

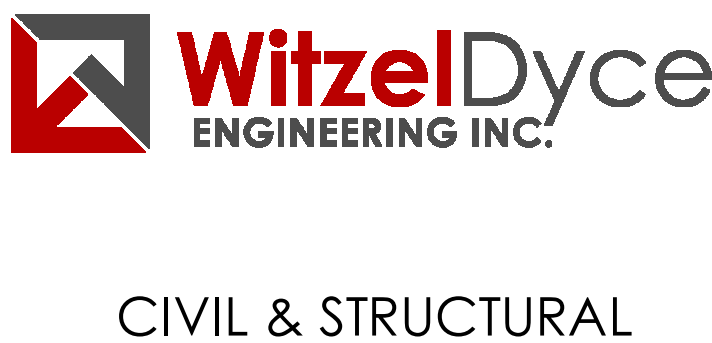
WATERLOO COLLEGIATE INSTITUTE HVAC AND EXTERIOR UPGRADES

300 HAZEL STREET, WATERLOO, ON. N2L 3P2

TENDER NO. 25-7702-RFT



ISSUED FOR PERMIT/TENDER
2025.03.25



LIST OF DRAWINGS

CIVIL	
C1.0	EXISTING CONDITIONS AND REMOVALS PLAN
C2.0	SANITARY AND STORM SERVICING PLAN

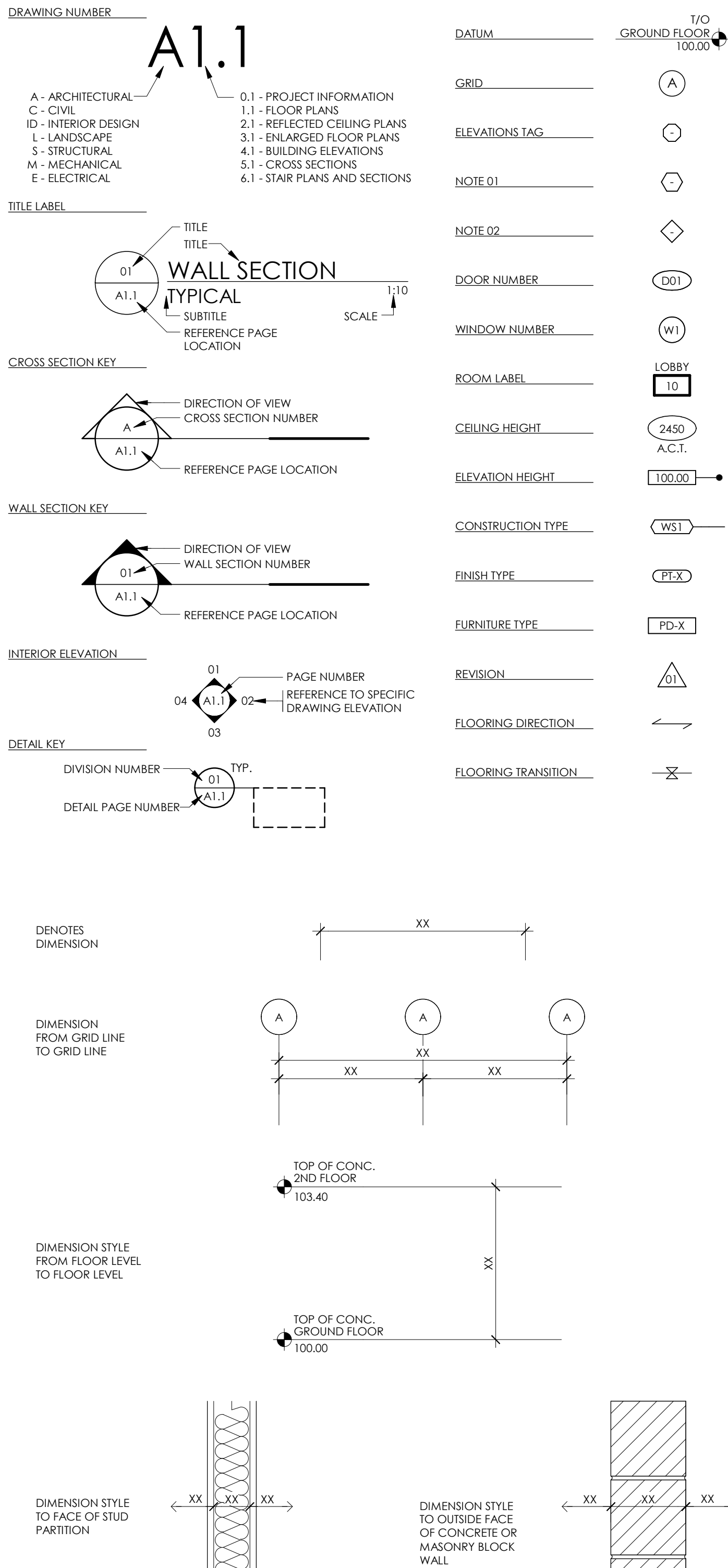
ARCHITECTURAL	
A0.1	GENERAL PROJECT INFORMATION
A0.2	OBC MATRICES & ASSEMBLIES
A1.1	HVAC RENO - THIRD FLOOR DEMOLITION REFLECTED CEILING PLANS
A1.2	HVAC - THIRD FLOOR REFLECTED CEILING PLANS, PARTIAL 2ND FLOOR RCP & PARTIAL THIRD FLOOR PLAN
A1.3	HVAC - ROOF PLAN
A2.1	WING A SANITARY - GROUND FLOOR DEMOLITION PLANS
A2.2	WING A SANITARY - GROUND FLOOR PLANS
A2.3	WING B LOWER LEVEL - PLUMBING RENO DEMOLITION PLAN
A2.4	WING B LOWER LEVEL - PLUMBING RENO FLOOR PLAN
A2.5	WING B LOWER LEVEL PARTIAL FINISHES FLOOR PLAN & INTERIOR ELEVATION
A3.1	BRICK FACADE REPAIR

STRUCTURAL	
S0.0	GENERAL NOTES, TYP. DETAILS, & SECTIONS
S1.0	PARTIAL FOUNDATION PLAN & SECTIONS
S2.0	PARTIAL THIRD FLOOR & ROOF FRAMING PLAN

MECHANICAL	
M1.1	GENERAL NOTES, LEGEND & SCHEDULES
M2.1	LOWER FLOOR PLAN WINGS A&B DDC DEMOLITION
M2.2	FIRST FLOOR PLAN WING A DDC DEMOLITION
M2.3	SECOND FLOOR PLAN WING A DDC DEMOLITION
M2.4	THIRD FLOOR WING A DDC DEMOLITION
M2.5	LOWER FLOOR PLAN WINGS A&B DDC RENOVATION
M2.6	FIRST FLOOR PLAN WING A DDC RENOVATION
M2.7	SECOND FLOOR PLAN WING A DDC RENOVATION
M2.8	THIRD FLOOR PLAN WING A DDC RENOVATION
M3.1	FIRST FLOOR/CRAWL SPACE WING A DRAINAGE DEMOLITION
M3.2	FIRST FLOOR / CRAWL SPACE WING A DRAINAGE RENOVATION
M3.3	LOWER FLOOR WING B DRAINAGE DEMOLITION/RENOVATION
M3.4	SECOND FLOOR PART PLAN WING A DRAINAGE RENOVATION
M4.1	THIRD FLOOR PLAN WING A - REFRIGERATION & CONDENSATE PIPING
M5.1	THIRD FLOOR PLAN WING A - HVAC DEMOLITION
M5.2	THIRD FLOOR PLAN WING A - HVAC RENOVATION
M6.1	FAN RM 411 (WING A) - DEMO/RENO
M7.1	ROOF PLAN WING A - RENOVATION
M8.1	DETAILS

ELECTRICAL	
E1.1	KEY PLAN / LED BULB REPLACEMENT
E1.2	LEGEND, SCHEDULES AND DETAIL
E1.3	EQUIPMENT WIRING SCHEDULE
E2.1	THIRD FLOOR DEMOLITION PLAN
E3.1	THIRD FLOOR LIGHTING RENOVATION PLAN
E3.2	THIRD FLOOR POWER AND SYSTEMS RENOVATION PLAN
E3.3	ROOF PLAN
E4.1	ENLARGED PLAN
E5.1	DISTRIBUTION RISER DIAGRAM & PANEL SCHEDULE

DRAWING SYMBOLS LEGEND



ABBREVIATIONS

A

AT

AB

AIR BARRIER

AC

AIR CONDITIONING

ACC

ACOUSTIC CEILING TILE

ACF

ACCESS FLOOR

AFB

AFTER FINISHED FLOOR

AFB

ASPHALT IMPREGNATED FIBRE BOARD

ALUM

ALUMINUM

ANOD

ANODIZED

AP

ACCESS PANEL

APPROX

APPROXIMATE

ARCH

ARCHITECTURAL

AUD

AUDITORIUM

AVB

AIR / VAPOUR BARRIER

AV

AUDIO / VISUAL

B

BD

BOARD

BEW

BOTTOM EACH WAY

BFR

BARRIER FREE

BG

BUMPER GUARD

BILDG

BUILDING

BLK

BLOCK

BLL

BOTTOM LOWER LAYER

BM

BENCH MARK

BP

BASE PLATE

BR

BRICK

BRD

BOARD

BSMT

BASEMENT

BSPT

BENT STEEL PLATE

BTM

BOTTOM

BTW

BETWEEN

BW

STEEL BUILT UP (TO IOWS)

BUL

BOTTOM LOWER LAYER

CA

CLEAN ANODIZED

CB

CATCH BASIN

CBD

CEMENT BOND

C/C

CENTER TO CENTER

CG

CORNER GUARD

CJ

CONSTRUCTION JOINT

CL

CENTER LINE

CLJ

CEILING

CLP

COLOR

CLST

CLOSET

CMP

COMPOSITE METAL PANEL

CMR

COLUMN

CONC

CONCRETE

CONC

CONCRETE

COORD

COORDINATE

CORR

CORROSION

CPT

COMMUNICATION PANEL

CR

CARD READER

CR

COURSE

CT

CURTAIN TRUCK

C/W

COMPLETE WITH

CWT

CERAMIC WALL TILE

CIV

CIVIL

D

DEG

DEGREE

DF

DRINKING FOUNTAIN

DIA

DIAMETER

DI

DIAMETER

DM

DIMENSION

DIV

DIVISION

DN

DOWN

DP

DEMOUNTABLE PARTITION

DS

DOOR SEAL

DSW

DOOR SWEEP

DT

DETAIL

DWG(S)

DRAWING(S)

E

EA

EACH

EAF

EACH FACE

ELEC

ELECTRICAL

ELEV

ELEVATION

ECC

EPOXY CEILING COATING

EFC

EPOXY FLOOR COATING

ELJ

EXPANSION JOINT

ELEC

ELECTRICAL

EMP

EMERGENCY POWER

ENC

ENCLOSED

E

ELECTRICAL PANEL

EQ

EQUAL

EQUIP

EQUIPMENT

ES

ELECTRICAL STRIKE

ESRI

ELECTRICAL STRIKE ROUGH IN

ETC

ETCETERA

EW

EACH WAY

EW

EPOXY WALL COATING

EX

EXISTING

F

FD

FLOOR DRAIN

FDC

FIRE DEPARTMENT CONNECTION

FE

FIRE EXTINGUISHER

FEC

FIRE EXTINGUISHER CABINET

FHC

FIRE HOSE CABINET

FIN

FINISH

FL

FLOOR

FLASH

FLASHING

FOUNDATION

FOUNDATION

FP

FIRE ALARM ANNUNCIATOR PANEL

FPSP

FACTORY PRIMED STEEL PAINTED

FR

FIRE RESISTANCE RATING

FS

FIRE SEPARATION

G

GA

GAUGE

GALV

GALVANIZED

GB

GRAB BAR

GC

GENERAL CONTRACTOR

GFWB

GYPSUM FIBRE WALL BOARD

GL

GLAZING

GRAN

GRANULAR

GWG

GEORGIAN IRON WALL

GYP

GYPSUM

H

HB

HOSE BIB

HD

HEAVY DUTY

HEF

HORIZONTAL ECH FACE

HIF

HORIZONTAL INSIDE FACE

HM

HOLLOW METAL

HOF

HORIZONTAL OUTSIDE FACE

HORIZ

HORIZONTAL

HOUR

HOUR

HRL

HAND RAIL

HSSL

HOLLOW STRUCTURAL STEEL

HT

HEIGHT

HTR

HEATER

HP

HIGH POINT

I

IC

INCLUDED IN CONTRACT

ID

INCLUDED IN DIMENSION

IF

INSIDE FACE

INS

INSULATED HOLLOW METAL

INCL

INCLUDED

INSUL

INSULATION

INT

INTERIOR

IRWB

IMPACT RESISTANT WALLBOARD

J

JN

JOINT

JT

JOINTOR

K

KP

KICKPLATE

L

LAM

LAMINATE

LAV

LAVATORY

LG

LIGHT GLAZED SAFETY GLASS

LWTW

LIGHT WEIGHT

LP

LOW POINT

M

MAG

MAGNETIC LOCK

MANUF

MANUFACTURED

MAX

MAXIMUM

MAT

MATERIAL

MDF

MEDIUM DENSITY FIBRE BOARD

MECH

MECHANICAL

MED

MEDIUM

MEMB

MEMBRANE

MEZ

MEZZANINE

MH

MANHOLE

MHO

MAGNETIC HOLD OPEN

MIN

MINIMUM

MISC

MISCELLANEOUS

ML

MAGNETIC LOCK

MLO

MAGNETIC LOCK ROUGH IN

MO

MASONRY OPENING

MT

METAL

MTD

MOUNTED

N

NBC

NATIONAL BUILDING CODE

NIC

NOT IN CONTRACT

NHFB

NON FREEZER HOSE BIB

NUMBER

NUMBER

NIS

NOT TO SCALE

O

OB

ONTARIO BUILDING CODE

O/C

ON CENTER

OD

OUTSIDE DIMENSION

OF

OUTSIDE FACE

OH

OVERHEAD

OPDS

ONCE OVERHEAD PROVINCIAL STANDARD DETAIL

OPSS

ONTARIO PROVINCIAL STANDARD SPECIFICATION

OSB

ORIENTED STRAND BOARD

OWJ

OPEN WEIL STEEL JOIST

P

PB

PUSH BUTTON

PE

PEDESTAL

PLAM

PLASTIC LAMINATE

PLYD

PLYWOOD

POLY

POLYETHYLENE

PREHIN

PREHINISHED

PRF

PRESSURE TREATED

PTD

PAINTED

R

RA

ROOF ANCHOR

RAD

RADIUS

RC

REFLECTED CEILING PLAND

RD

ROOF DRAIN

REINFORC

REINFORCED

REQD

REQUIRED

REQTS

REQUIREMENTS

RE

RECESSED FIRE EXTINGUISHER

RECESS

RECESSED HEATING CABINET

RM

ROOM

RO

ROUGH OPENING

RS

ROOF SCUPPER

RTU

ROOF TOP UNIT

RWL

RAIN WATER LEADER

S

SC

SAW CUT

SC

SHEET

SCM

SIMILAR

SPEC

STANDARD CONNECTION

SP

SPECIFICATION

SQFT

SQUARE FOOT

SQF

SQUARE FINE

SQ

SQUARE METERS

SS

STAINLESS STEEL

ST

STORAGE

STRUCT

STRUCTURAL

STL

STEEL

STM

STEEL MORM

SUPD

SUSPENDED

SW

SIDE WALL ROOF DRAIN

T

TBHM

THERMALLY BROKEN

TH

THICK

TEMP

TEMPERED

TH

THICK

TJ

TIE JOIST

TLL

TOP LOWER LAYER

TOP TRANS

TOP LOWER LAYER

TUL

TOP UPPER LAYER

TY

TYPICAL

U/G

UNDERGROUND

U.N.O.

UNLESS NOTED OTHERWISE

URNAL

URNAL

U/S

UNDERSIDE OF

V

VB

VAPOUR BARRIER

VC

VALVE CABINET

VCT

VINYL COMPOSITE TILE

VESTIB

VESTIBILE

VERT

VERTICAL

VVF

VERTICAL EACH FACE

VVIF

VERTICAL INSIDE FACE

VOF

VERTICAL OUTSIDE FACE

W

W

WIDE

WC

WATER CLOSET

WOOD

WOOD

WFE

WALL MOUNTED FIRE EXTINGUISHER

WATER VAP

WATER VAPOUR

WWM

WELDED WIRE MESS

W/O

WITHOUT

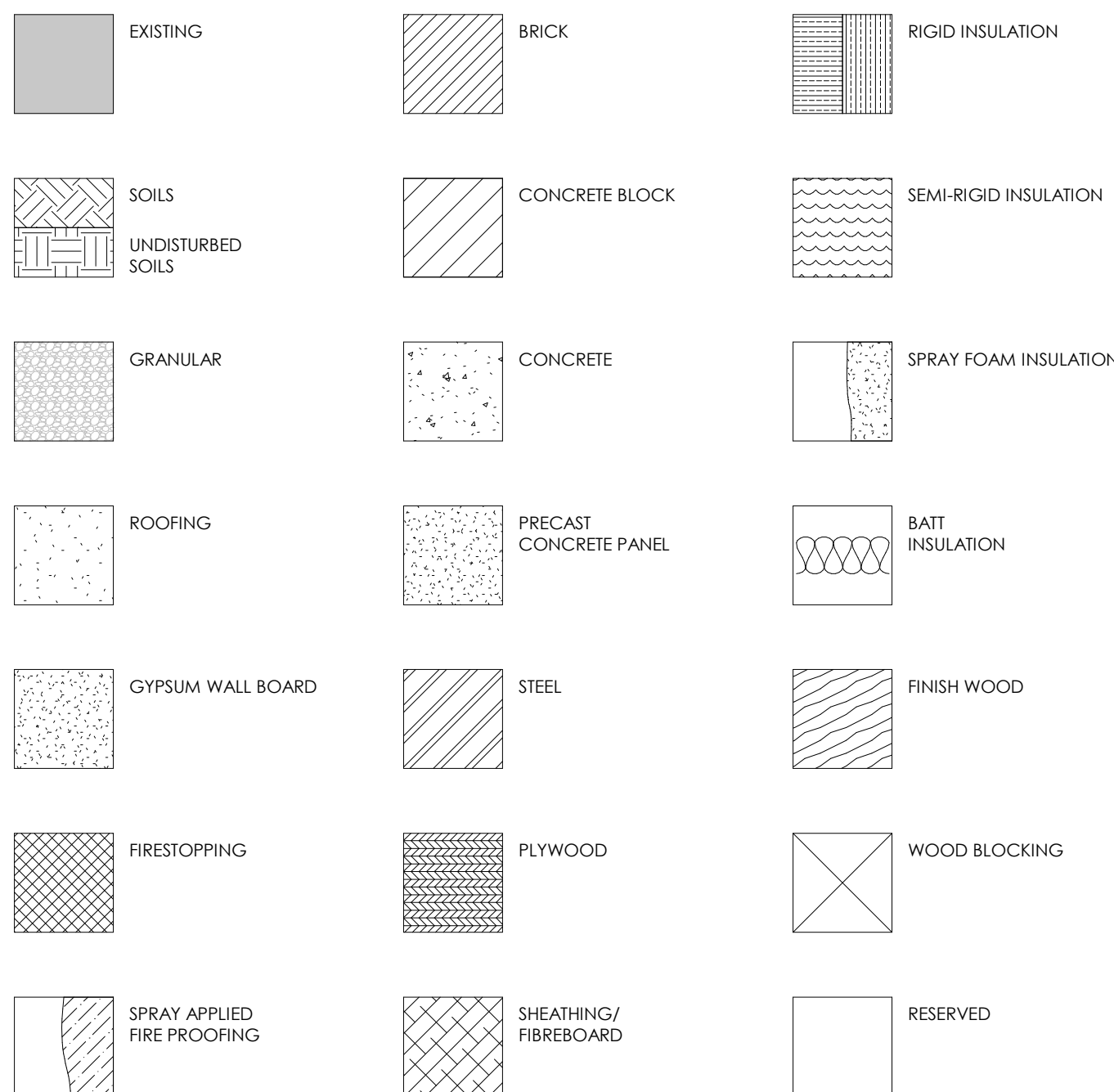
W/R

WASHROOM

WITH

WITH

HATCHING LEGEND



GENERAL INFORMATION

1. DO NOT SCALE DRAWINGS.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS ON SITE AND SHALL REPORT ALL DISCREPANCIES TO THE CONSULTANT BEFORE PROCEEDING WITH THE WORK.
3. DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE CIVIL, LANDSCAPE, STRUCTURAL, MECHANICAL, ELECTRICAL DRAWINGS, AND GEOTECHNICAL REPORT.
4. ALL MATERIAL AND WORKMANSHIP SHALL COMPLY WITH ALL APPLICABLE CANADIAN CONSTRUCTION STANDARDS AND CURRENT APPLICABLE BUILDING CODE AND GOVERNING REGULATIONS.
5. WORK SHALL BE PERFORMED IN A MANNER THAT WILL MINIMIZE THE INTERRUPTION OF ACCESS IN ALL AREAS AFFECTED BY CONSTRUCTION. EMERGENCY EXITING SHALL BE MAINTAINED AT ALL TIMES.
6. ALL MATERIAL USED FOR NEW CONSTRUCTION SHALL BE NEW AND FREE OF DEFECTS. CONTRACTOR WILL BE RESPONSIBLE TO PATCH, REPAIR AND MAKE GOOD ALL AREAS AFFECTED BY THE WORK INCLUDING MECHANICAL AND ELECTRICAL PATCH AND REPAIRS.
7. SUPPLY AND MAINTAIN ON A DAILY BASIS, ALL INTERIOR AND EXTERIOR TEMPORARY COVERINGS, FENCING, TARPING, HOARDING, FLOOR PLATES, SIGNAGE AND OTHER SEPARATIONS REQUIRED TO MAINTAIN THE SAFETY OF THE PUBLIC, AND PROVIDE ACCESS TO NECESSARY ROOMS DURING WORK OF THIS CONTRACT. COORDINATE THESE PROTECTIVE MEASURES WITH OWNER AND INDIVIDUAL ADMINISTRATIVE STAFF. REMOVE AND/OR DISPOSE OF ALL TEMPORARY MEASURES FROM SITE AFTER COMPLETION OF WORK OF THIS CONTRACT.
8. MAINTAIN A CLEAN AND ORDERLY SITE AT ALL TIMES.
9. COORDINATE WITH OWNER STAGING AREAS FOR SITE TRAILER AND MATERIALS STORAGE.
10. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND THEIR SUBCONTRACTORS TO VISIT THIS SITE AND FAMILIARIZE THEMSELVES WITH ALL ASPECTS OF THIS PROJECT.
11. COORDINATE WITH OWNER ANY STAGING OF WORK AND/OR THE DISRUPTION OF PARKING AND TRAFFIC FLOW.
12. PORTABLE FIRE EXTINGUISHERS TO BE INSTALLED IN CONFORMANCE WITH THE OFC 6.2 AND MUST HAVE A MINIMUM RATING OF 210B01C AS PER MUNICIPAL BYLAW.
13. THE DRAWINGS INDICATE THE PHYSICAL DIMENSIONS, EXISTING LEVELS AND SIMILAR ITEMS BEING INDICATED WHERE KNOWN. ALL ADDITIONAL WORK OF THE WORK, BUT WITH NO SPECIFIC REIFICATION EITHER EXPRESSED OR IMPLIED, AS TO COMPLETENESS OR ACCURACY, IS RESPONSIBLE FOR ANY DEDUCTIONS OR CONCLUSIONS MADE ON THE BASIS OF THIS INFORMATION AND THAT OF ANY ADDITIONAL SITE INSPECTIONS IF MADE.
14. ALL WORK SHALL COMPLY WITH CODES, LAWS, ORDINANCES, RULES, AND REGULATIONS OF PUBLIC AUTHORITIES GOVERNING THE WORK.
15. THE HIGHEST QUALITY PRACTICES, SET BY THE APPROPRIATE TRADE, GUILD, OR INDUSTRY-ACCEPTED AUTHORITY SHALL GOVERN WORK.
16. CONTRACTOR WILL REVIEW ALL RECEIVED DOCUMENTS, VERIFY DIMENSIONS AND FIELD CONDITIONS AND CONFIRM THAT WORK CAN BE BUILT AS SHOWN, REPORT ANY CONFLICTS OR OMISSIONS FOR CLARIFICATION, OR EXCEPTIONS TO BEST TRADE PRACTICES ON EXISTING AND PROPOSED WORK, TO THE DESIGNER PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION.
17. SHOP DRAWINGS TO BE SUBMITTED FOR ITEMS TO BE MANUFACTURED, PROCESSED OR ASSEMBLED FOR REVIEW BY THE DESIGNER PRIOR TO ORDERING OF MATERIALS AND FABRICATION.
18. SUBMIT REQUESTS FOR SUBSTITUTIONS, REVISIONS, OR CHANGES FOR REVIEW PRIOR TO PURCHASE, FABRICATION OR INSTALLATION.
19. CONTRACTOR SHALL CONFIRM THAT OWNER WILL PROVIDE WORK NOTED "BY OTHERS" OR "N/C" UNDER SEPARATE CONTRACT, INCLUDE REQUIREMENTS IN CONSTRUCTION PROGRAM SCHEDULE AND COORDINATE TO ASSURE ORDERLY SEQUENCE OF INSTALLATION. THIS COULD INCLUDE BUT NOT LIMITED TO TELECOM SERVICES, SECURITY SYSTEMS, BASE BUILDING EQUIPMENT COMMISSIONING, FURNITURE DELIVERY AND INSTALLATION.
20. MAINTAIN EXITS, EXIT LIGHTING, FIRE PROTECTIVE DEVICES, AND ALARMS IN CONFORMANCE WITH CODES AND ORDINANCES, AND PROTECT AREAS ADJACENT TO SCOPE AREA OF WORK FROM DAMAGE.
21. CONTRACTOR TO ADHERE TO ALL REQUIREMENTS AS OUTLINED BY BASE BUILDING CONSTRUCTION MANUAL - INCLUDING BUT NOT LIMITED TO SCHEDULING TIME AND LOCATIONS FOR DELIVERIES, BUILDING ACCESS, USE OF BUILDING SERVICES AND FACILITIES, AND USE OF ELEVATORS. MINIMIZE DISRUPTION OF BUILDING FUNCTIONS AND OCCUPANTS.
22. THERE SHALL BE NO DIRECT ATTACHMENT MADE TO THE EXTERIOR CURTAIN WALL, OR RADIANT PANELS AT CEILING OR BASE.

BARRIER-FREE WASHROOM DESIGN REQUIREMENTS

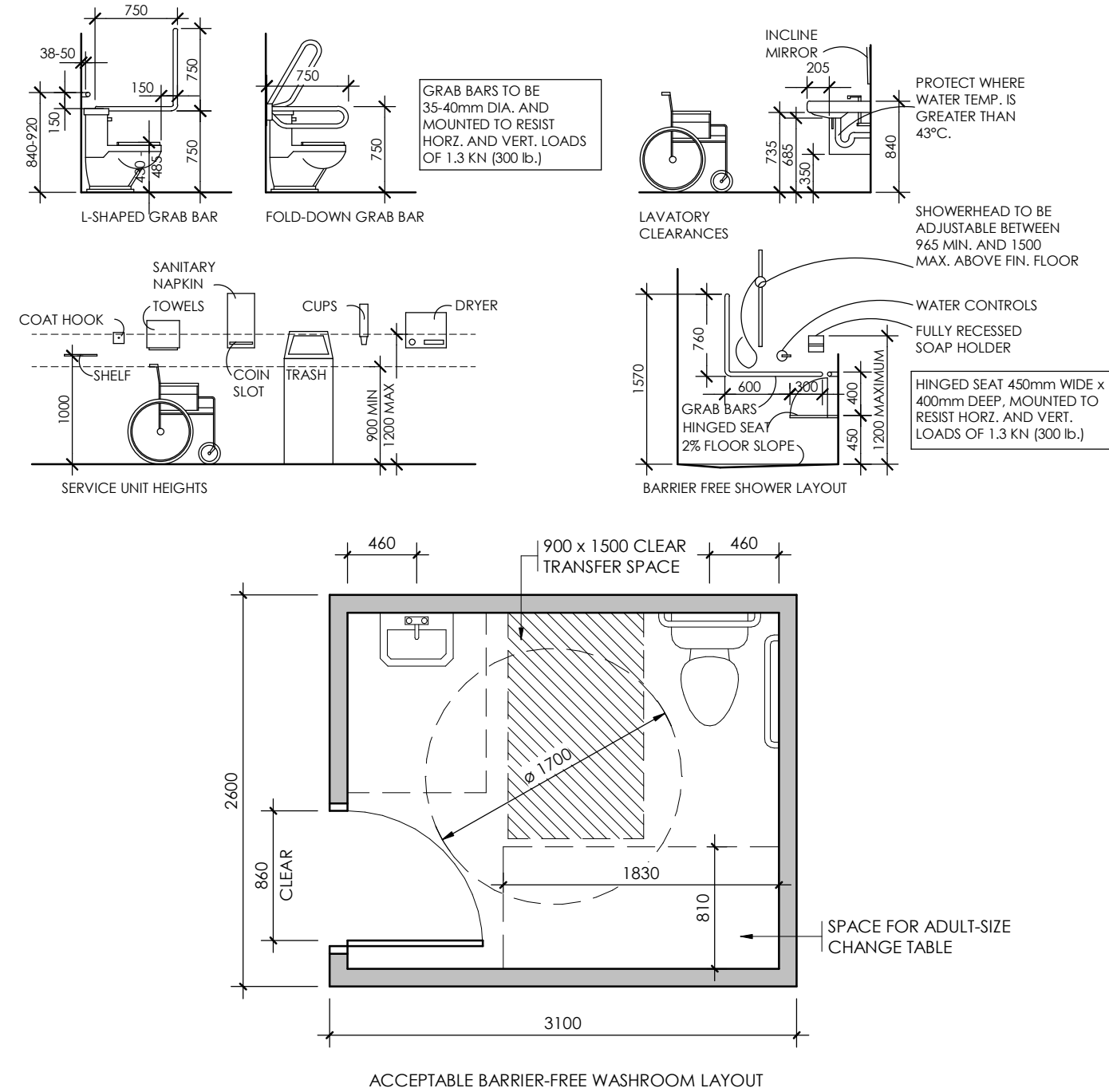
BARRIER-FREE ENTRY DOOR ASSEMBLY NOTES:

1. ENSURE A MAXIMUM DIFFERENCE IN ELEVATION OF 13mm TO ACCOMMODATE BARRIER-FREE ACCESSIBILITY INTO THE FACILITY AT BUILDING ENTRIES NOTED TO HAVE PUSH BUTTONS. USE DESIGNATED BARRIER-FREE DOOR SILL.

BARRIER FREE ACCESSIBILITY NOTES:

1. WORK & ACCESSORIES REQUIRED FOR "ACCESSIBLE" WASHROOM:
 1. PROVIDE ONE TILT MIRROR DESIGNATED AS "ACCESSIBLE";
 2. INSULATE WASTE & HOT WATER SUPPLY PIPING AT U/S OF LAVATORY ;
 3. WALL HUNG LAVATORY SHALL BE EQUIPPED WITH APPROVED "WING-HANDLE"
 4. MOUNT ALL FIXTURES AND ACCESSORIES AS INDICATED ON ELEVATIONS;
 5. ENSURE MINIMUM 600mm CLEARANCE FROM JAMB TO IN-SWING OF DOOR
 6. ENSURE MINIMUM 300mm CLEARANCE FROM JAMB TO OUT-SWING OF DOOR
 7. PROVIDE COAT HOOK AT 1200mm A.F.F.;

1. SIDE BAR TO BE 38mm DIA. CONTINUOUS L-SHAPED WITH 750mm LONG HORIZONTAL AND VERTICAL COMPONENTS, MOUNTED WITH HORIZONTAL COMPONENT 750mm A.F.F. AND VERTICAL COMPONENT 150mm IN FRONT OF SEAT, PROVIDE SOLID BACK SUPPORT FOR ANCHORS. PROVIDE 38mm CLEAR BETWEEN BAR AND WALL.
2. BACK BAR TO BE 38mm DIA. BY 400mm STRAIGHT S.S. MOUNTED HORIZONTALLY ON WALL BEHIND TOILET SEAT AT #400mm A.F.F. OR 150mm ABOVE TOP OF TANK, PROVIDE SOLID BACK SUPPORT FOR ANCHORS. PROVIDE 38mm CLEAR BETWEEN BAR AND WALL.



THIS DRAWING IS AN INSTRUMENT OF SERVICE & IS THE PROPERTY OF ABA ARCHITECTS INC. & CANNOT BE MODIFIED AND/OR REPRODUCED WITHOUT THE PERMISSION OF ABA ARCHITECTS INC.

THE CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE AND REPORT ANY DISCREPANCIES TO THE ARCHITECT, BEFORE PROCEEDING WITH THE WORK.

DRAWINGS ARE NOT TO BE SCALED.

[illegible]

***IMPORTANT NOTE TO ALL CONTRACTORS/SUB-CONTRACTORS:**

THIS SCOPE OF WORK CONTAINS ASBESTOS CONTAINING MATERIALS (ACM). ALL CONTRACTORS SHALL REFER TO THE ASBESTOS AUDIT AND SECTION 01 35 43, HAZARDOUS MATERIALS FOR APPROPRIATE PROTOCOLS THAT MUST BE FOLLOWED, REGARDLESS OF ABATEMENT OPERATIONS BEING CONDUCTED OR NOT.

ISSUED FOR PERMIT/TENDER	2025.03.25
ISSUED FOR COORDINATION	2025.01.17
CHRONOLOGY	DATE



aba architects inc.



CUENT

PROJECT NAME

WATERLOO
COLLEGIATE INSTITUT
HVAC AND EXTERIOR
UPGRADES

300 HAZEL STREET, WATERLOO, ON. N2L 3P2

GENERAL PROJECT INFORMATION

SCALE N.T.S.	DRAWING NUMBER
SHEET SIZE 24X36	A0.1
PROJECT NUMBER 2024-168	

The diagram shows a cross-section of a beam. A vertical crack is located in the center. There are three pairs of horizontal reinforcement bars, one pair in each of the three segments created by the crack. The top bars are solid circles, and the bottom bars are solid circles with a vertical line through them. The beam is supported by vertical lines on the left and right sides.



- PRE-ENGINEERED ACOUSTIC TILE CEILING SUSPENSION SYSTEM
- 610 x 1220 ACOUSTIC TILE



- 38 CARRIER U-CHANNEL AT 1220mm o.c.
- SUSPENDED AND FASTENED TO STRUCTURE
- 13 GYPSUM BOARD

OBC MATRIX											
Item	Ontario Building Code Data Matrix					OBC References					
	1	Project Description: WRDSB Waterloo C.I. Renovations Project Address: 300 Hazel St., Waterloo, ON, N2L 3P2	☐ New ☐ Change of Use	☐ Addition ☒ Alteration		☒ Part 3 2.1.1.	☐ Part 9 2.1.1.	☐ Part 1.1 11.1 to 11.4			
2	Major Occupancy(ies): Group A2 - Secondary School				3.1.2.1.(1)	9.10.2.					
3	Building Area (m ²): Existing: 6,449	New: 0	Total: 6,449		1.1.3.2.	1.1.3.2					
4	Gross Floor Area (m ²): Existing: 16,775	New: 0	Total: 16,775		1.1.3.2.	1.1.3.2.					
5	Number of Storeys: Below Grade: 4 Above Grade: 0				3.2.1.1. & 1.1.3.2.	9.10.4.					
6	Height of Building (m): Existing to Remain										
7	Number of Streets/ Access Routes: 1				3.2.2.10. & 3.2.5.5	9.10.20.					
8	Building Classification: Group A, Div.2, 3.2.2.24. - Existing				3.2.2.20-83	9.10.2.					
9	Sprinkler System Proposed:	☐ Entire Building ☐ Basement Only ☐ In Lieu of Roof Rating ☒ Not Required			3.2.2.20-83 3.2.1.5. 3.2.2.17.	9.10.8.2.					
	Existing to Remain										
10	Standpipe Required:	☐ Yes ☒ No	☒ No		3.2.9.						
11	Fire Alarm Required:	☐ Yes ☒ No	☐ No		3.2.4.	9.10.18.					
12	Water Service / Supply is Adequate:	☒ Yes ☐ No	☐ No		3.2.5.7.						
13	High Building:	☐ Yes ☒ No	☒ No		3.2.6.						
14	Permitted Construction: ☐ Combustible Acted Construction: ☐ Combustible	☒ Non-Combustible ☒ Non-Combustible	☐ Both ☐ Both		3.2.2.20-83 3.2.1.1.(3)-(8)	9.10.6.					
15	Mezzanine(s) Area (m ²): N/A				3.1.17.1.(3)-(8)	9.10.4.1.					
16	Occupant Load: ☐ m ² / person	☒ Design of Building			3.1.17.1.	9.9.1.3.					
	Group -- Occupancy: ----- Load: -----	Persons									
	Group -- Occupancy: ----- Load: -----	Persons									
	Group -- Occupancy: ----- Load: -----	Persons									
	Group -- Occupancy: ----- Load: -----	Persons									
17	Barrier-free Design:	☒ Yes ☐ No	☐ No		3.8.	9.5.2.					
18	Hazardous Substances:	☐ Yes ☒ No	☒ No		3.3.1.2.(1) & 3.3.1.19.(1)	9.10.1.3.(4)					
19	Required Fire Resistance Rating (FRR)	Horizontal Assemblies FRR (Hours): Floor: 1 HR Roof: - Mezz: - Supporting Members FRR (Hours): Floor: 1 HR Roof: - Mezz: -	Listed Design No. or Description (SB-2): - - - Listed Design No. or Description (SB-2): - - -		3.2.2.20-83 & 3.2.1.4.	9.10.8. 9.10.9. 9.10.9.4.(2)					
20	Spatial Separation - Construction of Exterior Walls:					3.2.3.	9.10.14.				
	Building Face	Area of EBF (m ²)	L/D (m)	L/H Ratio	Permitted U.O.'s (%)	Proposed U.O.'s (%)	FRR (Hours)	Listed Design or Description	Combustible Construction	Non-Comb. Cladding	Non-Comb. Construction
	North	Existing	-	-	-	Existing	-	-	☐	☐	☒
	East	Existing	-	-	-	Existing	-	-	☐	☐	☒
	West	Existing	-	-	-	Existing	-	-	☐	☐	☒
	South	Existing	-	-	-	Existing	-	-	☐	☐	☒
Notes:											

PART 11 OBC MATRIX			
Item	Description	Ontario Building Code Data Matrix	OBC Reference
	Project Description	Project Number: 2024-168 Project Name: Waterloo Collegiate Institute HVAC Upgrades Location: 300 Hazel St., Waterloo, ON, N2L 3P2 Certificate of Practice Number: 2026	
11.1	Existing Building Classification	Change in Major Occupancy: ☐ Yes ☒ Not Applicable Existing Major Occupancy: <u>Group A, Div.2</u> Describe Use: <u>Secondary School</u> Building Size: <u>Large</u> Construction Index: <u>N/A</u> Hazard Index (Existing): <u>N/A</u> Importance Category: ☒ Low ☐ Normal ☐ High ☐ Post-Disaster	11.2.1.1 T 11.2.1.1.B-N T 11.2.1.1.B-N T 11.2.1.1.A T 11.2.1.1.B-N 4.1.2.1.(3) & 5.2.2.1.(2)
	Proposed Building Classification	Proposed Major Occupancy: <u>Group A, Div.2 - Existing to Remain</u> Describe Use: <u>Secondary School</u> Building Size: <u>Large</u> Hazard Index (Proposed): <u>N/A</u>	T 11.2.1.1.B-N T 11.2.1.1.B-N T 11.2.1.1.B-N
11.2	Alteration to Existing Building	Basic Renovation: ☒ Extensive Renovation: ☐	11.3.3.1 11.3.3.2
11.3	Performance Level Reduction	Structural: ☐ No ☒ Yes Increase in Occupant Load: ☒ No ☐ Yes Change of Major Occupancy: ☒ No ☐ Yes Plumbing: ☒ No ☐ Yes Sewage System: ☐ No ☒ Yes	11.4.2.1 11.4.2.2 11.4.2.3 11.4.2.4 11.4.2.5
11.4	Compensating Construction	Structural: ☐ No ☒ Yes (explain) Structural reinforcement required for additional loads on roof. Increase in Occupant Load: ☒ No ☐ Yes (explain) Change of Major Occupancy: ☒ No ☐ Yes (explain) Plumbing: ☒ No ☐ Yes (explain) Sewage System: ☐ No ☒ Yes (explain) Sanitary and storm replacement. No change to loads.	11.4.3.2 11.4.3.3 11.4.3.4 11.4.3.5 11.4.3.6
11.5	Compliance Alternatives Proposed	☒ No ☐ Yes (provide number(s)) _____	11.5.1
11.6	Alternative Measures Proposed	☒ No ☐ Yes (explain)	11.5.2

THE CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE AND REPORT ANY DISCREPANCIES TO THE ARCHITECT, BEFORE PROCEEDING WITH THE WORK.

[illegible]

THIS SCOPE OF WORK CONTAINS ASBESTOS CONTAINING MATERIALS (ACM). ALL CONTRACTORS SHALL REFER TO THE ASBESTOS AUDIT AND SECTION 01 35 43, HAZARDOUS MATERIALS FOR APPROPRIATE PROTOCOLS THAT MUST BE FOLLOWED, REGARDLESS OF ABATEMENT OPERATIONS BEING CONDUCTED OR NOT.

ISSUED FOR PERMIT/TENDER	2025.03.25
ISSUED FOR COORDINATION	2025.01.17
CHRONOLOGY	DATE



WATERLOO
COLLEGIATE INSTITUTE
HVAC AND EXTERIOR
UPGRADES

300 HAZEL STREET, WATERLOO, ON. N2L 3P2

OBC MATRICES & ASSEMBLIES

SCALE	DRAWING NUMBER
As indicated	A0.2
SHEET SIZE	
24X36	
PROJECT NUMBER	
2024-168	

[illegible]

THIS SCOPE OF WORK CONTAINS ASBESTOS CONTAINING MATERIALS (ACM). ALL CONTRACTORS SHALL REFER TO THE ASBESTOS AUDIT AND SECTION 01 35 43, HAZARDOUS MATERIALS FOR APPROPRIATE PROTOCOLS THAT MUST BE FOLLOWED, REGARDLESS OF ABATEMENT OPERATIONS BEING CONDUCTED OR NOT.

ISSUED FOR PERMIT/TENDER	2025.03.21
ISSUED FOR COORDINATION	2025.01.13
CHRONOLOGY	DATE



CUEN



PROJECT NAME

PROJECT NAME WATERLOO COLLEGIATE INSTITUTE HVAC AND EXTERIOR UPGRADES

DRAWING TITLE

HVAC RENO - THIRD FLOOR DEMOLITION REFLECTED CEILING PLANS

SCAU

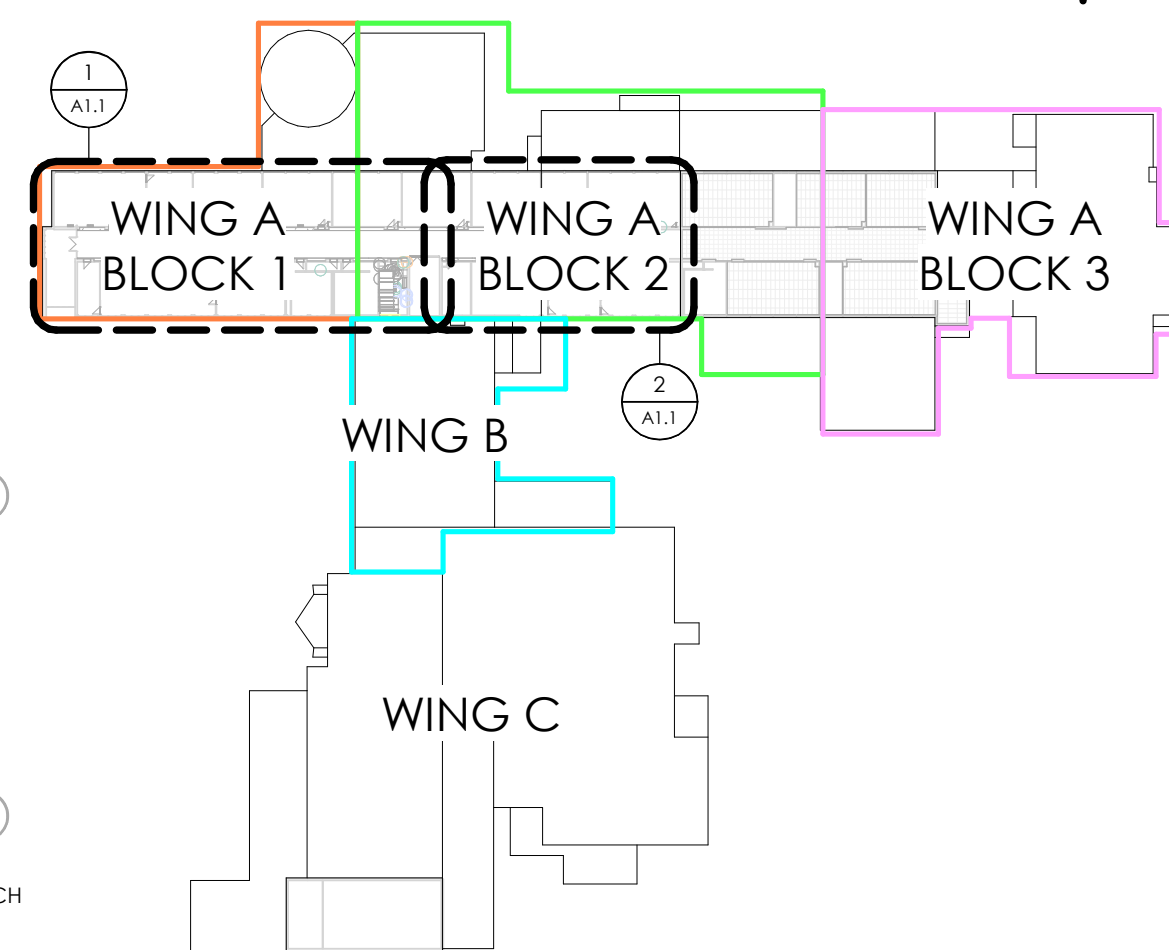
As indicated

SHEET SIZE
24X36

PROJECT NUMBER
2024-168

DRAWING NUMBER

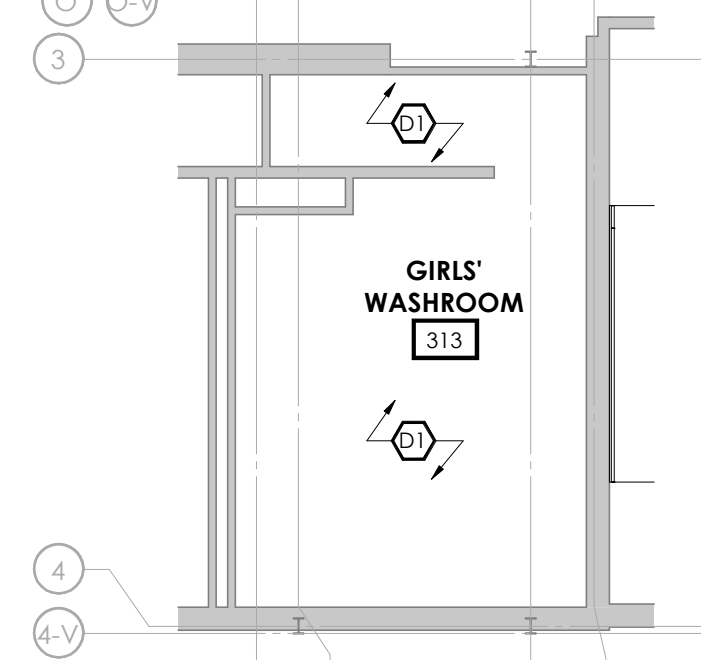
A1.1



KEY PLAN

WING A BLOCK 1 - THIRD FLOOR PARTIAL DEMOLITION REFLECTED CEILING PLAN

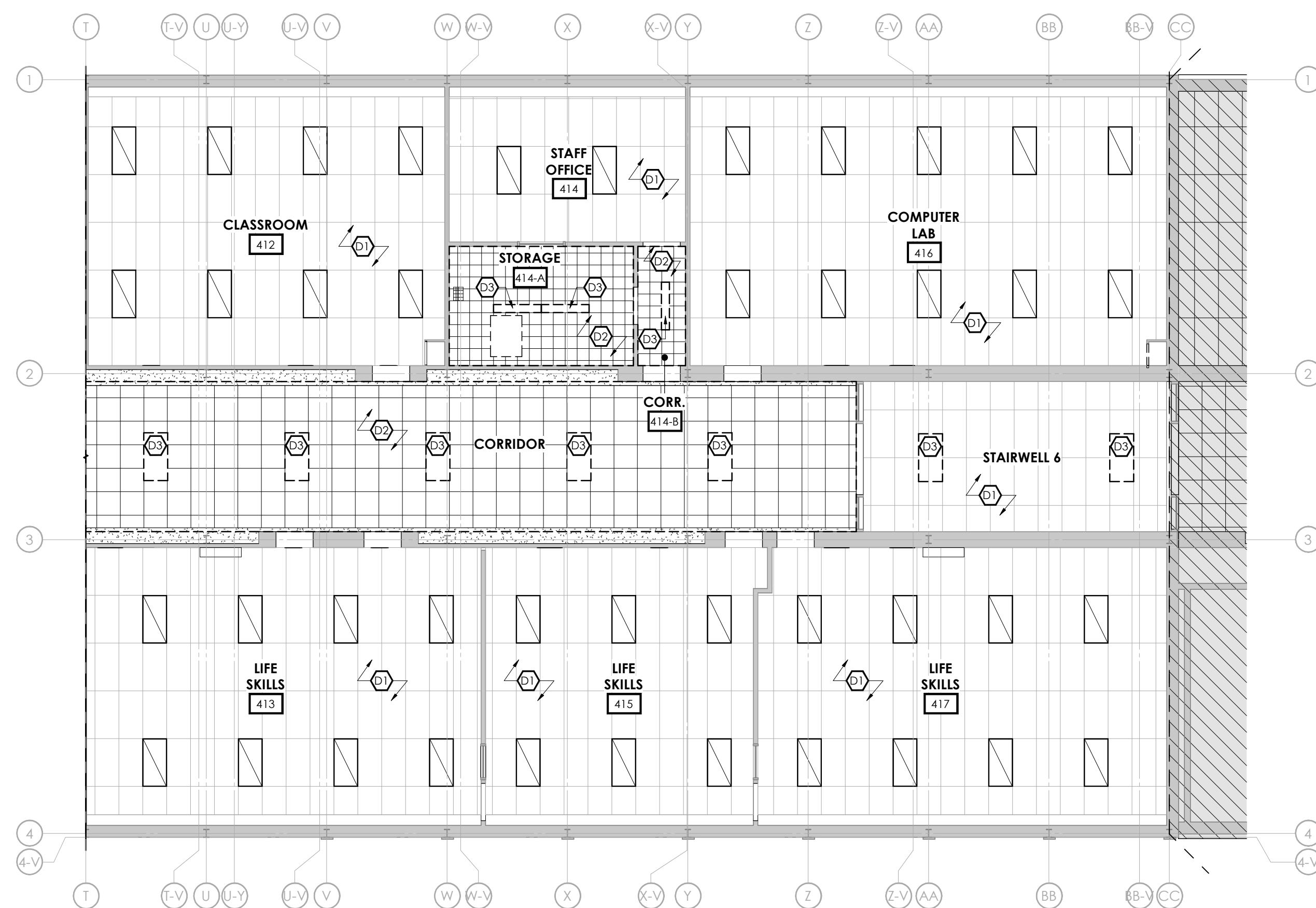
1 : 100



\\SECOND FLOOR PLAN PARTIAL DEMO RCP

7 GIRLS' WASHROOM RM 313

1 : 100



WING A BLOCK 2 - THIRD FLOOR PARTIAL DEMOLITION REFLECTED CEILING PLAN

1 · 100

REMOVE EXISTING ACOUSTIC CEILING TILES AND SUSPENDED CEILING TILE GRID AS REQUIRED TO PERFORM HVAC AND/OR PLUMBING RENOVATION. REMOVE CEILING TILE GRID WHERE REQUIRED. REFER TO MECHANICAL DRAWINGS FOR FULL SCOPE OF HVAC RENOVATION. SHOULD A SECOND MEMBRANE CEILING BE DISCOVERED ABOVE THE SUSPENDED CEILING, REPORT FINDINGS TO DESIGNER PRIOR TO DEMOLITION.

DEMOLISH EXISTING CEILING IN ITS ENTIRETY. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR FULL SCOPE OF REMOVAL, REUSE, REROUTING OR DECOMMISSIONING OF EXISTING SERVICES. STORE CEILING TILES STILL IN GOOD CONDITION, UP TO 10% OF TILES, IN A SAFE, DRY LOCATION. CONFER WITH OWNER IF REQUIRED FOR STORAGE LOCATION. REFER TO ASBESTOS AUDIT REPORT PRIOR TO ANY CEILING DEMOLITION.

D3 REMOVE EXISTING LIGHT FIXTURE AND TURN OVER TO OWNER. REFER TO ELECTRICAL DRAWINGS.

 REFER TO MECHANICAL DRAWINGS FOR DISMANTLING & REMOVAL OF EXISTING AHU AND ASSOCIATED DUCTWORK

EXISTING CEILING TO REMAIN. CONFER WITH DESIGNER PRIOR TO ANY NECESSARY REMOVAL/CUTTING OF CEILING.

D6 EXISTING EXTERIOR WALL OPENING TO BE MODIFIED.
REFER TO STRUCTURAL DRAWINGS.

2450	CEILING HEIGHT TAG
	POT LIGHT FIXTURE (REFER TO ELECTRICAL DWGS.)
	SUSPENDED PENDANT LIGHT FIXTURE (REFER TO ELECTRICAL DWGS.)
	WALL MOUNTED LIGHT FIXTURE (REFER TO ELECTRICAL DWGS.)
	610x610 AND 610x1220 RECESSED LIGHT FIXTURE (REFER TO ELECTRICAL DWGS.)
	SUSPENDED LIGHT FIXTURE (REFER TO ELECTRICAL DWGS.)
	SUPPLY AIR DIFFUSERS (REFER TO MECHANICAL DWGS.)
	EXHAUST FAN (REFER TO MECHANICAL DWGS.)
	RETURN AIR GRILLE (REFER TO MECHANICAL DWGS.)

EXISTING WALL TO REMAIN (SHOWN SHADED)

EXISTING WALL TO BE DEMOLISHED

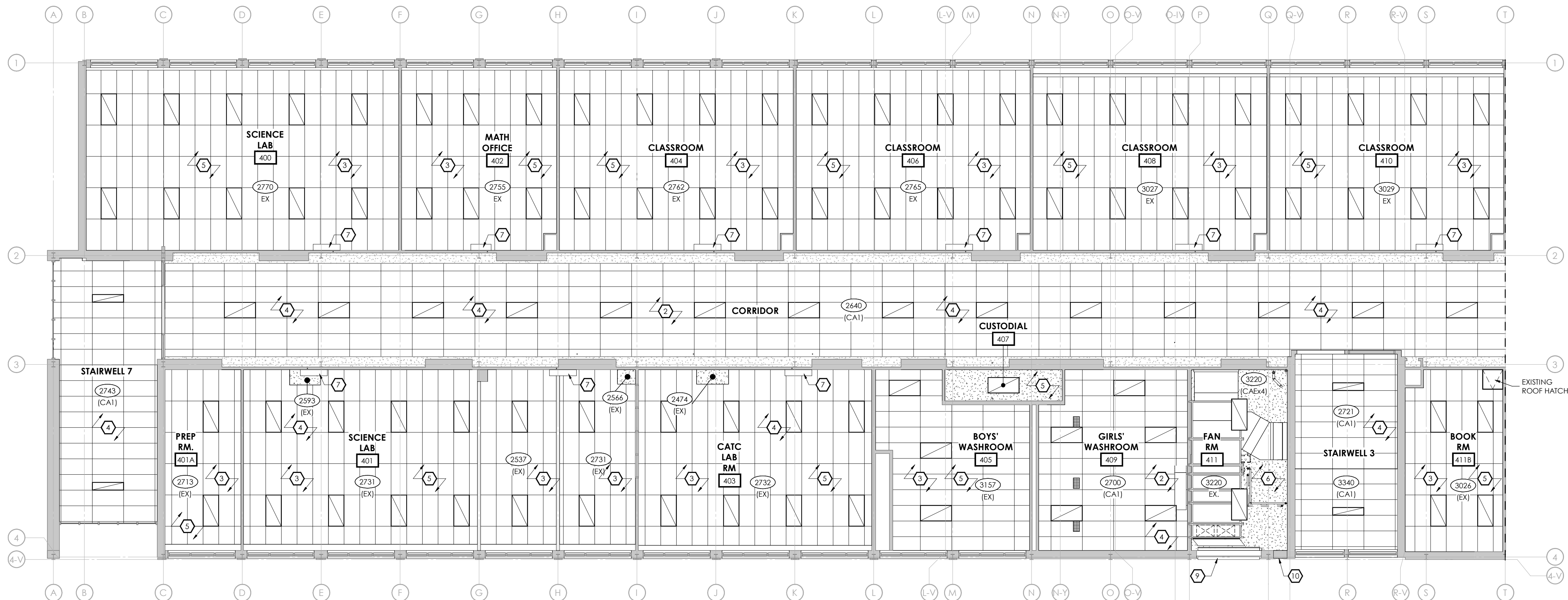
DENOTES EXISTING BUILDING

DENOTES AREA N.J.C. UNLESS NOTED OTHERWISE

DEMOLITION NOTES

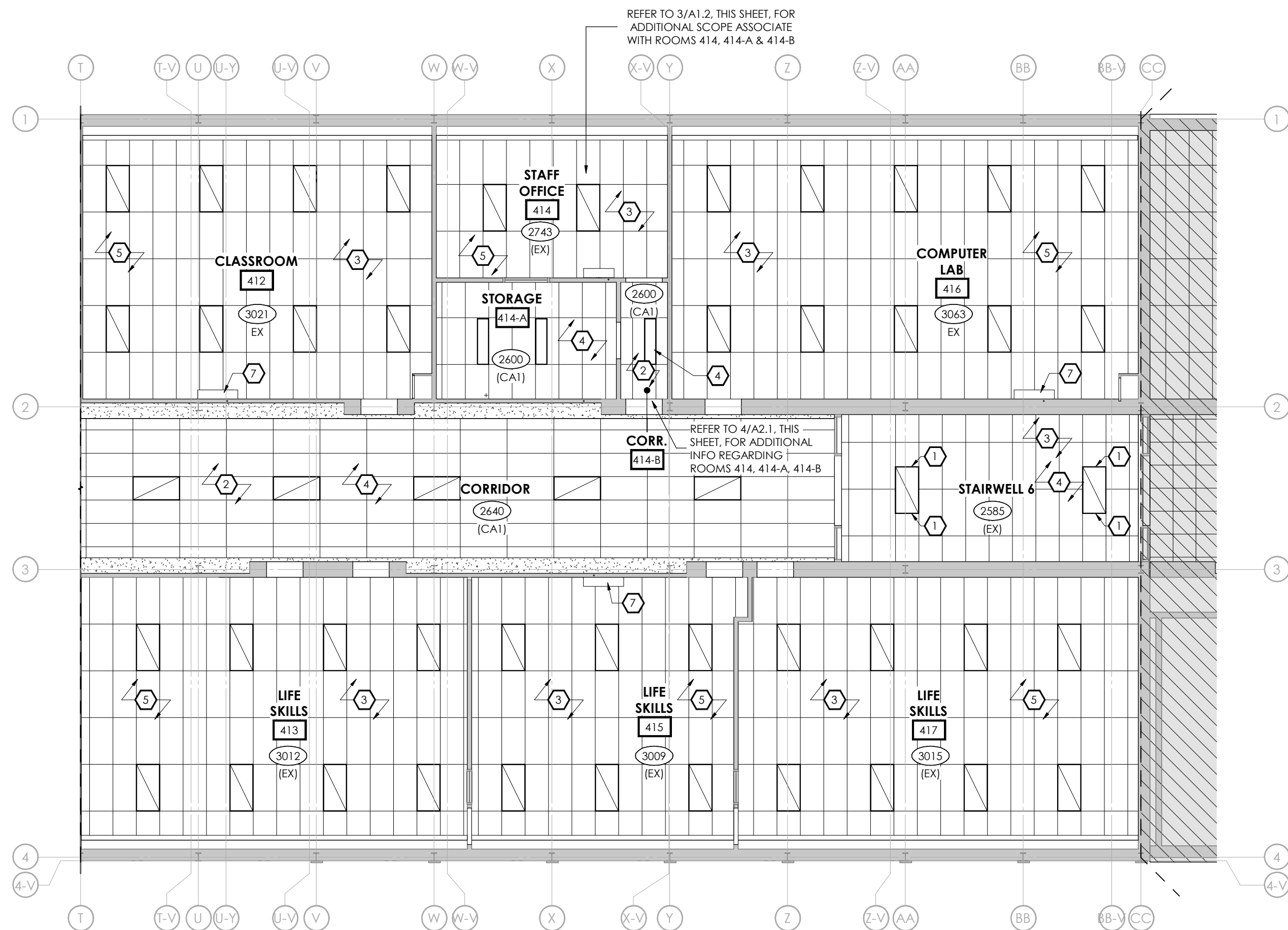
1. DISPOSE OF REMOVED ITEMS IN A LAWFUL MANNER IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE MUNICIPALITY HAVING JURISDICTION.
2. ALL EXISTING WALLS AND ITEMS TO BE REMOVED ARE SHOWN DASHED.
3. ALL EXISTING WALLS TO REMAIN ARE SHOWN SHADED.
4. OWNER TO HAVE THE RIGHT TO FIRST REFUSAL OF ALL ITEMS REMOVED. ITEMS TO BE STORED IN A DRY AND SECURE LOCATION. ALL REMOVED ITEMS SHALL BE DISPOSED OF AS PER NOTE HG. 1.
5. COORDINATE WITH STRUCTURAL, MECHANICAL AND ELECTRICAL DESIGNERS RE: READ AND CONSTRUCTION OF DEMOLITION, MODIFICATION AND NEW INSTALLATION.
6. REMOVE, RELOCATE AND/OR RE-ROUTE ALL MECHANICAL AND ELECTRICAL SERVICE AND CONNECTIONS AS REQUIRED TO ACCOMMODATE DEMOLITION OR AS NECESSARY AS A RESULT OF DEMOLITION.
7. SUPPLY AND INSTALL ALL NECESSARY SHORING AND/OR BRACING AS REQUIRED FOR TEMPORARY SUPPORT OF EXISTING STRUCTURE. COORDINATE WITH A STRUCTURAL ENGINEER AS REQUIRED.
8. ENSURE ALL FLOOR AREAS ARE FREE OF HAZARDS AFTER DEMOLITION IS COMPLETE. LEVEL, PATCH, FILL AND GRIND FLOOR AS REQUIRED TO ACHIEVE A SMOOTH SANITARY SURFACE READY TO RECEIVE FLOOR FINISH.
9. CARE SHALL BE TAKEN TO MINIMIZE DAMAGE TO EXISTING ADJUTING WALLS, SURFACES AND FINISHES TO REMAIN.
10. PROTECT SALVAGED AND/OR ITEMS TO REMAIN FROM DAMAGE. PROVIDE ADEQUATE COVERINGS AND/OR STORAGE AS REQUIRED.
11. EXISTING EYE SIGNAGE, FIRE ALARM SYSTEM AND EMERGENCY LIGHTING TO BE LEFT IN OPERATION DURING DEMOLITION AND DURATION OF CONTRACT OR UNTIL NEW INSTALLED.
12. COORDINATE WITH OWNER AREA(S) FOR WASTE BIN LOCATION. SURVEYORS MAINTAIN PROTECTIVE MEASURES TO ENSURE THE PUBLIC'S SAFETY.
13. COORDINATE WITH THE OWNER ANY STAGING OF WORK AND/OR DISRUPTIONS TO PARKING AND TRAFFIC FLOWS.
14. SHOULD MATERIAL, RESEMBLING SPRAY OR TROWEL APPLIED ASBESTOS OR OTHER TOXIC OR HAZARDOUS MATERIALS BE ENCOUNTERED IN THE COURSE OF DEMOLITION, STOP WORK, TAKE PREVENTATIVE MEASURES AND NOTIFY ARCHITECT AND/OR OWNER IMMEDIATELY. DO NOT PROCEED UNTIL WRITTEN INSTRUCTIONS HAVE BEEN RECEIVED.
15. CONTRACTOR TO EXAMINE EXISTING CONDITIONS ON SITE AFFECTING DIVISION OF WORK. NO CLAIM FOR PAYMENT SHALL BE MADE FOR EXTRA WORK MADE NECESSARY BY CIRCUMSTANCES ENCOUNTERED DUE TO CONDITIONS WHICH WERE VISIBLE UPON, OR REASONABLY INFERRABLE, FROM AN EXAMINATION OF THE PRIOR TO SUBMISSION OF THE BID, THIS INCLUDES BUT IS NOT LIMITED TO THE SERVICES ABOVE THE CEILING.
16. CONTRACTOR MUST OBTAIN DEMOLITION PERMITS REQUIRED BY RELEVANT AUTHORITIES BEFORE THE COMMENCEMENT OF THE WORK.
17. DURING DEMOLITION, CONTRACTOR TO PREVENT DUST, DIRT AND DEBRIS FROM RISING OR MIGRATING TO OTHER AREAS BY HANGING 0.5mm POLY SHEETS BETWEEN AREAS OF DEMOLITION. PROTECT EXISTING HVAC UNITS FROM CONTAMINATION AND REPLACE FILTERS UPON COMPLETION OF DEMOLITION.
18. CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN THE INTEGRITY OF THE BUILDING CORE.
19. DEMOLITION OCCURRING BEYOND THE SCOPE IDENTIFIED IS TO BE REPAIRED OR REPLACED TO ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
20. CONTRACTOR TO PATCH CEILING, ADJACENT WALLS AND FLOOR SURFACES AS REQUIRED AFTER DEMOLITION. ALL STRIPPED SURFACES TO BE LEFT IN SMOOTH CONDITION SUITABLE TO RECEIVE NEW FINISHES.
21. ELECTRICAL SERVICES TO BE REMOVED ARE TO BE SAFELY CAPPED, COMPLIANT WITH THE APPLICABLE CODES.
22. ALL CUTTING AND PATCHING OF EXISTING FINISHES WILL BE DONE TO THE HIGHEST STANDARD.
23. GENERAL CONTRACTOR TO ENSURE ALL FLOOR AREAS ARE FREE OF HAZARDS AFTER DEMOLITION AND DURING CONSTRUCTION.
24. CONTRACTOR TO REFER TO GENERAL CONDITIONS AS OUTLINED IN SPECIFICATIONS FOR NEW CONSTRUCTION.

