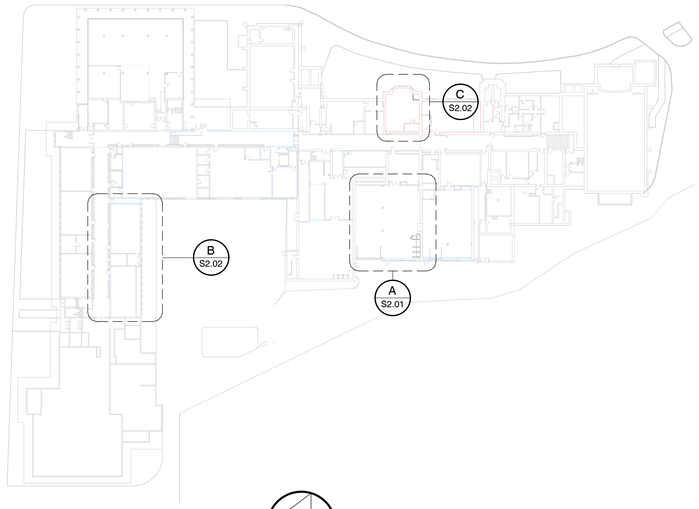
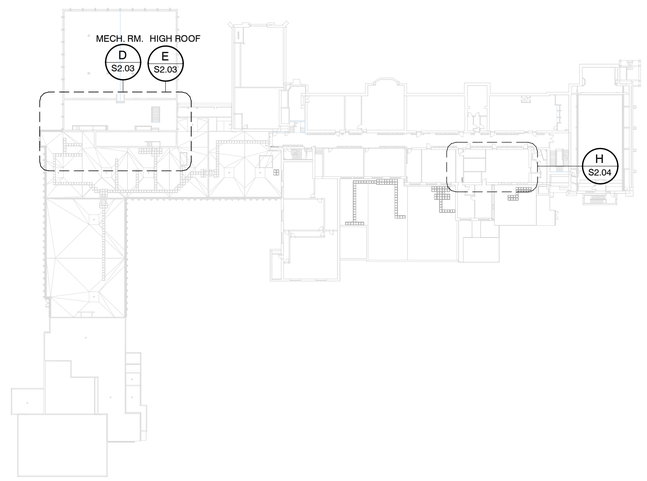


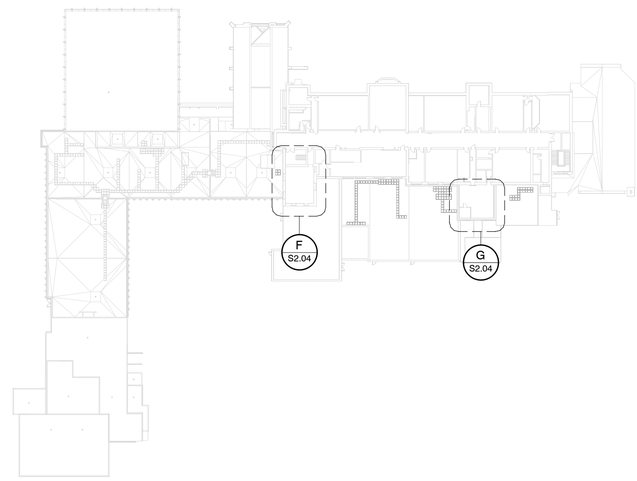
KEYPLAN LEVEL 1

1 : 750



KEYPLAN LEVEL 3

1 : 750



KEYPLAN LEVEL 4

1 : 750

1. ALL OPENINGS LARGER THAN 200mm TO BE FRAMED AS SHOWN BELOW OR AS DETAILED ON DRAWINGS.
2. OPENINGS FROM 200mm TO 350mm TO BE FRAMED WITH L-64x64x6.4 TWO SIDES OF OPENING AND WELDED OR BOLTED TO STEEL DECK. SEE DETAIL BELOW.

3. WHERE DECK SUPPORTS ARE NOT SPACED OVER 1500 o.c. OPENINGS LARGER LARGER THAN 350 TO BE FRAMED WITH L's 89x89x6.4 ALL AROUND OPENING AND CONNECTED TO O.W.S.J.. SEE DETAIL BELOW.

4. WHERE DECK SUPPORTS ARE SPACED OVER 1500 o.c. OPENINGS LARGER THAN 350 TO BE FRAMED WITH L's 89x89x6.4 ALL AROUND OPENINGS AND CONNECTED TO C150x12 PURLINS. SEE DETAIL BELOW.

NOTE:
SEE MECHANICAL DRAWINGS FOR LOCATION, SIZE AND WEIGHT OF ALL ROOF MOUNTED OR SUPPORTED EQUIPMENT.

