEL ALL NEW PIPING WITH SERVICE AND FLOW ARROWS EVERY 10'(3m) AND ON EITHER SIDE OF WALLS.
- 18. THE CONTRACTOR SHALL ARRANGE FOR INSPECTIONS BY THE ENGINEER PRIOR TO CEILINGS AND WALLS BEING CLOSED IN. WHERE THIS HAS NOT BEEN ARRANGED IT IS THE CONTRACTOR'S RESPONSIBILITY TO REMOVE CEILING TILES OR ACCESS DOORS FOR INSPECTION AT THE DIRECTION OF THE CONSULTANT.
- 19. PERFORM TESTING AND START UP OF ALL SYSTEMS AS REQUIRED BY CODE, THE CONSULTANT, MANUFACTURER'S REQUIREMENTS, AND AUTHORITIES HAVING JURISDICTION. SUBMIT REPORTS TO THE CONSULTANT.
- INSTRUCT AND DEMONSTRATE TO THE OWNER ON PROPER OPERATION OF THE SYSTEM. RECORD AND SUBMIT A LOG DATED AND SIGNED BY ALL ATTENDEES.
- 21. UPON COMPLETION OF THE PROJECT THE CONSULTANT WILL DO A FINAL REVIEW. UPON RECEIVING THE FINAL INSPECTION REPORT, THE CONTRACTOR MUST CORRECT AND SIGN BACK THE INSPECTION REPORT INDICATING ALL DEFICIENCIES ARE COMPLETED. A RE-INSPECTION WILL ONLY BE DONE ONCE THE CONSULTANT RECEIVES THIS IN WRITING. WHERE THE CONSULTANT PERFORMS THE RE-INSPECTION AND THE WORK IS NOT COMPLETE, THE CONTRACTOR IS RESPONSIBLE FOR REIMBURSING THE CONSULTANT FOR THE FIELD REVIEW. THE FEE FOR ADDITIONAL REVIEWS WILL BE AT THE CONSULTANT'S HOURLY RATES PLUS MILEAGE AND APPLICABLE TAXES TO BE PAID DIRECTLY TO THE CONSULTANT PRIOR TO PERFORMING THE NEXT FIELD REVIEW.
- 22. PROVIDE ONE (1) YEAR WARRANTY ON ALL MATERIAL AND LABOUR FROM THE DATE OF SUBSTANTIAL COMPLETION.
- 23. PROGRESS DRAWS SHALL INCLUDE MINIMUM \$2,500.00 FOR MANUALS AND AS-BUILT DRAWINGS. TOTAL AMOUNT SHALL REMAIN UNBILLED UNTIL MANUALS AND AS-BUILT DRAWINGS HAVE BEEN SUBMITTED AND APPROVED.
- 24. PROVIDE ONE (1) ELECTRONIC COPY OF MAINTENANCE MANUAL BY WEB TRANSFER AND ON USB. MANUAL SHALL INCLUDE:
- TABLE OF CONTENTS
- CONTRACTOR INFORMATION - WARRANTY LETTER
- SHOP DRAWINGS - O&Ms - INSPECTION & TEST REPORTS
- AS-BUILT DRAWINGS.
 AS-BUILT DRAWINGS SHALL INCLUDE <u>COMPLETE</u> MECHANICAL DRAWING SET WITH ANY CHANGES MARKED CLEARLY AND NEATLY IN COLOUR. AS-BUILTS SHALL BE STAMPED ACCORDINGLY BY THE CONTRACTOR (ALL DRAWINGS). DRAWINGS SHALL BE SUBMITTED HARD COPY IN FULL SIZE. SUBSTANTIAL COMPLETION WILL NOT BE AWARDED UNTIL THE MANUALS AND AS-BUILTS HAVE BEEN SUBMITTED TO THE CONSULTANT AND THE CONSULTANT HAS APPROVED.

PLUM	MBING LEGEND
	NEW
	EXISTING
	DEMOLITION
ASAS	DEMO ABOVEGROUND SANITARY
	DOMESTIC COLD WATER (DCW)
	DOMESTIC HOT WATER (DHW)
	DOMESTIC HOT WATER RECIRC (DRW)
UG	DOMESTIC WATER UNDERGROUND (UG)
——AS———AS——	ABOVEGROUND SANITARY LINE
ss	UNDERGROUND SANITARY LINE
	PLUMBING VENT
—— F——— F——	FIRE PROTECTION LINE
FD FD	FLOOR DRAIN
- 11co D co	STACK / FLOOR CLEANOUT
-+	HOSEBIBB (HB)
WC-1	FIXTURE TAG
<u> </u>	ELBOW RISING
 >	ELBOW DROPPING
	BRANCH RISING FROM TEE
	BRANCH DROPPING FROM TEE
ΙΦΙ	SHUT-OFF BALL VALVE
MECHANIC	CAL ABBREVIATIONS
EX	EXISTING TO REMAIN
AFF	ABOVE FINISHED FLOOR
CTE	CONNECT TO EXISTING

COMPLETE WITH

TRAP SFAL PRIMER

THERMOSTATIC MIXING VALVE

HOSE BIBB

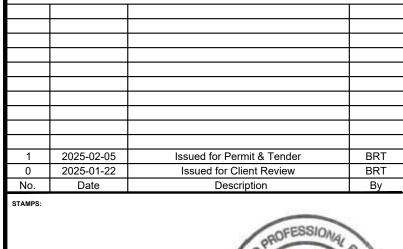
C/W

HB

TMV

DI LIMPINO I ECEND

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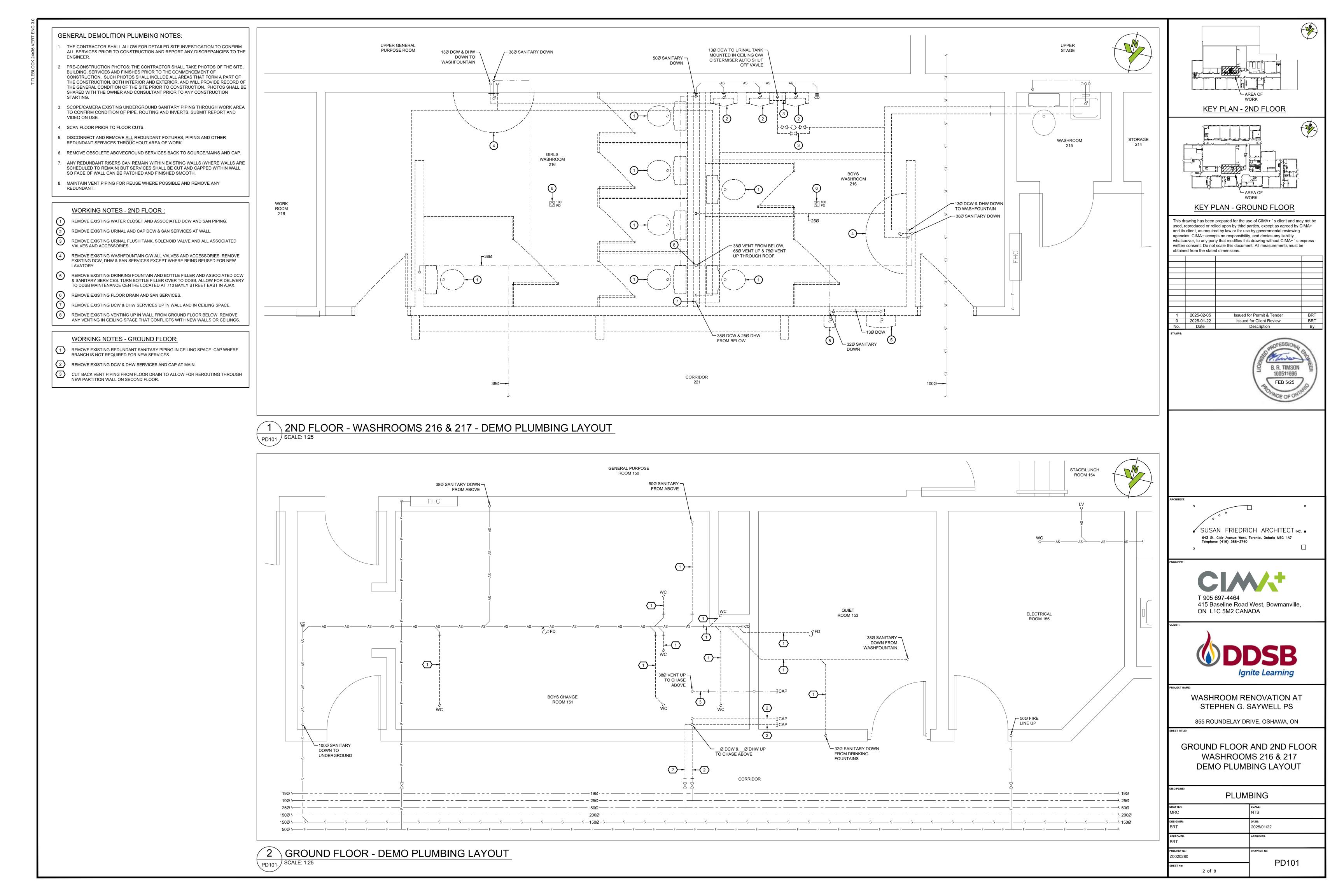


WASHROOM RENOVATION AT STEPHEN G. SAYWELL PS

855 ROUNDELAY DRIVE, OSHAWA, ON

PLUMBING LEGENDS AND NOTES

ISCIPLINE: PLUMI	BING
rafter: //RC	scale: NTS
esigner: BRT	DATE: 2025/01/22
pprover: BRT	APPROVER:
ROJECT No: 20020280	DRAWING No:
HEET No: 1 of 8	P-001



GENERAL NEW PLUMBING NOTES . WORK TO BE COMPLETED OUTSIDE REGULAR HOURS: .1 ANY WORK THAT CREATES DISRUPTION TO REGULAR SCHOOL OR OCCUPANT ACTIVITIES AND OPERATIONS SHALL BE DONE OUTSIDE OF REGULAR SCHOOL HOURS. THIS INCLUDES BUT IS NOT LIMITED TO SERVICE INTERRUPTIONS, WORK THAT GENERATES NOISE, WORK THAT GENERATES VIBRATIONS, WORK THAT GENERATES FUMES/SMELLS, ETC. .2 ANY WORK INSIDE OR OUTSIDE, THAT CREATES RISK TO BUILDING OCCUPANTS SHALL BE DONE OUTSIDE OF REGULAR SCHOOL HOURS. ANY WELDING SHALL BE DONE OUTSIDE REGULAR SCHOOL HOURS. THE CONTRACTOR SHALL INVESTIGATE AND CONFIRM SERVICES ON SITE PRIOR TO CONSTRUCTION AND REPORT ANY DISCREPANCIES TO CONSULTANT. PRE-CONSTRUCTION PHOTOS: THE CONTRACTOR SHALL TAKE PHOTOS OF THE SITE, BUILDING, SERVICES AND FINISHES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. SUCH PHOTOS SHALL INCLUDE ALL AREAS THAT FORM A PART OF THE CONSTRUCTION, BOTH INTERIOR AND EXTERIOR, AND WILL PROVIDE RECORD OF THE GENERAL CONDITION OF THE SITE PRIOR TO CONSTRUCTION. PHOTOS SHALL BE SHARED WITH THE OWNER AND CONSULTANT PRIOR TO ANY

- CONSTRUCTION STARTING.

 4. SCOPE/CAMERA EXISTING UNDERGROUND SANITARY AND STORM PIPING THROUGH WORK AREA TO CONFIRM CONDITION OF PIPE, ROUTING AND INVERTS. SUBMIT REPORT AND VIDEO ON USB.
- 5. SCAN FLOOR PRIOR TO FLOOR CUTS AND UNDERGROUND PIPING INSTALLATION.
- 6. REFER TO ARCHITECTURAL DRAWINGS AND/OR GENERAL CONTRACTOR FOR CEILING HEIGHTS TO ENSURE ALL SERVICES ARE CONCEALED WITHIN AVAILABLE CEILING SPACE. RUN ALL NEW SERVICES UP IN JOIST SPACE AND BETWEEN LIGHTS AS NOTED OR AS REQUIRED.
- 7. COORDINATE ALL SERVICES WITH ALL TRADES PRIOR TO INSTALLATION.
- 8. COVER ALL FLOOR DRAINS DURING CONSTRUCTION TO PREVENT DEBRIS FROM FALLING IN DRAINS.
- 9. PROVIDE NEW PLUMBING VENTS THROUGH SECOND FLOOR AND THROUGH ROOF AS REQUIRED OR TIE INTO EXISTING WHERE POSSIBLE.
- 10. INSULATION AND LABEL ALL NEW PIPING WITHIN CEILING SPACE IN AREA OF WORK.
- 11. FIRE STOP ALL NEW PIPING THROUGH RATED WALLS AND FLOORS IN AREA OF
- 12. SUPPLY ACCESS DOORS FOR MECHANICAL DEVICES CONCEALED BEHIND DRYWALL AND TURN OVER TO GENERAL CONTRACTOR FOR INSTALLATION.
- 13. LABEL CEILING GRID AT ACCESS TO MECHANICAL EQUIPMENT AND DEVICES WITH LAMACOID NAMEPLATE.
- 14. THE CONTRACTOR SHALL FLUSH, SCOPE, AND PROVIDE VIDEO INSPECTION OF THE SANITARY SYSTEM AFTER COMPLETION OF WORK AND PRIOR TO SUBSTANTIAL COMPLETION. FLUSHING, SCOPING AND VIDEO SHALL INCLUDE AREA OF WORK TO WHERE IT TIES INTO THE MAIN. SUBMIT REPORT AND VIDEO ON USB.

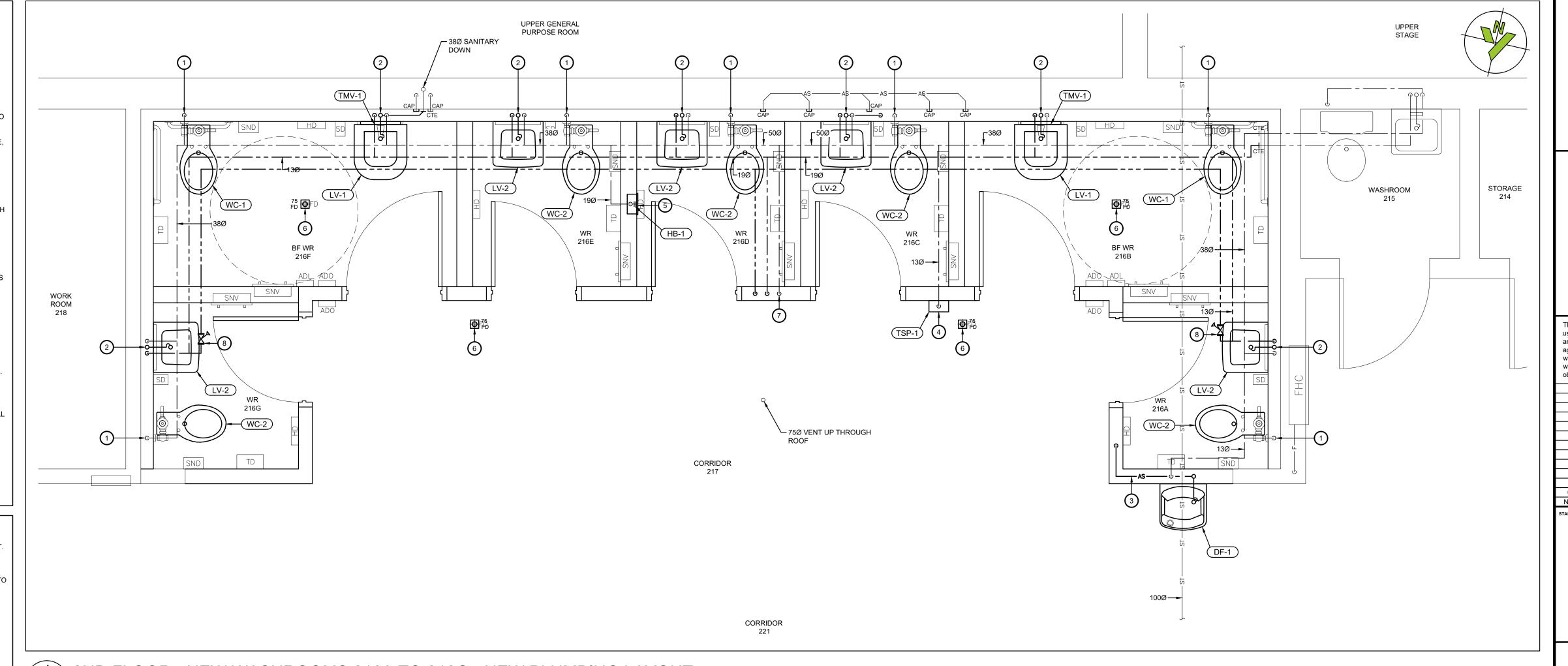
WORKING NOTES - 2ND FLOOR

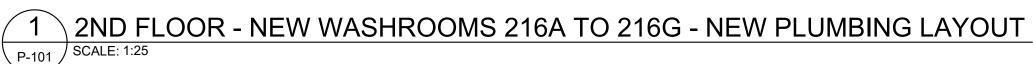
- 25Ø DCW DOWN IN CHASE TO NEW FLOOR MOUNTED FLUSH VALVE WATER CLOSET. RUN SANITARY DOWN THROUGH FLOOR TO CEILING SPACE BELOW. COORDINATE ALL CORING AND FLOOR CUTTING WITH GENERAL CONTRACTOR.
- 13Ø DCW & DHW DOWN IN CHASE TO NEW WALL LAVATORY. RUN 13Ø DCW & DHW TO NEW TMV AND 13Ø DTW TO HOT SIDE OF FAUCET. COORDINATE INSTALLATION OF CARRIER AND MOUNTING HEIGHT WITH GENERAL CONTRACTOR. RUN NEW SANITARY DOWN THROUGH FLOOR TO CEILING SPACE BELOW.
- 13Ø DCW DOWN IN CHASE TO NEW COMBINATION BOTTLE FILLER/DRINKING FOUNTAIN. COORDINATE MOUNTING HEIGHT WITH GENERAL CONTRACTOR. RUN SANITARY THROUGH PARTITION WALLS UNTIL CLEAR OF CORRIDOR WALL BELOW.
- PROVIDE NEW TRAP SEAL PRIMER ABOVE CEILING IN ACCESSIBLE LOCATION. COORDINATE POWER REQUIREMENTS WITH ELECTRICAL CONTRACTOR.
- PROVIDE NEW HOSEBIBB WITHIN CHASE. SUPPLY NEW LOCKABLE ACCESS DOOR IN CHASE WALL AND TURN OVER TO THE GENERAL CONTRACTOR FOR INSTALLATION.
- 6 PROVIDE NEW FLOOR DRAIN AND CONNECT TO EXISTING SANITARY SERVICES IN CEILING SPACE BELOW.
- 7) 50Ø DCW, 25Ø DHW & 13Ø DRW UP FROM GROUND FLOOR IN PARTITION WALL TO
- 8 PROVIDE NEW LEAD FREE CBV AND BALANCE TO 0.5gpm.