2025-03-25 10:05:49 AM C:\Users\jgarratt\Documents\2024-1-08 - HVAC - HVAC & Ext Upgrades - Central School Board\Hvac\hvac.rvt



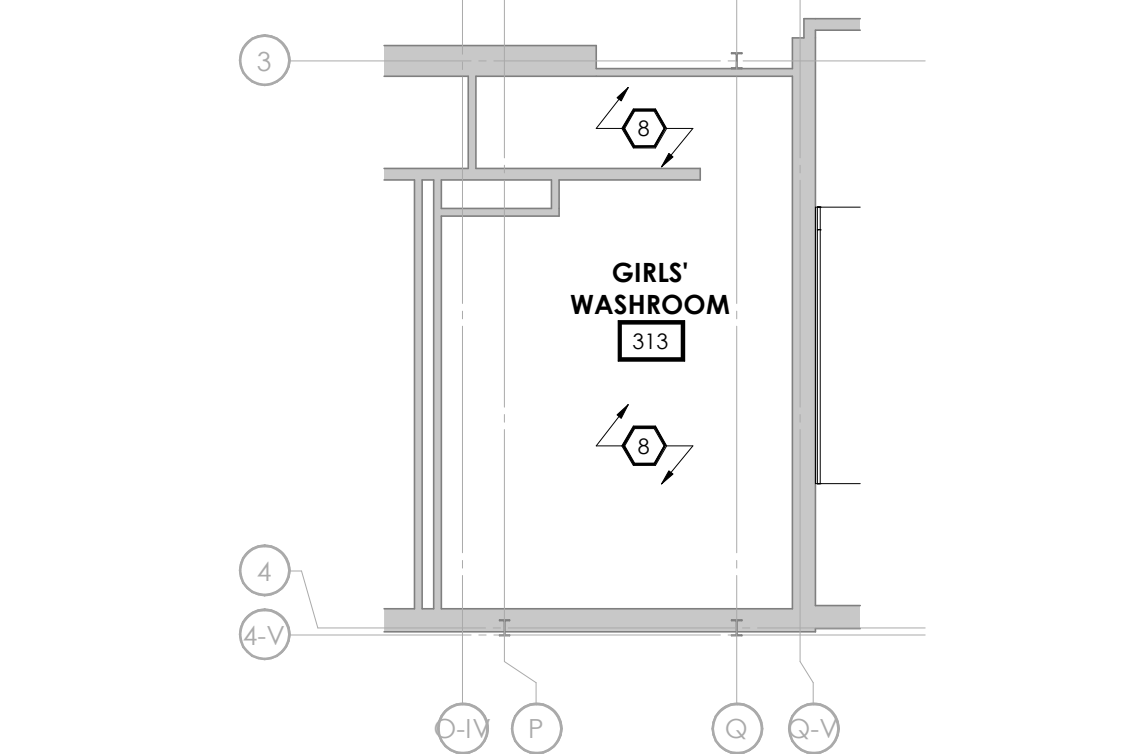
1 A1.2 WING A BLOCK 1 - THIRD FLOOR REFLECTED CEILING PLAN

1:100



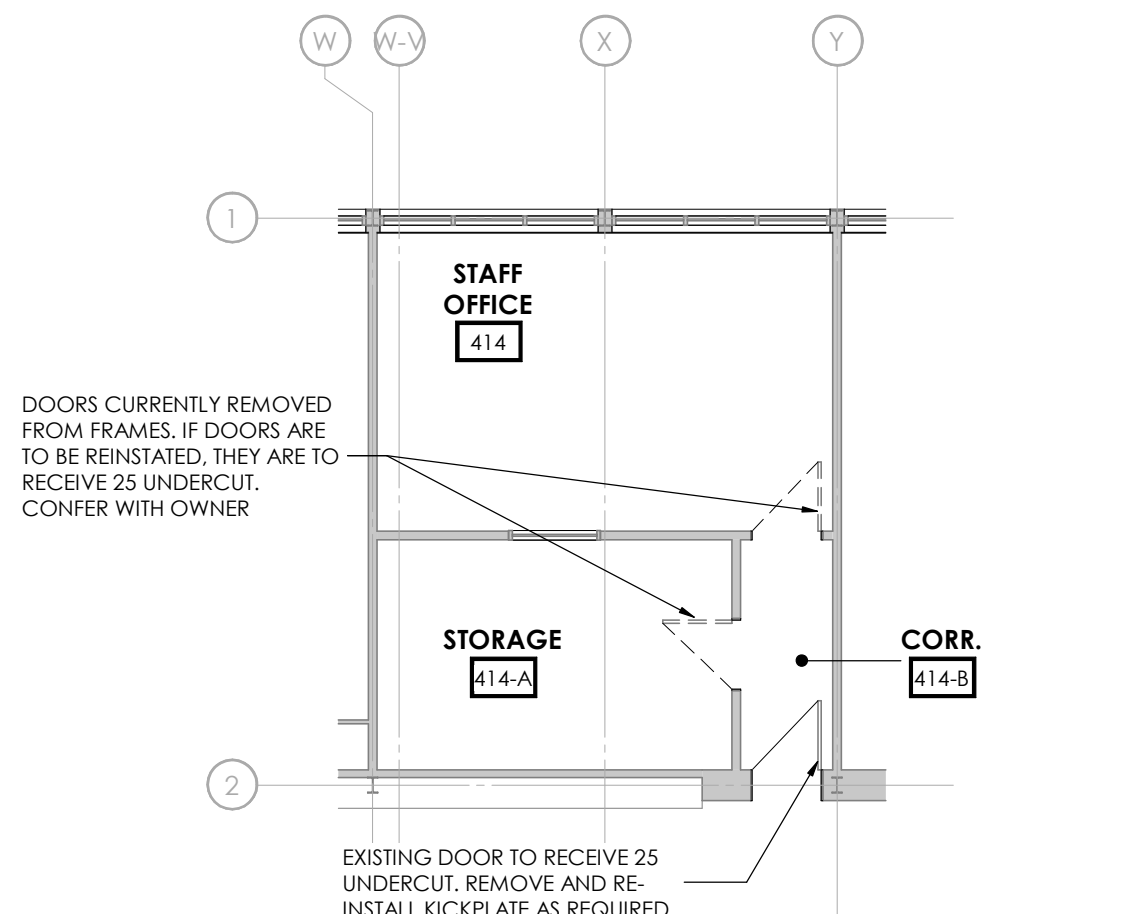
2 A1.2 WING A BLOCK 2 - THIRD FLOOR REFLECTED CEILING PLAN

1:100



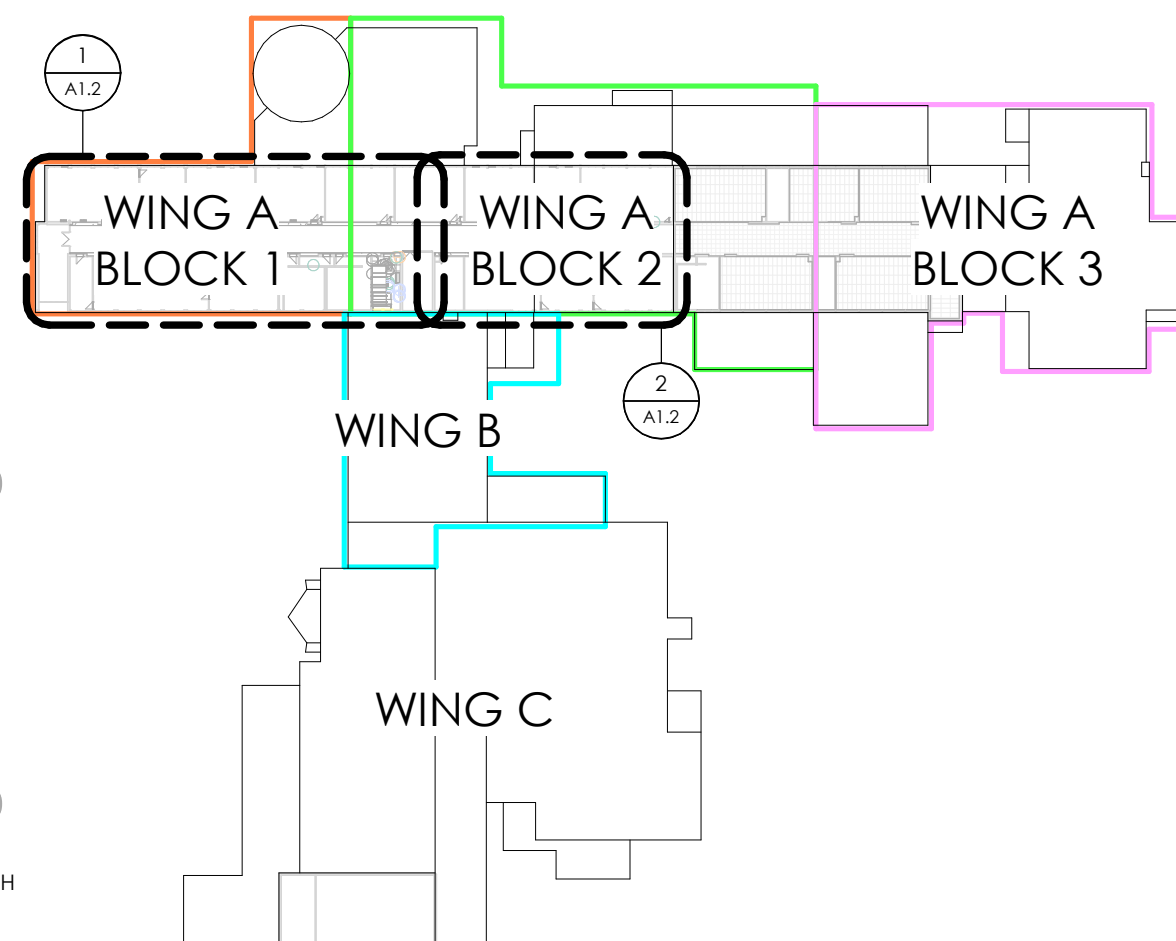
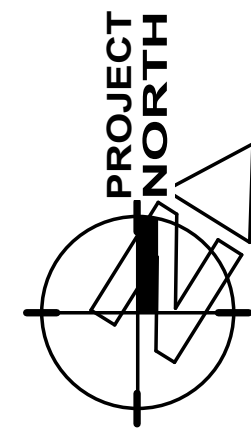
3 A1.2 SECOND FLOOR PLAN PARTIAL RCP
GIRLS' WASHROOM RM 313

1:100



4 A1.2 THIRD FLOOR - ROOM 414 PLAN

1:100



KEY PLAN

RCP LEGEND

- 2450 CEILING HEIGHT TAG
- POT LIGHT FIXTURE (REFER TO ELECTRICAL DWGS.)
- SUSPENDED PENDANT LIGHT FIXTURE (REFER TO ELECTRICAL DWGS.)
- WALL MOUNTED LIGHT FIXTURE (REFER TO ELECTRICAL DWGS.)
- 610x610 AND 610x1220 RECESSED LIGHT FIXTURE (REFER TO ELECTRICAL DWGS.)
- SUSPENDED LIGHT FIXTURE (REFER TO ELECTRICAL DWGS.)
- SUPPLY AIR DIFFUSERS (REFER TO MECHANICAL DWGS.)
- EXHAUST FAN (REFER TO MECHANICAL DWGS.)
- RETURN AIR GRILLE (REFER TO MECHANICAL DWGS.)

RCP KEYNOTES

- REWORK SUSPENDED CEILING GRID TO ACCOMMODATE NEW RECESSED LIGHT FIXTURES. LIGHT FIXTURE LOCATION TO MATCH THE LOCATION OF REMOVED LIGHT FIXTURE.
- REFER TO ELECTRICAL DRAWINGS FOR RELOCATION OF ELECTRICAL SERVICES AFFECTED BY CEILING HEIGHT DECREASE.
- REPLACE ALL/ANY DAMAGED ACOUSTIC CEILING TILES. REFER TO CASH ALLOWANCES IN SPECIFICATIONS.
- REFER TO ELECTRICAL DRAWINGS FOR ANY/ALL SCOPE RELATED TO NEW LIGHTING AND/OR ELECTRICAL FIXTURES. THIS ROOM.
- REFER TO ELECTRICAL DRAWINGS FOR ANY/ALL SCOPE RELATED TO EXISTING LIGHTING AND/OR ELECTRICAL FIXTURES. THIS ROOM.
- REFER TO MECHANICAL DRAWINGS FOR INSTALLATION OF NEW AHU. CONFIR WITH DESIGNER AND WIDE (STRUCTURAL) FOR ANY WALLS THAT REQUIRE MODIFICATION TO SUIT NEW DUCTWORK.
- NEW AIR CONDITIONING UNIT. REFER TO MECHANICAL DRAWINGS. PATCH AND REPAIR ASSEMBLIES AFFECTED BY INSTALLATION. ALL VISIBLE SURFACES AFFECTED TO BE REFINISHED TO MATCH EXISTING ADJACENT FINISHES.
- REINSTATE ALL CEILING TILES REMOVED FOR HVAC AND/OR PLUMBING RENOVATIONS. REPLACE ANY DAMAGED ACOUSTIC CEILING TILES. REFER TO CASH ALLOWANCES IN SPECIFICATIONS.
- NEW 2400x3250 INTAKE LOUVER. REFER TO MECHANICAL DRAWINGS. LOUVER SHALL BE RATED FOR WIND AND GUARD LOADS. PROVIDE INSULATED BACK PAN FOR PORTIONS OF LOUVER OUTSIDE OF INTAKE DUCT AREA. SITE VERIFY AREA OF OPENING PRIOR TO MANUFACTURING.
- PROVIDE AN INSULATED BACKPAN TO EXISTING HIGH LEVEL LOUVER TO REMAIN. MAKE AIR/WEATHER TIGHT.

RCP NOTES

- LIGHT FIXTURES ARE TO BE PLACED IN THE CENTRE OF THE SUSPENDED CEILING TILE, GYPSUM BOARD CEILING OR BULKHEAD UNLESS NOTED OTHERWISE.
- EMERGENCY AND EXIT SIGNS NOT SHOWN. REFER TO ELECTRICAL DRAWINGS FOR LOCATIONS AND MOUNTING HEIGHTS. NOTIFY ARCHITECT AND/OR DESIGNER OF ANY CONFLICTS.
- REFER TO ELECTRICAL DRAWINGS FOR FULL SCOPE OF ELECTRICAL DEVICES AND SPECIFICATIONS. NOTIFY THE ARCHITECT AND/OR DESIGNER OF ANY FOUND DISCREPANCIES AND/OR CONFLICTS.
- REFER TO MECHANICAL DRAWINGS FOR FULL SCOPE OF MECHANICAL DEVICES AND SPECIFICATIONS. NOTIFY THE ARCHITECT AND/OR DESIGNER OF ANY FOUND DISCREPANCIES AND/OR CONFLICTS.
- LIGHT FIXTURES AND MECHANICAL DUCTWORK/DIFFUSERS/RETURN AIR GRILLES/EQUIPMENT ARE SHOWN FOR COORDINATION PURPOSES ONLY. NOT ALL FIXTURES MAY BE INDICATED ON THIS PLAN. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR COMPREHENSIVE SCHEDULING OF FIXTURES, DEVICES AND EQUIPMENT/QUANTITY/MOUNTING HEIGHTS/ETC.
- REFER TO ARCHITECT AND/OR DESIGNER DRAWINGS FOR DIMENSIONAL LOCATION OF CEILING FIXTURES. REFER TO ENGINEERING DRAWINGS FOR SPECIFICATIONS. LOCATION FOR FIXTURES IN CEILING TO BE LAID OUT AND APPROVED ON SITE BY DESIGNER PRIOR TO INSTALLATION.
- LOCATE DIFFUSERS/GRILLES AND LIGHT FIXTURES WITHIN GRID LINES. CENTRE SPRINKLER HEADS, SPEAKERS, RECESSED FIXTURES, AND SIMILAR CEILING ELEMENTS IN ACOUSTICAL UNITS AND DRYWALL TO CREATE ALIGNMENT, UNLESS NOTED OTHERWISE.
- CONTRACTOR TO CROSS REFERENCE BETWEEN ARCHITECT AND/OR DESIGNER'S ELECTRICAL DRAWINGS, ENGINEER'S ELECTRICAL DRAWINGS, ENGINEER'S MECHANICAL DRAWINGS AND SITE CONDITIONS. REPORT DISCREPANCIES TO THE ARCHITECT AND/OR DESIGNER FOR CLARIFICATION.
- CONTRACTOR TO PROVIDE OPENINGS IN DRYWALL CEILING TO ACCOMMODATE SPRINKLERS, EXIT LIGHTS, ACCESS PANELS TO MECHANICAL BOTH NEW AND BASE BUILDING EQUIPMENT. RECESSED DOWN LIGHT AND AIR DIFFUSERS. CONTRACTOR TO REFER TO REFLECTED CEILING PLAN AND ENGINEERING DRAWINGS AND SPECIFICATIONS.
- ALL POT LIGHTS AND ACCENT LIGHTS TO BE ON DIMMERS UNLESS NOTED OTHERWISE. REFER TO ENGINEERING DRAWINGS FOR FURTHER INFORMATION.
- REFER TO ENGINEERING DRAWING FOR LIFE SAFETY SYSTEMS.
- ALL EXPOSED DUCTWORK TO BE GALVANIZED AND REMAIN UNFINISHED, UNLESS NOTED OTHERWISE.
- ALL GYPSUM BOARD CEILINGS TO RECEIVE PAINT FINISH PT-1, UNLESS NOTED OTHERWISE.
- WHEREVER EXISTING FIXTURES ARE DAMAGED OR IN POOR WORKING ORDER, CONTRACTOR TO ALLOW FOR REPLACEMENT WITH NEW FIXTURES TO MATCH EXISTING.
- CONTRACTOR TO PROVIDE AIR TRANSFER DUCTS IN ACCORDANCE WITH MECHANICAL DRAWINGS WHERE CONSTRUCTION OCCURS ABOVE SUSPENDED CEILING TO U/S OF SLAB.
- UPON COMPLETION OF CONSTRUCTION, CONTRACTOR TO RETURN UNUSED BASE BUILDING FIXTURES TO OWNER

THIS DRAWING IS AN INSTRUMENT OF SERVICE & IS THE PROPERTY OF ABA ARCHITECTS INC. & CANNOT BE MODIFIED AND/OR REPRODUCED WITHOUT THE PERMISSION OF ABA ARCHITECTS INC.
THE CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE AND REPORT ANY DISCREPANCIES TO THE ARCHITECT, BEFORE PROCEEDING WITH THE WORK.
DRAWINGS ARE NOT TO BE SCALED.



No.	REVISIONS	DATE

*IMPORTANT NOTE TO ALL CONTRACTORS/SUB-CONTRACTORS:

THIS SCOPE OF WORK CONTAINS ASBESTOS CONTAINING MATERIALS (ACM). ALL CONTRACTORS SHALL REFER TO THE ASBESTOS AUDIT AND SECTION 01 35 43. HAZARDOUS MATERIALS FOR APPROPRIATE PROTOCOLS THAT MUST BE FOLLOWED, REGARDLESS OF ABATEMENT OPERATIONS BEING CONDUCTED OR NOT.

ISSUED FOR PERMIT/TENDER	2025.03.25
ISSUED FOR COORDINATION	2025.01.17
CHRONOLOGY	DATE

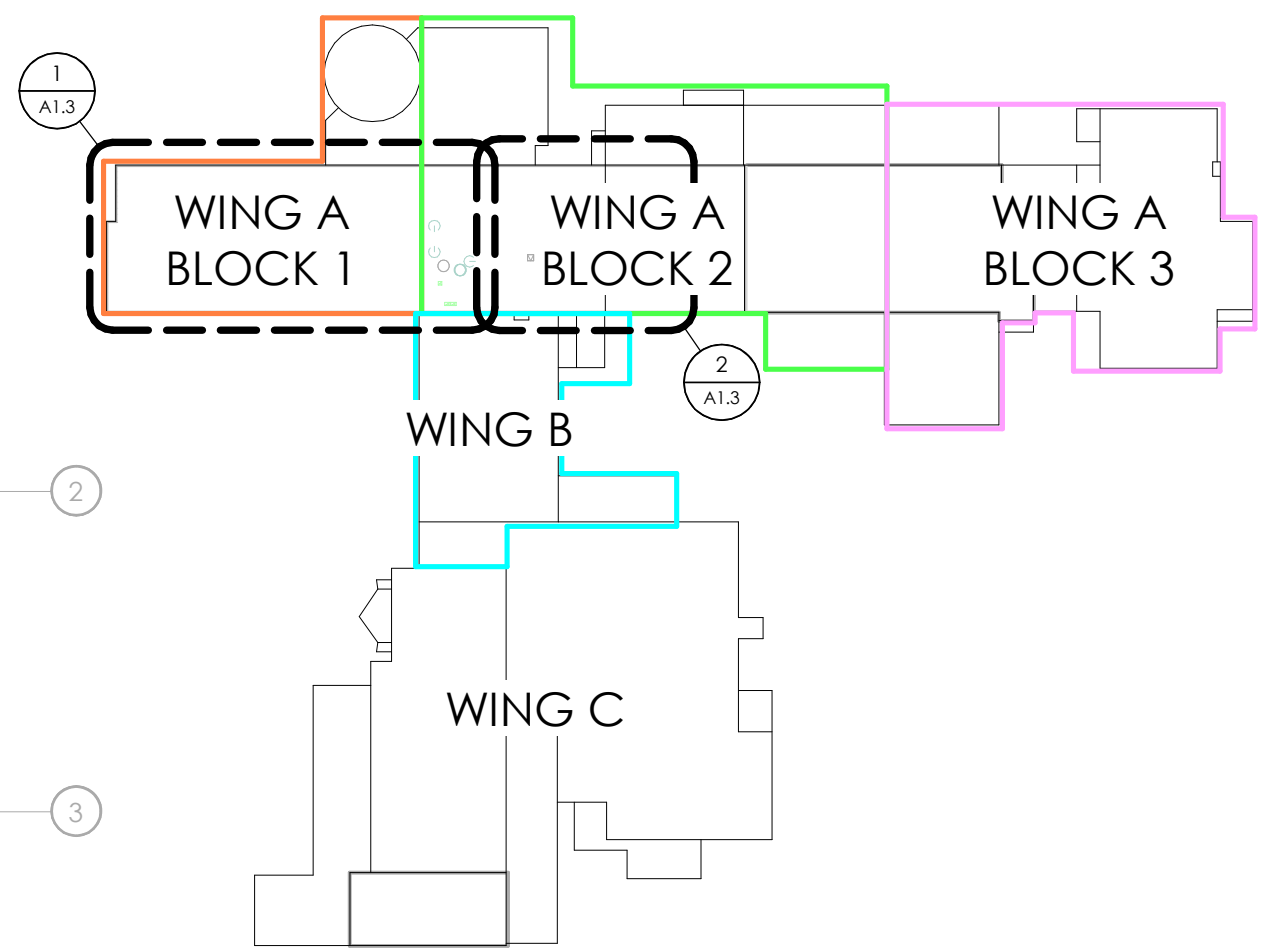


PROJECT NAME
WATERLOO COLLEGIATE INSTITUTE HVAC AND EXTERIOR UPGRADES
300 HAZEL STREET, WATERLOO, ON. N2L 3P2

DRAWING TITLE
HVAC - THIRD FLOOR REFLECTED CEILING PLANS, PARTIAL 2ND FLOOR RCP & PARTIAL THIRD FLOOR PLAN

SCALE	DRAWING NUMBER
As indicated	
SHEET SIZE	24X36
PROJECT NUMBER	2024-168

A1.2



1 WING A BLOCK 1 - PARTIAL ROOF PLAN 1:100



	PRE-FINISHED METAL PARAPET CAP FLASHING
	EXTENT OF SLOPED INSULATION, MINIMUM 1% TO ROOF DRAIN(S)
	ROOF DRAIN (REFER TO MECHANICAL DRAWINGS) c/w 1220x1220 TAPERED, ONE-PIECE, PRE-FABRICATED POLY-ISO SUMP PANEL
	610x610 PRECAST CONCRETE PAVER STONES ON 5 RIGID INSULATION SLEEPERS
	MINIMUM 1% SLOPE OF ROOF STRUCTURE OR SLOPED INSULATION TO ROOF DRAIN(S)
	ROOF ASSEMBLY TYPE (AG: (REFER TO ASSEMBLY SHEET))
RWL	RAIN-WATER LEADER
RS	ROOF SCUPPER
RA	ROOF ANCHORS, FINAL POSITION AND QUANTITY T.B.D. PROVIDE ENGINEERED SHOP DRAWINGS FOR CONSULTANT REVIEW PRIOR TO ORDERING OR INSTALLATION
HP / LP	ROOF HIGH POINT / LOW POINT

- 1 NEW CONDENSING UNIT ON PREMANUFACTURED SLEEPERS. REFER TO MECHANICAL DRAWINGS. REFER TO STRUCTURAL DRAWINGS FOR REQUIRED ROOF STRUCTURE REINFORCEMENT.
- 2 REFRIGERANT PIPES c/w PIPE SUPPORTS. REFER TO MECHANICAL DRAWINGS.
- 3 PRE-MANUFACTURED PIPE DOGHOUSES AND ROOF CURB. REFER TO MECHANICAL DRAWINGS.
- 4 EXHAUST FAN. REFER TO MECHANICAL DRAWINGS.
- 5 MECHANICAL DOGHOUSE FOR EXHAUST DUCT THROUGH ROOF. REFER TO MECHANICAL DRAWINGS.
- 6 TIE IN NEW ROOF CURB & ROOF PENETRATION ROOFING MEMBRANES TO EXISTING ROOFING MEMBRANE(S). MAKE WATER/WEATHER TIGHT.

1. SUPPLY AND MAINTAIN ON A DAILY BASIS ALL TEMPORARY FENCING, HOARDING, SIGNAGE AND OTHER SEPARATIONS REQUIRED TO MAINTAIN THE SAFETY OF THE PUBLIC. DURING WORK OF THIS CONTRACT, COORDINATE THESE PROTECTIVE MEASURES WITH THE OWNER.
2. MAINTAIN A CLEAN AND ORDERLY SITE AT ALL TIMES. ALL DEBRIS AND EXCESS MATERIALS NOT REQUIRED SHALL BE CLEARED FROM ROOF TOP NIGHTLY. ANY MATERIALS STORED ON THE ROOF SHALL BE PROPERLY SECURED TO PREVENT LIFTING.
3. MATERIALS THAT ARE STORED ON THE ROOF SHALL BE PLACED ON ROOF SLEEPERS TO PREVENT ANY DAMAGE TO THE EXISTING ROOFING AND ALLOW FOR PROPER WATER DRAINAGE ACROSS THE ROOF.
4. COORDINATE WITH OWNER ANY STAGING OF WORK.
5. PROTECTIVE MEASURES SHALL BE TAKEN TO PREVENT DAMAGE TO THE EXISTING ROOF MEMBRANE AND THE EXISTING ROOF TOP UNITS THAT ARE TO REMAIN.
6. REMOVE ALL REDUNDANT ROOF CURBS, CONES, STACKS AND SLEEPERS FROM THE EXISTING ROOF. PATCH AND REPAIR THE ROOF DECK AND ROOFING AS NECESSARY TO MAKE WEATHERTIGHT.
7. ALL EXISTING HVAC UNIT AND CONDENSER LOCATIONS ARE TO BE CONFIRMED ON SITE. SEE MECHANICAL DRAWINGS FOR ALL NEW HVAC AND/OR CONDENSER LOCATIONS.
8. ALL ABANDONED ROOF PENETRATIONS TO BE PATCHED AND REPAIRED AS NECESSARY TO MAKE WEATHERTIGHT.
9. ALL EXISTING ROOF DRAINS TO BE CLEANED AND REPAIRED AS NECESSARY. REPORT ALL FOUND DEFICIENCIES TO THE ARCHITECT.
10. PATCH AND REPAIR ANY FOUND ROOF DEFECTS AS NECESSARY TO MAKE WEATHERTIGHT. REPORT DEFICIENCIES TO THE ARCHITECT.



ONTARIO ASSOCIATION
OF
ARCHITECTS
JOSHUA O.P. BEDARD
LICENCE
7407

[illegible]

THIS SCOPE OF WORK CONTAINS ASBESTOS CONTAINING MATERIALS (ACM). ALL CONTRACTORS SHALL REFER TO THE ASBESTOS AUDIT AND SECTION 01 35 43, HAZARDOUS MATERIALS FOR APPROPRIATE PROTOCOLS THAT MUST BE FOLLOWED, REGARDLESS OF ABATEMENT OPERATIONS BEING CONDUCTED OR NOT.

ISSUED FOR PERMIT/TENDER	2025.03.25
ISSUED FOR COORDINATION	2025.01.17
CHRONOLOGY	DATE



CUENT



PROJECT NAME

PROJECT NAME

WATERLOO
COLLEGIATE INSTITUTE
HVAC AND EXTERIOR
UPGRADES

300 HAZEL STREET, WATERLOO, ON. N2L 3P2

DRAWING TITLE

HVAC - ROOF PLAN

SCALE

As indicated

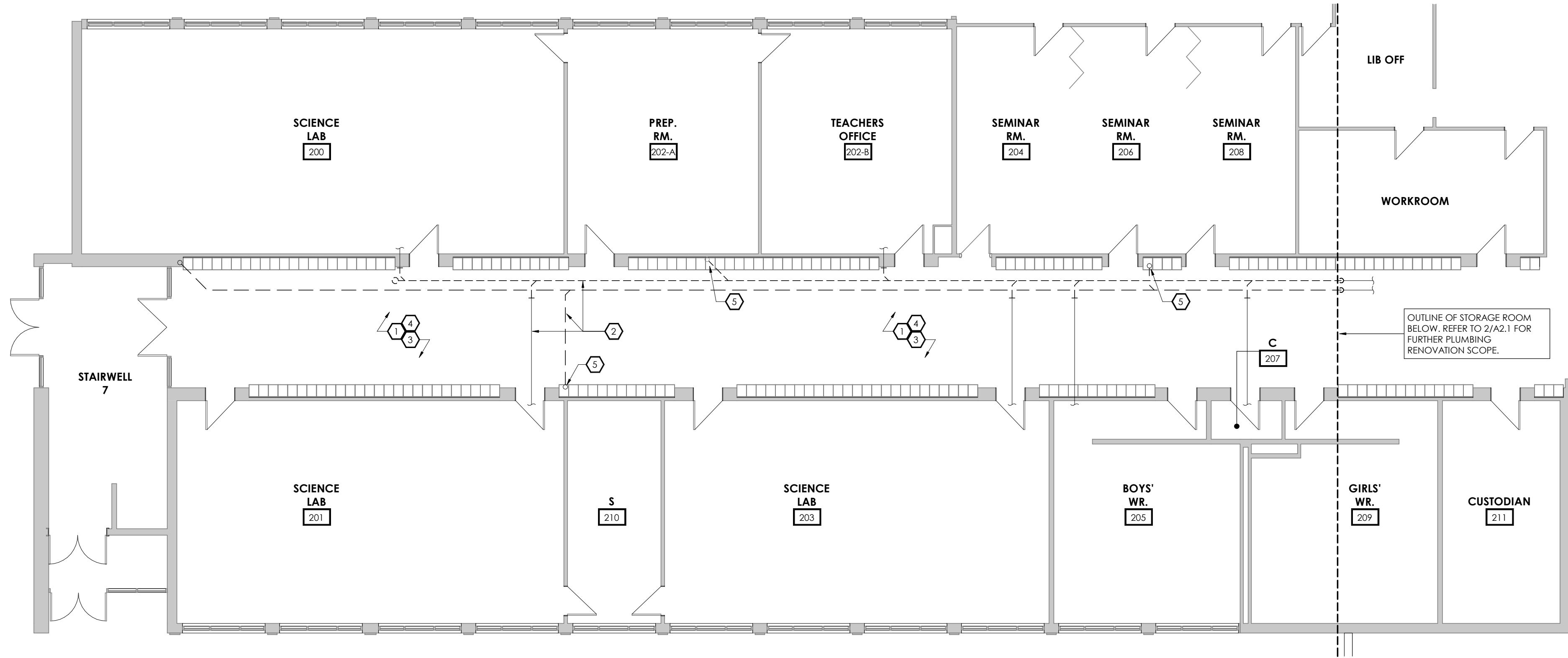
SHEET :

SUBJECT NUMBER

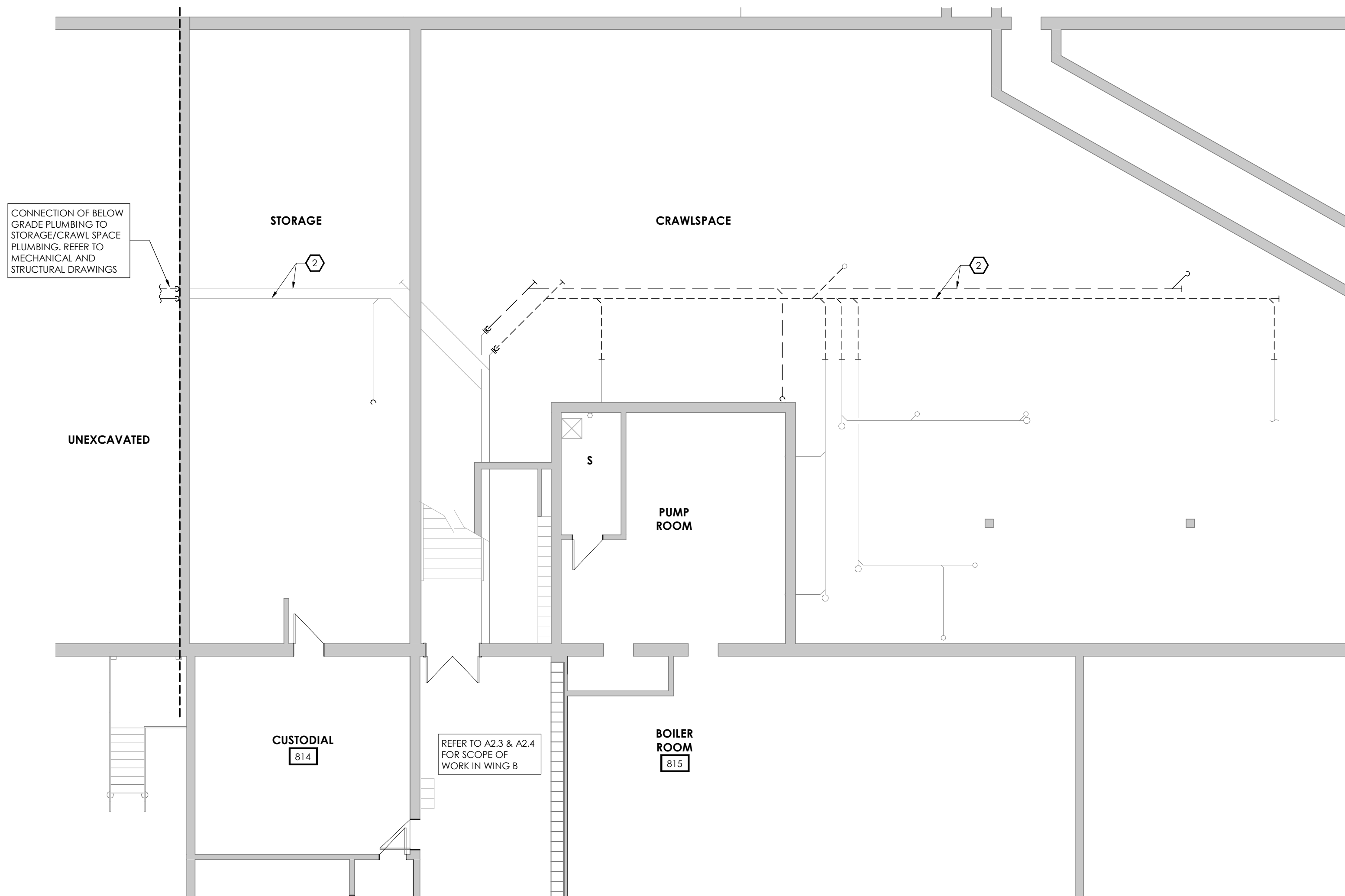
DRAWING NUMBER

A1.3

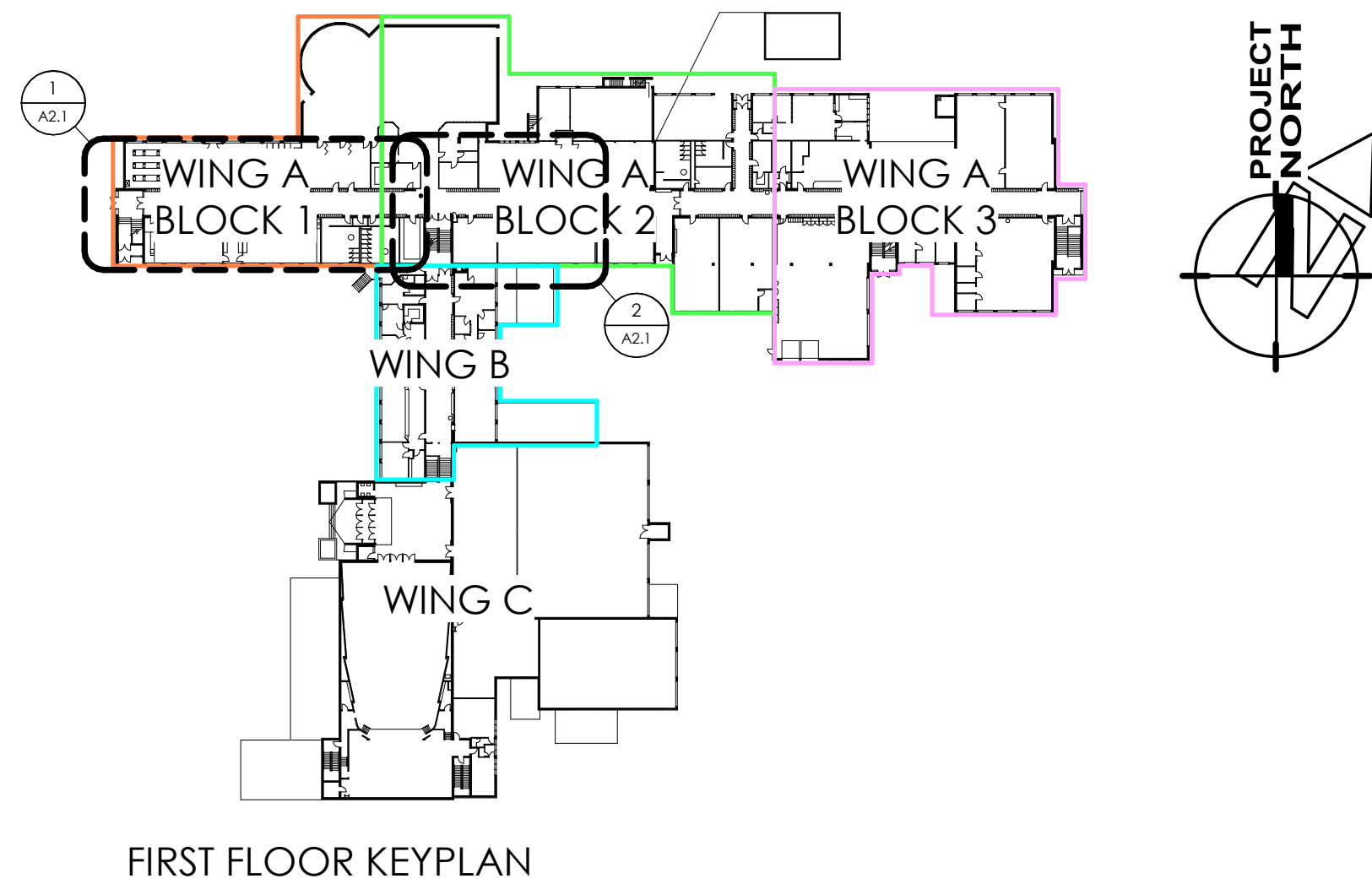
C:\Users\jsearsh\Documents\2024-1-68 - HVAC & Ext Upgrades - Central, JH, Broomfield, abarchitects inc.dwg 2/25/2025 10:05:52 AM



1
A2.1
WING A BLOCK 1 - PARTIAL PLUMBING RENO DEMOLITION PLAN
1 : 100



2
A2.1
WING A BLOCK 2 - PARTIAL PLUMBING RENO DEMOLITION PLAN
1 : 100



FIRST FLOOR KEYPLAN

DEMOLITION PLAN LEGEND

- EXISTING WALL TO REMAIN (SHOWN SHADED)
- EXISTING WALL TO BE DEMOLISHED
- DENOTES EXISTING BUILDING
- DENOTES AREA N.I.C., UNLESS NOTED OTHERWISE

DEMOLITION KEYNOTES

- CUT/DEMOLISH EXISTING FLOOR, INCLUDING TERRAZZO TILE FINISH, AND CONCRETE S.O.G., AS NEEDED FOR EXCAVATION ASSOCIATED WITH SANITARY AND STORM RENOVATION. TERRAZZO TILE MAY NEED ADDITIONAL REMOVAL, INCLUDING TILE BASE, FOR LOGICAL APPLICATION OF NEW TILE UPON COMPLETION OF PLUMBING RENOVATION. REFER TO STRUCTURAL DRAWINGS FOR EXCAVATION DETAILS.
- PLUMBING INDICATED IS FOR COORDINATION OF WORK ONLY, AND LOCATIONS ARE APPROXIMATE. DASHED LINES REPRESENT SANITARY AND STORM LINES TO BE DEMOLISHED/MODIFIED. REFER TO MECHANICAL DRAWINGS FOR FULL SCOPE OF DEMOLITION RELATED TO SANITARY AND STORM SERVICES.
- CONTRACTOR TO SITE VERIFY IF CORRIDOR WALLS REQUIRE ANY PARTIAL OR COMPLETE DEMOLITION IN ORDER TO COMPLETE PLUMBING RENOVATION. REPORT TO STRUCTURAL ENGINEER FOR ASSESSMENT AND DIRECTION PRIOR TO COMMENCING ANY DEMOLITION.
- REMOVE CEILING TILE AS NEEDED TO ACCESS STORM PIPING. STORE TILES IN SAFE/DRY PLACE FOR FUTURE RE-INSTATEMENT. COORDINATE STORAGE LOCATION WITH OWNER.
- REMOVE PART OR COMPLETE LOCKER IF REQUIRED TO COMPLETE STORM REPLACEMENT SCOPE. STORE LOCKER IN A SAFE PLACE IF RE-USE IS POSSIBLE. CARE IS TO BE TAKEN TO PRESERVE PHYSICAL AND AESTHETIC INTEGRITY OF SURROUNDING LOCKERS.

DEMOLITION NOTES

- DISPOSE OF REMOVED ITEMS IN A LAWFUL MANNER IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE MUNICIPALITY HAVING JURISDICTION.
- ALL EXISTING WALLS AND ITEMS TO BE REMOVED ARE SHOWN DASHED.
- ALL EXISTING WALLS TO REMAIN ARE SHOWN SHADED.
- OWNER TO HAVE THE RIGHT TO FIRST REFUSAL OF ALL ITEMS REMOVED. ITEMS TO BE STORED IN A DRY AND SECURE LOCATION. ALL REMOVED ITEMS SHALL BE DISPOSED OF AS PER NOTE NO. 1.
- COORDINATE WITH STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS ALL RELATED COMPONENTS OF DEMOLITION, MODIFICATION AND NEW INSTALLATION.
- REMOVE, RELOCATE AND/OR RE-ROUTE ALL MECHANICAL AND ELECTRICAL SERVICES AND CONNECTIONS AS REQUIRED TO ACCOMMODATE DEMOLITION OR AS NECESSARY AS A RESULT OF DEMOLITION.
- SUPPLY AND INSTALL ALL NECESSARY SHORING AND/OR BRACING AS REQUIRED FOR TEMPORARY SUPPORT OF EXISTING STRUCTURE. COORDINATE WITH A STRUCTURAL ENGINEER AS REQUIRED.
- ENSURE ALL FLOOR AREAS ARE FREE OF HAZARDS AFTER DEMOLITION IS COMPLETE. LEVEL, PATCH, FILL AND GRIND FLOOR AS REQUIRED TO ACHIEVE A SMOOTH SANITARY SURFACE READY TO RECEIVE FLOOR FINISH.
- CARE SHALL BE TAKEN TO MINIMIZE DAMAGE TO EXISTING ABUTTING WALLS, SURFACES AND FINISHES TO REMAIN.
- PROTECT SALVAGED AND/OR ITEMS TO REMAIN FROM DAMAGE. PROVIDE ADEQUATE COVERINGS AND/OR STORAGE AS REQUIRED.
- EXISTING EXIT SIGNAGE, FIRE ALARM SYSTEM AND EMERGENCY LIGHTING TO BE LEFT IN OPERATION DURING DEMOLITION AND DURATION OF CONTRACT OR UNTIL NEW INSTALLED.
- COORDINATE WITH OWNER AREA(S) FOR WASTE BIN LOCATION, SUPPLY AND MAINTAIN PROTECTIVE MEASURES TO ENSURE THE PUBLIC'S SAFETY.
- COORDINATE WITH THE OWNER ANY STAGING OF WORK AND/OR DISRUPTIONS TO PARKING AND TRAFFIC FLOWS.
- SHOULD MATERIAL RESEMBLING SPRAY OR TROWEL APPLIED ASBESTOS OR OTHER TOXIC OR HAZARDOUS MATERIALS BE ENCOUNTERED IN THE COURSE OF DEMOLITION, STOP WORK, TAKE PREVENTATIVE MEASURES AND NOTIFY ARCHITECT AND/OR OWNER IMMEDIATELY. DO NOT PROCEED UNTIL WRITTEN INSTRUCTIONS HAVE BEEN RECEIVED.
- CONTRACTOR TO EXAMINE EXISTING CONDITIONS ON SITE AFFECTING DIVISION OF WORK. NO CLAIM FOR PAYMENT SHALL BE MADE FOR EXTRA WORK MADE NECESSARY BY CIRCUMSTANCES ENCOUNTERED DUE TO CONDITIONS WHICH WERE VISIBLE UPON, OR REASONABLY INFERRABLE, FROM AN EXAMINATION OF THE SITE PRIOR TO SUBMISSION OF THE BID. THIS INCLUDES BUT IS NOT LIMITED TO THE SERVICES ABOVE THE CEILING.
- CONTRACTOR MUST OBTAIN DEMOLITION PERMITS REQUIRED BY RELEVANT AUTHORITIES BEFORE THE COMMENCEMENT OF THE WORK.
- DURING DEMOLITION, CONTRACTOR TO PREVENT DUST, DIRT AND DEBRIS FROM RISING OR MIGRATING TO OTHER AREAS BY HANGING 0.5mm POLY SHEETS BETWEEN AREAS OF CONSTRUCTION. PROTECT EXISTING HVAC UNITS FROM CONTAMINATION AND REPLACE FILTERS UPON COMPLETION OF DEMOLITION.
- CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN THE INTEGRITY OF THE BUILDING CORE.
- DEMOLITION OCCURRING BEYOND THE SCOPE IDENTIFIED IS TO BE REPAIRED OR REPLACED TO ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR TO PATCH CEILING, ADJACENT WALLS AND FLOOR SURFACES AS REQUIRED AFTER DEMOLITION. ALL STRIPPED SURFACES TO BE LEFT IN SMOOTH CONDITION SUITABLE TO RECEIVE NEW FINISHES.
- ELECTRICAL SERVICES TO BE REMOVED ARE TO BE SAFELY CAPPED, COMPLIANT WITH THE APPLICABLE CODES.
- ALL CUTTING AND PATCHING OF EXISTING FINISHES WILL BE DONE TO THE HIGHEST STANDARD.
- GENERAL CONTRACTOR TO ENSURE ALL FLOOR AREAS ARE FREE OF HAZARDS AFTER DEMOLITION AND DURING CONSTRUCTION.
- CONTRACTOR TO REFER TO GENERAL CONDITIONS AS OUTLINED IN SPECIFICATIONS FOR NEW CONSTRUCTION.

THIS DRAWING IS AN INSTRUMENT OF SERVICE & IS THE PROPERTY OF ABA ARCHITECTS INC. & CANNOT BE MODIFIED AND/OR REPRODUCED WITHOUT THE PERMISSION OF ABA ARCHITECTS INC.
THE CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE AND REPORT ANY DISCREPANCIES TO THE ARCHITECT, BEFORE PROCEEDING WITH THE WORK.
DRAWINGS ARE NOT TO BE SCALED.



No.	REVISIONS	DATE

IMPORTANT NOTE TO ALL CONTRACTORS/SUB-CONTRACTORS:

THIS SCOPE OF WORK CONTAINS ASBESTOS CONTAINING MATERIALS (ACM). ALL CONTRACTORS SHALL REFER TO THE ASBESTOS AUDIT AND SECTION 01 35 43. HAZARDOUS MATERIALS FOR APPROPRIATE PROTOCOLS THAT MUST BE FOLLOWED, REGARDLESS OF ABATEMENT OPERATIONS BEING CONDUCTED OR NOT.

ISSUED FOR PERMIT/TENDER	2025.03.25
ISSUED FOR COORDINATION	2025.01.17
CHRONOLOGY	DATE



PROJECT NAME
WATERLOO COLLEGIATE INSTITUTE HVAC AND EXTERIOR UPGRADES
300 HAZEL STREET, WATERLOO, ON. N2L 3P2

DRAWING TITLE
WING A SANITARY - GROUND FLOOR DEMOLITION PLANS

SCALE As indicated	DRAWING NUMBER A2.1
SHEET SIZE 24X36	
PROJECT NUMBER 2024-168	



FLOOR PLAN NOTES

1. PARTITIONS WHICH SUPPORT FIXTURES, MILLWORK AND/OR ACCESSORIES ARE TO BE REINFORCED WITH WOOD STUDS, BLOCKING AND PLYWOOD AS REQUIRED TO PROVIDE RIGID SUPPORT AND FASTENING SURFACES.
2. SITE VERIFY ALL DIMENSIONS PRIOR TO FABRICATION OF DOORS, WINDOWS, MILLWORK AND GLAZING SYSTEMS. REPORT ALL DISCREPANCIES TO THE CONSULTANT BEFORE PROCEEDING WITH THE WORK.
3. ALL NEW & EXISTING WALLS, CEILINGS AND SURFACES THAT ARE TO BE FINISHED SHALL BE PREPARED, PATCHED AND SANDED SMOOTH, AS REQUIRED, READY FOR PAINT.
4. ALL NEW SIGNAGE TO BE COORDINATED IN CONJUNCTION WITH OWNER'S REQUIREMENTS, ALL SIGNAGE PERMITS AND DRAWINGS BY OTHERS.
5. EXISTING WALLS, DOOR AND/OR STRUCTURES TO REMAIN ARE SHOWN SHAVED.
6. COORDINATE STRUCTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ALL RELATED COMPONENTS OF DEMOLITION, MODIFICATION AND NEW INSTALLATION.
7. REMOVE ALL REDUNDANT PLUMBING, ELECTRICAL, MECHANICAL AND HVAC COMPONENTS AS SCHEDULED BY CONSULTANTS. PATCH, SEAL, COVER AND MAKE ASK AS REQUIRED.
8. PATCH AND REPAIR ALL OPENINGS AND PENETRATIONS FROM REMOVED ITEMS IN EXISTING FLOORS, WALLS AND CEILINGS TO REMAIN [MAINTAIN EXISTING FIRE RATINGS AS NOTED].
9. ALL EXISTING SURFACES TO RECEIVE NEW FINISHES ARE TO BE REVIEWED PRIOR TO CONSTRUCTION. ALL DISCREPANCIES IN THE EXISTING MATERIALS AND/OR DIMENSIONS TO BE REPORTED TO THE ARCHITECT.
10. INTERIOR DIMENSIONS ARE TO/FROM FACE OF STEEL STUD, AND/OR EXISTING WALL FINISH.
11. PROVIDE FIRE STOPPING/FIRE CAULKING AT TOP OF WALLS. REQUIRED TO BE A FIRE SEPARATION. TO MAINTAIN CONTINUOUS FIRE SEPARATION, REFER TO ASSEMBLIES AND CBC PLANS.
12. FURR IN RAIN WATER LEADERS WITH 92mm METAL STUDS AND CYCLOPS BOLTS TO 200mm ABOVE CEILING LINE, UNLESS NOTED OTHERWISE, FOR EXACT NUMBER OF RAIN WATER LEADERS AND CHASES REFER TO MECHANICAL DRAWINGS.
13. INTERIOR CONCRETE BLOCK PARTITIONS/WALLS TO EXTEND FULL HEIGHT TO US OF STRUCTURE UNLESS NOTED OTHERWISE. PROVIDE GAP FOR DEFLECTION AS REQUIRED.
14. ALL AREAS DESIGNATED AS MECHANICAL SPACE TO RECEIVE FIRE STOPPING AND DAMPERS AT ALL FLOOR PENETRATIONS.
15. GYPSUM BOARD IN ALL WASHROOMS, KITCHENS AND MECHANICAL/ELECTRICAL ROOMS TO BE MOISTURE RESISTANT.
16. GENERAL CONTRACTOR TO PROVIDE AND MAINTAIN ALL SHORING THAT IS REQUIRED FOR TEMPORARY SUPPORTS.
17. SUPPLY AND INSTALL SEALANT AT LOCATIONS OF ABUTTING, DISSIMILAR MATERIALS AND EQUIPMENT, VISIBLE OR OTHERWISE, TO PROTECT BUILDING COMPONENTS FROM AIR INFILTRATION AND MOISTURE PENETRATION. COLOUR TO MATCH ADJACENT SURFACE.
18. GRIND EXISTING FLOORS AS REQUIRED TO ENSURE A SMOOTH SURFACE READY FOR NEW FINISH.

FLOOR PLAN KEYNOTES

PLUMBING INDICATED IS FOR COORDINATION OF WORK ONLY, AND LOCATIONS ARE APPROXIMATE. CENTRE LINES REPRESENT SANITARY AND DRAIN LINES TO BE INSTALLED. REFER TO MECHANICAL DRAWINGS FOR FULL SCOPE OF CONSTRUCTION TO SANITARY AND DORM SERVICES.

UPON COMPLETION OF PLUMBING SCOPE, INFILL EXCAVATED AREAS. POUR NEW CONC. S.O.G. ON COMPACTED GRANULAR, REFER TO STRUCTURAL DRAWINGS. PREP FLOOR FOR NEW FINISHES.

INSTALL NEW TERRAZZO FLOORING, TO MATCH EXISTING INCLUDING WALL BASE c/w RADIUSD UPON. REFER TO SPECIFICATIONS.

RESTORE/REPLACE ANY/ALL LOCKERS REMOVED IN WHOLE OR IN PART IN ORDER TO COMPLETE STORM REPLACEMENT SCOPE. PAINT FINISH TO MATCH ADJACENT EXISTING LOCKERS.

ONTARIO ASSOCIATION
 OF
 ARCHITECTS
 JOSHUA O.P. BEDARD
 LICENCE
 7407

[illegible]

THIS SCOPE OF WORK CONTAINS ASBESTOS CONTAINING MATERIALS (ACM). ALL CONTRACTORS SHALL REFER TO THE ASBESTOS AUDIT AND SECTION 01 35 43, HAZARDOUS MATERIALS FOR APPROPRIATE PROTOCOLS THAT MUST BE FOLLOWED, REGARDLESS OF ABATEMENT OPERATIONS BEING CONDUCTED OR NOT.

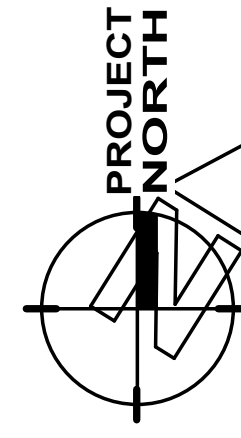
ISSUED FOR PERMIT/TENDER	2025.03.2
ISSUED FOR COORDINATION	2025.01.1
CHRONOLOGY	DATE

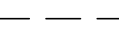


DRAWING TITLE

WING A SANITARY -
GROUND FLOOR
PLANS

SCALE As indicated	DRAWING NUMBER A2.2
SHEET SIZE 24X36	
PROJECT NUMBER 2024-168	



 EXISTING WALL TO REMAIN (SHOWN SHADED)
 EXISTING WALL TO BE DEMOLISHED
 DENOTES EXISTING BUILDING
 DENOTES AREA N.I.C., UNLESS NOTED OTHERWISE

CUT/DEMOLISH EXISTING FLOOR, INCLUDING TERRAZZO TILE FINISH, AND CONCRETE S.O.G., AS NEEDED FOR EXCAVATION ASSOCIATED WITH SANITARY AND STORM RENOVATION. TERRAZZO TILE MAY NEED ADDITIONAL REMOVAL, INCLUDING TILE BASE, FOR LOGICAL APPLICATION OF NEW TILE UPON COMPLETION OF PLUMBING RENOVATION. REFER TO STRUCTURAL DRAWINGS FOR EXCAVATION DETAILS.

PLUMBING INDICATED IS FOR COORDINATION OF WORK ONLY, AND LOCATIONS ARE APPROXIMATE. DASHED LINES REPRESENT SANITARY AND STORM LINES TO BE DEMOLISHED/MODIFIED. REFER TO MECHANICAL DRAWINGS FOR FULL SCOPE OF DEMOLITION RELATED TO SANITARY AND STORM SERVICES.

3 CONTRACTOR TO SITE VERIFY IF CORRIDOR WALLS REQUIRE ANY PARTIAL OR COMPLETE DEMOLITION IN ORDER TO COMPLETE PLUMBING RENOVATION. REPORT TO STRUCTURAL ENGINEER FOR ASSESSMENT AND DIRECTION PRIOR TO COMMENCING ANY DEMOLITION.

4 DISCONNECT & REMOVE EXISTING FIXTURE FOR LATER REINSTALLATION, ENSURE PROPER PROTECTION AND STORAGE UNTIL REINSTALLATION. REFER TO MECH DWGS.

5 CAREFULLY REMOVE WATER CLOSET PARTITIONS AND STORE IN A SAFE, DRY LOCATION FOR FUTURE REINSTALLATION.

6 REMOVE/DEMOLISH EXISTING TILE FLOORING IN ITS ENTIRETY AND DISPOSE OF FROM SITE. CUT EXISTING CONC. S.O.G. AS REQUIRED FOR EXCAVATION ASSOCIATED WITH SANITARY AND STORM RENOVATION.

7 EXISTING SANITARY PIPE BELOW TO BE ABANDONED IN PLACE. REFER TO MECH. DWGS.

8 CORE EX. FOUNDATION WALL FOR NEW PIPE PENETRATIONS. REFER TO MECHANICAL DRAWINGS FOR LOCATIONS. REFER TO STRUCTURAL DRAWINGS FOR NOTES REGARDING WALL REINFORCEMENT AND ASSUMED FOUNDATION WALLS.

9 REMOVE/DEMOLISH ALL EXISTING WALL TILE IN ITS ENTIRETY AND DISPOSE OF FROM SITE. PREP EXISTING SURFACES TO REMAIN FOR NEW FINISHES.

10 CUT/DEMOLISH EXISTING CONCRETE S.O.G., AS NEEDED FOR EXCAVATION ASSOCIATED WITH NEW SUMP PUMP INSTALLATION AND SANITARY AND STORM RENOVATION. REFER TO STRUCTURAL DRAWINGS FOR EXCAVATION DETAILS AND MECHANICAL DRAWINGS FOR SCOPE OF PLUMBING WORKS.

EXISTING EXIT STAIRS TO BE REMOVED DURING SITE EXCAVATION AND NEW SANITARY STORM PIPE INSTALLATION. STAIR TO BE STORED IN A SAFE LOCATION UNTIL REINSTATEMENT. PEIRS ARE TO REMAIN IN PLACE; CONFER WITH STRUCTURAL ENGINEER REGARDING SAFE EXCAVATION AND SHORING. STAIR TO ONLY BE REMOVED WHEN SCHOOL IS NOT OCCUPIED AND TEMPORARY EXIT STAIR TO BE INSTATED DURING THIS TIME. CONFER WITH OWNER AND DESIGNER PRIOR TO REMOVAL OF EXISTING STAIR.

12 REMOVE PART OR COMPLETE LOCKER IF REQUIRED TO COMPLETE STORM REPLACEMENT SCOPE. STORE LOCKER IN A SAFE PLACE IF RE-USE IS POSSIBLE. CARE IS TO BE TAKEN TO PRESERVE PHYSICAL AND AESTHETIC INTEGRITY OF SURROUNDING LOCKERS.

1. DISPOSE OF REMOVED ITEMS IN A LAWFUL MANNER IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE MUNICIPALITY/HAVING JURISDICTION.
2. ALL EXISTING WALLS AND ITEMS TO BE REMOVED ARE SHOWN DASHED.
3. ALL EXISTING WALLS TO REMAIN ARE SHOWN SHADED.
4. OWNER TO HAVE THE RIGHT TO FIRST REFUSAL OF ALL ITEMS REMOVED. ITEMS TO BE STORED IN A DRY AND SECURE LOCATION. ALL REMOVED ITEMS SHALL BE DISPOSED OF AS PER NOTE No. 1.
5. COORDINATE WITH STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS ALL RELATED COMPONENTS OF DEMOLITION, MODIFICATION AND NEW INSTALLATION.
6. REMOVE, RELOCATE AND/OR RE-ROUTE ALL MECHANICAL AND ELECTRICAL SERVICES AND CONNECTIONS AS REQUIRED TO ACCOMMODATE DEMOLITION OR AS NECESSARY AS A RESULT OF DEMOLITION.
7. SUPPLY AND INSTALL ALL NECESSARY SHORING AND/OR BRACING AS REQUIRED FOR TEMPORARY SUPPORT OF EXISTING STRUCTURE. COORDINATE WITH A STRUCTURAL ENGINEER AS REQUIRED.
8. ENSURE ALL FLOOR AREAS ARE FREE OF HAZARDS AFTER DEMOLITION IS COMPLETE. LEVEL PATCH, FILL AND GROUND FLOOR AS REQUIRED TO ACHIEVE A SMOOTH SANITARY SURFACE READY TO RECEIVE FLOOR FINISH.
9. CARE SHALL BE TAKEN TO MINIMIZE DAMAGE TO EXISTING ABUTTING WALLS, SURFACES AND FINISHES TO REMAIN.
10. PROTECT SALVAGED AND/OR ITEMS TO REMAIN FROM DAMAGE. PROVIDE ADEQUATE COVERINGS AND/OR STORAGE AS REQUIRED.
11. EXISTING EYE SIGNAGE, FIRE ALARM SYSTEM AND EMERGENCY LIGHTING TO BE LEFT IN OPERATION DURING DEMOLITION AND DURATION OF CONTRACT OR UNTIL NEW INSTALLED.
12. COORDINATE WITH OWNER AREA(S) FOR WASTE BIN LOCATION, SUPPLY AND MAINTAIN PROTECTIVE MEASURES TO ENSURE THE PUBLIC'S SAFETY.
13. COORDINATE WITH THE OWNER ANY STAGING OF WORK AND/OR DISRUPTIONS TO PARKING AND TRAFFIC FLOWS.
14. SHOULD MATERIAL RESEMBLING SPRAY OR TROWEL APPLIED ASBESTOS OR OTHER TOXIC OR HAZARDOUS MATERIALS BE ENCOUNTERED IN THE COARSE OF DEMOLITION, STOP WORK. TAKE PREVENTATIVE MEASURES AND NOTIFY ARCHITECT AND/OR OWNER IMMEDIATELY. DO NOT PROCEED UNTIL WRITTEN INSTRUCTIONS HAVE BEEN RECEIVED.
15. CONTRACTOR TO EXAMINE EXISTING CONDITIONS ON SITE AFFECTING DIVISION OF WORK. NO CLAIM FOR PAYMENT SHALL BE MADE FOR EXTRA WORK MADE NECESSARY BY CIRCUMSTANCES ENCOUNTERED DUE TO CONDITIONS WHICH WERE VISIBLE UPON, OR REASONABLY INFERRABLE FROM AN EXAMINATION OF THE SITE PRIOR TO SUBMISSION OF THE BID. THIS INCLUDES BUT IS NOT LIMITED TO THE SERVICES ABOVE THE CEILING.
16. CONTRACTOR MUST OBTAIN DEMOLITION PERMITS REQUIRED BY RELEVANT AUTHORITIES BEFORE THE COMMENCEMENT OF THE WORK.
17. DURING DEMOLITION, CONTRACTOR TO PREVENT DUST, DIRT AND DEBRIS FROM RISING OR MIGRATING TO OTHER AREAS BY HANGING 0.5mm POLY SHEETS BETWEEN AREAS OF CONSTRUCTION. PROTECT EXISTING HVAC UNITS FROM CONTAMINATION AND REPLACE FILTERS UPON COMPLETION OF DEMOLITION.
18. CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN THE INTEGRITY OF THE BUILDING CORE.
19. DEMOLITION OCCURRING BEYOND THE SCOPE IDENTIFIED IS TO BE REPAIRED OR REPLACED TO ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
20. CONTRACTOR TO PATCH CEILING, ADJACENT WALLS AND FLOOR SURFACES AS REQUIRED AFTER DEMOLITION. ALL STRIPPED SURFACES TO BE LEFT IN SMOOTH CONDITION SUITABLE TO RECEIVE NEW FINISHES.
21. ELECTRICAL SERVICES TO BE REMOVED ARE TO BE SAFELY CAPPED, COMPLIANT WITH THE APPLICABLE CODES.
22. ALL CUTTING AND PATCHING OF EXISTING FINISHES WILL BE DONE TO THE HIGHEST STANDARD.
23. GENERAL CONTRACTOR TO ENSURE ALL FLOOR AREAS ARE FREE OF HAZARDS AFTER DEMOLITION AND DURING CONSTRUCTION.
24. CONTRACTOR TO REFER TO GENERAL CONDITIONS AS OUTLINED IN SPECIFICATIONS FOR NEW CONSTRUCTION.

THE CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE AND REPORT ANY DISCREPANCIES TO THE ARCHITECT, BEFORE PROCEEDING WITH THE WORK.

DRAWINGS ARE NOT TO BE SCALED.

[illegible]

THIS SCOPE OF WORK CONTAINS ASBESTOS CONTAINING MATERIALS (ACM). ALL CONTRACTORS SHALL REFER TO THE ASBESTOS AUDIT AND SECTION 01 35 43, HAZARDOUS MATERIALS FOR APPROPRIATE PROTOCOLS THAT MUST BE FOLLOWED, REGARDLESS OF ABATEMENT OPERATIONS BEING CONDUCTED OR NOT.

ISSUED FOR PERMIT/TENDER	2025.03.25
ISSUED FOR COORDINATION	2025.01.17
CHRONOLOGY	DATE



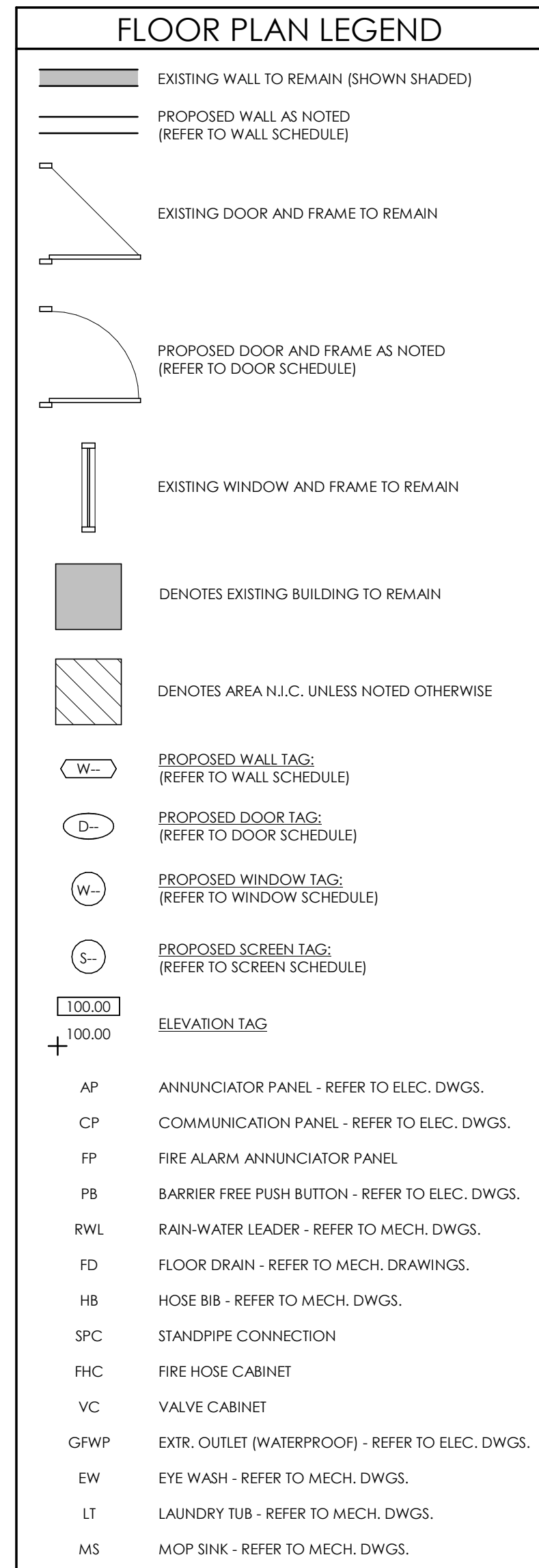
CLIENT



DRAWING TITLE

WING B LOWER LEVEL -
PLUMBING RENO
DEMOLITION PLAN

SCALE As indicated	DRAWING NUMBER A2.3
SHEET SIZE 24X36	
PROJECT NUMBER 2024-168	



- ## FLOOR PLAN NOTES
1. PARTITIONS WHICH SUPPORT FIXTURES, MILLWORK AND/OR ACCESSORIES ARE TO BE REINFORCED WITH WOOD STUDS, BLOCKING AND PLYWOOD AS REQUIRED TO PROVIDE RIGID SUPPORT AND FASTENING SURFACES.
 2. SITE VERIFY ALL DIMENSIONS PRIOR TO FABRICATION OF DOORS, WINDOWS, MILLWORK AND GLAZING SYSTEMS. REPORT ALL DISCREPANCIES TO THE CONSULTANT BEFORE PROCEEDING WITH THE WORK.
 3. ALL NEW & EXISTING WALLS, CEILINGS AND SURFACES THAT ARE TO BE PAINTED SHALL BE REPAIRED, PATCHED AND SANDED SMOOTH, AS REQUIRED, READY FOR PAINT.
 4. ALL NEW SIGNAGE TO BE COORDINATED IN CONJUNCTION WITH OWNER'S REQUIREMENTS. ALL SIGNAGE PERMITS AND DRAWINGS BY OTHERS.
 5. EXISTING WALLS AND/OR STRUCTURES TO REMAIN ARE SHOWN SHADED.
 6. COORDINATE STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR ALL RELATED COMPONENTS OF DEMOLITION, MODIFICATION AND NEW INSTALLATION.
 7. REMOVE ALL REDUNDANT PLUMBING, ELECTRICAL, MECHANICAL AND HVAC COMPONENTS AS SCHEDULED BY CONSULTANTS. PATCH, SEAL, COVER AND MAKE ASK AS REQUIRED.
 8. PATCH AND REPAIR ALL OPENINGS AND PENETRATIONS FROM REMOVED ITEMS IN EXISTING FLOORS, WALLS AND CEILINGS TO REMAIN (MAINTAIN EXISTING FIRE RATINGS AS NOTED).
 9. ALL EXISTING SURFACES TO RECEIVE NEW FINISHES ARE TO BE REVEALED PRIOR TO CONSTRUCTION. ALL DISCREPANCIES IN THE EXISTING MATERIALS AND/OR DIMENSIONS TO BE REPORTED TO THE ARCHITECT.
 10. INTERIOR DIMENSIONS ARE TO/FROM FACE OF STEEL STUD, AND/OR EXISTING WALL FINISH.
 11. PROVIDE FIRE STOPPING/FIRE CAULKING AT TOP OF WALLS REQUIRED TO BE A FIRE SEPARATION, TO MAINTAIN CONTINUOUS FIRE SEPARATION. REFER TO ASSEMBLIES AND CBC PLANS.
 12. FURR IN RAIN WATER LEADERS WITH 92mm METAL STUDS AND GYPSUM BOARD TO 200mm ABOVE CEILING LINE, UNLESS NOTED OTHERWISE. FOR EXACT NUMBER OF RAIN WATER LEADERS AND CHANGES REFER TO MECHANICAL DRAWINGS.
 13. ALL INTERIOR CONCRETE BLOCK PARTITIONS/WALLS TO EXTEND FULL HEIGHT TO TOP OF STRUCTURE UNLESS NOTED OTHERWISE. PROVIDE GAP FOR DEFLECTION AS REQUIRED.
 14. ALL AREAS DESIGNATED AS MECHANICAL SPACE TO RECEIVE FIRE STOPPING AND DAMPERS AT ALL FLOOR PENETRATIONS.
 15. GYPSUM BOARD IN ALL WASHROOMS, KITCHENS AND MECHANICAL/ELECTRICAL ROOMS TO BE MOISTURE RESISTANT.
 16. GENERAL CONTRACTOR TO PROVIDE AND MAINTAIN ALL SHORING THAT IS REQUIRED FOR TEMPORARY SUPPORTS.
 17. SUPPLY AND INSTALL SEALANT AT LOCATIONS OF ABUTTING, DISSIMILAR MATERIALS AND EQUIPMENT, VISIBLE OR OTHERWISE, TO PROVIDE BUILDING COMPONENTS FROM AIR INTRUSION AND MOISTURE PROTECTION. COLOUR TO MATCH ADJACENT SURFACE.
 18. GRIND EXISTING FLOORS AS REQUIRED TO ENSURE A SMOOTH SURFACE READY FOR NEW FINISH.