5-B **STANDARD DETAIL**
NOT TO SCALE
STEEL DECK - OPENINGS THROUGH ROOF DECK

GENERAL

1. GENERAL CONTRACTOR TO SITE VERIFY ALL CONDITIONS AND OR DIMENSIONS SHOWN OR IMPLIED ON THE STRUCTURAL DRAWINGS.
2. GENERAL CONTRACTOR TO COORDINATE ALL STRUCTURAL DOCUMENTS AND WORK WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL AND SITE SERVICING DOCUMENTS AND WORK.
3. REPORT ANY DISCREPANCIES AND OR CONFLICTS IN DIMENSIONS OR DETAILS TO THE ARCHITECT FOR CLARIFICATION PRIOR TO COMMENCING THE WORK IN QUESTION.
4. PROVIDE ALL TEMPORARY NEEDLING, SHORING AND BRACING AS REQUIRED TO SAFELY COMPLETE THE WORK SHOWN ON THE STRUCTURAL DRAWINGS. SUBMIT, UPON REQUEST OF THE STRUCTURAL ENGINEER, DRAWINGS DETAILING THE TEMPORARY WORKS, SEALED SIGNED AND DATED BY A LICENSED PROFESSIONAL ENGINEER.
5. PROVIDE ALL FALSE WORK AND RESHORING REQUIRED TO CONSTRUCT CONCRETE WALLS, COLUMNS AND BEAMS SHOWN ON THE STRUCTURAL DRAWINGS.
6. ALL OPENINGS IN MASONRY WALLS REQUIRE A LINTEL. COORDINATE LOCATIONS AND CLEAR MASONRY OPENING WIDTHS WITH ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS AND SELECT THE APPROPRIATE LINTEL FROM "LINTEL SCHEDULE-GENERAL PURPOSE LINTELS" AS SHOWN IN THE SCHEDULE ON DRAWING S1.01, USING WALL CONSTRUCTION AND MAXIMUM CLEAR OPENING WIDTH AS THE CRITERIA.

CONCRETE AND CONCRETE REINFORCING

1. ALL CONCRETE WORK INCLUDING MATERIALS, MIXING, PLACING, FINISHING, CURING, COLD WEATHER PROTECTION, HOT WEATHER PROTECTION, FORMWORK AND RESHORING IN ACCORDANCE WITH A23.1 AND A23.3 CURRENT UNLESS NOTED OTHERWISE HERE.
2. ALL CONCRETE REINFORCING INCLUDING MATERIALS, FABRICATION, DETAILING, LAP SPLICES, PLACEMENT, FIXING AND COVER IN ACCORDANCE WITH A23.1 AND A23.3 CURRENT UNLESS NOTED OTHERWISE HERE.
3. WELDED WIRE MESH TO BE LAPPED ONE (1) FULL MESH PLUS 50mm. PROVIDE CONCRETE BRICK BOLSTERS FOR WELDED WIRE MESH AT 1000mm ON CENTRE EACH WAY.
4. CURE ALL SLABS ON GRADE WITH A PRE-APPROVED CURING COMPOUND COMPATIBLE WITH THE PROPOSED FLOORING ADHESIVE. MAINTAIN AIR TEMPERATURE AT OR ABOVE 10°C FOR SEVEN (7) DAYS.
CONCRETE PROPERTIES:

LOCATION	SPEC. 28 DAY COMPRESSIVE STRENGTH	SLUMP	AIR CONTENT	EXPOSURE CLASS
SUSPENDED SLABS (EXTERIOR)	35MPa (56 DAYS)	100 MAX. (w/c -0.40)	5-8%	C-1
WALLS FOUNDATION (EXTERIOR)	35MPa (56 days)	100 MAX (WC ratio 0.55)	4-7%	F-2
INTERIOR SLAB ON GRADE AND DECK AND FOOTINGS	25MPa	100 MAX		N
HOUSEKEEPING PAD	20MPa	100 MAX		N

5. REINFORCING STEEL TO BE GRADE 400, WITH A MINIMUM SPECIFIED YIELD STRENGTH OF 400 MPA.
6. SUBMIT REINFORCING STEEL SHOP DRAWING TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION.

STRUCTURAL STEEL

1. SUBMIT FOR CONSULTANT S REVIEW ERECTION DIAGRAMS AND FABRICATION DETAILS IN ACCORDANCE WITH THE GENERAL NOTES.
2. CONSULTANTS REVIEW OF SHOP DRAWING DOES NOT RELEASE THE CONTRACTOR OF HIS RESPONSIBILITY FOR THE COMPLETENESS OF THE WORK NOR COORDINATION WITH OTHER TRADES.
3. FABRICATION AND ERECTION OF STEEL SHALL BE IN ACCORDANCE WITH CSA S16 (CURRENT).

