

MILTON #13 PUBLIC SCHOOL



* FOR REFERENCE ONLY *

DRAWING No.	DRAWING LIST
S0.0	COVERPAGE
S1.0	FOUNDATION PLAN
S1.1	SLAB-ON-GRADE SAW-CUT PLAN
S2.0	FOUNDATION SECTIONS
S2.1	TYPICAL FOUNDATION DETAILS
S3.0	SECOND FLOOR FRAMING PLAN
S3.1	THIRD FLOOR FRAMING PLAN
S3.2	ROOF FRAMING PLAN
S4.0	FRAMING SECTIONS
S4.1	FRAMING SECTIONS
S4.2	FRAMING SECTIONS
S4.3	TYPICAL FRAMING DETAILS

GENERAL NOTES

- CHECK ALL DIMENSIONS ON THESE DRAWINGS WITH ALL OTHER DRAWINGS, INCLUDING BUT NOT LIMITED TO, TRAFFIC MARKINGS, ARCHITECTURAL, MECHANICAL, OR ELECTRICAL DRAWINGS. REPORT ANY DISCREPANCIES TO THE ARCHITECT IMMEDIATELY UPON DISCOVERY. THE WORKER IS RESPONSIBLE FOR COMMENCING WITH THE WORK DO NOT SCALE THE DRAWINGS.
- THE DESIGN LIVE LOADS ARE INDICATED ON THE DRAWINGS. CONSTRUCTION LOADS SHALL NOT EXCEED THE DESIGN LIVE LOADS.
- IF THE DELETED STRUCTURE IS SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY BRACING, SHORING AND ANY OTHER TEMPORARY OR PERMANENT MEASURES REQUIRED DURING CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY SUPPORT OF EXISTING ADJACENT STRUCTURES AS REQUIRED. ALL BRACING AND SHORING SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER.
- ALL CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE LATEST ONTARIO BUILDING CODE, LATEST APPLICABLE REGULATIONS, AND GOOD CONSTRUCTION PRACTICES.
- THE STRUCTURE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND SPECIFICATIONS.
- CLARIFY ANY QUERIES WITH THE ENGINEER REGARDING THE INTERPRETATION OF THE DRAWINGS, PRIOR TO THE COMMENCEMENT OF ANY WORK.
- KALOS ENGINEERING INC. PROVIDES GENERAL PERFORMANCE REVIEW ONLY FOR THE WORK SHOWN ON THESE DRAWINGS. THIS REVIEW IS A REVIEW ONLY TO DETERMINE THAT THE WORK IS IN GENERAL CONFORMANCE WITH THE REQUIREMENTS OF THE ONTARIO BUILDING CODE AND THE ONTARIO ENGINEERING ACT. THE CONTRACTOR SHALL COORDINATE FIELD REVIEWS WITH ALL ENGINEERING FIRMS PROVIDING STRUCTURAL DESIGN SERVICES. COMMENTS AS SHOWN ON THESE DRAWINGS, PROVIDE 48 HOURS ADVANCE NOTICE OF EACH REQUIRED FIELD REVIEW WITH KALOS ENGINEERING INC. DOES NOT MAKE WARRANTIES OF THE CONTRACTOR'S WORK. IT REMAINS THE CONTRACTOR'S RESPONSIBILITY TO CONSTRUCT THE WORK IN CONFORMANCE WITH THE CONTRACT DOCUMENTS.
- THE USE OF THESE DRAWINGS IS LIMITED TO THAT IDENTIFIED IN THE REVISIONS COLUMN. DO NOT CONSTRUCT FROM THESE DRAWINGS UNLESS MARKED 'ISSUED FOR CONSTRUCTION'. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OTHER REVISIONS. THE DRAWINGS SHALL NOT BE USED FOR TENDER UNLESS INDICATED IN THE REVISIONS COLUMN.
- REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR PRECISE LOCATIONS AND ASSEMBLY TYPES OF REQUIRED FIRE RESISTANCE RATINGS. ALL ENGINEERING WORK SHALL BE ACCORDING TO APPLICABLE LOCAL RESTRICTED ASSEMBLIES.
- DO NOT CUT OR DRILL ANY DIMENSIONS IN STRUCTURAL MEMBERS OR ELEMENTS WITHOUT WRITTEN CONSENT OF KALOS ENGINEERING INC.

CONCRETE NOTES

- ALL STRUCTURAL CONCRETE ELEMENTS HAVE BEEN DESIGNED IN ACCORDANCE WITH CSA STANDARD CAN/CSA A23.3. ALL CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH CSA STANDARD CAN/CSA A23.1.
- MINIMUM CONCRETE STRENGTH AT 28 DAYS SHALL BE:
 - FOOTINGS - 40 MPa
 - INTERIOR SLAB ON GRADE - 28 MPa TYPE F2
 - MAXIMUM AGGREGATE SIZE - 20mm (3/4")
 - EXTERIOR SLAB ON GRADE - 32 MPa TYPE C2
 - 1-5M BARS - 400 mm (16")
 - 2-5M BARS - 700 mm (28")
 - 2-5M BARS - 700 mm (28")
- THE DEFORMED REINFORCING STEEL SHALL CONFORM TO CSA STANDARD C22.5 IN GRADE 500K STEEL BARS AND TIES AND GRADE 400K FOR ALL OTHER REINFORCING. ALL REINFORCING HOOKS AND BENDS SHALL BE IN ACCORDANCE WITH A23.1. THE REINFORCING LAP LENGTH SHALL BE IN ACCORDANCE WITH A23.1 UNLESS NOTED OTHERWISE. TYPICAL SPLICE LENGTHS SHALL BE AS FOLLOWS:
 - 1-5M BARS - 400 mm (16")
 - 2-5M BARS - 700 mm (28")
 - 2-5M BARS - 700 mm (28")
- WELDED WIRE FABRIC SHALL BE IN ACCORDANCE WITH CSA 030.18. ALL MESH SHALL BE CHAINED PRIOR TO POURING CONCRETE. LIFTING OF THE MESH DURING THE CONCRETE POUR WILL NOT BE PERMITTED. ALL SPLICES SHALL BE A MINIMUM OF TWO CROSSWISE SPACING PLUS 50mm (2")
- THE REINFORCING COVER FOR CONCRETE SHALL BE:
 - 40mm (1 1/2") FOR FORMED CONCRETE EXPOSED TO EARTH OR WEATHER
 - 25mm (1") FOR FORMED CONCRETE EXPOSED TO EARTH OR WEATHER
 - 25mm (1") FOR INTERIOR CONCRETE
 - CONCRETE CHAIRS AND BAR SUPPORTS SHALL BE IN ACCORDANCE WITH CSA A23.1.
- CONSTRUCT CONCRETE WALLS WITHOUT CONTROL JOINTS UNLESS NOTED OTHERWISE. PROVIDE CHAIRS AND BEAM HOOKETS IN THE INTERIOR FACE OF CONCRETE WALLS AS REQUIRED.
- PROVIDE TOPPING FOR WALL AND COLUMNS TO SUIT THE REINFORCING IN THE WALL OR COLUMN ABOVE.
- CONCRETE DOWELS FROM STEEL DECK SHALL BE A MINIMUM OF 60mm (2 1/4") FROM TOP OF DECK AND REINFORCING WITH 120x125 mm (4 3/8" x 4 3/8") 90° W/ 750 W/ 2 WELDED WIRE FABRIC. CONFORM WELDED WIRE FABRIC SIZE WITH REQUIRED UCL FIRE RATING ASSEMBLY AS SPECIFIED BY THE ARCHITECT.
- A STEEL TROWEL FINISH SHALL BE PROVIDED FOR ALL INTERIOR SLABS UNLESS NOTED OTHERWISE. A BROOK FINISH SHALL BE PROVIDED FOR ALL EXTERIOR SLABS UNLESS NOTED OTHERWISE.
- CONCRETE SCREEDING SHALL BE PROVIDED FOR ALL FOOTING, PIER, WALL, COLUMN, AND SLAB POURS.
- CONCRETE SHALL BE PROTECTED AGAINST ADVERSE WEATHER CONDITIONS INCLUDING, BUT NOT LIMITED TO, HIGH WINDS, FREEZING, PRECIPITATION, EXCESSIVE HUMIDITY, AND TEMPERATURE DIFFERENTIALS. PREMATURE DRYING AND WEATHER LOSS IN ACCORDANCE WITH THE REQUIREMENTS OF CAN/CSA A23.1.
- WHEN THE AIR TEMPERATURE IS AT OR ABOVE 27°C, OR WHEN THERE IS A PROBABILITY OF THE TEMPERATURE RISING TO 27°C DURING THE PLACING PERIOD, THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PREVENT CONCRETE IN PLACE FROM THE EFFECTS OF HOT AND/OR DRYING WEATHER CONDITIONS FOR THE DURATION OF THE REQUIRED CURING PERIOD. THE REQUIRED CURING PERIOD SHALL BE DETERMINED IN ACCORDANCE WITH CSA A23.1.
- WHEN THE AIR TEMPERATURE IS AT OR BELOW 5°C, OR WHEN THERE IS A PROBABILITY OF THE TEMPERATURE FALLING BELOW 5°C WITHIN 24 HOURS OF PLACING, THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PREVENT CONCRETE FROM THE EFFECTS OF COLD WEATHER. THE REQUIRED PROTECTION SHALL BE BY MEANS OF HEATED ENCLOSURES, COVERINGS, INSULATION OR A SUITABLE COMBINATION OF THESE METHODS.