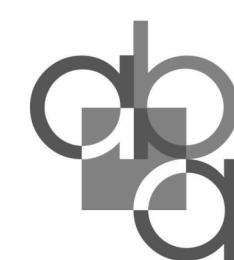
- 1 PLUMBING INDICATED IS FOR COORDINATION OF WORK ONLY. LINES AND LOCATIONS ARE APPROXIMATE. CENTRE LINES REPRESENT SANITARY AND STORM LINES TO BE INSTALLED. REFER TO MECHANICAL DRAWINGS FOR FULL SCOPE OF CONSTRUCTION TO SANITARY AND STORM SERVICES.
- 2 UPON COMPLETION OF PLUMBING SCOPE, INFILL EXCAVATED AREAS, POUR NEW CONC. S.O.G. ON COMPACTED GRANULARS, REFER TO STRUCTURAL DRAWINGS. PREP FLOOR FOR NEW FINISHES.
- 3 INSTALL NEW TERRAZO FLOORING, TO MATCH EXISTING INCLUDING WALL BASE c/w RADIOUSD UPON. REFER TO SPECIFICATIONS.
- 4 RESTORE/REPLACE ANY WALL LOCKERS REMOVED IN WHOLE OR IN PART IN ORDER TO REINSTATE STORM REPLACEMENT SCOPE. PAINT FINISH TO MATCH ADJACENT EXISTING LOCKERS.
- 5 REFER TO FINISHES PLAN 1/A2.5 FOR NEW FINISHES REQUIREMENTS.
- 6 EXISTING EXIT STAIR AND LANDING TO BE RENAISTED IN ITS ENTIRETY.
- 7 ALL NEW PENETRATIONS THROUGH FOUNDATION WALL TO BE SEALED AND WATERTIGHT.
- 8 NEW FLOOR FINISH TO MATCH EXISTING FLOOR FINISH.

ONTARIO ASSOCIATION
OF
ARCHITECTS
JOS
JOSHUA O.P. BEDARD
LICENCE
7407

[illegible]

THIS SCOPE OF WORK CONTAINS ASBESTOS CONTAINING MATERIALS (ACM). ALL CONTRACTORS SHALL REFER TO THE ASBESTOS AUDIT AND SECTION 01 35 43, HAZARDOUS MATERIALS FOR APPROPRIATE PROTOCOLS THAT MUST BE FOLLOWED, REGARDLESS OF ABATEMENT OPERATIONS BEING CONDUCTED OR NOT.

ISSUED FOR PERMIT/TENDER	2025.03.25
ISSUED FOR COORDINATION	2025.01.17
CHRONOLOGY	DATE



aba architects inc.

CUEN



PROJECT NAME

PROJECT NAME

WATERLOO
COLLEGIATE INSTITUTE
HVAC AND EXTERIOR
UPGRADES

300 HAZEL STREET, WATERLOO, ON. N2L 3P2

DRAWING TITLE

WING B LOWER LEVEL-
PLUMBING RENO
FLOOR PLAN

SCALE	DRAWING NUMBER
As indicated	A2.4
SHEET SIZE	
24X36	
PROJECT NUMBER	
2024-168	



1. REFER TO DRAWING FOR FLOORING INSTALL DIRECTION.
2. TRANSITION STRIPS REQUIRED ANYWHERE WHERE TWO DIFFERENT FLOORING MATERIALS MEET. CONTRACTOR TO COORDINATE APPROPRIATE PRODUCT/PROFILE WITH DESIGNER BEFORE ORDERING. UNLESS NOTED OTHERWISE, ALL TRANSITIONS TO OCCUR AT CENTERLINE OF DOOR FRAME.
3. PROVIDE SAMPLES OF ALL FINISHES FOR APPROVAL PRIOR TO INSTALLATION.
4. ALTERNATIVES TO BE SUBMITTED TO DESIGNER FOR REVIEW AND APPROVAL BEFORE ORDERING.
5. ALL EXPOSED CEILINGS, DRYWALL CEILINGS AND BULKHEADS TO BE PAINTED PT-1 (GLOSS LEVEL G1), UNLESS NOTED OTHERWISE.

	INDICATES EXTENT OF WALL FINISH
	INDICATES FLOORING DIRECTION
	INDICATES FLOORING TRANSITION
	INDICATES INTERIOR ELEVATION

- | | |
|--------|------------------------------------|
| PLX | PAINT FINISH (WALL U.N.O.) |
| LVT-X | LUXURY VINYL TILE |
| CRPT-X | CARPET TILE |
| CER-X | CERAMIC TILE (FLOOR AND/OR WALL) |
| PORT-1 | PORCELAIN TILE (FLOOR AND/OR WALL) |
| WC-1 | WALL COVERING |
| CONC-X | CONCRETE SEALER COATING |
| ETC-X | EPOXY COATING |
| BASE-X | WALL BASE |

PAINT

(PT-1) PT-1 (GENERAL WALL & CEILING COLOUR)
BENJAMIN MOORE
CC-20. DECORATOR'S WHITE
**EGGSHELL FINISH ON WALL APPLICATIONS (GLOSS LEVEL G1)
***FINISH AT CEILING APPLICATIONS (GLOSS LEVEL G1)
***BENJAMIN MOORE PRE-CATALYZED WATERBORNE EPOXY
(OR APPROVED ALTERNATE BY DULUX OR SHERWIN WILLIAMS)

ACT-1 ACT-1
ARSMTRONG
CORTEGA SQUARE LAY-IN
SIZE: 24" x 48"
COLOUR: WHITE
GRID: 15/16"

PORT-1 PORT-1 (WASHROOM FLOOR TILE)
OLYMPIA TILE
SERIES: REGAL COLLECTION
COLOUR: DARK GREY, MATTE
SIZE: 12" x 24"
GROUT: MAPEI, 107 IRON (SEAL GROUT)
BASE: NO BASE
INSTALLATION: HORIZONTALLY STACKED
*ADD SCHULTER IATGB - BRUSHED NICKEL FINISH FLOORING
TRANSITION STRIPS REQUIRED WHERE FLOOR MATERIAL
CHANGES, REFER TO FLOOR FINISHES PLAN FOR LOCATIONS.

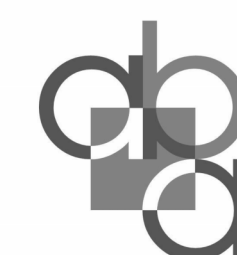
OLYMPIA TILE
SERIES: REGAL COLLECTION
COLOUR: GREY, POLISHED
SIZE: 12" x 24"
GROUT: MAPEI 107 IRON (SEAL GROUT)
BASE: NO BASE
INSTALLATION: HORIZONTALLY STACKED FROM FINISHED
FLOOR TO 84" AFF.
** SCHLUTER JOY-FIN. (ATGB – BRUSHED NICKEL FINISH)
REQUIRED ON ALL EXPOSED EDGES
** SCHLUTER ECK-K TRIM (ATGB FINISH) REQUIRED ON ALL
OUTER CORNERS OF TILE

DRAWINGS ARE NOT TO BE SCALED

[illegible]

THIS SCOPE OF WORK CONTAINS ASBESTOS CONTAINING MATERIALS (ACM). ALL CONTRACTORS SHALL REFER TO THE ASBESTOS AUDIT AND SECTION 01 35 43, HAZARDOUS MATERIALS FOR APPROPRIATE PROTOCOLS THAT MUST BE FOLLOWED, REGARDLESS OF ABATEMENT OPERATIONS BEING CONDUCTED OR NOT.

ISSUED FOR PERMIT/TENDER	2025.03.2
ISSUED FOR COORDINATION	2025.01.1
CHRONOLOGY	DATE



aba architects inc

CUEN



PROJECT NAME

PROJECT NAME

WATERLOO
COLLEGIATE INSTITUTE
HVAC AND EXTERIOR
UPGRADES

300 HAZEL STREET, WATERLOO, ON. N2L 3P2

DRAWING TITLE

WING B LOWER LEVEL
PARTIAL FINISHES
FLOOR PLAN &
INTERIOR ELEVATION

SCAU

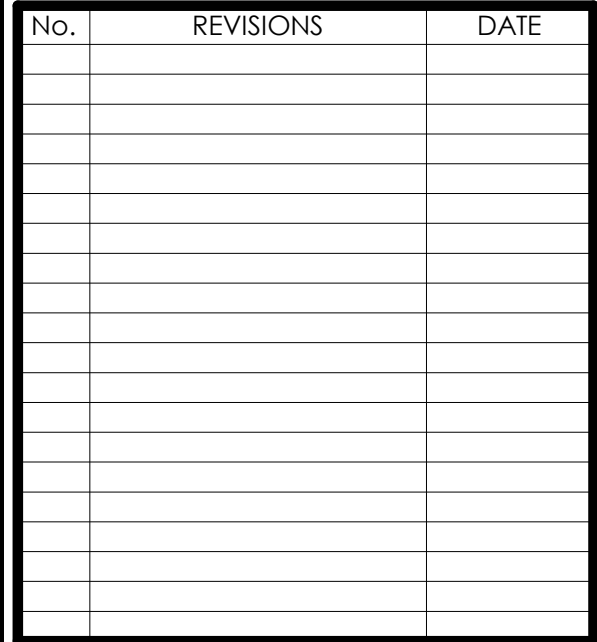
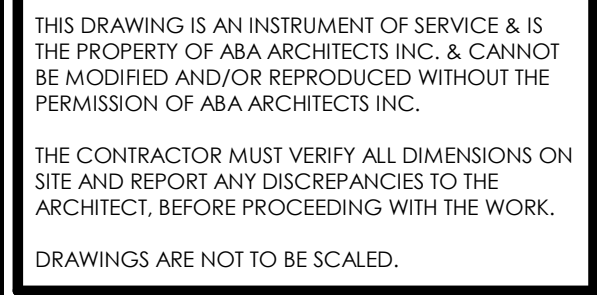
As indicated

SHEET SIZE

PROJECT NUMBER

DRAWING NUMBER

A2.5



ISSUED FOR PERMIT/TENDER	2025.03.25
ISSUED FOR COORDINATION	2025.01.17
CHRONOLOGY	DATE



DRAWING TITLE

BRICK FACADE REPAIR

SCOPE OF WORK

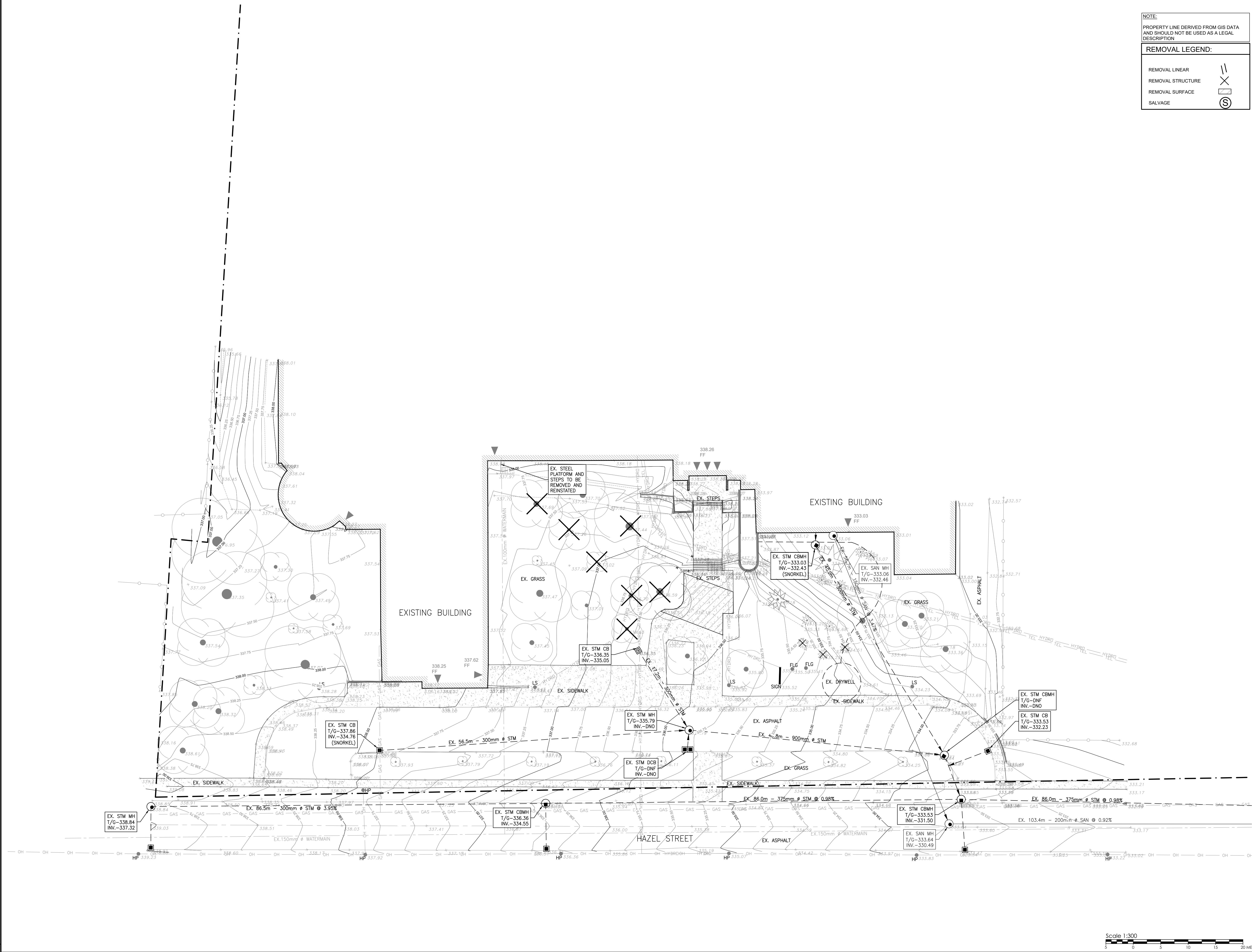
- REFER TO REFERENCE PHOTOS.
- CUT VERTICAL +/- 13mm CONTROL JOINT IN LINE WITH EXISTING CRACK, FULL HEIGHT OF WALL.
- LOOSE OR CRACKED BRICKS ON BOTH SIDES OF NEW JOINT TO BE REPLACED WITH NEW BRICK, TO MATCH EXISTING IN SIZE, COLOUR, AND INSTALLATION.
- CAULK AND SEAL NEW JOINT TO MAKE WEATHER TIGHT.
- HOLE IN LOCATION OF REFERENCE PHOTO C TO BE PATCHED/REPAIRED WITH NEW BRICK TO MATCH EXISTING IN SIZE, COLOUR, AND INSTALLATION.

A photograph showing a corner of a brick building. A yellow recycling bin is positioned against the wall. The ground is a concrete sidewalk with scattered dry leaves. A window is visible on the right side of the building.

A photograph showing the exterior of a brick building. A glass entrance with a dark frame is visible. Above the entrance is a white overhang. To the right of the entrance, a fire alarm pull station is mounted on the brick wall. A fire alarm control unit is also visible on the wall to the right. The building has a brick facade and a concrete base.

REFER TO REFERENCE PHOTO D

1 : 500



NOTE:
PROPERTY LINE DERIVED FROM GIS DATA
AND SHOULD NOT BE USED AS A LEGAL
DESCRIPTION

REMOVAL LEGEND:

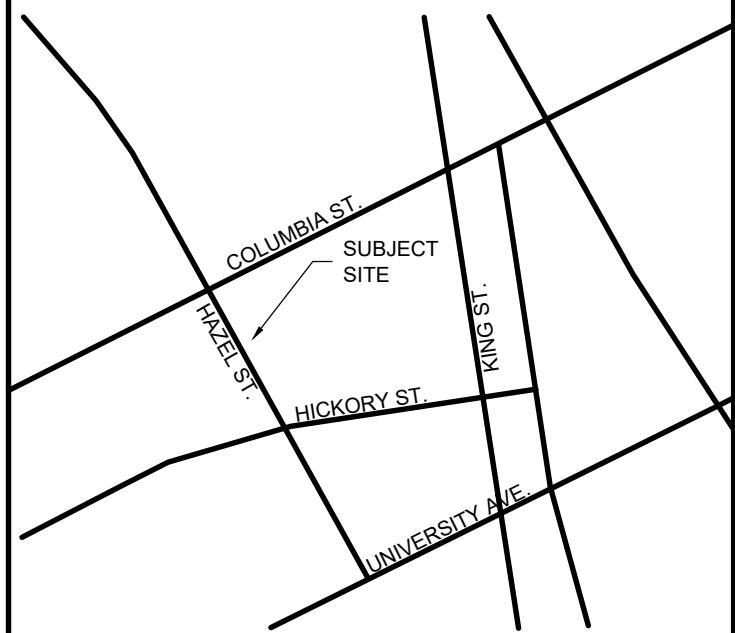
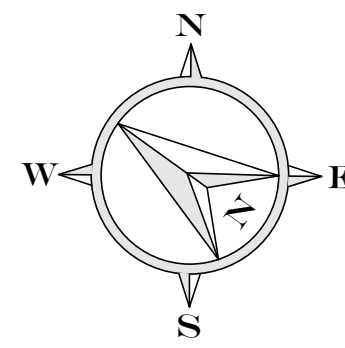
REMOVAL LINEAR

REMOVAL STRUCTURE

REMOVAL SURFACE

SALVAGE

These documents are instruments of service and are the copyright property of Witzel Dyce Engineering Inc. They may not be reproduced, altered or reused without the expressed written consent of Witzel Dyce Engineering Inc.



KEY PLAN

LEGEND:

ELEVATION

EXISTING CONTOURS

CENTERLINE ROAD

DOOR

TREE DRIP LINE

TOP/BOTTOM OF BANK

SWALE

EX. HYDRO POLE

FIRE HYDRANT

MANHOLE

CATCHBASIN

ASPHALT

GRAVEL

FENCE

GAS LINE

HYDRO DUCT

OVERHEAD WIRE

TELEPHONE LINE

FIBRE LINE

STORM PIPE

WATERMAIN

SANITARY

NOTE:
TOPOGRAPHIC SURVEY COMPLETED BY WDE
ON FEBRUARY 4, 2025

1	2025.03.24	ISSUED FOR TENDER
NO.	DATE	REVISION

WitzelDyce
ENGINEERING INC.

826 King Street North, Unit 20
Waterloo, Ontario, N2J 4G8
www.witzeldyce.com



PROJECT
**WATERLOO COLLEGIATE
SANITARY CONNECTION**
300 HAZEL STREET WATERLOO, ON

DRAWING
**EXISTING CONDITIONS
AND REMOVALS PLAN**

DESIGNER JHV	PROJECT NO. 10332-900
DRAWN JHV	DRAWING NO. C1.0
DATE MARCH 2025	
SCALE 1:300	



CONSTRUCTION NOTES:

A. GENERAL

1. ALL CONSTRUCTION WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE LATEST EDITION OF THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECT.
2. ALL WORK AND MATERIALS TO CONFORM WITH THE CURRENT ONTARIO BUILDING CODE, MINISTRY OF THE ENVIRONMENT AND CLIMATE CHANGE OF ONTARIO, CITY OF WATERLOO, ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS, LOCAL UTILITY STANDARDS AND MINISTRY OF TRANSPORTATION STANDARDS WILL APPLY.
3. CONTRACTOR SHALL COORDINATE WITH WITZEL DYCE ENGINEERING AND SHALL CONTACT SAME AT LEAST 48 HOURS PRIOR TO INSTALLATION OF ANY SITE WORK INCLUDING SITE SERVICES.
4. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UTILITIES DURING CONSTRUCTION. ALL EXISTING UTILITIES MUST BE LOCATED PRIOR TO COMMENCEMENT OF WORK. ANY VARIANCE IN LOCATION (VERTICAL OR HORIZONTAL) IS TO BE REPORTED TO THE SITEWORK ENGINEER OF RECORD 48 HOURS PRIOR TO CONSTRUCTION. LOST TIME AND/OR ANY ADDITIONAL WORKS DUE TO FAILURE OF THE CONTRACTOR TO CONFIRM UTILITY LOCATIONS AND ELEVATIONS AND NOTIFY THE SITEWORK ENGINEER OF RECORD OF ANY CONFLICTS 48 HOURS PRIOR TO CONSTRUCTION WILL BE AT THE CONTRACTOR'S EXPENSE.
5. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE EXISTING CONDITIONS, PLAN, AND SITE GRADING AND SERVICING PLAN.
6. CONTRACTOR TO OBTAIN A ROAD OCCUPANCY PERMIT PRIOR TO COMMENCING ANY WORK WITHIN THE RIGHTS-OF-WAY OR MUNICIPAL EASEMENTS IF REQUIRED BY THE CITY OF WATERLOO. ALL UNDERGROUND SERVICING WORK IN THE RIGHTS-OF-WAY OR MUNICIPAL EASEMENTS SHALL BE INSPECTED BY THE AUTHORITY HAVING JURISDICTION PRIOR TO BACKFILLING. ALL WORK WITHIN THE RIGHTS-OF-WAY OR MUNICIPAL EASEMENTS SHALL BE INSTALLED BY APPROVED CONTRACTOR AT THE OWNERS EXPENSE, UNLESS OTHERWISE NOTED.
7. REFER TO SITE PLAN PREPARED BY WITZEL DYCE ENGINEERING FOR ALL DIMENSIONS AND CONSTRUCTION LAYOUT REQUIREMENTS FOR CURBS, BUILDING ENVELOPES AND SITE DETAILS.
8. THESE PLANS FOR CONSTRUCTION ONLY WHEN APPROVED BY THE CITY OF WATERLOO AND SEALED BY THE ENGINEER.
9. ANY PROPOSED CHANGES SHALL BE APPROVED BY THE ENGINEER, AND THE CITY OF WATERLOO. WITZEL DYCE ENGINEERING TO CERTIFY UNDERGROUND SERVICES. CONTRACTOR TO PROVIDE MINIMUM 48 HOURS NOTICE FOR INSPECTION. FAILURE TO NOTIFY WITZEL DYCE ENGINEERING OF INSPECTIONS 48 HOURS PRIOR TO CONSTRUCTION MAY RESULT IN RECONSTRUCTION AT CONTRACTOR'S EXPENSE.
10. IF FOR UNFORESEEN REASONS, THE OWNER AND/OR HIS/HER REPRESENTATIVE D MUST ENCLOSE ON PRIVATE LANDS TO UNDERTAKE ANY WORKS, HE/SHE MUST OBTAIN WRITTEN PERMISSION FROM THE ADJACENT PROPERTY OWNERS PRIOR TO ENTERING UPON THE PRIVATE PROPERTY TO PERFORM ANY WORKS. COPIES OF THESE LETTERS OF CONSENT MUST BE SUBMITTED TO THE TOWNSHIP'S ENGINEERING DIVISION, PRIOR TO ANY WORK BEING PERFORMED. FAILURE TO COMPLY WITH THE ABOVE IS AT THE PROPERTY OWNERS OWN RISK.
11. CONTRACTOR WILL BE RESPONSIBLE FOR ALL REMOVALS REQUIRED TO FACILITATE NEW CONSTRUCTION. REFER TO EXISTING CONDITION PLAN FOR INFORMATION. ALL EXISTING SERVICE STRUCTURES, VALVES AND HYDRANTS ARE TO BE ADJUSTED TO PROPOSED ELEVATIONS.
12. THE CONTRACTOR SHALL PROVIDE THE SITEWORK ENGINEER OF RECORD 1 (ONE) SET OF SITE SERVICING, GRADING, SITE ELECTRICAL AND LANDSCAPE

RECORD DRAWINGS

13. AS BUILT PLANS TO BE UNDER TAKEN BY THE CONTRACTOR AT THE COMPLETION OF THE SITE WORKS AND PROVIDED TO THE ENGINEER OF RECORD FOR REVIEW.
14. CONTRACTOR TO OBTAIN SITE SERVICING PERMIT FROM LOCAL AUTHORITY HAVING JURISDICTION AND PROVIDE A COPY OF SAME TO SITEWORK ENGINEER OF RECORD.
15. UNDERGROUND SERVICES
1. CONTRACTOR SHALL VERIFY ELEVATION AND LOCATION OF EXISTING SANITARY, STORM SEWERS AND WATERMANS PRIOR TO COMMENCING SITE SERVICING WORK AND SHALL NOTIFY THE ENGINEER OF ANY CONFLICTS BETWEEN EXISTING AND PROPOSED.
2. THE CONTRACTOR TO MAKE CONNECTIONS TO SERVICES AS SHOWN AND IS RESPONSIBLE FOR RESTORATION OF ALL OFF-SITE AFFECTED PROPERTY TO ORIGINAL CONDITION.
3. ON-SITE SERVICING SHALL NOT BE UNDERTAKEN PRIOR TO COMPLETION OF SERVICE CONNECTIONS WITHIN THE ROAD RIGHT-OF-WAYS.
4. ALL UNDERGROUND SERVICES TO BE IN COMPLIANCE WITH THE CURRENT ONTARIO BUILDING CODE, CITY OF WATERLOO ENGINEERING STANDARDS, ONTARIO PROVINCIAL STANDARDS (OPSS, OPSD) AND WITH THE LATEST REGULATIONS OF THE ONTARIO PLUMBING CODE AND INSPECTED BY TOWNSHIP STAFF/CONSULTANT PRIOR TO BACKFILLING.
5. UNDERGROUND SERVICES TO TERMINATE 1.5m FROM BUILDING LINE, PLUGGED OR CAPPED w/ MARKER EXTENDING FROM INVERT TO 1.0m ABOVE FINISHED GRADE.
6. ALL BEDDING TO BE CLASS 'B' AS PER OPSS. TRENCH BACKFILL TO BE APPROVED NATIVE MATERIAL COMPACTED IN 300mm DEEP MAXIMUM LIFTS TO 95% STANDARD PROCTOR DENSITY (S.P.D.).
7. ALL SERVICES SHALL BE TESTED AS SPECIFIED IN THE APPLICABLE OPSS (OPSS 410 & 411).
8. ANY UTILITY RELOCATION DUE TO THIS DEVELOPMENT TO BE UNDERTAKEN AT THE EXPENSE OF THE OWNER/DEVELOPER.

C. GRADING

1. COMPLETE ALL EXCAVATION, GRADING, TRIMMING AND COMPACTION AS REQUIRED TO FACILITATE THE WORK. ALL SUBGRADE AREAS SHALL BE PROOF ROLLED TO 98% S.P.D. PRIOR TO SUBGRADE PLACEMENT.
2. DISPOSE OF ALL SURPLUS AND UNSUITABLE MATERIAL OFF-SITE.
3. SAW-CUT ASPHALT IN NEAT LINES AT ALL MATCH LINES.
4. TRANSITION SLOPES TO BE MAXIMUM 3:1 (HORIZONTAL TO VERTICAL) UNLESS NOTED OTHERWISE.

SURFACE WORKS

1. SITE AREAS DISTURBED BY CONSTRUCTION AND NOT INDICATED FOR REMOVAL TO BE RESTORED TO ORIGINAL CONDITIONS.

EROSION CONTROL

1. ALL SILT FENCING TO BE INSTALLED PRIOR TO COMMENCEMENT OF ANY AREA GRADING, EXCAVATION OR DEMOLITION.
2. EROSION CONTROL FENCE TO BE PLACED AROUND THE BASE OF ALL STOCKPILES. ALL STOCKPILES TO BE KEPT A MINIMUM OF 2.5m FROM ALL PROPERTY LINES.
3. P-250 FILTER FABRIC UNDERLYING CONSTRUCTION VEHICLE ENTRANCE TO

1. CONSIST OF CLEANED OR REPLACED 300mm THICK, 50mmØ STONE, STONE TO BE TAKEN UP WHEN ACCUMULATIONS COVER 50% OF TOP OF STONE (SEE DETAIL).
2. EROSION PROTECTION TO BE PROVIDED AROUND ALL STORM AND SANITARY MANHOLES AND/OR CATCHBASINS.
3. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AS SITE DEVELOPMENT PROGRESSES. CONTRACTOR TO PROVIDE ALL ADDITIONAL CONTROL STRUCTURES.
4. EROSION CONTROL STRUCTURES TO BE MONITORED REGULARLY BY WITZEL DYCE ENGINEERING AND ANY DAMAGE REPAIRED IMMEDIATELY. SEDIMENTS TO BE REMOVED WHEN ACCUMULATIONS REACH A MAXIMUM OF ONE THIRD (1/3) THE HEIGHT OF THE SILT FENCE.
5. ALL EROSION CONTROL STRUCTURES TO REMAIN IN PLACE UNTIL ALL DISTURBED GROUND SURFACES HAVE BEEN RE-STABILIZED EITHER BY PAVING OR RESTORATION OF VEGETATIVE GROUND COVER.
6. NO ALTERNATIVE METHODS OF EROSION CONTROL PROTECTION SHALL BE PERMITTED UNLESS APPROVED BY WITZEL DYCE ENGINEERING.
7. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING SEDIMENTS FROM THE MUNICIPAL ROADS, SIDEWALKS AND DITCHES AT THE END OF EACH WORK DAY.
8. MUD MATS TO BE PROVIDED AT ALL LOCATIONS WHERE CONSTRUCTION VEHICLES EXIT THE SITE. MUD MATS SHALL BE A MINIMUM OF 3.0m WIDE, 10.0m LONG (LENGTH MAY VARY DEPENDING ON SITE LAYOUT) AND 0.3m DEEP AND SHALL CONSIST OF 50mmØ CLEAR STONE MATERIAL OR APPROVED EQUIVALENT.
9. CONTRACTOR TO ENSURE ALL VEHICLES LEAVE THE SITE VIA THE MUD MAT AND THAT THAT MAT IS MAINTAINED IN A MANNER TO MAXIMIZE ITS EFFECTIVENESS AT ALL TIMES.
10. WITZEL DYCE ENGINEERING TO MONITOR THE SITE DEVELOPMENT TO ENSURE ALL EROSION CONTROLS ARE INSTALLED AND MAINTAINED TO TOWNSHIP REQUIREMENTS. CONTRACTOR TO COMPLY WITH THE ENGINEER'S INSTRUCTIONS TO INSTALL, MODIFY, OR MAINTAIN EROSION CONTROL WORKS.

MISCELLANEOUS

1. WHERE COVER OVER SEWERS IS LESS THAN 1.2m IN PAVED AREAS, OR LESS THAN 0.9m IN GRASSED AREAS, INSTALL INSULATION AS PER DETAIL. INSULATION TO BE 60mm THICK x1800mm WIDE UNLESS OTHERWISE NOTED. INSTALL LONGITUDINALLY OVER CENTERLINE OF PIPE WITH OVERLAPPING JOINTS.
2. IT IS THE SITE OWNERS RESPONSIBILITY TO ENSURE THAT ALL SEDIMENT CONTROLS ARE IMPLEMENTED AND MAINTAINED IN ACCORDANCE WITH THE ABOVE CRITERIA.

LIST OF OPSD'S

SEDIMENT AND EROSION CONTROL

- OPSD 219.100 - LIGHT DUTY STRAW BALE BARRIER
- OPSD 219.110 - LIGHT DUTY SILT FENCE BARRIER

FRAMES AND GRATES

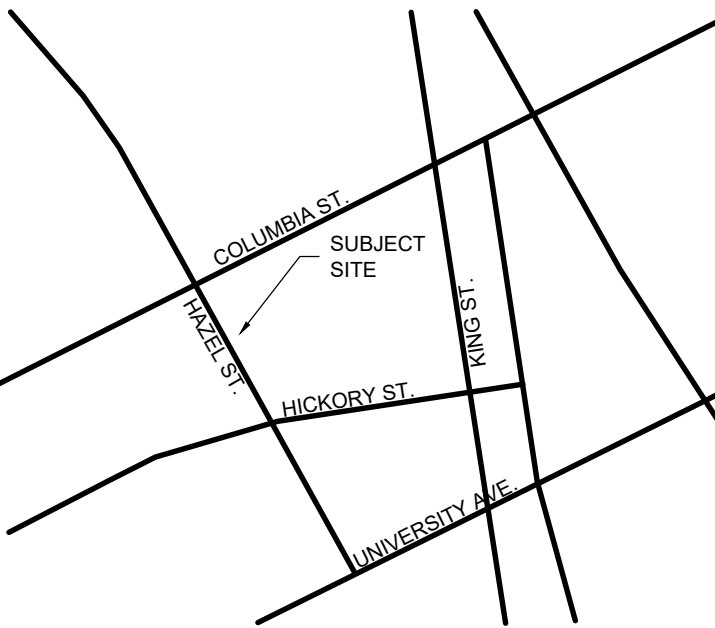
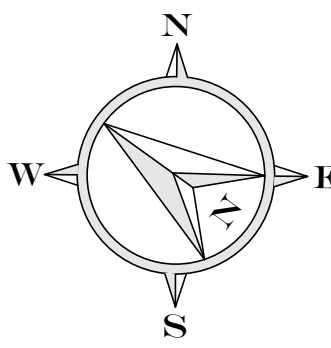
- OPSD 401.040 - CAST IRON, RAISED SQUARE FRAME WITH CIRCULAR OR OPEN COVER FOR MAINTENANCE HOLES

STRUCTURES

- OPSD 701.010 - PRECAST CONCRETE MAINTENANCE HOLE, 1200mm DIAMETER
- OPSD 701.021 - MAINTENANCE HOLE BENCHING AND PIPE OPENING ALTERNATIVES

NOTE:

PROPERTY LINE DERIVED FROM GIS DATA AND SHOULD NOT BE USED AS A LEGAL DESCRIPTION



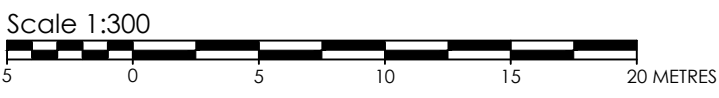
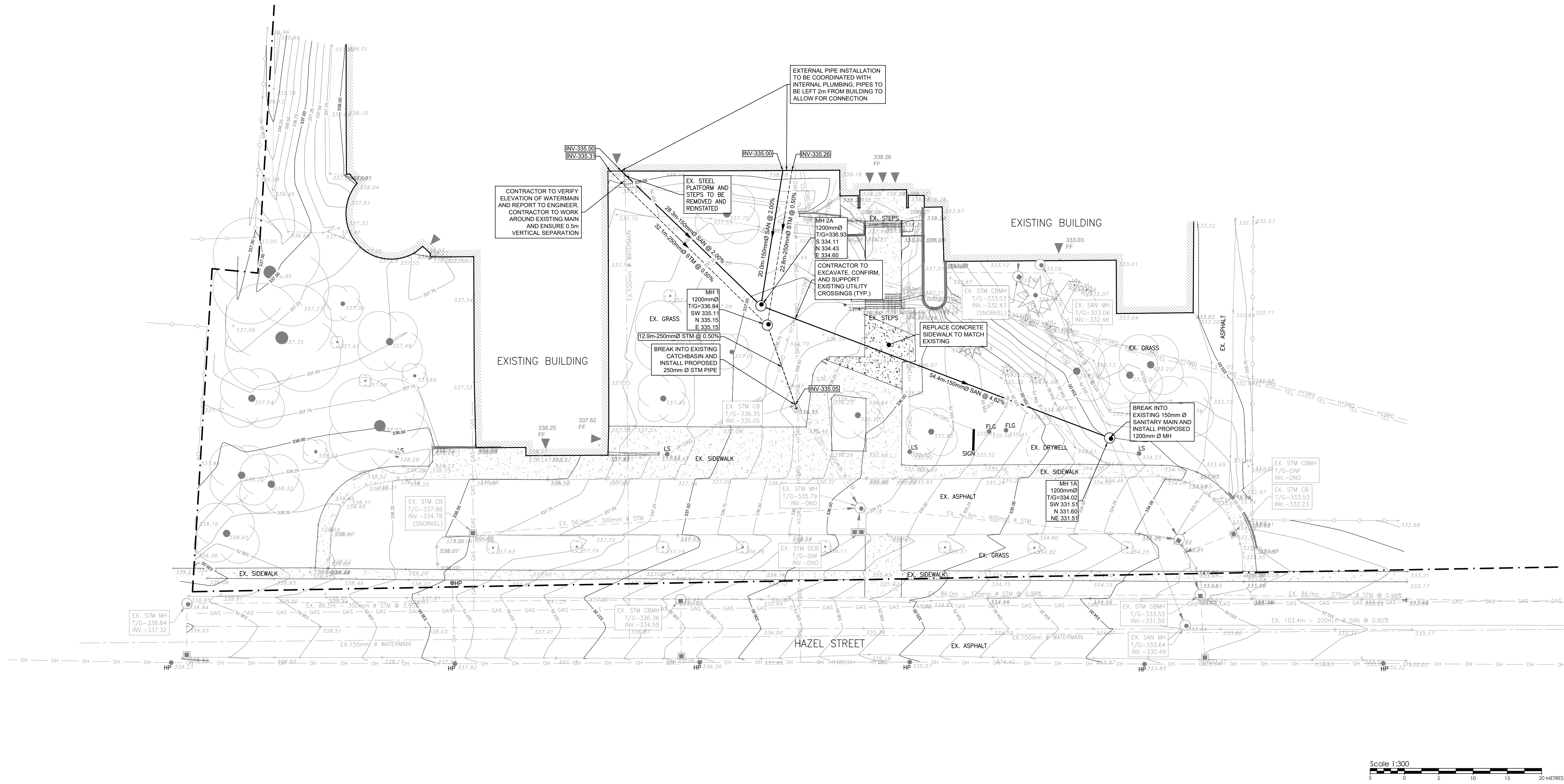
KEY PLAN

LEGEND:

ELEVATION	+XXXXXX (XXXXXX)
EXISTING CONTOURS	--- 345.75 ---
CENTERLINE ROAD	---
DOOR	▽ ▼
TREE DRIP LINE	---
TOP/BOTTOM OF BANK	---
SWALE	---
EX. HYDRO POLE	● ●
FIRE HYDRANT	○ ○
MANHOLE	○ ○
CATCHBASIN	■ ■
ASPHALT	---
GRAVEL	---
FENCE	---
GAS LINE	--- GAS --- GAS ---
HYDRO DUCT	--- HYDRO --- HYDRO ---
OVERHEAD WIRE	--- OH --- OH ---
TELEPHONE LINE	--- TEL --- TEL ---
FIBRE LINE	--- FIBRE --- FIBRE ---
STORM PIPE	---
WATERMAIN	---
SANITARY	---

NOTE:

TOPOGRAPHIC SURVEY COMPLETED BY WDE ON FEBRUARY 4, 2025



WitzelDyce
ENGINEERING INC.
826 King Street North, Unit 20
Waterloo, Ontario, N2J 4G8
www.witzeldyce.com



PROJECT
**WATERLOO COLLEGIATE
SANITARY CONNECTION**

300 HAZEL STREET WATERLOO, ON

DRAWING
**SANITARY AND STORM
SERVICING PLAN**

DESIGNER JHV	PROJECT NO. 10332-900
DRAWN JHV	DRAWING NO.
DATE MARCH 2025	C2.0
SCALE 1:300	

1. ALL WORK SHALL CONFORM TO ONTARIO BUILDING CODE (OBC) 2024 AND ALL STANDARDS REFERENCED WITHIN, LOCAL REGULATIONS AND BYLAWS, AND THE LATEST EDITIONS OF THE CANADIAN STANDARDS ASSOCIATION PROJECTS, THE LATEST VERSIONS OF STANDARDS SHALL APPLY.
2. READ THESE DRAWINGS IN CONJUNCTION WITH ALL RELATED CONTRACT DOCUMENTS.
3. THE CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH ALL CONDITIONS WHICH MAY ADVERSELY AFFECT THE PROPER CONSTRUCTION OF THE PROJECT. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN RELATION TO THE DRAWINGS AND NOTIFY THE ENGINEER TO ALL DISCREPANCIES PRIOR TO PROCEEDING WITH THE WORK.
4. DRAWINGS AND CONTRACT DOCUMENTS SHALL BE THE BASIS OF THE WORK.
5. THE DESIGN DOCUMENTS ARE PREPARED SOLELY FOR THE USE WITH THE PARTY WHOM THE ENGINEER HAS ENTERED INTO CONTRACT. THERE ARE NO WARRANTIES OR REPRESENTATIONS BY THE PARTY WITH WHOM THE ENGINEER HAS ENTERED INTO CONTRACT.
6. THE CONTRACTOR SHALL RETAIN AN INDEPENDENT TESTING AND INSPECTION COMPANY TO VERIFY THE CONSTRUCTION OF THE STRUCTURE ACCORDANCE WITH THE CONTRACT DOCUMENTS INCLUDING COMPACTION TESTING, REINFORCING STEEL PLACEMENT, CONCRETE TESTING AND NATURAL FLOOR LEVEL.
7. THE ENGINEER SHALL BE GIVEN MINIMUM 24 HOURS NOTICE BY THE CONTRACTOR FOR ALL CONSTRUCTION REVIEWS, SITE VISITS AND REVIEWS BY THE ENGINEER OR HIS REPRESENTATIVE. REVIEWS ARE INTENDED FOR THE SOLE PURPOSE OF CERTAINING CONFORMANCE WITH THE GENERAL DESIGN CONCEPT. THE REVIEWS SHALL NOT BE A BASIS FOR THE ENGINEER HAS SEEN ALL CONSTRUCTION PROCEDURES. REVIEW BY THE ENGINEER SHALL NOT BE CONSIDERED AN ENDORSEMENT OF THE CONSTRUCTION METHODS, OMISSIONS AND FOR MEETING ALL THE REQUIREMENTS OF THE CONSTRUCTION AND CONTRACT DOCUMENTS.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PROVISIONS FOR CONSTRUCTION LOADS AND TEMPORARY BRACING TO ENSURE SAFETY AND THE BUILDING IS PLUMB AND IN TRUE ALIGNMENT AT ALL PHASES OF CONSTRUCTION AS SHOWN ON THE DRAWINGS. THE BRACING AND SHORING DRAWINGS ARE DESIGNED FOR THE FINISHED STRUCTURE AND MAY NOT BE SUFFICIENT FOR ERECTION PURPOSES. SHORING AND BRACING SHALL BE DESIGNED BY THE CONTRACTOR. SHORING AND BRACING DRAWINGS, SHOR DRAWINGS SHALL BE SUBMITTED WITH P.ENG STAMP FOR OUR REVIEW PRIOR TO CONSTRUCTION.
9. THE SUPPLY OF ALL SPECIALTIES AND PRODUCTS AND MATERIALS ARE PERMITTED WITHOUT THE APPROVAL OF THE ENGINEER.

B. DESIGN PARAMETERS

1. REFERENCE FRAMING PLANS FOR DESIGN LOADS OF FLOORS AND ROOFS
 2. BUILDING IMPORTANCE CATEGORY: HIGH
 3. CLIMATIC/COUNTRY DATA: WIND SPEED, 200, ON
- | SNOW/WIND DATA | EARTHQUAKE |
|-----------------------------|-----------------------|
| $S_s = 2.0 \text{ kPa}$ | $S_a(0.2) = 0.203$ |
| $S_r = 0.4 \text{ kPa}$ | $S_a(0.5) = 0.122$ |
| $Q_0 = 0.8$ | $S_a(1.0) = 0.0671$ |
| $C_w = 1.0$ | $S_a(2.0) = 0.032$ |
| $C_s = 1.0$ | $S_a(5.0) = 0.00846$ |
| $C_a = 1.0$ | $S_a(10.0) = 0.00301$ |
| $I_w = 1.15$ | $R_d = 0.0895$ |
| $q_{S0} = 0.37 \text{ kPa}$ | $R_d = 1.5$ |
| CATEGORY 2 | $R_e = 1.3$ |
| $I_w = 1.15$ | $I_S(0.2) = 0.284$ |
| $I_w = 1.3$ | |
| SITE CLASS "D" | |
4. ADDITIONAL DEAD LOAD ALLOWANCE SHALL BE INCLUDED IN ADDITION TO THE LOAD SPECIFIED ON THE DRAWINGS FOR PIPING IN EXCESS OF 75mm (3") CARRYING FLUIDS (SPRINKLERS, ROOF TOP MECHANICAL UNITS AND ROOF TOP PATIO SLABS).
 5. ALL ROOF FRAMING ELEMENTS INCLUDING JOISTS, OWLS AND TRUSSES ARE TO BE DESIGNED IN ACCORDANCE TO CBC 2024 AND ALL OTHER MOST CURRENT VERSION OF THE NBC STRUCTURAL COMMENTARIES USING THE ABOVE NOTED DESIGN PARAMETERS.

3. STRUCTURAL STEEL SHALL CONFORM TO THE MOST RECENT VERSION OF CANCSA-516 AND THE CISC CODE OF STANDARD PRACTICE.
4. STRUCTURAL STEEL SHALL CONFORM TO THE MOST RECENT VERSION OF CANCSA 40 W20, G40 21 GRADE 350W CLASS C FOR H.S.S., G40 21 GRADE 350W FOR G40 SHAPES SECTIONS AND G40 21 GRADE 350W FOR CHANNELS, AND CISC 308 FOR SHAPES.
5. BOLTED CONNECTIONS SHALL USE GRADE A325 BOLTS.
6. ANCHOR BOLTS SHALL BE FABRICATED USING STEEL ROL FORMING TO THE MOST RECENT VERSION OF THE CISC CODE OF STANDARD PRACTICE.
7. WELDING SHALL CONFORM TO CSA W59 AND CSA W47 DIVISION 1 OR DIVISION 2.1 BY THE CANADIAN WELDING BOARD. WELDING SHALL BE PERFORMED BY A QUALIFIED WELDER AND INSPECTOR TO THE CANCSA STANDARDS W178.1 AND W178.2.
8. WHERE FORCES ARE NOT SHOWN ON THE DRAWINGS BEAM REACTIONS SHALL BE 12% OF THE TOTAL REACTION. REACTIONS ARE LISTED IN THE BEAM LOAD TABLES OF PART 5 OF THE CISC'S HANDBOOK OF STEEL CONSTRUCTION.
9. ALL STRUCTURAL STEEL MEMBERS SHALL NOT BE SPICED WITHOUT THE APPROVAL OF THE ENGINEER.
10. STEEL BEAMS AND LINTELS SHALL HAVE MINIMUM 200mm (8") BEARING ON CONCRETE SLAB. THIS SHALL BE NOTED. WELD BEAMS AND LINTELS TO BEARING PLATES WHERE PROVIDED WITH MINIMUM 4.8mm x 50mm (3/16"x2") FILLET WELD EACH SIDE.
11. PROVIDE 12.5% STIFFENER PLATES EACH SIDE OF BEAMS CANTILEVERED OVER COLUMNS OR SUPPORTS OR SUPPORTING COLUMNS.
12. ALL ROOF OPENINGS IN METAL DECK ARE TO BE REINFORCED WITH C130x101 STEEL BEAMS OR LINTELS.
13. ALL STRUCTURAL STEEL IS TO BE SHOP PRIME PAINT UNLESS NOTED OTHERWISE. STRUCTURAL STEEL WHICH IS TO BE PROTECTED WITH SPRAY ON FIRE PROTECTION IS TO BE UNPAINTED AND UNCOATED.
14. STRUCTURAL STEEL EXPOSED TO WEATHER IS TO BE HOT DIP GALVANIZED CONFORMING TO CANCSA-G164. ALL COATINGS ARE TO BE TOUCHED UP ON SITE WITH APPROVED PAINT FOR PRIME STEEL AND ZINC RICH PAINT FOR GALVANIZED STEEL.
15. OPEN WEB STEEL JOISTS SHALL BE DESIGNED WITH DEFLECTION LIMITS OF LIVE LOAD L/360 AND TOTAL LOAD L/240.
16. ALL ELECTRICAL INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE POINTS OF JOISTS ARE TO LINE UP JOIST TO JOIST WITHIN SIMILAR AREAS.
17. ALL BUILDING MATERIALS AND EQUIPMENT SUPPORTED BY OPEN WEB STEEL JOISTS SHALL BE SUPPORTED BY JOIST.
18. DESIGN METAL DECK IN CONFORMANCE TO THE MOST RECENT VERSION OF CANCSA-516 INCLUDING SUPPLEMENT CANCSA-S1693.
19. WELDS FROM FLOOR TO CEILING SHALL BE MINIMUM 19mm (3/4") DIA. PUDDLE WELD AT THE FOLLOWING MINIMUM SPACING:
 - a. TRANSVERSE WELDS 300mm (12")
 - b. PERIMETER WELDS 300mm (12")
 - c. LONGITUDINAL WELDS 600mm (24")
20. BUTT JUNCTION PUNCH ALL SEAMS AT 300mm (12") O.C.
21. DECK OVERLAP AND JOINTS SHALL BE MINIMUM 500mm (20")
22. DECK WELDS SHALL BE TOUCHED UP WITH APPROVED PAINT.

SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION. SHOP DRAWINGS MUST BE REVIEWED AND STAMPED BY THE GENERAL CONTRACTOR PRIOR TO ISSUING TO THE ENGINEER FOR REVIEW.



THIS DRAWING IS AN INSTRUMENT OF SERVICE & IS THE PROPERTY OF ABA ARCHITECTS INC. & CANNOT BE MODIFIED AND/OR REPRODUCED WITHOUT THE PERMISSION OF ABA ARCHITECTS INC.

THE CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE AND REPORT ANY DISCREPANCIES TO THE ARCHITECT, BEFORE PROCEEDING WITH THE WORK.

DRAWINGS ARE NOT TO BE SCALED.

A circular professional engineer seal for the Province of Ontario. The outer ring contains the text "LICENSED PROFESSIONAL ENGINEER" at the top and "PROVINCE OF ONTARIO" at the bottom. In the center, the name "D.G. WATERS" is written in a stylized font, with the license number "100543905" below it. At the bottom of the seal, the expiration date "Mar 24, 2025" is displayed.



WitzelDyce
ENGINEERING INC.

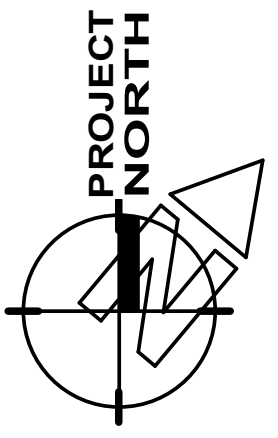
826 King Street North, Unit 20
Waterloo, Ontario, N2J 4G8
www.witzeldyce.com



DRAWING TITLE

GENERAL NOTES, TYP.
DETAILS, & SECTIONS

2025-03-24 3:04:09 PM P:\10332\305 - HVAC & Ext. Upgrades\DWG\10332-305.rvt

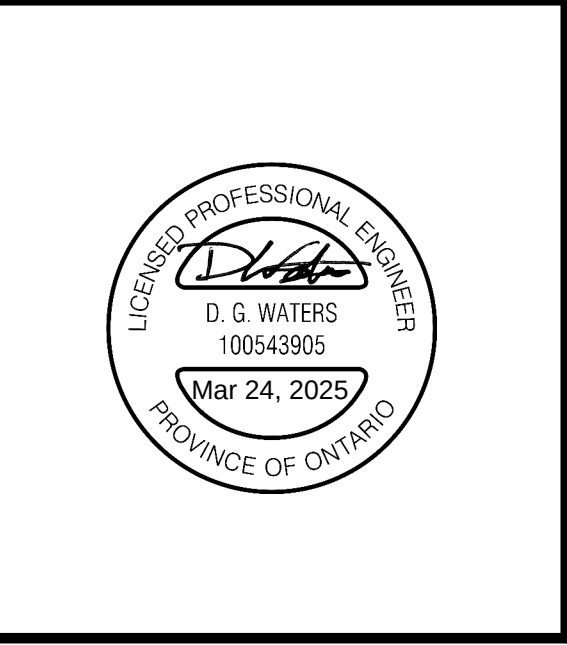


THIS DRAWING IS AN INSTRUMENT OF SERVICE & IS THE PROPERTY OF ABA ARCHITECTS INC. & CANNOT BE MODIFIED AND/OR REPRODUCED WITHOUT THE PERMISSION OF ABA ARCHITECTS INC.

THE CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE AND REPORT ANY DISCREPANCIES TO THE ARCHITECT, BEFORE PROCEEDING WITH THE WORK.

DRAWINGS ARE NOT TO BE SCALED.

No.	REVISIONS	DATE
1	ISSUED FOR PERMIT / TENDER	2025.03.24



CHRONOLOGY	DATE

WitzelDyce
ENGINEERING INC.

826 King Street North, Unit 20
Waterloo, Ontario, N2J 4G8
www.witzeldyce.com



CLIENT

**WATERLOO REGION
DISTRICT SCHOOL
BOARD**

PROJECT NAME

**WATERLOO
COLLEGIATE INSTITUTE -
HVAC & EXTERIOR
UPGRADES**

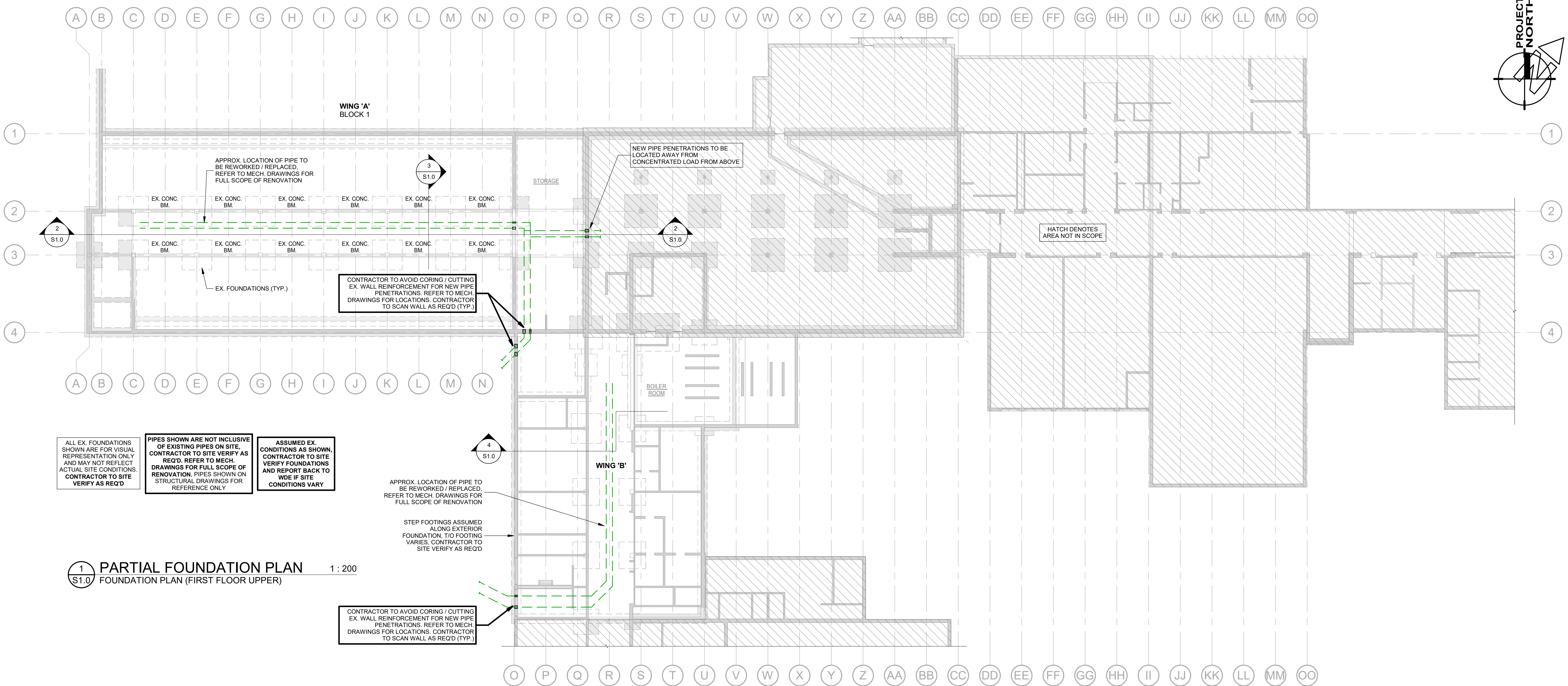
300 HAZEL STREET, WATERLOO ON N2L 3P2

DRAWING TITLE

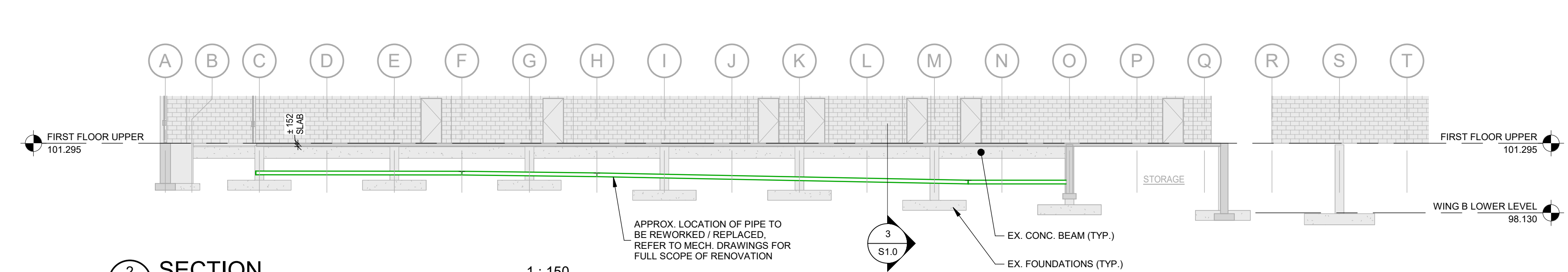
**PARTIAL FOUNDATION
PLAN & SECTIONS**

SCALE	DRAWING NUMBER
As indicated	
SHEET SIZE	
24X36	
PROJECT NUMBER	
10332-305	

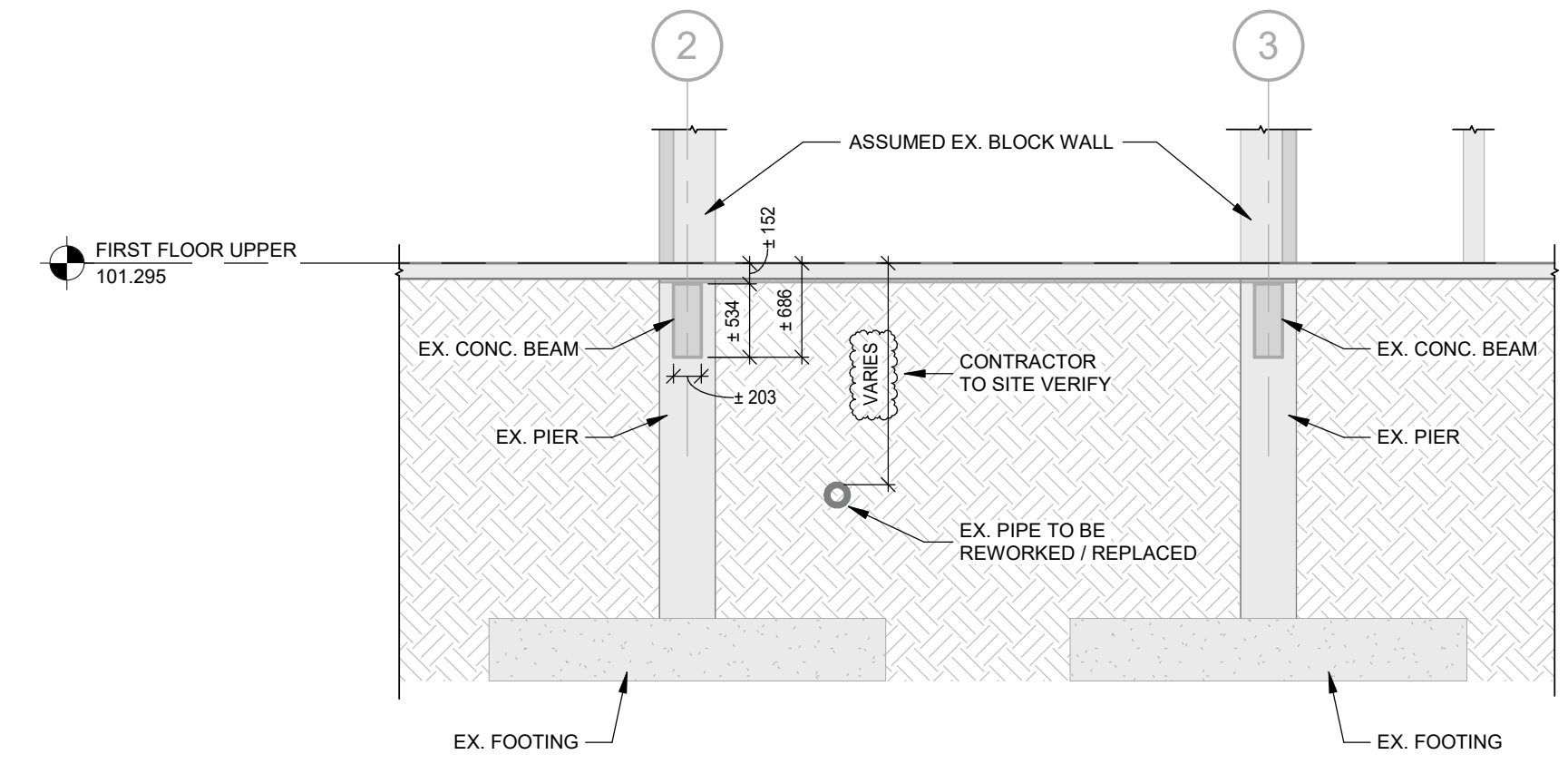
S1.0



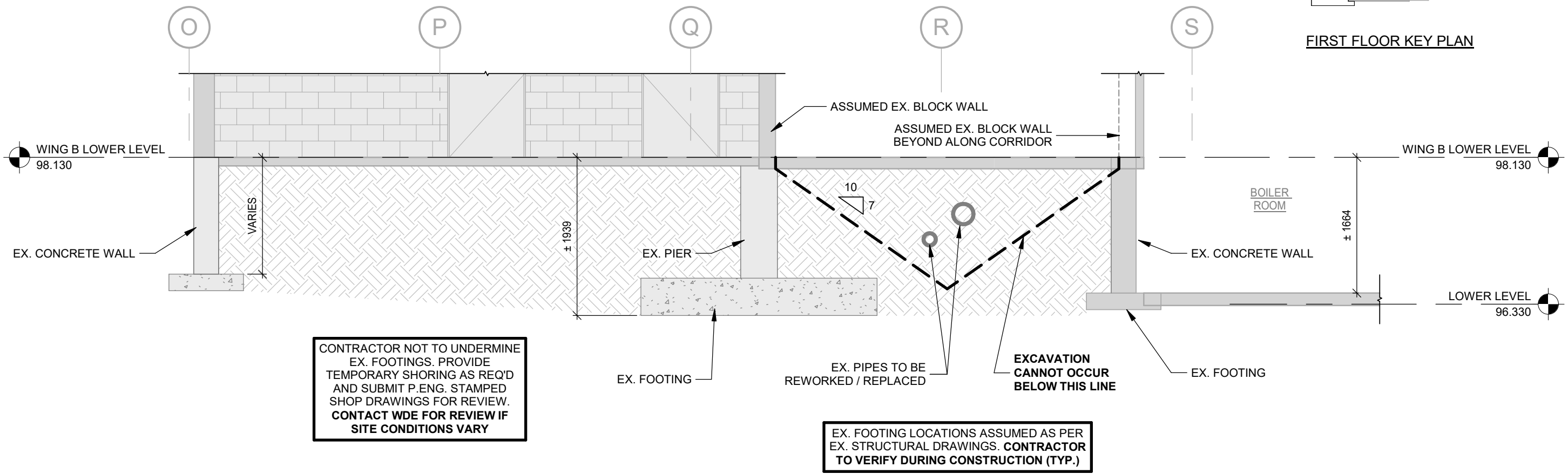
1 PARTIAL FOUNDATION PLAN
FOUNDATION PLAN (FIRST FLOOR UPPER)
1 : 200



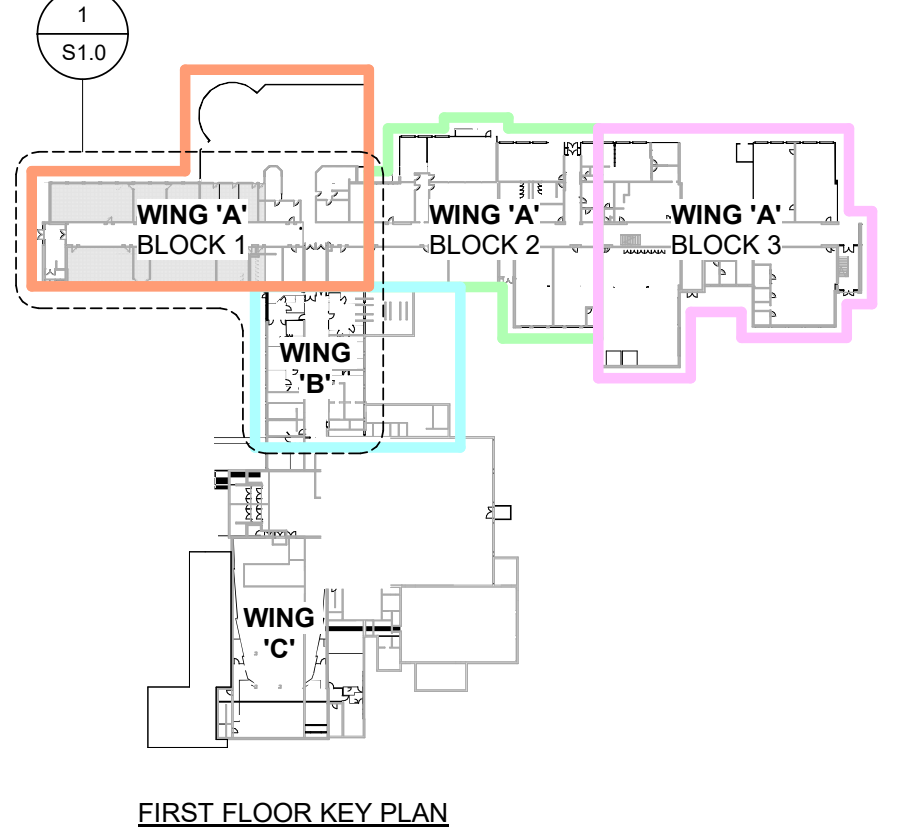
2 SECTION
PIPE MODIFICATION PARALLEL TO CORR. - WING A
1 : 150



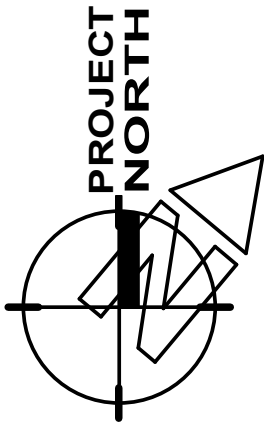
3 SECTION
PIPE MODIFICATION - WING A
1 : 50



4 SECTION
PIPE MODIFICATION - WING B
1 : 50



FIRST FLOOR KEY PLAN

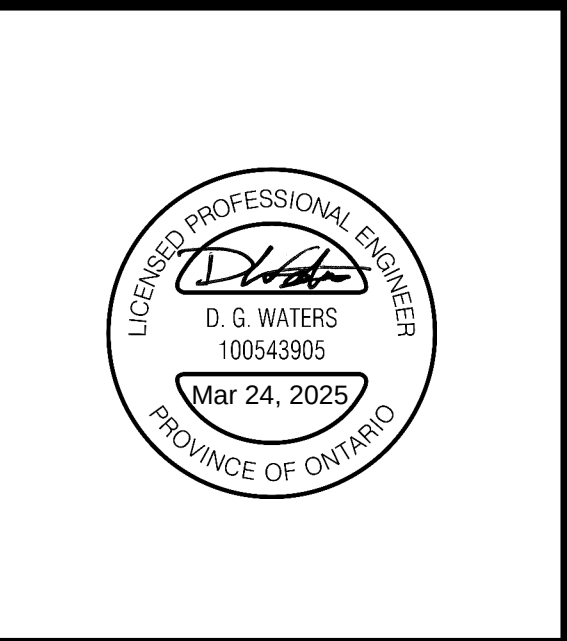


THIS DRAWING IS AN INSTRUMENT OF SERVICE & IS THE PROPERTY OF ABA ARCHITECTS INC. & CANNOT BE MODIFIED AND/OR REPRODUCED WITHOUT THE PERMISSION OF ABA ARCHITECTS INC.