SHAPE	STANDARD	GRADE	MIN. YEILD STRENGTH
W BEAMS	CSA G40.21	350W	50 Ksi
HOLLOW STRUCTURAL CLASS H UNLESS NOTED AS CLASS C	CSA G40.21	350W	50Ksi
PLATES, CHANNELS AND ANGLES	CSA G40.21	300W	44Ksi

4. STRUCTURAL STEEL TO CONFORM TO THE FOLLOWING TABLE UNLESS NOTED OTHERWISE.
5. ALL WELDING SHALL BE DONE BY AN ORGANIZATION FULLY APPROVED BY THE CANADIAN WELDING BUREAU UNDER CSA-W47.1 (CURRENT) IN DIVISION 1 OR 2 AT THE TIME OF TENDERING. WELDERS TO BE CWB CERTIFIED TO THE COMPANIES STANDARDS. WELDING AND WELDING MATERIALS SHALL CONFORM TO CSA-W59-(CURRENT).
6. THE FABRICATOR SHALL NOTE THE SIZE AND TYPE OF BOLTS AND WELDS USED IN STRUCTURAL CONNECTIONS ON THE SHOP DRAWINGS.
7. ALL STRUCTURAL STEEL SHALL BE SUFFICIENTLY STRAIGHT THAT VARIATIONS CANNOT BE DETERMINED WITH THE UNAIDED EYE. ALL STRUCTURAL STEEL SHALL BE THOROUGHLY CLEANED OF ALL LOOSE MILL SCALE, DIRT, OIL, OR OTHER FOREIGN MATTER BEFORE SHOP PAINTING. SHOP PAINT SHALL CONFORM TO CAN/CGSB 1.40-M89 OR CISC/CPMA STANDARD 2-75.
8. ALL STRUCTURAL STEEL EXPOSED TO THE ELEMENTS TO BE HOT DIP GALVANIZED UNLESS NOTED OTHERWISE.
9. WHERE HOT DIP GALVANIZING (HDG) IS SPECIFIED IT SHALL BE IN ACCORDANCE WITH CAN/CSA-G164-M92 (MINIMUM ZINC COATING 600 GSM).
10. STEEL LINTELS SHALL HAVE A MINIMUM BEARING LENGTH OF 200.

REINFORCED MASONRY NOTES

1. VERTICAL MASONRY REINFORCING STEEL TO BE FY = 400 MPA.
2. LAP ALL VERTICAL REINFORCING 600MM UNLESS NOTED OTHERWISE.
3. MASONRY UNITS FOR LOADBEARING WALLS:
   A. UNLESS NOTED OTHERWISE IN WALL SCHEDULE OR ELSEWHERE IN THE STRUCTURAL DOCUMENTS TO BE 15MPa.
4. FOR LOAD BEARING WALLS MORTAR TYPE 'S'
5. GROUT TO BE 25MPA WITH 10MM MAX AGGREGATE SIZE AND 150mm ± 25mm SLUMP. GROUTING TO CONFORM TO REQUIREMENTS OF CSA STANDARD CAN3-A371-94. ALL GROUTING TO BE 'LOW-LIFT'. MAXIMUM LIFT 1000mm.
6. UNLESS SPECIFICALLY DETAILED OTHERWISE ON THE STRUCTURAL DRAWINGS VERTICAL REINFORCING TO BE LOCATED IN CENTRE OF BLOCK.
7. IN ADDITION TO THE VERTICAL REINFORCING SPECIFIED ON DRAWINGS PROVIDE A MINIMUM OF 2-15M EACH SIDE OF:
   a) ALL DOOR OPENINGS
   b) ALL WINDOW OPENINGS
   c) AT ENDS OF ALL WALLS
   d) EACH SIDE OF EVERY MASONRY WALL CONTROL JOINT
8. ALL MASONRY WALLS ARE TO HAVE LADDER TYPE CONTINUOUS HORIZONTAL WALL REINFORCING AT 400 ON CENTRE. MINIMUM WIRE DIAMETER TO BE 4.76mm. PROVIDE PREFABRICATED CORNER AND TEE HORIZONTAL REINFORCING ALL CORNERS.

MINIMUM TESTING REQUIREMENTS FOR MASONRY

MASONRY UNITS, MORTAR AND GROUT SHALL BE TESTED IN ACCORDANCE WITH THE ONTARIO BUILDING CODE AND REQUIREMENTS OF CSA S304.1-04, BUT NOT LESS THAN THE FOLLOWING:

1. UNITS:
   ONE SET OF FIVE MASONRY UNITS DELIVERED TO SITE FOR EACH 250sqm OF WALL OF EACH TYPE OF MASONRY UNIT, IN ACCORDANCE WITH CSA S304, TESTED AND REPORTED PRIOR TO UNITS BEING USED ON SITE. PROVIDED CURRENT DATA IS AVAILABLE FROM THE MANUFACTURE, TESTING OF 15 MPa UNITS IS WAIVED. CURRENT IN THIS CURRENT DATA MEANS COMPRESSIVE STRENGTH TESTS FOR UNITS IN ACCORDANCE WITH THE REQUIREMENTS OF CSA S304.1-04, PREFORMED WITHIN THE THREE MONTHS PRECEDING THE START OF MASONRY FOR THIS PROJECT.
2. MORTAR:
   ONE SET OF MORTAR CUBES PER 500 SQUARE METERS OF CONSTRUCTION, OR PART THERE OF IN ACCORDANCE WITH THE TEST PROCEDURES AS PUT FORTH IN THE APPROPRIATE CSA STANDARDS.
3. GROUT:
   ONE SET OF CUBES AND ONE SLUMP TEST TAKEN AT THE SAME TIME AND FREQUENCY AS MORTAR TESTS DESCRIBED ABOVE.