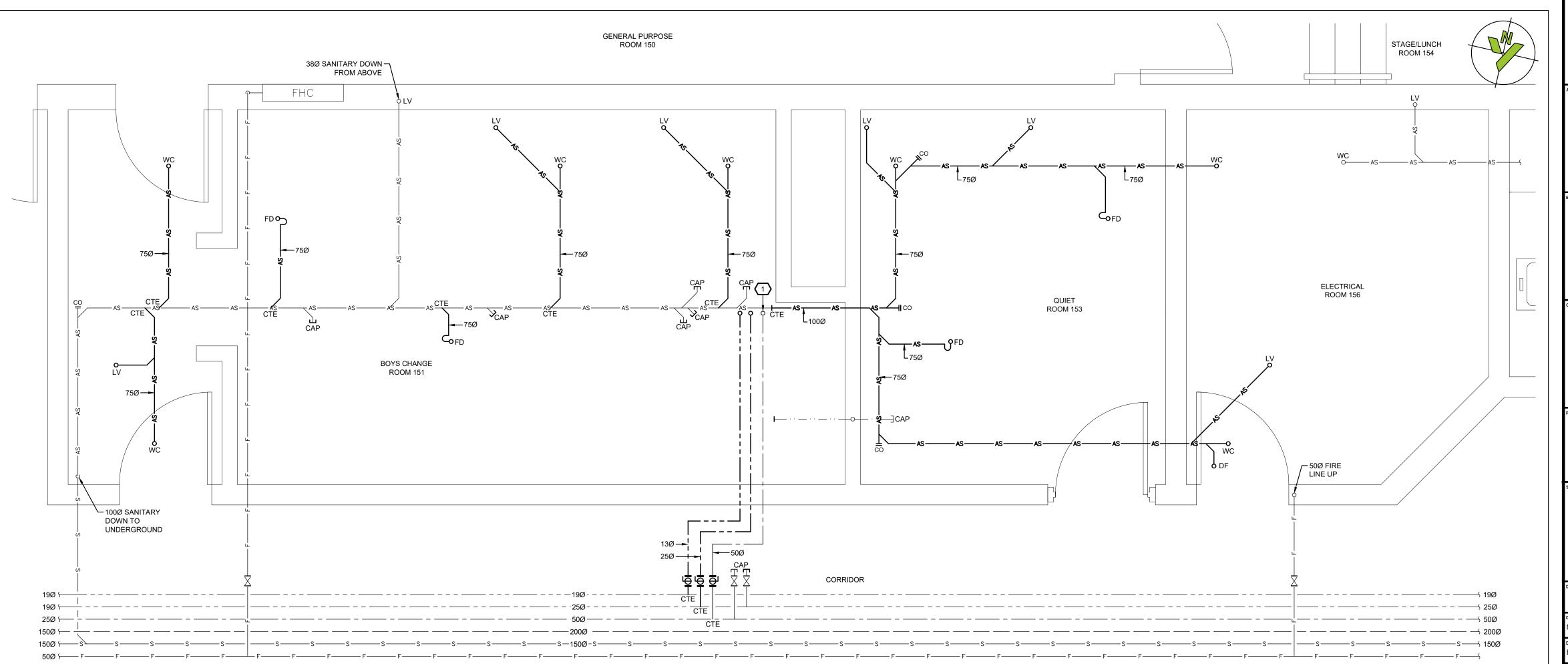
WORKING NOTES - GROUND FLOOR:

- 50Ø DCW, 25Ø DHW & 13Ø DRW UP TO SECOND FLOOR. FIRESTOP PIPING AT FLOOR PENETRATIONS.
- CONNECT NEW 50Ø DCW, 25Ø DHW & 13Ø DRW TO EXISTING SERVICES IN CORRIDOR C/W ISOLATION VALVES. FIRESTOP AT WALL PENETRATIONS.

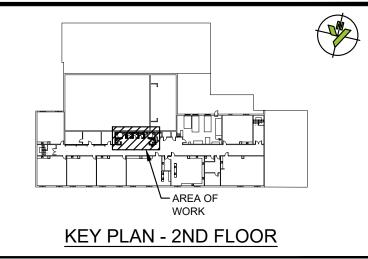
TYPI	TYPICAL PLUMBING PIPE SIZING				
	DCW	DHW	DTW	SANITARY	VENT
WC (FLUSH VALVE)	25Ø			75Ø	38Ø
LAVATORY	13Ø	13Ø	13Ø	32Ø	32Ø
DRINKING FOUNTAIN	13Ø			32Ø	32Ø
HOSEBIBB	19Ø				
75Ø FD				75Ø	38Ø
100Ø FD				100Ø	38Ø
PROVIDE ISOLATION VALVES AT ALL FIXTURES					

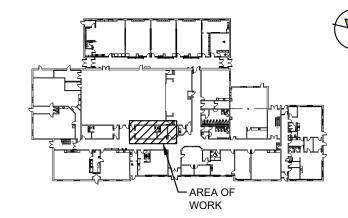






2 GROUND FLOOR - NEW PLUMBING LAYOUT





KEY PLAN - GROUND FLOOR

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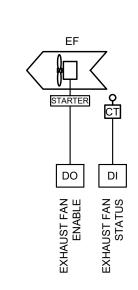


WASHROOM RENOVATION AT STEPHEN G. SAYWELL PS

855 ROUNDELAY DRIVE, OSHAWA, ON

GROUND FLOOR AND 2ND FLOOR NEW WASHROOMS 216A TO 216G NEW PLUMBING LAYOUT

PLUMBING			
DRAFTER:	SCALE:		
MRC	AS NOTED		
DESIGNER:	DATE:		
BRT	2025/01/22		
APPROVER:	APPROVER:		
BRT			
PROJECT No:	DRAWING No:		
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3 of 8			



EXHAUST FAN CONTROL
SCHEMATIC (BAS CONTROL)

CONTROLS SCOPE OF WORK:

- 1. THE GENERAL (PRIME) CONTRACTOR SHALL RETAIN THE INSTALLING CONTROLS CONTRACTOR FOR ALL NEW BAS CONTROLS WORK UNDER A CASH ALLOWANCE. ONCE THE CONTRACT IS AWARDED, THE DDSB SHALL SELECT A PRE-QUALIFIED INSTALLING CONTROLS CONTRACTORS BASED ON THE SCOPE OF WORK OUTLINED ON THE DRAWINGS. THE GENERAL (PRIME) CONTRACTOR SHALL CARRY THE SUCCESSFUL INSTALLING CONTROLS CONTRACTOR AS A SUB-TRADE UNDER THE ALLOTTED CASH ALLOWANCE (REFER TO CASH ALLOWANCE SPECIFICATION).
- 2. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEMO ELECTRIC (120V) CONTROLS WORK AND CONTROL WIRING ASSOCIATED WITH THE EXISTING AC UNITS.
- 3. THE INSTALLING CONTROLS CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEMO AND NEW BAS CONTROLS WORK.
- 4. DDSB SHALL SUPPLY ALL REQUIRED SENSORS, RELAYS, CURRENT SWITCHES, CONTROL ENCLOSURES, AND ALL OTHER NECESSARY CONTROL DEVICES FOR A FULLY OPERATIONAL SYSTEM EXCEPT AS NOTED HEREIN AND TURN OVER TO INSTALLING CONTROLS CONTRACTOR FOR INSTALLATION. (THE EXISTING BAS SYSTEM IS SIEMENS CONTROLS).
- 5. DDSB SHALL SUPPLY ALL ELECTRIC (24V) AND NEW BAS CONTROL VALVES AND TURN OVER CONTROL VALVE BODIES TO MECHANICAL CONTRACTOR FOR INSTALLATION. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PICKING UP VALVES FROM DDSB OFFICE AND TRANSPORTING VALVES TO SITE. COORDINATE WITH DDSB.
- 6. DDSB SHALL SUPPLY ALL NEW TEMPERATURE SENSOR WELLS AND TURN OVER TO MECHANICAL CONTRACTOR FOR INSTALLATION. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PICKING UP WELLS FROM DDSB OFFICE AND TRANSPORTING WELLS TO SITE. COORDINATE WITH DDSB.
- SCOPE OF WORK SHALL INCLUDE BUT IS NOT LIMITED TO:

 .1 REMOVAL OF REDUNDANT CONTROLS.
- .2 PROVIDE NEW SPACE SENSORS, RELOCATE EXISTING SENSORS, OR REWIRE EXISTING SENSORS TO SUIT NEW CONTROLS AS REQUIRED AND AS INDICATED ON DRAWINGS.
- 23 PROVIDE NEW OR UPGRADE EXISTING BAS CONTROLLERS AS INDICATED AND FOR COMPLETELY FUNCTIONAL SYSTEMS. TIE NEW CONTROLLERS INTO EXISTING BAS CONTROL NETWORK. RELOCATE EXISTING CONTROLLERS A REQUIRED AND TIE BACK INTO EXISTING BAS CONTROL NETWORK.

 24 PROVIDE CONTROL FOR NEW EXHAUST FANS.
- 6. MECHANICAL CONTRACTOR AND INSTALLING CONTROLS CONTRACTOR SHALL TAKE PRECAUTIONS DURING DEMOLITION AND NEW WORK TO ENSURE BAS COMMUNICATIONS WIRING REMAINS FULLY FUNCTIONAL AND OPERATIONAL DURING RENOVATION. CONTROLS CONTRACTOR SHALL PROVIDE ANY TEMPORARY WIRING REQUIRED TO MAINTAIN SYSTEM UPTIME AND INTEGRITY.
- 7. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING, REPAIRING, AND SEALING ANY WALLS, CEILINGS, OR EQUIPMENT WHERE EXISTING CONTROLS DEVICES ARE REMOVED. COORDINATE LOCATION AND PATCHING FOR NEW CONTROLS WITH INSTALLING CONTROLS CONTRACTOR.

AIR OUTLET SCHEDULE				
TAG	A	A1	В	С
TYPE	FIRE RATED LOUVERED FACE RETURN	FIRE RATED LOUVERED FACE RETURN	SQUARE CONE DIFFUSER	EGG CRATE RETURN
MANUFACTURER	PRICE	PRICE	PRICE	PRICE
MODEL	535-FR-L(D)	535-FR-L	SCD-31-3C	80
SIZE	SEE DRAWINGS	SEE DRAWINGS	SEE DRAWINGS	SEE DRAWINGS
COLOUR	B12	B12	B12	B12
NOTES	-SINGLE DEFLECTION -1/2" BLADE SPACING -CEILING FIRESTOP FLAP -STANDARD 165°F FUSIBLE LINK -ULC LISTED -W/DAMPER	-SINGLE DEFLECTION -1/2" BLADE SPACING -CEILING FIRESTOP FLAP -STANDARD 165°F FUSIBLE LINK -ULC LISTED -LESS DAMPER	-24x24 CEILING MODULE FOR T-BAR MOUNTING	-NO BORDER FOR T-BAR MOUNTING.
ALTERNATE MANUFACTURER	METALAIRE, KREUGER			

FAN SCHEDULE			
TAG		EF-217	EF-209
SERVICE		NEW WASHROOMS	CUSTODIAL 209
TYPE		ROOF MOUNTED	CEILING MOUNTED
MANUFACTURER		соок	BROAN
MODEL		100C15DH	L100MG
AIR FLOW	cfm	450	100
EXTERNAL STATIC	in.wc.	0.5	0.25
SOUND		61 dBA/11 SONES	2.5 @ 0.1"ESP
FAN RPM		1451	-
FAN MOTOR	hp	FRACTIONAL	FRACTIONAL
FAN TYPE		DIRECT DRIVE C/W FSC	CENTRIFUGAL BLOWER
AMPS	amps	-	0.5A
ELECTRICAL	volt/ph	115/1	120/1
DIMENSIONS	inches	18-3/4 SQ x 16-13/16 H	14 SQ x 17 L
APPROX. WEIGHT	lbs	14	
CONTROLS		-TIE INTO BAS TO RUN DURING OCCUPIED HOURS	-TIE INTO BAS TO RUN DURING OCCUPIED HOURS
ACCESSORIES		-ROOF CURB -FAN SPEED CONTROLLER -NEMA-1 DICONNECT -BACKDRAFT DAMPER	-PLUG-IN -POLYMERIC GRILLE -RESILIENT ANTI-VIBRATION MOTOR MOUNTS -6" DUCT CONNECTER ASSEMBLY -METAL GRILLE
ALTERNATE MANUFACTURERS		GREENHECK, CARNES, PENN	•

NEW HOT WATER WALLFIN SCHEDULE				
TAG		WF-A		
MANUFACTURER		SIGMA		
WALLFIN MODEL		SWE-SS		
ELEMENT		ELMT-44C075		
TYPE		SLOPE LOUVERED TOP OUTLET SLOPE LOUVERED BOTTOM INLET		
FLUID		WATER (0% GLYCOL)		
ENCLOSURE HEIGHT	in.	12		
ENCLOSURE DEPTH	in.	5-1/4		
ENCLOSURE LENGTH		SITE MEASURE		
ENCLOSURE COLOUR		STAINLESS STEEL		
ELEMENT LENGTH		REFER TO DRAWINGS		
HEATING CAPACITY	btuh/ft	630		
EWT/LWT	°F	160/140		
NO OF TIERS/ROWS		1		
COPPER TUBING DIA.	in.	3/4"		
ALUMINUM FINS	in.	4"x4"		
CONTROLS		-CONTROL VALVE AND SENSOR. REFER TO DETAILS.		
ACCESSORIES		-CONTINUOUS COVER C/W SPACERS, JOINERS ETC. AS REQUIRED -SLOPE LOUVERED TOP OUTLET AND BOTTOM INLET		
NOTES		CONTRACTOR / SUPPLIER SHALL SITE MEASURE ALL ELEMENT AND ENCLOSURE LENGTHS & HEIGHTS PRIOR TO ORDERING MATERIAL. LENGTHS & HEIGHTS ARE THE RESPONSIBILITY OF THE CONTRACTOR.		
ALTERNATE MANUFACTURERS		ENGINEERED AIR, EH PRICE, TRANE		

HVAC MATERIAL SPECIFICATIONS

- DUCTWORK:
 IN CONFORMANCE WITH SMACNA, ASHRAE, OBC, NFPA 90A.
 SHEET METAL SHALL BE BEST QUALITY LOCK FORMING GALVANIZED SHEET
- METAL. GALVANIZING SHALL BE TO ASTM A525 (G90), HAVING A THICKNESS OF 0.054 MM AND WEIGHING NOT LESS THAN 0.31 KG/M2 ON EACH SURFACE.

 3 ALL ROUND DUCTWORK SHALL BE SPIRAL.
- DUCT ACCESS DOORS
- .1 DUCT ACCESS DOORS SHALL BE EQUAL TO NAILOR 085CL(SQUARE) 0R 0800(OVAL). REFER TO DETAIL.
- .1 PIPING UP TO INCLUDING 2"(50mm): PIPING SHALL BE BLACK STEEL SCHEDULE
 40 WITH MALLEABLE STEEL THREADED SCREW FITTINGS OR COPPER WITH
- SOLDER JOINTS.

 2 PIPING 2-1/2"(63mm) AND OVER: PIPING SHALL BE BLACK STEEL SCHEDULE 40 WITH WELDED FITTINGS.

.3 BRASS ADAPTERS SHALL BE PROVIDED AT ALL CONNECTIONS BETWEEN

- COPPER TUBING AND FERROUS PIPING.

 4 PROVIDE AUTOMATIC AIR VENTS C/W BALL VALVE AT ALL HIGH POINTS. REFER TO SPECIFICATIONS BELOW.
- .5 PROVIDE DRAIN VALVES C/W HOSE CONNECTION AND CAP AT ALL LOW POINTS AND AS NOTED ON DETAILS.

.6 ALLOW FOR ANY CHEMICAL TREATMENT OR GLYCOL FILL TO BRING SYSTEM

- 4. PIPE HANGERS:
- .1 ADJUSTABLE WROUGHT IRON CLEVIS TYPE AND/OR ADJUSTABLE RING WITH THREADED SUSPENSION RODS.
 .2 FOR COPPER PIPING (INCLUDING PIPING WITHIN WALLFIN ENCLOSURE) PROVIDE COPPER PLATED OR EPOXY TYPE HANGERS OR PROVIDE
- SEPARATION OF DISSIMILAR METALS WITH APPROVED DIELECTRIC MATERIALS. INSULATING TAPE IS NOT ACCEPTABLE.

 3 HANGERS SHALL WRAP AROUND OUTSIDE OF PIPE INSULATION. PROVIDE
- SADDLES TO PREVENT CRUSHING OF INSULATION.

 4 PIPE HANGER SPACING
 -SIZES UP TO 1-1/4"(32mm) = 8'(2.5m) SPACING
 -SIZES 1-1/2"(38mm) TO 2"(50mm) = 10'(3m) SPACING

TO ACCEPTABLE LEVELS AND SUBMIT REPORTS.

- -SIZES 2-1/2"(63mm) AND OVER = 12'(3.5m) SPACING
 PROVIDE HANGER WITHIN 12"(300mm) OF EVERY ELBOW
- VALVES AND ACCESSORIES:

 .1 ALL VALVES SHALL BE LINE SIZED UNLESS OTHERWISE NOTED. (CBVs
- GENERALLY NOT LINE SIZE).