THE CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE AND REPORT ANY DISCREPANCIES TO THE ARCHITECT, BEFORE PROCEEDING WITH THE WORK.

DRAWINGS ARE NOT TO BE SCALED.

No.	REVISIONS	DATE
1	ISSUED FOR PERMIT / TENDER	2025.03.24



CHRONOLOGY	DATE

WitzelDyce
ENGINEERING INC.

826 King Street North, Unit 20
Waterloo, Ontario, N2J 4G8
www.witzeldyce.com



CLIENT

**WATERLOO REGION
DISTRICT SCHOOL
BOARD**

PROJECT NAME

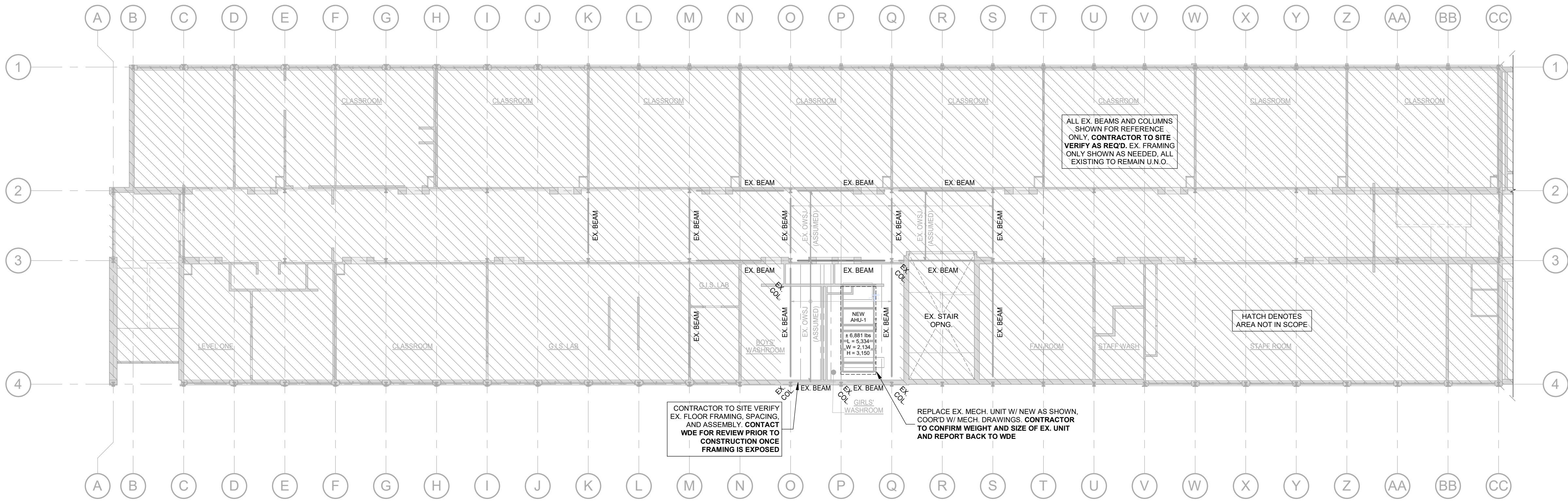
**WATERLOO
COLLEGIATE INSTITUTE -
HVAC & EXTERIOR
UPGRADES**

300 HAZEL STREET, WATERLOO ON N2L 3P2

DRAWING TITLE

**PARTIAL THIRD FLOOR
& ROOF FRAMING
PLAN**

SCALE	DRAWING NUMBER
As indicated	
SHEET SIZE	
24X36	
PROJECT NUMBER	
10332-305	
	S2.0



1 PARTIAL FRAMING PLAN
THIRD FLOOR FRAMING PLAN 1 : 150

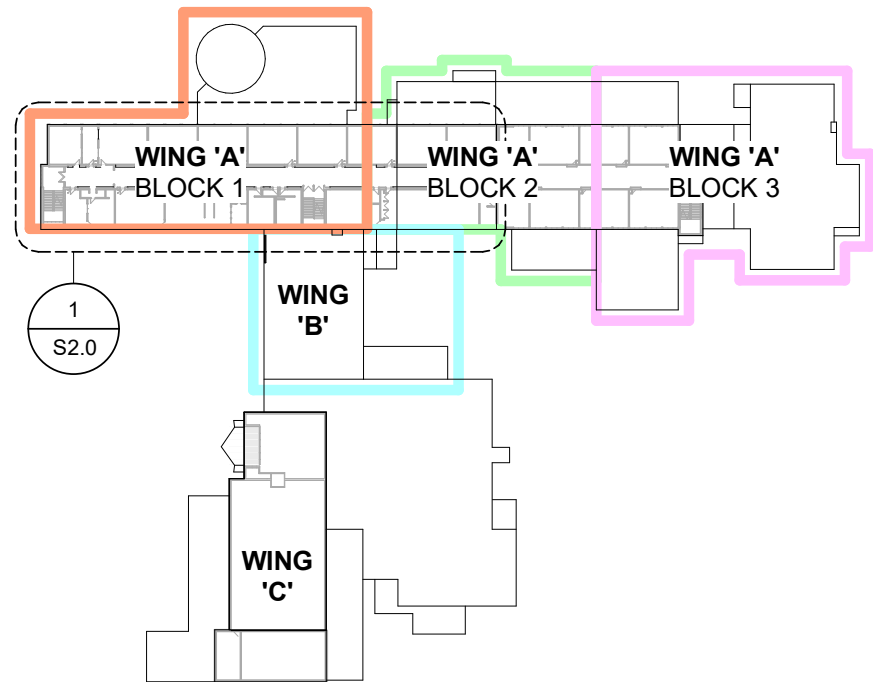
EX. SERVICE RM. FLOOR DESIGN LOADS	
LIVE LOAD	= 3.6 kPa
DEAD LOAD	= 4.45 kPa

FLOOR DESIGN LOADS
TO BE CONFIRMED

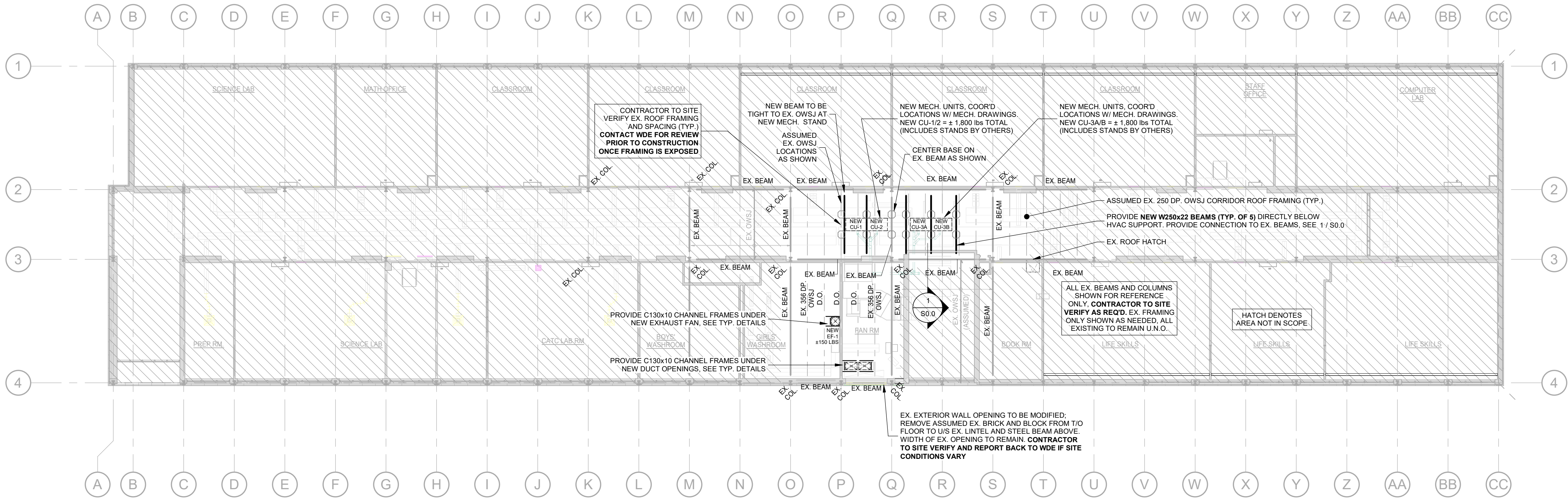
CONTRACTOR TO
SITE VERIFY ALL
EX. CONDITIONS

ASSUMED EX. CONDITIONS AS
SHOWN, CONTRACTOR TO SITE
VERIFY FRAMING AND REPORT BACK
TO WDE IF SITE CONDITIONS VARY

EX. FLOOR FRAMING
SUPPORTING NEW MECH. UNITS
TO BE SITE VERIFIED, FLOOR
REINFORCING MAY BE REQ'D



SECOND FLOOR KEY PLAN



2 PARTIAL FRAMING PLAN
ROOF FRAMING PLAN 1 : 150

EX. ROOF DESIGN LOADS	
LIVE LOAD	= 2.3 kPa
DEAD LOAD	= 1.2 kPa

FRAMING NOTES

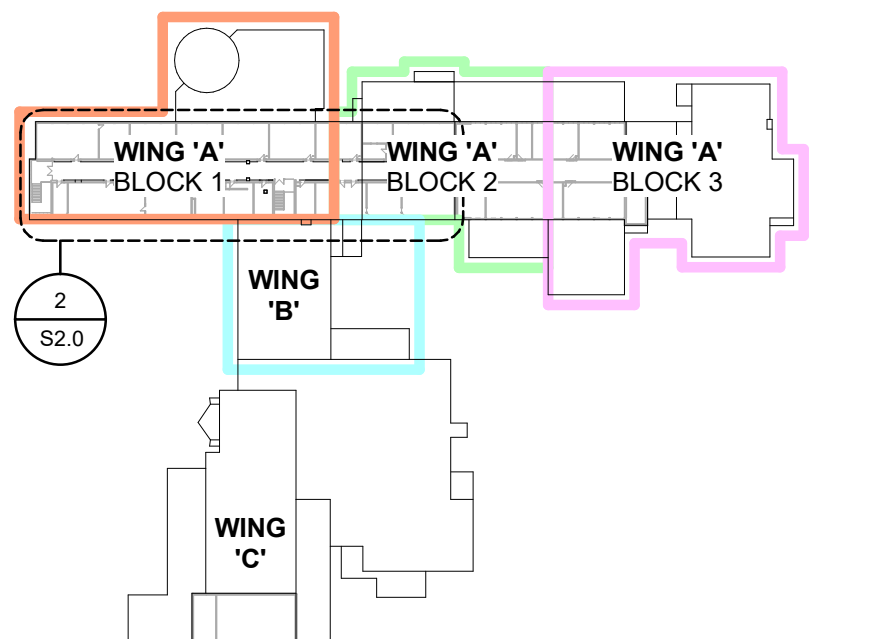
1. ALL ROOFTOP UNITS AND MECH. OPENINGS TO BE FRAMED W/ C130x10 (TYP. U.N.O.) REFER TO MECHANICAL DRAWINGS FOR EXACT UNIT LOCATION AND SIZE

CONTRACTOR TO
SITE VERIFY ALL
EX. CONDITIONS

ASSUMED EX. CONDITIONS AS
SHOWN, CONTRACTOR TO SITE
VERIFY FRAMING AND REPORT BACK
TO WDE IF SITE CONDITIONS VARY

EX. ROOF FRAMING
SUPPORTING NEW MECH. UNITS
TO BE SITE VERIFIED, ROOF
REINFORCING MAY BE REQ'D

CONTACT WDE IF NEW
WALL PENETRATIONS ARE
REQ'D FOR DUCTWORK



THIRD FLOOR KEY PLAN

AIR HANDLING UNIT SCHEDULE

Item	Type	Supply Air Fan Array Data										Return/Exhaust Air Fan Array Data										VRF ASHP COIL										HOT WATER COIL										ENERGY RECOVERY										Manufacturer	Model	Alternate Manufacturers	Remarks
		Capacity cfm	ESP in	Drive	Size hp	Electrical Data	MCA	MOCP	Capacity cfm	ESP in	Drive	Size hp	Electrical Data	MCA	MOCP	Medium	Type	Sens.Cap. BTU/HR	Total Cap. BTU/HR	Ent. Air db	LVR Air °F db/°b °F	PD, Air in.	Face Vel fpm	Hot Gas Lat °F	Reheat db °F	Medium	Capacity BTU/HR	Ent °F db	LVR Air °F db	Face Vel fpm	PD, Air in.	Ent. Fluid °F	LVR Fluid °F	Flow Rate gpm	PD, Fluid ft.hd	Type	Model	Heating Capacity (BTU/HR) @ -5° db / -6° wb	Effectiveness Heating (%)	Cooling Capacity (BTU/HR) @ 82° db / 74° wb	Effectiveness Cooling (%)	Net Airflow CFM (SUPPLY)	Net Airflow CFM (EXHAUST)												
AHU-1	INDOOR AIR HANDLING UNIT - 3RD FLOOR	8000	1.2	ECM (2)/VFD	6.7	208/3/60	37.4	50	6000	1.0	ECM (2)/VFD	3.8	208/3/60	20	25	DX	RA104	250,366	423,600	83.1/70.0	54.5/53.3	0.78	435	70		WATER	767,702	-5	82.8	381	0.12	170.0	149.4	80.1	9.9	WHEEL	SKA-1750-MS	493,079	80.32	199,534	78.64	8000	6000	DAIKIN	CAH0220DCH	ENG AIR VALENT	CONNECT TO CU-3A/B/C/D								

PLUMBING FIXTURE SCHEDULE

Item	Type	Connection Sizes					Fixture		Trim		Accessories	
		HW	CW	TW	Drain	Vent	Acceptable Manufacturer	Fixture Description	Acceptable Manufacturer	Trim Description	Acceptable Manufacturer	Accessory Description
HD-1	HUB DRAIN				NOTED 1 1/2"		ZURN Z415 C/W Z-400-S MIFAB F1100-C-DD CONTOUR C2000-F WATTS FD-100-C-DD	GENERAL DUTY HUB DRAIN CAST IRON BODY, CLAMPING COLLAR, NICKEL-BRONZE ADJUSTABLE HEAD HUB. C/W TRAP PRIMER.				

PUMP SCHEDULE

Item	Type	Capacity USgpm	Head ft	Size	Electrical Voltage	Manufacturer & Model	Alternate Manufacturers	Remarks
P-11	AHU HEATING COIL PUMP	80	40	3 HP	208/3/60	BELL & GOSSETT EDCORC XL 110-180	ARMSTRONG	C/W ECM MOTOR

CONDENSATE PUMP SCHEDULE

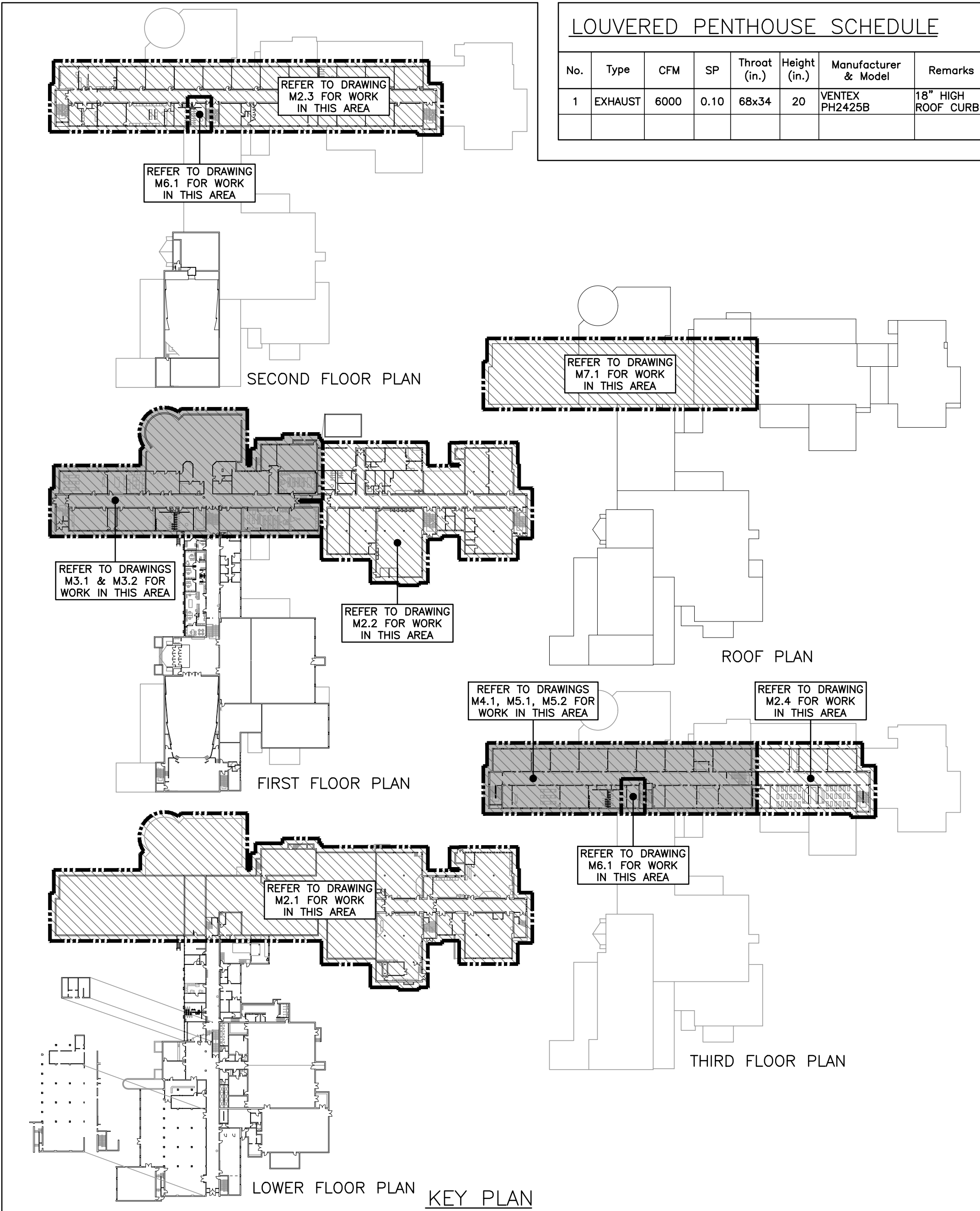
Item	Type	Capacity USgph	Head ft	Size	Electrical Voltage	Manufacturer & Model	Alternate Manufacturers	Remarks
CP-1	CONDENSATE PUMP	6.0	10	0.2A	208/1/60	ASPEN MAXI ORANGE	LITTLE GIANT	C/W ANTI-SIPHON KIT. POWERED THROUGH AC UNIT
CP-2	CONDENSATE PUMP	10	15	0.5A	208/1/60	LITTLE GIANT VCM20	ASPEN	C/W ANTI-SIPHON KIT.

SUMP PUMP SCHEDULE

Item	Type	Capacity USgpm	Head ft	Size hp	Electrical Voltage	Speed rpm	Manufacturer & Model	Alternate Manufacturers	Remarks
SMP-1	DUPLEX SAN SUMP PUMP	2@20	25	2@3/4	208/3/60	3450	MYERS WHR7H-03	BARNES, GRUNDFOS	C/W CONTROL PANEL, FLOATS, 900mm ϕ FIBERGLASS SUMP, AND LID WITHIN A LID. REFER TO SPECIFICATION, INTERLOCK LOCAL ALARM TO SECURITY FOR ON-CALL RESPONSE.

LOUVERED PENTHOUSE SCHEDULE

No.	Type	CFM	SP	Throat (in.)	Height (in.)	Manufacturer & Model	Remarks
1	EXHAUST	6000	0.10	68x34	20	VENTEX PH2425B	18" HIGH ROOF CURB



VRF INDOOR SCHEDULE

Item	Type	Capacity	Cooling	Heating	Electrical			Manufacturer (or Approved Alternate)	Remarks	
		tons	Capacity MBH	Capacity MBH	Voltage	MCA	MOCP			
DS-1	WALL MOUNTED AC UNIT	2.0	635	24	26.5	208/1/60	0.6	15	DAIKIN FXAQ24PVJU	CONNECT TO CU-1
DS-2	WALL MOUNTED AC UNIT	1.0	290	12	13.5	208/1/60	0.4	15	DAIKIN FXAQ12PVJU	CONNECT TO CU-1
DS-3	WALL MOUNTED AC UNIT	2.0	635	24	26.5	208/1/60	0.6	15	DAIKIN FXAQ24PVJU	CONNECT TO CU-1
DS-4	WALL MOUNTED AC UNIT	2.0	635	24	26.5	208/1/60	0.6	15	DAIKIN FXAQ24PVJU	CONNECT TO CU-1
DS-5	WALL MOUNTED AC UNIT	2.0	635	24	26.5	208/1/60	0.6	15	DAIKIN FXAQ24PVJU	CONNECT TO CU-1
DS-6	WALL MOUNTED AC UNIT	2.0	635	24	26.5	208/1/60	0.6	15	DAIKIN FXAQ24PVJU	CONNECT TO CU-1
DS-7	WALL MOUNTED AC UNIT	2.0	635	24	26.5	208/1/60	0.6	15	DAIKIN FXAQ24PVJU	CONNECT TO CU-1
DS-8	WALL MOUNTED AC UNIT	1.0	290	12	13.5	208/1/60	0.4	15	DAIKIN FXAQ12PVJU	CONNECT TO CU-1
DS-9	WALL MOUNTED AC UNIT	2.0	635	24	26.5	208/1/60	0.6	15	DAIKIN FXAQ24PVJU	CONNECT TO CU-1
DS-10	WALL MOUNTED AC UNIT	1.0	290	12	13.5	208/1/60	0.4	15	DAIKIN FXAQ12PVJU	CONNECT TO CU-1
DS-11	WALL MOUNTED AC UNIT	2.0	635	24	26.5	208/1/60	0.6	15	DAIKIN FXAQ24PVJU	CONNECT TO CU-2
DS-12	WALL MOUNTED AC UNIT	2.0	635	24	26.5	208/1/60	0.6	15	DAIKIN FXAQ24PVJU	CONNECT TO CU-2
DS-13	WALL MOUNTED AC UNIT	2.0	635	24	26.5	208/1/60	0.6	15	DAIKIN FXAQ24PVJU	CONNECT TO CU-2
DS-14	WALL MOUNTED AC UNIT	2.0	635	24	26.5	208/1/60	0.6	15	DAIKIN FXAQ24PVJU	CONNECT TO CU-2

VRF BRANCH SELECTOR BOX SCHEDULE

Item	Type	Max. Port Capacity MBH	Electrical			Manufacturer & Model	Alternate Manufacturers	Remarks
			Voltage	MCA	MOCP			
BSB-3A	6-PORT	54	208/1/60	0.6	15	DAIKIN BSF6Q54TAVJ	Mitsubishi, LG	LOW PROFILE MODEL, MAX 250mm HEIGHT. CONNECT TO CU-3A
BSB-3B	6-PORT	54	208/1/60	0.6	15	DAIKIN BSF6Q54TAVJ	Mitsubishi, LG	LOW PROFILE MODEL, MAX 250mm HEIGHT. CONNECT TO CU-3B

VRF HEAT PUMP UNIT SCHEDULE

Item	Type	Nom. Tons	Cooling Capacity		Heating Capacity		Refrigerant		Connected Capacity Ratio %	Electrical			Manufacturer & Model	Remarks	
			Corrected* MBH @95°F (db)	Rated EER/IEER (Ducted)	Ambient Temp. °F (db)	Corrected* MBH @Ambient	COP @47°F /17°F	Type		Factory Charge lbs	Voltage	MCA			MOP
CU-1	VRF HEAT PUMP UNIT	20	225.8	9.8/18.0	47.0 -4.0 -13.0	262.8 127.5 111.6	3.3/2.2	R-410A	25.79	85.0	208/3/60	73.7	80	DAIKIN RXYQ240AATJB	C/W SNOW/WIND HOODS BY SAME MANUFACTURER, BIG FOOT STAND AND VIBRATION ISOLATION
CU-2	VRF HEAT PUMP UNIT	10	117.8	11.1/19.3	47.0 -4.0 -13.0	131.9 76.7 67.1	3.4/2.3	R-410A	25.35	80.0	208/3/60	36.5	40	DAIKIN RXYQ120AATJB	C/W SNOW/WIND HOODS BY SAME MANUFACTURER, BIG FOOT STAND AND VIBRATION ISOLATION
CU-3A	VRF HEAT PUMP UNIT	10	120.1	12.3/22.6	47.0 -3.5 -13.0	141.0 77.6 68.0	3.8/2.5	R-410A	25.8	90.0	575/3/60	18.2	25	DAIKIN RXYQ120XAYCB	C/W SNOW/WIND HOODS BY SAME MANUFACTURER, BIG FOOT STAND AND VIBRATION ISOLATION
CU-3B	VRF HEAT PUMP UNIT	10	120.1	12.3/22.6	47.0 -3.5 -13.0	141.0 77.6 68.0	3.8/2.5	R-410A	25.8	90.0	575/3/60	18.2	25	DAIKIN RXYQ120XAYCB	C/W SNOW/WIND HOODS BY SAME MANUFACTURER, BIG FOOT STAND AND VIBRATION ISOLATION
GENERAL VRF SYSTEM OUTDOOR UNIT NOTES:										2. NOMINAL RATED COOLING AND HEATING CAPACITIES ARE RATED CAPACITIES FOR OUTDOOR EQUIPMENT RATED IN ACCORDANCE WITH AHRI 1230.					
1. EQUIPMENT EFFICIENCY INDICATED IN HEATING IS RATED COP AT TWO DIFFERENT OUTDOOR AIR TEMPERATURES FOR EQUIPMENT CONNECTED TO DUCTLESS/INDOOR FAN COIL UNITS AND DUCTED INDOOR AIR HANDLING UNIT.										3. CORRECTED COOLING AND HEATING CAPACITIES ARE MINIMUM PERMITTED CAPACITIES AS CORRECTED FOR SPECIFIC SYSTEM GEOMY.					

GENERAL VRF SYSTEM OUTDOOR UNIT NOTES:
 1. EQUIPMENT EFFICIENCY INDICATED IN HEATING IS RATED COP AT TWO DIFFERENT OUTDOOR AIR TEMPERATURES FOR EQUIPMENT CONNECTED TO DUCTLESS INDOOR FAN COIL UNITS AND DUCTED INDOOR AIR HANDLING UNIT.
 2. NOMINAL RATED COOLING AND HEATING CAPACITIES ARE RATED CAPACITIES FOR OUTDOOR EQUIPMENT RATED IN ACCORDANCE WITH AHRI 1230.
 3. CORRECTED COOLING AND HEATING CAPACITIES ARE MINIMUM PERMITTED CAPACITIES AS CORRECTED FOR SPECIFIC SYSTEM GEOMETRY.

FAN SCHEDULE

Item	Type	Capacity cfm	ESP in wc	Fan Speed rpm	Motor		Acceptable Manufacturer		Description
					hp	Voltage			
EF-1	ROOF EXHAUST FAN (W/Rs)	950	0.75	1596	1/3	120/1/60	GREENHECK	GB100	SPUN ALUMINUM MOTOR COVER & FAN SHROUD, DOWN DISCHARGE, W/BELT DRIVE CENTRIFUGAL BACKWARD INCLINED FAN, GALV BIRD SCREEN, 24" HIGH INSULATED ROOF CURB, & BACKDRAFT DAMPER
GENERAL FAN NOTES: 1. ACCEPTABLE MANUFACTURERS: GREENHECK, PENN-BARRY, COOK, CARNES, ACME, TWIN CITY, JENCO, BUFFALO. (CEILING FANS: BROAN, GREENHECK, ZONEX) 2. PROVIDE 24" TALL PREFABRICATED, INSULATED ROOF CURB FOR ALL ROOF MOUNTED FANS.									

GENERAL FAN NOTES:
 1. ACCEPTABLE MANUFACTURERS: GREENHECK, PENN-BARRY, COOK, CARNES, ACME, TWIN CITY, JENCO, BUFFALO. (CEILING FANS: BROAN, GREENHECK, ZONEX)
 2. PROVIDE 24" TALL PREFABRICATED, INSULATED ROOF CURB FOR ALL ROOF MOUNTED FANS.

GRILLE SCHEDULE

Item	Type	Equalizing Grid	Volume Damper	Acceptable Manufacturer	Description
E1	EXHAUST GRILLE (DUCTED)	NO	YES	EH PRICE 80-FA	1/2x1/2x1/2 ALUMINUM EGGRATE CORE, C/W 1 1/4" FLAT BORDER & SCREWED FASTENING FOR SURFACE MOUNTING.
GENERAL DIFFUSER/GRILLE NOTES:					
1. ACCEPTABLE MANUFACTURERS: EH PRICE, NAILOR, TITUS, KRUEGER, CARNES, METALAIR, TUTTLE & BAILEY					
2. GRILLE COLOURS ARE SELECTED BY ARCHITECT FROM STANDARD COLOUR CHART, UNLESS OTHERWISE NOTED.					
3. PAINT INTERIOR OF DUCTWORK BEHIND GRILLE MATT BLACK (WHERE VISIBLE THRU GRILLE).					

GENERAL DIFFUSER/GRILLE NOTES:
 1. ACCEPTABLE MANUFACTURERS: EH PRICE, NAILOR, TITUS, KRUEGER, CARNES, METALAIRE, TUTTLE & BAILEY
 2. GRILLE COLOURS ARE SELECTED BY ARCHITECT FROM STANDARD COLOUR CHART, UNLESS OTHERWISE NOTED.
 3. PAINT INTERIOR OF DUCTWORK BEHIND GRILLE MATT BLACK (WHERE VISIBLE THRU GRILLE).

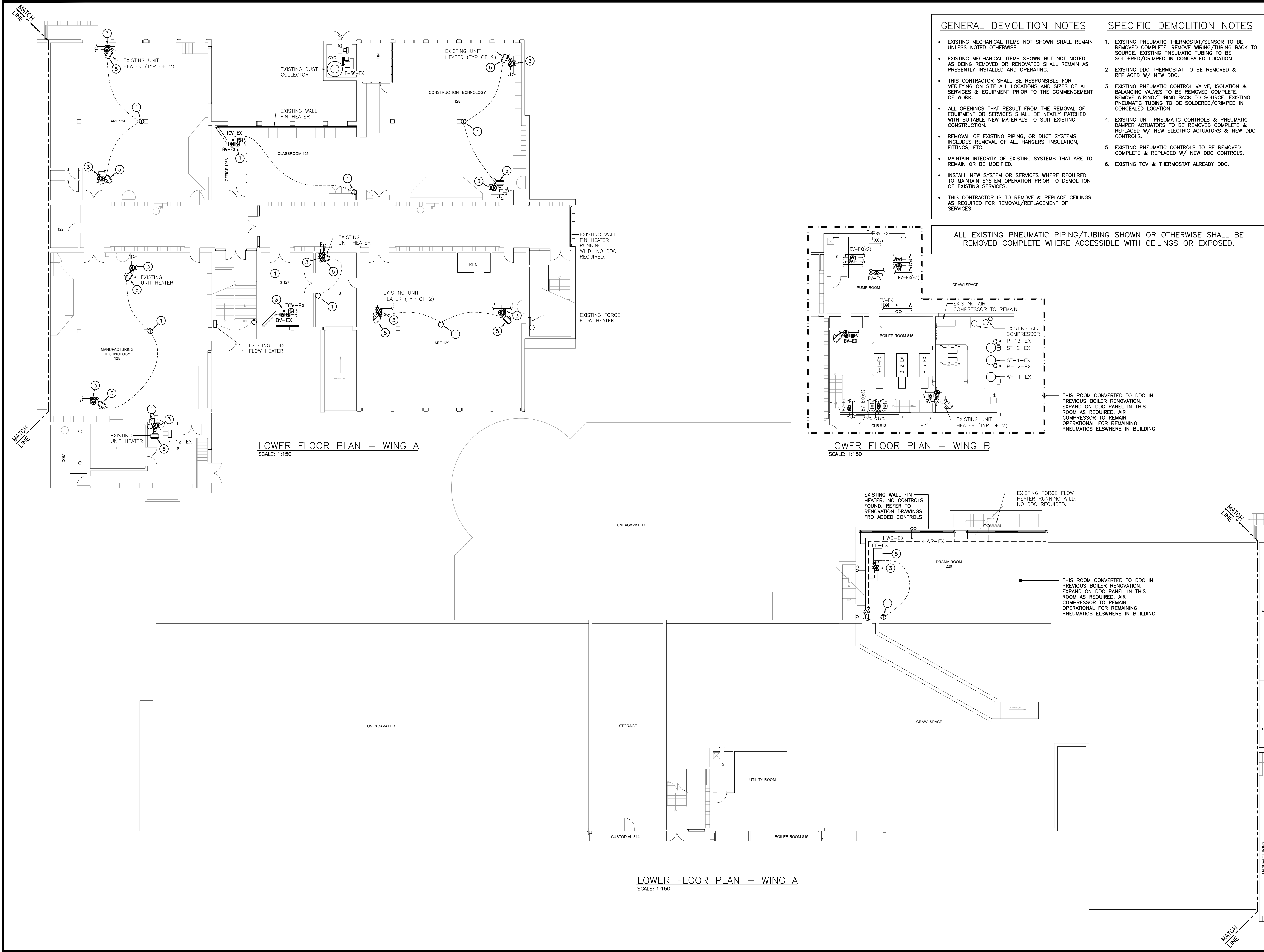
MECHANICAL LEGEND

Item	Description	Item	Description
-----	ITEM TO BE REMOVED		BUTTERFLY VALVE
+	CUT EXISTING & CONNECT NEW PIPING	NC	3-WAY MIXING VALVE
▶	FLOW DIRECTION	NO	3-WAY DIVERTING VALVE
- SAN-EX -	EXISTING SAN ABOVE FLOOR	Ⓜ	MOTORIZED VALVE ACTUATOR
- SAN-EX -	EXISTING SAN BELOW FLOOR	Ⓜ	CONTROL VALVE ACTUATOR
- SAN -	SANITARY ABOVE FLOOR	Ⓜ	SOLENOID VALVE
- SAN -	SANITARY BELOW FLOOR	Ⓜ	VALVE ON RISER
- STM-EX -	EXISTING STM ABOVE FLOOR	Ⓜ	BALANCING VALVE
- STM-EX -	EXISTING STM BELOW FLOOR	Ⓜ	INLINE PUMP
- STM -	STORM ABOVE FLOOR	TCV	2-WAY TEMPERATURE CONTROL VALVE
- STM -	STORM BELOW FLOOR	TCV	3-WAY TEMPERATURE CONTROL VALVE
- CD -	CONDENSATE DRAIN	CO	FLOOR CLEANOUT
- V -	VENT	CO	LINE CLEANOUT
- RL -	REFRIGERANT LIQUID	Ⓜ	THERMOMETER
- RS -	REFRIGERANT SUCTION	FS	FLOW SWITCH
FD	FLOOR DRAIN	Ⓜ	THERMOSTAT (WITH GUARD WHERE INDICATED)
- TP -	TRAP PRIMER	→→→→	TURNING VANES
- TG -	TRAP GUARD	Ⓜ	SUPPLY AIR DUCT
+	TEE CONNECTION	Ⓜ	RETURN/EXHAUST AIR DUCT
-	PIPE DOWN	Ⓜ	ACOUSTIC DUCT LINING
-	PIPE UP	Ⓜ	THERMAL INSULATION
-	FLEXIBLE CONNECTION	BD	BALANCING DAMPER
-	REDUCER/INCREASER	Ⓜ	MOTORIZED DAMPER
-	CHECK VALVE	FD	FIRE DAMPER
Ⓜ	DOUBLE CHECK BACKFLOW PREVENTOR	Ⓜ	RECTANGULAR DUCTWORK
Ⓜ	REDUCED PRESSURE BACKFLOW PREVENTOR	Ⓜ	RIGID ROUND DUCT
	UNION	Ⓜ	DIFFUSER/GRILLE SIZE (mp), TYPE & CAPACITY (cfm)
Ⓜ	STRAINER	RIC	RETURN IN CABINET
+	SCREWED OR WELDED PIPE CAP	AFF	ABOVE FINISHED FLOOR
NO	NORMALLY OPEN	AFR	ABOVE FINISHED ROOF
NC	NORMALLY CLOSED	EX	EXISTING DUCT (SIZE AS INDICATED)
Ⓜ	BALL VALVE	Ⓜ	TRANSFER DUCT (SIZE AS INDICATED)

GENERAL NOTES

- ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE PREPARED SPECIFICATION.
- THIS CONTRACTOR SHALL TRACK REVISIONS ON SITE AND SUBMIT AS-BUILTS TO CONSULTANT TO DIGITIZE. REFER TO SPECIFICATION 20.02.51.
- ALL PIPING, DUCTWORK, AND EQUIPMENT IS TO BE RESTRAINED TO MEET SEISMIC CODE REQUIREMENTS. SUPPLY AND INSTALL ALL SEISMIC RESTRAINT MATERIALS TO MANUFACTURER'S WRITTEN INSTRUCTIONS. REFER TO SPECIFICATION.
- SANITARY VENT PIPING IS NOT SHOWN. PROVIDE ALL NECESSARY VENT PIPING FROM ALL FIXTURES FOR A COMPLETE SYSTEM TO ALL LOCAL PLUMBING CODE & LOCAL AUTHORITY REQUIREMENTS, CONNECTED TO EXISTING VENTS OR NEW VENTS AS REQUIRED. CO-ORDINATE VENT LOCATION(S) WITH GENERAL CONTRACTOR. MAINTAIN MIN 14"-0" FROM ANY AIR INLET (25"-0" FOR LONG TERM CARE/HOSPITALS). INSTALL VENT PIPING HIGH IN JOIST SPACE.
- WHERE DUCTWORK PENETRATES CORRIDOR WALL, CENTER DUCT(S) BETWEEN OWS.
- CO-ORDINATE WITH THE GENERAL CONTRACTOR ANY OWS BRIDGING/CROSS BRACING RELOCATION OR REMOVAL/REPLACEMENT REQUIRED FOR INSTALLATION OF DUCTWORK.
- UPON COMPLETION OF THE PROJECT OR UPON COMPLETION OF EACH INDIVIDUAL PHASE OF THE PROJECT THE CONTRACTORS SHALL PROVIDE THE FOLLOWING CERTIFICATES BEFORE CONFORMANCE LETTERS ARE ISSUED BY THE CONSULTANT:
 - TSSA CERTIFICATE OF AUTHORIZATION FOR SPLIT AIR CONDITIONING SYSTEMS (EXCEEDING 5 TONS) ALL CERTIFICATES ARE TO BE SUBMITTED TOGETHER IN A SINGLE PACKAGE.

The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work.
 The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.
 The drawings do not indicate all offsets fitting and accessories which may be required. Provide the same to meet the required conditions.
 Drawings and specifications, etc., prepared and issued by the Consultant are the property of the Consultant and must be returned at the completion of the project. These documents are not to be duplicated or copied without the consent of the Consultant.
 Do not scale this drawing.
 © 2025 DEI Consulting Engineers Inc.

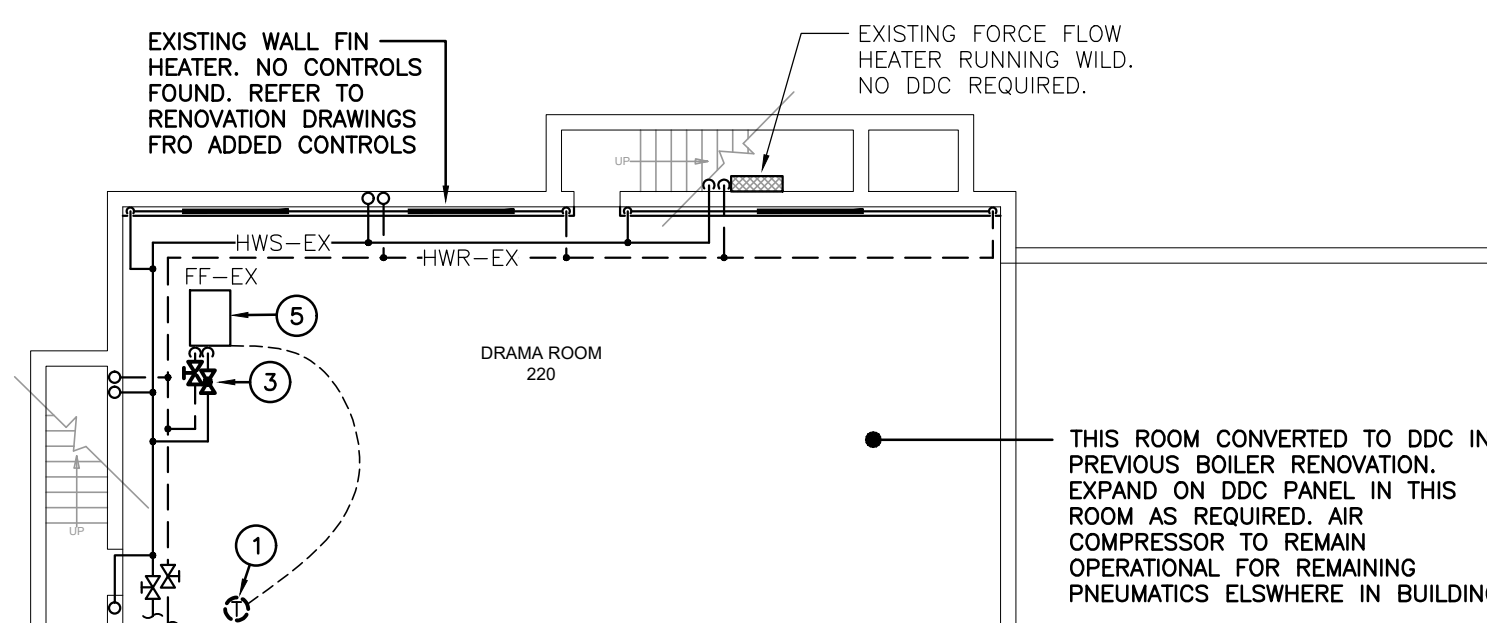
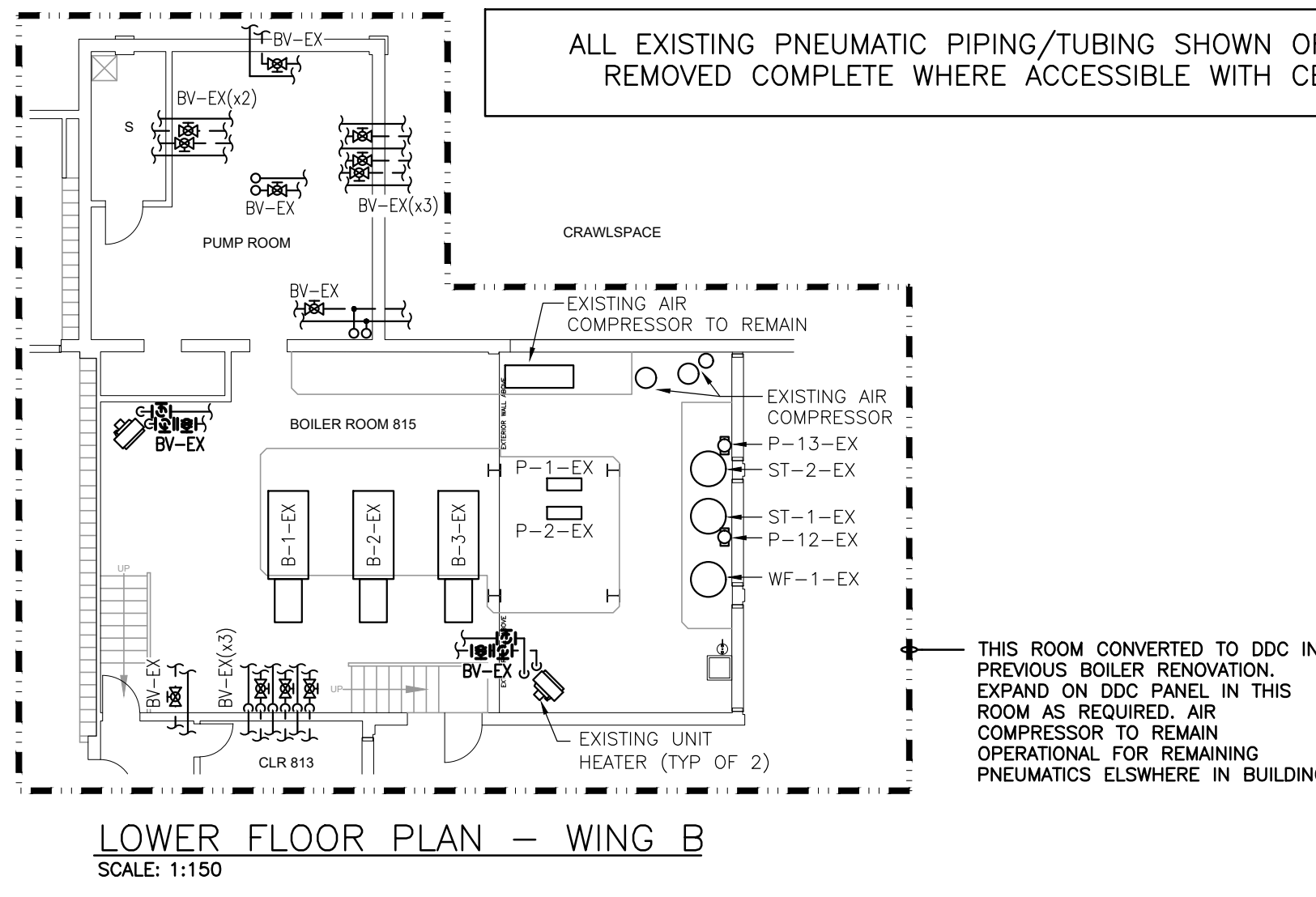


- ### GENERAL DEMOLITION NOTES

 - EXISTING MECHANICAL ITEMS NOT SHOWN SHALL REMAIN UNLESS NOTED OTHERWISE.
 - EXISTING MECHANICAL ITEMS SHOWN BUT NOT NOTED AS BEING REMOVED OR RENOVATED SHALL REMAIN AS PRESENTLY INSTALLED AND OPERATING.
 - THIS CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ON SITE ALL LOCATIONS AND SIZES OF ALL SERVICES & EQUIPMENT PRIOR TO THE COMMENCEMENT OF WORK.
 - ALL OPENINGS THAT RESULT FROM THE REMOVAL OF EQUIPMENT OR SERVICES SHALL BE NEATLY PATCHED WITH SUITABLE NEW MATERIALS TO SUIT EXISTING CONSTRUCTION.
 - REMOVAL OF EXISTING PIPING, OR DUCT SYSTEMS INCLUDES REMOVAL OF ALL HANGERS, INSULATION, FITTINGS, ETC.
 - MAINTAIN INTEGRITY OF EXISTING SYSTEMS THAT ARE TO REMAIN OR BE MODIFIED.
 - INSTALL NEW SYSTEM OR SERVICES WHERE REQUIRED TO MAINTAIN SYSTEM OPERATION PRIOR TO DEMOLITION OF EXISTING SERVICES.
 - THIS CONTRACTOR IS TO REMOVE & REPLACE CEILINGS AS REQUIRED FOR REMOVAL/REPLACEMENT OF SERVICES.
- ### SPECIFIC DEMOLITION NOTES

 - EXISTING PNEUMATIC THERMOSTAT/SENSOR TO BE REMOVED COMPLETE. REMOVE WIRING/TUBING BACK TO SOURCE. EXISTING PNEUMATIC TUBING TO BE SOLDERED/CRIMPED IN CONCEALED LOCATION.
 - EXISTING DDC THERMOSTAT TO BE REMOVED & REPLACED W/ NEW DDC.
 - EXISTING PNEUMATIC CONTROL VALVE, ISOLATION & BALANCING VALVES TO BE REMOVED COMPLETE. REMOVE WIRING/TUBING BACK TO SOURCE. EXISTING PNEUMATIC TUBING TO BE SOLDERED/CRIMPED IN CONCEALED LOCATION.
 - EXISTING UNIT PNEUMATIC CONTROLS & PNEUMATIC DAMPER ACTUATORS TO BE REMOVED COMPLETE & REPLACED W/ NEW ELECTRIC ACTUATORS & NEW DDC CONTROLS.
 - EXISTING PNEUMATIC CONTROLS TO BE REMOVED COMPLETE & REPLACED W/ NEW DDC CONTROLS.
 - EXISTING TCV & THERMOSTAT ALREADY DDC.

ALL EXISTING PNEUMATIC PIPING/TUBING SHOWN OR OTHERWISE SHALL BE REMOVED COMPLETE WHERE ACCESSIBLE WITH CEILINGS OR EXPOSED.



The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work.
The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.
The drawings do not indicate all offsets fitting and accessories which may be required. Provide the same to meet the required conditions.
Drawings and specifications, etc., prepared and issued by the Consultant are the property of the Consultant and must be returned at the completion of the project. These documents are not to be duplicated or copied without the consent of the Consultant.
Do not scale this drawing.
© 2025 DEI Consulting Engineers Inc.

PROJECT NORTH

No.	REVISIONS	DATE

AREA OF WORK (LOWER FLOOR)

KEY PLAN

ISSUED FOR PERMIT/TENDER	2025.03.24
CHRONOLOGY	DATE

55 Northland Road,
Waterloo, ON, N2V 1Y9
Phone: 519 750 3555
Website: deiassociates.ca
Project Number: 2025

DEI Consulting Engineers

MECHANICAL | ELECTRICAL | AQUATIC

aba architects inc.
10 FERRIS BLVD. #100 WATERLOO, ONT. N2L 2P2

CLIENT

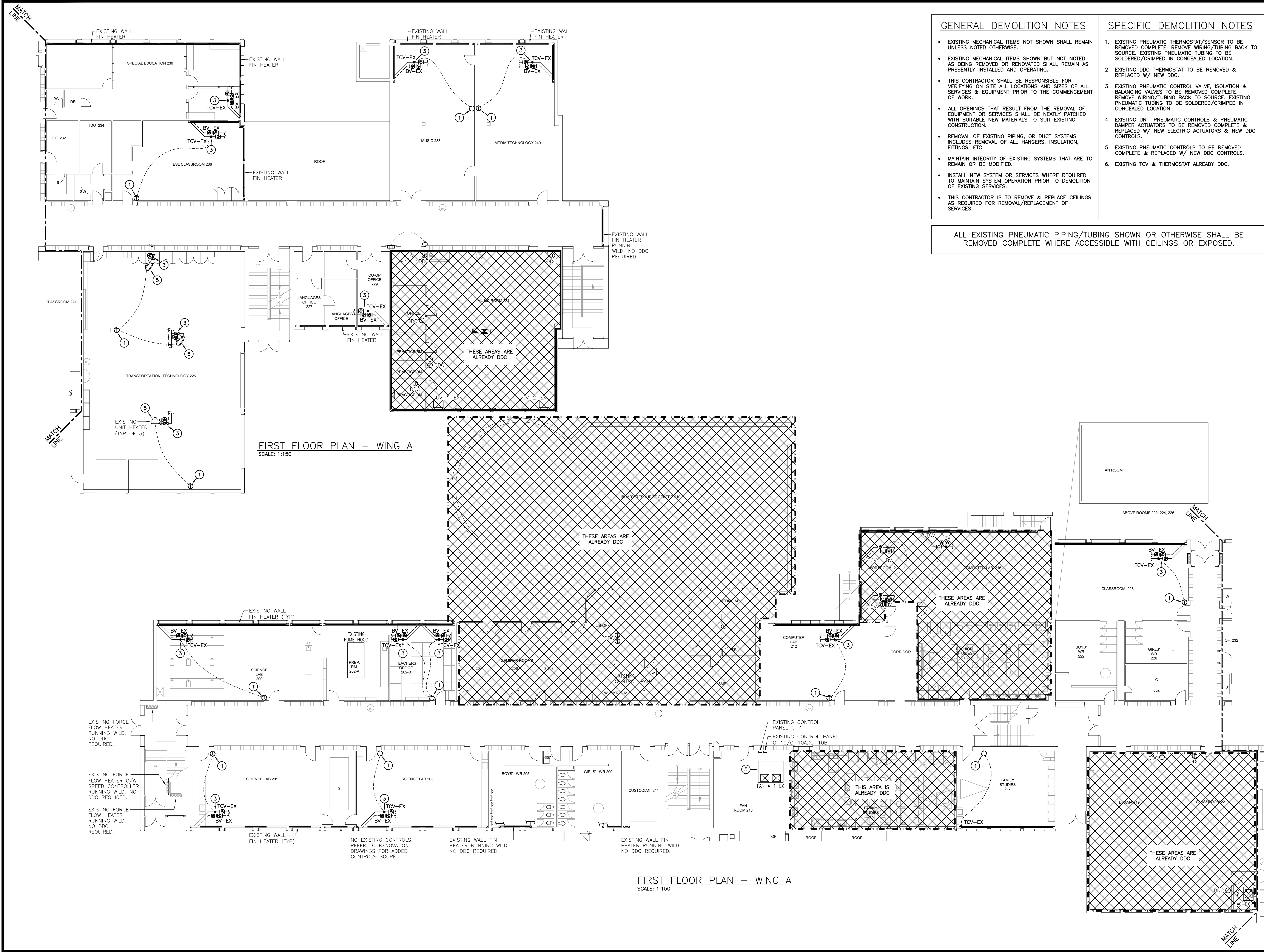
PROJECT NAME

WATERLOO COLLEGIATE INSTITUTE - HVAC UPGRADES
300 HAZEL ST., WATERLOO, ON, N2L 3P2

DRAWING TITLE

LOWER FLOOR PLAN WINGS A&B DDC DEMOLITION

SCALE	AS NOTED	M2.1
SHEET SIZE	24x36	
PROJECT NUMBER	2024-168	



- ### GENERAL DEMOLITION NOTES

 - EXISTING MECHANICAL ITEMS NOT SHOWN SHALL REMAIN UNLESS NOTED OTHERWISE.
 - EXISTING MECHANICAL ITEMS SHOWN BUT NOT NOTED AS BEING REMOVED OR RENOVATED SHALL REMAIN AS PRESENTLY INSTALLED AND OPERATING.
 - THIS CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ON SITE ALL LOCATIONS AND SIZES OF ALL SERVICES & EQUIPMENT PRIOR TO THE COMMENCEMENT OF WORK.
 - ALL OPENINGS THAT RESULT FROM THE REMOVAL OF EQUIPMENT OR SERVICES SHALL BE NEATLY PATCHED WITH SUITABLE NEW MATERIALS TO SUIT EXISTING CONSTRUCTION.
 - REMOVAL OF EXISTING PIPING, OR DUCT SYSTEMS INCLUDES REMOVAL OF ALL HANGERS, INSULATION, FITTINGS, ETC.
 - MAINTAIN INTEGRITY OF EXISTING SYSTEMS THAT ARE TO REMAIN OR BE MODIFIED.
 - INSTALL NEW SYSTEM OR SERVICES WHERE REQUIRED TO MAINTAIN SYSTEM OPERATION PRIOR TO DEMOLITION OF EXISTING SERVICES.
 - THIS CONTRACTOR IS TO REMOVE & REPLACE CEILINGS AS REQUIRED FOR REMOVAL/REPLACEMENT OF SERVICES.
- ### SPECIFIC DEMOLITION NOTES

 - EXISTING PNEUMATIC THERMOSTAT/SENSOR TO BE REMOVED COMPLETE. REMOVE WIRING/TUBING BACK TO SOURCE. EXISTING PNEUMATIC TUBING TO BE SOLDERED/CRIMPED IN CONCEALED LOCATION.
 - EXISTING DDC THERMOSTAT TO BE REMOVED & REPLACED W/ NEW DDC.
 - EXISTING PNEUMATIC CONTROL VALVE, ISOLATION & BALANCING VALVES TO BE REMOVED COMPLETE. REMOVE WIRING/TUBING BACK TO SOURCE. EXISTING PNEUMATIC TUBING TO BE SOLDERED/CRIMPED IN CONCEALED LOCATION.
 - EXISTING UNIT PNEUMATIC CONTROLS & PNEUMATIC DAMPER ACTUATORS TO BE REMOVED COMPLETE & REPLACED W/ NEW ELECTRIC ACTUATORS & NEW DDC CONTROLS.
 - EXISTING PNEUMATIC CONTROLS TO BE REMOVED COMPLETE & REPLACED W/ NEW DDC CONTROLS.
 - EXISTING TCV & THERMOSTAT ALREADY DDC.
- ALL EXISTING PNEUMATIC PIPING/TUBING SHOWN OR OTHERWISE SHALL BE REMOVED COMPLETE WHERE ACCESSIBLE WITH CEILINGS OR EXPOSED.

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

The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.

The drawings do not indicate all offsets fitting and accessories which may be required. Provide the same to meet the required conditions.

Drawings and specifications, etc., prepared and issued by the Consultant are the property of the Consultant and must be returned at the completion of the project. These documents are not to be duplicated or copied without the consent of the Consultant.

Do not scale this drawing.

© 2025 DEI Consulting Engineers Inc.

PROJECT NORTH

No.	REVISIONS	DATE

AREA OF WORK (FIRST FLOOR)

KEY PLAN

ISSUED FOR PERMIT/TENDER	2025.03.24
CHRONOLOGY	DATE

DEI
Consulting Engineers
MECHANICAL | ELECTRICAL | AQUATIC

55 Northland Road,
Waterloo, ON, N2V 1Y9
Phone: 519 745 3855
Website: deiassociates.ca
Project Number: 2025

aba architects inc.

100 Wellington Street West, Suite 1100
Waterloo, ON N2L 2R5

CLIENT

WATERLOO REGION DISTRICT SCHOOL BOARD

PROJECT NAME

WATERLOO COLLEGIATE INSTITUTE - HVAC UPGRADES

300 HAZEL ST., WATERLOO, ON, N2L 3P2

DRAWING TITLE

FIRST FLOOR PLAN WING A DDC DEMOLITION

SCALE

AS NOTED

SHEET SIZE

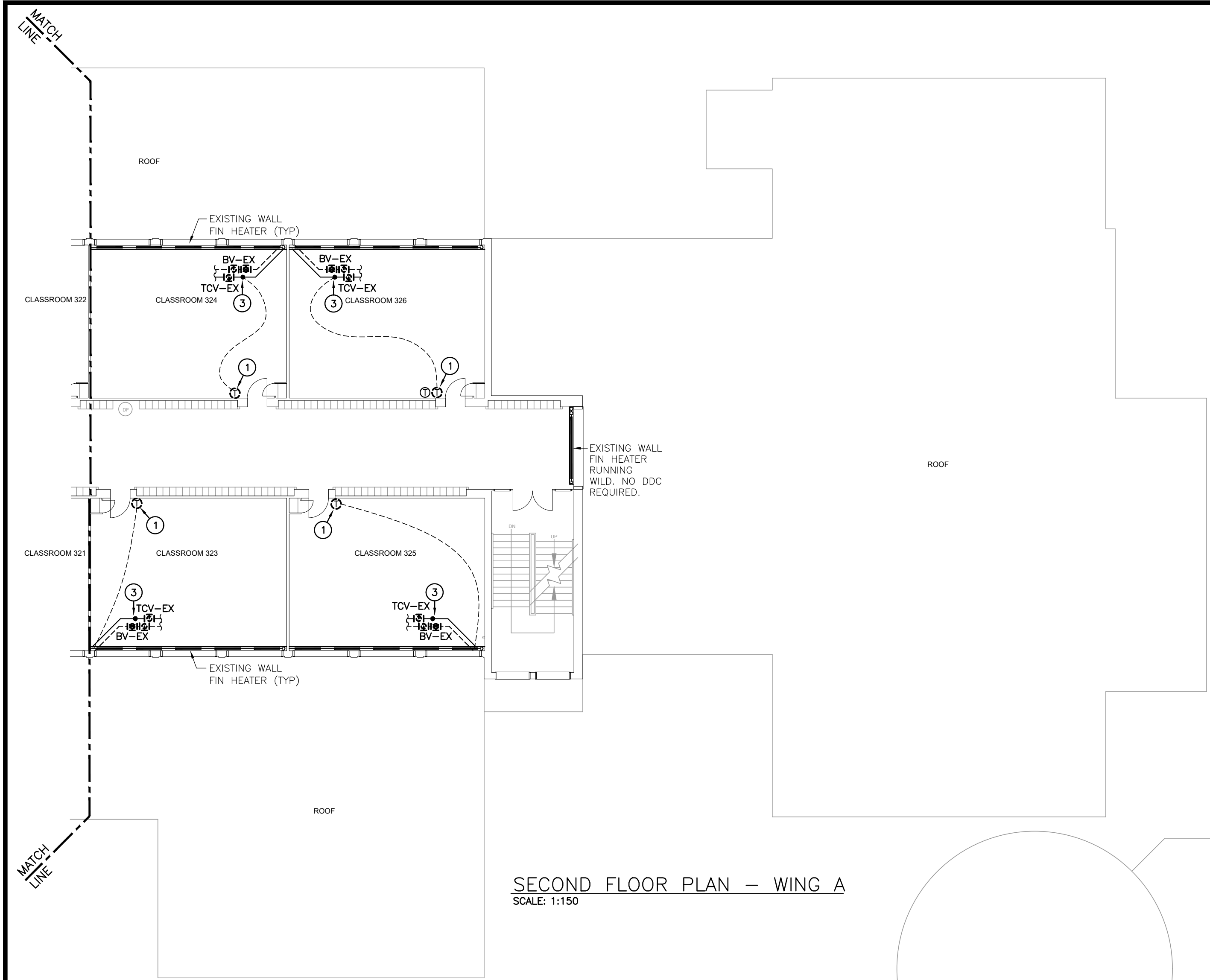
24x36

PROJECT NUMBER

2024-168

DRAWING NUMBER

M2.2



SECOND FLOOR PLAN – WING A
SCALE: 1:150

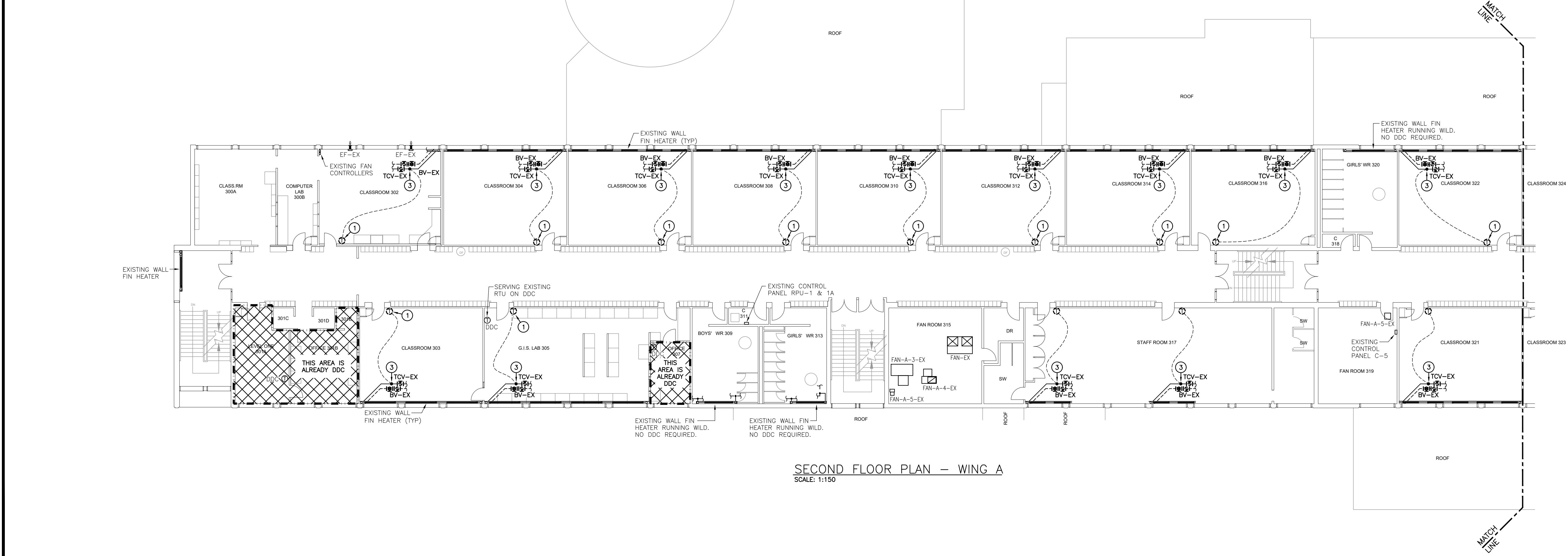
GENERAL DEMOLITION NOTES

- EXISTING MECHANICAL ITEMS NOT SHOWN SHALL REMAIN UNLESS NOTED OTHERWISE.
- EXISTING MECHANICAL ITEMS SHOWN BUT NOT NOTED AS BEING REMOVED OR RENOVATED SHALL REMAIN AS PRESENTLY INSTALLED AND OPERATING.
- THIS CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ON SITE ALL LOCATIONS AND SIZES OF ALL SERVICES & EQUIPMENT PRIOR TO THE COMMENCEMENT OF WORK.
- ALL OPENINGS THAT RESULT FROM THE REMOVAL OF EQUIPMENT OR SERVICES SHALL BE NEATLY PATCHED WITH SUITABLE NEW MATERIALS TO SUIT EXISTING CONSTRUCTION.
- REMOVAL OF EXISTING PIPING, OR DUCT SYSTEMS INCLUDES REMOVAL OF ALL HANGERS, INSULATION, FITTINGS, ETC.
- MAINTAIN INTEGRITY OF EXISTING SYSTEMS THAT ARE TO REMAIN OR BE MODIFIED.
- INSTALL NEW SYSTEM OR SERVICES WHERE REQUIRED TO MAINTAIN SYSTEM OPERATION PRIOR TO DEMOLITION OF EXISTING SERVICES.
- THIS CONTRACTOR IS TO REMOVE & REPLACE CEILINGS AS REQUIRED FOR REMOVAL/REPLACEMENT OF SERVICES.