WIND LOADING ON WALL SYSTEMS

IN ADDITION TO THE SEISMIC PROVISIONS OF THE ONTARIO BUILDING CODE THE FOLLOWING TABLES PROVIDE THE MINIMUM SPECIFIED WIND LOADS TO BE USED IN THE DESIGN OF THE NOTED WALL SYSTEMS. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND THE CONTRACTOR'S ENGINEER TO ENSURE THE WALL SYSTEM HAS BEEN DESIGNED TO THE ONTARIO BUILDING CODE BUT NOT LESS THAN THE VALUES GIVEN HERE.

STEEL STUDS, CURTAIN WALL

LEVEL	SPECIFIED PRESSURE OR SUCTION LOADS Iw*q*Ce(CpCg+/- Cpi Cgi)	
	ULS (kPa)	SLS (kPa)
MAIN ROOF TO GYM ROOF	1.07	0.70

CpCg DENOTES THE PRODUCT OF THE EXTERNAL PRESSURE COEFFICIENT TIMES THE GUST FACTOR AS NOTED IN FIGURE 4.1.7.6-B OF THE NBC 2015 STRUCTURAL.

CpCg VALUES USED IN THE TABLE ABOVE ARE BASED ON A TRIBUTARY AREA OF 20m² IN FIGURE 4.1.7.6-B.

ULS LOAD FACTOR OF 1.4 NOT INCLUDED IN SPECIFIED ULS LOADS NOTED IN TABLE ABOVE.
- Cpi = -0.45 to +0.30
- Cgi = 2.0

MTE
Engineers, Scientists, Surveyors 519-204-6510
2026-02-17 ISSUED FOR BID

WATERLOO REGION DISTRICT SCHOOL BOARD

Galt Collegiate Institute
200 WATER ST NORTH, CAMBRIDGE, ON N1R 1H6
BOILER REPLACEMENT AND H&V UPGRADES - PHASE 2
NOTES AND STANDARD DETAILS