STRUCTURAL STEEL NOTES

- ALL STRUCTURAL STEEL ELEMENTS INCLUDING DESIGN OF ELEMENTS AND CONNECTIONS SHALL BE IN ACCORDANCE WITH CAN/CSA S16.
- ALL STRUCTURAL STEEL SHALL CONFORM TO CSA G40.21 (50W) EXCEPT W SECTIONS AND PLATES G40.21 (50W). WSS MEMBERS G40.21 (50W) CLASS C. ANCHOR BOLTS ASTM F1554 GR 36. COLD FORM SECTIONS ASTM A572M GRADE 50W.
- ALL SECTIONS SHALL BE PRIME PAINTED WITH THE SURFACE PREPARATION AND PAINTING PROCEDURES IN ACCORDANCE WITH CAN/CSA S8.10 UNLESS NOTED OTHERWISE. ALL STEEL EXPOSED TO THE EXTERIOR TO BE HOT DIP GALVANNEZED TO RECEIVE SPRAY FIREPROOFING SHALL BE LEFT UNPAINTED. COORDINATE WITH THE ARCHITECTURAL DRAWINGS.
- ALL WELDING SHALL BE CARRIED OUT IN ACCORDANCE WITH CAN/CSA W59. THE STEEL FABRICATOR SHALL BE FULLY QUALIFIED UNDER THE REQUIREMENTS BY THE CANADIAN WELDING BUREAU IN CONFORMANCE WITH CAN/CSA W47.1.
- DESIGN ALL MOMENT AND SHEAR CONNECTIONS FOR THE FULL CAPACITY OF THE SMALLER MEMBER IN THE CONNECTION UNLESS OTHERWISE NOTED. MOMENT CONNECTIONS SHALL BE PROVIDED FOR ALL MAJOR AND MINOR AXES BEING WHERE NOTED. THE STEEL CONTRACTOR SHALL PROVIDE LOCAL REINFORCING OR MEMBERS AS REQUIRED FOR CONNECTION FORCES AS PART OF THE CONNECTION DESIGN.
- PROVIDE MINIMUM BEARING LENGTH OF STEEL MEMBERS AS FOLLOWS:
 - ON MASONRY - 150mm
 - ON CONCRETE - 100mm
 - ON BEARING PLATES - FULL LENGTH OF BEARING PLATE
- THE BASE PLATE AND BEARING PLATE GROUP SHALL BE OF THE DEMENTITOUS NON-SHOCK TYPE AND SHALL BE A MINIMUM OF 25mm (1") THICK WITH A COMPRESSION STRENGTH OF 50 MPa AT 20 DAYS.
- FULLY WELD BASE PLATES TO COLUMNS AND PROVIDE MINIMUM 6mm (1/4") THICK CAP PLATES ON ALL COLUMNS.
- PROVIDE MINIMUM 175x175x10mm (7x7x1/2") BEARING PLATES FOR ALL STRUCTURAL STEEL C/W 2-18mm (5/8") ANCHORS, 400mm (16") LONG WITH 50mm (2") BEYOND LONG LINE AND 100mm (4") BEYOND SHORT LINE.
- ALL BOLTS SHALL BE TIGHTENED WITH A SUITABLE TORQUE WRENCH IN ACCORDANCE WITH CSA S16.
- ERECT STRUCTURAL STEEL IN ACCORDANCE WITH CSA S16 AND IN CONFORMANCE WITH THE REVISIONS AND SHOP DRAWINGS.
- THE STRUCTURAL STEEL CONTRACTOR SHALL SUPPLY ALL LINTELS OVER DOORS, WINDOWS, DUCT AND PIPE PENETRATIONS, AND ALL BEARING PLATES, ANCHOR BOLTS, WALL ANCHORS, SILL ANGLES, TRIMMER ANGLES, AND MASONRY CURBS ON COLUMNS LOCATED WITH PENETRATIONS.
- THE GENERAL CONTRACTOR SHALL PROVIDE TEMPORARY SHORING OF ALL FLUSH BEAMS, SHORING SHALL BE DESIGNED BY THE CONTRACTOR AND SHALL BE CURVED.
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR REVIEWING AND COORDINATING THE STRUCTURAL STEEL SUBMITTALS WITH WORK IN OTHER SPECIFICATION SECTIONS INCLUDING, BUT NOT LIMITED TO, MASONRY, PRECAST, METAL DECK, METAL STUDS, & OWS.