 2 CIRCUIT BALANCING VALVES SHALL BE IMI TA STAS/STAD/STAF SERIES (NO ALTERNATES ACCEPTABLE). MOUNT WITH PORTS UPRIGHT OR AT LEAST 90° UP FROM BOTTOM. SUBMIT SHOP DRAWINGS COMPLETE WITH VALVE SIZING SCHEDULE.
- .3 BALL VALVES SHALL BE EQUAL TO KITZ 58 & 59.
 .4 AUTOMATIC AIR VENTS SHALL BE EQUAL TO:

 -WALLFINS, CONVECTORS, RADS: "MAID-O-MIST" #67 COMPLETE WITH BALL VALVE
 -PIPE MAINS & LINES, MECHANICAL ROOMS, EQUIPMENT, COILS, CEILING SPACES AND ALL OTHER SPACES EXCEPT NOTED ABOVE: "MAID-O-MIST" #71 COMPLETE WITH BALL VALVE
- WATER TREATMENT:
- ALLOW FOR CHEMICAL TREATMENT TO BRING SYSTEM TO ACCEPTABLE LEVELS AND SUBMIT REPORTS.
 OBTAIN THE SERVICES OF MK SERVICES FOR ALL WATER TREATMENT.
- . DUCT INSULATION:
 .1 ACOUSTIC DUCT INSULATION
 - .1 FIBERGLASS INSULATION, COATED TO PREVENT FIBRE EROSION AT AIR VELOCITIES UP TO 400 fpm.
 .2 ALL SUBSTRATE MATERIAL TO BE NON-DARKENED, CONTRASTING COLOUR FROM LINER LAYER.
- .3 THICKNESS: 1" (25mm)
 .2 THERMAL DUCT INSULATION
 .1 INSULATION SHALL BE PRECOVERED, PREFORMED RIGID FIBROUS
- GLASS INSULATION COMPLETE WITH FOIL OR KRAFT ALL-PURPOSE JACKET.

 2 0.75 PCF (12 kg/m³) DENSITY, 0.29 K-VALUE WITH 25/50 FLAME
- SPREAD/SMOKE DEVELOPMENT CLASSIFICATION IN ACCORDANCE WITH CAN/ULC \$102.
- .3 SUPPLY, RETURN AND EXHAUST DUCT APPLICATION THICKNESS: 1" (25mm) MINIMUM.
- .4 OUTDOOR AIR INTAKE DUCT APPLICATION THICKNESS:
 2"(50mm) MINIMUM
 .5 RECOVERING JACKETS (INTERIOR): ULC LISTED "THERMO CANVAS",

TREATED COTTON FABRIC. PIPE INSULATION:

.1 PROVIDE 1-1/2"(38mm) PIPE INSULATION ON ALL HEATING PIPING SIZES UP TO AND INCLUDING 1-1/4"(32mm)

VALVES, ETC. PROVIDE NON-CRUSHING INSULATION AT ALL PIPE HANGERS

- .2 PROVIDE 2"(50mm) PIPE INSULATION ON ALL HEATING PIPING SIZES
 1-1/2"(38mm) AND OVER
 .4 EXTERNAL PIPE INSULATION SHALL BE RIGID, SECTIONAL FIBERGLASS TYPE
 AND BE COMPLETE WITH FACTORY SUPPLIED ALL PURPOSE VAPOUR
 BARRIER. PRE-FORMED INSULATION SHALL BE USED AT PIPE FITTINGS.
- AND PROVIDE SADDLES.

 5 PROVIDE PVC JACKET ON ALL INSULATION IN EXPOSED AREAS.

ACCESS DOORS/COVERS

- 1 FLUSH ACCESS DOOR UNIVERSAL: ACUDOR #UF-5000 UNIVERSAL ACCESS DOORS, 14 GA. (1.7mm) STEEL, BAKED ENAMEL PRIME COAT, CONTINUOUS CONCEALED HINGE, WITH POSITIVE AND SELF-OPENING SCREWDRIVER OPERATED LOCK. DOORS IN WASHROOMS SHALL BE STAINLESS STEEL. ALL OTHER PANELS SHALL BE BAKED ENAMEL PRIME COATED FOR FIELD PAINTING. MINIMUM SIZE OF PANELS SHALL BE 12"x18" (300mmx450mm). WHEREVER POSSIBLE 24"x24" (600mmx600mm) PANELS SHALL BE USED.
- WHEREVER POSSIBLE 24"x24" (600mmx600mm) PANELS SHALL BE USED.

 2 RECESSED ACCESS DOOR DRYWALL AREA: ACUDOR #DW-5015 SERIES RECESSED ACCESS DOOR, 16 GA. (1.5mm) STEEL, BAKED ENAMEL PRIME COAT, WITH CONCEALED PIVOTING ROD TYPE HINGE AND SELF-OPENING SCREWDRIVER OPERATED LOCK. DOOR TO BE RECESSED 5/8" (14mm) TO RECEIVE DRYWALL. FLANGE OF DOOR TO BE GALVANIZED STEEL TAPING BEADING TO PROVIDE FINISH OF DRYWALL JOINTS FOR FIELD PAINTING.

HVAC NOTES:

- CONCEAL ALL SERVICES IN CEILING SPACES AND FURRED CONSTRUCTION UNLESS INSTALLED IN UNFINISHED OR EXPOSED AREAS OR IF SPECIFICALLY NOTED TO BE
- 2. COORDINATE INSTALLATION WITH ALL OTHER TRADES.
- REFER TO REFLECTED CEILING PLAN TO CONFIRM EXACT LOCATION OF GRILLES AND DIFFUSERS. LIGHTING TAKES PRECEDENCE.
- 4. PROVIDE ACOUSTIC INSULATION IN ALL TRANSFER DUCTS AND AS INDICATED ON DRAWINGS. SEAL ALL EXPOSED ENDS OF INSULATION.
- 5. TEMPORARILY SEAL ALL OPEN DUCTS THROUGHOUT CONSTRUCTION TO PREVENT DUST AND DIRT FROM ENTERING THE SYSTEM. WHERE THE CONTRACTOR DOES NOT CONFORM THEY ARE RESPONSIBLE FOR CLEANING OF THE SYSTEMS IN A MANNER APPROVED BY THE CONSULTANT.
- 6. BRANCH DUCTWORK TO DIFFUSERS TO BE SAME SIZE AS DIFFUSER NECK.
- REVIEW WITH BALANCING CONTRACTOR TO CONFIRM LOCATIONS OF ALL BALANCE DAMPERS PRIOR TO CONSTRUCTION.

PROVIDE BALANCE DAMPERS ON ALL BRANCH DUCTS CLOSE TO MAIN TAKE-OFF.

- 8. INCLUDE FOR THE SUPPLY AND INSTALLATION OF TWO(2) EXTRA BALANCE DAMPERS AFTER CONSTRUCTION AND BALANCING COMPLETION. (PENDING BALANCING RESULTS AND COMMENTS).
- 9. FLEXIBLE DUCT SHALL ONLY BE USED IN SUPPLY AIR APPLICATIONS FOR CONNECTIONS TO DIFFUSERS IN DROPPED CEILING. FLEXIBLE DUCT SHALL BE MAXIMUM 6' (1.8m) IN LENGTH AND SHALL BE SECURELY FASTENED TO DUCTS AND DIFFUSERS. PROVIDE HANGERS AND FLEXIBLE DUCTWORK WITHOUT SHARP 90°S, SAGGING, OR CRUSHING OF DUCT. FLEXIBLE DUCT IS NOT ACCEPTABLE IN ANY OTHER APPLICATION.
- PROVIDE EXTERNAL INSULATION ON ALL SUPPLY AIR DUCTS, ALL OUTSIDE AIR DUCTS AND ON ALL EXHAUST DUCTS WITHIN 8' (2.4m) OF OUTSIDE WALL/ROOF INCLUDING RIGID AND FLEXIBLE DUCT.
- 11. ALL INDOOR CONTROL WIRING SHALL BE RUN IN EMT CONDUIT OR FT6 (EMT SHALL BE USED IN EXPOSED AREAS). LAST 3' SHALL BE BX WHEN USING CONDUIT. ALL OUTDOOR CONTROL WIRING SHALL BE RUN IN LIQUIDTIGHT.] [ALL CONCEALED INDOOR CONTROL WIRING SHALL BE RUN IN LVT. ALL EXPOSED INDOOR CONTROL WIRING (IN UNFINISHED AREAS ONLY) SHALL BE RUN IN EMT CONDUIT WITH FINAL CONNECTION IN BX. ALL OUTDOOR CONTROL WIRING SHALL BE RUN IN LIQUIDTIGHT.
- 12. PROVIDE FIRE DAMPERS AT ALL FIRE SEPARATIONS. FIRE DAMPERS SHALL BE TYPE 'B' C/W LINKAGE OUT OF THE AIR STREAM. FIRE DAMPER RATING TO MATCH THE RATING OF THE SEPARATION CROSSED. INSTALLATION MUST CONFORM TO LATEST NFPA/CUA 90A SPECIFICATIONS. ONLY USE ULC APPROVED EQUIPMENT. PROVIDE DUCT ACCESS DOORS AND BREAK AWAY FLANGES FOR ALL FIRE DAMPERS IN CONFORMANCE WITH CODE AND INSTALLATION INSTRUCTIONS. ACCESS DOORS SHALL BE TWIST LOCK TYPE SCREWED PANELS ARE NOT ACCEPTABLE.
- 13. PROVIDE SLEEVES FOR PIPES THROUGH ALL NEW BLOCK WALLS. FILL VOIDS AROUND PIPES. ENSURE NO CONTACT BETWEEN DISSIMILAR METALS.
- 14. SUPPLY DRYWALL ACCESS DOORS FOR CONCEALED FIRE AND BALANCE DAMPERS AND ANY OTHER CONCEALED DEVICES [AND TURN OVER TO THE GENERAL CONTRACTOR FOR INSTALLATION. DOORS TO BE GALVANIZED STEEL FOR FIELD PAINTING. DOORS SHALL BE RATED WHERE INSTALLED IN FIRE SEPARATIONS.
- 15. DRAIN HEATING SYSTEMS AS REQUIRED FOR NEW WORK. FILL, FLUSH, TEST AND TREAT (CHEMICAL TREATMENT) AFTER WORK IS COMPLETE. PROVIDE ALL PORTS, VALVES AND GAUGES AS REQUIRED. SUBMIT CHEMICAL TREATMENT REPORT TO ENGINEER. FREEZING OF PIPING TO ALLOW ISOLATION OF WORK AREA IS ACCEPTABLE IN LIEU OF DRAINING.
- 16. ALL CBVs SHALL BE MOUNTED WITH PORTS IN HORIZONTAL (90°) POSITION.
- 17. PROVIDE EXTERNAL INSULATION ON ALL HEATING PIPING EXCEPT IN WALLFIN ENCLOSURES.
- 18. PROVIDE FIRE STOPPING AROUND ALL NEW PIPING THROUGH FIRE SEPARATIONS IN ACCORDANCE WITH CAN/ULC-S115.
- 19. LABEL ALL NEW HEATING PIPING COMPLETE WITH FLOW ARROWS. LABELS SHALL BE MAX 3m(10') SPACING AND ON EITHER SIDE OF WALLS. LABELING MUST BE COMPLETE PRIOR TO NEW CEILING BEING INSTALLED OTHERWISE IT IS THE CONTRACTORS RESPONSIBILITY TO REMOVE CEILING TILES FOR INSPECTION AT THE DIRECTION OF THE CONSULTANT.
- 20. LABEL CEILING TILE WITH PERMANENT ADHESIVE LABELS OR LAMACOID NAMEPLATES FOR ACCESS TO MECHANICAL ITEMS.
- O 21. OBTAIN THE SERVICES OF A NEBB, CAABC OR NBCTA ACCREDITED BALANCING COMPANY TO BALANCE THE COMPLETE HVAC SYSTEM. PROVIDE REPORT TO ENGINEER FOR REVIEW. REFER TO SPECIFICATIONS FOR APPROVED AGENTS.

BALANCING SPECIFICATIONS:

- OBTAIN THE SERVICES OF A 3rd PARTY ACCREDITED BALANCING COMPANY TO
 BALANCE THE COMPLETE AIR AND WATER HVAC SYSTEM.
- PROVIDE PRELIMINARY REPORT TO ENGINEER FOR REVIEW AND COMMENTS.
 ALLOW FOR ONE FOLLOW-UP SITE VISIT FOR ADJUSTMENTS.
- 4. RETURN TO SITE FOR ANY ADJUSTMENTS AND SUBMIT FINAL REPORT TO ENGINEER AND CONTRACTOR FOR INCLUSION INTO MAINTENANCE MANUAL.
- 5. ACCEPTABLE AGENTS:
 - .1 QUALITY AIR DISTRIBUTION INC CONTACT: MIKE NOONAN
 - TEL: (289)892-7168
 EMAIL: mike@qualityairdistribution.com
 - 2 DESIGN TEST & BALANCE
 CONTACT: SURRINDER SINGH
 TEL: (905)886-6513
 EMAIL: mail@designtest.ca
 - 6 FLOWSET BALANCING
 CONTACT: CHRIS PITHER
 PHONE: (416)410-9793 OR (647)321-5114
 EMAIL: chrisp@flowset.com
- .8 COMPLETE SYSTEMS BALANCING
 CONTACT: TREVOR KELLY
 PHONE: 705-760-0390
 EMAIL: trevork@csbalancing.com

GENERAL NOTES:

- WORK TO BE COMPLETED OUTSIDE REGULAR HOURS:

 .1 ANY WORK THAT CREATES DISRUPTION TO REGULAR SCHOOL OR OCCUPANT ACTIVITIES AND OPERATIONS SHALL BE DONE OUTSIDE OF REGULAR SCHOOL HOURS. THIS INCLUDES BUT IS NOT LIMITED TO SERVICE INTERRUPTIONS, WORK THAT GENERATES NOISE, WORK THAT GENERATES VIBRATIONS, WORK
- THAT GENERATES FUMES/SMELLS, ETC.

 .2 ANY WORK INSIDE OR OUTSIDE, THAT CREATES RISK TO BUILDING
 OCCUPANTS SHALL BE DONE OUTSIDE OF REGULAR SCHOOL HOURS.
- .3 ANY WELDING SHALL BE DONE OUTSIDE REGULAR SCHOOL HOURS.
 HOURS.
- 2. OBTAIN, ARRANGE AND PAY FOR ALL REQUIRED PERMITS AND INSPECTIONS.
- 3. THE CONTRACTOR AND ITS SUB-TRADES SHALL ATTEND BI-WEEKLY SITE MEETINGS OR AS ARRANGED BY CONSULTANT OR OWNER.
- 4. OBTAIN AND REVIEW THE DESIGNATED SUBSTANCE REPORT FROM THE CLIENT AND COORDINATE ANY DESIGNATED SUBSTANCE ISSUES WITH THE CLIENT PRIOR TO ANY WORK BEING DONE.
- 5. PROVIDE SHOP DRAWINGS ELECTRONICALLY IN PDF FORMAT TO CONSULTANT FOR REVIEW. ALL SHOP DRAWINGS MUST BE REVIEWED, STAMPED AND SIGNED BY THE MECHANICAL CONTRACTOR PRIOR TO SUBMITTING TO THE CONSULTANT. REVIEW SHALL INCLUDE BUT NOT BE LIMITED TO: VERIFYING UNIT VOLTAGE WITH ELECTRICIAN AND/OR SITE, EQUIPMENT PERFORMANCE, DIMENSIONS AND CLEARANCES.
- 6. THOROUGHLY REVIEW AND COORDINATE WITH SITE CONDITIONS AND COMPLETE DRAWING SET PRIOR TO PRICING AND INSTALLATION.
- 7. INSTALL ALL WORK IN CONFORMANCE WITH MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS.
- 8. DO NOT USE ANY NEW PERMANENT EQUIPMENT FOR TEMPORARY USE DURING CONSTRUCTION WITHOUT WRITTEN APPROVAL. WHERE SYSTEMS ARE USED AND ARE CONTAMINATED BY DUST OR DIRT, THE CONTRACTOR SHALL CLEAN IN A MANNER ACCEPTABLE TO THE CONSULTANT.
- 9. MAINTAIN AS-BUILT DRAWINGS ON AN ON-GOING BASIS. DRAWINGS SHALL BE AVAILABLE FOR PERIODIC REVIEW BY THE CONSULTANT DURING CONSTRUCTION.
- ALL WORK SHALL COMPLY WITH APPLICABLE CODES.
- REMOVE ALL REDUNDANT EQUIPMENT, MATERIALS AND GARBAGE FROM SITE AND DISPOSE OF IN AN APPROVED MANNER. REDUNDANT EQUIPMENT AND MATERIALS SHALL NOT BE ABANDONED IN PLACE.
- 12. ALL CUTTING AND CORING SHALL BE BY THIS CONTRACTOR. COORDINATE PATCHING WITH GENERAL CONTRACTOR. TRENCHING, EXCAVATION AND BACKFILL FOR UNDERGROUND PLUMBING SHALL BE BY THIS CONTRACTOR. ALL SAW CUTTING AND RESTORATION OF CONCRETE FLOOR BY GENERAL CONTRACTOR. COORDINATE WITH SAME
- 3. COORDINATE ROOFING FOR DUCT AND PIPE ROOF PENETRATIONS WITH GENERAL CONTRACTOR. PROVIDE PITCH POCKETS FOR ALL SERVICES THROUGH ROOF UNLESS SERVICES CAN BE FED THROUGH BASE OF EQUIPMENT.
- 14. ANY FEED TO NEW ROOFTOP EQUIPMENT SHALL BE INSTALLED WITH GOOSENECK STYLE PITCH POCKET EQUAL TO THALER METAL MEF-2A OR DOGHOUSE. SIZE AS REQUIRED TO SUIT FEED.
- 15. MAINTAIN REQUIRED ACCESS AND CLEARANCE TO ALL EQUIPMENT AND SYSTEMS AS REQUIRED BY CODE AND AS PER MANUFACTURER'S REQUIREMENTS.
- 16. TAG ALL EQUIPMENT WITH LAMACOID NAMEPLATES. TAG ALL VALVES WITH LAMACOID NAMEPLATES OR BRASS TAGS ON CHAINS.
- 17. LABEL ALL NEW PIPING WITH SERVICE AND FLOW ARROWS EVERY 10'(3m) AND ON
- EITHER SIDE OF WALLS.