SPECIFIC DEMOLITION NOTES

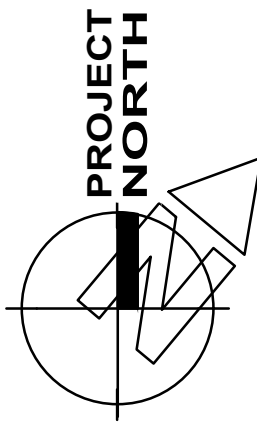
- EXISTING PNEUMATIC THERMOSTAT/SENSOR TO BE REMOVED COMPLETE. REMOVE WIRING/TUBING BACK TO SOURCE. EXISTING PNEUMATIC TUBING TO BE SOLDERED/CRIMPED IN CONCEALED LOCATION.
- EXISTING DDC THERMOSTAT TO BE REMOVED & REPLACED W/ NEW DDC.
- EXISTING PNEUMATIC CONTROL VALVE, ISOLATION & BALANCING VALVES TO BE REMOVED COMPLETE. REMOVE WIRING/TUBING BACK TO SOURCE. EXISTING PNEUMATIC TUBING TO BE SOLDERED/CRIMPED IN CONCEALED LOCATION.
- EXISTING UNIT PNEUMATIC CONTROLS & PNEUMATIC DAMPER ACTUATORS TO BE REMOVED COMPLETE & REPLACED W/ NEW ELECTRIC ACTUATORS & NEW DDC CONTROLS.
- EXISTING PNEUMATIC CONTROLS TO BE REMOVED COMPLETE & REPLACED W/ NEW DDC CONTROLS.
- EXISTING TCV & THERMOSTAT ALREADY DDC.

ALL EXISTING PNEUMATIC PIPING/TUBING SHOWN OR OTHERWISE SHALL BE REMOVED COMPLETE WHERE ACCESSIBLE WITH CEILINGS OR EXPOSED.

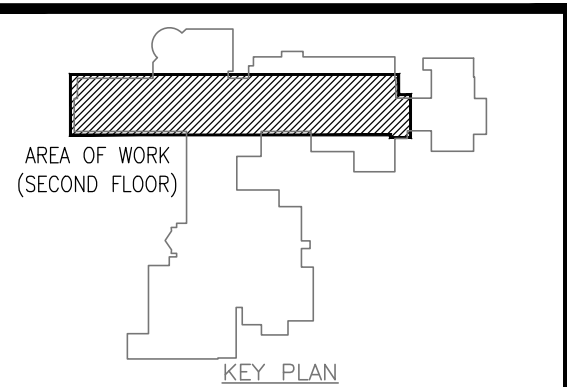
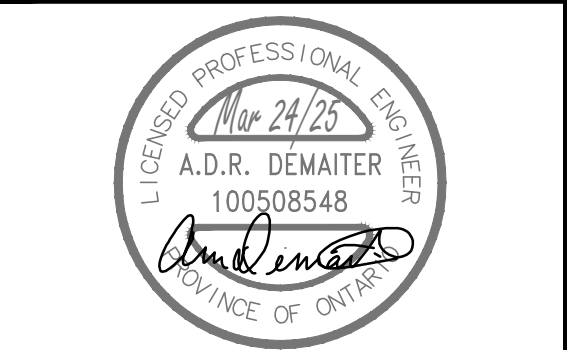


SECOND FLOOR PLAN – WING A
SCALE: 1:150

The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work.
The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.
The drawings do not indicate all offsets fitting and accessories which may be required. Provide the same to meet the required conditions.
Drawings and specifications, etc., prepared and issued by the Consultant are the property of the Consultant and must be returned at the completion of the project. These documents are not to be duplicated or copied without the consent of the Consultant.
Do not scale this drawing.
© 2025 DEI Consulting Engineers Inc.



No.	REVISIONS	DATE



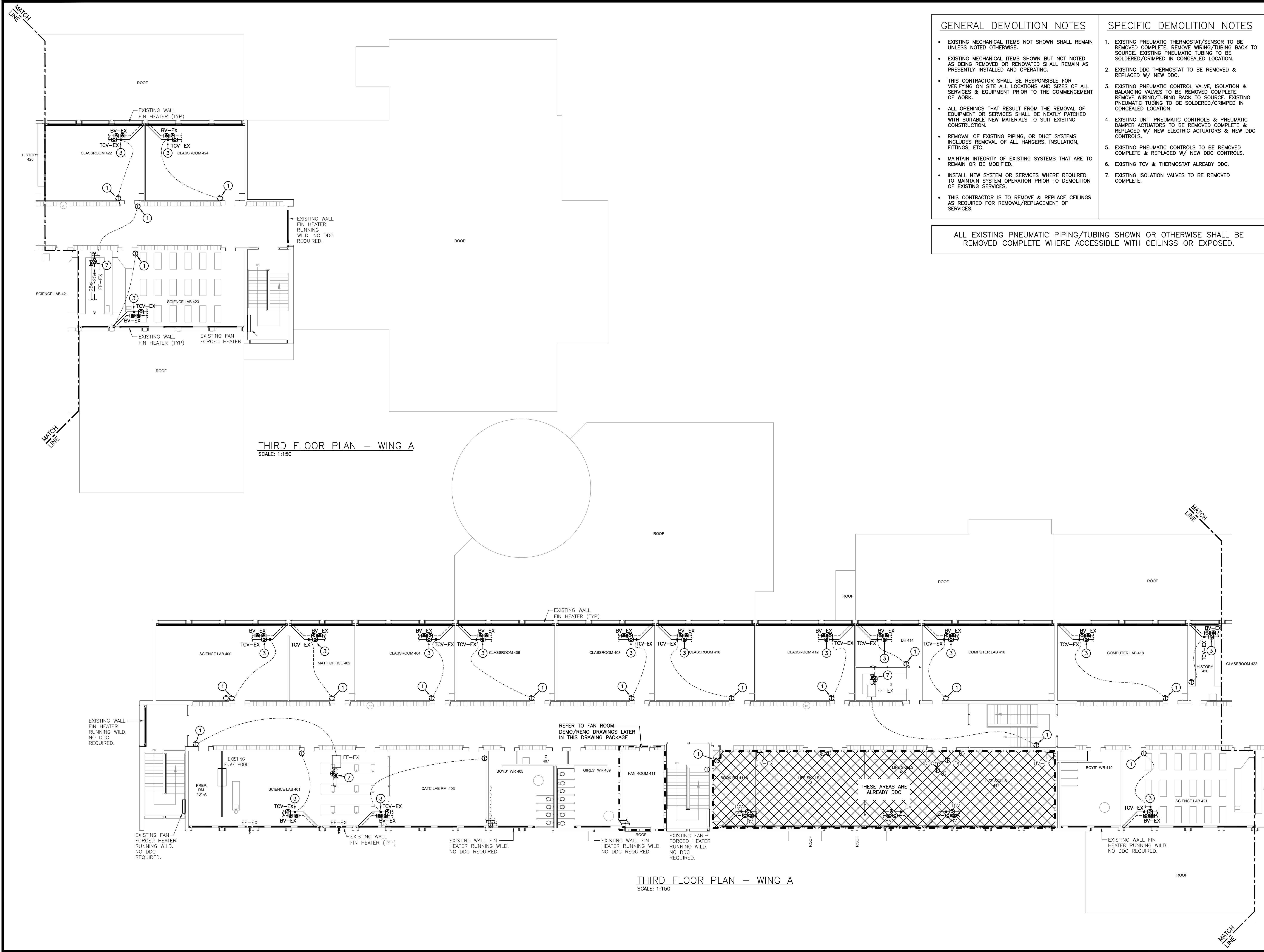
ISSUED FOR PERMIT/TENDER	2025.03.24
CHRONOLOGY	DATE



PROJECT NAME
WATERLOO COLLEGIATE INSTITUTE - HVAC UPGRADES
300 HAZEL ST., WATERLOO, ON, N2L 3P2

DRAWING TITLE
SECOND FLOOR PLAN WING A DDC DEMOLITION

SCALE	DRAWING NUMBER
AS NOTED	
SHEET SIZE 24x36	M2.3
PROJECT NUMBER 2024-168	



THIRD FLOOR PLAN – WING A
SCALE: 1:150

THIRD FLOOR PLAN – WING A
SCALE: 1:150

GENERAL DEMOLITION NOTES

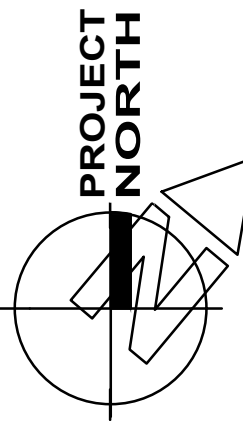
- EXISTING MECHANICAL ITEMS NOT SHOWN SHALL REMAIN UNLESS NOTED OTHERWISE.
- EXISTING MECHANICAL ITEMS SHOWN BUT NOT NOTED AS BEING REMOVED OR RENOVATED SHALL REMAIN AS PRESENTLY INSTALLED AND OPERATING.
- THIS CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ON SITE ALL LOCATIONS AND SIZES OF ALL SERVICES & EQUIPMENT PRIOR TO THE COMMENCEMENT OF WORK.
- ALL OPENINGS THAT RESULT FROM THE REMOVAL OF EQUIPMENT OR SERVICES SHALL BE NEATLY PATCHED WITH SUITABLE NEW MATERIALS TO SUIT EXISTING CONSTRUCTION.
- REMOVAL OF EXISTING PIPING, OR DUCT SYSTEMS INCLUDES REMOVAL OF ALL HANGERS, INSULATION, FITTINGS, ETC.
- MAINTAIN INTEGRITY OF EXISTING SYSTEMS THAT ARE TO REMAIN OR BE MODIFIED.
- INSTALL NEW SYSTEM OR SERVICES WHERE REQUIRED TO MAINTAIN SYSTEM OPERATION PRIOR TO DEMOLITION OF EXISTING SERVICES.
- THIS CONTRACTOR IS TO REMOVE & REPLACE CEILINGS AS REQUIRED FOR REMOVAL/REPLACEMENT OF SERVICES.

ALL EXISTING PNEUMATIC PIPING/TUBING SHOWN OR OTHERWISE SHALL BE REMOVED COMPLETE WHERE ACCESSIBLE WITH CEILINGS OR EXPOSED.

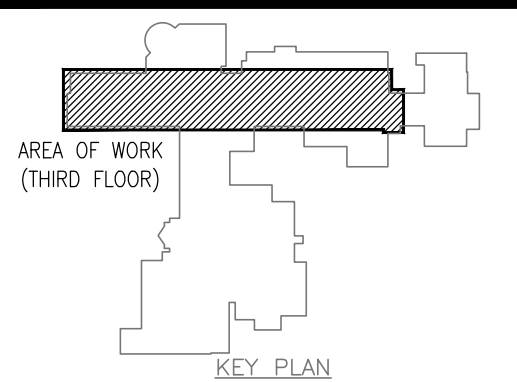
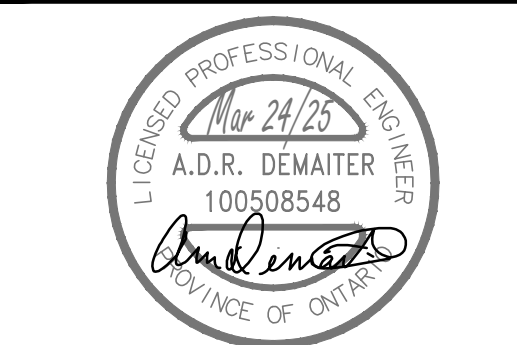
SPECIFIC DEMOLITION NOTES

- EXISTING PNEUMATIC THERMOSTAT/SENSOR TO BE REMOVED COMPLETE. REMOVE WIRING/TUBING BACK TO SOURCE. EXISTING PNEUMATIC TUBING TO BE SOLDERED/CRIMPED IN CONCEALED LOCATION.
- EXISTING DDC THERMOSTAT TO BE REMOVED & REPLACED W/ NEW DDC.
- EXISTING PNEUMATIC CONTROL VALVE, ISOLATION & BALANCING VALVES TO BE REMOVED COMPLETE. REMOVE WIRING/TUBING BACK TO SOURCE. EXISTING PNEUMATIC TUBING TO BE SOLDERED/CRIMPED IN CONCEALED LOCATION.
- EXISTING UNIT PNEUMATIC CONTROLS & PNEUMATIC DAMPER ACTUATORS TO BE REMOVED COMPLETE & REPLACED W/ NEW ELECTRIC ACTUATORS & NEW DDC CONTROLS.
- EXISTING PNEUMATIC CONTROLS TO BE REMOVED COMPLETE & REPLACED W/ NEW DDC CONTROLS.
- EXISTING TCV & THERMOSTAT ALREADY DDC.
- EXISTING ISOLATION VALVES TO BE REMOVED COMPLETE.

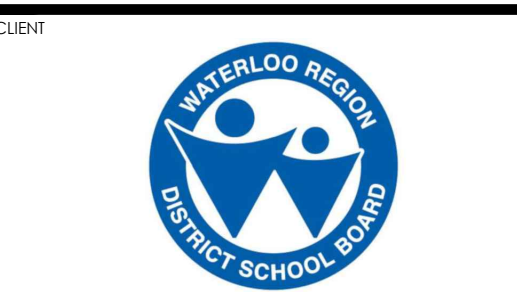
The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work.
The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.
The drawings do not indicate all offsets fitting and accessories which may be required. Provide the same to meet the required conditions.
Drawings and specifications, etc., prepared and issued by the Consultant are the property of the Consultant and must be returned at the completion of the project. These documents are not to be duplicated or copied without the consent of the Consultant.
Do not scale this drawing.
© 2025 DEI Consulting Engineers Inc.



No.	REVISIONS	DATE



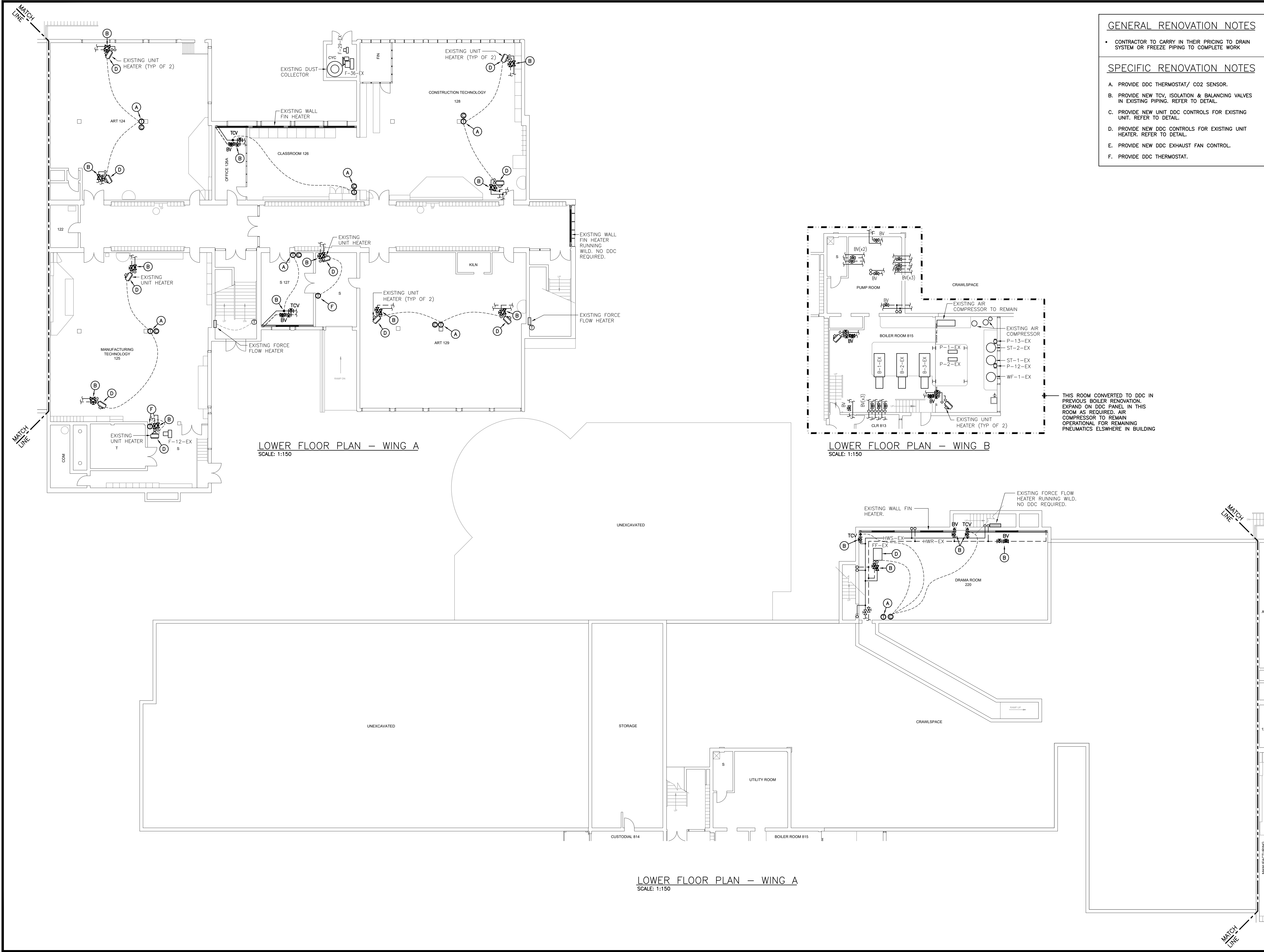
ISSUED FOR PERMIT/TENDER	2025.03.24
CHRONOLOGY	DATE



PROJECT NAME
WATERLOO COLLEGIATE INSTITUTE - HVAC UPGRADES
300 HAZEL ST., WATERLOO, ON, N2L 3P2

DRAWING TITLE
THIRD FLOOR PLAN WING A DDC DEMOLITION

SCALE	DRAWING NUMBER
AS NOTED	
SHEET SIZE 24x36	M2.4
PROJECT NUMBER 2024-168	



- GENERAL RENOVATION NOTES
- CONTRACTOR TO CARRY IN THEIR PRICING TO DRAIN SYSTEM OR FREEZE PIPING TO COMPLETE WORK

- SPECIFIC RENOVATION NOTES
- PROVIDE DDC THERMOSTAT/ CO2 SENSOR.

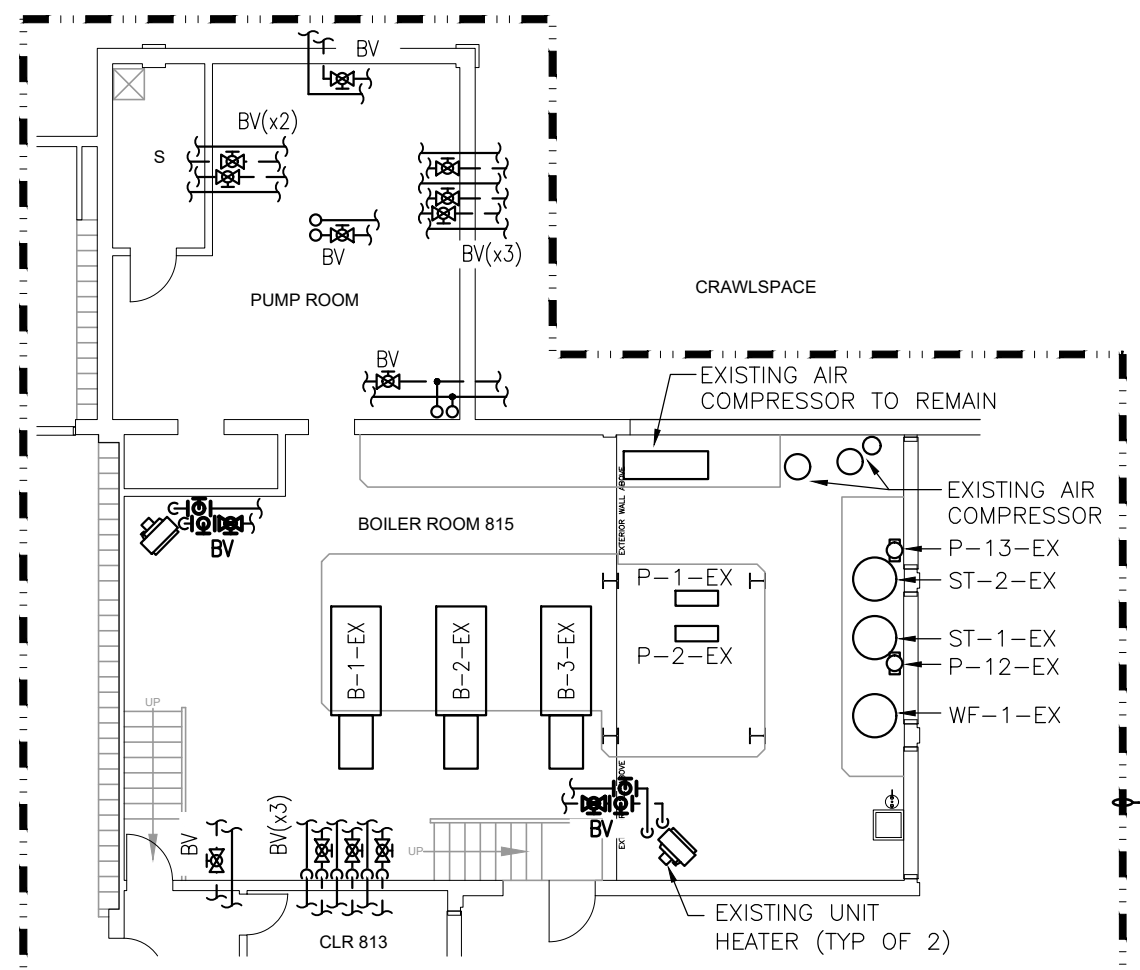
PROVIDE NEW TCV, ISOLATION & BALANCING VALVES IN EXISTING PIPING. REFER TO DETAIL.

PROVIDE NEW UNIT DDC CONTROLS FOR EXISTING UNIT. REFER TO DETAIL.

PROVIDE NEW DDC CONTROLS FOR EXISTING UNIT HEATER. REFER TO DETAIL.

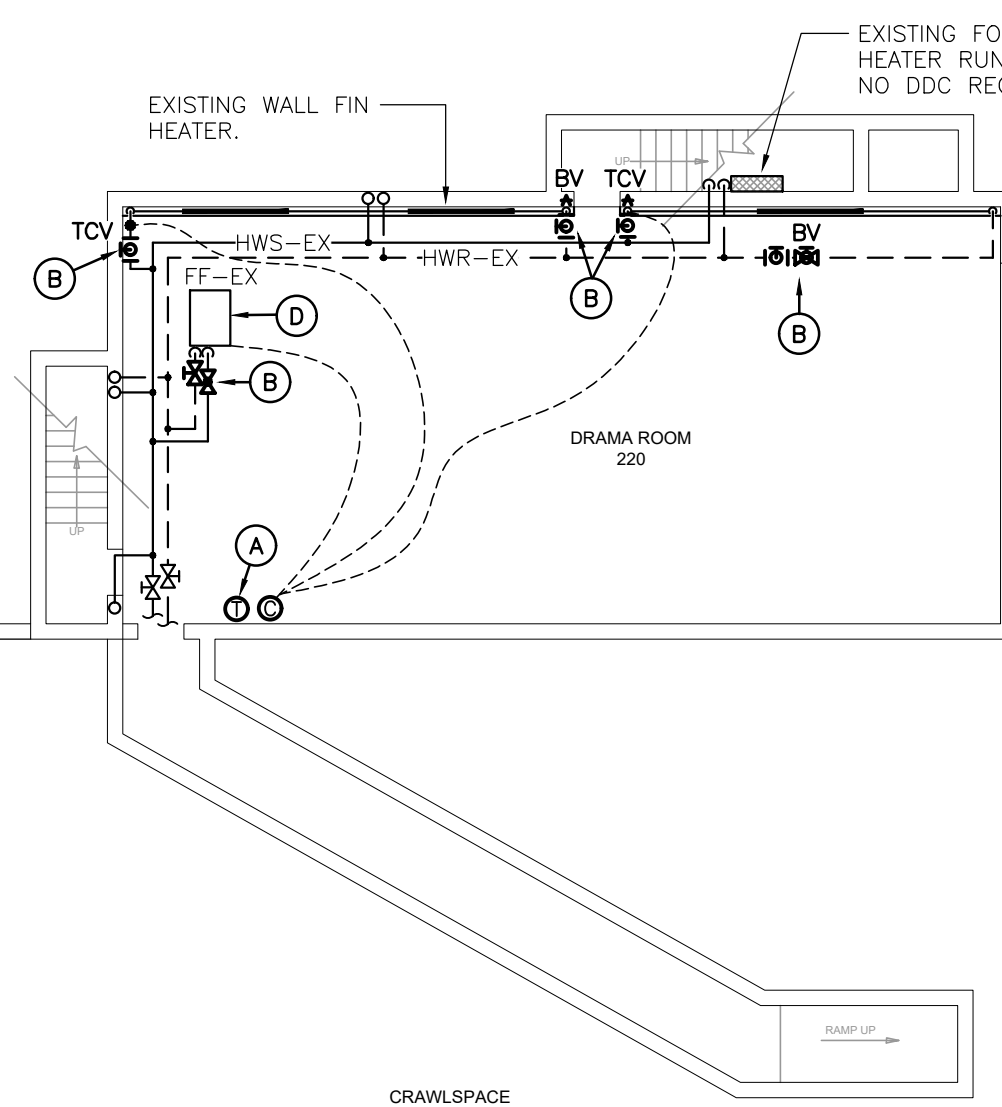
PROVIDE NEW DDC EXHAUST FAN CONTROL.

PROVIDE DDC THERMOSTAT.



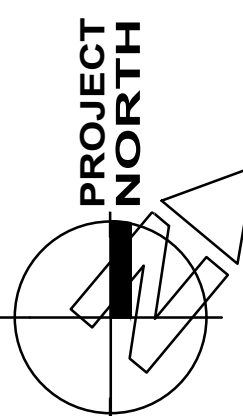
THIS ROOM CONVERTED TO DDC IN PREVIOUS BOILER RENOVATION. EXPAND ON DDC PANEL IN THIS ROOM AS REQUIRED. AIR COMPRESSOR TO REMAIN OPERATIONAL FOR REMAINING PNEUMATICS ELSEWHERE IN BUILDING

LOWER FLOOR PLAN - WING B
SCALE: 1:150

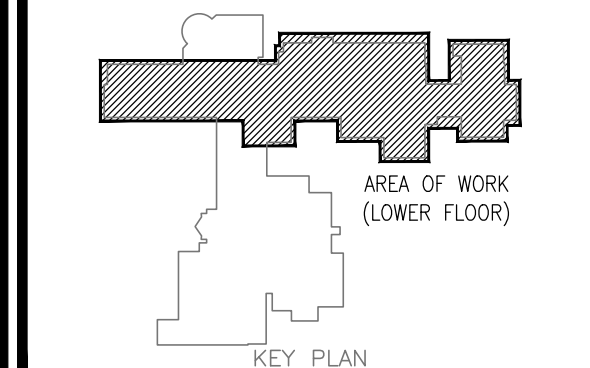
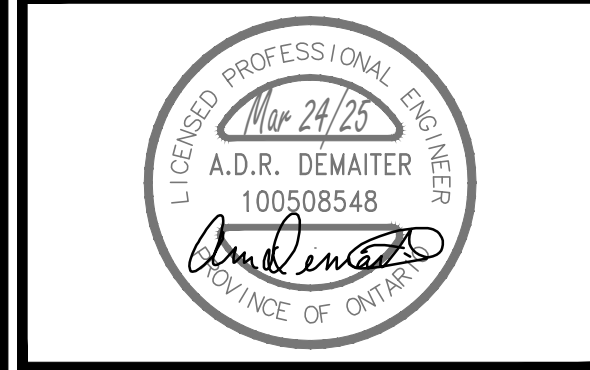


LOWER FLOOR PLAN - WING A
SCALE: 1:150

The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work.
The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.
The drawings do not indicate all offsets fitting and accessories which may be required. Provide the same to meet the required conditions.
Drawings and specifications, etc., prepared and issued by the Consultant are the property of the Consultant and must be returned at the completion of the project. These documents are not to be duplicated or copied without the consent of the Consultant.
Do not scale this drawing.
© 2025 DEI Consulting Engineers Inc.



No.	REVISIONS	DATE



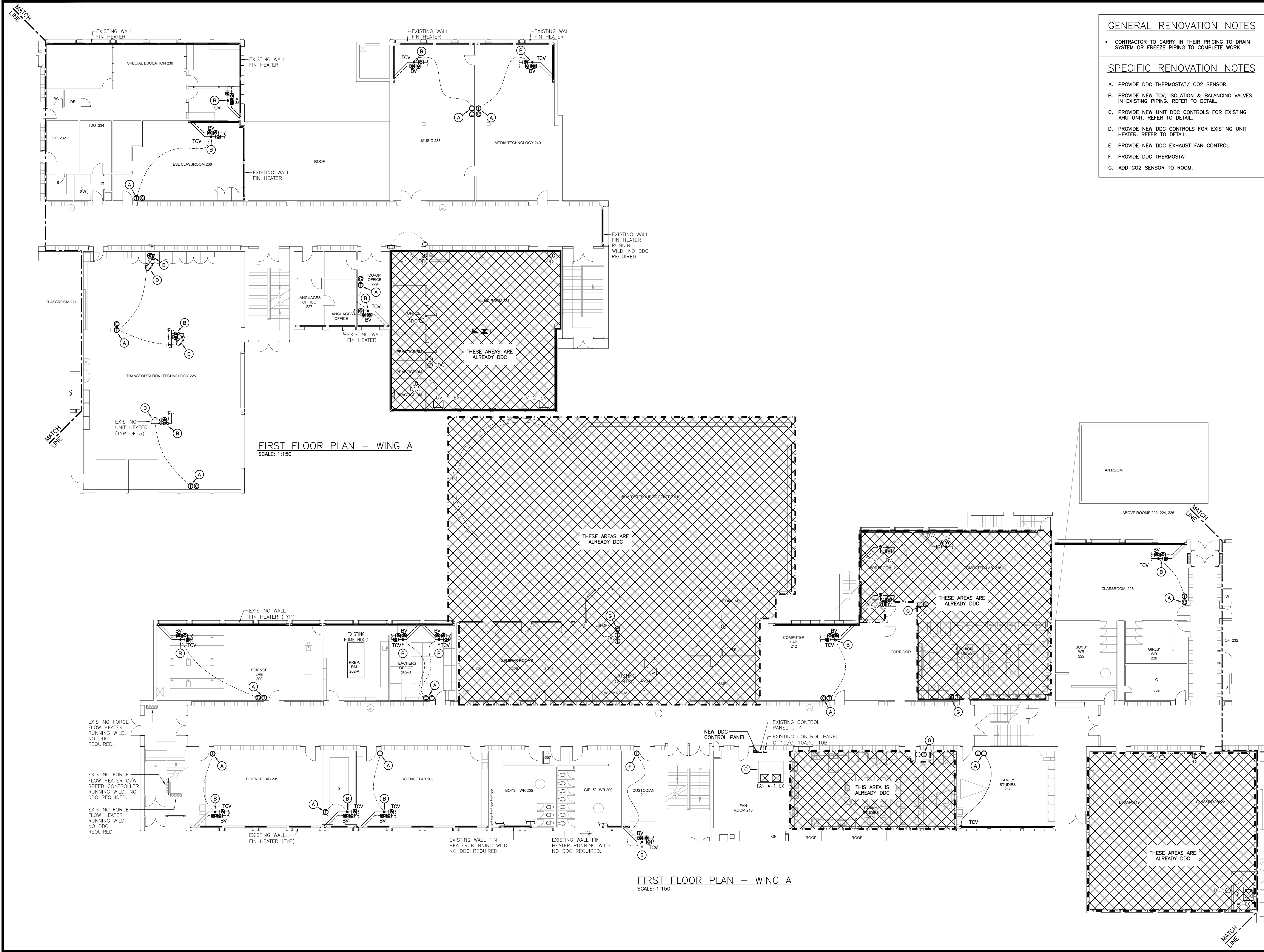
ISSUED FOR PERMIT/TENDER	2025.03.24
CHRONOLOGY	DATE



PROJECT NAME
WATERLOO COLLEGIATE INSTITUTE - HVAC UPGRADES
300 HAZEL ST., WATERLOO, ON, N2L 3P2

DRAWING TITLE
LOWER FLOOR PLAN WINGS A&B
DDC RENOVATION

SCALE AS NOTED	DRAWING NUMBER M2.5
SHEET SIZE 24x36	
PROJECT NUMBER 2024-168	



- GENERAL RENOVATION NOTES
- CONTRACTOR TO CARRY IN THEIR PRICING TO DRAIN SYSTEM OR FREEZE PIPING TO COMPLETE WORK
- SPECIFIC RENOVATION NOTES
- A. PROVIDE DDC THERMOSTAT/ CO2 SENSOR.

B. PROVIDE NEW TCV, ISOLATION & BALANCING VALVES IN EXISTING PIPING. REFER TO DETAIL.

C. PROVIDE NEW UNIT DDC CONTROLS FOR EXISTING AHU UNIT. REFER TO DETAIL.

D. PROVIDE NEW DDC CONTROLS FOR EXISTING UNIT HEATER. REFER TO DETAIL.

E. PROVIDE NEW DDC EXHAUST FAN CONTROL.

F. PROVIDE DDC THERMOSTAT.

G. ADD CO2 SENSOR TO ROOM.

The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work.
The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.
The drawings do not indicate all offsets fitting and accessories which may be required. Provide the same to meet the required conditions.
Drawings and specifications, etc., prepared and issued by the Consultant are the property of the Consultant and must be returned at the completion of the project. These documents are not to be duplicated or copied without the consent of the Consultant.
Do not scale this drawing.
© 2025 DEI Consulting Engineers Inc.

PROJECT NORTH

No.	REVISIONS	DATE

A.D.R. DEMAITER
100508548
PROVINCE OF ONTARIO

AREA OF WORK
(FIRST FLOOR)

KEY PLAN

ISSUED FOR PERMIT/TENDER	2025.03.24
CHRONOLOGY	DATE

DEI
Consulting Engineers
MECHANICAL | ELECTRICAL | AQUATIC

55 Northland Road,
Waterloo, ON, N2V 1Y9
Phone: 519 750 3055
Website: deiassociates.ca
Project Number: 2024-168

aba architects inc.
100 Wellington Street West, Suite 1100
Waterloo, ON N2V 1Y9

CLIENT

WATERLOO REGION
DISTRICT SCHOOL BOARD

PROJECT NAME

WATERLOO
COLLEGIATE INSTITUTE -
HVAC UPGRADES
300 HAZEL ST., WATERLOO, ON, N2L 3P2

DRAWING TITLE

FIRST FLOOR PLAN
WING A
DDC RENOVATION

SCALE

AS NOTED

SHEET SIZE

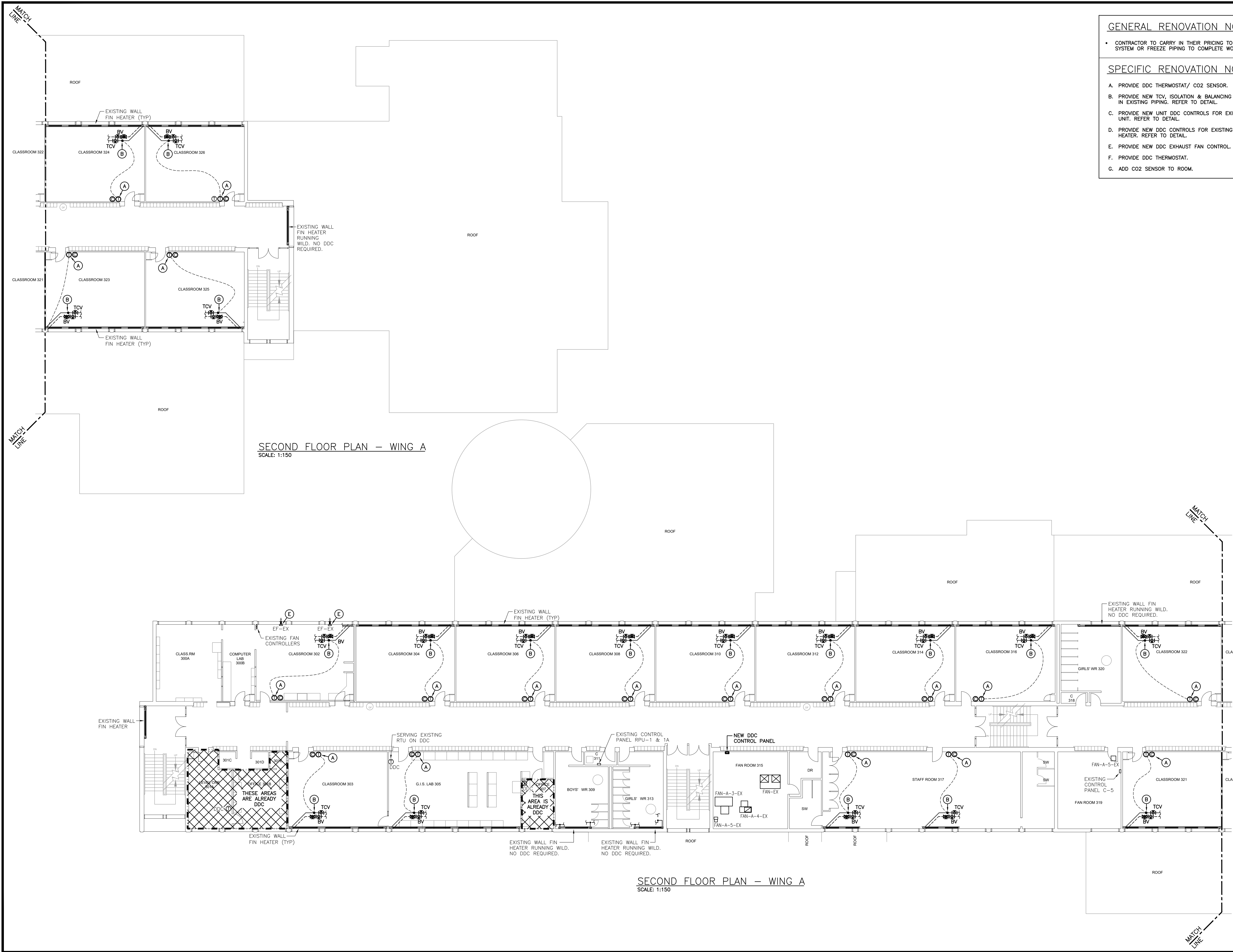
24x36

PROJECT NUMBER

2024-168

DRAWING NUMBER

M2.6



SECOND FLOOR PLAN – WING A
SCALE: 1:150

SECOND FLOOR PLAN – WING A
SCALE: 1:150

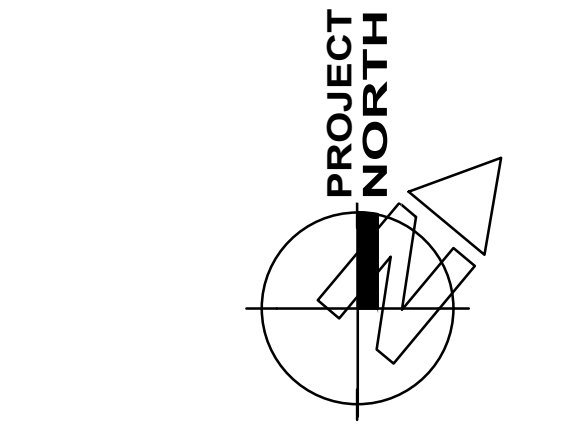
GENERAL RENOVATION NOTES

- CONTRACTOR TO CARRY IN THEIR PRICING TO DRAIN SYSTEM OR FREEZE PIPING TO COMPLETE WORK

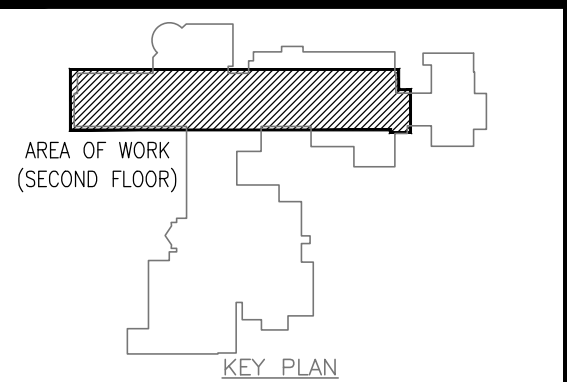
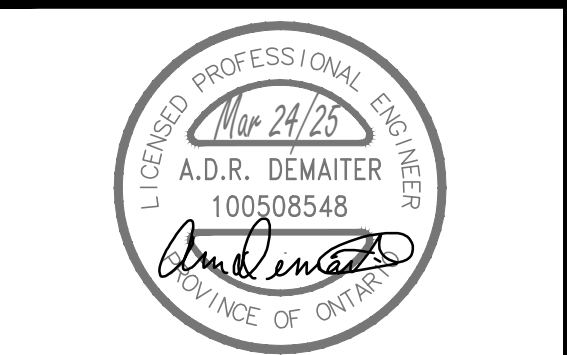
SPECIFIC RENOVATION NOTES

- PROVIDE DDC THERMOSTAT/ CO2 SENSOR.
- PROVIDE NEW TCV, ISOLATION & BALANCING VALVES IN EXISTING PIPING. REFER TO DETAIL.
- PROVIDE NEW UNIT DDC CONTROLS FOR EXISTING UNIT. REFER TO DETAIL.
- PROVIDE NEW DDC CONTROLS FOR EXISTING UNIT HEATER. REFER TO DETAIL.
- PROVIDE NEW DDC EXHAUST FAN CONTROL.
- PROVIDE DDC THERMOSTAT.
- ADD CO2 SENSOR TO ROOM.

The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work.
The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.
The drawings do not indicate all offsets fitting and accessories which may be required. Provide the same to meet the required conditions.
Drawings and specifications, etc., prepared and issued by the Consultant are the property of the Consultant and must be returned at the completion of the project. These documents are not to be duplicated or copied without the consent of the Consultant.
Do not scale this drawing.
© 2025 DEI Consulting Engineers Inc.



No.	REVISIONS	DATE



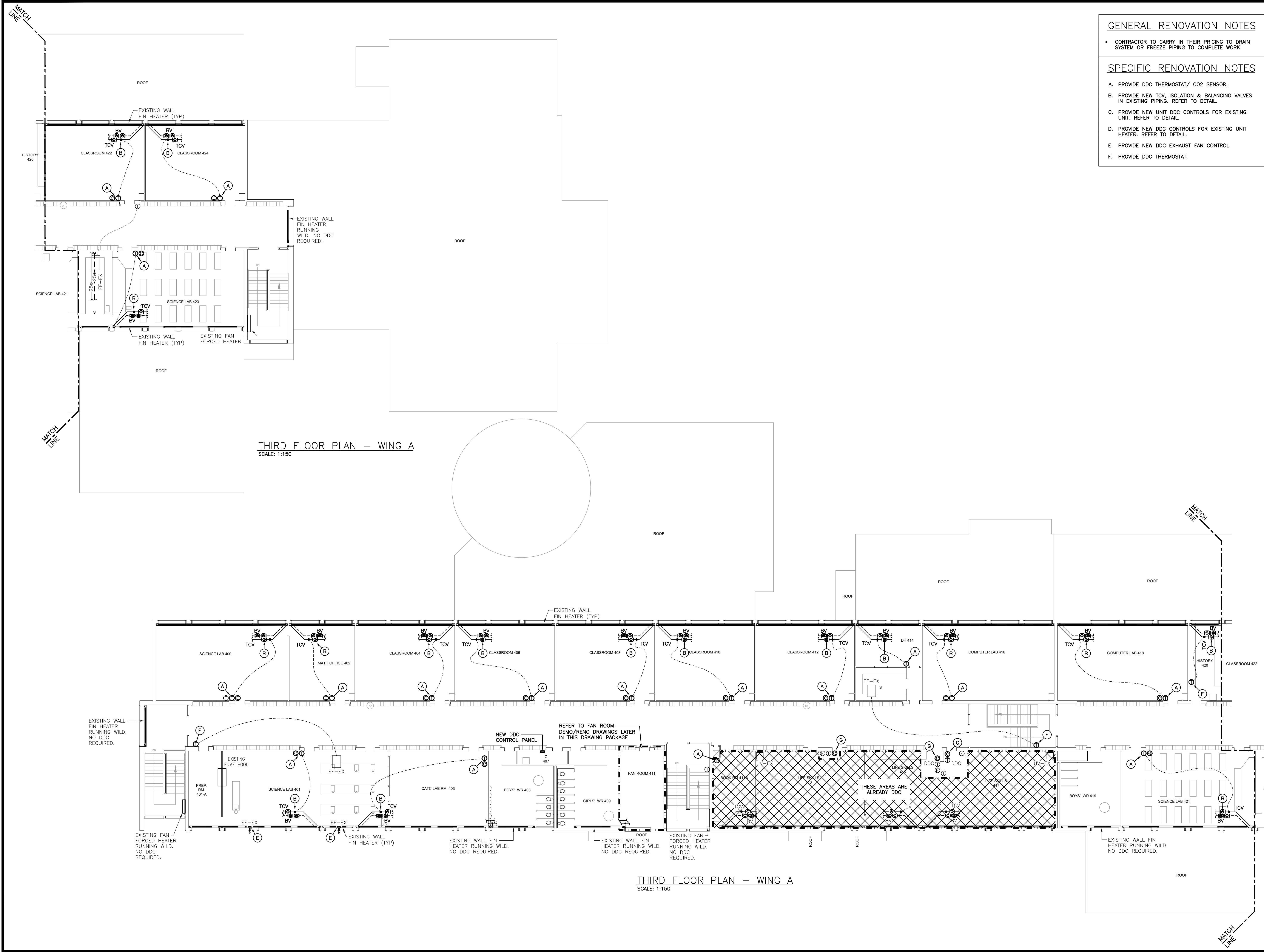
ISSUED FOR PERMIT/TENDER	2025.03.24
CHRONOLOGY	DATE



PROJECT NAME
WATERLOO COLLEGIATE INSTITUTE - HVAC UPGRADES
300 HAZEL ST., WATERLOO, ON, N2L 3P2

DRAWING TITLE
SECOND FLOOR PLAN WING A DDC RENOVATION

SCALE AS NOTED	DRAWING NUMBER M2.7
SHEET SIZE 24x36	
PROJECT NUMBER 2024-168	



- GENERAL RENOVATION NOTES
- CONTRACTOR TO CARRY IN THEIR PRICING TO DRAIN SYSTEM OR FREEZE PIPING TO COMPLETE WORK
- SPECIFIC RENOVATION NOTES
- A. PROVIDE DDC THERMOSTAT/ CO2 SENSOR.

B. PROVIDE NEW TCV, ISOLATION & BALANCING VALVES IN EXISTING PIPING. REFER TO DETAIL.

C. PROVIDE NEW UNIT DDC CONTROLS FOR EXISTING UNIT. REFER TO DETAIL.

D. PROVIDE NEW DDC CONTROLS FOR EXISTING UNIT HEATER. REFER TO DETAIL.

E. PROVIDE NEW DDC EXHAUST FAN CONTROL.

F. PROVIDE DDC THERMOSTAT.

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

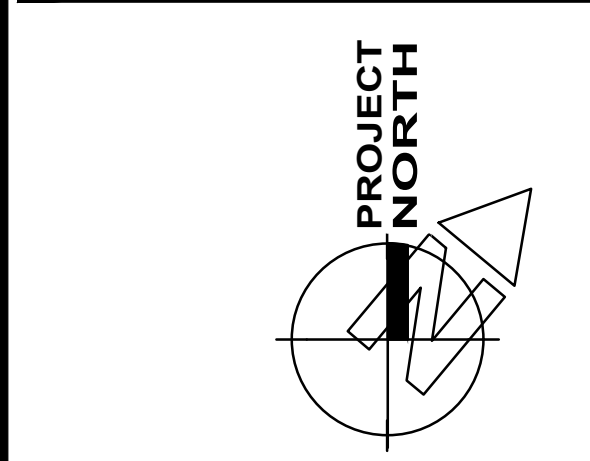
The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.

The drawings do not indicate all offsets fitting and accessories which may be required. Provide the same to meet the required conditions.

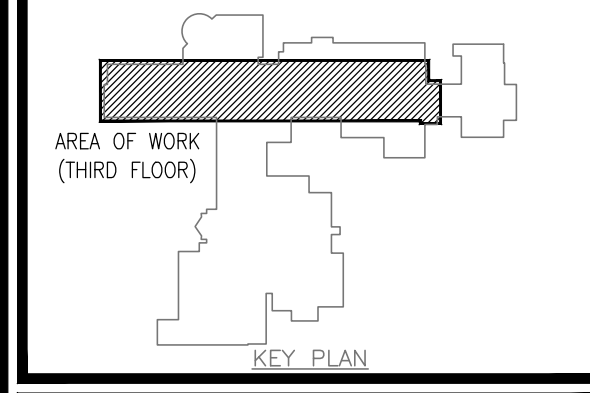
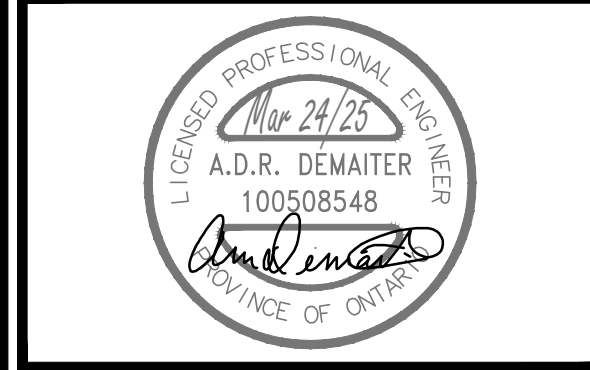
Drawings and specifications, etc., prepared and issued by the Consultant are the property of the Consultant and must be returned at the completion of the project. These documents are not to be duplicated or copied without the consent of the Consultant.

Do not scale this drawing.

© 2025 DEI Consulting Engineers Inc.



No.	REVISIONS	DATE



ISSUED FOR PERMIT/TENDER	2025.03.24
CHRONOLOGY	DATE



PROJECT NAME

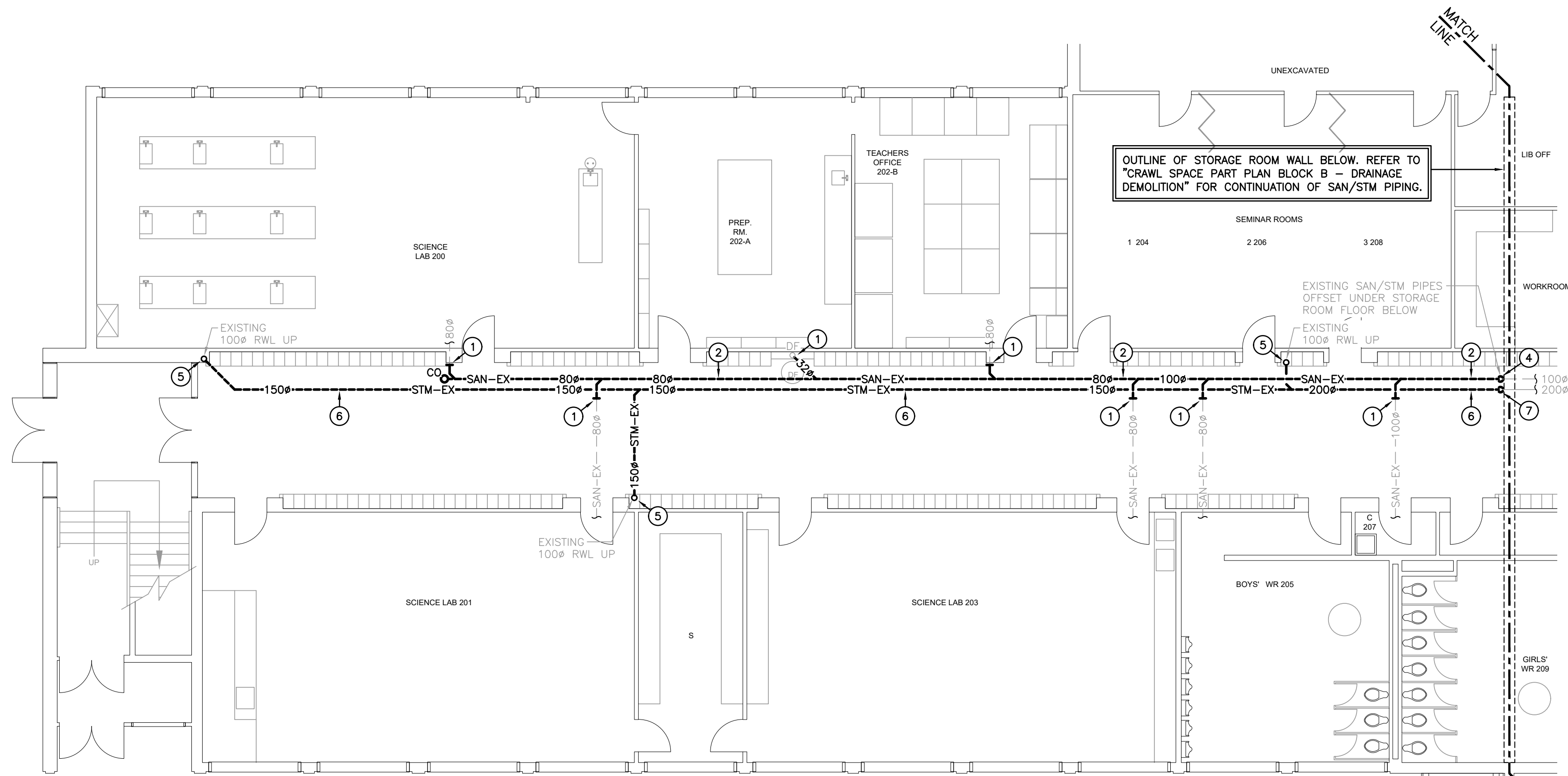
WATERLOO COLLEGIATE INSTITUTE - HVAC UPGRADES

300 HAZEL ST., WATERLOO, ON, N2L 3P2

DRAWING TITLE

THIRD FLOOR PLAN WING A DDC RENOVATION

SCALE	AS NOTED	DRAWING NUMBER <
-------	----------	---



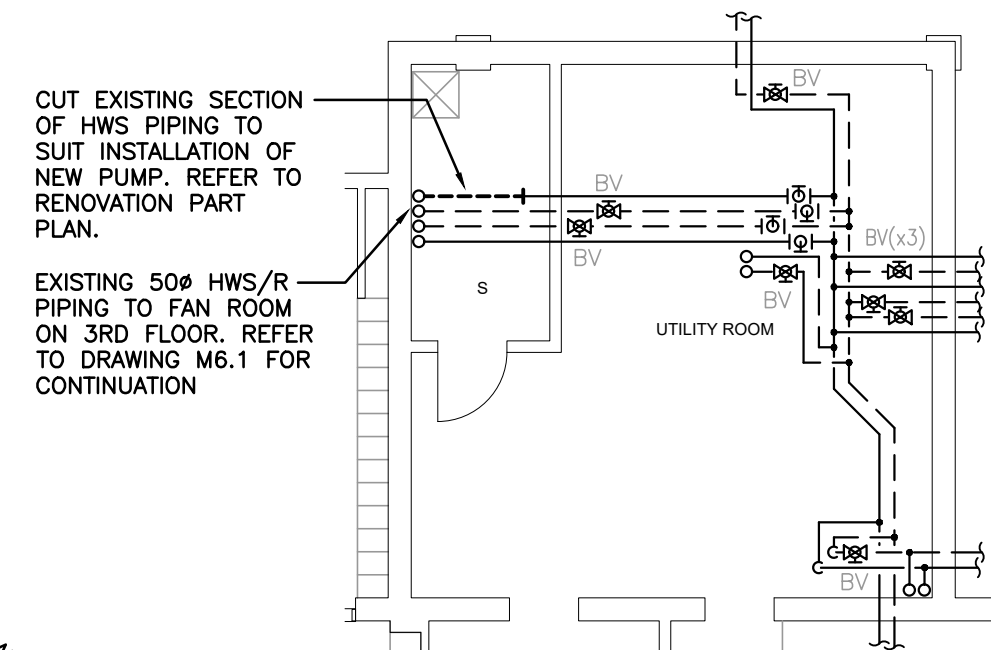
FIRST FLOOR PART PLAN WING A – DRAINAGE DEMOLITION
SCALE: 1:100
(F.F.E: 338.25)

GENERAL DEMOLITION NOTES

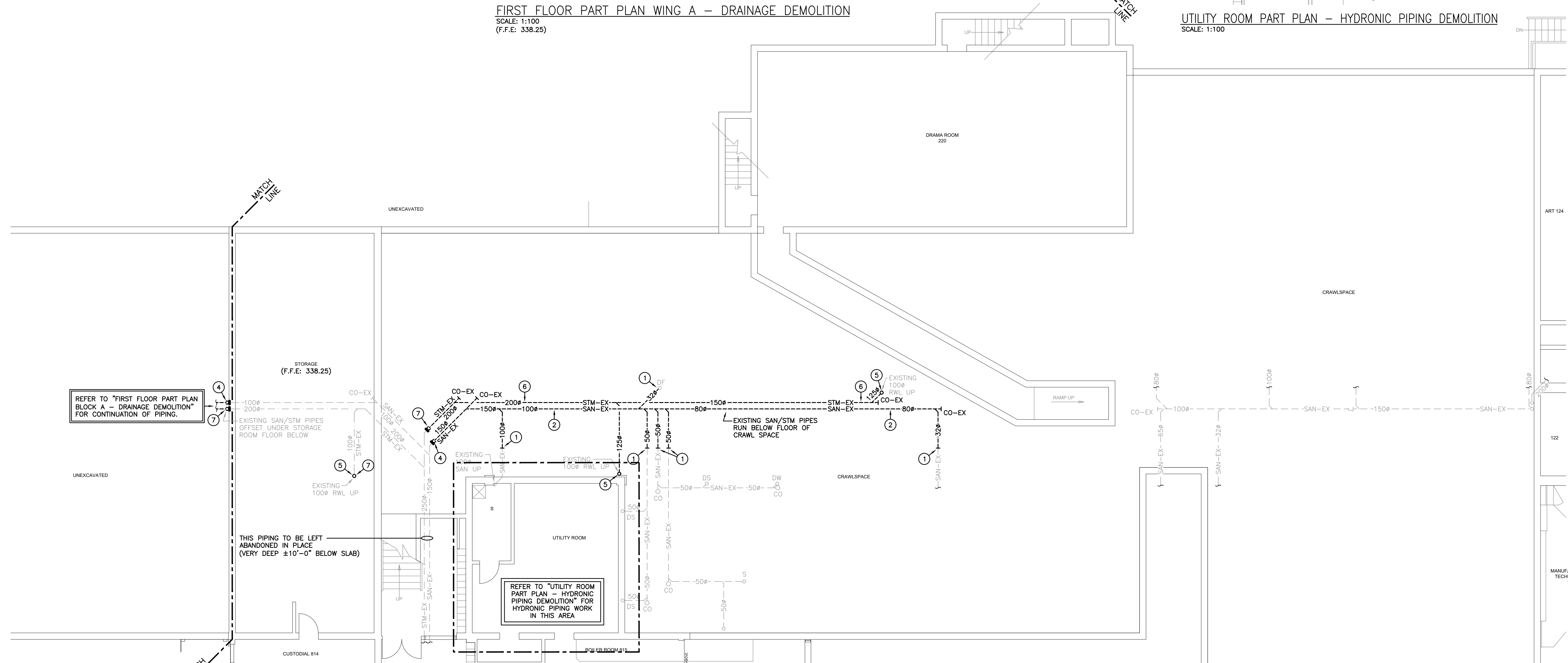
- EXISTING MECHANICAL ITEMS NOT SHOWN SHALL REMAIN UNLESS NOTED OTHERWISE.
- EXISTING MECHANICAL ITEMS SHOWN BUT NOT NOTED AS BEING REMOVED OR RENOVATED SHALL REMAIN AS PRESENTLY INSTALLED AND OPERATING.
- THIS CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ON SITE ALL LOCATIONS AND SIZES OF ALL SERVICES & EQUIPMENT PRIOR TO THE COMMENCEMENT OF WORK.
- ALL OPENINGS THAT RESULT FROM THE REMOVAL OF EQUIPMENT OR SERVICES SHALL BE NEATLY PATCHED WITH SUITABLE NEW MATERIALS TO SUIT EXISTING CONSTRUCTION.
- PLUMBING VENTS ARE NOT INDICATED OR IDENTIFIED. REMOVE ALL REDUNDANT VENTS WHILE MAINTAINING INTEGRITY OF EXISTING SYSTEMS TO REMAIN.
- REMOVAL OF EXISTING PIPING, OR DUCT SYSTEMS INCLUDES REMOVAL OF ALL HANGERS, INSULATION, FITTINGS, ETC.
- MAINTAIN INTEGRITY OF EXISTING SYSTEMS THAT ARE TO REMAIN OR BE MODIFIED.
- INSTALL NEW SYSTEM OR SERVICES WHERE REQUIRED TO MAINTAIN SYSTEM OPERATION PRIOR TO DEMOLITION OF EXISTING SERVICES.
- THIS CONTRACTOR IS TO REMOVE & REPLACE CEILING AS REQUIRED FOR REMOVAL/REPLACEMENT OF SERVICES.

SPECIFIC DEMOLITION NOTES

- EXISTING SAN TO BE CUT AND REMOVED AS INDICATED.
- EXISTING SAN TO BE REMOVED COMPLETE.
- EXISTING SAN PIPING BELOW FLOOR/N WALL OF WASHROOMS TO BE ABANDONED IN PLACE.
- EXISTING SAN TO BE CUT, CAPPED ON RISER AND REMOVED BACK COMPLETE. REMAINING SAN BELOW FLOOR TO REMAIN AND BE ABANDONED IN PLACE.
- EXISTING STM TO BE CUT AT U/S OF FLOOR ABOVE AND REMOVED DN COMPLETE.
- EXISTING STM TO BE REMOVED COMPLETE.
- EXISTING STM TO BE CUT, CAPPED ON RISER AND REMOVED BACK COMPLETE. REMAINING SAN BELOW FLOOR TO REMAIN AND BE ABANDONED IN PLACE.

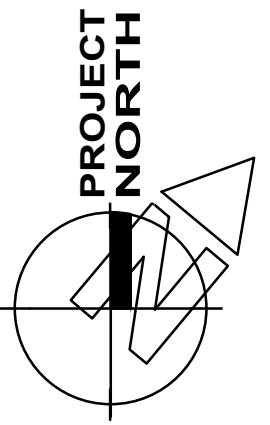


UTILITY ROOM PART PLAN – HYDRONIC PIPING DEMOLITION
SCALE: 1:100

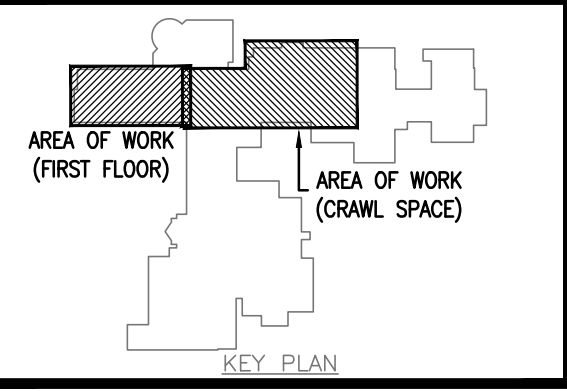
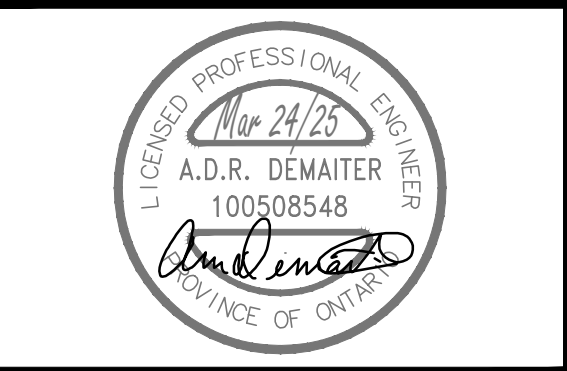


CRAWL SPACE BELOW FIRST FLOOR WING A – DRAINAGE DEMOLITION
SCALE: 1:100

The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work.
The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.
The drawings do not indicate all offsets fitting and accessories which may be required. Provide the same to meet the required conditions.
Drawings and specifications, etc., prepared and issued by the Consultant are the property of the Consultant and must be returned at the completion of the project. These documents are not to be duplicated or copied without the consent of the Consultant.
Do not scale this drawing.
© 2025 DEI Consulting Engineers Inc.