Plot Date: 03/03/26
Drawn By: JAS
Project No.: 63814_001

S1.01

TRANSPORTATION 103 ROOF FRAMING PLAN

A S2.01 1 : 100

Galt Collegiate Institute

BOILER REPLACEMENT AND H&V UPGRADES - PHASE 2 — 200 WATER ST NORTH, CAMBRIDGE, ON N1R 1H6

NEW WELDING BOOTH UPGRADES

Project No.:	Drawn By:	Plot Date:
6381 4_001	JAS	03/03/26

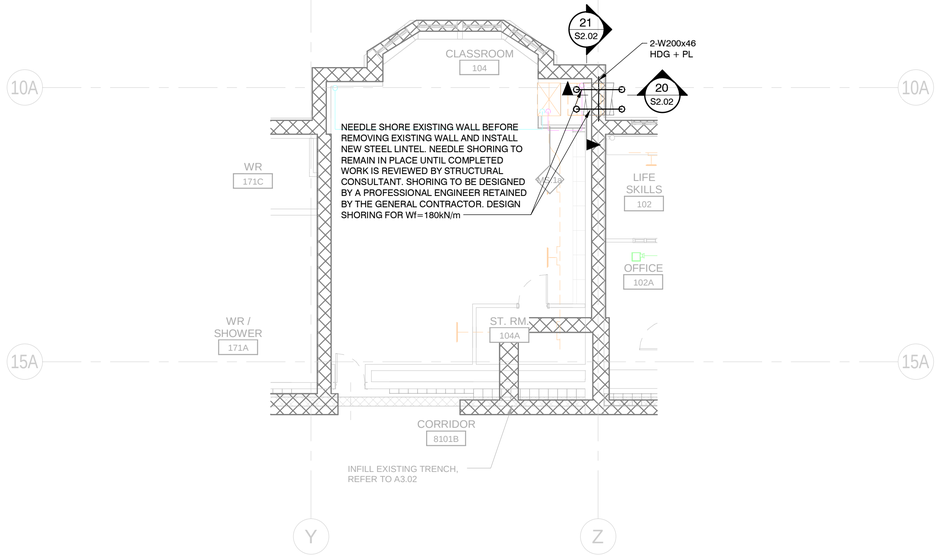
S2.01

WATERLOO REGION DISTRICT SCHOOL BOARD

MTE

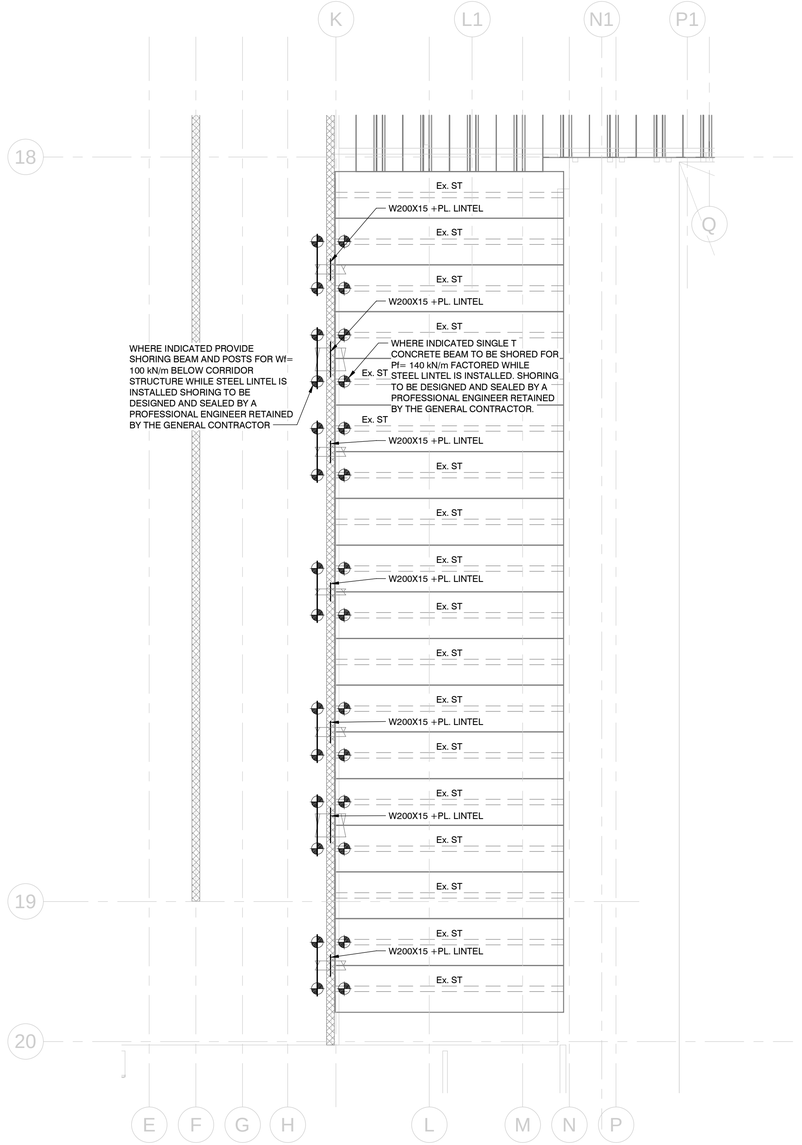
Engineers, Scientists, Surveyors 519-204-6510

		ISSUED FOR BID	2026-03-17



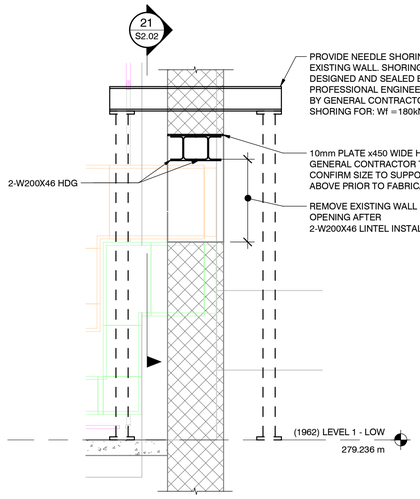
C S2.02 **CLASSROOM 104 LEVEL 2 FRAMING PLAN**

1 : 100



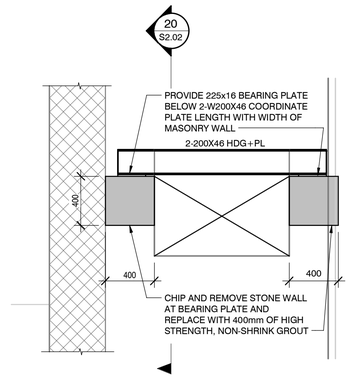
B S2.02 **PART LEVEL 2 FRAMING PLAN**

1 : 100



20 S2.02 **SECTION**

1 : 25



21 S2.02 **SECTION**

1 : 25

MTE
Engineers, Scientists, Surveyors 519-204-6510

2026-09-17	ISSUED FOR BID

WATERLOO REGION DISTRICT SCHOOL BOARD

Galt Collegiate Institute

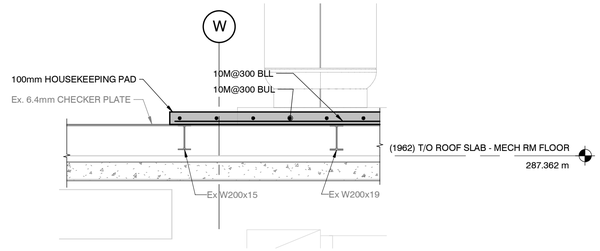
200 WATER ST NORTH, CAMBRIDGE, ON N1R 1H6