 8. THE CONTRACTOR SHALL ARRANGE FOR INSPECTIONS BY THE ENGINEER PRIOR TO CEILINGS AND WALLS BEING CLOSED IN. WHERE THIS HAS NOT BEEN ARRANGED IT IS
- THE CONTRACTOR'S RESPONSIBILITY TO REMOVE CEILING TILES OR ACCESS DOORS FOR INSPECTION AT THE DIRECTION OF THE CONSULTANT.

 19. PERFORM TESTING AND START UP OF ALL SYSTEMS AS REQUIRED BY CODE, THE
- CONSULTANT, MANUFACTURER'S REQUIREMENTS, AND AUTHORITIES HAVING JURISDICTION. SUBMIT REPORTS TO THE CONSULTANT.
- 20. INSTRUCT AND DEMONSTRATE TO THE OWNER ON PROPER OPERATION OF THE SYSTEM. RECORD AND SUBMIT A LOG DATED AND SIGNED BY ALL ATTENDEES.
- 21. UPON COMPLETION OF THE PROJECT THE CONSULTANT WILL DO A FINAL REVIEW. UPON RECEIVING THE FINAL INSPECTION REPORT, THE CONTRACTOR MUST CORRECT AND SIGN BACK THE INSPECTION REPORT INDICATING ALL DEFICIENCIES ARE COMPLETED. A RE-INSPECTION WILL ONLY BE DONE ONCE THE CONSULTANT RECEIVES THIS IN WRITING. WHERE THE CONSULTANT PERFORMS THE
- RE-INSPECTION AND THE WORK IS NOT COMPLETE, THE CONTRACTOR IS
 RESPONSIBLE FOR REIMBURSING THE CONSULTANT FOR THE FIELD REVIEW. THE FEE
 FOR ADDITIONAL REVIEWS WILL BE AT THE CONSULTANT'S HOURLY RATES PLUS
 MILEAGE AND APPLICABLE TAXES TO BE PAID DIRECTLY TO THE CONSULTANT PRIOR
 TO PERFORMING THE NEXT FIELD REVIEW.
- 22. PROVIDE ONE (1) YEAR WARRANTY ON ALL MATERIAL AND LABOUR FROM THE DATE
- OF SUBSTANTIAL COMPLETION.

 23. PROGRESS DRAWS SHALL INCLUDE MINIMUM \$2,500.00 FOR MANUALS AND AS-BUILT DRAWINGS. TOTAL AMOUNT SHALL REMAIN UNBILLED UNTIL MANUALS AND AS-BUILT
- 24. PROVIDE ONE (1) ELECTRONIC COPY OF MAINTENANCE MANUAL BY WEB TRANSFER AND ON USB. MANUAL SHALL INCLUDE:
 TABLE OF CONTENTS

DRAWINGS HAVE BEEN SUBMITTED AND APPROVED.

- CONTRACTOR INFORMATION
 WARRANTY LETTER
 SHOP DRAWINGS
- INSPECTION & TEST REPORTS
 AS-BUILT DRAWINGS.
- AS-BUILT DRAWINGS.

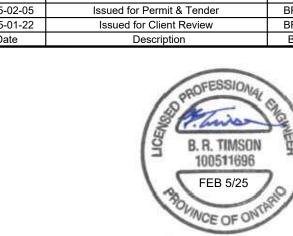
 AS-BUILT DRAWINGS SHALL INCLUDE <u>COMPLETE</u> MECHANICAL DRAWING SET WITH ANY CHANGES MARKED CLEARLY AND NEATLY IN COLOUR. AS-BUILTS SHALL BE STAMPED ACCORDINGLY BY THE CONTRACTOR (ALL DRAWINGS). DRAWINGS SHALL BE SUBMITTED HARD COPY IN FULL SIZE. SUBSTANTIAL COMPLETION WILL NOT BE AWARDED UNTIL THE MANUALS AND AS-BUILTS HAVE BEEN SUBMITTED TO THE CONSULTANT AND THE CONSULTANT HAS APPROVED.

	EXISTING		
	DEMOLITION		
	SUPPLY DUCTS (UP / DOWN)		
\$	EXHAUST DUCTS (UP / DOWN)		
	ROUND DUCTS (UP / DOWN)		
	FLEXIBLE DUCT		
\$ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	ACOUSTIC LINED DUCT		
× Z	TURNING VANES		
	BALANCE DAMPER		
FD FD	FIRE DAMPER		
	SUPPLY DIFFUSER (SQUARE / ROUND)		
	RETURN/EXHAUST CEILING GRILLE		
——нs———	HOT WATER HEATING SUPPLY (HS)		
HRHR	HOT WATER HEATING RETURN (HR)		
	ELBOW RISING		
	ELBOW DROPPING		
	BRANCH RISING FROM TEE		
	BRANCH DROPPING FROM TEE		
ІФІ	BALL SHUT-OFF VALVE		
N	CHECK VALVE		
M	DANFOSS 2-WAY CONTROL VALVE		
×	CIRCUIT BALANCING VALVE (CBV)		
ıļı	UNION		
И	CONCENTRIC REDUCER		
♥	STRAINER		
AAV G	AUTOMATIC AIR VENT C/W 1/4" BALL VALVE AND NIPPLE/COUPLING (MINI BALL VALVES NOT ACCEPTABLE)		
TYPE	EQUIPMENT TYPE OF EQUIPMENT NUMBER DESIGNATION		
QTY TYPE SIZE AIR	GRILLE TYPE SYMBOLS SIZE (mm) AIR FLOW (cfm)		
QTY TYPE SIZE-1 SIZE-2 CAPACITY TYPE FIN LENGTH (mm) ENCLOSURE LENGTH (min) CAPACITY (MBH)			
MECHANICAL ABBREVIATIONS			
EX	EXISTING TO REMAIN		

HVAC LEGEND

CAPACITY	CAPACITY (MBH)	
MECHANIC	CAL ABBREVIATIONS	
EX	EXISTING TO REMAIN	
AFF	ABOVE FINISHED FLOOR	
CTE	CONNECT TO EXISTING	
C/W	COMPLETE WITH	
S/A	SUPPLY AIR	
R/A	RETURN AIR	
E/A	EXHAUST AIR	

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WASHROOM RENOVATION AT STEPHEN G. SAYWELL PS

855 ROUNDELAY DRIVE, OSHAWA, ON

HVAC LEGENDS, NOTES, SCHEDULES AND CONTROLS

DISCIPLINE:

MECHANICAL

DRAFTER:
MRC

DESIGNER:
BRT

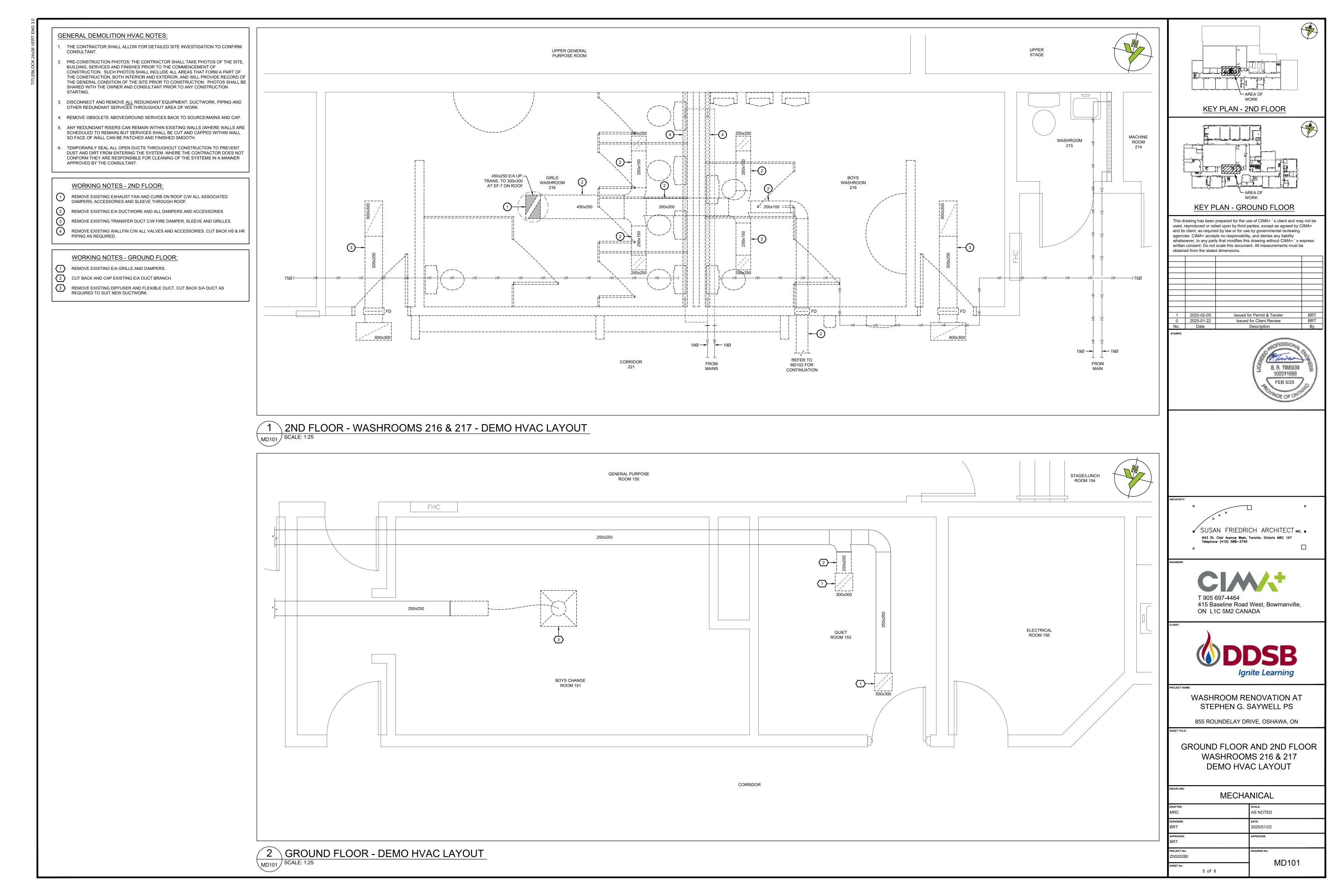
DATE:
2025/01/22

APPROVER:
BRT

PROJECT No:
Z0020280

SHEET No:

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GENERAL NEW HVAC NOTES: UPPER GENERAL . WORK TO BE COMPLETED OUTSIDE REGULAR HOURS: PURPOSE ROOM STAGE .1 ANY WORK THAT CREATES DISRUPTION TO REGULAR SCHOOL OR OCCUPANT 300x300 300x300 110cfm 300x300 50cfm ACTIVITIES AND OPERATIONS SHALL BE DONE OUTSIDE OF REGULAR SCHOOL HOURS. THIS INCLUDES BUT IS NOT LIMITED TO SERVICE INTERRUPTIONS, WORK THAT GENERATES NOISE, WORK THAT GENERATES VIBRATIONS, WORK THAT GENERATES FUMES/SMELLS, ETC. 2 ANY WORK INSIDE OR OUTSIDE, THAT CREATES RISK TO BUILDING OCCUPANTS SHALL BE DONE OUTSIDE OF REGULAR SCHOOL HOURS. ANY WELDING SHALL BE DONE OUTSIDE REGULAR SCHOOL HOURS. AREA OF THE CONTRACTOR SHALL INVESTIGATE AND CONFIRM SERVICES ON SITE PRIOR TO WORK CONSTRUCTION AND REPORT ANY DISCREPANCIES TO CONSULTANT. KEY PLAN - 2ND FLOOR PRE-CONSTRUCTION PHOTOS: THE CONTRACTOR SHALL TAKE PHOTOS OF THE SITE, BUILDING, SERVICES AND FINISHES PRIOR TO THE COMMENCEMENT OF ROOM CONSTRUCTION. SUCH PHOTOS SHALL INCLUDE ALL AREAS THAT FORM A PART OF THE CONSTRUCTION, BOTH INTERIOR AND EXTERIOR, AND WILL PROVIDE RECORD OF THE GENERAL CONDITION OF THE SITE PRIOR TO CONSTRUCTION. PHOTOS SHALL BE SHARED WITH THE OWNER AND CONSULTANT PRIOR TO ANY STORAGE WASHROOM CONSTRUCTION STARTING. 600mm 216B 600mm 4. SCAN ROOF PRIOR TO ROOF CUTS. 0.8 MBH 0.8 MBH REFER TO ARCHITECTURAL DRAWINGS AND/OR GENERAL CONTRACTOR FOR CEILING HEIGHTS TO ENSURE ALL SERVICES ARE CONCEALED WITHIN AVAILABLE CEILING SPACE. RUN ALL NEW SERVICES UP IN JOIST SPACE AND BETWEEN LIGHTS AS NOTED OR AS REQUIRED. 6. COORDINATE ALL SERVICES WITH ALL TRADES PRIOR TO INSTALLATION. 7. THERMALLY INSULATE EXHAUST AIR DUCTWORK 2.4m BACK FROM ROOF. **KEY PLAN - GROUND FLOOR** 8. FIRE STOP ALL NEW PIPING THROUGH RATED WALLS IN AREA OF WORK. 9. SUPPLY ACCESS DOORS FOR MECHANICAL DEVICES CONCEALED BEHIND DRYWALL This drawing has been prepared for the use of CIMA+ 's client and may not be AND TURN OVER TO GENERAL CONTRACTOR FOR INSTALLATION. used, reproduced or relied upon by third parties, except as agreed by CIMA+ and its client, as required by law or for use by governmental reviewing 10. LABEL CEILING GRID AT ACCESS TO MECHANICAL EQUIPMENT AND DEVICES WITH agencies. CIMA+ accepts no responsibility, and denies any liability LAMACOID NAMEPLATE. whatsoever, to any party that modifies this drawing without CIMA+ 's express written consent. Do not scale this document. All measurements must be 11. TEMPORARILY SEAL ALL OPEN DUCTS THROUGHOUT CONSTRUCTION TO PREVENT obtained from the stated dimensions. DUST AND DIRT FROM ENTERING THE SYSTEM. WHERE THE CONTRACTOR DOES NOT CONFORM THEY ARE RESPONSIBLE FOR CLEANING OF THE SYSTEMS IN A MANNER APPROVED BY THE CONSULTANT. CORRIDOR 0.4 MBH **WORKING NOTES - 2ND FLOOR** 250x250 E/A UP THROUGH ROOF TO NEW EXHAUST FAN MOUNTED ON NEW CURB. THERMALLY INSULATE LAST 2.4m BACK FROM ROOF. 2 NEW ACOUSTICALLY LINED TRANSFER ELBOW. REFER TO DETAIL. REFER TO PLAN DRAWING FOR SIZE. Issued for Permit & Tender Issued for Client Review 3 PROVIDE NEW WALLFIN. PROVIDE COMMON SET OF VALVES IN CORRIDOR CEILING WITH COMMON DANFOSS VALVE FOR CONTROL. REFER TO DETAIL. RUN HEATING PIPING UP INTO CEILING SPACE BETWEEN SECTIONS OF ENCLOSURE. 19Ø -- PROVIDE CBV FOR EACH BRANCH OF HR PIPING AND BALANCE TO VALUE SHOWN. CONTROLS WORKING NOTES - 2ND FLOOR: 100511696 REFER TO DRAWING M501 FOR CONTROLS SCOPE. FEB 5/25 (C1) PROVIDE CONTROLS AND CONTROL WIRING FOR NEW EXHAUST FAN. WORKING NOTES - GROUND FLOOR: PROVIDE NEW S/A DUCT AND DIFFUSER AND CONNECT TO EXISTING S/A MAIN IN 1 \ 2ND FLOOR - NEW WASHROOMS 216A TOT 216G - NEW HVAC LAYOUT CHANGEROOM CEILING. M-101 | SCALE: 1:25 2 EXTEND E/A DUCT DOWN TO CEILING LEVEL AND CONNECT TO NEW GRILLE IN TBAR CEILING. PROVIDE NEW BALANCE DAMPER. PROVIDE NEW TAKEOFF, GRILLE AND BALANCE DAMPER AND CONNECT TO EXISTING GENERAL PURPOSE STAGE/LUNCH **ROOM 150 ROOM 154** FHC 250x250 300x300 350cfm 415 Baseline Road West, Bowmanville, 250x250 250x250 ON L1C 5M2 CANADA \bigcirc ELECTRICAL ROOM 156 - 200Ø -BOYS CHANGE ROOM 151 WASHROOM RENOVATION AT STEPHEN G. SAYWELL PS QUIET **ROOM 153** 855 ROUNDELAY DRIVE, OSHAWA, ON 2ND FLOOR NEW WASHROOMS 216A TO 216G **NEW HVAC LAYOUT** CORRIDOR **MECHANICAL** AS NOTED 2025/01/22 2 GROUND FLOOR - NEW HVAC LAYOUT