No.	REVISIONS	DATE



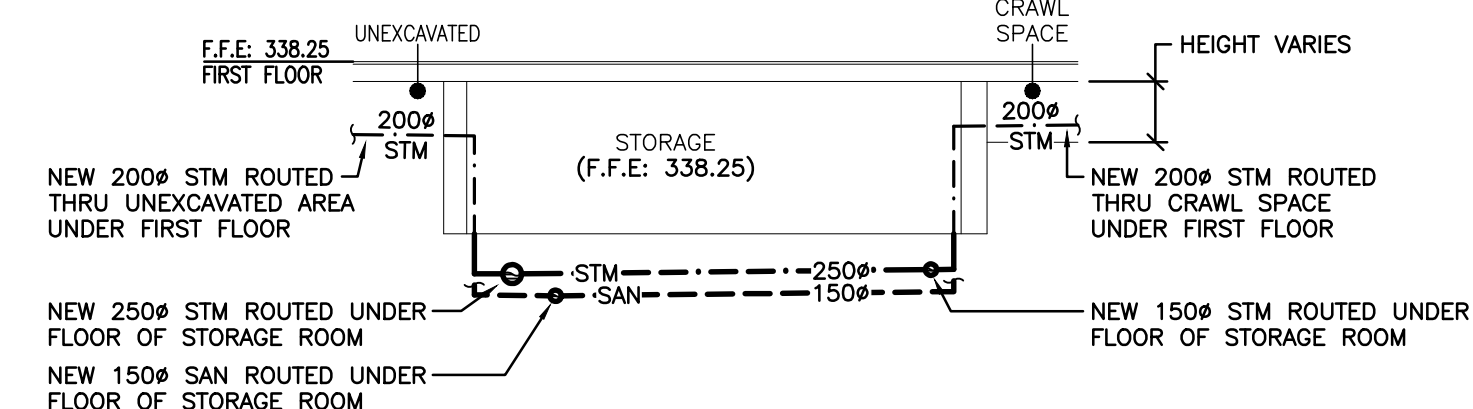
ISSUED FOR PERMIT/TENDER	2025.03.24
CHRONOLOGY	DATE



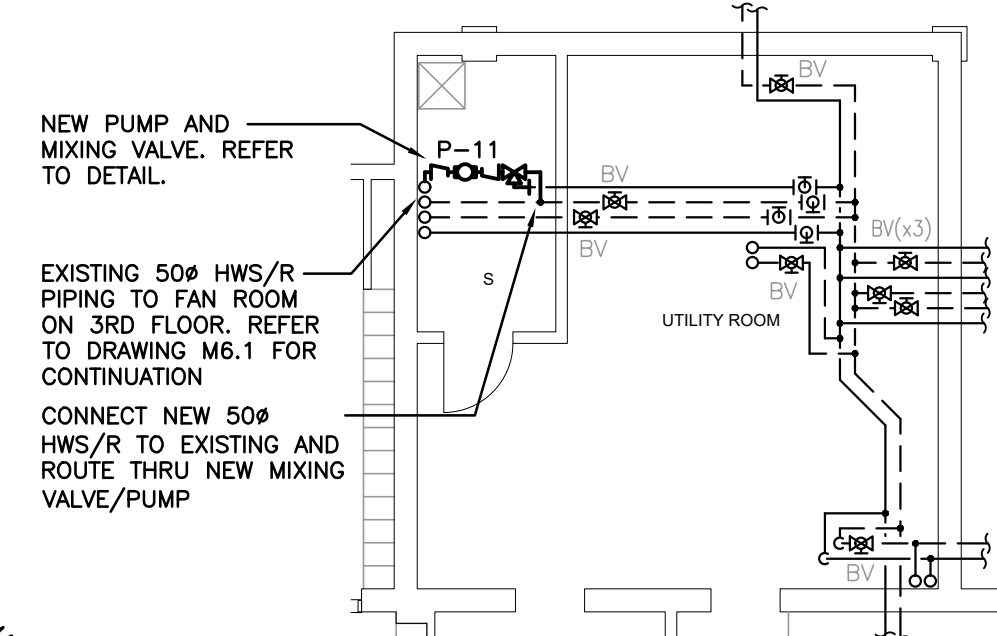
PROJECT NAME
WATERLOO COLLEGIATE INSTITUTE - HVAC UPGRADES
300 HAZEL ST., WATERLOO, ON, N2L 3P2

DRAWING TITLE
FIRST FLOOR / CRAWL SPACE WING A DRAINAGE DEMOLITION

SCALE AS NOTED	DRAWING NUMBER M3.1
SHEET SIZE 24x36	
PROJECT NUMBER 2024-168	

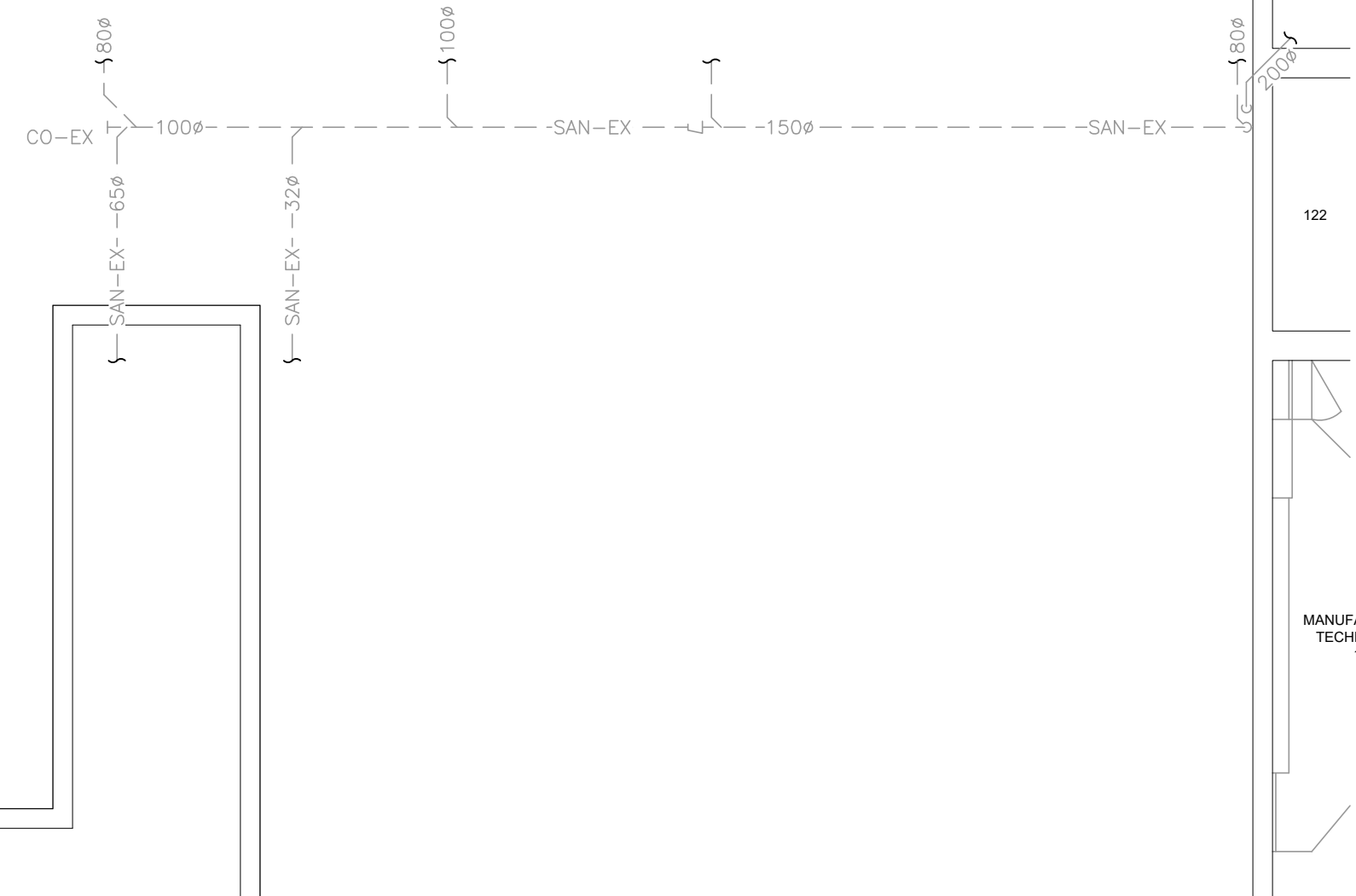


SCALE: N.T.S.
(SANITARY ROUTING SIMILAR)



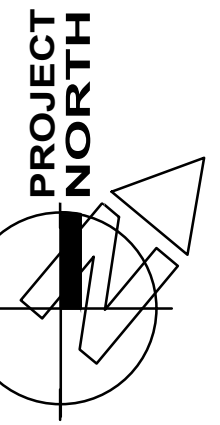
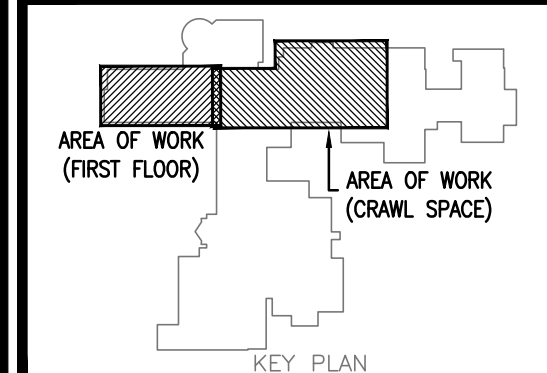
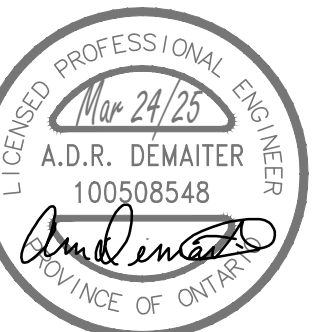
SCALE: 1:100

SCALE: 1:100
(F.F.E: 338.25)



SCALE: 1:100

1. CONNECT NEW SAN PIPE TO EXISTING CUT CONNECTION. SIZE AS INDICATED ON DRAWING.
2. CONNECT NEW SAN PIPE TO EXISTING CUT CONNECTION AT U/S OF FLOOR ABOVE. SIZE AS INDICATED ON DRAWING.
3. CONNECT NEW 150% STM PIPE TO EXISTING CUT CONNECTION AT U/S OF FLOOR ABOVE.
4. CONNECT NEW 80% SAN TO EXISTING FLOOR DRAIN AND EXTEND TO NEW SAN SYSTEM AS INDICATED.

[illegible]

ISSUED FOR PERMIT/TENDER	2025.03.24
CHRONOLOGY	DATE



aba architects inc.



PROJECT NAME

WATERLOO
COLLEGIATE INSTITUTE -
HVAC UPGRADES

300 HAZEL ST., WATERLOO, ON, N2L 3P2

DRAWING TITLE

FIRST FLOOR /
CRAWL SPACE
WING A
DRAINAGE RENOVATION

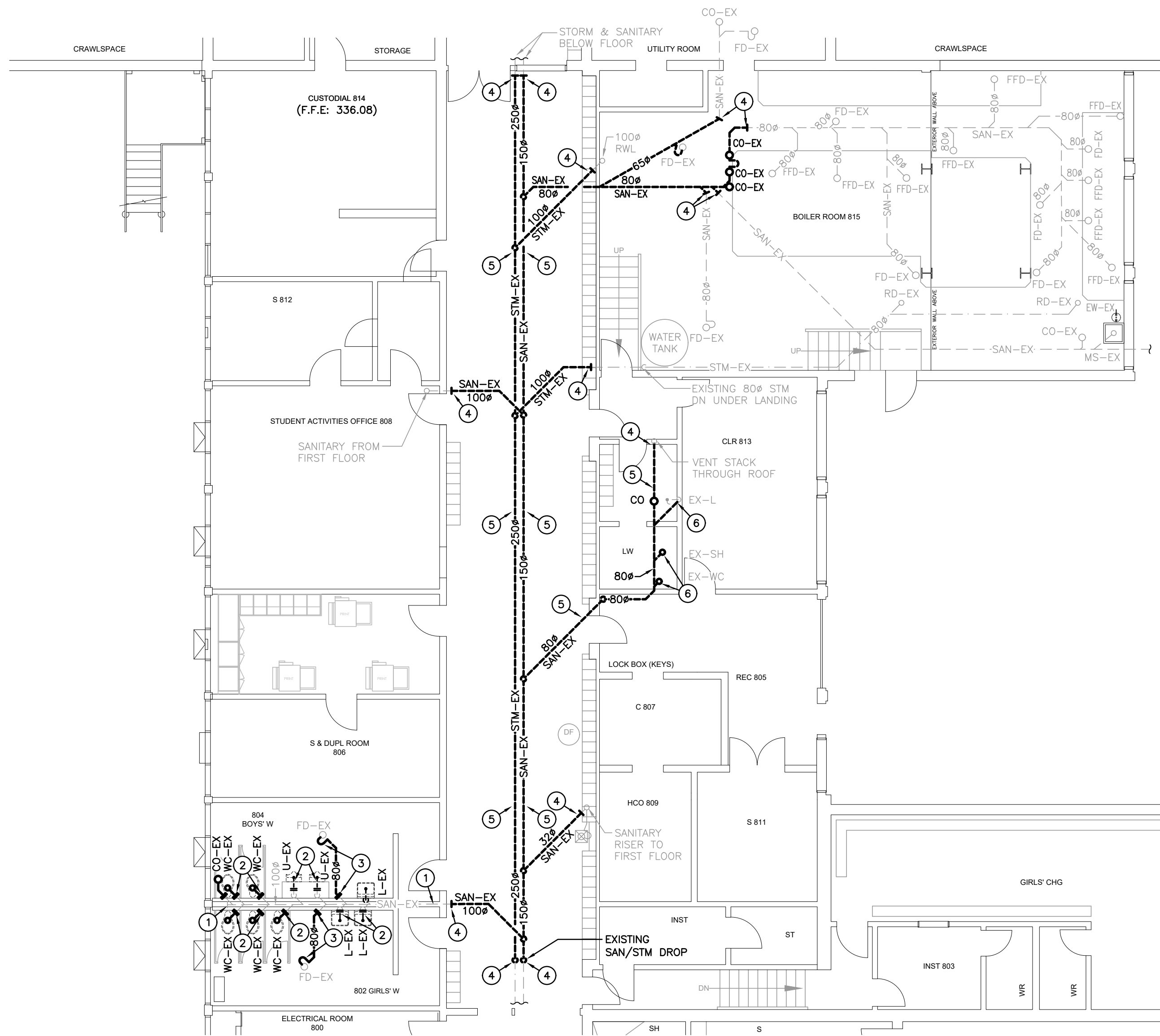
SCALE	DRAWING NUMBER
AS NOTED	
SHEET SIZE	
24x36	M3.2
PROJECT NUMBER	
2024-168	

GENERAL DEMOLITION NOTES

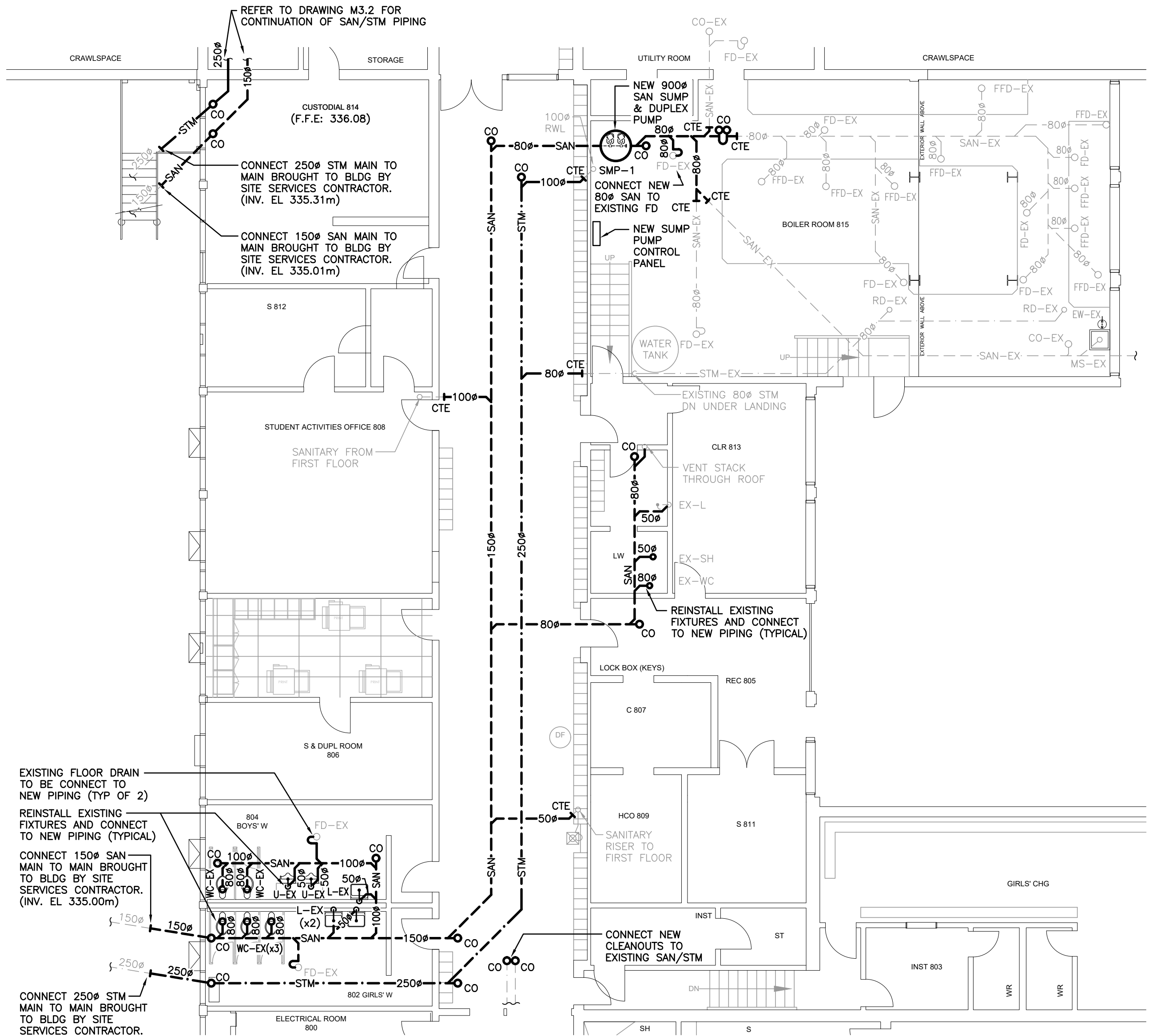
- A. EXISTING MECHANICAL ITEMS NOT SHOWN SHALL REMAIN UNLESS NOTED OTHERWISE.
- B. EXISTING MECHANICAL ITEMS SHOWN BUT NOT NOTED AS BEING REMOVED OR RENOVATED SHALL REMAIN AS PRESENTLY INSTALLED AND OPERATING.
- C. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ON SITE ALL LOCATIONS AND SIZES OF ALL SERVICES & EQUIPMENT PRIOR TO THE COMMENCEMENT OF WORK.
- D. ALL OPENINGS THAT RESULT FROM THE REMOVAL OF EQUIPMENT OR SERVICES SHALL BE NEATLY PATCHED WITH SUITABLE NEW MATERIALS TO SUIT EXISTING CONSTRUCTION.
- E. PLUMBING VENTS ARE NOT INDICATED OR IDENTIFIED. REMOVE ALL REDUNDANT VENTS WHILE MAINTAINING INTEGRITY OF EXISTING SYSTEMS TO REMAIN.
- F. REMOVAL OF EXISTING PIPING, OR DUCT SYSTEMS INCLUDES REMOVAL OF ALL HANGERS, INSULATION, FITTINGS, ETC.
- G. MAINTAIN INTEGRITY OF EXISTING SYSTEMS THAT ARE TO REMAIN OR BE MODIFIED.
- H. INSTALL NEW SYSTEM OR SERVICES WHERE REQUIRED TO MAINTAIN SYSTEM OPERATION PRIOR TO DEMOLITION OF EXISTING SERVICES.
- I. THIS CONTRACTOR IS TO REMOVE & REPLACE CEILING AS REQUIRED FOR REMOVAL/REPLACEMENT OF SERVICES.

SPECIFIC DEMOLITION NOTES

1. EXISTING SAN PIPING BELOW FLOOR/IN WALL OF WASHROOMS TO BE ABANDONED IN PLACE.
2. EXISTING PLUMBING FIXTURE(S) TO BE DISCONNECTED AND REMOVED COMPLETE. SAN PIPING TO BE CAPPED BELOW FLOOR/IN WALL AND REMAINING PIPING TO BE ABANDONED IN PLACE. DISCONNECTED FIXTURE(S) TO BE STORED AND PROTECTED ON SITE.
3. EXISTING FLOOR DRAIN TO BE DISCONNECTED AND SAN PIPING TO BE REMOVED AS INDICATED. REMAINING SAN PIPING BELOW FLOOR TO BE CAPPED AND ABANDONED IN PLACE.
4. EXISTING SAN/STM TO BE CUT AND REMOVED AS REQUIRED TO SUIT NEW CONNECTIONS. REMAINING UNUSED PIPING TO BE ABANDONED IN PLACE.
5. EXISTING SAN/STM PIPING BELOW FLOOR TO BE ABANDONED IN PLACE.
6. EXISTING PLUMBING FIXTURE(S) TO BE DISCONNECTED AND REMOVED COMPLETE. SAN PIPING TO BE CUT BELOW FLOOR AND REMAINING PIPING TO BE ABANDONED IN PLACE. DISCONNECTED FIXTURE(S) TO BE STORED AND PROTECTED ON SITE.

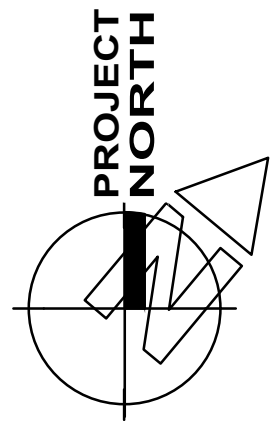


LOWER FLOOR PLAN WING B - DRAINAGE DEMOLITION
SCALE: 1:100
(F.F.E: 336.39)

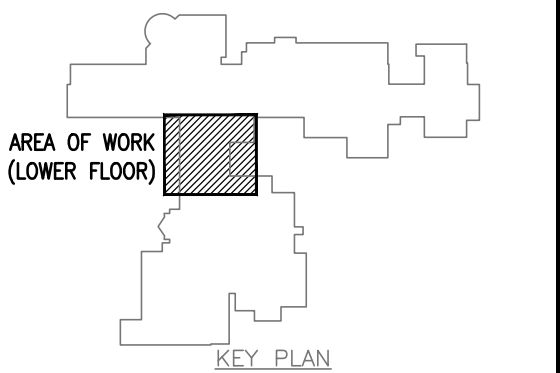


LOWER FLOOR PLAN WING B - DRAINAGE RENOVATION
SCALE: 1:100
(F.F.E: 336.39)

The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work.
The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.
The drawings do not indicate all offsets fitting and accessories which may be required. Provide the same to meet the required conditions.
Drawings and specifications, etc., prepared and issued by the Consultant are the property of the Consultant and must be returned at the completion of the project. These documents are not to be duplicated or copied without the consent of the Consultant.
Do not scale this drawing.
© 2025 DEI Consulting Engineers Inc.



No.	REVISIONS	DATE



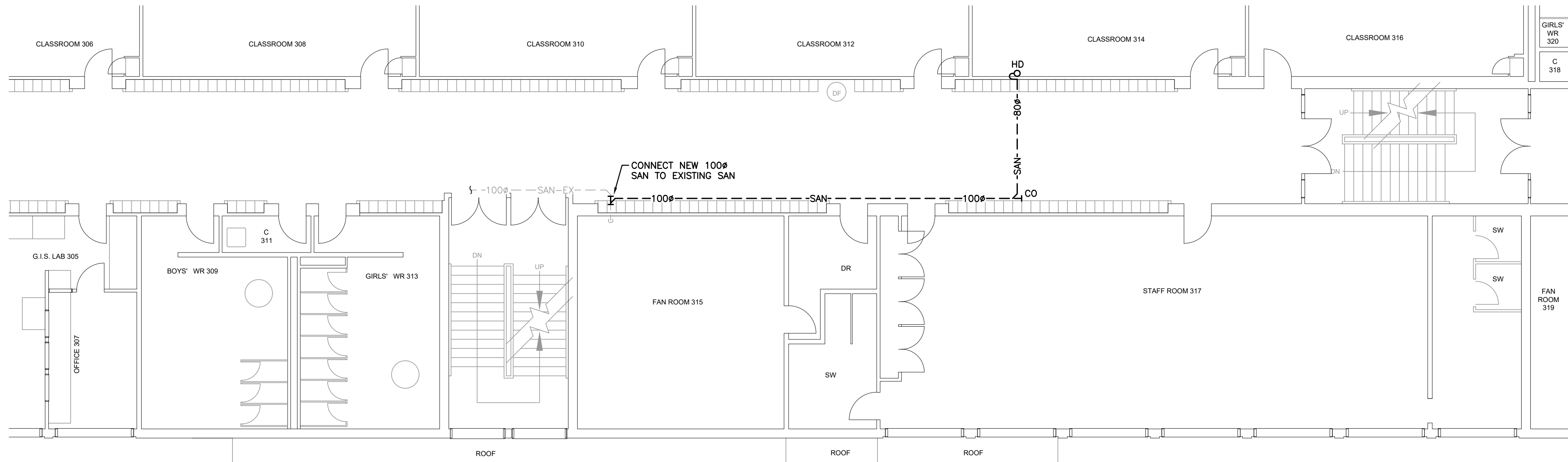
ISSUED FOR PERMIT/TENDER	2025.03.24
CHRONOLOGY	DATE



PROJECT NAME
WATERLOO COLLEGIATE INSTITUTE - HVAC UPGRADES
300 HAZEL ST., WATERLOO, ON, N2L 3P2

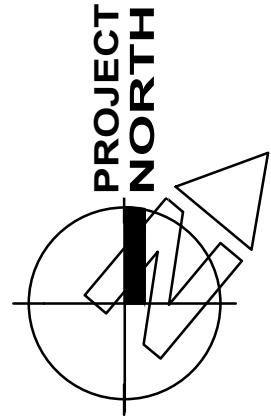
DRAWING TITLE
LOWER FLOOR WING B DRAINAGE DEMOLITION/ RENOVATION

SCALE AS NOTED	DRAWING NUMBER M3.3
SHEET SIZE 24x36	
PROJECT NUMBER 2024-168	

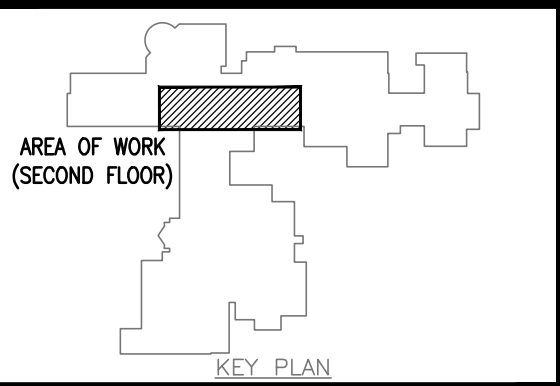
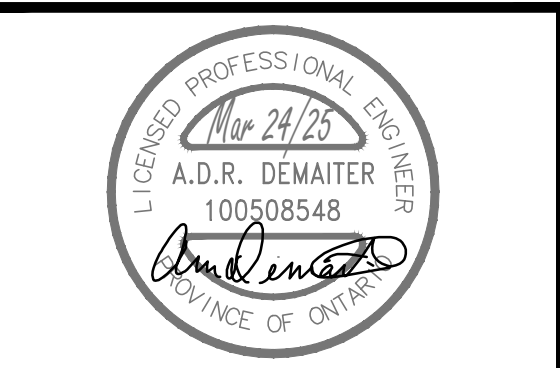


SECOND FLOOR PART PLAN WING A – DRAINAGE RENOVATION (SAN IN CEILING SPACE)
SCALE: 1:100

The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work.
The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.
The drawings do not indicate all offsets fitting and accessories which may be required. Provide the same to meet the required conditions.
Drawings and specifications, etc., prepared and issued by the Consultant are the property of the Consultant and must be returned at the completion of the project. These documents are not to be duplicated or copied without the consent of the Consultant.
Do not scale this drawing.
© 2025 DEI Consulting Engineers Inc.



No.	REVISIONS	DATE



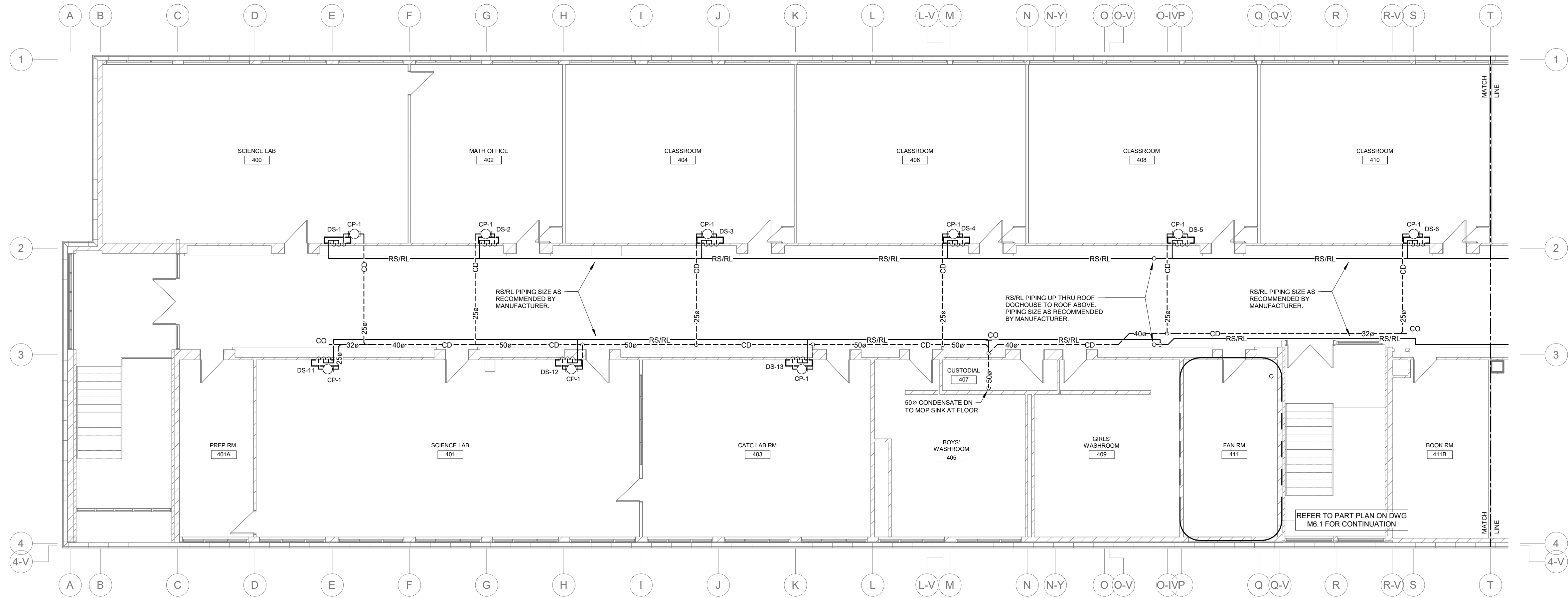
ISSUED FOR PERMIT/TENDER	2025.03.24
CHRONOLOGY	DATE



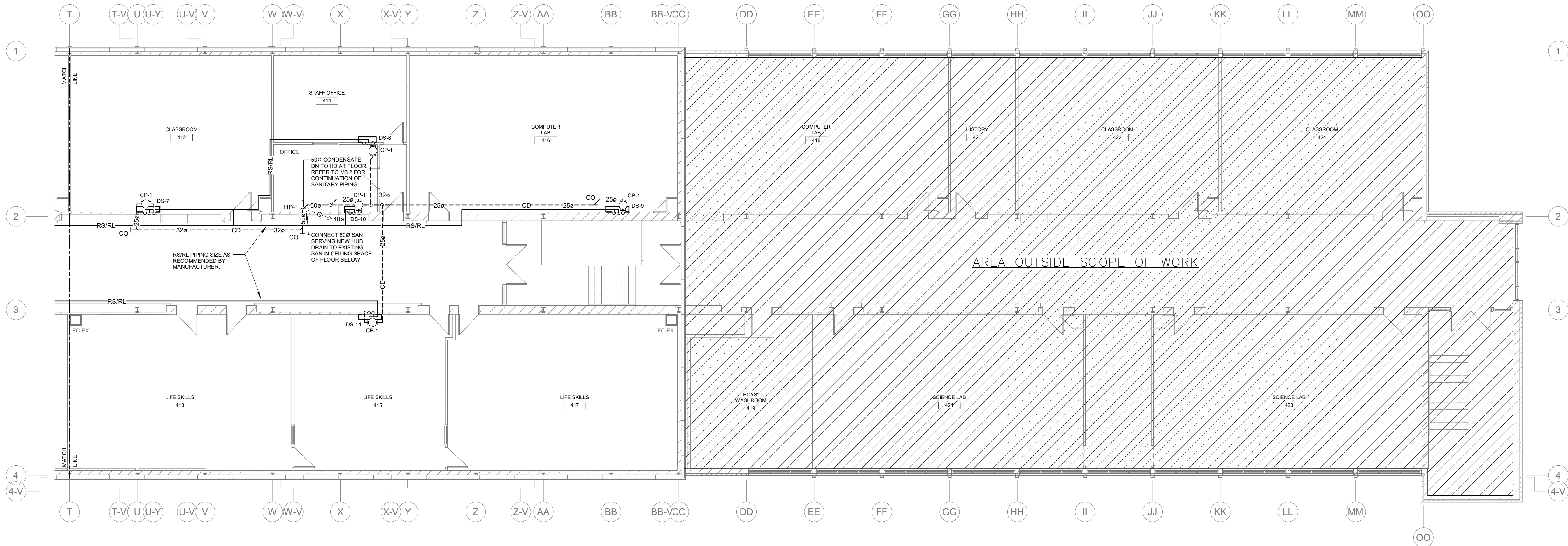
PROJECT NAME
WATERLOO COLLEGIATE INSTITUTE - HVAC UPGRADES
300 HAZEL ST., WATERLOO, ON, N2L 3P2

DRAWING TITLE
SECOND FLOOR PART PLAN WING A DRAINAGE RENOVATION

SCALE AS NOTED	DRAWING NUMBER M3.4
SHEET SIZE 24x36	
PROJECT NUMBER 2024-168	

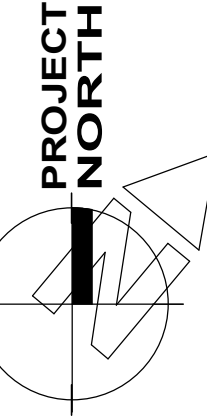


THIRD FLOOR PLAN - WING A (BLOCK 1) - REFRIGERATION/CONDENSATE PIPING
SCALE: 1 : 100

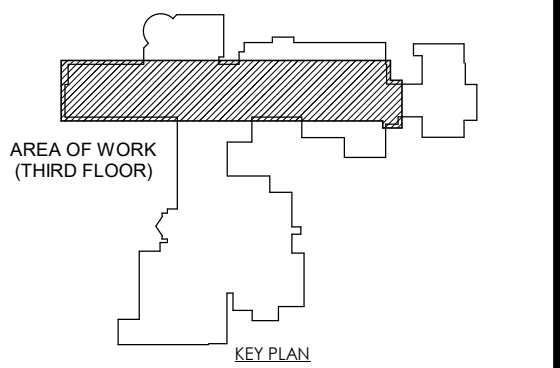
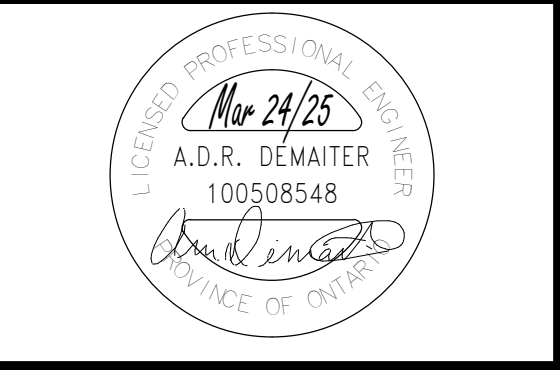


THIRD FLOOR PLAN - WING A (BLOCK 2&3) - REFRIGERATION/CONDENSATE PIPING
SCALE: 1 : 100

The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work.
The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.
The drawings do not indicate all offsets fitting and accessories which may be required. Provide the same to meet the required conditions.
Drawings and specifications, etc., prepared and issued by the Consultant are the property of the Consultant and must be returned at the completion of the project. These documents are not to be duplicated or copied without the consent of the Consultant.
Do not scale this drawing.
© 2024 DEI Consulting Engineers Inc.



No.	REVISIONS	DATE



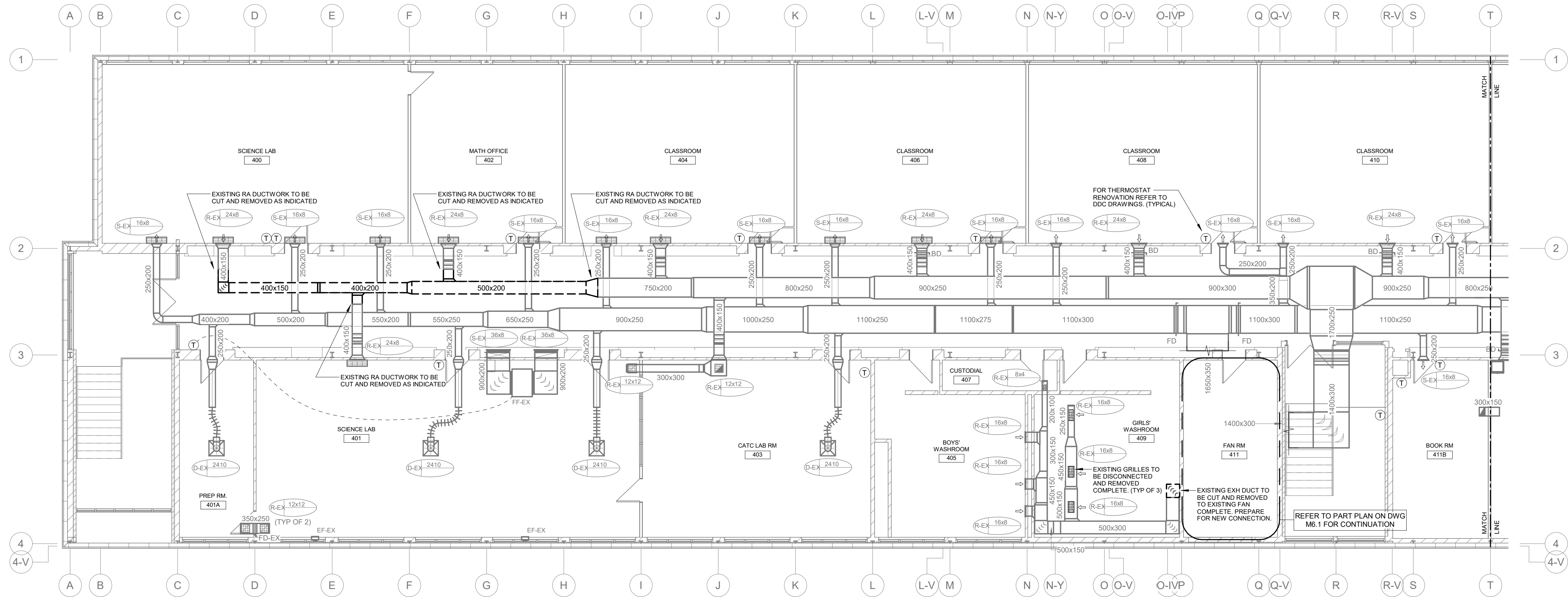
ISSUED FOR PERMIT/TENDER	2025.03.24
CHRONOLOGY	DATE



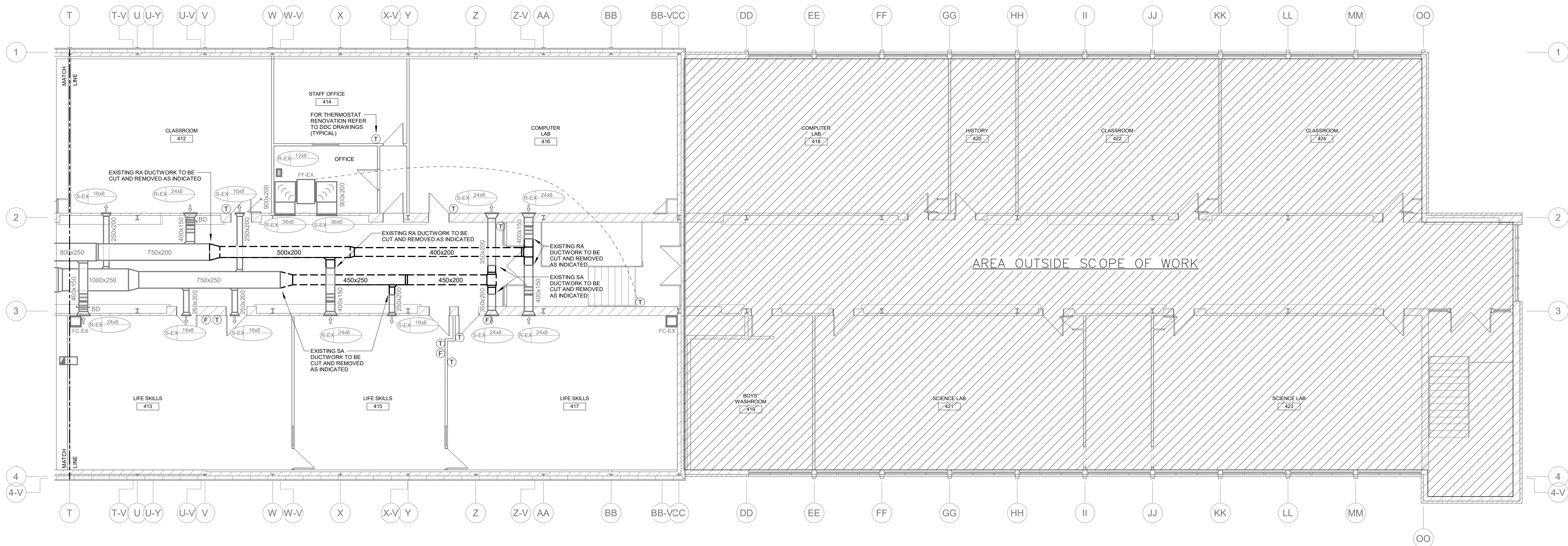
PROJECT NAME
WRDSB WCI HVAC Upgrades & Renovations, Waterloo
300 Hazel St, Waterloo, ON N2L 3P2

DRAWING TITLE
THIRD FLOOR PLAN WING A - REFRIGERATION & CONDENSATE PIPING

SCALE	DRAWING NUMBER
AS NOTED	M4.1
SHEET SIZE	
PROJECT NUMBER	



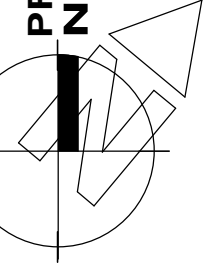
THIRD FLOOR PLAN - WING A (BLOCK 1) - HVAC DEMOLITION
SCALE: 1 : 100



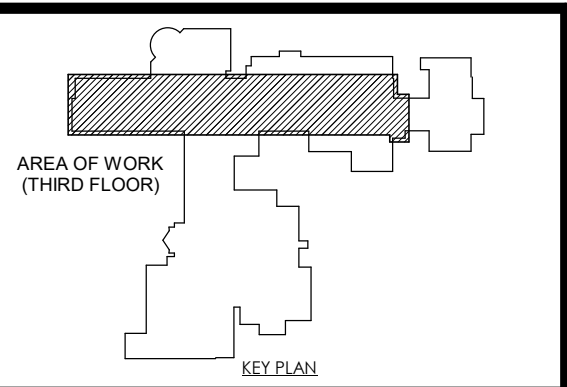
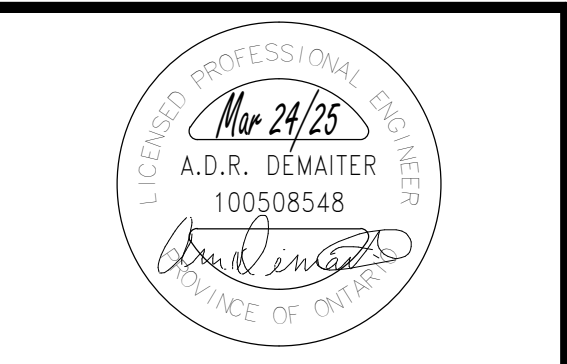
THIRD FLOOR PLAN - WING A (BLOCK 2&3) - HVAC DEMOLITION
SCALE: 1 : 100

The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work.
The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.
The drawings do not indicate all offsets fitting and accessories which may be required. Provide the same to meet the required conditions.
Drawings and specifications, etc., prepared and issued by the Consultant are the property of the Consultant and must be returned at the completion of the project. These documents are not to be duplicated or copied without the consent of the Consultant.
Do not scale this drawing.
© 2024 DEI Consulting Engineers Inc.

PROJECT NORTH



No.	REVISIONS	DATE



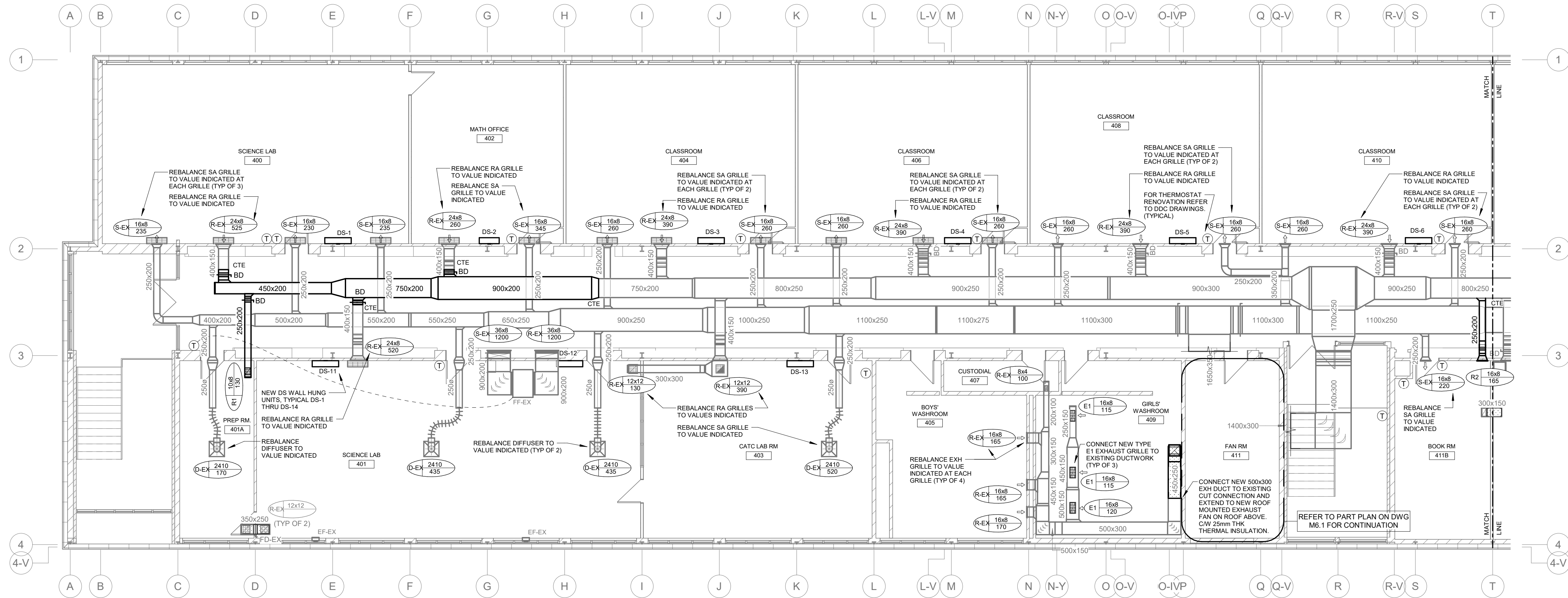
ISSUED FOR PERMIT/TENDER	2025.03.24
CHRONOLOGY	DATE



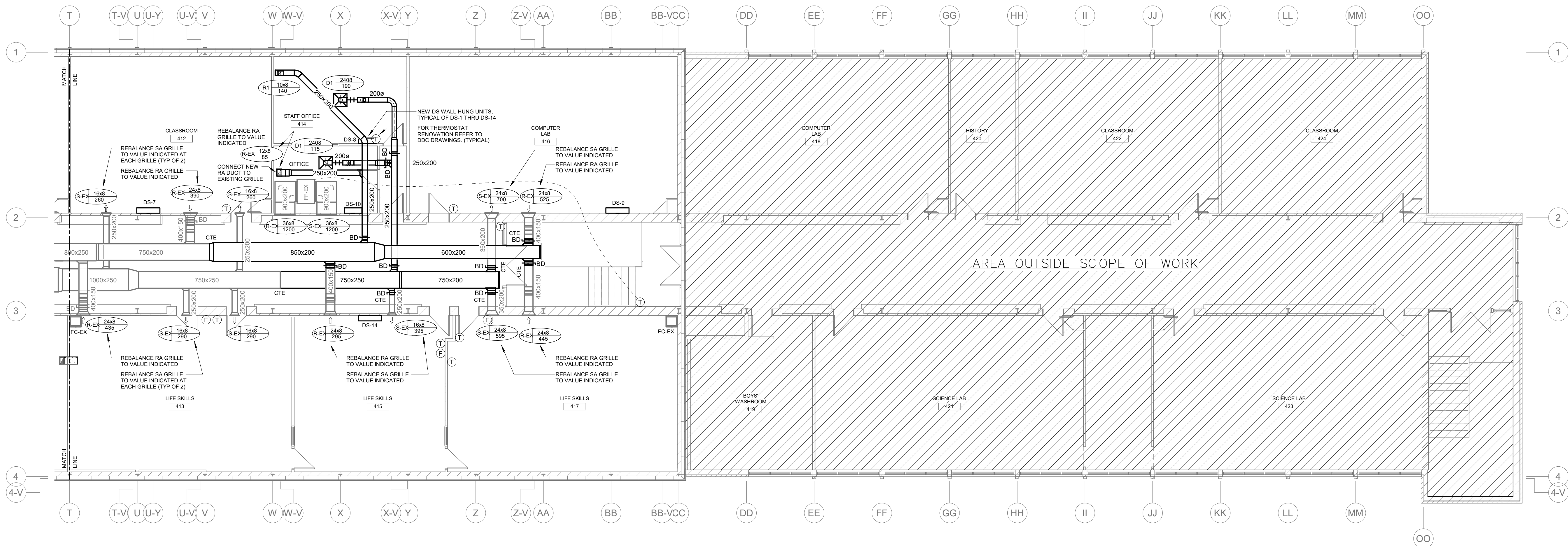
PROJECT NAME
WRDSB WCI HVAC Upgrades & Renovations, Waterloo
300 Hazel St, Waterloo, ON N2L 3P2

DRAWING TITLE
THIRD FLOOR PLAN WING A - HVAC DEMOLITION

SCALE AS NOTED	DRAWING NUMBER M5.1
SHEET SIZE 24X36	
PROJECT NUMBER 24331	



THIRD FLOOR PLAN - WING A (BLOCK 1) - HVAC RENOVATION
SCALE: 1 : 100

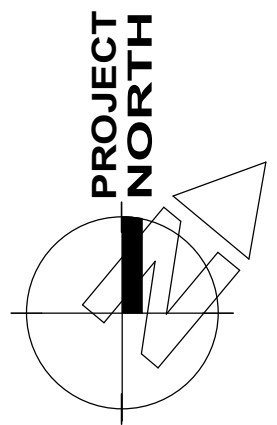


THIRD FLOOR PLAN - WING A (BLOCK 2&3) - HVAC RENOVATION
SCALE: 1 : 100

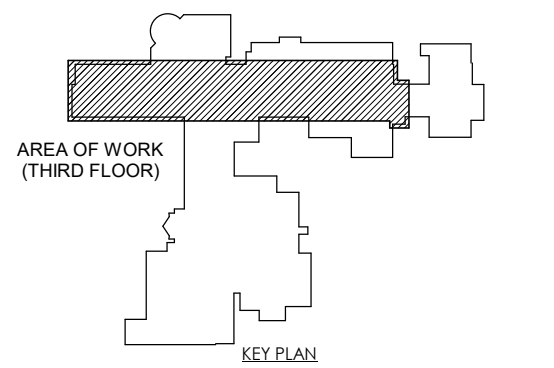
GENERAL NOTES

1. ALL SUPPLY AIR DUCTWORK ON THE 3RD FLOOR (EXISTING AND NEW) SHALL BE INSULATED. REFER TO SPECIFICATION FOR DETAILS.

The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work.
The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the project.
The drawings do not indicate all offsets fitting and accessories which may be required. Provide the same to meet the required conditions.
Drawings and specifications, etc., prepared and issued by the Consultant are the property of the Consultant and must be returned at the completion of the project. These documents are not to be duplicated or copied without the consent of the Consultant.
Do not scale this drawing.
© 2024 DEI Consulting Engineers Inc.



No.	REVISIONS	DATE



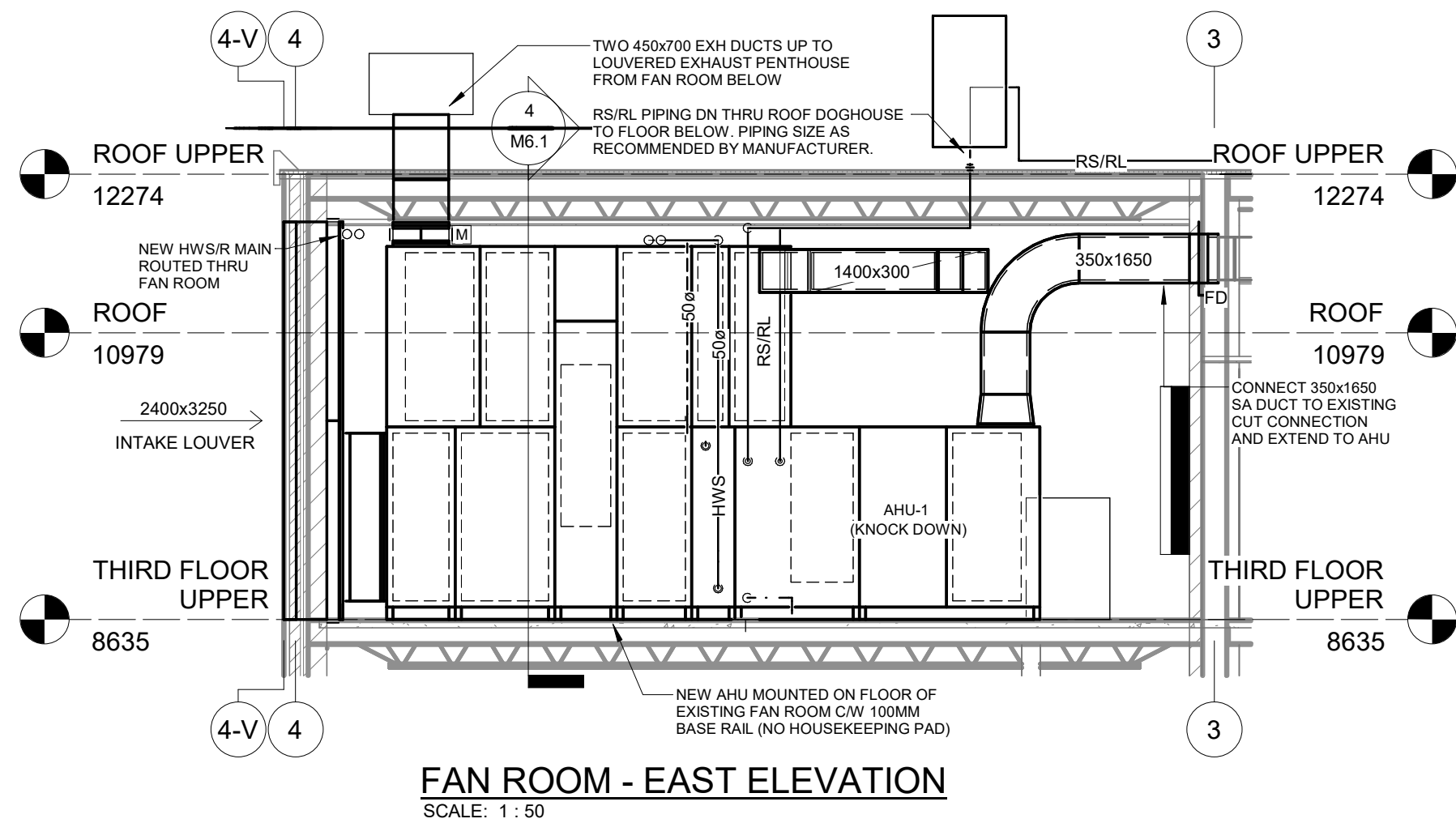
ISSUED FOR PERMIT/TENDER	2025.03.24
CHRONOLOGY	DATE



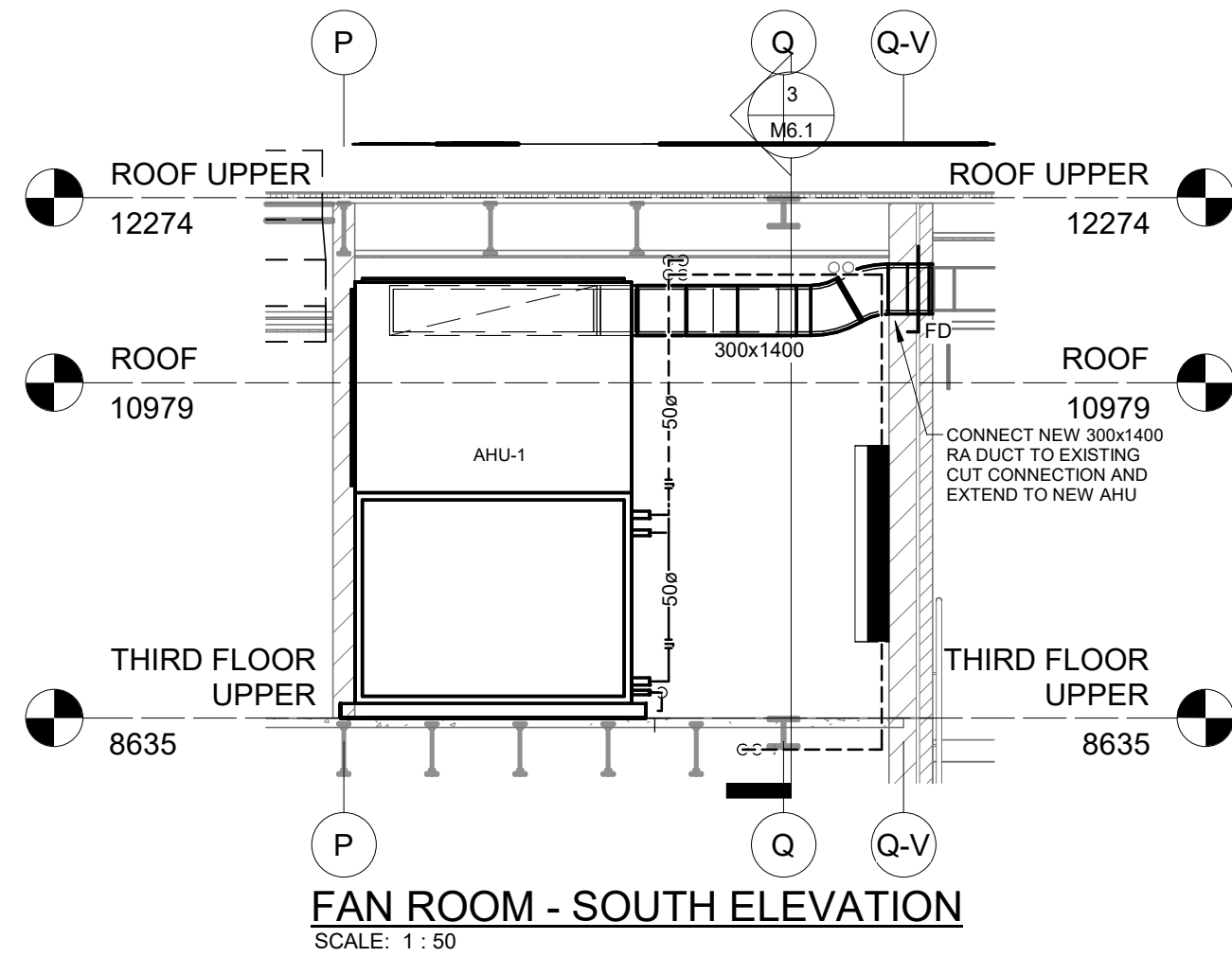
PROJECT NAME
WRDSB WCI HVAC Upgrades & Renovations, Waterloo
300 Hazel St. Waterloo, ON N2L 3P2

DRAWING TITLE
THIRD FLOOR PLAN WING A - HVAC RENOVATION

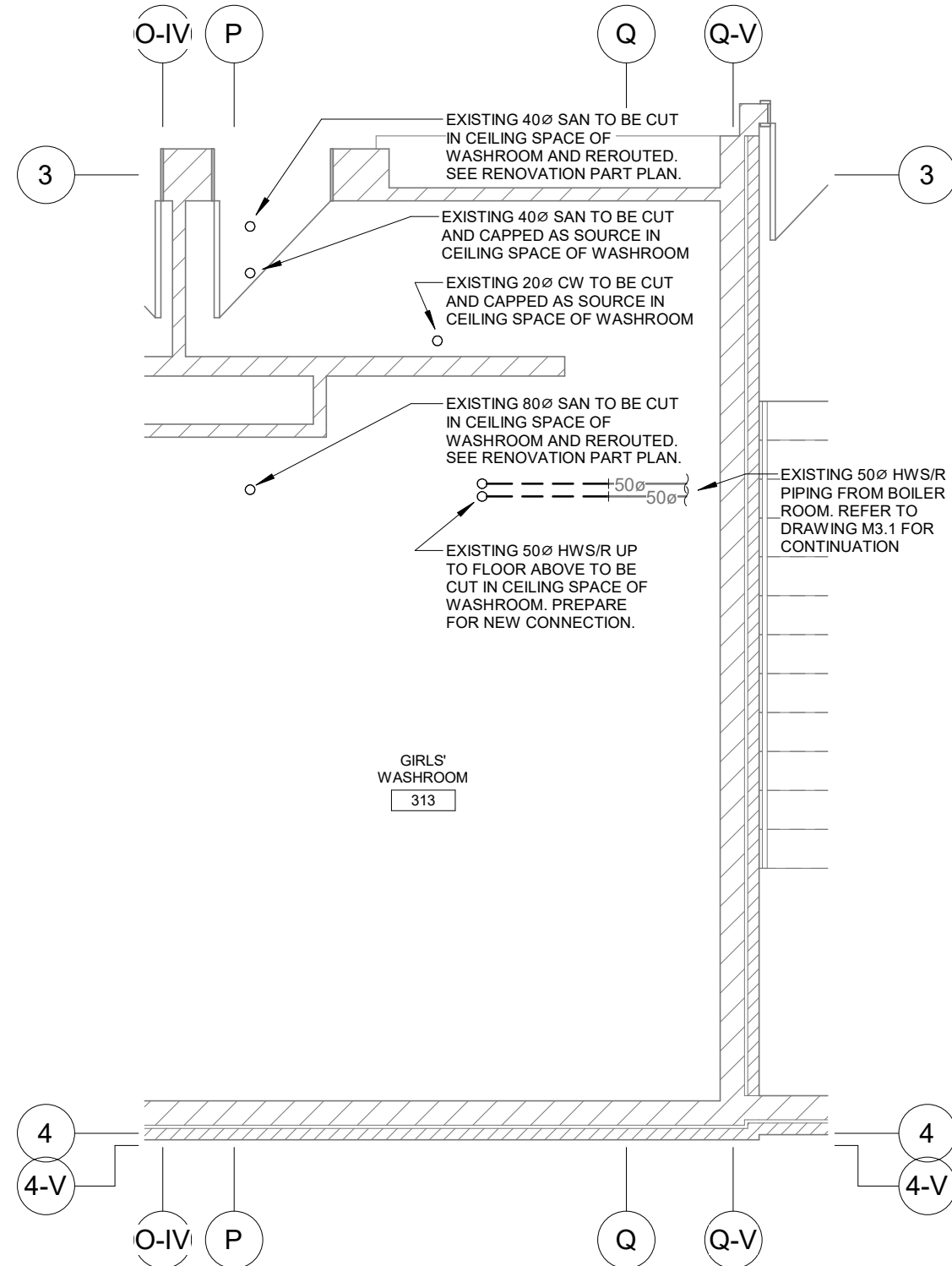
SCALE AS NOTED	DRAWING NUMBER M5.2
SHEET SIZE 24X36	PROJECT NUMBER 24331



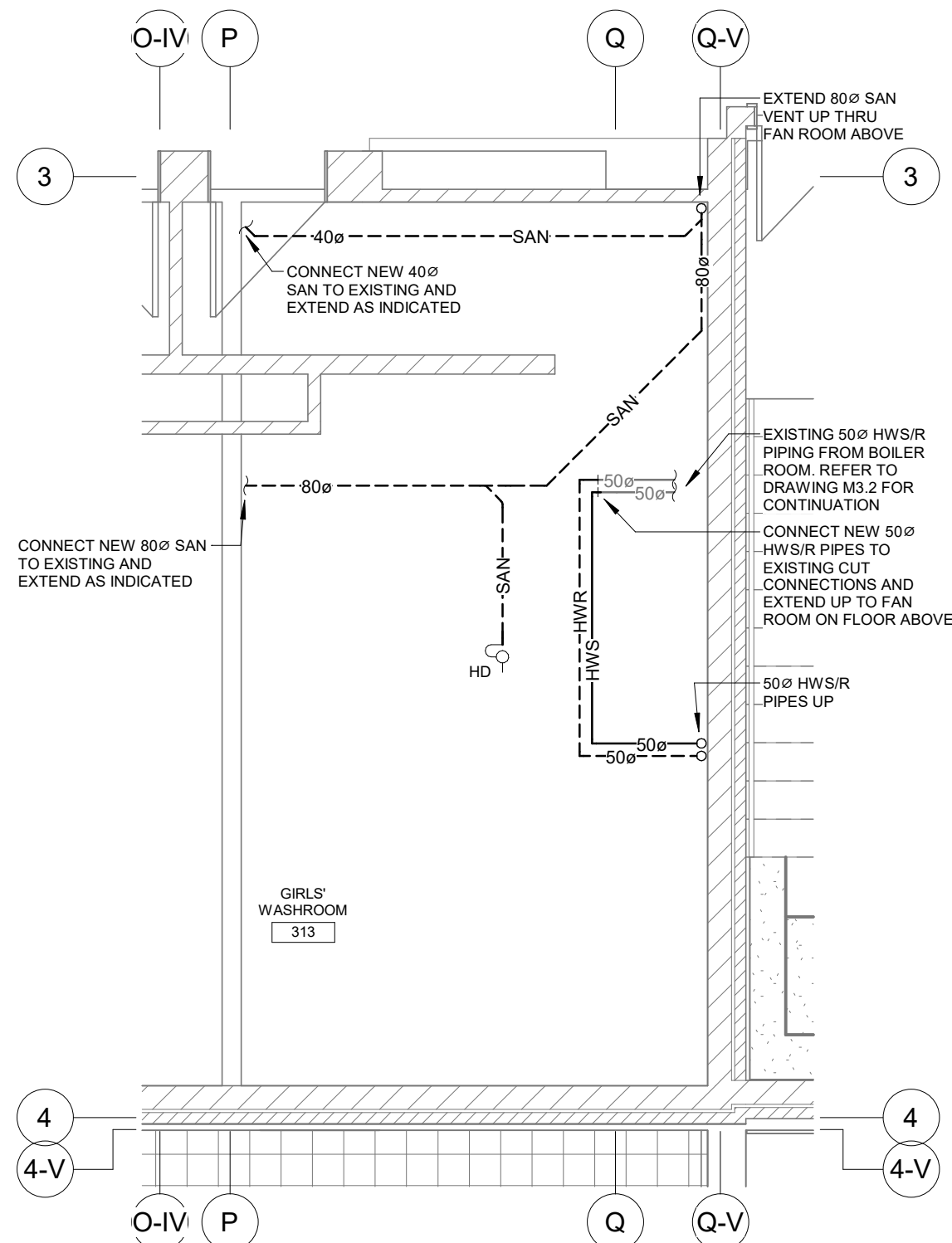
FAN ROOM - EAST ELEVATION
SCALE: 1 : 50



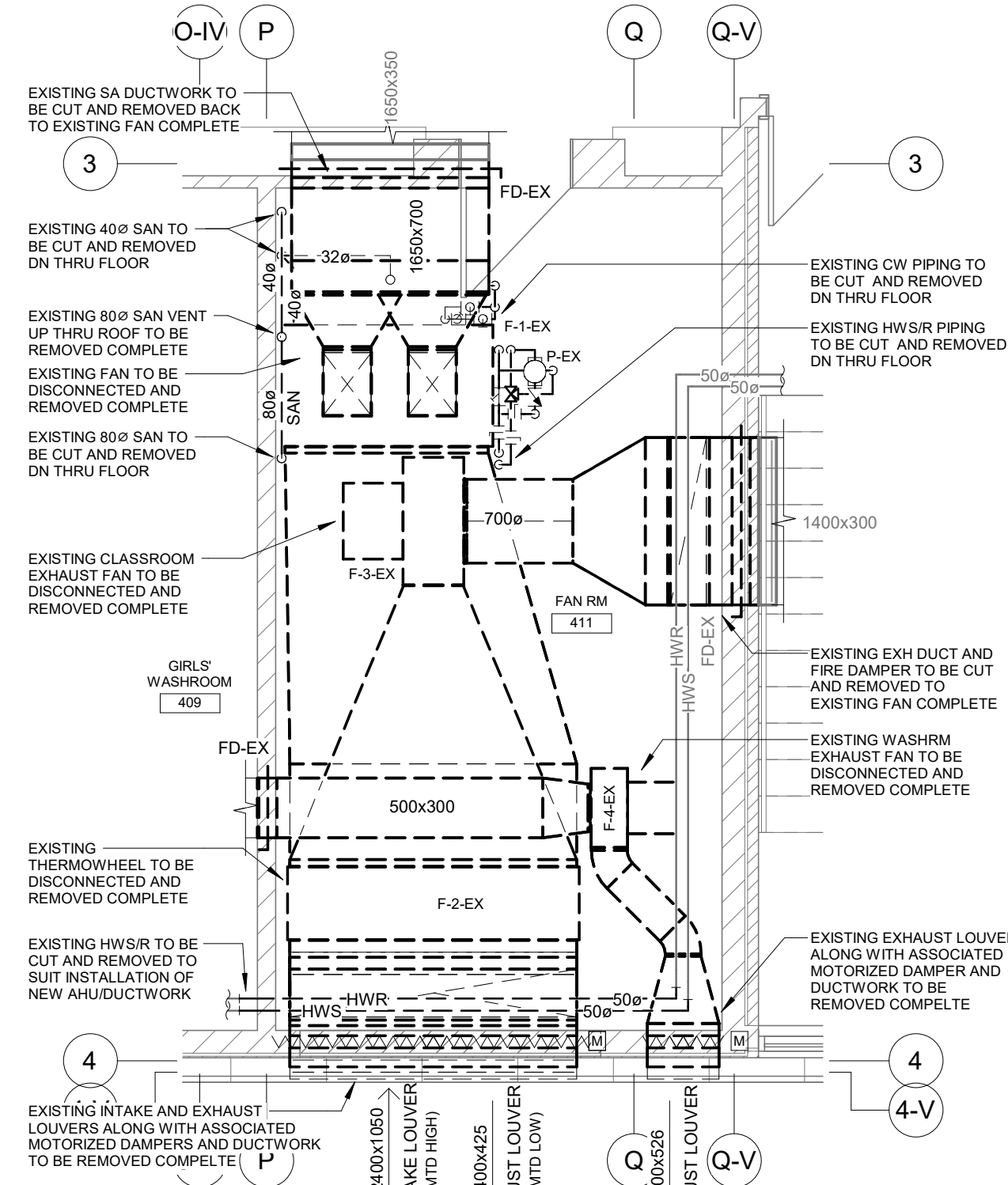
FAN ROOM - SOUTH ELEVATION
SCALE: 1 : 50



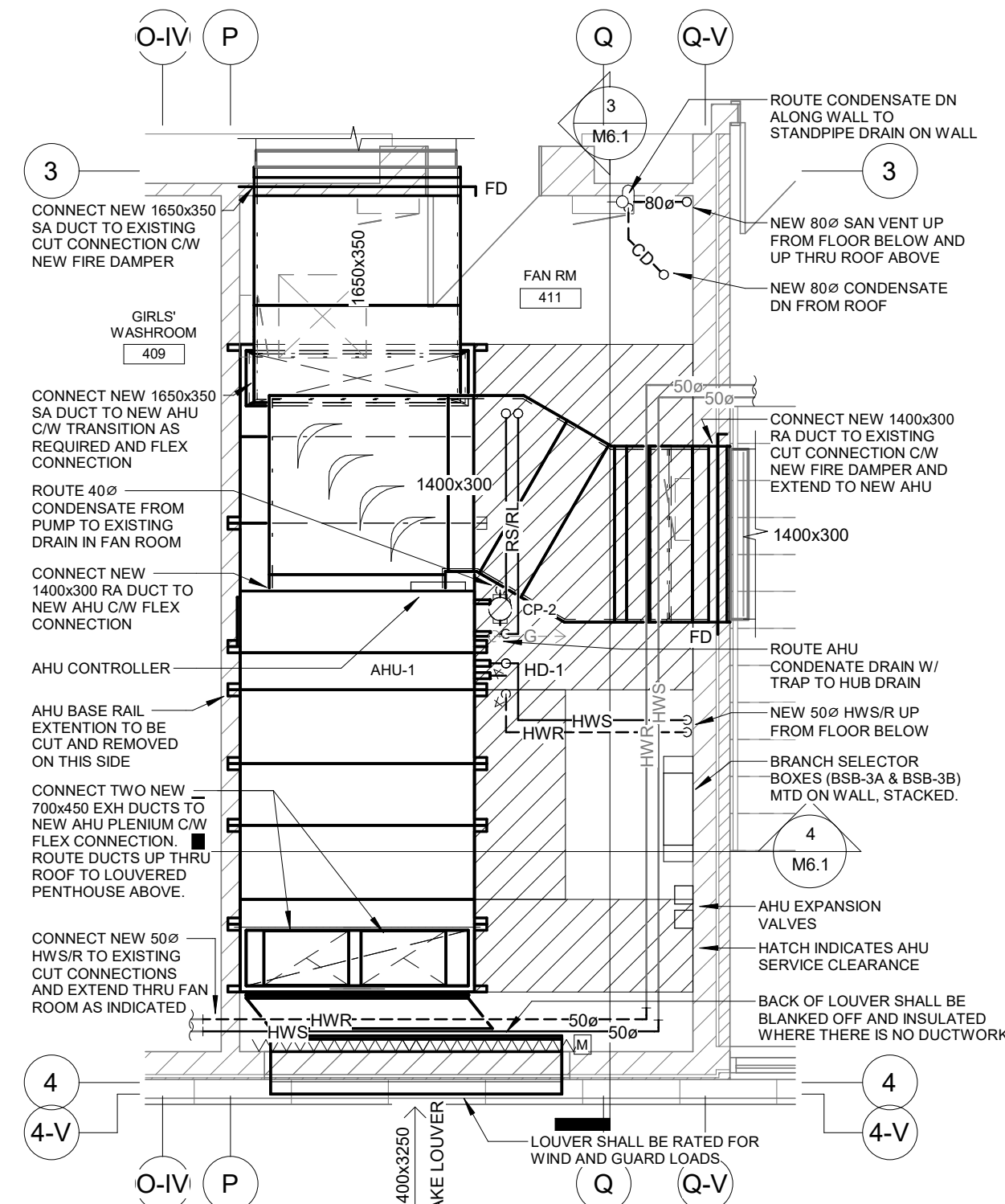
SECOND FLOOR - WASHROOM PART PLAN DEMOLITION
SCALE: 1 : 50
(PIPING IN CEILING SPACE)



SECOND FLOOR - WASHROOM PART PLAN RENOVATION
SCALE: 1 : 50
(PIPING IN CEILING SPACE)

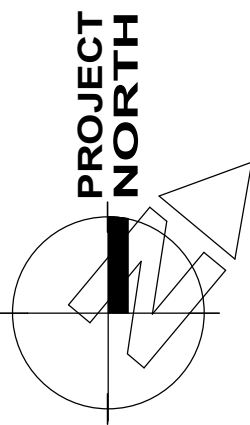


FAN RM 411 - DEMOLITION
SCALE: 1 : 50

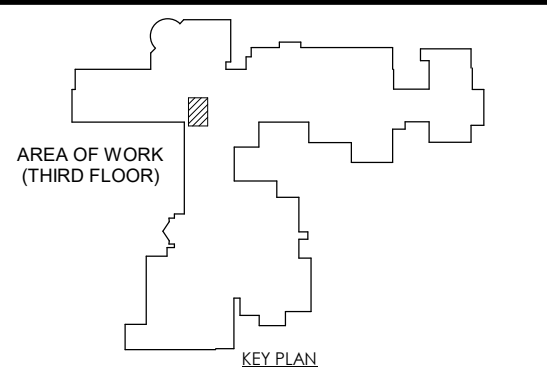
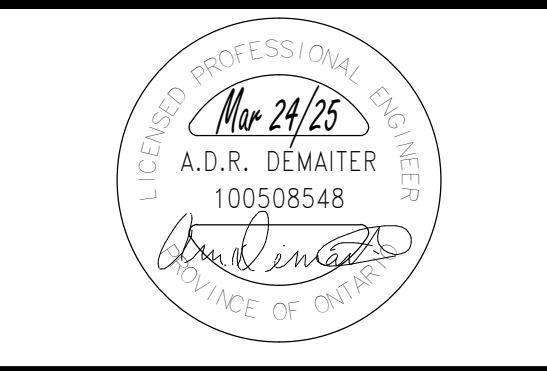


FAN RM 411 - RENOVATION
SCALE: 1 : 50

The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work.
The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.
The drawings do not indicate all offsets fitting and accessories which may be required. Provide the same to meet the required conditions.
Drawings and specifications, etc., prepared and issued by the Consultant are the property of the Consultant and must be returned at the completion of the project. These documents are not to be duplicated or copied without the consent of the Consultant.
Do not scale this drawing.
© 2024 DEI Consulting Engineers Inc.