MASONRY NOTES

- ALL STRUCTURAL ELEMENTS HAVE BEEN DESIGNED IN ACCORDANCE WITH CSA STANDARD CAN/CSA A23.3. ALL CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH CSA STANDARD CAN/CSA A23.1.
- ALL CONCRETE BLOCKS SHALL BE LIGHT WEIGHT TYPE M1500 UNLESS NOTED OTHERWISE. MORTAR SHALL BE TYPE F FOR LOAD BEARING MASONRY AND TYPE N FOR NON-LOAD BEARING MASONRY.
- GROUT SHALL CONSIST OF ONE PART PORTLAND CEMENT AND THREE PARTS SAND (MAXIMUM AGGREGATE SIZE SHALL BE 14mm (5/8") IF WATER TO PROVIDE A MINIMUM 10 MPa COMPRESSIVE STRENGTH AT 28 DAYS. SLUMP SHALL BE 200mm ± 25mm (8" ± 1").
- GROUTING:
 - ALL CELLS CONTAINING REINFORCING SHALL BE GROUTED SOLID.
 - ALL MASONRY BELOW BEARING PLATES SHALL BE GROUTED SOLID FULL HEIGHT. BOND BEAMS SHALL BE GROUTED SOLID.
- REINFORCING:
 - PROVIDE VERTICAL REINFORCING AS FOLLOWS UNLESS NOTED OTHERWISE ON THE DRAWINGS:
 - 140mm (6") CONCRETE BLOCK - 10M VERTICAL AT 800mm (24") O.C.
 - 190mm (7 1/2") CONCRETE BLOCK - 10M VERTICAL AT 800mm (24") O.C.
 - 240mm (10") CONCRETE BLOCK - 20M VERTICAL AT 800mm (24") O.C.
 - 290mm (12") CONCRETE BLOCK - 20M VERTICAL AT 800mm (24") O.C.
 - TRIM ALL OPENINGS WITH TWO VERTICAL BARS ON EACH SIDE OF DRAWING BARS. SHALL BE LAPPED IN THE FIRST TWO COURSES ON EACH SIDE OF THE OPENING AND THE BAR SIZE SHALL MATCH THE WALL REINFORCING. UNLESS NOTED OTHERWISE, ALL WALLS SHALL COVER BEHIND BEARING PLATES. THE BAR SIZE SHALL MATCH THE WALL REINFORCING.
 - FOR WALLS WITH REINFORCING, THE REINFORCING SHALL BE LAPPED IN EVERY SECOND COURSE UNLESS NOTED OTHERWISE ON THE DRAWINGS.
 - DO NOT EXTEND HORIZONTAL REINFORCING THROUGH CONTROL JOINTS UNLESS OTHERWISE NOTED.
- FOUNDATION WALL HEIGHTS AND COURSING SHALL BE BASED ON THE UNDERSIDE OF FOOTING ELEVATION, THE FOOTING THICKNESS, AND THE GROUND FLOOR FINISH ELEVATION. THE FINISH ELEVATION SHALL BE SURPASSED WHERE A TOP OF FOOTING ELEVATION IS SPECIFIED. DO NOT COUNT THE COURSING IN THE FOUNDATION SECTIONS.
- PROVIDE A 200mm (8") HIGH BOND BAR REINFORCED WITH 120x125 BAR IN THE TOP COURSE OF ALL INTERIOR PERIMETER WALLS.
- VERTICAL ALIGNMENT (PLUMBNESS) OF STUDS SHALL BE WITHIN 1/1000 OF THE SPAN.
- HORIZONTAL ALIGNMENT (LEVELNESS) OF WALLS SHALL BE WITHIN 1/1000 OF THEIR RESPECTIVE LENGTHS.
- CUTTING OF STUDS OR TRACK IS NOT PERMITTED EXCEPT AS NOTED ON DRAWINGS.
- BRIDGING SHALL BE OF SIZE, SPACING AND TYPE SHOWN ON THE DRAWINGS AND SHALL BE INSTALLED ON THE HANGING EDGE OF THE TRACK AND NOTED ON DRAWINGS AND ROTATION OF STUDS. PROVIDE BRIDGING AT 1200mm (48") MAXIMUM.
- TEMPORARY BRACING SHALL BE PROVIDED AND LEFT IN PLACE UNTIL WORK IS PERMANENTLY STABILIZED. REVIEW OF COMPLETED WELDS.
- STUDS SHALL SEAT INTO TOP AND BOTTOM TRACKS WITH THE GAP BETWEEN THE END OF THE STUD AND WEB OF THE TRACK NOT TO EXCEED 3mm (1/16") OF THE SPAN.
- VERTICAL ALIGNMENT (PLUMBNESS) OF STUDS SHALL BE WITHIN 1/1000 OF THE SPAN.
- HORIZONTAL ALIGNMENT (LEVELNESS) OF WALLS SHALL BE WITHIN 1/1000 OF THEIR RESPECTIVE LENGTHS.
- CUTTING OF STUDS SHALL BE WITHIN 3mm (1/16") FROM DESIGN SPACING PROVIDED THAT CLIMATIC ERRORS DOES NOT EXCEED THE REQUIREMENTS OF THE FINISHING MATERIALS.

TESTING AND INSPECTIONS:

- THIRD-PARTY TESTING AND INSPECTIONS SHALL BE PROVIDED IN ACCORDANCE WITH CAN/CSA A23.3 AND STAFFED BY A PROFESSIONAL ENGINEER. TESTING AND INSPECTION REQUIREMENTS NOTED IN THE PROJECT SPECIFICATIONS SHALL BE SUPPLEMENTED BY THE FOLLOWING:
 - TESTING OF THE FOOTING SUBGRADE SHALL BE PROVIDED PRIOR TO ALL CONCRETE POURS TO ENSURE CONFORMANCE WITH THE BEARING CAPACITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PROVIDING ALL NECESSARY ENGINEERING INFO. SHALL BE NOTIFIED IMMEDIATELY IF EXCAVATIONS ARE REQUIRED TO EXCEED BELOW THE NOTED BEARING CAPACITY.
 - CONCRETE REINFORCING SHALL BE INSPECTED FOR CONFORMANCE TO THE STRUCTURAL DRAWINGS PRIOR TO EVERY CONCRETE POUR.
 - COMPRESSION TESTING OF CONCRETE SHALL BE IN ACCORDANCE WITH CSA A23.1. A MINIMUM OF ONE STRENGTH TEST SHALL BE COMPLETED FOR EACH 100 m³ OF CONCRETE PLACED AND A MINIMUM OF ONE TEST PER DAY SHALL BE COMPLETED FOR CONCRETE OF A SINGLE MIX DESIGN. TESTS SHALL CONSIST OF ONE SET OF FOUR CYLINDERS.
 - THE COMPRESSIVE STRENGTH OF CONCRETE BLOCKS SHALL BE TESTED AT A MINIMUM OF ONCE PER FLOOR IN ACCORDANCE WITH CSA A106.1. A MINIMUM OF FIVE TESTS OF EACH SIZE OF CONCRETE BLOCK SHALL BE TESTED.
 - MORTAR CUBE COMPRESSIVE STRENGTH SHALL BE TESTED AT LEAST ONCE FOR EACH 500 m³ OF MASONRY FOR A PROJECT HAVING MORE THAN 500 m³ OF MASONRY AND ONCE FOR EACH 250 m³ OF MASONRY FOR A PROJECT HAVING LESS THAN 500 m³ OF MASONRY. FOUR SAMPLES SHALL BE TAKEN FOR EACH TEST.
 - GROUT COMPRESSIVE STRENGTH SHALL BE TESTED AT LEAST ONCE FOR EACH 20 m³ OF GROUT FOR A PROJECT HAVING MORE THAN 20 m³ OF GROUT AND ONCE FOR EACH 10 m³ OF GROUT FOR A PROJECT HAVING LESS THAN 20 m³ OF GROUT. FOUR SAMPLES SHALL BE TAKEN FOR EACH TEST.
 - STRUCTURAL STEEL INSPECTIONS AND TESTING SHALL BE AS FOLLOWS:
 - DEFLECTION FOR JOISTS PARALLEL TO LOAD BEARING WALLS AND WITHIN CURTAINS SHALL BE LIMITED TO 1/200.
 - DEFLECTION FOR JOISTS SUPPORTING UNDESIGNED PARTITIONS AND CURTAINS SHALL BE LIMITED TO 1/100.
 - PROVIDE 100mm (4") DEEP JOIST SHOES IN ALL JOIST JOISTS.
 - JOIST SHOES SHALL BE DESIGNED FOR A MAXIMUM BEARING PRESSURE OF 1.1 MPa (160 psi) ON MASONRY WALLS.
 - NO DRILLING, CUTTING, OR WELDING OF JOISTS OR BRIDGING IS PERMITTED WITHOUT THE APPROVAL OF THE ENGINEER AND THE JOIST DESIGNER.
 - ALL JOISTS SHALL BE WELDED TO SUPPORTING MEMBERS AND BEARING PLATES.
 - PROVIDE MINIMUM 175x175x10mm (7x7x1/2") BEARING PLATES C/W TWO 18mm (3/8") DIAMETER 400mm (16") LONG ANCHOR RODS WITH 50mm (2") BEYOND HOLES FOR ALL JOISTS BEARING ON MASONRY.

LATERAL FORCE RESISTING SYSTEM NOTES:

- THE ROOF DIAPHRAGM AND CHORD MEMBERS CONSIST OF HOLLOW CORE PRECAST SLABS AND MASONRY BOND BEAMS AND METAL DECK AND TRIMMER ANGLES.
- THE ROOF DECK AND CONNECTIONS TO SUPPORTING MEMBERS SHALL HAVE A MINIMUM SHEAR CAPACITY OF 4 kN/m. REFER TO METAL DECK NOTE B.
- THE SECOND FLOOR DIAPHRAGM AND CHORD MEMBERS CONSIST OF HOLLOW CORE PRECAST SLABS AND MASONRY BOND BEAMS.
- PRECAST SLABS AND GROUT JOISTS BETWEEN SLABS SHALL HAVE A MINIMUM IN-PLANE SHEAR CAPACITY OF 30 kN/m.
- CONNECTIONS BETWEEN SLABS, BEARING WALLS, AND SHEAR WALLS SHALL HAVE A MINIMUM SHEAR CAPACITY OF 40 kN/m.