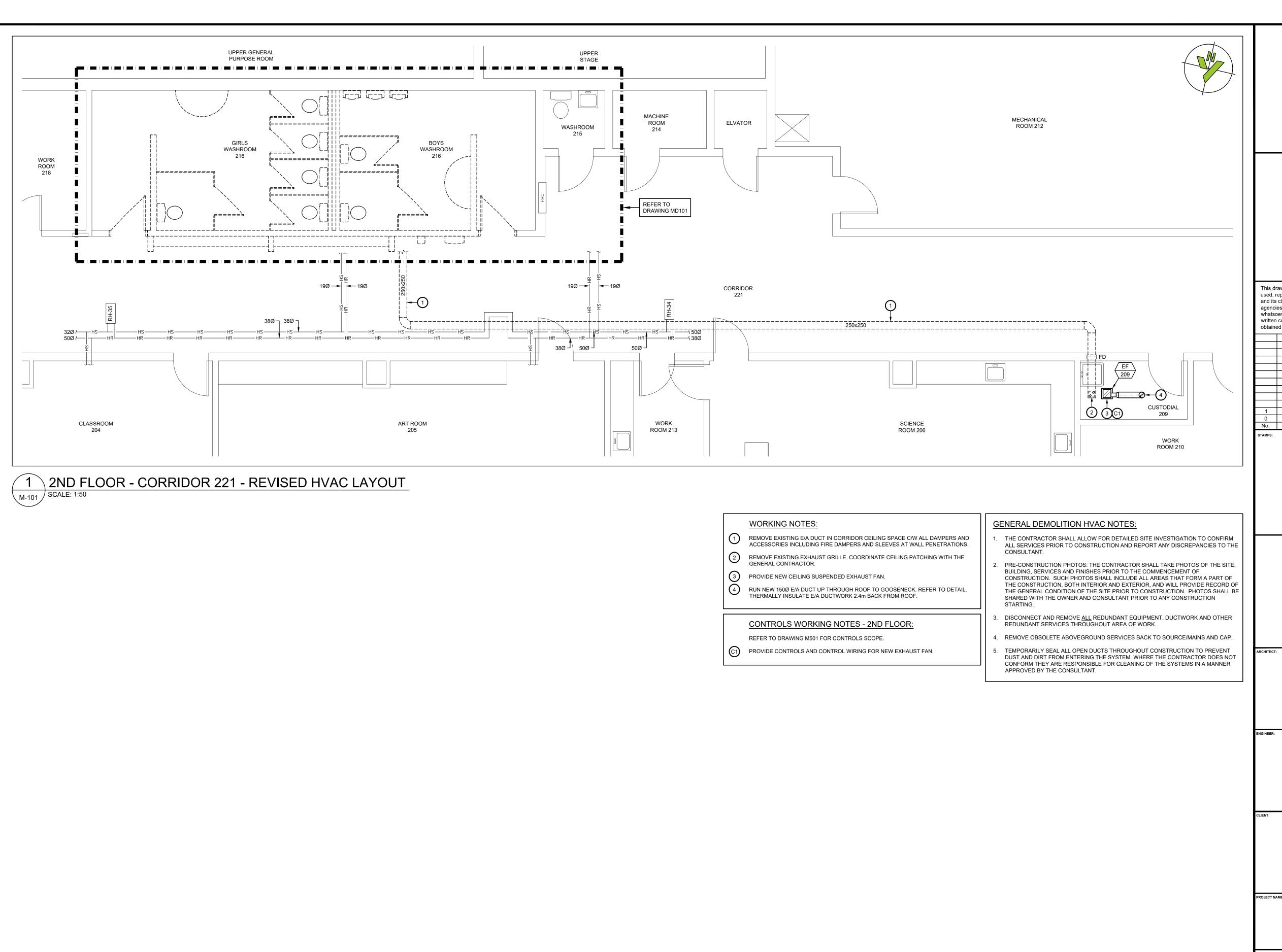
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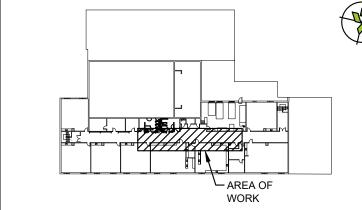
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M-101

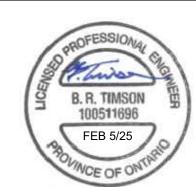




KEY PLAN - 2ND FLOOR

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ON L1C 5M2 CANADA

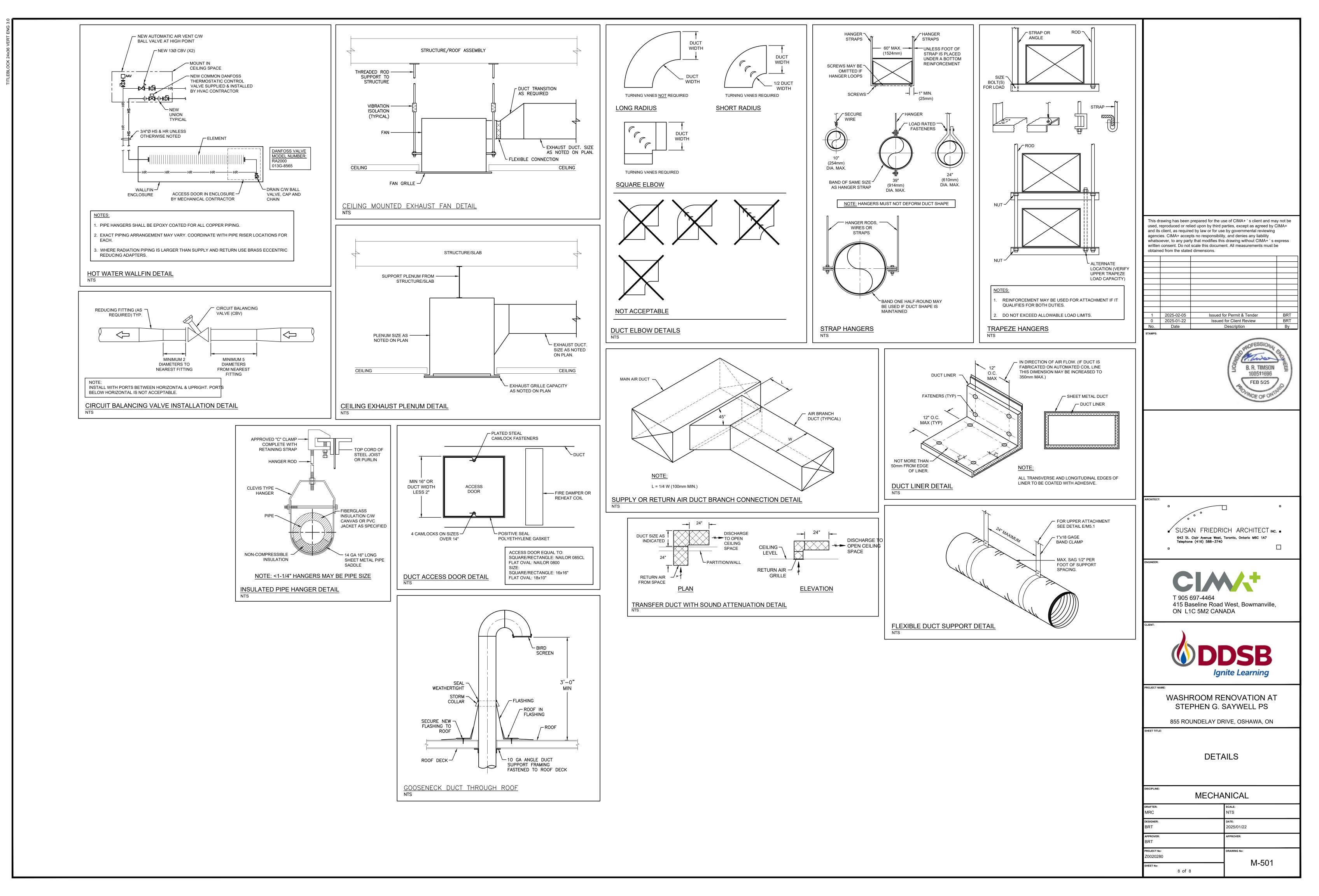


WASHROOM RENOVATION AT STEPHEN G. SAYWELL PS

855 ROUNDELAY DRIVE, OSHAWA, ON

2ND FLOOR **CORRIDOR 221** REVISED HVAC LAYOUT

DISCIPLINE:	IECHANICAL
DRAFTER: MRC	scale: AS NOTED
DESIGNER: BRT	DATE: 2025/01/22
APPROVER: BRT	APPROVER:
PROJECT No: Z0020280	DRAWING No:
SHEET No: 7 of 8	M-102



WHERE EXPOSED WIRING HAS BEEN APPROVED).

- T-BAR CEILING SPACES.
- VERTICAL DROPS TO DEVICES IN NEW WALLS (I.E. SWITCHES RECEPTACLES,

LIQUIDTIGHT MUST BE USED IN THE FOLLOWING INDOOR AND OUTDOOR

LAST 5' (1.5m) FOR FINAL CONNECTION TO INDOOR AND OUTDOOR MECHANICAL EQUIPMENT. LIQUID TIGHT CONDUIT IN CEILING SPACE MUST BE PLENUM

- ALL OUTDOOR WIRING.
- FLEXIBLE CABLE IS ONLY ACCEPTABLE IN THE FOLLOWING INDOOR APPLICATIONS:
- LAST 5' (1.5m) FOR FINAL CONNECTION TO LIGHTING AND SMALL EQUIPMENT/COMPONENTS IN CEILING SPACES. DAISY CHAIN OF LUMINAIRES IS NOT ALLOWED.
- LAST 5'(1,5m) FOR FINAL CONNECTION TO MECHANICAL EQUIPMENT LOCATED IN CEILING SPACE OR ON ROOF.
- FISHED DOWN IN EXISTING WALL(S). FLEXIBLE CABLE IN NOT PERMITTED IN

P.A. SYSTEMS

- ELECTRICAL CONTRACTOR RESPONSIBLE FOR OBTAINING THE SERVICES OF A QUALIFIED PUBLIC ADDRESS SYSTEM CONTRACTOR TO CARRY OUT ALL WORK ASSOCIATED WITH THE P.A. SYSTEM INCLUDING BUT NOT LIMITED TO CONDUIT, WIRING, TESTING AND VERIFICATION.
- ELECTRICAL CONTRACTOR RESPONSIBLE FOR PROVIDING ALL INFRASTRUCTURE FOR COMMUNICATION CABLING INCLUDING BUT NOT LIMITED TO BACK BOXES. CONDUIT UP WALL WITH PULL STRING AND INSULATING BUSHINGS AND CONDUIT INFRASTRUCTURE IN CEILING SPACE INCLUDING JUNCTION BOXES, CONDUIT STUBS
- ALL P.A. CABLING SHALL BE RUN WITHIN EXISTING COMMUNICATIONS CONDUIT/RACEWAYS WHERE POSSIBLE. WHERE NOT POSSIBLE CABLING SHALL BE RUN USING J-HOOKS. SPACING AS PER MANUFACTURERS RECOMMENDATIONS.
- EXISTING SYSTEM IS DUKANE. ANY NEW DEVICES TO MATCH EXISTING SYSTEM. PROVIDE SHOP DRAWINGS FOR REVIEW.
- SPEAKERS SHALL BE MCBRIDE WHITE SQUARE GRILL WITH 25 VOLT TRANSFORMERS. SPEAKERS TO BE TAPPED: 2-4 WATTS IN GYM SHOPS AND BOILER ROOMS; 0.25 WATTS IN OFFICES AND TO 1 WATT IN ALL OTHER APPLICATIONS. SPEAKER WITHOUT GRILL IS 8LS822-19
- ALL WIRING TO BE CAT6 FT4 RATED WITH WHITE OUTER SHEATH AND INSTALLED IN CONDUIT. WHERE IT IS NOT POSSIBLE TO INSTALL IN CONDUIT, PROVIDE J-HOOKS AND RUN FT6 RATED CABLE
- ALL P.A. WIRING TO RUN BACK TO MAIN CONTROL PANEL AS NOTED. CONTRACTOR TO USE PROPER PUNCH DOWN TOOLS ON BIX PANEL FOR ALL WIRING.
- PROVIDE AS-BUILT MARKUPS OF ANY NEW DEVICES AND ANY NEW JUNCTION **BOXES PROVIDED TO SUIT**
- CONTRACTOR TO ALLOW FOR MEETING ON SITE WITH KPRDSB REPRESENTATIVE TO REVIEW ALL INSTALLATION REQUIREMENTS AT THE BEGINNING OF THE
- 10. P.A. CABLING SHALL BE LABELLED WITH ROOM NUMBER ON BOTH ENDS OF CABLE.
- .1 CONTRACTOR MUST PROVIDE INSPECTION, TESTING, REQUIRED AD ILISTMENTS, COMMISSIONING VERIFICATION AND CERTIFICATION OF THE SYSTEM. CONFIRM FINAL ROOM NUMBERS WITH KPRDSB. SUBMIT REPORT
- PRIOR TO OCCUPANCY GRANTED. ALL LINES SHALL BE TESTED FOR CONTINUITY, GROUND AND SHORTS. IMPENDENCE TEST SHALL BE DONE ON EVERY SPEAKER AND INCLUDED IN

TO CONSULTANT AND INCLUDE IN MANUAL. THIS MUST BE COMPLETED

CONTRACTOR SHALL TEST SYSTEM TO ENSURE PROPER OPERATION AND MAKE ANY CORRECTIONS TO THE SYSTEM AT NO COST TO THE OWNER.

FIRE ALARM SCOPE OF WORK:

- EXISTING FIRE ALARM CONTROL PANEL IS SIMPLEX 4100U.
- FIRE ALARM MANUFACTURER TO ATTEND SITE PRIOR TO PRICING TO REVIEW EXISTING SYSTEM FOR CONFORMANCE WITH NEW PROPOSED DEVICES. FIRE ALARM MANUFACTURER TO INCLUDE FOR ALL LABOUR AND COMPONENTS REQUIRED TO CONNECT EXISTING DEVICES TO EXISTING FIRE ALARM CONTROL PANEL IN CONFORMANCE WITH ALL APPLICABLE CODES. ALLOW FOR WIRING BACK TO FIRE ALARM CONTROL PANEL TO SUPPORT NEW ZONE IF REQUIRED.
- ADD ADDITIONAL DEVICES AS INDICATED. FIRE ALARM MANUFACTURER TO CONFIRM CIRCUIT LOADING PRIOR TO PRICING IF CONNECTING NEW DEVICES TO EXISTING
- ALL DEVICE AND SIGNAL CIRCUITS TO BE WIRED TO MATCH EXISTING.
- TIE NEW AHUS INTO FIRE ALARM PANEL FOR FAN SHUT DOWN. COORDINATE WITH MECHANICAL CONTRACTOR FOR FIRE ALARM TIE-IN POINT (VFD OR UNIT) TO ENSURE UNIT SHUT DOWNS.
- NEW END OF LINE RESISTORS TO BE MOUNTED BY FIRE ALARM CONTROL PANEL.
- LABELING: PAINT ALL FIRE ALARM JUNCTION BOXES RED. IDENTIFY EACH JUNCTION BOX AS EITHER SIGNAL OR INITIATING CIRCUIT.
- LABEL ALL POWER JUNCTION BOXES WITH PANEL AND CIRCUIT NUMBER. TEST AND VERIFY THE FIRE ALARM SYSTEM IN CONFORMANCE WITH CAN/ULC-S537-M "STANDARD FOR THE VERIFICATION OF FIRE ALARM SYSTEMS" TO
- **ENSURE SATISFACTORY OPERATION** PERFORM AUDIBILITY TESTS AS PER ONTARIO FIRE CODE (MINIMUM 65DBA, MAXIMUM 100DBA THROUGHOUT) AND PROVIDE REPORT TO THE CONSULTANT, ALL SPACES WITHIN THE PROJECT AREA MUST BE TESTED. DOORS SHALL BE CLOSED DURING TESTING. CONTRACTOR AND VERIFIER TO ALLOW FOR SYSTEM MODIFICATIONS AND REVERIFICATIONS AS REQUIRED TO MEET AUDIBILITY
- PROVIDE VERIFICATION REPORT AND AUDIBILITY TESTS TO THE CONSULTANT FOR REVIEW. SUBMIT FINAL COPY OF REPORT TO THE BUILDING DEPARTMENT/FIRE PREVENTION
- ARRANGE FOR A SITE INSPECTION BY THE BUILDING DEPARTMENT/FIRE PREVENTION, CONSULTANT AND ESA AT COMPLETION OF THE PROJECT FOR FINAL ACCEPTANCE. PERFORM ADDITIONAL AUDIBILITY TESTS AS REQUESTED.

FIRE ALARM SPECIFICATIONS:

REQUIREMENTS.

- THE CONTRACTOR SHALL RELOCATE OR FURNISH NEW LABOUR, SERVICES AND MATERIALS NECESSARY TO PROVIDE A COMPLETE, FUNCTIONAL LIFE SAFETY FIRE SYSTEM THE SYSTEM SHALL COMPLY IN ALL RESPECTS WITH ALL PERTINENT CODES, RULES, REGULATIONS AND LAWS OF THE LOCAL JURISDICTION. THE SYSTEM SHALL COMPLY IN ALL RESPECTS WITH THE REQUIREMENTS OF THE SPECIFICATIONS, MANUFACTURER'S RECOMMENDATIONS AND UNDERWRITERS LABORATORIES OF CANADA (ULC) LISTINGS. ALL COMPONENTS SHALL BE ULC
- THE EQUIPMENT AND INSTALLATION SHALL COMPLY WITH THE CURRENT PROVISIONS OF THE FOLLOWING CODES AND STANDARDS:
- LOCAL AND PROVINCIAL BUILDING CODES LOCAL AND PROVINCIAL FIRE CODES
- LOCAL, PROVINCIAL AND CANADIAN ELECTRICAL CODES NFPA 72 - NATIONAL FIRE ALARM CODE
- NFPA 101 LIFE SAFETY CODE CAN/ULC-S524 AND OTHER APPLICABLE ULC STANDARDS
- AUTHORITY HAVING JURISDICTION ALL SIGNAL DEVICES SHALL HAVE FIELD ADJUSTABLE DB SETTINGS VIA DIP
- SWITCHES OR PROGRAMMING FOR LOW, MEDIUM AND HIGH. PERMANENT MODIFICATION TO DEVICE TO CHANGE AUDIBLE LEVEL IS NOT ACCEPTABLE.
- FIRE DETECTOR MOUNTING: .1 FIRE DETECTORS SHALL NOT BE LOCATED CLOSER THAN 1000mm
- HORIZONTALLY FROM TIP OF A CEILING SUSPENDED (PADDLE) FAN OR CEILING MOUNTED UNIT HEATER MEASURED TO THE EDGE OF THE
- FIRE DETECTORS SHALL NOT BE LOCATED CLOSER THAN 450mm FROM ANY SUPPLY OUTLET OR EXHAUST OUTLET AS MEASURED TO THE EDGE OF THE
- DEVICE MOUNTING HEIGHT:

AND GROUND FAULT.