No.	REVISIONS	DATE



ISSUED FOR PERMIT/TENDER	2025.03.24
CHRONOLOGY	DATE

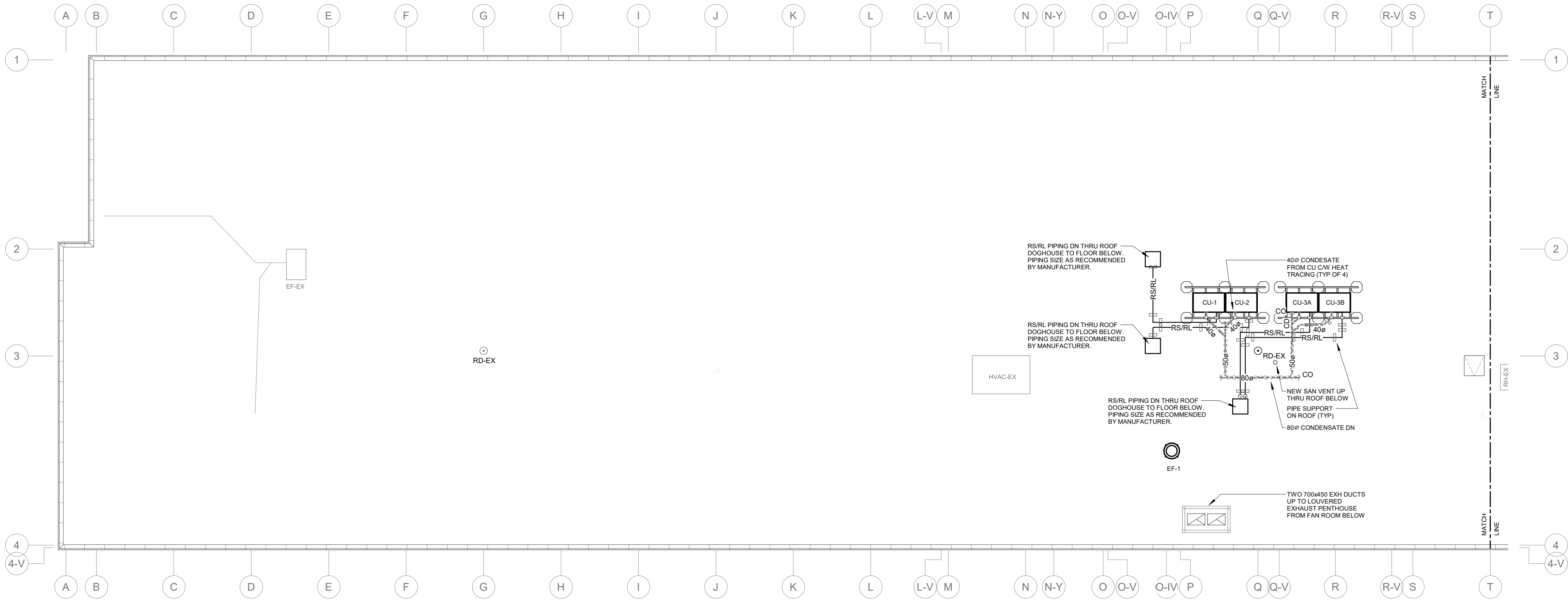


PROJECT NAME
WRDSB WCI HVAC Upgrades & Renovations, Waterloo
300 Hazel St, Waterloo, ON N2L 3P2

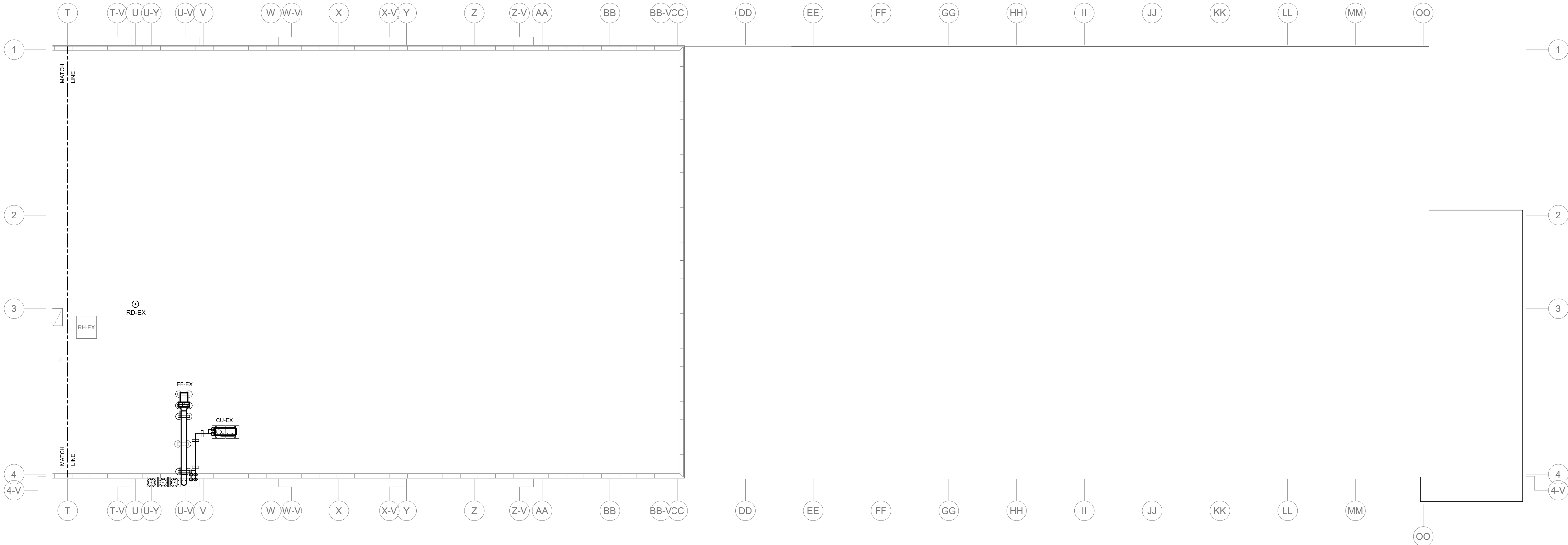
DRAWING TITLE
FAN RM 411 (WING A) - DEMO/RENO

SCALE	DRAWING NUMBER
AS NOTED	M6.1
SHEET SIZE	24X36
PROJECT NUMBER	24331

C:\Revit\24331 WRDSB WCI Mech Central (RVT2).cbrncr\delasociates.com.rvt 2025-03-24 4:23:12 PM

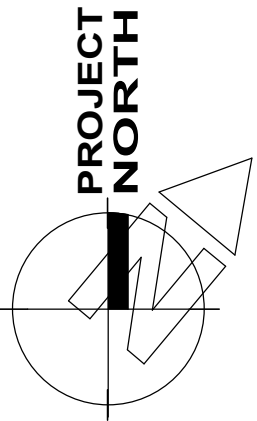


ROOF PLAN - WING A (BLOCK 1)
SCALE: 1 : 100

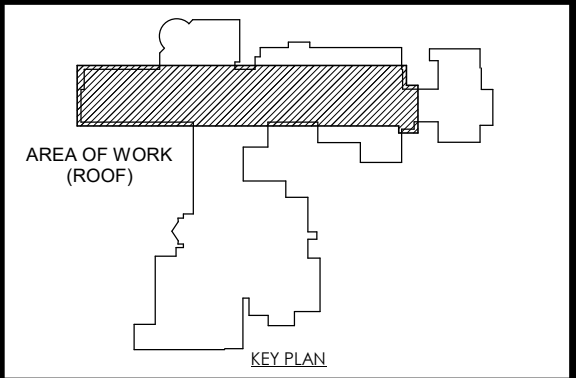


ROOF PLAN - WING A (BLOCK 2&3)
SCALE: 1 : 100

The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work.
The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.
The drawings do not indicate all offsets fitting and accessories which may be required. Provide the same to meet the required conditions.
Drawings and specifications, etc., prepared and issued by the Consultant are the property of the Consultant and must be returned at the completion of the project. These documents are not to be duplicated or copied without the consent of the Consultant.
Do not scale this drawing.
© 2024 DEI Consulting Engineers Inc.



No.	REVISIONS	DATE



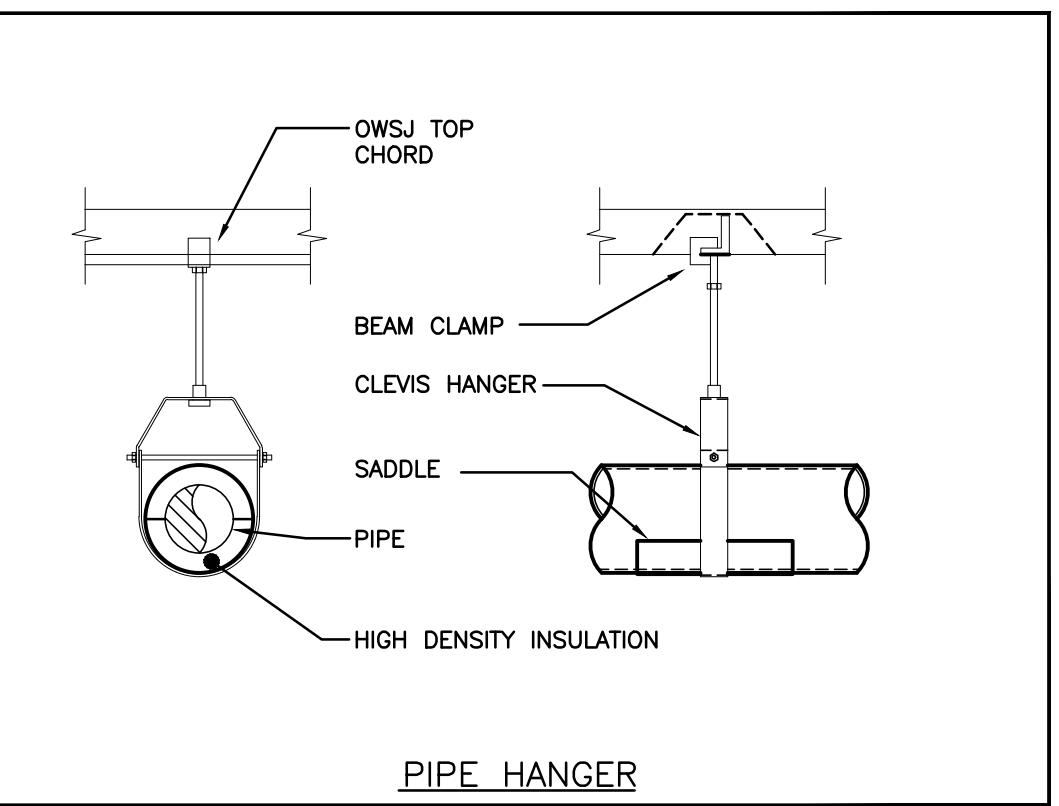
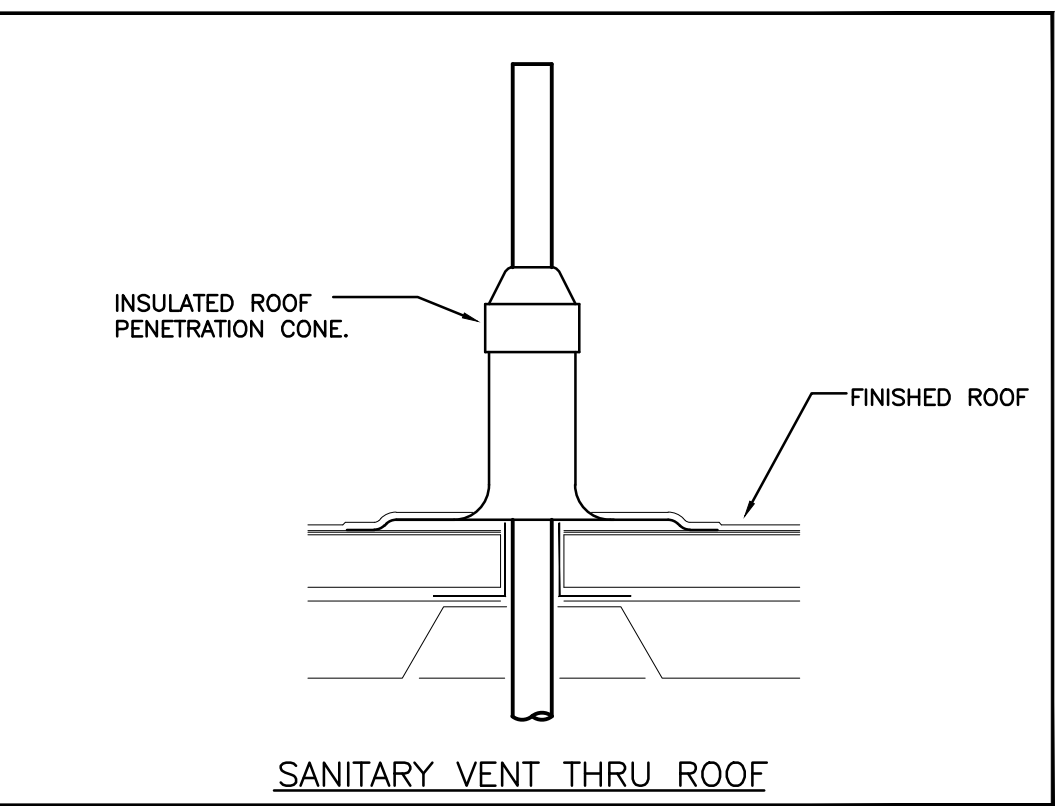
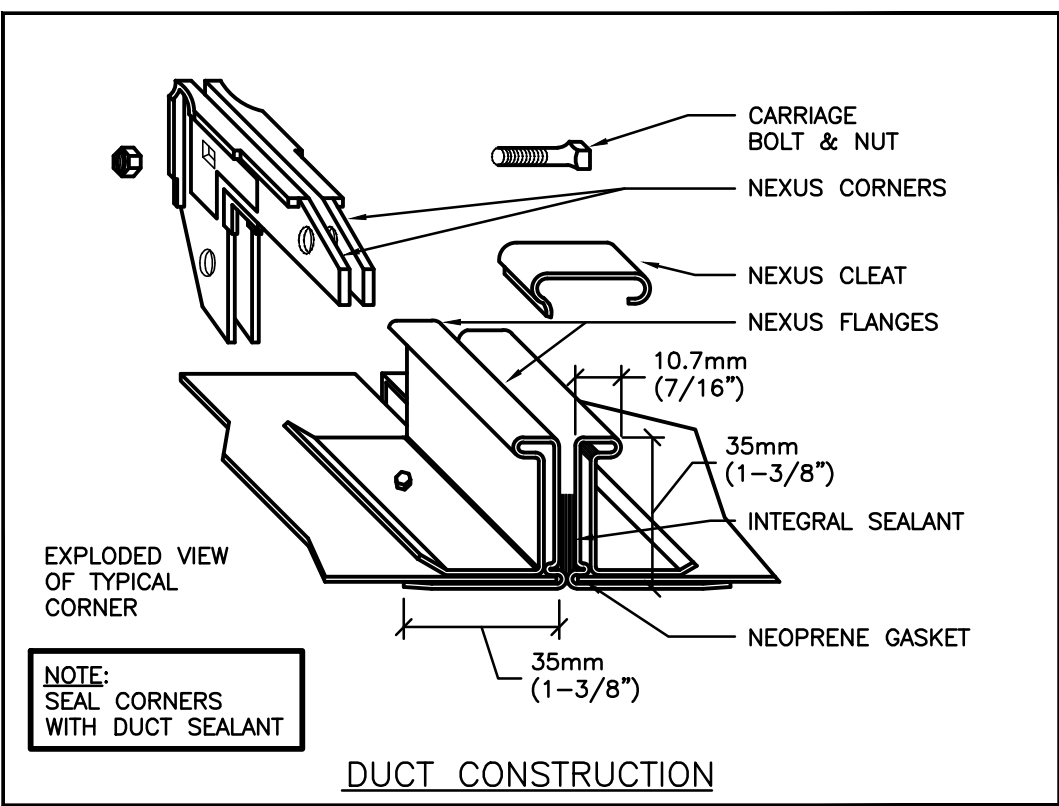
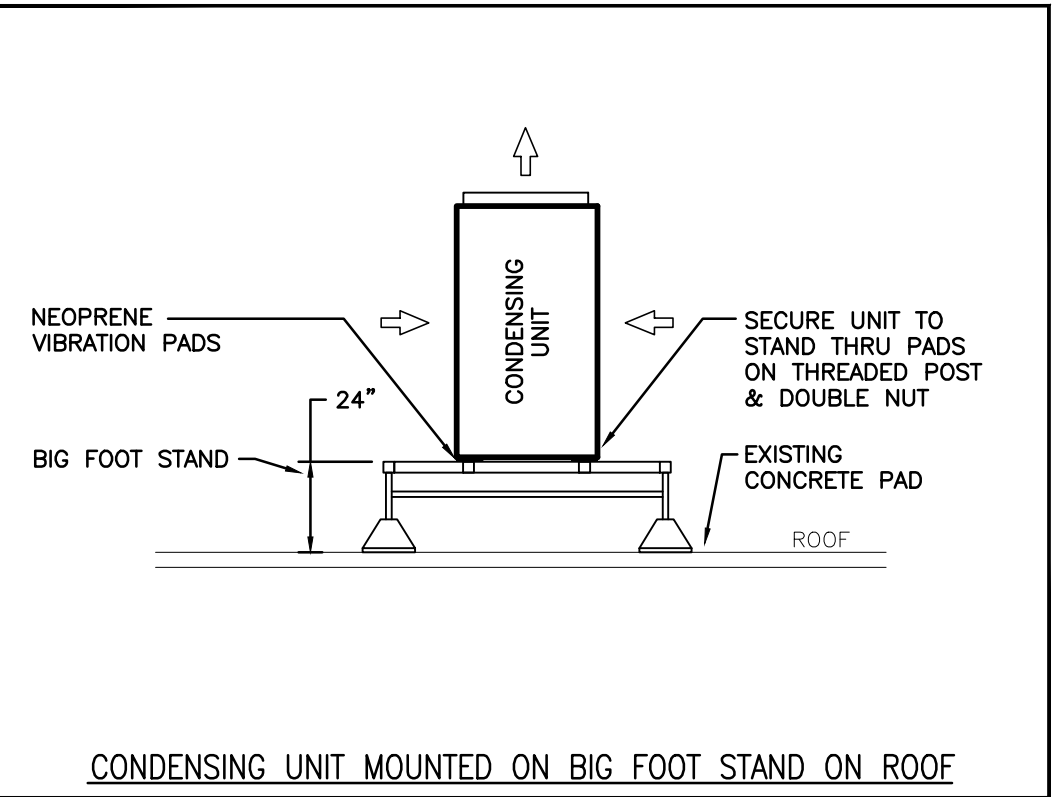
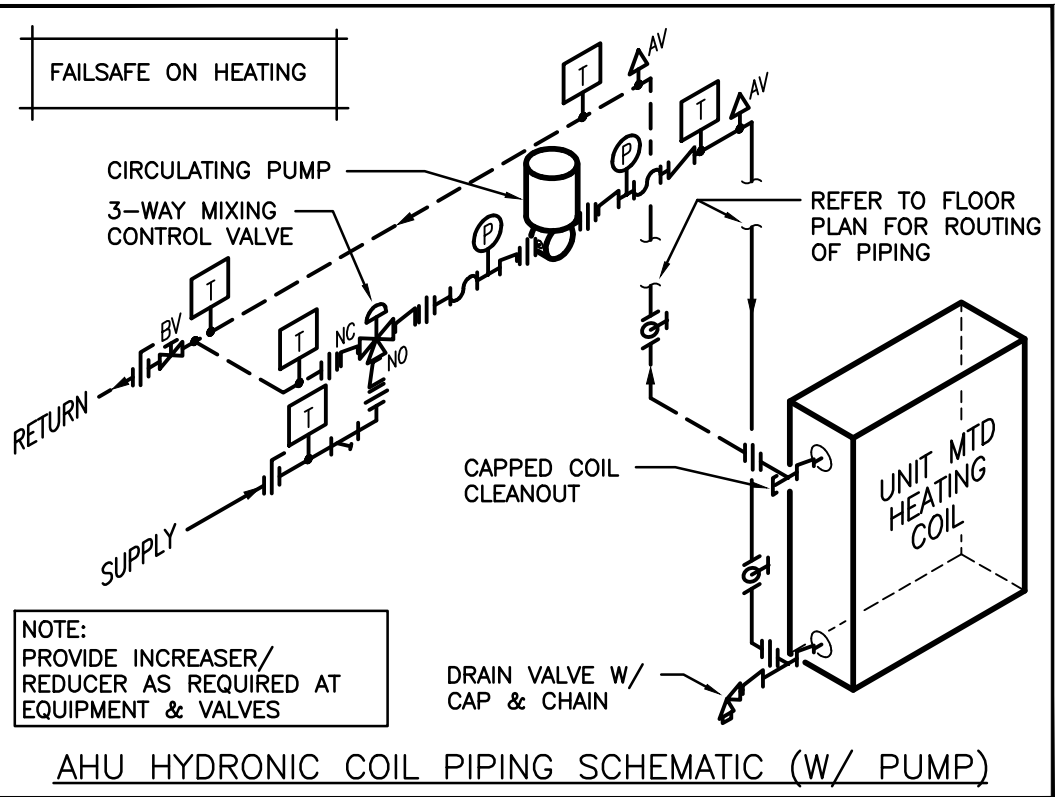
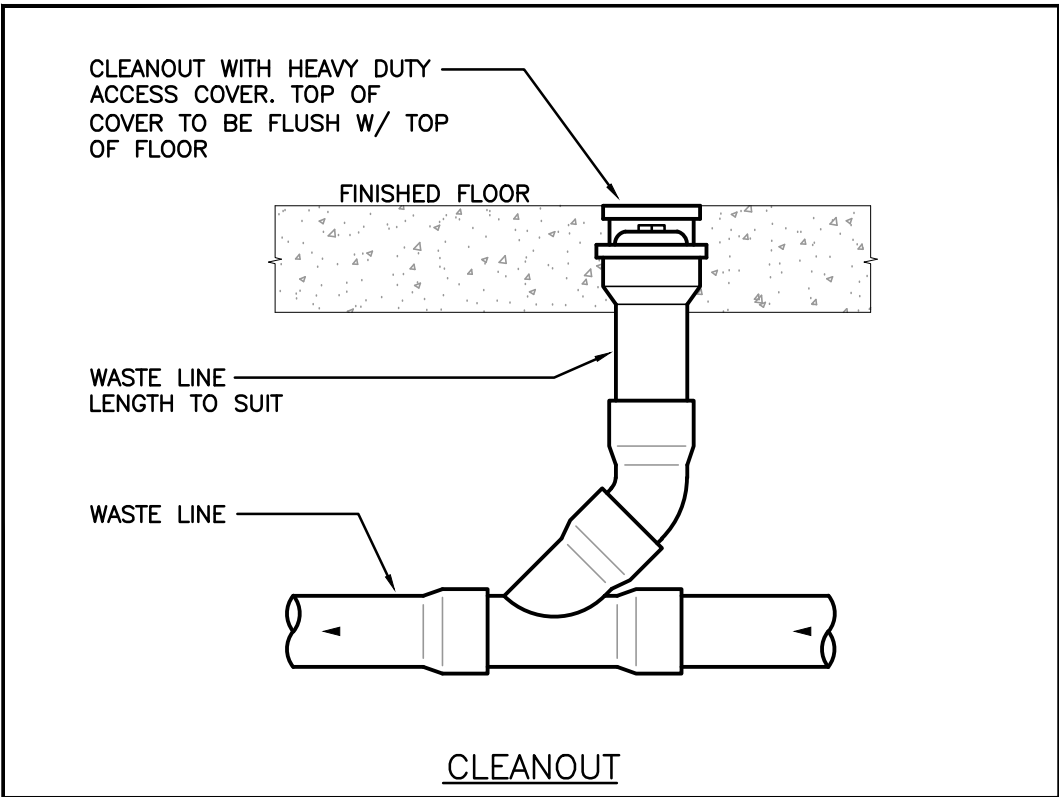
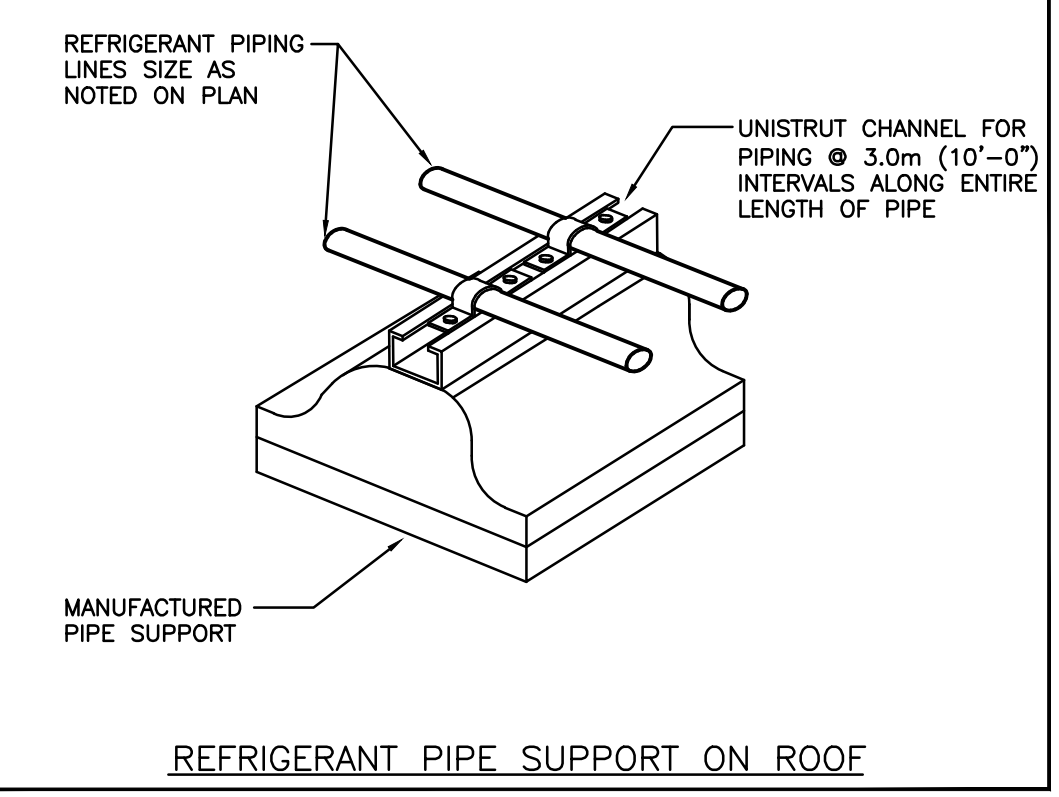
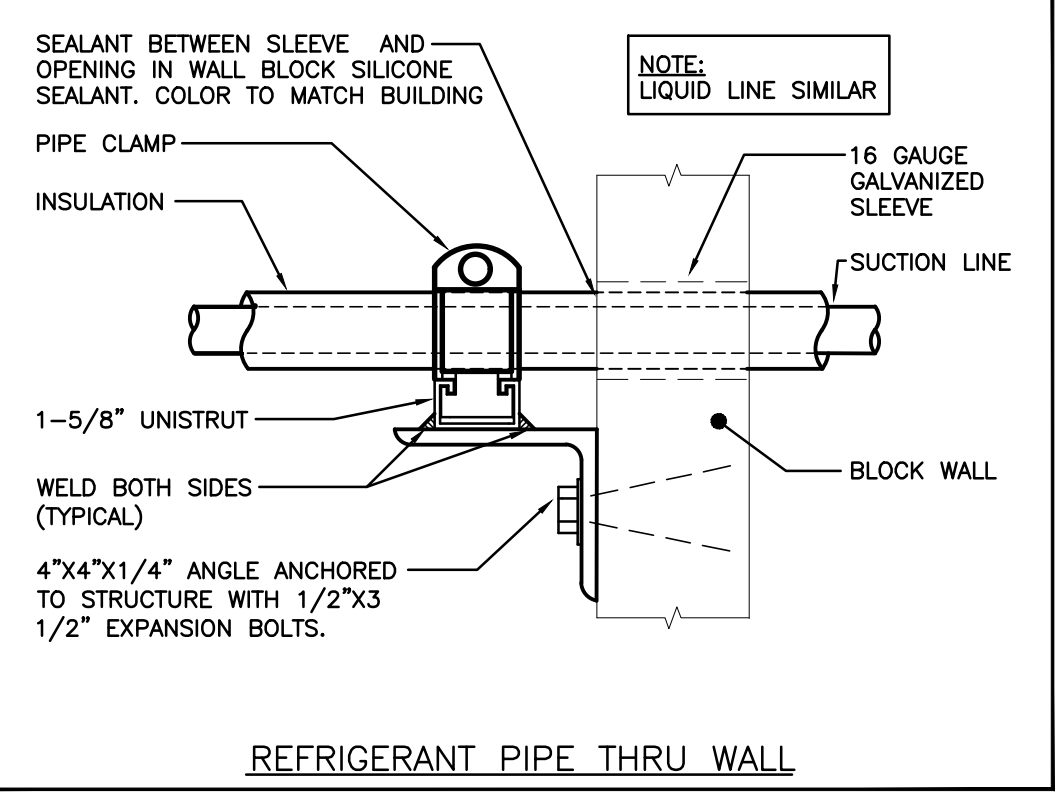
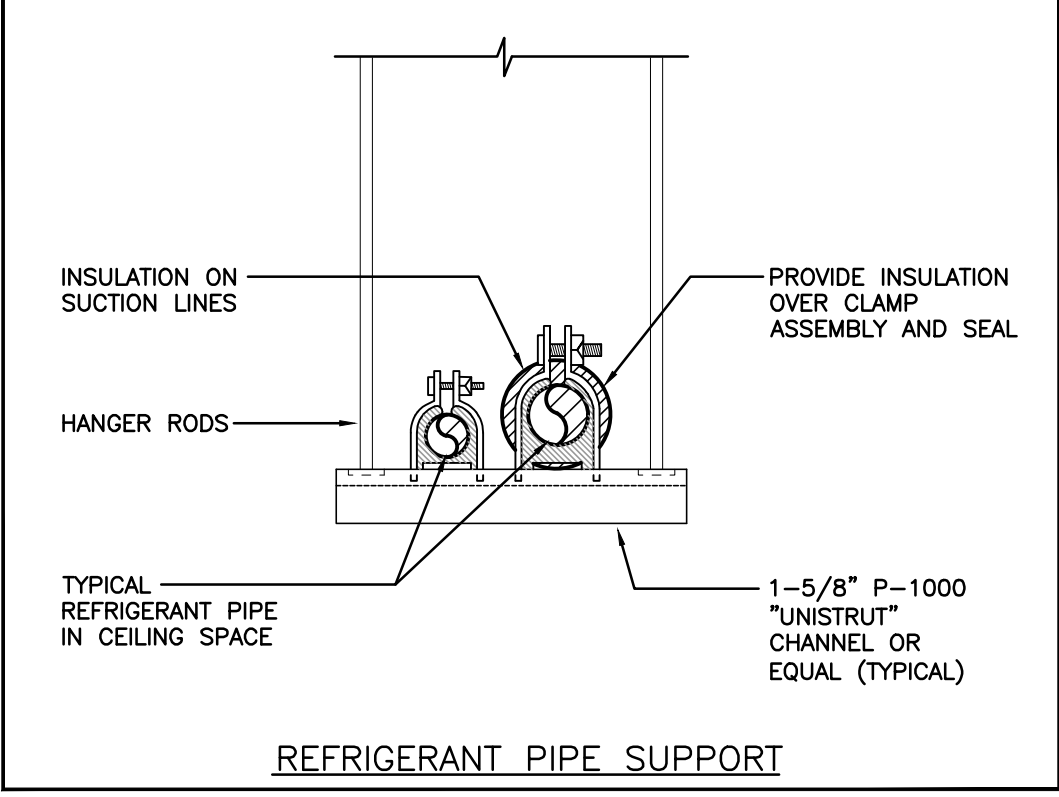
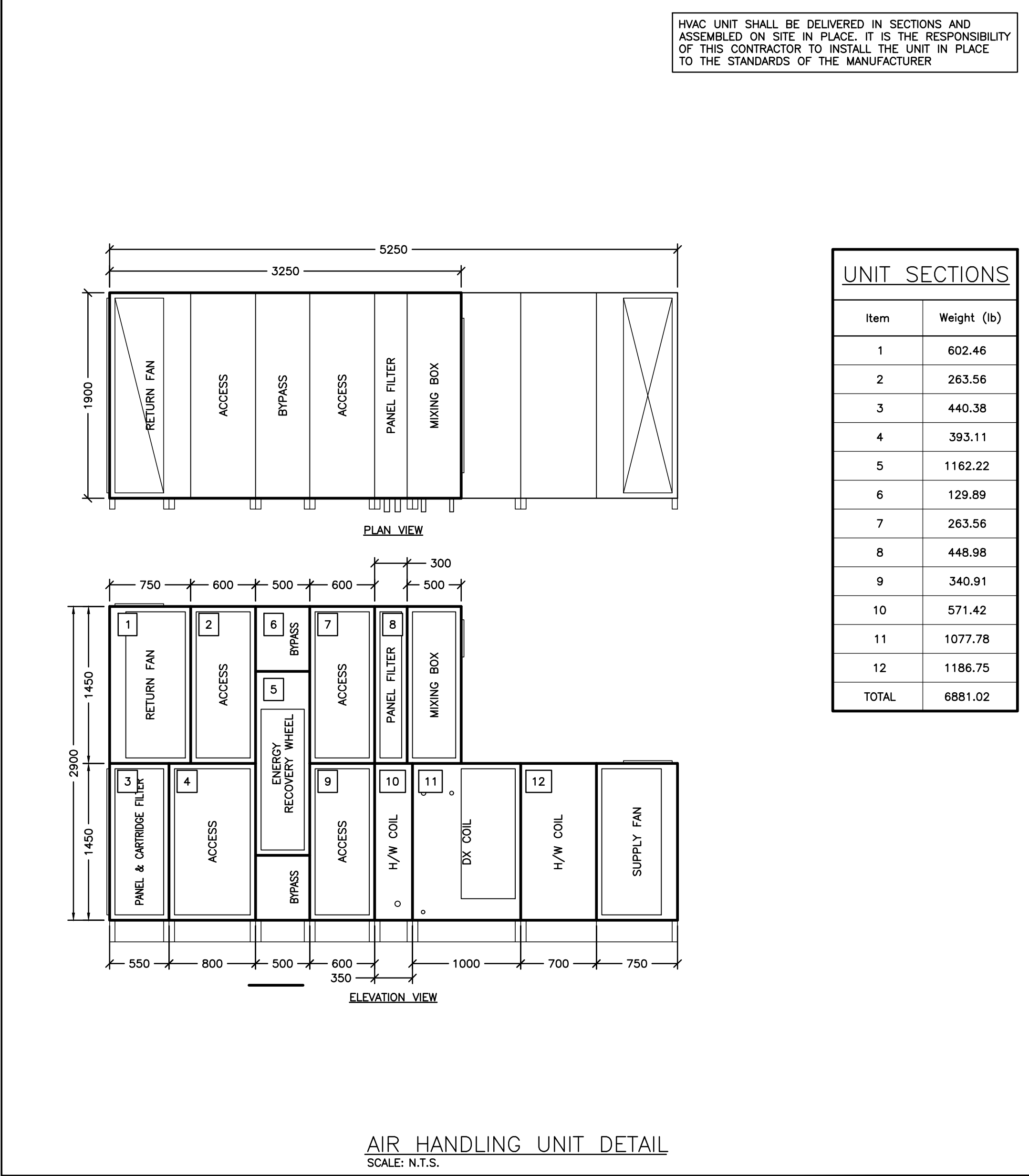
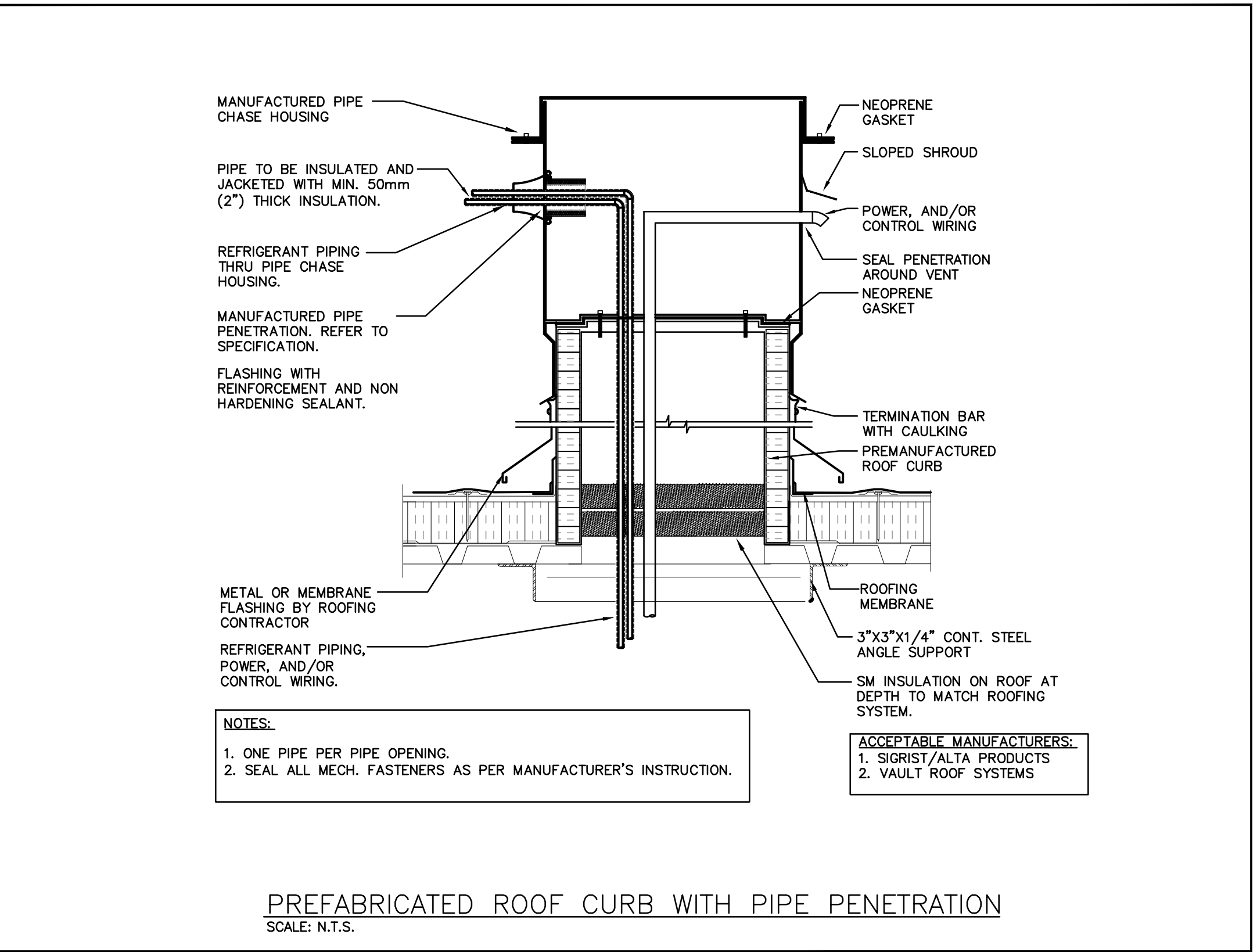
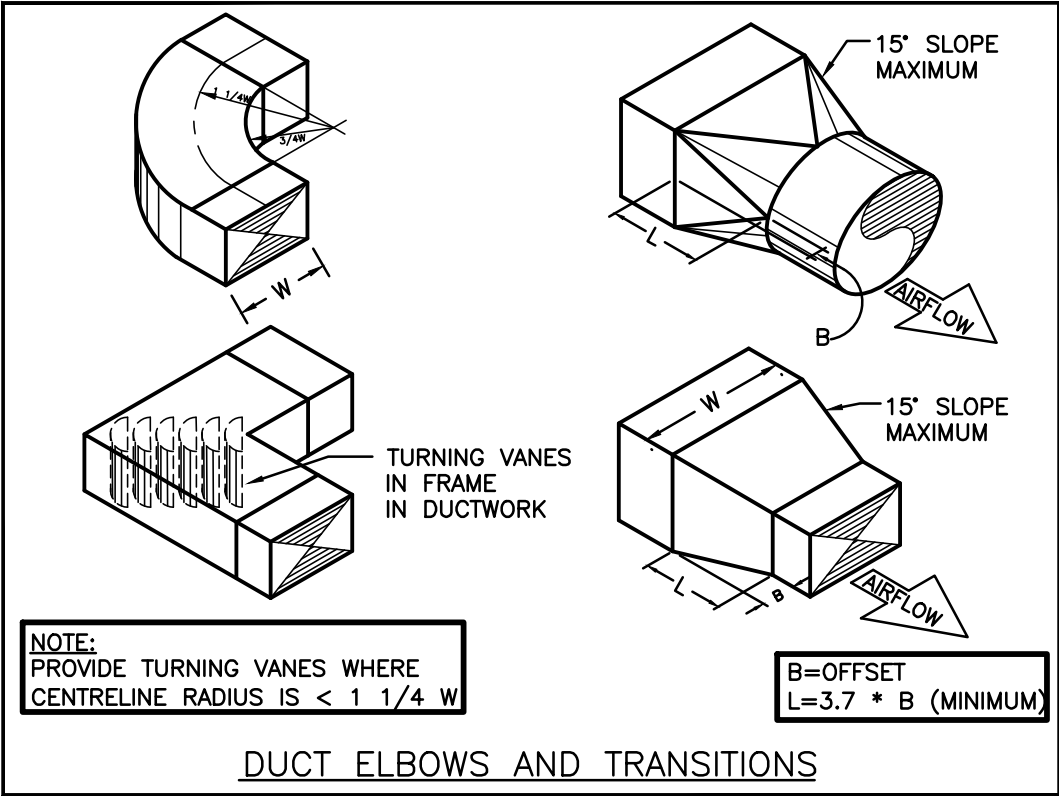
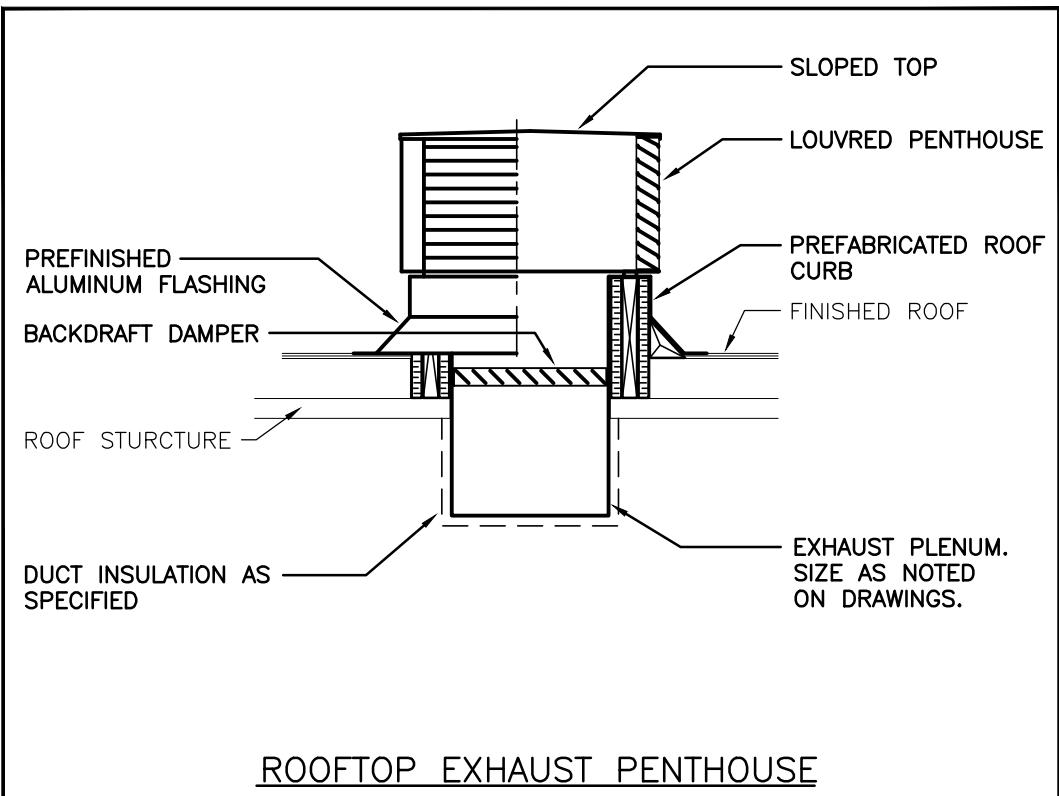
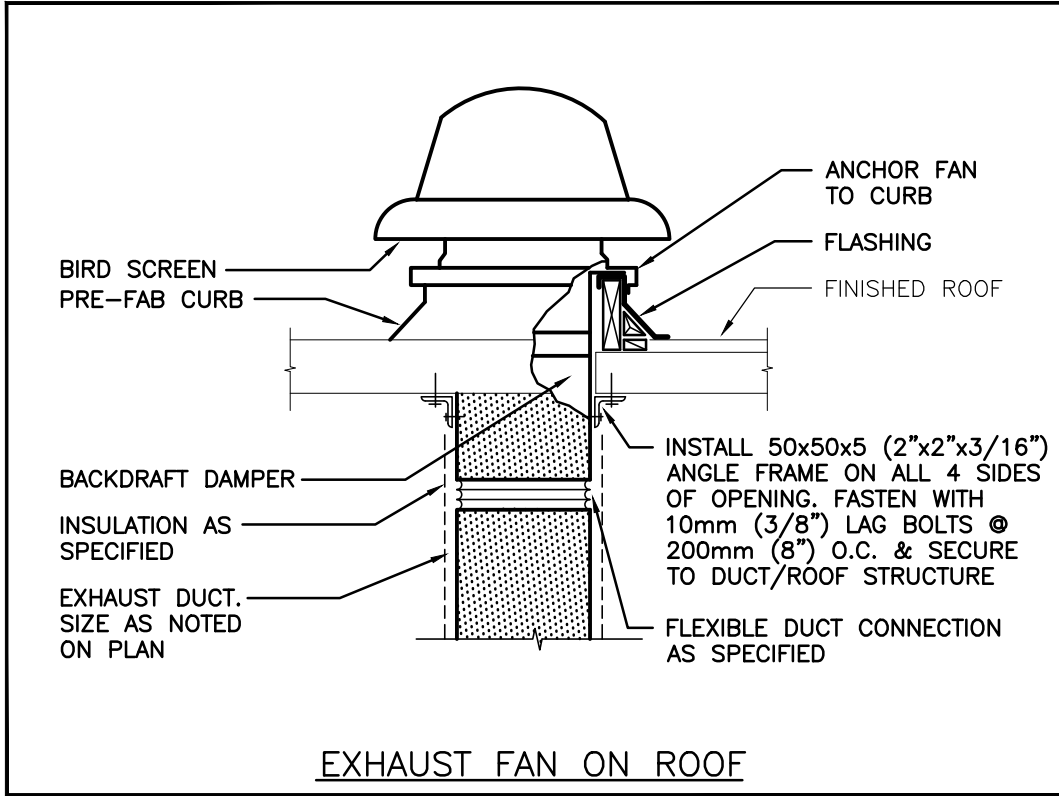
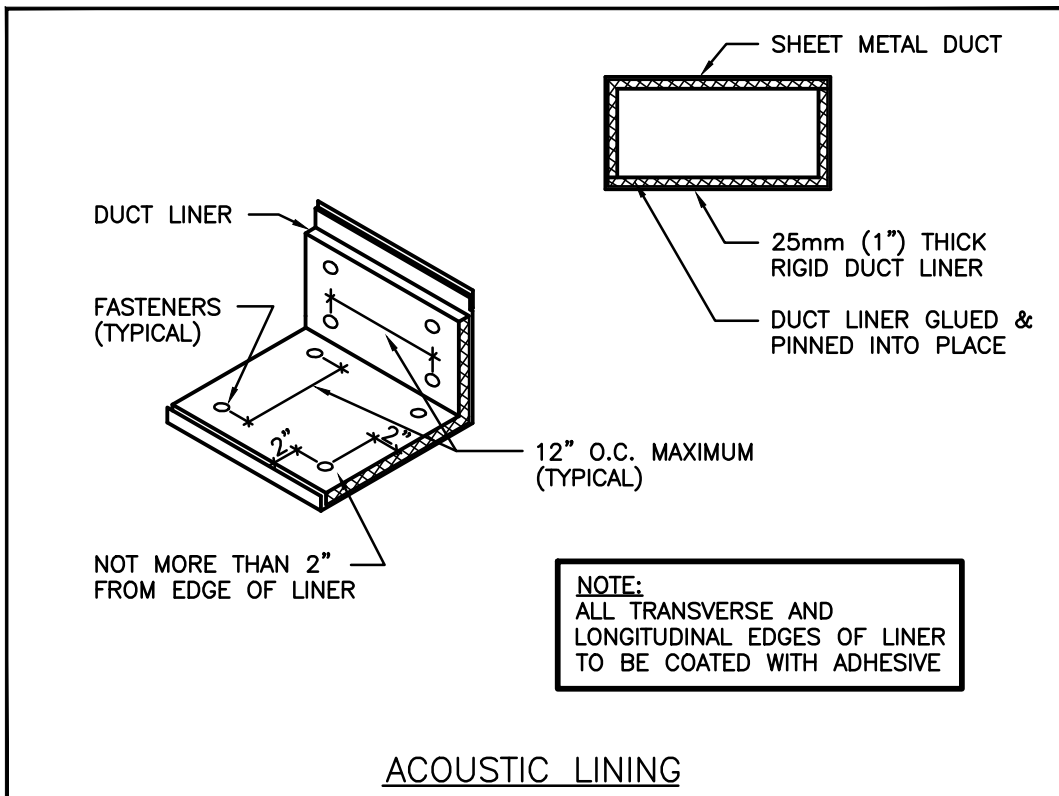
ISSUED FOR PERMIT/TENDER	2025.03.24
CHRONOLOGY	DATE



PROJECT NAME
**WRDSB WCI HVAC
Upgrades &
Renovations, Waterloo**
300 Hazel St, Waterloo, ON N2L 3P2

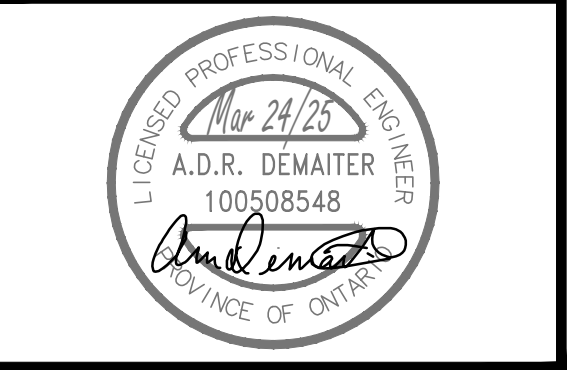
DRAWING TITLE
**ROOF PLAN WING A -
RENOVATION**

SCALE AS NOTED	DRAWING NUMBER M7.1
SHEET SIZE 24X36	
PROJECT NUMBER 24331	



The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work.
The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.
The drawings do not indicate all offsets fitting and accessories which may be required. Provide the same to meet the required conditions.
Drawings and specifications, etc., prepared and issued by the Consultant are the property of the Consultant and must be returned at the completion of the project. These documents are not to be duplicated or copied without the consent of the Consultant.
Do not scale this drawing.
© 2025 DEI Consulting Engineers Inc.

No.	REVISIONS	DATE



ISSUED FOR PERMIT/TENDER	2025.03.24
CHRONOLOGY	DATE



PROJECT NAME
WATERLOO COLLEGIATE INSTITUTE - HVAC UPGRADES
300 HAZEL ST., WATERLOO, ON, N2L 3P2

DRAWING TITLE
DETAILS

SCALE AS NOTED	DRAWING NUMBER M8.1
SHEET SIZE 24x36	PROJECT NUMBER 2024-168

Scope of Work

The lighting retrofits will generally consist of the following work:

1. Modify existing fixtures to accommodate WRDSB approved Type B LED Lamps as Retrofit Kits (not self-ballasted lamps)
2. Supply and install WRDSB approved Type B LED lamps

Contractor shall complete this work as shown on the attached layout. The layout includes device quantities that are accurate to the best of our knowledge. The contractor is responsible to report any inaccuracies.

Execution

- The Contractor shall source all materials for this project including lamps.
2. The lead time for the lamps will be noted on the shop drawings.
3. Delivery, Storage, and Handling
- a. All equipment shall be stored and handled by the contractor as per manufacturer's requirements and recommendations.
 - b. Materials may be stored on site with permission of the head custodian
4. Contractor to clean up the work site EACH DAY to the satisfaction of the head custodian. Workspaces to be occupied by students before the contractor returns shall be returned to a clean finished state, with all contractor materials, waste, cut-offs, wire ends, etc., completely removed and the area cleaned.
5. At the start of the project, contractor should document any existing damage to lens covers, fixtures or other furnishings that may be impacted by the work.
6. Timing of work (AFTER HOURS):
- a. All work is to be performed outside of normal school hours (6 am to 4 pm, Mon to Fri).
 - b. Timing of all work needs to be pre-arranged with the head custodian.
7. The Contractor will not work in areas of the school occupied by Rentals and After School programs during the hours these programs are using the space.
8. Assume 2 classrooms are occupied until 6pm Mon to Fri. Assume the space is occupied until 10pm Mon to Fri. Rentals are not to be cancelled in order to facilitate access.
- a. Lamp Retrofit
 - b. The existing fluorescent lamps shall be replaced with Type B LED lamps.
 - c. The existing ballast shall be bypassed and removed.
 - d. Type B lamps are to be installed as Retrofit Kit, not self-ballasted lamps.
 - d. All Type B lamps must be installed double-ended (line to one lamp holder, neutral to the other). Single-ended installation is not acceptable.
9. It is believed that there is no 347V lighting in the school, however any 347V lighting shall be brought to the attention of the coordinator immediately and prior to retrofit. In no case shall the contractor install a Type A lamp on a 347V circuit.
- a. Lamp holders (sockets/tombstones) are assumed to be in good enough condition to enable a retrofit. If the contractor encounters lamp holders that are unsafe or require replacement the work, they are to be replaced. The contractor is not to be included in the quoted price, no extras will be paid for this work. It is the contractor's responsibility to collect the necessary information prior to submitting a bid.
 - b. The contractor is to install a Type B LED identification sticker on surface mounted fixtures or on the T-Bar ceiling adjacent to T-Bar Lay in fixtures, near where fixture cover types are located. Sticker should be easily seen from floor.
 - c. There may be some Type A lamps already in the school due to one-off lamp replacements.
 - d. If the lamp encountered is a Type A: Replace with Type B and Give the Type A lamp replacement cost. Inform Caleb Ganger Regier (caleb_ganger@regierwdrb.ca) that there are Type A lamps on site.
 - e. If the lamp is a hybrid Type A/B: Remove the ballast and leave the existing lamp in place. Type B hybrid lights clearly state "LED T8 UL Type A/B Lamp" on the tube.
- c. Under no circumstances is the contractor to throw out Type A or Type A/B lamps.
- a. • Type B double ended
 - c. Alternate 2: Eiko Model 09735 LED14W/T8/48/840/G80
 - 14 Watt
 - 1,800 Lumens
 - 4000K colour temperature
 - b. • Type B double ended
 - d. Alternate 3: GE Current LED138DT8/G840X/CLVG (Order Code 93154590)
 - 13 Watt
 - 1,950 Lumens
 - 4000K colour temperature
 - c. • Type B double ended
 - e. Alternate 4: XTC Lighting T8-48T-14W-XXY-DE
 - 14 Watt
 - 1,900 Lumens
 - 4000K (colour selectable)
 - Type B double ended
 - PET coated tubes are NSF rated
 - f. Alternate 5: L7814840BDECT
 - 14 Watt
 - 1,800 Lumens
 - 4000K colour temperature
 - Double ended
 - Shatterproof coated
 - g. Alternate 6: WLL-LED28BP10.5DV/840 (Order Code R41124)
 - 10.5 Watt
 - 1,800 Lumens
 - 4000K colour temperature
 - Double or single ended
 - Shatterproof NSF/ANSI Standard 2 – Food equipment rating
- Electrical Details
- 1. Contractor will install WRDSB-supplied "Lights Off" stickers on all switches in school that don't already have similar signage.
 - 2. Contractor will install Luminaire Notification to the ESA per the ESA Program for Acceptance of Retrofit/Luminaire Guide.
 - 3. Contractor will complete retrofit as per ESA Program for Retrofit/Luminaire as per the attached document: <https://assets/files/esaonline/pdf/Forms/Guide-to-Retrofit-Luminaire-ESA.pdf>
- a. Includes installing manufacturer-provided stickers in each fixture that indicates the fixture has been modified per ESA Retrofit/Luminaire Guide Section 4.2.1. Must be placed so as to be seen when changing the lamp.
4. Contractor shall complete retrofit in compliance with L1596C.
- 5. Contractor to log project and attach ESA Certificate of Inspection in the WRDSB CSS system. The certificate is to be loaded onto the project page.
 - 6. Line voltage wiring above the drop ceiling will be in armored cables strapped as per code
 - 7. Low voltage wiring (24VAC or less) installed above the drop ceiling to be plenum rated where applicable
 - 8. Any exposed wiring below a drop ceiling to be run in Wiremold of a suitable size.
 - 9. Contractor to remove and recycle removed ballasts and fluorescent lamps. Contractor will not recycle the lamps from this site with lamps from another site. A recycling certificate and receipt specific to each site is required.
 - 10. Contractor will submit a copy of the ESA Certificate of Inspection prior to project close out.

Type B LED

1. The supplied Type B LED shall be one of the following:
 - a. Preferred: Turlight Model VIV-78BSP/4/10.5W/40/F/DE (4FT) (ordering code 1762893)
 - 10.5 W
 - 1700 Lumens
 - 4000K colour temperature
 - Type B double ended
 - b. Alternate: Earthtronics Model: LT814840BDECT shatterproof coated.
 - 14 Watt
 - 1800 Lumens
 - 4000K colour temperature
 - Type B double ended
 - c. Alternate 2: Eiko Model 09735 LED14WT8/P/48/840-G8D
 - 14 Watt
 - 1800 Lumens
 - 4000K colour temperature
 - Type B double ended
 - d. Alternate 3: GE Current LED13BDT8/G4/840XL/CVG (Order Code 93154590)
 - 13.5W Lumens
 - 13 Watt
 - 4000K colour temperature
 - Type B double ended
 - e. Alternate 4: XTC Lighting T8-48T-14W-XXY-DE
 - 14 Watt
 - 1900 Lumens
 - 4000K (colour selectable)
 - Type B double ended
 - f. PET coated tubes are NSF rated
 - f. Alternate 5: LT814840BDECT
 - 14 Watt
 - 1800 Lumens
 - 4000K colour temperature
 - Double ended
 - Shatterproof coated
 - g. Alternate 6: WLL-LED78BP/10.5DW/840 (Order Code 141124)
 - 10.5 Watt
 - 1800 Lumens
 - 4000K colour temperature
 - Double or single ended
 - Shatterproof NSF/ANSI Standard 2 – Food equipment rated

Electrical Details

1. Contractor will install WRDSB-supplied 'Lights Off' stickers on all switches in school that do not already have similar signage.
2. Contractor to provide signage for the ESR to the ESR for the ESR Program for Acceptance of Retrofitted Luminaires per
3. Contractor shall complete retrofit as per ESR Program for Retrofitted Luminaires as updated on April 1, 2020: <https://essas.com/assets/files/essas/epr/Forms/Guide-ESR-Program-for-Retrofitted-Luminaires-April2020.pdf>
4. Includes installing manufacturer-provided stickers on each fixture that indicates the fixture is not to be replaced. The fixture is not to be replaced per Section 4.2.2. Must be placed so as to be seen when changing the lamp.
4. Contractor shall complete retrofit in compliance with UL1598C.
5. Contractor to log project and attach ESA Certificate of Inspection in the WRDSB CSS logbook located onsite.
6. Line voltage wiring above the drop ceiling will be in armored cables strapped as per code.
7. Low voltage wiring (24VAC or less) installed above the drop ceiling to be plenum rated where applicable.
8. Any exposed wiring below a drop ceiling will be run in Wiremold of a suitable size.
9. Contractor to remove and recycle removed ballasts and fluorescent lamps. Contractor will not expose the lamps from this site with lamps from another site. A recycling certificate and receipt specific to each site is required.
10. Contractor will submit a copy of the ESA Certificate of Inspection prior to project close



KEY PLAN / LED BULB REPLACEMENT

SCALE: NTS

LAMP QUANTITY LEGEND

12x2 FIXTURE QTY x LAMP QTY



Project Number: 24331

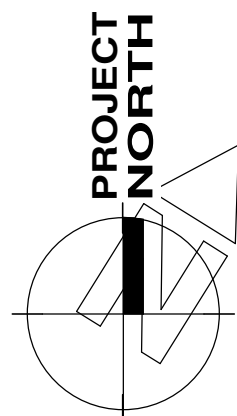
The contractor shall verify all dimensions and report all errors and discrepancies to the Consultant before commencement of the work.

The drawings show general arrangement of services. Follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.

The drawings do not indicate all offsets fitting and accessories which may be required. Provide the same to meet the required conditions.

Drawings and specifications, etc., prepared and issued by the consultant are the property of the consultant and must be returned at the completion of the project. These documents are not to be duplicated or copied without the consent of the Consultant.

Do not scale this drawing.