PRECAST CONCRETE SLAB NOTES

- ALL PRECAST CONCRETE SHALL BE DESIGNED IN ACCORDANCE WITH CSA A23.3 AND SHALL BE CONSTRUCTED AND INSTALLED PER CSA A23.1 AND CSA A23.4. ALL PRECAST CONCRETE SHALL BE DESIGNED BY AN ENGINEER LICENSED TO PRACTICE IN THE PROVINCE OF ONTARIO.
- PRECAST CONCRETE SHALL BE DESIGNED TO RESIST THE LOADS NOTED ON THE DRAWINGS.
- PRECAST SLAB LIVE LOAD DEFLECTION SHALL NOT EXCEED L/360 FOR FLOORS AND L/240 FOR ROOFS.
- A RAISED FINISH SHALL BE PROVIDED ON ALL SLABS WHERE A TOPPING IS TO BE PROVIDED. A SMOOTH FINISH SHALL BE PROVIDED ON ALL ROOF SLABS.
- DIFFERENTIAL CAMBER SHALL BE LIMITED SUCH THAT THE APPLICATION OF THE SPECIFIED FLOOR OR ROOF FINISHES IS NOT NEGATIVELY AFFECTED. A CAMBERED FINISH SHALL BE PROVIDED WHERE REQUIRED TO EXCEED EXCESSIVE DIFFERENTIAL CAMBER.
- A LATER HANDED BEARING AGENT SHALL BE PROVIDED ON ALL SLABS PRIOR TO THE APPLICATION OF A TOPPING. REFER TO SPECIFICATION SECTION 03 41 01 FOR FURTHER DETAILS.
- NOTICES IN SLABS AT COLUMNS SHALL BE FILLED WITH 25 MPa CONCRETE AND 15M BARS DRILLED AND EPOXIED INTO ADJACENT SLABS.
- CORE INSULATION SHALL BE PROVIDED BY THE PRECAST MANUFACTURER AT LOCATIONS WHERE CORES ARE TO BE GROUTED SOLID.
- WRITTEN CONFIRMATION SHALL BE PROVIDED FROM THE PRECAST MANUFACTURER PRIOR TO THE USE OF LIFTS OR HEAVY EQUIPMENT ON PRECAST SLABS.
- CONSTRUCTION LOADS ON PRECAST SLABS, INCLUDING TEMPORARY STORAGE LOADS, SHALL NOT EXCEED 1 kPa (20 PSF).
- COORDINATE THE SITE DRILLED HOLES THROUGH SLABS WITH CONSULTANT PLACEMENT AND DRILLING THROUGH SLABS TO ENSURE THAT NO DAMAGE IS CAUSED TO THE SLABS OR REINFORCEMENT.
- ALL FLUSH BEAMS SHALL BE SHORED PRIOR TO AND DURING PRECAST SLAB PLACEMENT AND SHORING WALLS SHALL BE FILLED WITH FLUSH BEAMS AND FULLY CONCRETE.
- FOR SLOPED SLABS PROVIDE 10mm (3/8") NEOPRENE BEARING PADS AT ALL BEARING LOCATIONS.
- DESIGN SLABS FOR AN UNFACTORED LIVE LOAD OF 10 kN/m² AT EACH PARTITION WALL AND FOR ALL UNFACTORED LIVE LOADS AS REQUIRED. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS.
- SLAB JOISTS SHALL BE PROVIDED AS REQUIRED AT THE DISCRETION OF THE PRECASTER TO SUPPORT MECHANICAL UNITS, CANTILEVERS, SIDE CANTILEVERS, DAMPPROOFING, INSULATION, LINE LOADS, AND ANY OTHER LOADS NOTED ON THE STRUCTURAL DRAWINGS.

COLD-FORMED STEEL FRAMING NOTES:

- THESE NOTES APPLY TO THE STEEL STUD FRAMING COMPONENT OF THE PARTITIONS, CURTAINS, AND WINDOW WALLS ENGINEERING SHOP DRAWINGS SHALL BE PROVIDED.
- THE MINIMUM UNFACTORED DESIGN LIVE LOADING IS 1.21 kPa (250 LB/FT² FOR BRICK VENEER).
- THE DESIGN OF THE FRAMING SYSTEM IS BASED ON PUBLISHED STUD SECTION PROPERTIES BY BAILEY METAL PRODUCTS LIMITED.
- THE MINIMUM BASE METAL THICKNESS FOR ALL METAL WALL COMPONENTS, EXCLUDING CURTAINS, ARE NOTED ON THE DRAWINGS.
- STEEL MEETS THE REQUIREMENTS OF A S.T.M. A583A30M S5 GRADE 33 (270) FOR 1.2mm (1/8") GAL MATERIAL AND THINNER, AND S5 GRADE 50 (360) CLASS 1 FOR 1.5mm (1/8") GAL MATERIAL AND THICKER.
- GALVANIZING TO BE HOT-DIP PROCESS, G90 (275).
- METHOD OF CONSTRUCTION SHALL BE BY STACK BUILDING ON SITE.
- CONNECTIONS SHALL BE ACCOMPLISHED BY SELF DRILLING SCREWS AND OTHER FASTENERS AS SHOWN ON THESE DRAWINGS. PENETRATION BEYOND JOINED MATERIALS SHALL BE NOTED WITH THREE EXPOSED THREADS ALL CONNECTIONS USED IN ASSEMBLIES SHALL BE OF CORROSION RESISTANT MATERIALS COMPATIBLE WITH GALVANIZED COATINGS WITH A MINIMUM COATING THICKNESS OF 0.03mm ZINC CADMIUM PLATES. NO BLACK COATINGS WILL BE ACCEPTED. SUBSTITUTIONS MUST BE APPROVED BY THE ENGINEER.
- SCREWS COVERED BY SNEATHING MATERIALS SHALL HAVE LOW PROFILE HEADS.
- WIRE TYING IS NOT PERMITTED IN STRUCTURAL APPLICATIONS.
- CUTTING OF STEEL FRAMING MEMBERS SHALL BE BY SAW OR SHEAR. NO TORCH OR MANUAL CUTTING IS PERMITTED.
- SPLICING OF STUDS OR TRACK IS NOT PERMITTED EXCEPT AS NOTED ON DRAWINGS.
- BRIDGING SHALL BE OF SIZE, SPACING AND TYPE SHOWN ON THE DRAWINGS AND SHALL BE INSTALLED ON THE HANGING EDGE OF THE TRACK AND NOTED ON DRAWINGS AND ROTATION OF STUDS. PROVIDE BRIDGING AT 1200mm (48") MAXIMUM.
- TEMPORARY BRACING SHALL BE PROVIDED AND LEFT IN PLACE UNTIL WORK IS PERMANENTLY STABILIZED. REVIEW OF COMPLETED WELDS.
- STUDS SHALL SEAT INTO TOP AND BOTTOM TRACKS WITH THE GAP BETWEEN THE END OF THE STUD AND WEB OF THE TRACK NOT TO EXCEED 3mm (1/16") OF THE SPAN.
- VERTICAL ALIGNMENT (PLUMBNESS) OF STUDS SHALL BE WITHIN 1/1000 OF THE SPAN.
- HORIZONTAL ALIGNMENT (LEVELNESS) OF WALLS SHALL BE WITHIN 1/1000 OF THEIR RESPECTIVE LENGTHS.
- CUTTING OF STUDS SHALL BE WITHIN 3mm (1/16") FROM DESIGN SPACING PROVIDED THAT CLIMATIC ERRORS DOES NOT EXCEED THE REQUIREMENTS OF THE FINISHING MATERIALS.