ACCORDANCE WITH THE OBC

- .2 WALL MOUNTED AUDIBLE SIGNAL TO BE MOUNTED MINIMUM 6" (150mm) BELOW CEILING AND NO LESS THAN 90"(2300mm) A.F.F. TO THE TOP OF THE DEVICE
- .3 STROBE(S) TO BE MOUNTED SO THAT ENTIRE LENS IS 78"-94" (2000-2400mm)
- COMBINATION HORN/STROBE(S) SHALL CONFORM TO BOTH 5.2 AND 5.3 .5 END OF LINE RESISTORS TO BE MOUNTED LESS THAN 70" (1800mm) A.F.F.
- CONDUIT AND WIRE: .1 WIRING SHALL BE IN ACCORDANCE WITH LOCAL, PROVINCIAL AND NATIONAL CODES, AND AS RECOMMENDED BY THE MANUFACTURER OF THE FIRE ALARM SYSTEM.
- .2 NUMBER AND SIZE OF CONDUCTORS SHALL BE AS RECOMMENDED BY THE FIRE ALARM SYSTEM MANUFACTURER, BUT NOT LESS THAN 18 AWG (1.02 MM) FOR INITIATING DEVICE CIRCUITS AND SIGNALING LINE CIRCUITS. AND 14 AWG (1.63 MM) FOR NOTIFICATION APPLIANCE CIRCUITS (UNLESS OTHERWISE DIRECTED BY MANUFACTURER)
- .3 ALL WIRE AND CABLE SHALL BE LISTED AND/OR APPROVED BY A RECOGNIZED TESTING AGENCY FOR USE WITH A PROTECTIVE SIGNALING SYSTEM. .4 ALL FIELD WIRING SHALL BE ELECTRICALLY SUPERVISED FOR OPEN CIRCUIT
- .5 ALL WIRE SHALL BE INSTALLED IN CONDUIT. PROVIDE WIREMOLD FOR ALL WIRING IN EXPOSED AREAS: ALL SURFACE MOUNTED CONDUIT MUST BE
- APPROVED BY OWNER OR CONSULTANT PRIOR TO INSTALLATION .6 WIRE AND CABLE NOT INSTALLED IN CONDUIT SHALL HAVE A FIRE
- RESISTANCE RATING SUITABLE FOR THE INSTALLATION AS INDICATED IN NFPA 70 (E.G., FPLR) AND AS PER OBC. 7 ALL JUNCTION BOXES SHALL BE PAINTED 'RED' AND IDENTIFIED AS SIGNAL OR INITIATING. ALL LBs SHALL BE PAINTED RED. ANY CONDUIT LENGTH
- EXCEEDING 10'(3m) SHALL HAVE COUPLING PAINTED RED FOR IDENTIFICATION.
- SURFACE DEVICES AND EXPOSED CONDUIT: .1 ALL SURFACE MOUNTED CONDUIT MUST BE APPROVED BY OWNER OR CONSULTANT PRIOR TO INSTALLATION.
- PROVIDE WIREMOLD (PANDUIT) FOR ALL WIRING IN EXPOSED AREAS. ANY SURFACE BOXES SHALL BE 'FS' (NO KNOCKOUTS) AND BE
- PRE-APPROVED BY OWNER OR CONSULTANT.
- FIRE STOP ALL EXISTING AND NEW CONDUIT THROUGH FIRE SEPARATIONS IN

GENERAL NOTES:

- WORK TO BE COMPLETED OUTSIDE REGULAR HOURS: ANY WORK THAT CREATES DISRUPTION TO REGULAR SCHOOL ACTIVITIES AND OPERATIONS SHALL BE DONE OUTSIDE OF REGULAR SCHOOL HOURS. THIS
- INCLUDES BUT IS NOT LIMITED TO SERVICE INTERRUPTIONS. WORK THAT GENERATES NOISE, WORK THAT GENERATES VIBRATIONS, WORK THAT GENERATES FUMES/SMELLS, ETC. ANY WORK INSIDE OR OUTSIDE, THAT CREATES RISK TO BUILDING
- OCCUPANTS SHALL BE DONE OUTSIDE OF REGULAR SCHOOL HOURS.
- THOROUGHLY REVIEW AND COORDINATE WITH SITE CONDITIONS AND COMPLETE DRAWING SET PRIOR TO PRICING AND INSTALLATION.
- OBTAIN AND REVIEW THE DESIGNATED SUBSTANCE REPORT FROM THE CLIENT AND COORDINATE ANY DESIGNATED SUBSTANCE ISSUES WITH THE CLIENT PRIOR TO ANY

OBTAIN, ARRANGE AND PAY FOR ALL REQUIRED PERMITS AND INSPECTIONS.

- THE ELECTRICAL CONTRACTOR AND SUB-TRADES SHALL ATTEND ALL SITE MEETINGS UNLESS OTHERWISE APPROVED.
- PROVIDE ELECTRONIC SHOP DRAWINGS IN PDF FORMAT TO CONSULTANT FOR REVIEW. ALL SHOP DRAWINGS MUST BE REVIEWED. STAMPED AND SIGNED BY THE ELECTRICAL CONTRACTOR PRIOR TO SUBMITTING TO THE CONSULTANT. REVIEW SHALL INCLUDE, BUT NOT LIMITED TO, VERIFYING VOLTAGE, RATING, DIMENSIONS
- AND CLEARANCES. SUBMIT SHOP DRAWINGS ELECTRONICALLY TO CONSULTANT. INSTALL ALL WORK IN CONFORMANCE WITH MANUFACTURER'S REQUIREMENTS AND
- MAINTAIN RECORD DRAWINGS ON AN ON-GOING BASIS. DRAWINGS SHALL BE
- AVAILABLE FOR PERIODIC REVIEW BY THE CONSULTANT DURING CONSTRUCTION.

ALL WORK SHALL COMPLY WITH APPLICABLE CODES.

- REMOVE ALL REDUNDANT EQUIPMENT AND MATERIALS FROM SITE AND DISPOSE OF IN AN APPROVED MANNER. REDUNDANT EQUIPMENT AND MATERIALS SHALL NOT BE ABANDONED IN PLACE.
- ALL CUTTING, CORING AND PATCHING SHALL BE BY THIS CONTRACTOR. COORDINATE PATCHING WITH GENERAL CONTRACTOR.
- ALL CONDUIT SHALL BE CONCEALED AND ALL DEVICES RECESSED. SURFACE MOUNTED CONDUIT IS NOT PERMITTED.
- MAINTAIN REQUIRED ACCESS AND CLEARANCE TO ALL EQUIPMENT AND SYSTEMS AS REQUIRED BY CODE AND AS PER MANUFACTURER'S REQUIREMENTS. PROVIDE ACCESS DOORS WHERE REQUIRED TO MAINTAIN ACCESS TO DEVICES.
- EQUIPMENT. JUNCTION BOXES ETC. COORDINATE AND TURN OVER TO GENERAL CONTRACTOR FOR INSTALLATION. CONTRACTOR TO INSTALL WHERE NOT COORDINATED PROPERLY WITH GENERAL CONTRACTOR. TAG ALL EQUIPMENT (INCLUDING MECHANICAL EQUIPMENT), EQUIPMENT DISCONNECTS/STARTERS AND PANELS WITH LAMACOID NAMEPLATES. PANEL
- OF FEEDER. EQUIPMENT SHALL STATE PANEL AND CIRCUIT NUMBER. PROVIDE TYPED PANEL SCHEDULES IN ALL PANELS. CONFIRM WITH CONSULTANT IF UNCLEAR. LABEL ALL RECEPTACLES AND JUNCTION BOXES WITH PANEL AND CIRCUIT NUMBER. USE BLACK MARKER ON CONCEALED JUNCTION BOXES AND CLEAR ADHESIVE LABELS

WITH BLACK WRITING ON RECEPTACLES. PAINT ALL JUNCTION BOXES RED FOR FIRE

NAMEPLATE SHALL STATE PANEL DESIGNATION, VOLTAGE, AMPERAGE AND SOURCE

- THE CONTRACTOR SHALL ARRANGE FOR FIELD REVIEWS BY THE CONSULTANT PRIOR TO CEILINGS AND WALLS BEING CLOSED IN. WHERE THIS HAS NOT BEEN ARRANGED IT IS THE CONTRACTOR'S RESPONSIBILITY TO REMOVE CEILING TILES OR ACCESS
- DOORS FOR REVIEW AT THE DIRECTION OF THE CONSULTANT 18. PERFORM TESTING OF ALL SYSTEMS AS REQUIRED BY CODE AND THE CONSULTANT.
- 19. ASSIST WITH START-UP AND COMMISSIONING OF ALL SYSTEMS AS REQUIRED.
- 20. INSTRUCT AND TRAIN THE OWNER ON PROPER OPERATION OF THE SYSTEM.
- 21. UPON COMPLETION OF THE PROJECT THE CONSULTANT WILL DO A FINAL REVIEW. UPON RECEIVING THE FINAL INSPECTION REPORT. THE CONTRACTOR MUST CORRECT AND SIGN BACK THE INSPECTION REPORT INDICATED ALL DEFICIENCIES ARE COMPLETED. A RE-INSPECTION WILL ONLY BE DONE ONCE THE CONSULTANT RECEIVES THIS IN WRITING. WHERE THE CONSULTANT PERFORMS THE RE-INSPECTION AND THE WORK IS NOT COMPLETE. THE CONTRACTOR IS RESPONSIBLE FOR REIMBURSING THE CONSULTANT FOR THE FIELD REVIEW. THE FEE FOR ADDITIONAL REVIEWS WILL BE AT THE CONSULTANT'S HOURLY RATES PLUS MILEAGE AND APPLICABLE TAXES TO BE PAID DIRECTLY TO THE CONSULTANT PRIOR TO PERFORMING THE NEXT FIELD REVIEW.
- 22. PROVIDE ONE (1) YEAR WARRANTY ON ALL MATERIAL AND LABOUR FROM THE DATE OF SUBSTANTIAL COMPLETION.
- 3. PROGRESS DRAWS SHALL INCLUDE MINIMUM \$500.00 FOR MANUALS AND AS-BUILT DRAWINGS. TOTAL AMOUNT SHALL REMAIN UNBILLED UNTIL MANUALS AND AS-BUILT DRAWINGS HAVE BEEN SUBMITTED AND APPROVED AND UNTIL ALL CONSULTANT FIELD REVIEW REPORTS HAVE BEEN SIGNED AND RETURNED TO CONSULTANT ALONG WITH PICTURES AS REQUESTED BY CONSULTANT
- PROVIDE ONE(1) ELECTRONIC COPY OF USB. CLOSE-OUT DOCUMENTATION INCLUDING CONTRACTOR INFORMATION, WARRANTY LETTER, ESA CERTIFICATE. FIRE ALARM VERIFICATION REPORT. EMERGENCY LIGHTING TEST REPORT. SHOP DRAWINGS. O&Ms. ANY OTHER REQUIRED REPORTS AND AS-BUILT DRAWINGS INCLUDING ALL PANEL SCHEDULES. AS-BUILT DRAWINGS SHALL INCLUDE COMPLETE ELECTRICAL DRAWING SET WITH ANY CHANGES MARKED CLEARLY AND NEATLY IN
- . PROVIDE PRE-FABRICATED FIRE PROTECTION COVER FOR ALL CEILING LIGHT

ELECTRICAL NOTES:

- ALL WORK SHALL CONFORM TO ESA REQUIREMENTS.
- PROVIDE CHAINS FOR ALL LIGHT FIXTURES. CHAINS SHALL BE PROVIDED AT ALL FOUR CORNERS.
- BOND ALL METALLIC WATER. DRAIN AND GAS PIPING AS PER ESA REQUIREMENTS.
- . PROVIDE JUNCTION BOXES C/W COVER PLATES AS REQUIRED.
- COORDINATE INSTALLATION WITH ALL OTHER TRADES.
- 6. REFER TO "EMT (ELECTRICAL METALLIC TUBING) vs. LIQUIDTIGHT vs. FLEXIBLE CABLE" FOR ACCEPTABLE USE OF EACH.
- EMT AND BOXES SHALL BE SIZED ACCORDING TO CODE REQUIREMENT BASED ON THE NUMBER OF CONDUCTORS
- FOR EMT AND/OR CONDUITS BENDS GREATER THAN OR EQUAL TO 270°, A PULL BOX MUST BE PROVIDED.
- ALL EMT (ELECTRICAL METALLIC TUBING) SHALL BE FIRMLY FASTENED IN PLACE SO AS TO SUPPORT THE WEIGHT OF CONDUIT AND TO PREVENT ANY STRAIN OR STRESS AT TERMINATIONS ACCORDING TO ELECTRICAL CODE 12-1010.
-). CONTRACTORS SHALL ATTEMPT TO FISH NEW FEEDS DOWN EXISTING WALLS WHERE THIS IS NOT POSSIBLE (ONLY). SURFACE INSTALLATION IS ACCEPTABLE ON EXISTING BLOCK WALLS IN FINISHED AREAS UPON OWNERS APPROVAL AS FOLLOWS:

BOXES SHALL BE SHALLOW WIRE MOLD BOX WITH NO KNOCKOUTS.

CONCEAL ALL EMT (ELECTRICAL METALLIC TUBING) AND COMPONENTS IN CEILING SPACE OR WALLS. RUN TIGHT TO ROOF DECK OR FLOOR ABOVE WHERE CEILING IS EXPOSED. RUN TIGHT TO WALL OR COLUMN WHERE WALLS ARE EXPOSED.

CONDUIT SHALL BE WIRE MOLD. COLOUR TO BE WHITE.

- . WHERE EMT RUNS HORIZONTALLY ACROSS WALL STUDS, NOTCHES SHOULD BE CUT AND PROTECTED BY STEEL PLATES.
- 13. MOUNTING HEIGHTS .1 MOUNT NEW CONTROL DEVICES, INCLUDING BUT NOT LIMITED TO, P.A. CALL SWITCHES, OPERATORS, LIGHT SWITCHES OR SWITCH PLATE OCCUPANCY SENSORS NO LESS THAN 36" (900mm) A.F.F TO BOTTOM OF BOX AND 43"(1100mm) MAXIMUM A.F.F TO TOP OF BOX. UNLESS OTHERWISE NOTED. MOUNT NEW RECEPTACLES 16" (400mm) A.F.F. UNLESS OTHERWISE NOTED.
- 4. RECEPTACLES LOCATED WITHIN 5'(1.5m) OF A DAMP OR WET LOCATION SHALL BE GROUND FAULT CIRCUIT INTERRUPTER TYPE.
- . CONTRACTOR TO ALLOW FOR THE RELOCATION OF ANY RECEPTACLE OR DEVICE/EQUIPMENT CONNECTION WITHIN 10' OF LOCATION SHOWN AT NO EXTRA
- DEVICE COVER PLATES SHALL BE STANDARD NYLON IN FINISHED AREAS AND STAINLESS STEEL IN UNFINISHED AREAS INCLUDING MECHANICAL ROOM. COLOUR OF NYLON COVER PLATES TO BE CONFIRMED WITH ARCHITECT. DEVICE COVER PLATES SHALL BE STAINLESS STEEL IN ALL AREAS.
- BRANCH CIRCUIT BREAKER AMPERE INTERRUPTING CAPACITY TO MATCH BUS RATING. PROVIDE 10% SPARE FOR FUTURE.
- MAXIMUM VOLTAGE DROP IN BRANCH CIRCUITS TO BE 3%. CONDUCTORS SHALL BE OVERSIZED TO SUIT VOLTAGE DROP WHERE APPLICABLE
- CONDUCTORS TO BE COPPER UNLESS OTHERWISE NOTED. CONDUCTORS IN RACEWAYS SHALL BE T75 NYLON (T90 ACCEPTABLE IF DERATED AS PER OESC). ALL CONDUCTORS SHALL BE MINIMUM #10AWG FOR EMERGENCY BATTERY CIRCUITS AND EXTERIOR LIGHTING. #14AWG FOR CONTROL WIRING AND MINIMUM #12AWG FOR ALI OTHER APPLICATIONS.
- ALL WIRE SIZES INDICATED ON DRAWINGS ARE BASED ON A 75°C TERMINATION TEMPERATURE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE TERMINATION TEMPERATURE OF EACH DEVICE AND MODIFY THE WIRE SIZE TO SUIT OR NOTIFY ENGINEER FOR DIRECTION.
- IDENTIFY EACH WIRE AND CABLE AT EVERY TERMINATION POINT. IDENTIFY ALL EMT AND/OR CONDUITS WITH "NEAT" COLOUR BANDS AT NO MORE THAN 25'(7.5m) INTERVALS AND ON BOTH SIDES OF WALLS & FLOOR.
- 22. NON-CURRENT CARRYING METAL PARTS FOR FIXED EQUIPMENT SHALL BE BONDED TO GROUND. INSTALL SEPARATE BONDING IN LIQUIDTIGHT CONDUITS.
- 23. DISCONNECT SWITCHES FOR HVAC EQUIPMENT MUST BE INSTALLED WITHIN 10' (3m) 24. MOTORS OTHER THAN AIR CONDITIONERS MUST HAVE DISCONNECT WITHIN SIGHT
- AND 30' (9m) OF THE MOTOR AND/OR STARTER. 25. CONTRACTOR IS RESPONSIBLE FOR LOAD BALANCING ALL DISTRIBUTION PANEL INSTALLATIONS MEASURE PHASE CURRENT TO PANELBOARDS WITH NORMAL LOADS. (LIGHTING) OPERATING AT TIME OF ACCEPTANCE. ADJUST BRANCH CIRCUIT CONNECTIONS AS REQUIRED TO OBTAIN BEST BALANCE OF CURRENT BETWEEN PHASES AND RECORD CHANGES. SUBMIT AT COMPLETION OF WORK, REPORT LISTING PHASE AND NEUTRAL CURRENTS ON PANELBOARDS, DRY-CORE TRANSFORMERS AND MOTOR CONTROL CENTERS OPERATING UNDER NORMAL LOAD. STATE HOUR AND DATE ON WHICH EACH LOAD WAS MEASURED, AND VOLTAGE AT
- 26. FIRE STOP ALL <u>EXISTING AND NEW</u> CONDUIT THROUGH FIRE SEPARATIONS. ARRANGE FOR ESA INSTALLATION PERMIT AND INSPECTION AND FORWARD A COPY OF THE ESA CERTIFICATE TO THE ENGINEER UPON ACCEPTANCE (INCLUDING FIRE ALARM LISTED AS A SEPARATE ITEM) ARRANGE AND PAY FOR OCCUPANCY PERMIT IF FINAL INSPECTION CANNOT BE SCHEDULED BY COMPLETION DATE SET FORTH IN TENDER DOCUMENTS.