BOILER REPLACEMENT AND H&V UPGRADES - PHASE 2

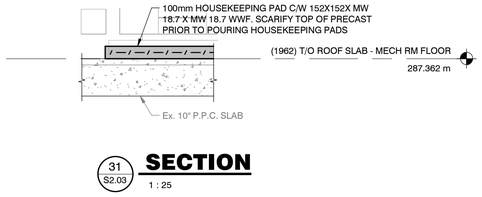
PART LEVEL 2 FRAMING PLAN

Project No.:	63814_001
Drawn By:	JAS
Plot Date:	03/03/26

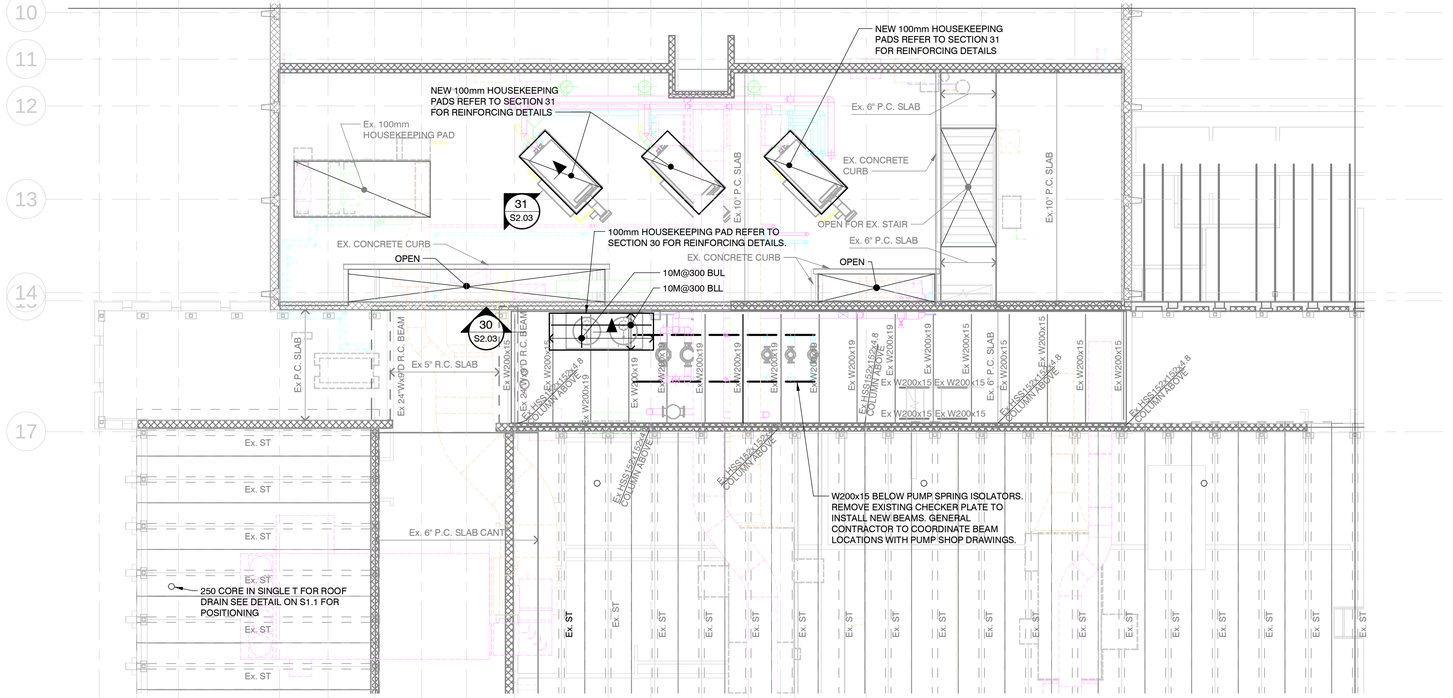
S2.02



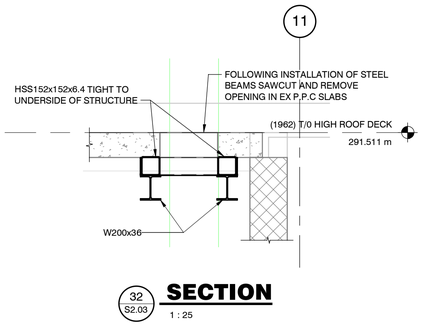
30 S2.03 **SECTION**
1 : 25



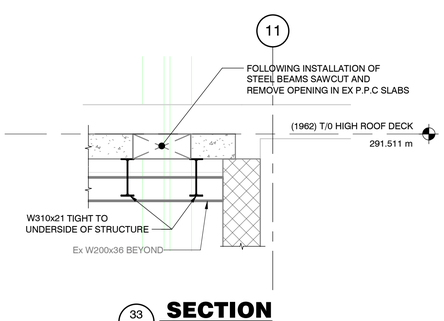
31 S2.03 **SECTION**
1 : 25



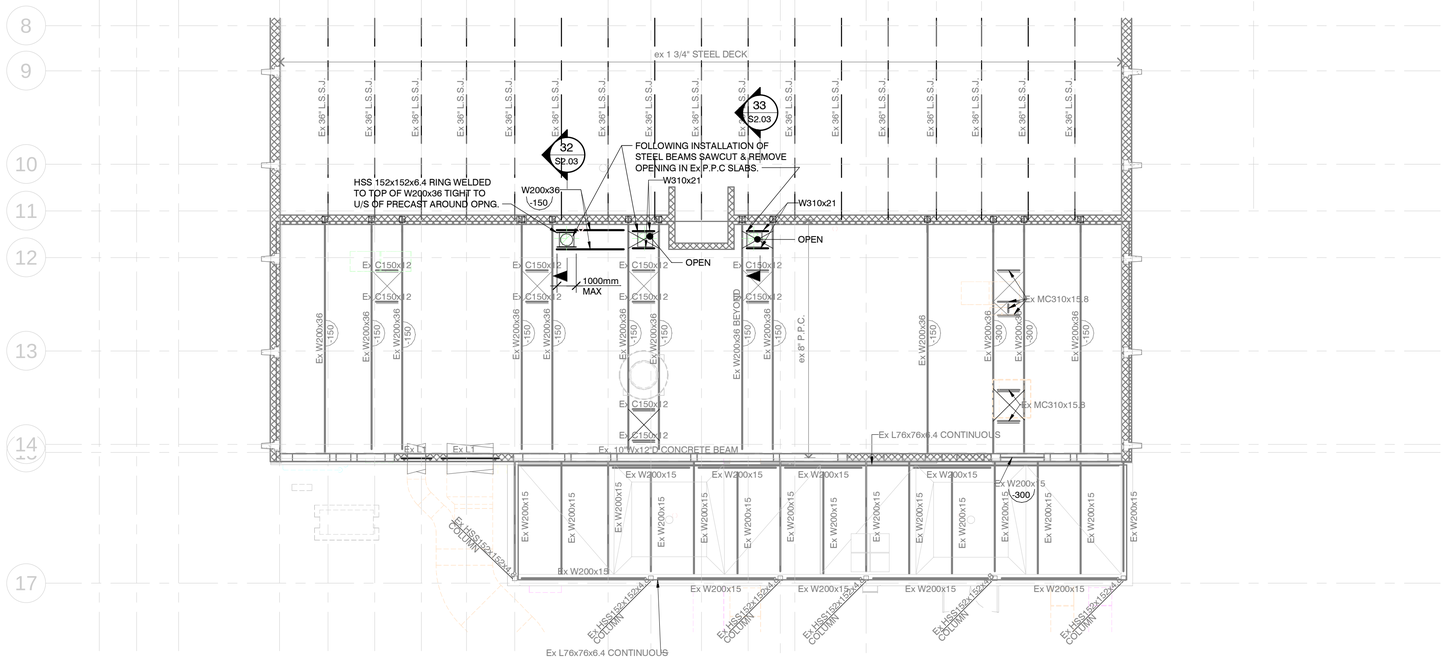
D S2.03 **MECH 358 FLOOR FRAMING PLAN**
1 : 100



32 S2.03 **SECTION**
1 : 25



33 S2.03 **SECTION**
1 : 25



E S2.03 **MECH 358 ROOF FRAMING PLAN**
1 : 100

MTE
Engineers, Scientists, Surveyors 519-204-6510

ISSUED FOR BID	2026-03-17

WATERLOO REGION DISTRICT SCHOOL BOARD

Galt Collegiate Institute

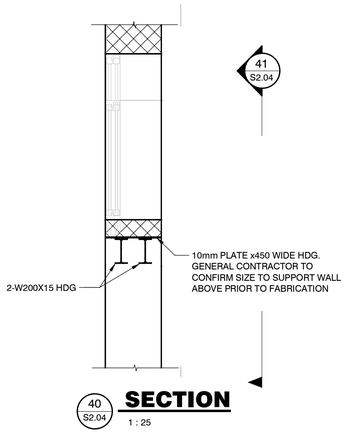
200 WATER ST NORTH, CAMBRIDGE, ON N1R 1H6