OWS NOTES:

- ALL OPEN WEB STEEL JOISTS SHALL BE DESIGNED AND ERRECTED IN ACCORDANCE WITH CAN/CSA S16-14. JOISTS ARE TO BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO. THE SPANS AND SPACING NOTED ON THE DRAWINGS AND IN ACCORDANCE WITH CAN/CSA S16-14. ALL JOIST BEARING REQUIREMENTS ARE TO CONFORM TO CAN/CSA S16-14.
- ALL WELDING OF JOISTS AND ASSOCIATED COMPONENTS SHALL BE CARRIED OUT IN ACCORDANCE WITH CAN/CSA W59. THE STEEL FABRICATOR AND INSTALLER SHALL BE FULLY QUALIFIED UNDER THE REQUIREMENTS BY THE CANADIAN WELDING BUREAU IN CONFORMANCE WITH CAN/CSA W47.1.
- OWS SHALL BE DESIGNED FOR AN UNFACTORED UPLIFT LOAD OF 1.1 kPa (20 PSF) WITHIN 1 m OF THE BEARING EDGE SHALL BE DESIGNED FOR AN UNFACTORED UPLIFT LOAD OF 1.35 kPa.
- PROVIDE THE JOISTS AT ALL COLUMN LOCATIONS.
- DEFLECTION FOR JOIST PARALLEL TO LOAD BEARING WALLS SHALL BE LIMITED TO 1/200 AND SHALL BE CALCULATED USING SPECIFIED LOADS UNLESS NOTED OTHERWISE.
- DEFLECTION FOR JOISTS SUPPORTING UNDESIGNED PARTITIONS AND CURTAINS SHALL BE LIMITED TO 1/100.
- DEFLECTION FOR JOISTS SUPPORTING UNDESIGNED PARTITIONS AND CURTAINS SHALL BE LIMITED TO 1/100.
- PROVIDE 100mm (4") DEEP JOIST SHOES IN ALL JOIST JOISTS.
- JOIST SHOES SHALL BE DESIGNED FOR A MAXIMUM BEARING PRESSURE OF 1.1 MPa (160 psi) ON MASONRY WALLS.
- NO DRILLING, CUTTING, OR WELDING OF JOISTS OR BRIDGING IS PERMITTED WITHOUT THE APPROVAL OF THE ENGINEER AND THE JOIST DESIGNER.
- ALL JOISTS SHALL BE WELDED TO SUPPORTING MEMBERS AND BEARING PLATES.
- PROVIDE MINIMUM 175x175x10mm (7x7x1/2") BEARING PLATES C/W TWO 18mm (3/8") DIAMETER 400mm (16") LONG ANCHOR RODS WITH 50mm (2") BEYOND HOLES FOR ALL JOISTS BEARING ON MASONRY.

LOADING SUMMARY

- DESIGN BUILDING CODE: 2010 RARY 4 STRUCTURAL DESIGN
- CAN/CSA A23.3-14, DESIGN OF CONCRETE STRUCTURES
- CAN/CSA S16-14, DESIGN OF STEEL STRUCTURES
- CAN/CSA S304-14, MASONRY DESIGN FOR BUILDINGS
- CAN/CSA S16-14, LIMIT STATES DESIGN OF STEEL STRUCTURES
- CAN/CSA S16-14, DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS

SNOW, ICE AND RAIN LOADS

- APPLIED PER CBC, PART 4, SECTION 4.1.6
- IMPORTANCE FACTOR, IE 1.0 (SLS) 1.15 (ELS)
- WIND LOADS: 1.1 kPa
- ASSOCIATED WIND LOAD, SW 0.4 kPa
- DRIFT LOADER, DR, CR, 1.4 kPa
- ROOF SNOW LOAD, S, 1.4 kPa
- DRIFT LOADER CLAUSE 4.1.6.2.8
- SLOPE FACTORS PER CLAUSE 4.1.6.2.10 (7)

WIND LOADS

- APPLIED PER CBC, PART 4, SECTION 4.1.7
- IMPORTANCE FACTOR, IF 0.75 (SLS) 1.15 (ELS)
- REFERENCE WIND SPEED, V, 100 km/h
- 0.47 MPa 100 YEAR PROBABILITY
- REFERENCE PRESSURE COEFFICIENTS AND NON-STRUCTURAL MEMBERS
- 0.36 kPa 100 YEAR PROBABILITY
- 0.25 kPa
- FOR WHOLE & MAIN STRUCTURAL MEMBERS
- 2.0 FOR INTERNAL PRESSURES
- BUILDING INTERNAL PRESSURE CATEGORY 2 PER NBC 2010 STRUCTURAL COMMENTARY PART B, COMMENTARY B.

SEISMIC LOADS

- APPLIED PER CBC, PART 4, SECTION 4.1.8
- IMPORTANCE FACTOR, IE 1.0 (SLS) 1.15 (ELS)
- SEISMIC CATEGORY, SC3
- Tp 0.253 SECONDS
- Mv 1.0
- Rv 1.0
- V 8000 kN

SEISMIC SWAY BRACING

- THESE NOTES APPLY TO THE STEEL STUD FRAMING COMPONENT OF THE PARTITIONS, CURTAINS, AND WINDOW WALLS ENGINEERING SHOP DRAWINGS SHALL BE PROVIDED.
- THE MINIMUM UNFACTORED DESIGN LIVE LOADING IS 1.21 kPa (250 LB/FT² FOR BRICK VENEER).
- THE DESIGN OF THE FRAMING SYSTEM IS BASED ON PUBLISHED STUD SECTION PROPERTIES BY BAILEY METAL PRODUCTS LIMITED.
- THE MINIMUM BASE METAL THICKNESS FOR ALL METAL WALL COMPONENTS, EXCLUDING CURTAINS, ARE NOTED ON THE DRAWINGS.
- STEEL MEETS THE REQUIREMENTS OF A S.T.M. A583A30M S5 GRADE 33 (270) FOR 1.2mm (1/8") GAL MATERIAL AND THINNER, AND S5 GRADE 50 (360) CLASS 1 FOR 1.5mm (1/8") GAL MATERIAL AND THICKER.
- GALVANIZING TO BE HOT-DIP PROCESS, G90 (275).
- METHOD OF CONSTRUCTION SHALL BE BY STACK BUILDING ON SITE.
- CONNECTIONS SHALL BE ACCOMPLISHED BY SELF DRILLING SCREWS AND OTHER FASTENERS AS SHOWN ON THESE DRAWINGS. PENETRATION BEYOND JOINED MATERIALS SHALL BE NOTED WITH THREE EXPOSED THREADS ALL CONNECTIONS USED IN ASSEMBLIES SHALL BE OF CORROSION RESISTANT MATERIALS COMPATIBLE WITH GALVANIZED COATINGS WITH A MINIMUM COATING THICKNESS OF 0.03mm ZINC CADMIUM PLATES. NO BLACK COATINGS WILL BE ACCEPTED. SUBSTITUTIONS MUST BE APPROVED BY THE ENGINEER.
- SCREWS COVERED BY SNEATHING MATERIALS SHALL HAVE LOW PROFILE HEADS.
- WIRE TYING IS NOT PERMITTED IN STRUCTURAL APPLICATIONS.
- CUTTING OF STEEL FRAMING MEMBERS SHALL BE BY SAW OR SHEAR. NO TORCH OR MANUAL CUTTING IS PERMITTED.
- SPLICING OF STUDS OR TRACK IS NOT PERMITTED EXCEPT AS NOTED ON DRAWINGS.
- BRIDGING SHALL BE OF SIZE, SPACING AND TYPE SHOWN ON THE DRAWINGS AND SHALL BE INSTALLED ON THE HANGING EDGE OF THE TRACK AND NOTED ON DRAWINGS AND ROTATION OF STUDS. PROVIDE BRIDGING AT 1200mm (48") MAXIMUM.
- TEMPORARY BRACING SHALL BE PROVIDED AND LEFT IN PLACE UNTIL WORK IS PERMANENTLY STABILIZED. REVIEW OF COMPLETED WELDS.
- STUDS SHALL SEAT INTO TOP AND BOTTOM TRACKS WITH THE GAP BETWEEN THE END OF THE STUD AND WEB OF THE TRACK NOT TO EXCEED 3mm (1/16") OF THE SPAN.
- VERTICAL ALIGNMENT (PLUMBNESS) OF STUDS SHALL BE WITHIN 1/1000 OF THE SPAN.
- HORIZONTAL ALIGNMENT (LEVELNESS) OF WALLS SHALL BE WITHIN 1/1000 OF THEIR RESPECTIVE LENGTHS.
- CUTTING OF STUDS SHALL BE WITHIN 3mm (1/16") FROM DESIGN SPACING PROVIDED THAT CLIMATIC ERRORS DOES NOT EXCEED THE REQUIREMENTS OF THE FINISHING MATERIALS.