		LIGHT FIXTURE SCH	HEDULE	
	TAG	DESCRIPTION	MAKE / MODEL	ALTERNATE
	EX	EXISTING LUMINAIRE	EXISTING	N/A
	A	RECESSED 2x4 LED LUMINAIRE, K12 0.125" PATTERN ACRYLIC LENS, 2-14W LED LAMPS, 1 INSTANT START BALLAST, 4000K 120V.	PIONEER LIGHTING TB24-248-120-K125	
	SELECTABLE COLOUR TEMP, 120V, WET LOCATION, IC RATED SWITCH PLATE MOUNTED PASSIVE INFRARED OCCUPANCY		LIGHTLINE LUNA 56 PRO RA56-33-F-90-WH-WH-NC	
			EXISTING	
			LEVITON ODS10-IDW	HUBBELL LEGRAND ACUITY CONTROLS

		EMERGENCY LIGHTING SCHEDULE				
WHITE, REMOVABLE FRONT ACCESS PANEL, LEAD ACID BAT		DESCRIPTION	MAKE / MODEL			
		STEEL BATTERY UNIT COMPLETE 1 4W LED HEAD, CORROSION RESISTANT, FACTORY WHITE, REMOVABLE FRONT ACCESS PANEL, LEAD ACID BATTERY, SOLID STATE PULSE-TYPE CHARGER, TEST SWITCH, LED INDICATOR LIGHTS, 120/347V INPUT WITH LINE CORD KIT, 12V OUTPUT.	EQUAL TO LUMACELL RG12S360-1-LD7			
	8	CEILING MOUNTED REMOTE SINGLE HEAD 4W LED EMERGENCY LIGHT, INJECTION MOLDED IMPACT RESISTANT FLAME RETARDANT THERMOPLASTIC, ADJUSTABLE LENSES, SUITABLE FOR INSTALLATION ON 4" OCTAGON BOX.	EQUAL TO LUMACELL RSQBLD7			
	APPROVED ALTERNATES: BEGHELLI, EMERGI-LITE, AIMLITE, STAN PRO					

DENOTES BATTERY UNIT

- 'DS' DENOTES DOUBLE SIDED
- ALLOW 20% SAFETY ON BACK-UP BATTERY PACK SIZING. ALL UNITS TO BE CSA CERTIFIED.
- EMERGENCY LIGHTING LIGHT LEVELS ARE TO BE TAKEN IN FOOT CANDLES BY THE CONTRACTOR AFTER PROJECT COMPLETION, ADVISE CONSULTANT OF TEST DATE FOR WITNESS AND OWN READINGS

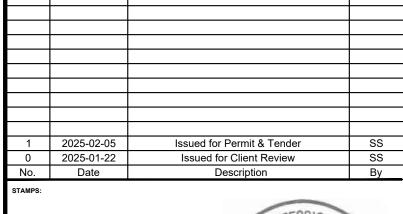
	POWER LEGEND	
TAG	DESCRIPTION	MAKE/MODEL
Фтв	15A 120V 1PH GROUNDED DUPLEX RECEPTACLE TAMPER RESISTANT C/W STAINLESS STEEL COVER PLATE	HUBBELL BR15WHITR OR EQUAL
⊕ TR	15A 120V 1PH GROUND FAULT CIRCUIT INTERRUPTING DUPLEX RECEPTACLE, TAMPER RESISTANT C/W STAINLESS STEEL COVER PLATE	HUBBELL GFTR15W OR EQUAL
∰ TR	20A 120V 1PH GROUNDED DUPLEX RECEPTACLE C/W STAINLESS STEEL COVER PLATE	HUBBELL BR20WHITR OR EQUAL
\bigcirc	120V 1PH GROUNDED DIRECT EQUIPMENT CONNECTION	
D	POWER DOOR OPERATOR BY GENERAL CONTRACTOR. PROVIDE 120V POWER TO DOOR OPERATOR AND INTERLOCK WIRING BETWEEN OPERATOR AND WALL PUSH BUTTON	
EM	EMERGENCY CALL BUTTON. <u>SUPPLIED</u> AND INSTALLED BY GENERAL WITH DOOR HARDWARE. PROVIDE BACK BOX, CONDUIT C/W PULL STRING TO DOOR CONTROLLER IN CEILING SPACE.	
L	PUSH TO LOCK. <u>SUPPLIED</u> AND INSTALLED BY GENERAL WITH DOOR HARDWARE. PROVIDE BACK BOX CONDUIT C/W PULL STRING TO DOOR CONTROLLER IN CEILING SPACE.	
P	EMERGENCY AUDIBLE/VISUAL DEVICE. <u>SUPPLIED</u> AND INSTALLED BY GENERAL WITH DOOR HARDWARE. PROVIDE BACK BOX CONDUIT C/W PULL STRING TO DOOR CONTROLLER IN CEILING SPACE.	
В	"PUSH TO OPEN" FOR BARRIER FREE OR REGULAR DOOR CONTROL BY GENERAL CONTRACTOR. PROVIDE CONCEALED CONDUIT UP WALL TO DOOR OPERATOR C/W INTERLOCK WIRING TO DOOR OPERATOR.	
JB	JUNCTION BOX	
	EXISTING PANEL	
a	HAND DRYER UNIVERSAL VOLTAGE, ALUMINUM WHITE FINISH	WORLD DRYER SLIMDRY L-974.

FIRE ALARM LEGEND		COMMUNICATIONS LEGENI)
HEAT DETECTOR FIXED TEMPERATURE [135°/200°]	TAG	DESCRIPTION	MAKE/MODEL
SMOKE DETECTOR C/W INDICATION LIGHT	S	CEILING MOUNTED P.A. SPEAKER	VALCOM 9021
COMBINATION HORN/STROBE. '##' DENOTES STROBE CANDELA RATING. PROVIDE 15cd UNLESS OTHERWISE	ES	ELECTRIC STRIKE BY GENERAL CONTRACTOR. ELECTRICAL CONTRACTOR TO PROVIDE WIRING.	
NOTED.	Р	PANIC BUTTON	
STROBE ONLY. '##' DENOTES STROBE CANDELA RATING. PROVIDE 15cd UNLESS OTHERWISE NOTED.	IC	INTERCOM	VALCOM V-1072B-ST
END-OF-LINE RESISTOR (EOL)	ELECTRICAL ABBREVIATIONS		

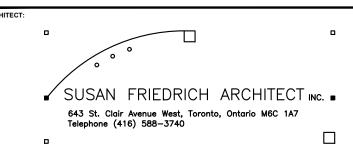
- 1		
	EX	EXISTING TO REMAIN
	D	EXISTING TO BE REMOVED C/W CONDUIT/WIRING BACK TO SOURCE
	RL	EXISTING TO BE RELOCATED. EXTEND FEED AS REQUIRED.
	H/L	HIGH LEVEL
	WP	WEATHERPROOF
	RI	ROUGH-IN ONLY
	TR	TAMPER RESISTANT

	<u> </u>	
	STARTER LEGEND	
TAG	DESCRIPTION	MAKE/MODEL
	DISCONNECT SWITCH 'WP' DENOTES WEATHERPROOF	
	MANUAL MOTOR STARTER. RATED TO SUIT LOAD.	FRANKLIN BAS-1P

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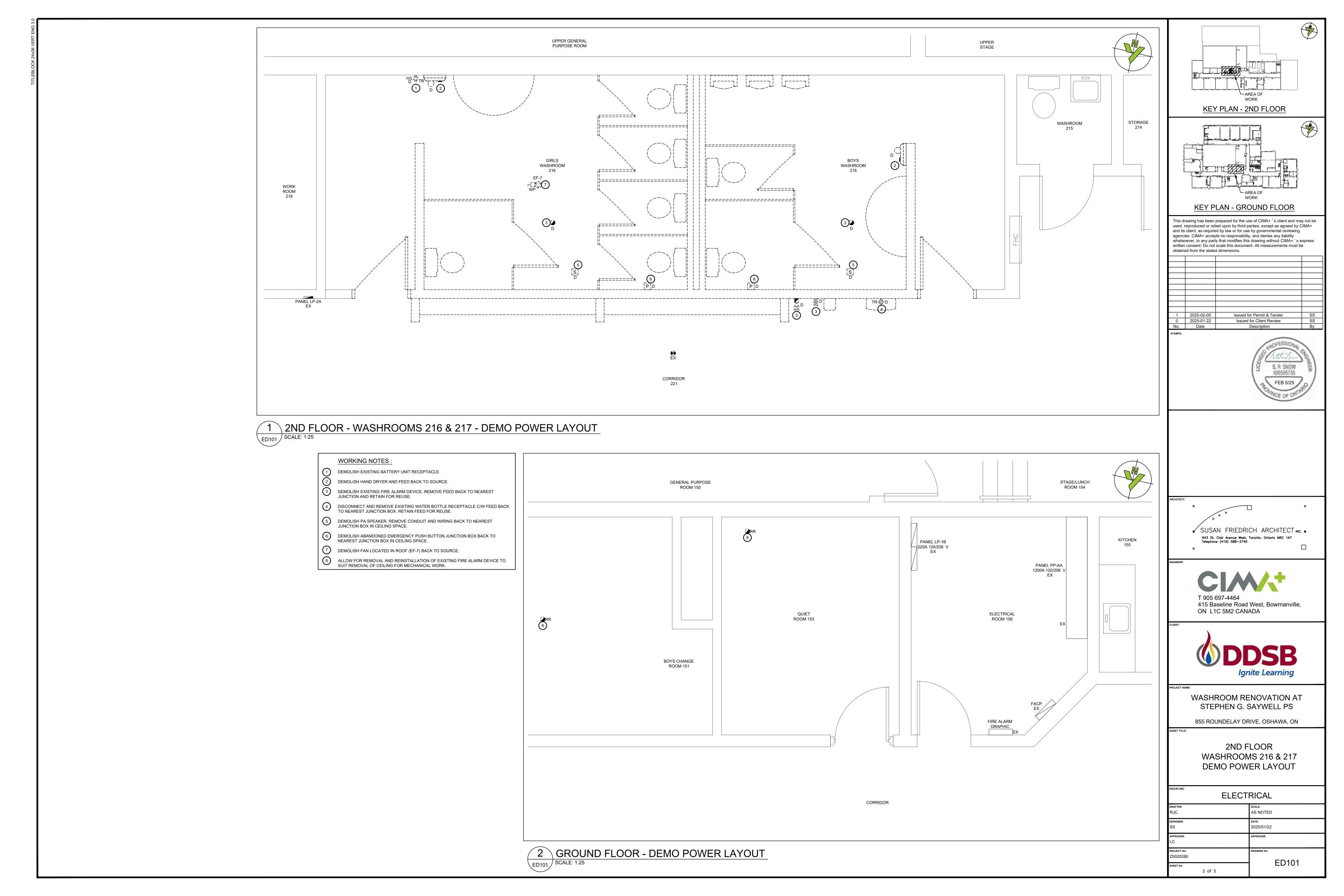