BOILER REPLACEMENT AND H&V UPGRADES - PHASE 2

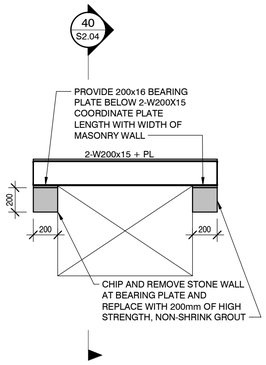
MECH. ROOM, AND HIGH ROOF FRAMING PLAN

Project No.:	Drawn By:	Plot Date:
63814_001	JAS	03/03/26

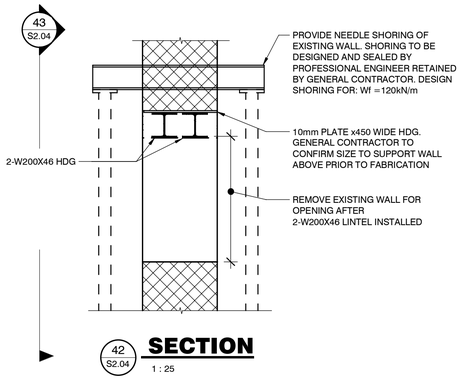
S2.03



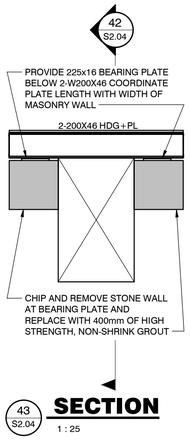
40 S2.04 **SECTION**
1 : 25



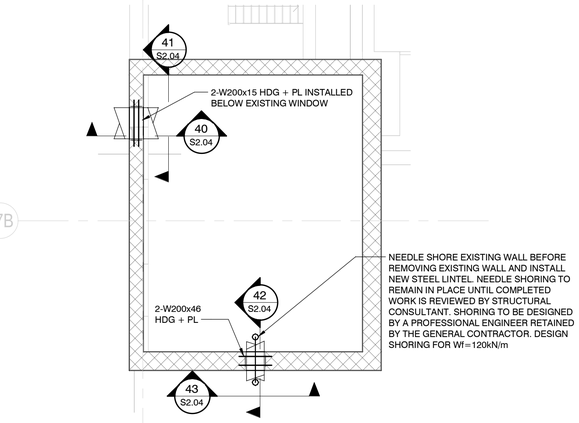
41 S2.04 **SECTION**
1 : 25



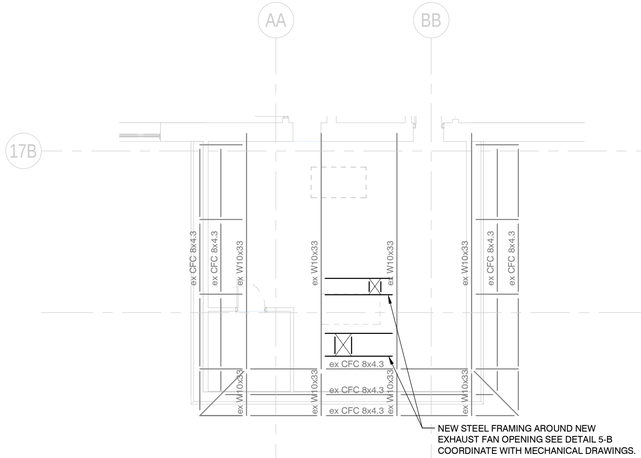
42 S2.04 **SECTION**
1 : 25



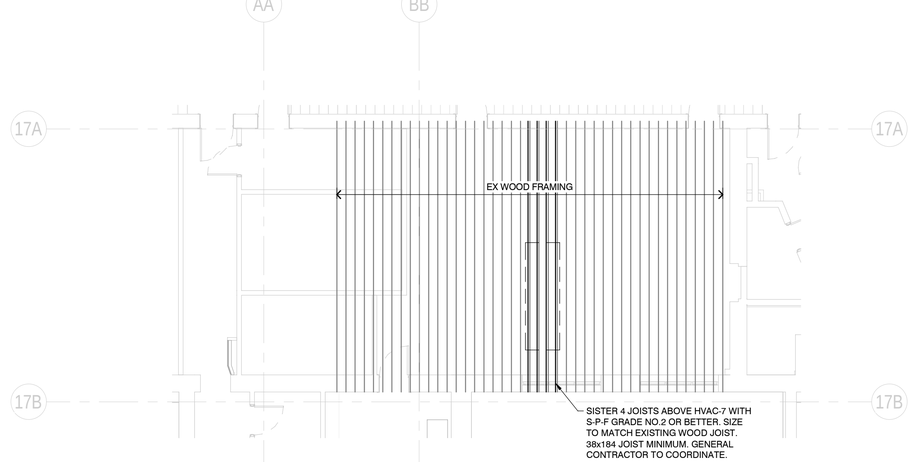
43 S2.04 **SECTION**
1 : 25



F S2.04 **CLASSROOM 409 PART FRAMING PLAN**
1 : 100



G S2.04 **ART PREP 403 PART FRAMING PLAN**
1 : 100



H S2.04 **SCIENCE ROOM 301 PART FRAMING PLAN**
1 : 100

MTE
Engineers, Scientists, Surveyors 519-204-6510

2026-09-17 ISSUED FOR BID

WATERLOO REGION DISTRICT SCHOOL BOARD

Galt Collegiate Institute

BOILER REPLACEMENT AND H&V UPGRADES - PHASE 2

200 WATER ST NORTH, CAMBRIDGE, ON N1R 1H6

PLANS AND SECTIONS

Project No.: 63814_001
Drawn By: JAS
Plot Date: 03/10/26

S2.04