FLOOR LOADS

- APPLIED PER CBC, PART 4, TABLE 4.1.5.3
- SEMINAR ROOMS 2.4 kPa (50 PSF)
- STAIRS 2.4 kPa (50 PSF)
- STAIRWELL CATIONS ROOM 2.4 kPa (50 PSF)
- STAIRS AND EXITS 4.8 kPa (100 PSF)
- 1. MINERAL & CELLULOSE 4.8 kPa (100 PSF)
- ACAD. STORAGE 4.8 kPa (100 PSF)
- STAGE 4.8 kPa (100 PSF)

DECK DESIGN

- DECK:
 - 4" x 1/8" S141 G10WEL = 0.32 kPa
 - 180 RIGID INSULATION = 0.10 kPa
 - 180 RIGID INSULATION = 0.10 kPa
 - ME ALLOWANCE = 0.25 kPa
 - ME ALLOWANCE = 0.25 kPa
 - FUTURE BALLASTED PV ARRAY (PRECAST ROOF) TOTAL = 0.50/0.50
 - 102 1.52 kPa
- PLUS MECHANICAL UNITS AND 1/4" x 1/4" ROOF FIVERS = 0.54 kPa
- 254H HOLLOW CORE PRECAST CONCRETE SLABS = 3.54 kPa
- 254H HOLLOW CORE PRECAST CONCRETE SLABS = 4.12 kPa
- 8" STEEL DECK = 0.10 kPa

FLOOR LOADS

- 8" FLOORS:
 - FLOORING = 0.20 kPa
 - 8" TOPPING = 1.18 kPa
 - ME ALLOWANCE = 0.25 kPa
 - ME ALLOWANCE = 0.25 kPa
 - TOTAL = 2.32/2.32
- PLUS 1/4" PARTITION WALL IN CLASSROOM AREAS = 1.88 kPa
- 120mm HOLLOW CORE PRECAST CONCRETE SLABS = 3.54 kPa
- 120mm HOLLOW CORE PRECAST CONCRETE SLABS = 4.12 kPa
- 120mm SOLID PRECAST CONCRETE SLABS = 4.57 kPa
- 120mm SOLID PRECAST CONCRETE SLABS = 7.17 kPa

- MASONRY LINE LOADS:
 - 140 HOLLOW CMU = 6.6 kN/m
 - 180 HOLLOW CMU = 10.4 kN/m

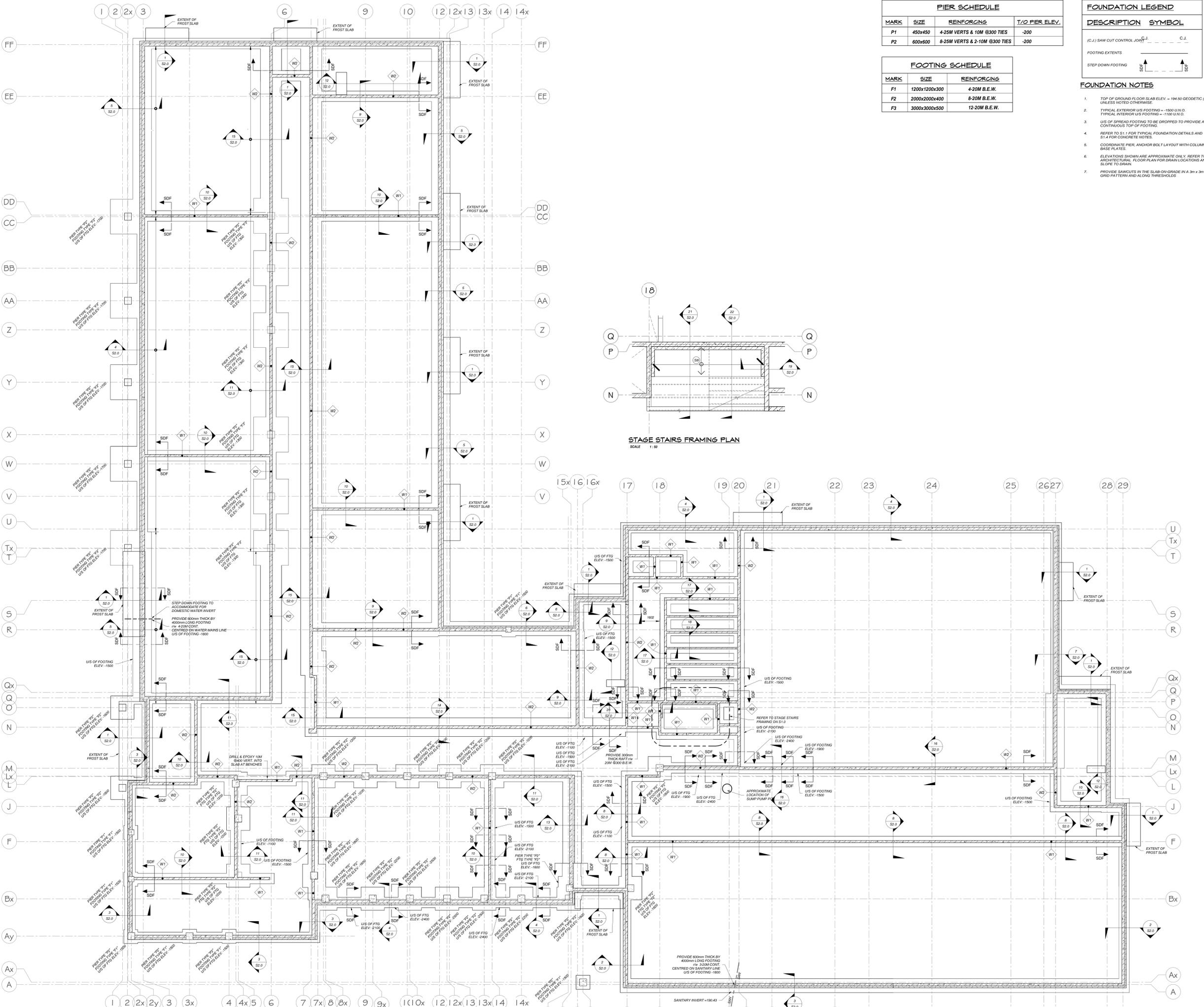
FOUNDATION NOTES

- FOOTINGS SHALL BEAR ON NATIVE UNDISTURBED SOIL, OR ON ENGINEERED FILL WITH A MINIMUM BEARING RESISTANCE OF:
 - 150 kPa BSE
 - 225 kPa LES
- THE CONTRACTOR SHALL VERIFY THE BEARING CAPACITY WITH A GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF CONCRETE. THE SOIL BEARING GRADE SHALL BEAT ON ENGINEERED FILL. REFER TO GEOTECHNICAL REPORT PREPARED BY SOIL ENGINEERS LTD. REFERENCE NO. 2008-S18.
- THE LINE OF SLOPE BETWEEN ADJACENT FOOTINGS OR EXCAVATION OR STEP-DOWN FOOTINGS SHALL NOT EXCEED A RISE OF 1 IN A RUN OF 10. STEP HEIGHT SHALL NOT EXCEED 600mm (2'-0").
- KEEP EXCAVATIONS DRY BEFORE CONCRETE IS PLACED. REMOVE ALL LOOSE MATERIAL, SOFT SOIL, OR WATER PRIOR TO PLACING CONCRETE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING AND ASSOCIATED FOUNDATION AND APPLICATIONS.
- ALL FOOTINGS SHALL BE CENTRED ON THE WALL UNLESS OTHERWISE NOTED.
- THE FOOTING DESIGN IS BASED ON INFORMATION AVAILABLE AT THE TIME OF DESIGN. THE FOOTING DESIGN MAY BE ALTERED DURING CONSTRUCTION IF THE SITE CONDITIONS WARRANT, BUT ONLY WITH THE EXPRESS PERMISSION OF THE ENGINEER.
- THE GENERAL CONTRACTOR SHALL PROVIDE HEATING AND HOORING AS REQUIRED PER CSA A23.1 AND/OR CSA S304 TO PROTECT ALL FOOTINGS. EXTERIOR FOOTINGS SHALL BE PROTECTED BELOW THE FROST LINE. MINIMUM 200mm (8") OF 100% BELOW GRADE. PROVIDE TEMPORARY HEATING AND HOORING FOR ALL FOOTINGS FOUND ABOVE THE FROST LINE DURING WINTER CONSTRUCTION.
- DO NOT BACKFILL AGAINST WALLS RETAINING EARTH UNITS. THE ELEMENTS PROVIDING LATERAL SUPPORT ARE COMPLETE. PLACE BACKFILL IN A MANNER WHERE THE ELEVATION DIFFERENCE ON EITHER SIDE OF THE WALL IS NO GREATER THAN 400mm (1'-4"). PROVIDE TEMPORARY SHORING AS REQUIRED.
- ALL FILL MATERIALS UNDER FLOOR SLABS ON GRADE SHALL BE MECHANICALLY COMPACTED IN LAYERS TO 10% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (SP400) UNLESS NOTED OTHERWISE IN THE GEOTECHNICAL REPORT.
- THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND SIZES OF ALL UNDERGROUND SERVICES AND ADVISE THE ENGINEER AND ARCHITECT OF ANY INTERFERENCES PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION OR EXCAVATION WORKS.
- FOUNDATION WALL HEIGHTS AND COURSING SHALL BE BASED ON THE UNDERSIDE OF FOOTING ELEVATION, THE FOOTING THICKNESS, AND THE GROUND FLOOR FINISH ELEVATION. THE FINISH ELEVATION SHALL BE SURPASSED WHERE A TOP OF FOOTING ELEVATION IS SPECIFIED. DO NOT COUNT THE COURSING IN THE FOUNDATION SECTIONS.