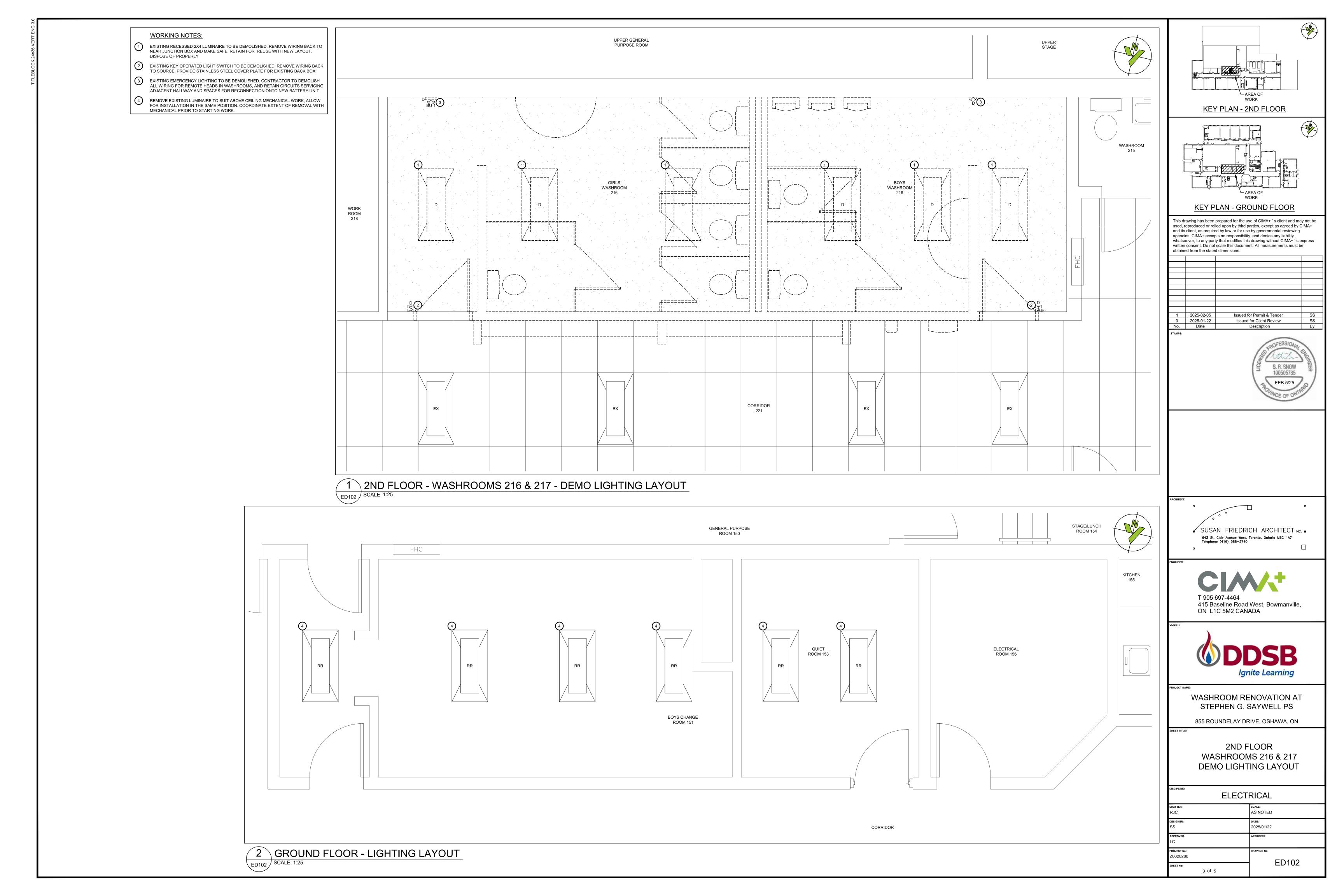
WASHROOM RENOVATION AT STEPHEN G. SAYWELL PS

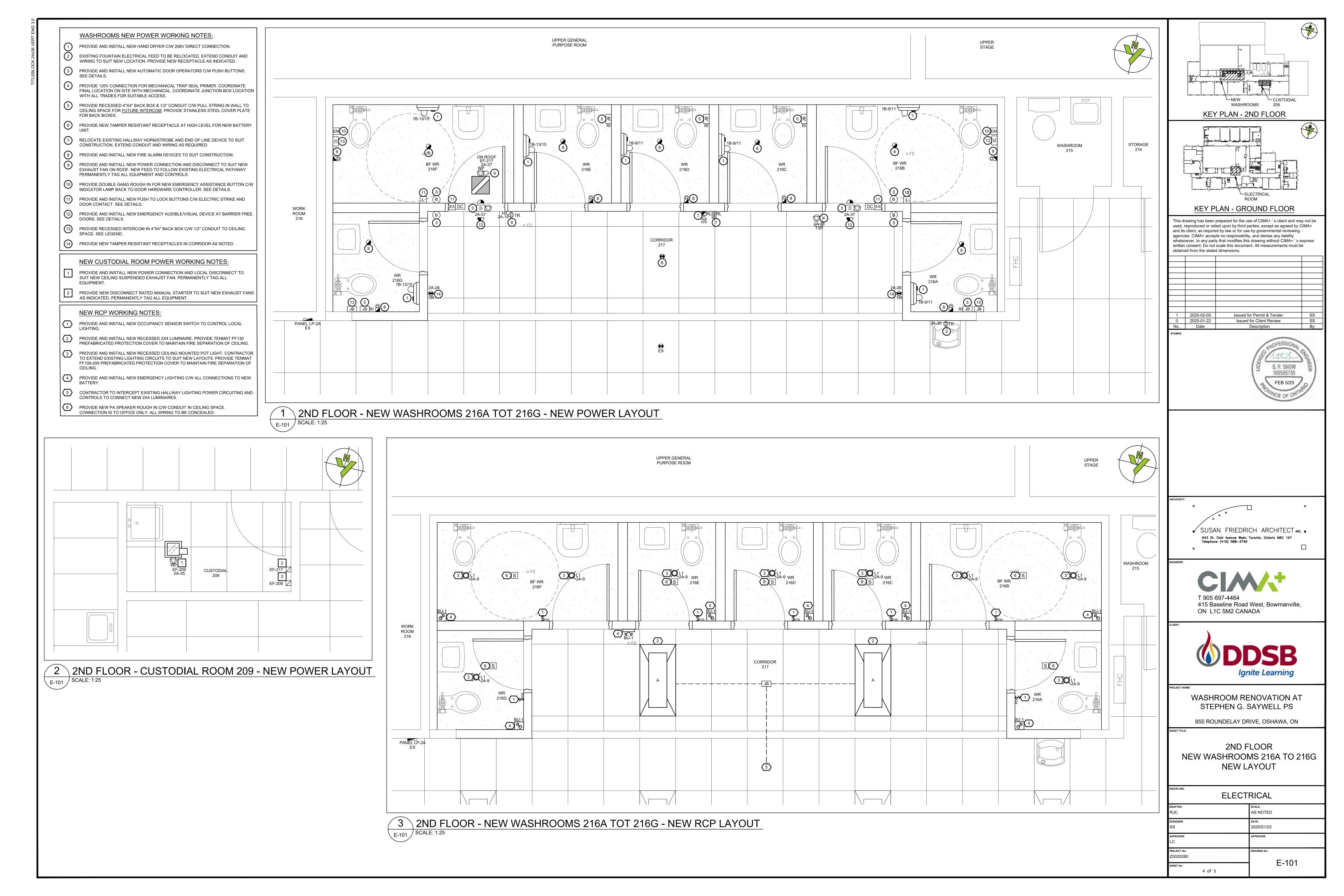
855 ROUNDELAY DRIVE, OSHAWA, ON

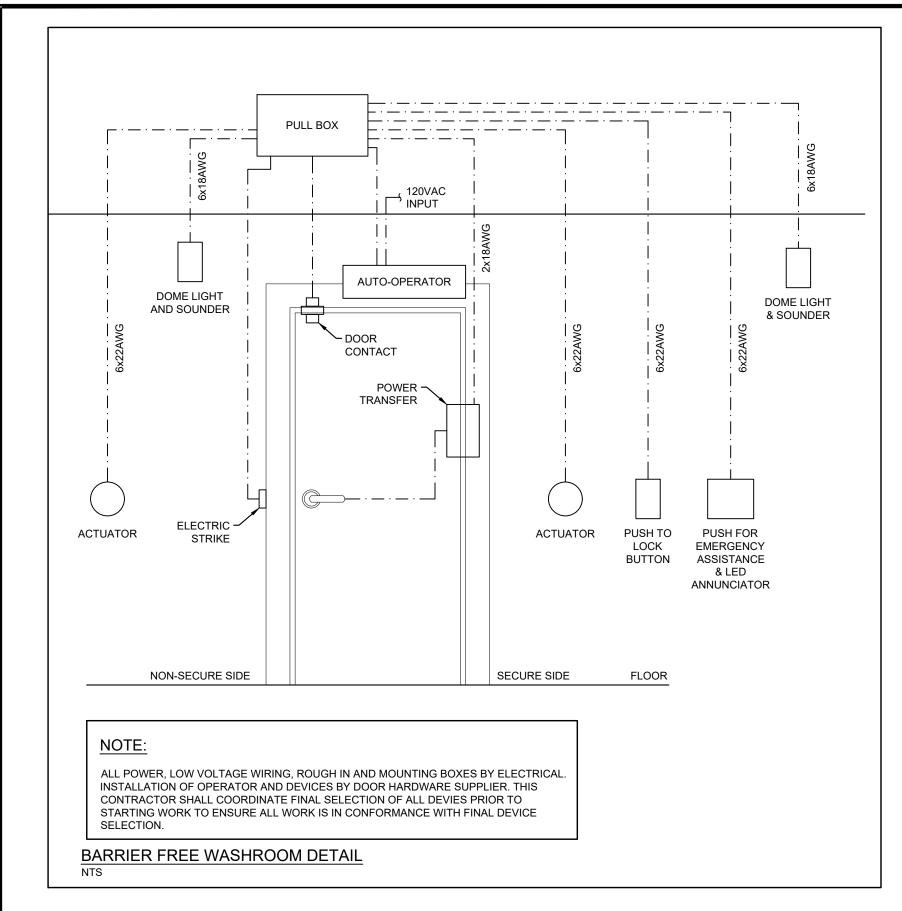
LEGENDS AND NOTES

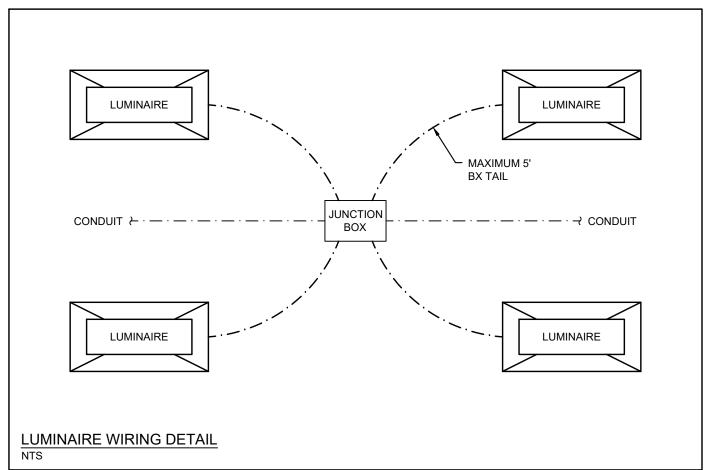
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EXISTING PANEL 'LP-2A'

EXISTING MANUFACTURER: FEDERAL PIONEER NBLP42B 225A, 42 CIRCUIT, 3P, 4W, 120/208 VOLT FLUSH MOUNTED BOLT-ON CIRCUIT BREAKER PANEL BOARD WITH MAIN LUGS ONLY & COPPER BUS, 25 KAIC

DESCRIPTION	BKR	ССТ	S/N	ССТ	BKR	DESCRIPTION	
RM. 203	15A	1	•	2	15A	4-RECEPTACLES RM. 213	
HALL NIGHT LIGHTS & 2 EXIT LIGHTS	15A	3	+	4	15A	3-RECEPT. RMS. 214 & 215	
RM. 213 LIGHTS	20A	5		- 6	15A	3-RECEPT. RM. 216 & EAST HALL FRENCH RM.	
RMS. 214 & 216 LIGHTS	15A	7	+	8	15A	COUNTER RECEPT. ART RM.	
BOYS & GIRLS WASHRM LIGHTS	15A	9	1	10	15A	ART ROOM VENT FAN	
ART ROOM LIGHTS	15A	11	+	12	15A	KILN ART ROOM	
RM. 209 LIGHTS	20A	13	+	14	15A	KILN ART ROOM	
RM. 210 LIGHTS	20A	15	+	16	15A	3-RECEPT. ART ROOM	
RM. 211 LIGHTS	20A	17		18	15A	4-RECEPT. ART ROOM	
BATTERY PACK GIRLS WASHRM	15A	19	+	20	15A	4-RECEPT. RM 210	
E.F3 RM. 215	15A	21	1	22	15A	4-RECEPT. RM. 211	
RM. 202 - COMP. RECEPT.	15A	23		24	15A	HAND DRYER BOYS WASHRM.	
RM. 201 - COMP. RECEPT.	15A	25	•	26	15A	HAND DRYER GIRLS WASHRM.	
E.F7 BOYS WASHRM. SOLENOID	15A	27	+	28	15A	RM. 206	
E.F8 RM. 216	15A	29		30	15A	WATER BOTTLE FILLER	
E.F9 RM. 216	15A	31	+	32	15A	ART RM COMP. RECEPT.	
SPARE	15A	33	+	34	15A	RM. 208 - COMP. RECEPT.	
SPARE	15A	35	+	36	15A	1.G. RECEPT. FOR COMP. HUB	
		37		38	15A	R. 204 - COMP. RECEPT.	
		39	+	40	15A	MUSIC RM COMP. RECEPT.	
		41	∏	42	15A	WORK RM. B - COMP. RECEPT.	

REVISED PANEL 'LP-2A'

EXISTING MANUFACTURER: FEDERAL PIONEER NBLP42B 225A, 42 CIRCUIT, 3P, 4W, 120/208 VOLT FLUSH MOUNTED BOLT-ON CIRCUIT BREAKER PANEL BOARD WITH MAIN LUGS ONLY & COPPER BUS, 25 KAIC ++ DENOTES NEW BREAKER REQUIRED

DESCRIPTION	BKR	ССТ	S/N	ССТ	BKR	DESCRIPTION				
RM. 203	15A	1	•	2	15A	4-RECEPTACLES RM. 213				
HALL NIGHT LIGHTS & 2 EXIT LIGHTS	15A	3	1	4	15A	3-RECEPT. RMS. 214 & 215				
RM. 213 LIGHTS	20A	5	+	6	15A	3-RECEPT. RM. 216 & EAST HALL FRENCH RM.				
RMS. 214 & 216 LIGHTS	15A	7	•	8	15A	COUNTER RECEPT. ART RM.				
BOYS & GIRLS WASHRM LIGHTS	20A++	9	1	10	15A	ART ROOM VENT FAN				
ART ROOM LIGHTS	15A	11		12	15A	KILN ART ROOM				
RM. 209 LIGHTS	20A	13		14	15A	KILN ART ROOM				
RM. 210 LIGHTS	20A	15	+	16	15A	3-RECEPT. ART ROOM				
RM. 211 LIGHTS	20A	17		18	15A	4-RECEPT. ART ROOM				
BF WR 216	15A	19	•	20	15A	4-RECEPT. RM 210				
E.F3 RM. 215	15A	21	1	22	15A	4-RECEPT. RM. 211				
RM. 202 - COMP. RECEPT.	15A	23		24	15A	SPARE				
RM. 201 - COMP. RECEPT.	15A	25	•	26	20A++*	RECEPTACLE CORRIDOR 217				
E.F217 RM. 217	15A	27	1	28	15A	RM. 206				
E.F8 RM. 216	15A	29		30	15A	WATER BOTTLE FILLER				
E.F9 RM. 216	15A	31	•	32	15A	ART RM COMP. RECEPT.				
TRAP SEAL PRIMER CORRIDOR 217	15A	33	+	34	15A	RM. 208 - COMP. RECEPT.				
E.F209 RM. 209	15A	35	+	36	15A	1.G. RECEPT. FOR COMP. HUB				
BF WR 216A & 216F ADO	20A++	37		38	15A	R. 204 - COMP. RECEPT.				
		39	+	40	15A	MUSIC RM COMP. RECEPT.				
		41		42	15A	WORK RM. B - COMP. RECEPT.				

EXISTING PANEL 'LP-1B' DOUBLE TUB

EXISTING MANUFACTURER: EATON PRL1A

225A, 84 CIRCUIT, 3P, 4W, 120/208 VOLT SURFACE MOUNTED BOLT-ON CIRCUIT BREAKER PANEL BOARD WITH MAIN LUGS ONLY & COPPER BUS, 25 KAIC + DENOTES MISILABELED CIRCUIT. CONTRACTOR TO VERIFY LOAD

+ DENOTES WISHABELED CIRCUIT. CONTRACTOR TO VERIFY LOAD															
DESCRIPTION	BKR	ССТ	S7N	- 1	ССТ	BKR	DESCRIPTION	DESCRIPTION	BKR	ССТ	S/N	ССТ	BKR	DESCRIPTION	
OUTSIDE SIGN	15A	1	•	ootnotesize H	2	15A+	UNKNOWN	GYM EXIT LIGHTS	15A	43	•	44	15A	4 RECEPTACLES RMS 135, 136, GYM S/E EXIT	
OUTSIDE SIGN	15A	3	+	H	4	15A+	UNKNOWN	GYM LIGHTS (EAST H.P.S.), CENTRE LIGHTS	15A	45	•	46	15A	4-RECEPTACLES GYM	
UNKNOWN	20A+	5		lack	6			STAFFROOM MICROWAVE	15A	47		48	15A	3-RECEPTACLES GYM + STAGE	
ONTANOWN	20/1	7	•	+	8	30A+	UNKNOWN	GYM LIGHTS, 135 (EAST FLR.), OUTER LIGHTS	15A	49		50	15A	4-RECEPTACLES STAGE	
		9	╁	\mathbb{H}	10			WEST FLR. CENTRE LIGHT	15A	51	+	52	15A	GYM P.A. RACK	
		11		lack	12			GYM W, BACKSIDE	15A	53	+	54	15A	2 RECEPTACLES BOY + GIRL CHANGE RMS	
		13	lack +	H	14			GYM LIGHTS (WAST H.P.S.), OUTSIDE LIGHTS	15A	55	$ \bullet $	56	15A	1 RECEPTACLE RM. 129	
		15	╁	\mathbb{H}	16			RM. 102 - GFI	15A	57	+	58	15A	COUNTER RECEPTACLE RM. 129	
		17	-	lack	18			RM. 127 LIGHTS (EAST FLR.)	20A	59		60	ISA	COOKIEKIKEOEI IAOLE IIW. 129	
		19	+	+	20			RM. 127 LIGHTS (WEST FLR.)	15A	61	•	62	15A	E.F10 LIGHTS RM 129	
		21	+	+	22			BOYS CHANGE RM. LIGHTS	15A	63	+	64	15A	RECEPTACLE ELECTRICAL RM.	
		23		lack	24			GIRLS CHANGE RM. LIGHTS	15A	65	+	66			
		25	+	\mathbb{H}	26			BATTERY PACK - ELECTRICAL RM.	15A	67	$ \bullet $	68	70A	MOTORIZED PARTITION GYM	
		27	 	H	28			TELEPHONE RECEPTACLE + SECURITY PANEL	15A	69	+	70			
		29		lack	30			T.V. RECEPTACLE	15A	71	+	72	15A	GYM EAST BACK STOP	
		31	+	\parallel	32					73	lack	74			
		33	╁	\mathbb{H}	34			STAGE TRACK LIGHTS	15A	75	+	76	15A	CARMA	
		35		lack	36					77	+	78			
		37	•	$oxed{H}$	38			RM. 103 COMPUTERS/WATER RN. REFILL STATION	15A	79		80	15A	SCOREBOARD	
		39	 	oxdot	40			RM. 104 COMPUTERS	15A	81	+	82	15A	HALL RECEPTACLE	
		41	\coprod	lack	42			RM. 101 GFI	15A	83	+	84	15A	LIGHTS + RECEPTACLE, ELEVATOR PIT	

EXISTING PANEL 'LP-1B' DOUBLE TUB

EXISTING MANUFACTURER: EATON PRL1A

225A, 84 CIRCUIT, 3P, 4W, 120/208 VOLT SURFACE MOUNTED BOLT-ON CIRCUIT BREAKER PANEL BOARD

WITH MAIN LUGS ONLY & COPPER BUS, 25 KAIC

REVISED PANEL 'LP-1B' DOUBLE TUB

EXISTING MANUFACTURER: EATON PRL1A

225A, 84 CIRCUIT, 3P, 4W, 120/208 VOLT SURFACE MOUNTED BOLT-ON CIRCUIT BREAKER PANEL BOARD

WITH MAIN LUGS ONLY & COPPER BUS, 25 KAIC

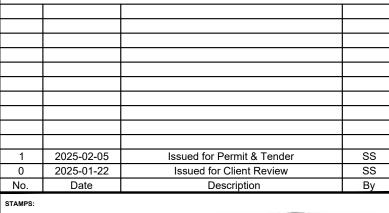
REVISED PANEL 'LP-1B' DOUBLE TUB

EXISTING MANUFACTURER: EATON PRL1A 225A, 84 CIRCUIT, 3P, 4W, 120/208 VOLT SURFACE MOUNTED BOLT-ON CIRCUIT BREAKER PANEL BOARD WITH MAIN LUGS ONLY & COPPER BUS, 25 KAIC

+ DENOTES	MISLABEI		CUIT. C	ONTRA		VERIFY LOAD	
DESCRIPTION	BKR	ССТ	S/N	ССТ	BKR		DESC
CION	454	4			454.	LINIKALOVAKI	

	++ DENOTES NEW BREAKER REQUIRED														
DESCRIPTION	BKR	CCT	Г	S7N		ССТ	BKR	DESCRIPTION	DESCRIPTION	BKR	ССТ	S/N	ССТ	BKR	DESCRIPTION
OUTSIDE SIGN	15A	1	-	<u> </u>	H	2	15A+	UNKNOWN	GYM EXIT LIGHTS	15A	43	•	44	15A	4 RECEPTACLES RMS 135, 136, GYM S/E EXIT
OUTSIDE SIGN	15A	3	F	•	H	4	15A+	UNKNOWN	GYM LIGHTS (EAST H.P.S.), CENTRE LIGHTS	15A	45	H	46	15A	4-RECEPTACLES GYM
LINUZALOMAL	204.	5	F	H	₽Ī	6			STAFFROOM MICROWAVE	15A	47		48	15A	3-RECEPTACLES GYM + STAGE
UNKNOWN	JNKNOWN 20A+	7	—	•	H	8	30A+	UNKNOWN	GYM LIGHTS, 135 (EAST FLR.), OUTER LIGHTS	15A	49	+	50	15A	4-RECEPTACLES STAGE
HAND DRYERS	20A++*	9/	7	•	Ħ	10			WEST FLR. CENTRE LIGHT	15A	51	+	52	15A	GYM P.A. RACK
WASHROOM 216A,B,C,D	2P	11	F	H	lack	12			GYM W, BACKSIDE	15A	53	\mathbb{H}	54	15A	2 RECEPTACLES BOY + GIRL CHANGE RMS
HAND DRYERS	20A++*	13	7	•	H	14			GYM LIGHTS (WAST H.P.S.), OUTSIDE LIGHTS	15A	55	+	56	15A	1 RECEPTACLE RM. 129
WASHROOM 216E,F,G	2P	15	F	•	H	16			RM. 102 - GFI	15A	57	H+	58		
		17	F	H	•H	18			RM. 127 LIGHTS (EAST FLR.)	20A	59		60	15A	COUNTER RECEPTACLE RM. 129
		19	┪	H	H	20			RM. 127 LIGHTS (WEST FLR.)	15A	61	+	62	15A	E.F10 LIGHTS RM 129
		21	F	•	H	22			BOYS CHANGE RM. LIGHTS	15A	63	H+	64	15A	RECEPTACLE ELECTRICAL RM.
		23	F	H	•	24			GIRLS CHANGE RM. LIGHTS	15A	65	\mathbb{H}	66		
		25	-	•	H	26			BATTERY PACK - ELECTRICAL RM.	15A	67	+	68	70A	MOTORIZED PARTITION GYM
		27	F	•	H	28			TELEPHONE RECEPTACLE + SECURITY PANEL	15A	69	H	70		
		29	F	H	•H	30			T.V. RECEPTACLE	15A	71		72	15A	GYM EAST BACK STOP
		31	┪	lack	H	32					73	+	74		
		33	F	•	H	34			STAGE TRACK LIGHTS	15A	75	H	76	15A	CARMA
		35	F	H		36			1		77	H	78		
		37	1	•	H	38			RM. 103 COMPUTERS/WATER RN. REFILL STATION	15A	79	+	80	15A	SCOREBOARD
		39	F	•	H	40			RM. 104 COMPUTERS	15A	81	H_{ullet}	82	15A	HALL RECEPTACLE
		41		H		42			RM. 101 GFI	15A	83	H	84	15A	LIGHTS + RECEPTACLE, ELEVATO PIT

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WASHROOM RENOVATION AT STEPHEN G. SAYWELL PS

855 ROUNDELAY DRIVE, OSHAWA, ON

PANEL SCHEDULES & DETAILS

DISCIPLINE: ELEC	CTRICAL
drafter: RJC	scale: NTS
DESIGNER: SS	DATE: 2025/01/22
APPROVER: LC	APPROVER:
PROJECT No: Z0020280	DRAWING No:
SHEET No: 5 of 5	E-601