[illegible]

ISSUED FOR PERMIT AND TENDER	2025.03.24
CHRONOLOGY	DATE



CUEN

WATERLOO REGION
DISTRICT SCHOOL
BOARD

PROJECT NAME

PROJECT NAME

**WATERLOO
COLLEGIATE INSTITUTE -
HVAC & EXTERIOR
UPGRADES**

300 HAZEL STREET, WATERLOO, ON. N2L 3P2

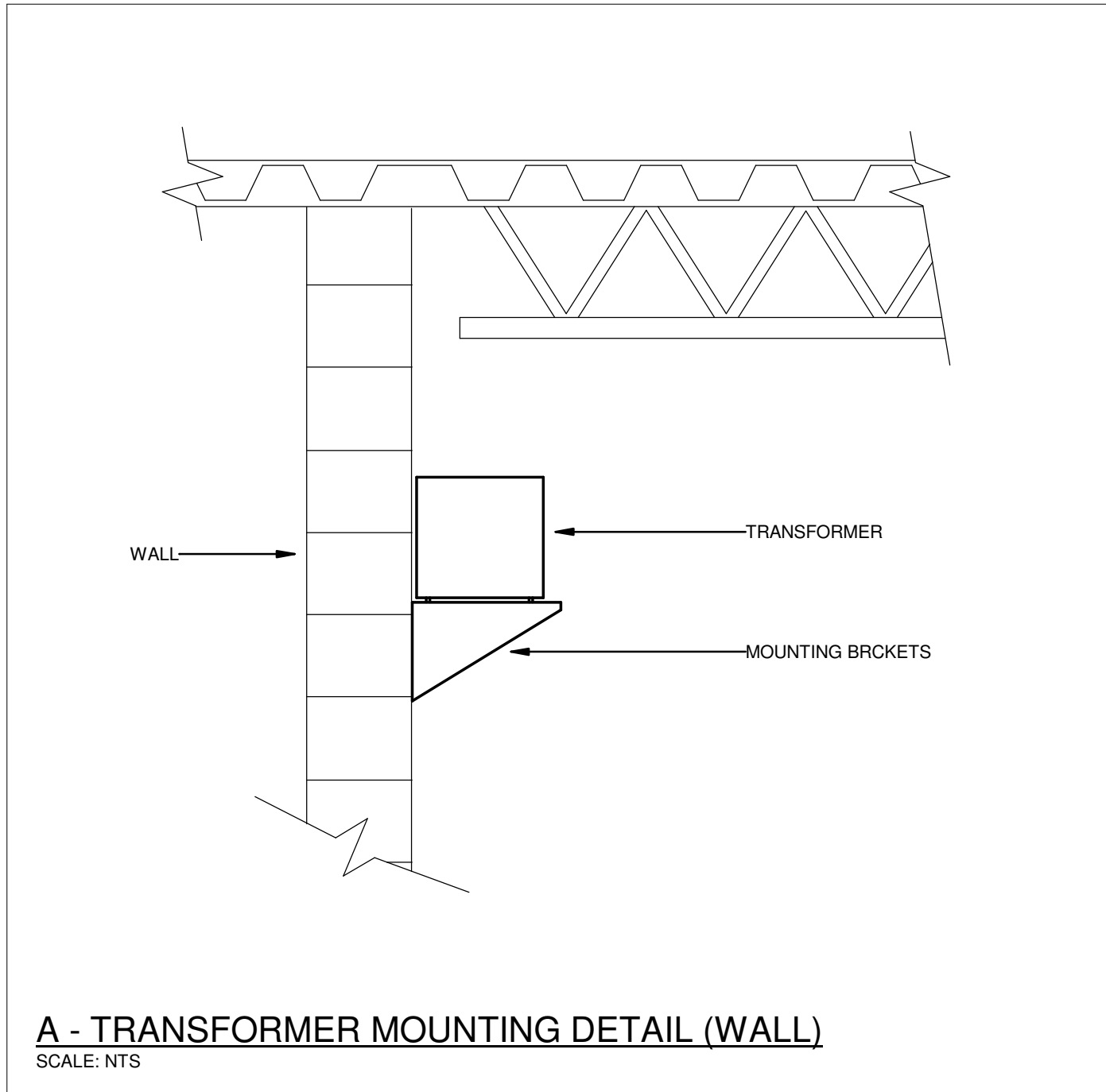
DRAWING TITLE

KEY PLAN / LED BULB REPLACEMENT

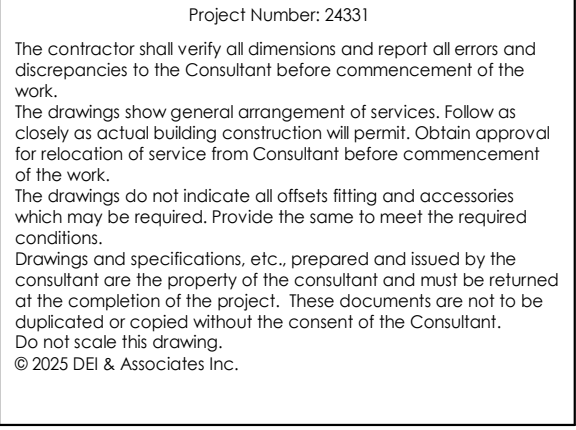
SCALE	DRAWING NUMBER
As Indicated	
24X36	E1.1
PROJECT NUMBER	
2024-168	

Item	Manufacturer/Catalog Number	Voltage	Lamp					Mounting	Listings	Description
			Type	Lumens	Colour Temperature	Wattage	CRI			
L1	COOPER CAT. #24GR-LD5-38-F125-UNV-L840-CD-1 LITHONIA CAT. #G2TL 4-40L-A12125 MVOLT GZ1 LP840 VISCOR CAT. #LRTA24-LED840K-040L-UNV-F98	120V	LED	3469	4000K	26.7W	80	RECESSED		2'x4' (610mmx1220mm) LED TROFFER C/W 0.125" (3.2mm) THICK PATTERN 12 FROSTED LENS, 10% 0-10V DIMMING DRIVER, AND WHITE FINISH.
L2	COOPER CAT. #14-GR-LD5-32-A125-UNV-L840-CD-1 LITHONIA CAT. #GTL 4-33L-A12125 GZ1-LP840 SIGNIFY CAT. #1SML32L840-4-FA-02F-UNV-DIM	120V	LED	3465	4000K	30W	80	RECESSED		1'x4' (305mmx1220mm) LED TROFFER C/W ALUMINUM HOUSING, A12 PRISMATIC LENS, AND ELECTRONIC DRIVER.
L3	COOPER CAT. #4SNX LW UNV CC83 CD1 C/W WG-SNX-SN-4FT-B LITHONIA CAT. #CSS L48 AL03 UVOLT SSW3 80CRI SIGNIFY CAT. #SDS42448L8CST-UN3-DIM C/W FKR-126-& SDS4WG (SET TO 4000K AND 4850LM)	120V	LED	4100	4000K	33W	80	SUSPENDED		4' (1220mm) SURFACE LED STRIP LIGHT C/W WIDE LENSED OPTICAL DISTRIBUTION, CHAIN SUSPENSION KIT, 10% 0-10V DIMMING DRIVER, AND WIRE GUARD. NOTE: SUSPEND TO MAINTAIN MAXIMUM HEADROOM.
EXIT LIGHTS	AIMLITE CAT. #RPALWUMWHTUNVDC STANPRO CAT. #RMXL0WH-JUDC LUMACELL CAT. #LASXUW	12V/120V	LED	-	-	2.5 WATT (MAX./AC 2 WATT (MAX./DC	N/A	SURFACE	N/A	LED EXTRUDED ALUMINUM PICTOGRAM FIXTURE C/W GREEN FACE AND WHITE LEGEND. UNIVERSAL MOUNTING TO SUIT WALL, END OR CEILING, AND MAXIMUM 2.5" (63mm) THICKNESS. FACES AND CHEVRONS TO SUIT DRAWINGS.
EMER. BATT. (SELF-POWERED)	BEGHELLI TEMPESTA SERIES: EM-1 #TA-LED-EM-120-TB-90SP (RECESSED TBAR MOUNT) OR APPROVED EQUALS BY: STANPRO AIMLIGHT	12V/120V	LED	-	-	2-4W PAR18	N/A	RECESSED		VANDAL RESISTANT LONG LIFE, SEALED BATTERY. C/W 17W LED MODULES, POLYCARBONATE BODY AND 90 MINUTE BATTERY DURATION.

NOTES:	1 FOR INFORMATION REGARDING DRIVER AND LENS INFORMATION REFER TO SPECIFICATION. 2 LED LUMEN VALUES QUOTED FOR FIXTURES ARE TO BE CONSIDERED MINIMUM, AND AS ABSOLUTE OR DELIVERED LUMENS. LUMEN VALUES SHOULD NOT EXCEED MORE THAN 10% OF SPECIFIED OUTPUT. 3 WHERE NOTED ABOVE THAT FIXTURES ARE TO HAVE FINISH TO SUIT ARCHITECT THE FINISH WILL BE SELECTED FROM MANUFACTURER'S OPTIONAL COLOUR CHART (i.e. RAL COLOURS OR EQUAL). PROVIDE THIS COLOUR CHART WITH SHOP DRAWING SUBMITTAL. 4 IF THERE ARE ANY DISCREPANCIES BETWEEN THE FIXTURE PART NUMBER AND DESCRIPTION, IT IS THE RESPONSIBILITY OF THIS CONTRACTOR TO BRING THIS TO THE ELECTRICAL CONSULTANTS ATTENTION PRIOR TO SHOP DRAWING REVIEW.
--------	--



LIGHTING		POWER		DATA	
	LIGHT FIXTURE TYPE AS INDICATED		WALL MOUNTED RECEPTACLE (15A-120V)		SINGLE WALL MOUNTED TELEPHONE OUTLET C/W 1/2" (13mm) C TO CABLE MANAGEMENT SYSTEM.
	LIGHT FIXTURE (HATCHING DENOTES NIGHTLIGHT)		WALL MOUNTED T-SLOT RECEPTACLE (20A-120V)		SINGLE COMPUTER OUTLET C/W 3/4" (21mm) C TO CABLE MANAGEMENT SYSTEM.
	COMBINATION EMERGENCY/EXIT TYPE AS INDICATED (EM-X INDICATES BATTERY UNIT TYPE; DC-X INDICATES DC CIRCUIT AND X-X INDICATES AC SOURCE CIRCUIT)		T-SLOT RECEPTACLE MTD. ABOVE COUNTER (20A-120V)		COMBINATION SINGLE VOICE/SINGLE COMPUTER OUTLET UNLESS OTHERWISE NOTED C/W 1" (27mm) C TO CABLE MANAGEMENT SYSTEM. # INDICATES THE QUANTITY OF ACTIVE PARTS. LEFT VALUE ALWAYS INDICATES VOICE.
	CEILING OR WALL MOUNTED LIGHT FIXTURE TYPE AS INDICATED		WALL MOUNTED QUAD RECEPTACLE (15A-120V)		WIRELESS ACCESS POINT. PROVIDE 3/4" (21mm) C TO CABLE MANAGEMENT SYSTEM.
	WALL MOUNTED EXIT LIGHT SHADING INDICATES FACE		WALL MOUNTED QUAD RECEPTACLE (20A-120V)		TELEVISION OUTLET C/W 1" (27mm) C TO CABLE MANAGEMENT SYSTEM.
	CEILING MOUNTED EXIT LIGHT ARROWS DENOTE DIRECTION SHADING INDICATES FACE		DIRECT CONNECTION		HANGER SYSTEM (REFER TO DETAILS)
	SINGLE OR TWIN EMERGENCY LIGHTING FIXTURE		FLOOR BOX C/W DEVICES AS NOTED (REFER TO SPECIFICATIONS)		AUXILIARY ROUGH-IN FOR USE AS NOTED
	BATTERY UNIT WITH INTEGRAL EMERGENCY FIXTURE (EM-X INDICATES BATTERY UNIT TYPE; DC-X INDICATES DC CIRCUIT AND X-X INDICATES AC SOURCE CIRCUIT)		JUNCTION BOX	COMMUNICATIONS	
			PULL BOX		CLOCK AS PER SPECIFICATIONS
	SINGLE POLE SWITCH (3-3 WAY, 4-4 WAY, P=PILOT LIGHT, K=KEYED, DM=DIMMER, M=MOTOR RATED)		PANEL AS INDICATED		ADMINISTRATIVE CONTROL CONSOLE
	OCCUPANCY SENSOR (PASSIVE)		FUSED DISCONNECT		HANDSET (ND = NON-DIAL STYLE)
	OCCUPANCY SENSOR: OSD=DUAL TECHNOLOGY OSR=DUAL CIRCUIT/DUAL TECHNOLOGY		UNFUSED DISCONNECT		P.A. CALL SWITCH
	CEILING MOUNTED MOTION SENSOR		SURGE PROTECTION DEVICE REFER TO SPECIFICATIONS		WALL MOUNTED SPEAKER (CS = COLUMN SPEAKER)
	WALL MOUNTED MOTION SENSOR		DUAL VOLTAGE RELAY		WALL MOUNTED SPEAKER C/W CALL IN SWITCH
	DIGITAL ROOM CONTROLLER		MANUAL STARTER		CEILING MOUNTED SPEAKER
	PHOTOCELL		MAGNETIC STARTER		MICROPHONE OUTLET
	DIGITAL WALL DIMMER STATION		COMBINATION MAGNETIC STARTER		DOOR BELL
	EMERGENCY LIGHTING RELAY		DESTRATIFICATION FAN		INTERCOM
	LIGHTING INPUT/OUTPUT RELAY		SURFACE RACEWAY C/W DEVICES AS NOTED (REFER TO SPECIFICATIONS)	GENERAL	
	ANALOG POWER PACK		CONTACTOR	ER	INDICATES EXISTING ITEM TO REMAIN
FIRE ALARM			MOTOR CONNECTION	D	INDICATES EXISTING ITEM TO BE DELETED
	HEAT DETECTOR (135 DEGREE RATE OF RISE AND FIXED TEMPERATURE)		POWER POLE	R	INDICATES EXISTING ITEM TO BE RELOCATED/IN RELOCATED POSITION
	HEAT DETECTOR (135 DEGREE FIXED TEMPERATURE)		THERMOSTAT (RA = REVERSE ACTING)	WG	WIREGUARD
	HEAT DETECTOR (194 DEGREE FIXED TEMPERATURE)		UNISTRUT UPSTAND	GF	GROUND FAULT
	HEAT DETECTOR (194 DEGREE RATE OF RISE AND FIXED TEMPERATURE)		TRANSFORMER	WP	WEATHERPROOF
	PULL STATION	SECURITY		IG	ISOLATED GROUND
	ISOLATING MODULE		SECURITY DETECTOR (SURFACE MOUNTED)	SR	SURGE PROTECTED
	MONITORING MODULE		SECURITY SIREN (INSTALL 2400mm AFF) C/W 21mmC TO NEAREST SECURITY JUNCTION BOX	TR	TAMPER RESISTANT
	RELAY MODULE		SECURITY KEYPAD (INSTALL (1100mm AFF) C/W 21mmC TO NEAREST SECURITY JUNCTION BOX	CLG	CEILING MOUNTED
	ALARM BELL		DOOR CONTACT C/W 21mmC TO NEAREST SECURITY JUNCTION BOX (REFER TO DETAIL)	EM	EMERGENCY (LAMICOID LABEL)
	ALARM HORN		CEILING MOUNTED CAMERA	HG	HOSPITAL GRADE
	ALARM STROBE				

[illegible]

 Professional Engineers *EM* 03/24/25
Ontario
Limited Engineering Licensee
Name: D.G. MCCONKEY
Number: 100230476
Limitations: Detailed design, reporting, and specifications for all building electrical systems; site servicing and review of conformity for these systems in new and renovation construction.
Association of Professional Engineers of Ontario

ISSUED FOR PERMIT AND TENDER	2025.03.24
CHRONOLOGY	DATE



WATERLOO REGION
DISTRICT SCHOOL
BOARD

PROJECT NAME

WATERLOO
COLLEGIATE INSTITUTE -
HVAC & EXTERIOR
UPGRADES

300 HAZEL STREET, WATERLOO, ON. N2L 3P2

DRAWING TITLE

LEGEND, SCHEDULES
AND DETAIL

SCALE	DRAWING NUMBER
As Indicated	
24X36	E1.2
PROJECT NUMBER	
2024-168	

Description		Electrical Data					Starter					Ctrl Device				Isolating Device		Remote Items														Other		Interlock		Remarks			
Mechanical Item	Description	Provided By	Voltage	Size hp/kW/Amps	Phase	MOCP	Magnetic	Manual	Combination	Contactors	VFD	ECM	Hand Off/Auto	On/Off Selector	Hight Low/Off	Pilot Light	Disconnect	VP Disconnect	Breaker/Fuse	Starter/Device	Wired by	Thermostat	RA Thermostat	Programmable Time Clock	Variable Speed Control	Current Sensor	Occ Sensor	Dual Voltage Relay	Interval Timer	Motor Rated Switch w/ Pilot Light	Smoke Control System Panel	Control Panel	Wired by	Bldg Auto System	Wired By		Miscellaneous 1	Miscellaneous 2	Interlock to
AHU-1	INDOOR AIR HANDELING UNIT (SUPPLY FAN)	M	208	37.4 M.C.A.	3	50					M								E	E	M											M	M	M			CU-3A.B	E	STARTED THRU CONTROL PANEL WITH INTEGRAL VFD, C/W FUSED DISCONNECT REFER TO NOTE: ①
AHU-1	INDOOR AIR HANDELING UNIT (RETURN/EXHAUST FAN)	M	208	20 M.C.A.	3	25					M								E	E	M											M	M	M			CU-3A.B	E	STARTED THRU CONTROL PANEL WITH INTEGRAL VFD, C/W FUSED DISCONNECT ①
AHU-1	INDOOR AIR HANDELING UNIT (ERV)	M	208	3 M.C.A.	3	15					M						E		E	E	M											M	M	M			CU-3A.B	E	STARTED THRU CONTROL PANEL WITH INTEGRAL VFD ①
AHU-1	INDOOR AIR HANDELING UNIT (CONTROLS)	M	120	1 M.C.A.	1	15													E	E													M	M			CU-3A.B	E	
DS-1	WALL MTD AC UNIT	M	208	1 M.C.A.	1	15											E		E	E	M											M	M	M			CU-1	E	
DS-2	WALL MTD AC UNIT	M	208	1 M.C.A.	1	15											E		E	E	M											M	M	M			CU-1	E	
DS-3	WALL MTD AC UNIT	M	208	1 M.C.A.	1	15											E		E	E	M											M	M	M			CU-1	E	
DS-4	WALL MTD AC UNIT	M	208	1 M.C.A.	1	15											E		E	E	M											M	M	M			CU-1	E	
DS-5	WALL MTD AC UNIT	M	208	1 M.C.A.	1	15											E		E	E	M											M	M	M			CU-1	E	
DS-6	WALL MTD AC UNIT	M	208	1 M.C.A.	1	15											E		E	E	M											M	M	M			CU-1	E	
DS-7	WALL MTD AC UNIT	M	208	1 M.C.A.	1	15											E		E	E	M											M	M	M			CU-1	E	
DS-8	WALL MTD AC UNIT	M	208	1 M.C.A.	1	15											E		E	E	M											M	M	M			CU-1	E	
DS-9	WALL MTD AC UNIT	M	208	1 M.C.A.	1	15											E		E	E	M											M	M	M			CU-1	E	
DS-10	WALL MTD AC UNIT	M	208	1 M.C.A.	1	15											E		E	E	M											M	M	M			CU-1	E	
DS-11	WALL MTD AC UNIT	M	208	1 M.C.A.	1	15											E		E	E	M											M	M	M			CU-2	E	
DS-12	WALL MTD AC UNIT	M	208	1 M.C.A.	1	15											E		E	E	M											M	M	M			CU-2	E	
DS-13	WALL MTD AC UNIT	M	208	1 M.C.A.	1	15											E		E	E	M											M	M	M			CU-2	E	
DS-14	WALL MTD AC UNIT	M	208	1 M.C.A.	1	15											E		E	E	M					</													

 Professional Engineers *JM* 03/24/25
Ontario
Limited Engineering Licensee
Name: D.G. MCCONKEY
Number: 100230476
Limitations: Detailed design, reporting, and specifications for all building electrical systems, site servicing and review of conformity for these systems in new and renovation construction.
Association of Professional Engineers of Ontario



aba architects inc.
101 Ransard Drive, Unit 8, Waterloo, ON, N2J 8M4 2711 www.abaarchitect.ca

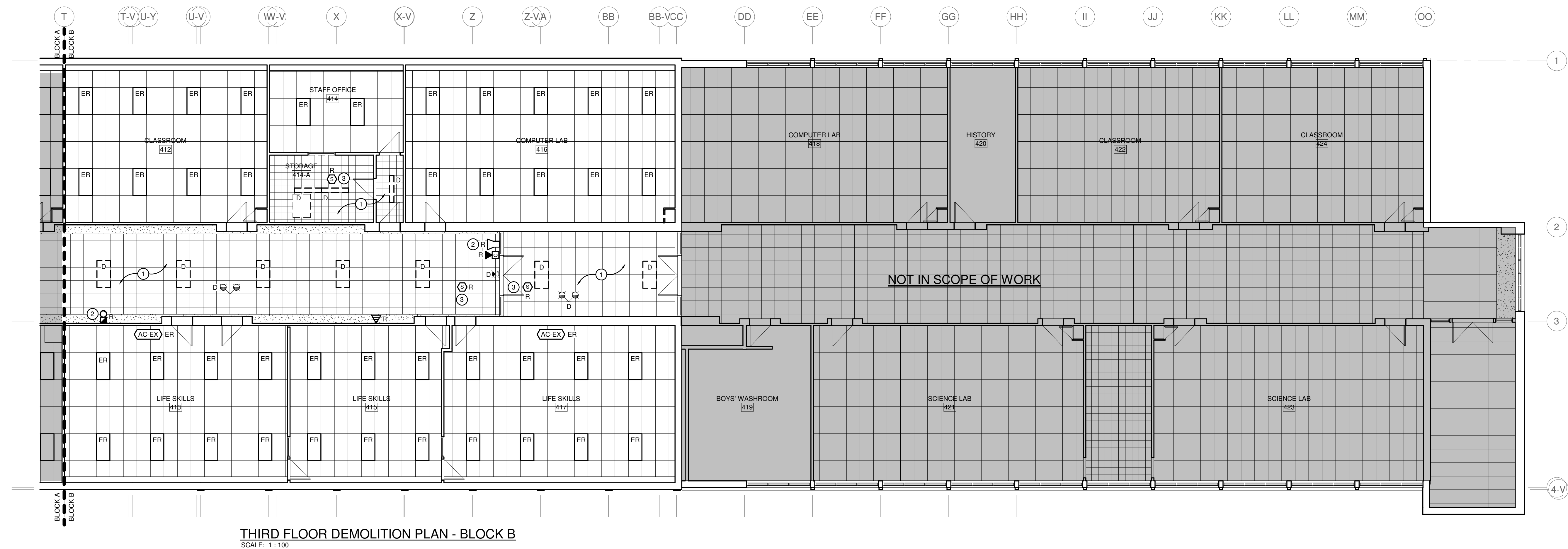
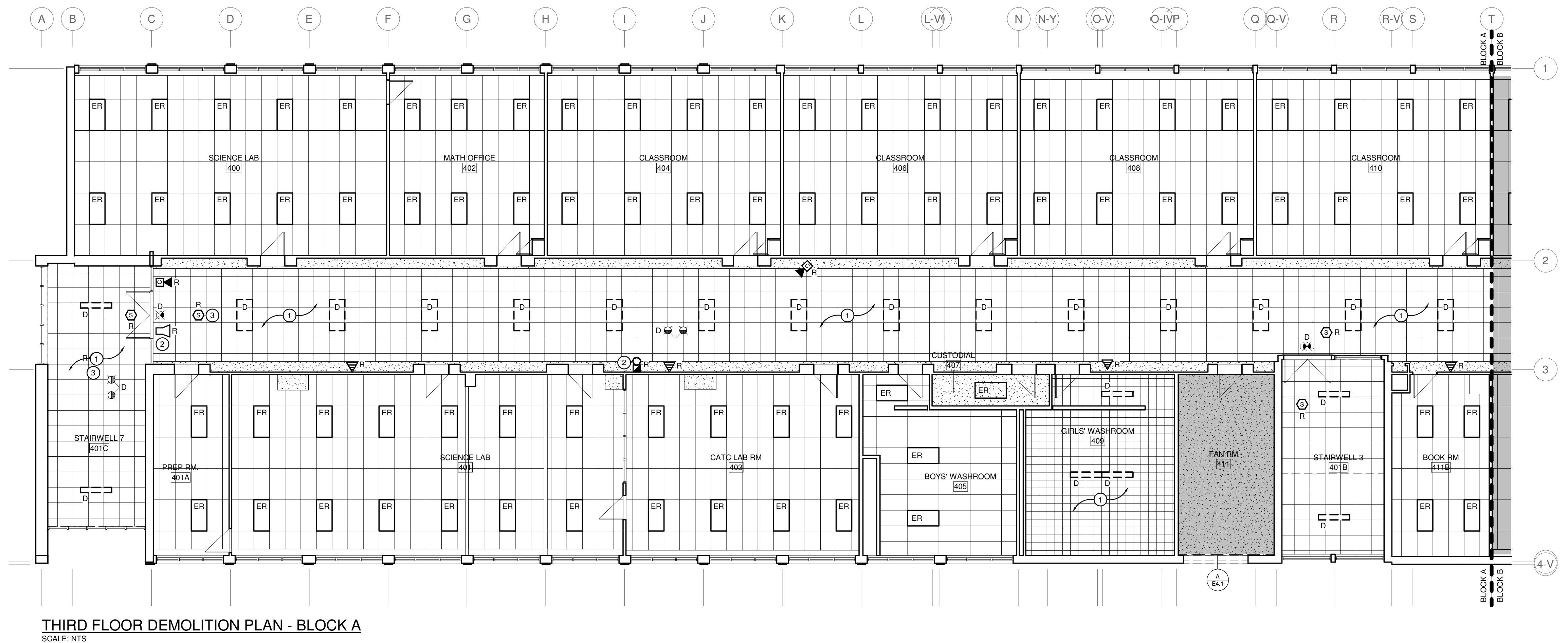
WATERLOO REGION
DISTRICT SCHOOL
BOARD

DRAWING TITLE

EQUIPMENT WIRING
SCHEDULE

E1.3

<u>GENERAL DEMOLITION NOTES</u>	
- 'E' DENOTES EXISTING ITEM TO REMAIN. - EXISTING ELECTRICAL EQUIPMENT NOT SHOWN SHALL REMAIN UNLESS NOTED OTHERWISE. - 'R' INDICATES EXISTING ITEM TO BE RELOCATED. REFER TO RENOVATION DRAWINGS AND RELOCATE DEVICE AND WIRING TO SUIT. UNLESS OTHERWISE NOTED. - 'D' INDICATES EXISTING ITEM TO BE DELETED. UNLESS OTHERWISE NOTED DISCONNECT AND REMOVE NOTED DEVICE AND WIRING BACK TO SOURCE. - ALL LIGHTING FIXTURES BEING RELOCATED SHALL BE CLEANED AND CHECKED PRIOR TO BEING REINSTALLED.	
<u>SPECIFIC NOTES</u>	
1. FIXTURES ARE TO BE DISCONNECTED AND REMOVED TO ALLOW FOR CEILING REPLACEMENT. MAINTAIN WIRING FOR CONNECTION TO NEW FIXTURES AND CONTROLS AS NOTED ON THE RENOVATION DRAWINGS. 2. INDICATED WALL MOUNTED DEVICE TO BE DISCONNECTED AND RECONNECTED TO ALLOW FOR CEILING REPLACEMENT. 3. INDICATED CEILING DEVICE TO BE DISCONNECTED AND RECONNECTED TO ALLOW FOR CEILING REPLACEMENT. PROVIDE FIRE ALARM VERIFICATION FOR ALL NEW AND DISCONNECTED/RECONNECTED FIRE ALARM DEVICES.	



DEI
Dr. Richard M. Decker, Inc.
10000 Highway 100, Suite 200
Houston, Texas 77036
713.465.1100
www.drdecker.com

Consulting Engineers 

MECHANICAL, ELECTRICAL, AQUATIC

Project Number: 24331

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

The drawings show general arrangement of work. Allow for closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.

The drawings do not indicate all offset fitting and accessories which may be required. Provide the same to meet the required conditions.

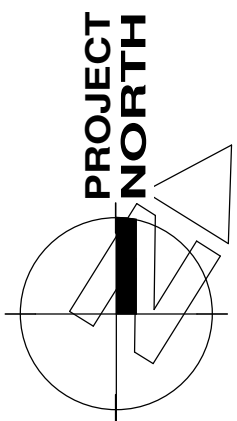
Drawings and specifications, etc., prepared and issued by the Consultant are the property of the Consultant and must be retained at the completion of the project. These documents are not to be duplicated or copied without the consent of the Consultant.

Do not scale the drawing.

© 2025 DEI & Associates Inc.

[illegible]

 Professional Engineers *DM* 03/24/25
Ontario
Limited Engineering Licensee
Name: D.G. MCCONKEY
Number: 100230476
Limitations: Detailed design, reporting, and specifications for all building electrical systems, site servicing and review of conformity for these systems in new and renovation construction.
Association of Professional Engineers of Ontario



ISSUED FOR PERMIT AND TENDER	2025.03.24
CHRONOLOGY	DATE



CUENT

WATERLOO REGION
DISTRICT SCHOOL
BOARD

PROJECT NAME

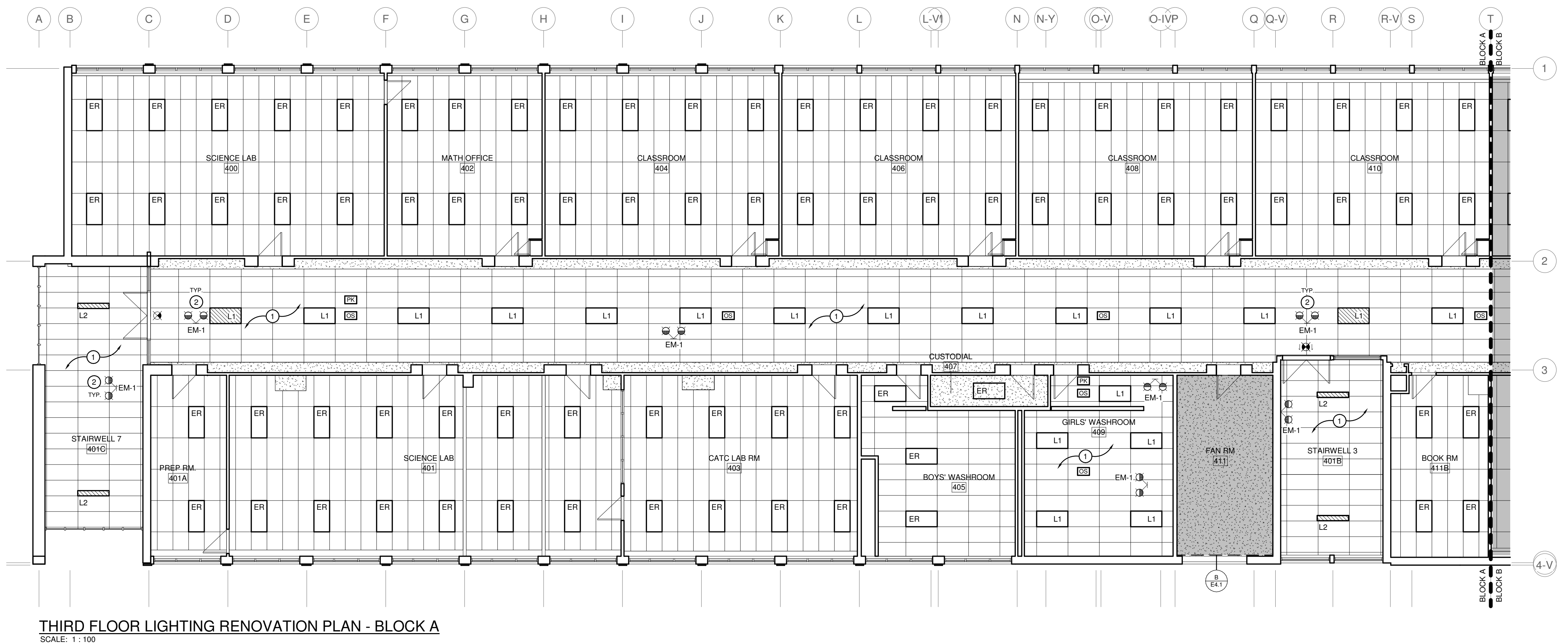
WATERLOO
COLLEGIATE INSTITUTE -
HVAC & EXTERIOR
UPGRADES

300 HAZEL STREET, WATERLOO, ON. N2L 3P2

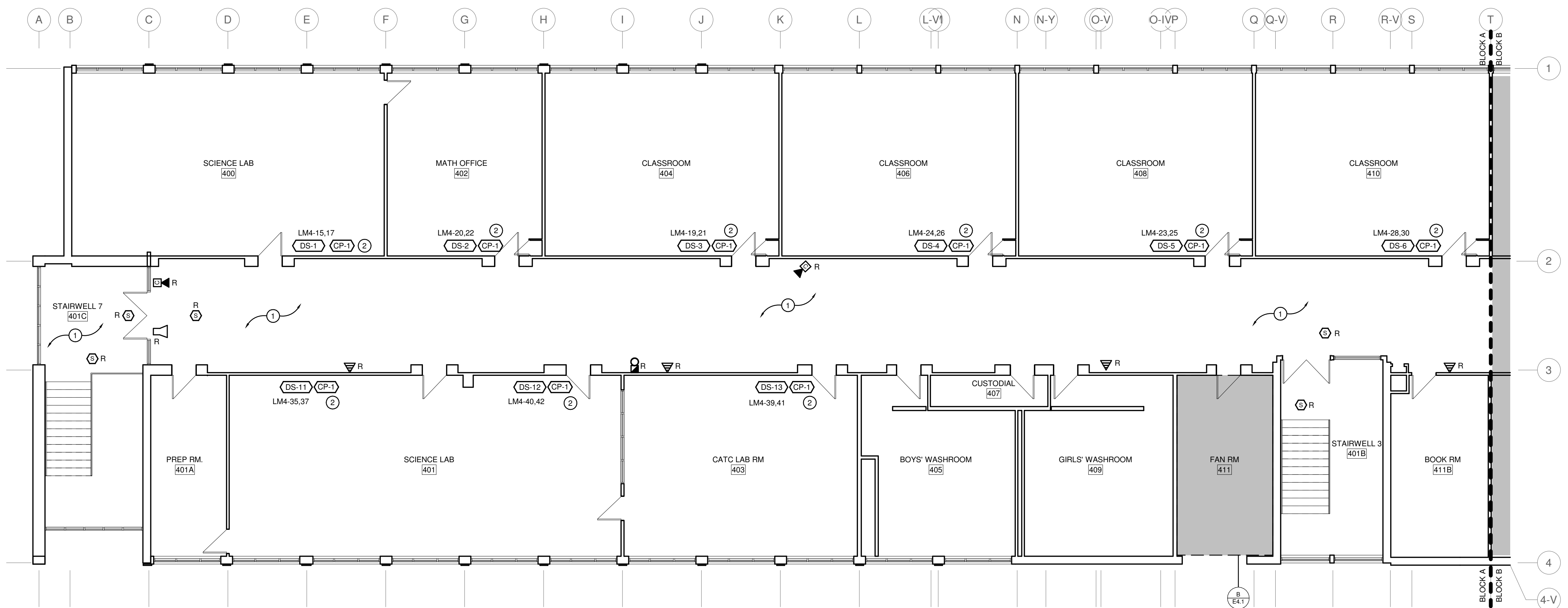
DRAWING TITLE

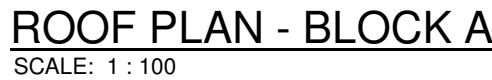
THIRD FLOOR
DEMOLITION PLAN

SCALE	DRAWING NUMBER
As Indicated	
24X36	
PROJECT NUMBER	E2.1
2024-168	



THIRD FLOOR LIGHTING RENOVATION PLAN - BLOCK B
SCALE: 1 : 100

[illegible]



"E" DENOTES EXISTING ITEM TO REMAIN.
 X1 EXISTING ELECTRICAL EQUIPMENT NOT SHOWN SHALL REMAIN UNLESS OTHERWISE NOTED.
 "R" INDICATES EXISTING ITEM TO BE RELOCATED. REFER TO RENOVATION DRAWINGS AND RELOCATE DEVICE AND WIRING TO SUIT. UNLESS OTHERWISE NOTED.
 "D" INDICATES EXISTING ITEM TO BE DELETED. UNLESS OTHERWISE NOTED, DISCONNECT AND REMOVE NOTED DEVICE AND WIRING BACK TO SOURCE.
 ALL NEW FIXTURES SHALL BE RELOCATED SHALL BE CLEANED AND CHECKED PRIOR TO BEING REINSTALLED.
 CONTRACTOR TO FISH EXISTING WALKS TO FEED NEW DEVICES ON EXISTING WALKS. EXISTING WALKS MUST BE FISHED. CONTRACTOR TO FISH FOR NONMETALLIC RACEWAY EQUAL TO WIREMOLD SERIES 500. CONNECT RECEPTACLE TO LOCAL RACEWAY. CONTRACTOR TO SUIT. FINAL LOCATION TO BE ADVISED ON SITE BY SCHOOL BOARD REPRESENTATIVE.

PROVIDE T-SLOT GROUND FLOOR PLATE RECEPTACLE COMPLETE WITH "HEAVY DUTY" IN-USE WEATHER PROOF COVER. COORDINATE PLACEMENT WITH MECHANICAL CONTRACTOR. LOCATED DEVICE IS TO BE MOUNTED 432" (900mm) ABOVE FINISHED ROOF LEVEL.

INDICATED AREA WILL BE NEW OPENING FOR MECHANICAL EQUIPMENT. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND DEDICATED SUIT, FIRE ALARM VERIFICATION MUST BE INCLUDED FOR ANY FIRE ALARM DEVICES THAT ARE DISCONNECTED. ELECTRICAL CONTRACTOR MUST PROVIDE REMOVAL OF EXISTING TRACING AND EXTENSION OF EXISTING CONDUITS WITHIN AREA TO ALLOW FOR OPENING. ELECTRICAL CONTRACTOR MUST INCLUDE IN TENDER PRICE FOR ADDITIONAL CONDUIT, WIRE, JUNCTION BOXES, ETC. TO BE INSTALLED. INSTALLATION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE CODES.

3 ELECTRICAL FEEDERS FOR UNITS TO FOLLOW REFRIGERATION PIPING AND ENTER BUILDING THROUGH MECHANICAL DOGHOUSE. REFER TO CONDUIT SUPPORT DETAIL AVE.3.

4 PROVIDE CONNECTION TO HEAT TRACING TO SUIT. COORDINATE WITH MECHANICAL TRADE FOR MORE DETAILS.



Project Number: 24331

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

The drawings show general arrangement of services, follow as closely as actual building construction will permit. Obtain approval for relocation of service from Consultant before commencement of the work.

The drawings do not indicate all offsets fitting and accessories which may be required. Provide the same to meet the required conditions.

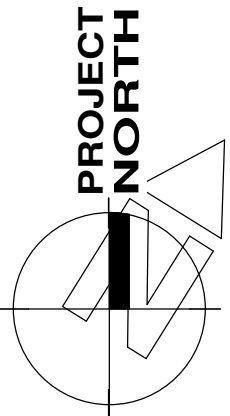
Drawings and specifications, etc., prepared and issued by the consultant are the property of the consultant and must be returned at the completion of the project. These documents are not to be duplicated or copied without the consent of the consultant.

Do not scale this drawing.

© 2025 DEI & Associates Inc.

[illegible]

 Professional Engineers *JM* 03/24/25
Ontario
Limited Engineering Licensee
Name: D.G. MCCONKEY
Number: 100230476
Limitations: Detailed design, reporting, and specifications for all building electrical systems; site servicing and review of conformity for these systems in new and renovation construction.
Association of Professional Engineers of Ontario



ISSUED FOR PERMIT AND TENDER	2025.03.24
CHRONOLOGY	DATE



CUENT

WATERLOO REGION
DISTRICT SCHOOL
BOARD

PROJECT NAME

PROJECT NAME

WATERLOO
COLLEGIATE INSTITUTE -
HVAC & EXTERIOR
UPGRADES

300 HAZEL STREET, WATERLOO, ON. N2L 3P2

DRAWING TITLE

ROOF PLAN

SCALE	DRAWING NUMBER
As Indicated	E3.3
24X36	
PROJECT NUMBER	
2024-168	

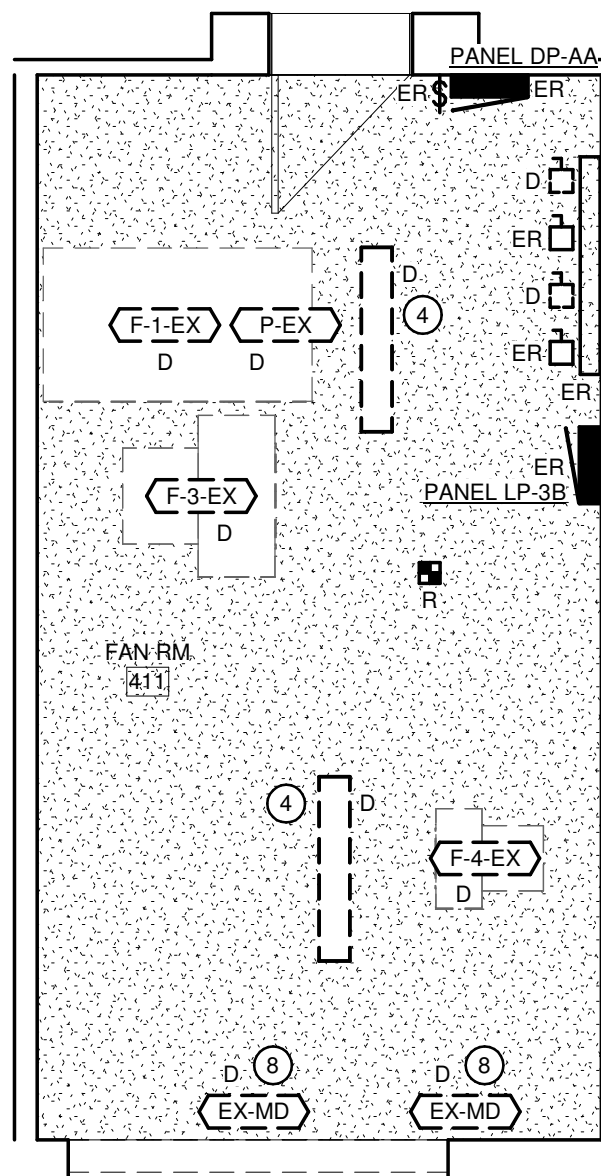
GENERAL NOTES

- 'E' DENOTES EXISTING ITEM TO REMAIN.
- 'N' EXISTING ELECTRICAL EQUIPMENT NOT SHOWN SHALL REMAIN UNLESS NOTED OTHERWISE.
- 'R' INDICATES EXISTING ITEM TO BE RELOCATED. REFER TO RENOVATION DRAWINGS AND RELOCATE DEVICE AND WIRING TO SUIT. UNLESS OTHERWISE NOTED.
- 'D' INDICATES EXISTING ITEM TO BE DELETED. UNLESS OTHERWISE NOTED DISCONNECT AND REMOVE NOTED DEVICE AND WIRING BACK TO SOURCE. ALL LIGHTING FIXTURES BEING RELOCATED SHALL BE CLEANED AND CHECKED PRIOR TO BEING REINALLED.
- CONTRACTOR TO FISH EXISTING WALLS TO FEED NEW DEVICES ON EXISTING WALLS. IF EXISTING WALLS CANNOT BE FISHED, CONTRACTOR IS TO USE AN ALTERNATE RACEWAY EQUAL TO OR GREATER THAN SERP 50L CONNECT PERCEPTABLE TO EXISTING LOCAL RACEWAY CIRCUIT. FINAL LOCATION TO BE ADVISED ON SITE BY SCHOOL BOARD REPRESENTATIVE.

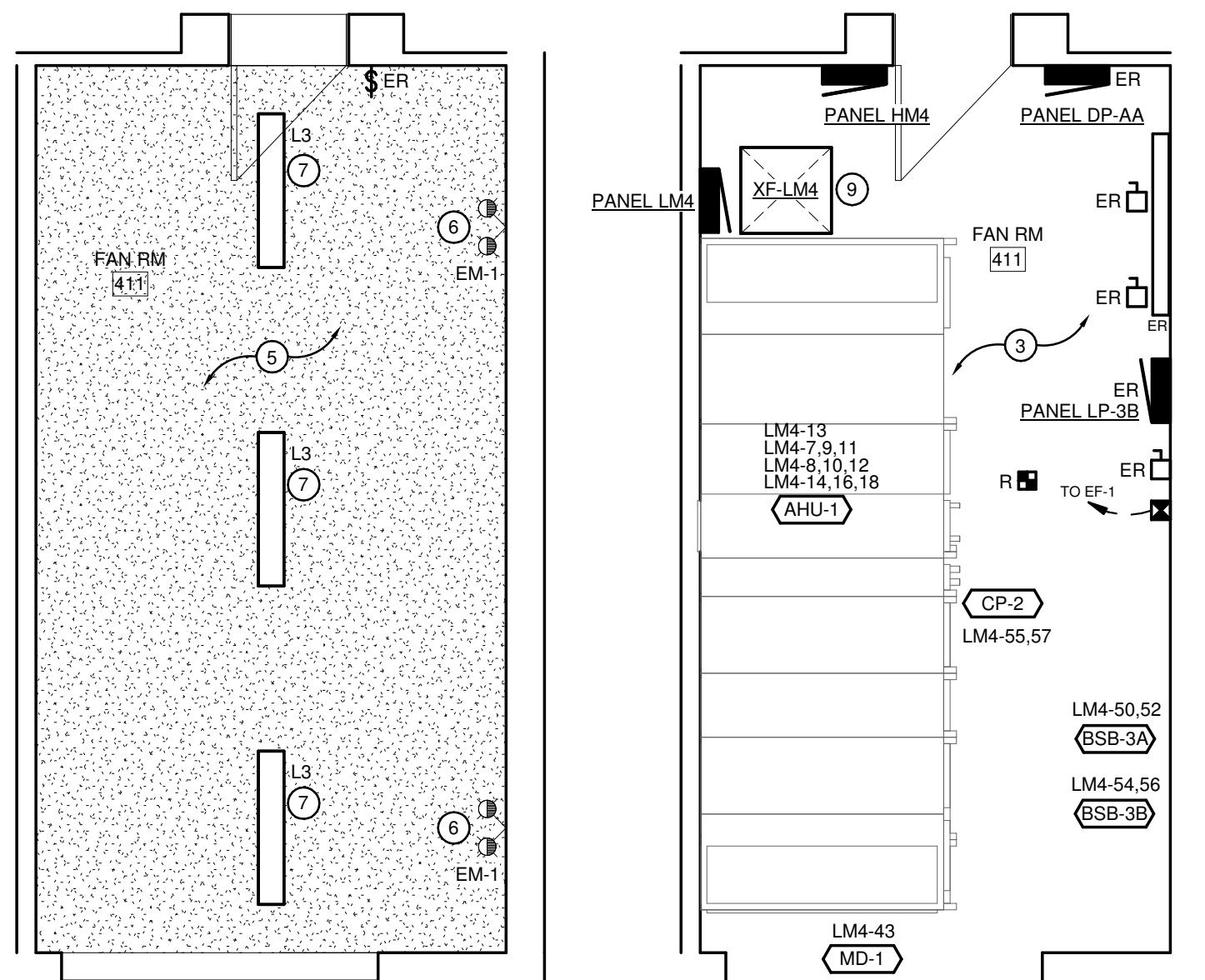
- | | |
|---|---|
| - | 'E' DENOTES EXISTING ITEM TO REMAIN. |
| - | INDICATING ELECTRICAL EQUIPMENT NOT SHOWN SHALL REMAIN UNLESS NOTED OTHERWISE. |
| - | 'R' INDICATES EXISTING ITEM TO BE RELOCATED. REFER TO RENOVATION DRAWINGS AND RELOCATE DEVICE AND WIRING TO SUIT. UNLESS OTHERWISE NOTED. |
| - | 'D' INDICATES EXISTING ITEM TO BE DELETED. UNLESS OTHERWISE NOTED DISCONNECT AND REMOVE NOTED DEVICE AND WIRING BACK TO SOURCE. |
| - | ALL LISTING FIXTURES BEING RELOCATED SHALL BE CLEANED AND CHECKED PRIOR TO BEING REINSTALLED. |
| - | CONTRACTOR TO FISH EXISTING WALLS TO FEED NEW DEVICES ON EXISTING WALLS. IF EXISTING WALLS CANNOT BE FISHED, CONTRACTOR IS TO USE AN ALTERNATE RACEWAY TO REACH REMOVED FINAL LOCATION. CONTRACTOR TO EXISTING LOCAL RECEPTACLE CIRCUIT. FINAL LOCATION TO BE ADVISED ON SITE BY SCHOOL BOARD REPRESENTATIVE. |

1	ELECTRICAL CONTRACTOR TO PROVIDE 120V POWER FOR SUMP PUMP CONTROL PANEL FROM NEARBY AVAILABLE 120/208V MECHANICAL PANEL. UPDATE PANEL SCHEDULE ACCORDINGLY.
2	ELECTRICAL CONTRACTOR TO PROVIDE NEW 208V 15A 3P BREAKER FOR NEW SUMP PUMP FROM NEARBY AVAILABLE 120/208V MECHANICAL PANEL. UPDATE PANEL SCHEDULE ACCORDINGLY.
3	EXACT LOCATIONS OF PANELS AND TRANSFORMER WITHIN MECHANICAL ROOM MUST BE COORDINATED WITH NEW MECHANICAL UNIT AND MECHANICAL CONTRACTOR. INCLUDE FOR RELOCATION WITHIN ROOM AS REQUIRED TO ENSURE ALL WIRING AND PIPES ARE MAINTAINED.
4	FIXTURES ARE TO BE DISCONNECTED AND REMOVED. MAINTAIN WIRING FOR CONNECTION TO NEW FIXTURES AS NOTED ON THE RENOVATION DRAWINGS.
5	INDICATES NEW INDICATED FIXTURES TO BE CONNECTED TO EXISTING CIRCUIT. EXTEND EXISTING WIRING TO SUIT AS REQUIRED.
6	INDICATES NEW EMERGENCY FIXTURE TO BE CONNECTED TO UNSWITCHED SIDE OF LOCAL LIGHTING CIRCUIT. EXTEND FEEDS AS REQUIRED.
7	INDICATES NEW EXISTING FIXTURE TO BE CONNECTED TO WIRING ELEMENT TO MAINTAIN MAXIMUM HEADROOM. EXACT LOCATIONS ARE TO BE DETERMINED ON SITE.
8	MOTORIZED DAMPERS(S) TO BE DISCONNECTED FOR REMOVAL OF EXISTING WIRING. UTILITIES CONTRACTOR TO PROVIDE NEW DAMPERS.
9	INDICATE TRANSFORMER TO BE MOUNTED ABOVE THE PANEL. REFER TO DETAIL AE1.2 FOR MORE INFORMATION.
10	INDICATES APPROXIMATE LOCATION OF NEW FUSED DISCONNECT PER RENOVATION RISER. INCLUDE EXACT LOCATION ON SITE. INCLUDE FOR THE RE-WIRING / RELOCATION OF EXISTING DISCONNECTS TO INSTALL NEW ELECTRICAL CONTRACTOR TO PROVIDE NEW 120V 25A 3P BREAKER FOR NEW AWH 1/2" COIL PUMP FROM NEARBY AVAILABLE 120/208V MECHANICAL PANEL. UPDATE PANEL SCHEDULE ACCORDINGLY.

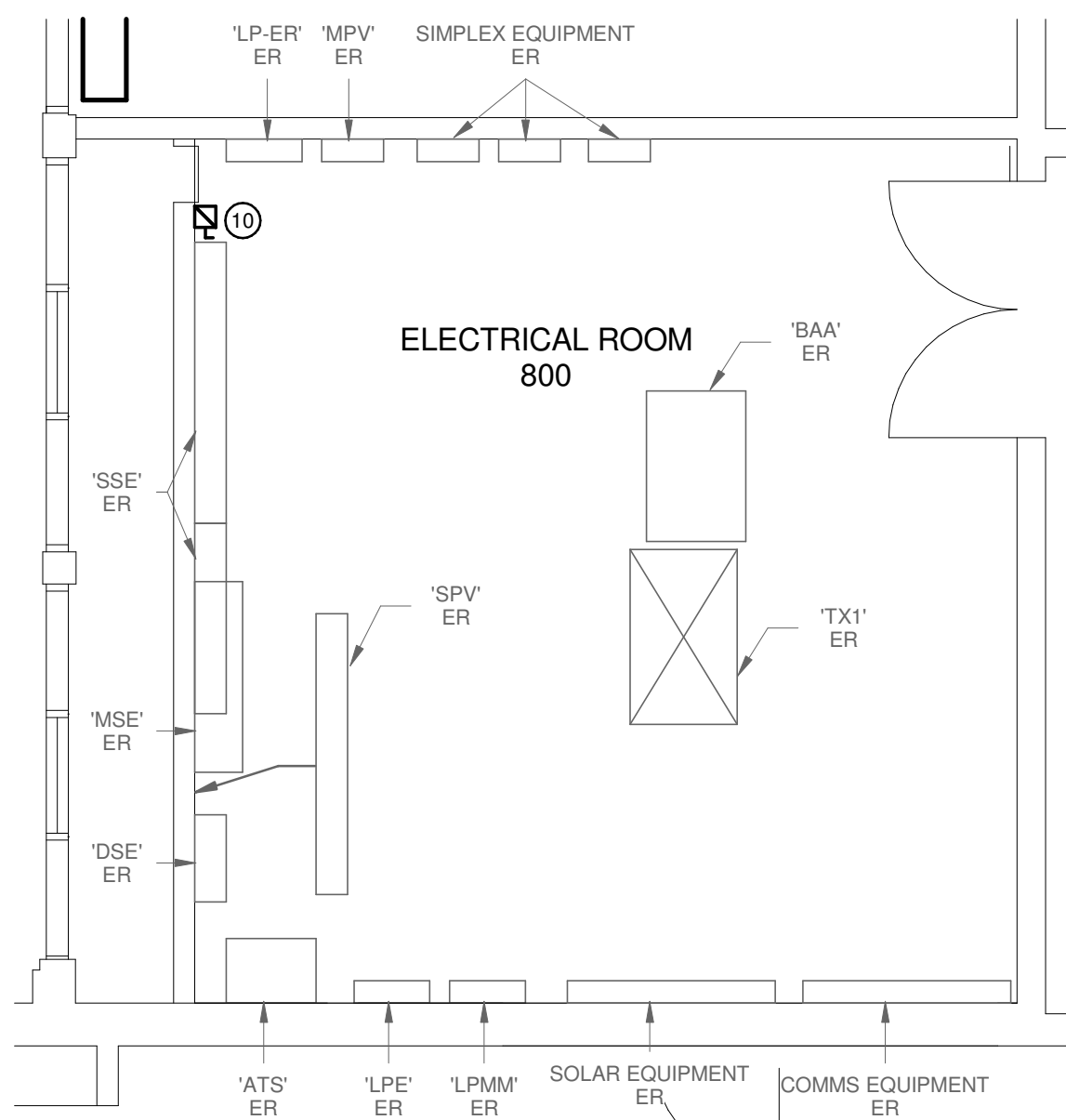
1. ELECTRICAL CONTRACTOR TO PROVIDE 120V POWER FOR SUMP PUMP CONTROL PANEL FROM NEARBY AVAILABLE 120/208V MECHANICAL PANEL. UPDATE PANEL ACCORDINGLY.
2. ELECTRICAL CONTRACTOR TO PROVIDE NEW 208V 15A 3P BREAKER FOR NEW SUMP PUMP FROM NEARBY AVAILABLE 120/208V MECHANICAL PANEL. UPDATE PANEL ACCORDINGLY.
3. EXACT LOCATIONS OF PANELS AND TRANSFORMER WITHIN MECHANICAL ROOM MUST BE COORDINATED WITH NEW MECHANICAL UNIT AND MECHANICAL CONTRACTOR. INCLUDE EXACT LOCATION WITHIN ROOM AS REQUIRED TO ENSURE CLEARANCES ARE MAINTAINED.
4. FIXTURES ARE TO BE DISCONNECTED AND REMOVED, MAINTAIN WIRING FOR CONNECTION TO NEW FIXTURES AS NOTED ON THE RENOVATION DRAWINGS.
5. FIXTURES ARE INDICATED TO BE DISCONNECTED TO EXISTING CIRCUIT. EXTEND EXISTING WIRING TO SUIT AS REQUIRED.
6. INDICATES NEW EMERGENCY FIXTURE TO BE CONNECTED TO UNSWITCHED SIDE OF THE LIGHTING CIRCUIT.
7. COORDINATE FUTURE EQUIPMENT WITH MECHANICAL EQUIPMENT TO MAINTAIN MAXIMUM HEADROOM. EXACT LOCATIONS ARE TO BE DETERMINED ON SITE.
8. MOTORIZED DAMPERS) IS TO BE DISCONNECTED FOR REMOVAL OF EXISTING DAMPER. UTILIZE EXISTING DAMPER FRAME.
9. INDICATE TRANSFORMER TO BE MOUNTED ABOVE THE PANEL. REFER TO DETAIL AE1.2 FOR MORE INFORMATION.
10. INDICATES APPROXIMATE LOCATION OF NEW FUSED DISCONNECT PER MECHANICAL CONTRACTOR. EXACT LOCATION ON SITE. INCLUDE FOR THE RE-WIRING / RELOCATION OF EXISTING DISCONNECTS TO INSTALL NEW.
11. ELECTRICAL CONTRACTOR TO PROVIDE NEW 208V 25A 3P BREAKER FOR NEW AWH 1/2" COIL PUMP FROM NEARBY AVAILABLE 120/208V MECHANICAL PANEL. UPDATE PANEL SCHEDULE ACCORDINGLY.



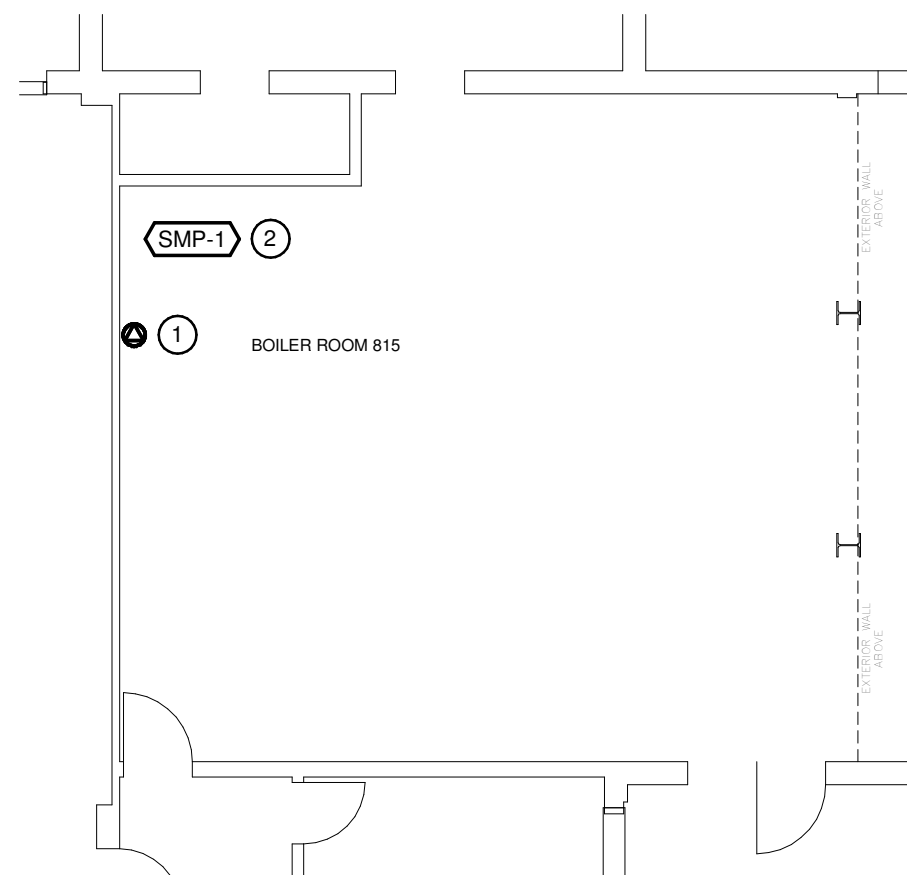
SCALE: 1 : 50



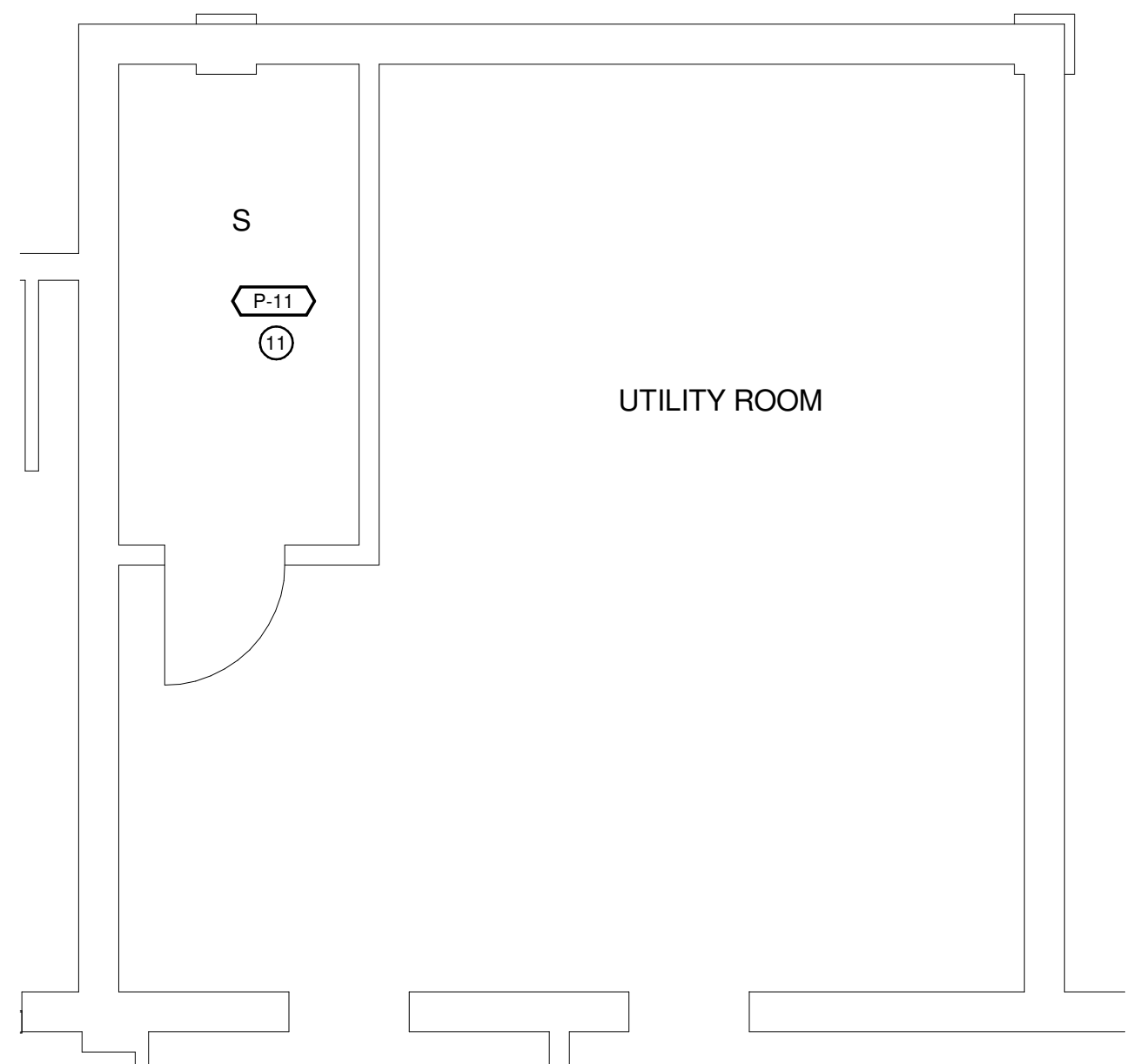
POWER AND SYSTEMS PLAN



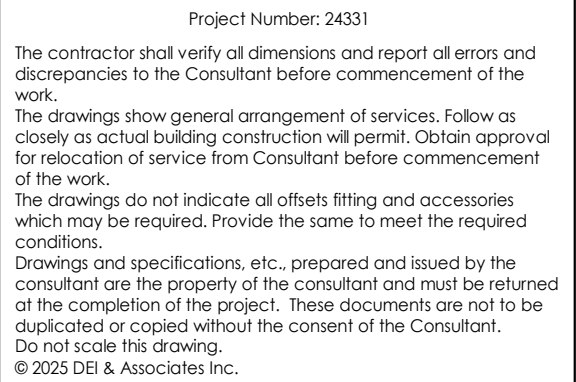
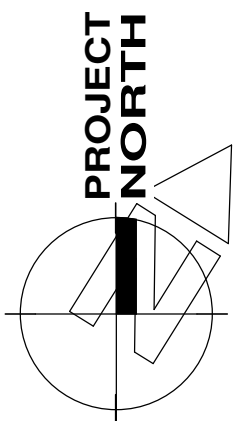
SCALE: 1 : 50



SCALE: 1 : 100



SCALE: 1 : 50

[illegible]

ISSUED FOR PERMIT AND TENDER	2025.03.24
CHRONOLOGY	DATE



CUENT

WATERLOO REGION
DISTRICT SCHOOL
BOARD

PROJECT NAME

PROJECT NAME

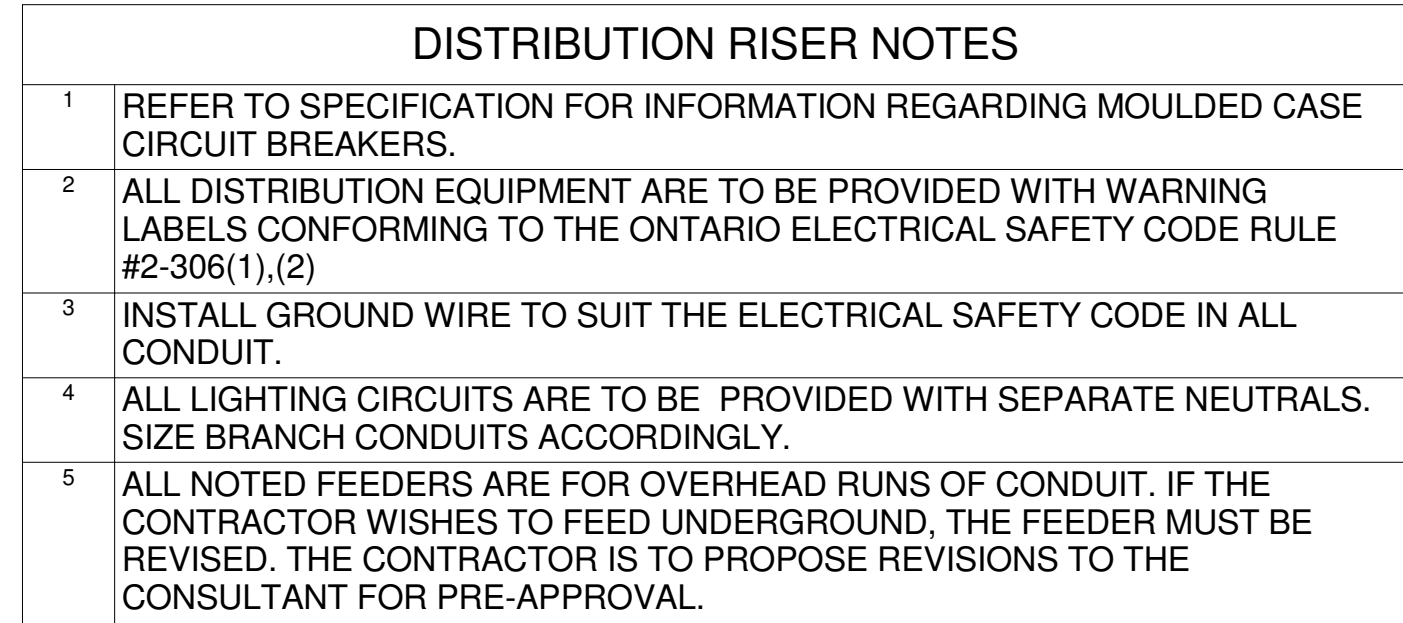
**WATERLOO
COLLEGIATE INSTITUTE -
HVAC & EXTERIOR
UPGRADES**

300 HAZEL STREET, WATERLOO, ON. N2L 3P2

DRAWING TITLE

ENLARGED PLAN

SCALE	DRAWING NUMBER
As Indicated	E4.1
24X36	
PROJECT NUMBER 2024-168	



PANEL LM4

MAINS: 400 A

MOUNTING: SURFACE

VOLTAGE: 120/208 3P4W

NEUTRAL BUS: 100%

INTERRUPTING CAPACITY: 10,000

ENCLOSURE: TYPE 2

CKT	Load Name	Type	Rating	Poles	A	B	C	Poles	Rating	Type	Load Name	CKT
1												2
3												4
5												6
7												8
9	AHU-1 SUPPLY		80 A	3				3	40 A		CU-2	10
11												12
13	AHU-1 CONTROLS	--	15 A	1				3	15 A	--	AHU-1 ERV	14
15												16
17	DS-1		15 A	2								18
19												20
21	DS-3		15 A	2				2	15 A		DS-2	22
23												24
25	DS-5		15 A	2				2	15 A		DS-4	26
27												28
29	DS-7		15 A	2				2	15 A		DS-6	30
31												32
33	DS-9		15 A	2				2	15 A		DS-8	34
35												36
37	DS-11		15 A	2				2	15 A		DS-10	38
39												40
41	DS-13		15 A	2				2	15 A		DS-12	42
43												44
45	MD-1		15 A	1				2	15 A		DS-14	46
47	ROOF RECEPTACLE		20 A	1								48
49	"HEAT TRACE		15 A	2				1	25 A		EF-1	50
51												52
53	"HEAT TRACE		15 A	2				2	15 A		BSB-3A	54
55												56
57	CP-2		15 A	2				2	15 A		BSB-3B	58
59												60
61												62
63												64
65												66
67												68
69												70
71												72
73	SPARE	--	15 A	2				2	20 A	--	SPARE	74
75												76
77	SPARE	--	15 A	2				2	20 A	--	SPARE	78
79												80
81	SPARE	--	15 A	1				1	20 A	--	SPARE	82
83	SPARE	--	15 A	1				1	20 A	--	SPARE	84

NOTES:

* INDICATES 33mA GROUND FAULT STYLE BREAKER.

3/24/2025 4:17:34 PM C:\Rev\24331 WRDSB WCI Elec Central R23_tson35FU8.rvt