METAL DECK NOTES:

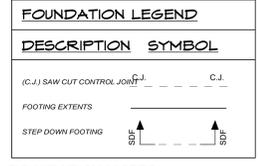
- ALL WELDING OF JOISTS AND ASSOCIATED COMPONENTS SHALL BE CARRIED OUT IN ACCORDANCE WITH CAN/CSA W59. THE STEEL FABRICATOR AND INSTALLER SHALL BE FULLY QUALIFIED UNDER THE REQUIREMENTS OF THE CANADIAN WELDING BUREAU IN CONFORMANCE WITH CAN/CSA W47.1.
- ALL DECK SHALL BE DESIGNED TO RESIST THE LOADS NOTED ON THE DRAWINGS IN ACCORDANCE WITH PART 4 OF THE LATEST ONTARIO BUILDING CODE. DECK AND FASTENING SHALL HAVE ADEQUATE CAPACITY TO SUPPORT THE DESIGN GRAVITY AND DIAPHRAGM LOADS AS NOTED ON THE DRAWINGS.
- DECK SHALL BE DESIGNED FOR AN UNFACTORED UPLIFT LOAD OF 1.1 kPa. DECK WITHIN 3 m OF THE BEARING EDGE SHALL BE DESIGNED FOR AN UNFACTORED UPLIFT LOAD OF 1.35 kPa.
- DECK SHALL BE EITHER 38mm (1 1/2") OR 76mm (3") DEEP IN ACCORDANCE WITH CSA S136 AND SHALL BE FABRICATED FROM ASTM A563 S50 OR GRADE 230 GALVANNEZED STEEL WITH A 27% GALVANIZED OR 27% GALVANIZED ZINC COATING. THE MINIMUM NOMINAL STEEL THICKNESS SHALL BE 0.76mm (30 ga).
- DECK SHALL BE FASTENED TO THE SUPPORTING STRUCTURE WITH 20mm ARC SPOT WELDS AT NOT MORE THAN 150mm (6") O.C. 180° AT SUPPORTS AND NOT LESS THAN 150mm (6") O.C. (30°) WITHIN 3m (10'-0") OF THE NEAREST BUILDING EDGE. ALL WELDS SHALL BE TOUCHED UP WITH PRIMER. MECHANICAL FASTENERS MAY ONLY BE USED WITH THE APPROVAL OF THE ENGINEER.
- THE STEEL DECK CONTRACTOR SHALL REINFORCE THE DECK FOR ROOF OPENINGS FROM 150mm (6") TO 400mm (16") O.C. AND FOR FLOOR OPENINGS FROM 150mm (6") TO 300mm (12") O.C. ALL WELLS SHALL BE TOUCHED UP WITH PRIMER. MECHANICAL FASTENERS MAY ONLY BE USED WITH THE APPROVAL OF THE ENGINEER.
- THE MINIMUM DECK GAUGE IS NOTED ON THE DRAWINGS. THE DECK ENGINEER SHALL INCREASE THE GAUGE AS REQUIRED TO SUIT AREAS OF HIGHER LOAD SUCH AS SLOPE DRIFTING.

SUBMITTALS

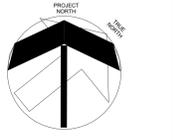


PIER SCHEDULE			
MARK	SIZE	REINFORCING	T/O PIER ELEV.
P1	450x450	4-25M VERTS & 10M @300 TIES	-200
P2	600x600	8-25M VERTS & 2-10M @300 TIES	-200

FOOTING SCHEDULE		
MARK	SIZE	REINFORCING
F1	1200x1200x300	4-20M B.E.W.
F2	2000x2000x400	8-20M B.E.W.
F3	3000x3000x500	12-20M B.E.W.



- FOUNDATION NOTES**
- TOP OF GROUND FLOOR SLAB ELEV = 194.50 GEODETIC (±0) UNLESS NOTED OTHERWISE.
 - TYPICAL EXTERIOR US FOOTING = 1500 U.N.O. TYPICAL INTERIOR US FOOTING = 1100 U.N.O.
 - US OF SPREAD FOOTING TO BE DROPPED TO PROVIDE A CONTINUOUS TOP OF FOOTING.
 - REFER TO S1.1 FOR TYPICAL FOUNDATION DETAILS AND S1.4 FOR CONCRETE NOTES.
 - COORDINATE PIER ANCHOR BOLT LAYOUT WITH COLUMN BASE PLATES.
 - ELEVATIONS SHOWN ARE APPROXIMATE ONLY. REFER TO ARCHITECTURAL FLOOR PLAN FOR DRAIN LOCATIONS AND SLOPE TO DRAIN.
 - PROVIDE SANGUITS IN THE SLAB ON GRADE IN A 3m x 3m GRID PATTERN AND ALONG THRESHOLDS.



NO	REVISIONS	DATE
1	ISSUED FOR PERMIT	23-10-18
2	ISSUED FOR TENDER	28-02-09

DRAWINGS ARE NOT TO BE SCALED. CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS ON THE PROJECT AND REPORT ANY DISCREPANCIES TO THE CONSULTANT IMMEDIATELY UPON DISCOVERY. THE USE OF THIS DRAWING OR PART THEREOF IS FORBIDDEN WITHOUT THE WRITTEN APPROVAL OF THE CONSULTANT.

MILTON #13 PUBLIC SCHOOL
 1345 TROUDEAU DRIVE, MILTON, ON.
 LEGAL DESCRIPTION:
 BLOCKS 54, REGISTERED PLAN 536A/000, TOWN OF CARVILLE, REGION OF HALTON



HALTON DISTRICT SCHOOL BOARD
 111 WILSON AVENUE, SUITE 200, GUELPH, ONT. N1H 2Z1
 TEL: (505) 335-3603 FAX: (505) 335-3602

FOUNDATION PLAN



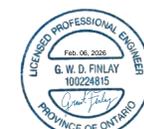
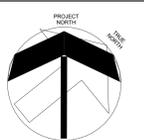
SCALE: As indicated
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 CHECKED: G.F.
 REVIT FILE: 22281 - Hossack - Carville S R22.RVT
 PROJECT: 19001
 DRAWING: S1.0
 PRINT DATE: 2/6/2020 1:04:19 PM



SLAB-ON-GRADE SAW-CUT PLAN
SCALE: 1:100

FOUNDATION LEGEND	
DESCRIPTION	SYMBOL
(C.J.) SAW CUT CONTROL JOINT	C.J.
CONCRETE BLOCK WALL	

- FOUNDATION NOTES**
1. TOP OF GROUND FLOOR SLAB ELEV. = 194.50 GEODETIC (0.0) UNLESS NOTED OTHERWISE.
 2. TYPICAL EXTERIOR US FOOTING = 1500 U.N.O. TYPICAL INTERIOR US FOOTING = 1100 U.N.O.
 3. US OF SPREAD FOOTING TO BE DROPPED TO PROVIDE A CONTINUOUS TOP OF FOOTING.
 4. REFER TO S1.1 FOR TYPICAL FOUNDATION DETAILS AND S1.4 FOR CONCRETE NOTES.
 5. COORDINATE PIER, ANCHOR BOLT LAYOUT WITH COLUMN BASE PLATES.
 6. ELEVATIONS SHOWN ARE APPROXIMATE ONLY, REFER TO ARCHITECTURAL FLOOR PLAN FOR DRAIN LOCATIONS AND SLOPE TO DRAIN.
 7. PROVIDE SAWCUTS IN THE SLAB-ON-GRADE IN A 3m x 3m GRID PATTERN AND ALONG THRESHOLDS.



NO.	REVISIONS	DATE
1	ISSUED FOR PERMIT	23-10-18
2	ISSUED FOR TENDER	26-02-09

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

MILTON #13 PUBLIC SCHOOL
1345 TRUDEAU DRIVE, MILTON ON.
LEGAL DESCRIPTION:
BLOCKS N4, REGISTERED PLAN 536A/000, TOWN OF OAKVILLE, REGION OF HALTON

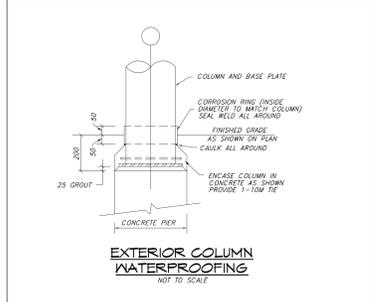
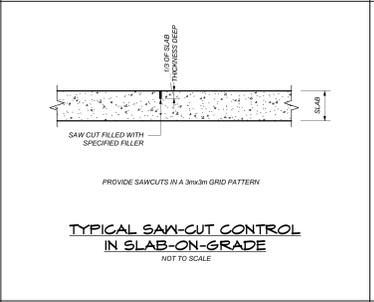
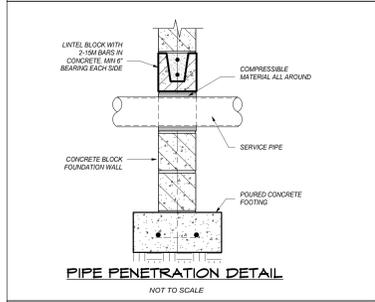
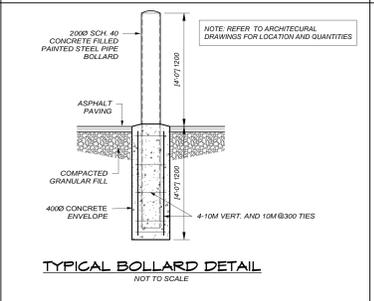
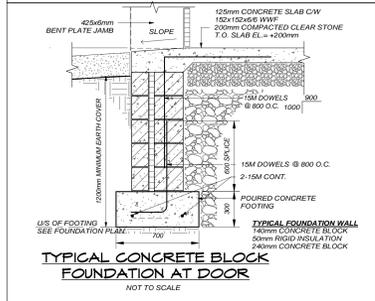
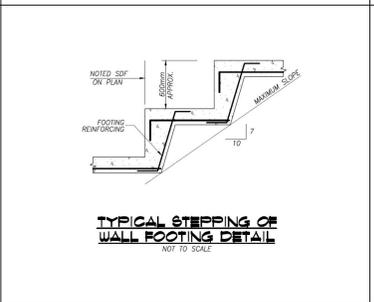
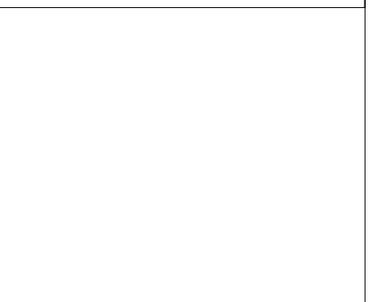
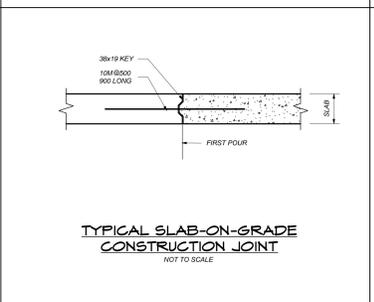
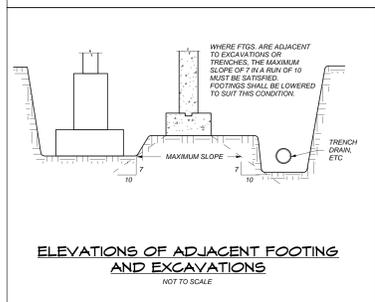
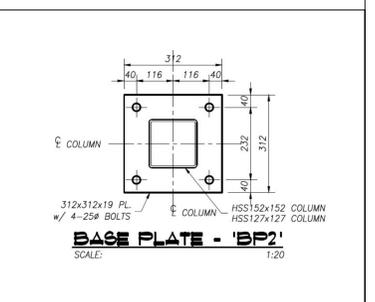
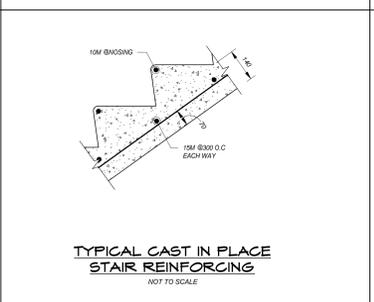
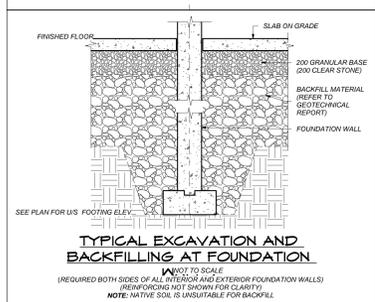
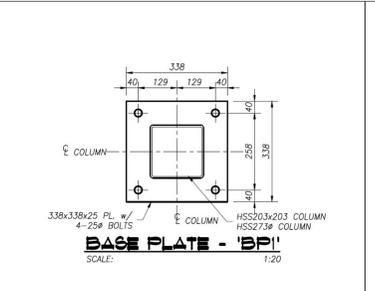
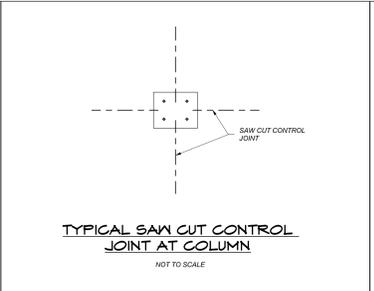
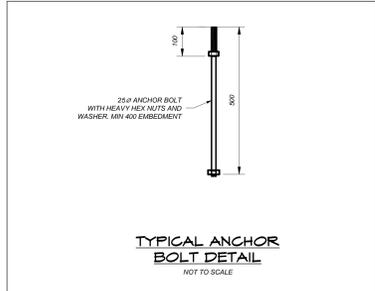


HALTON DISTRICT SCHOOL BOARD
L.W. SINGLETON EDUCATION CENTRE
2050 CHELSEA LINE
BURLINGTON, ON. L7R 5C7
TEL: (905) 335-1603
FAX: (905) 335-1602

SLAB-ON-GRADE SAW-CUT PLAN



SCALE: As indicated	PROJECT: 19001
DATE: FEB. 2019	DRAWING: S1.1
CHECKED: G.F.	PRINT DATE: 2/6/2019 1:04:22 PM
REVIT FILE	22291 - Hossack - Oakville 5 R22.RVT



NO.	REVISIONS	DATE
1	ISSUED FOR PERMIT	23-10-18
2	ISSUED FOR TENDER	20-02-09

DRAWINGS ARE NOT TO BE SCALED. CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS ON THE PROJECT AND REPORT ANY DISCREPANCIES TO THE CONSULTANT IMMEDIATELY UPON DISCOVERY. THE USE OF THIS DRAWING OR PART THEREOF IS FORBIDDEN WITHOUT THE WRITTEN APPROVAL OF THE CONSULTANT.

MILTON #13 PUBLIC SCHOOL
1345 TRUDEAU DRIVE, MILTON ON.
LEGAL DESCRIPTION:
BLOCKS XA, REGISTERED PLAN S20A-000
TOWN OF GAVELLE, REGION OF HALTON

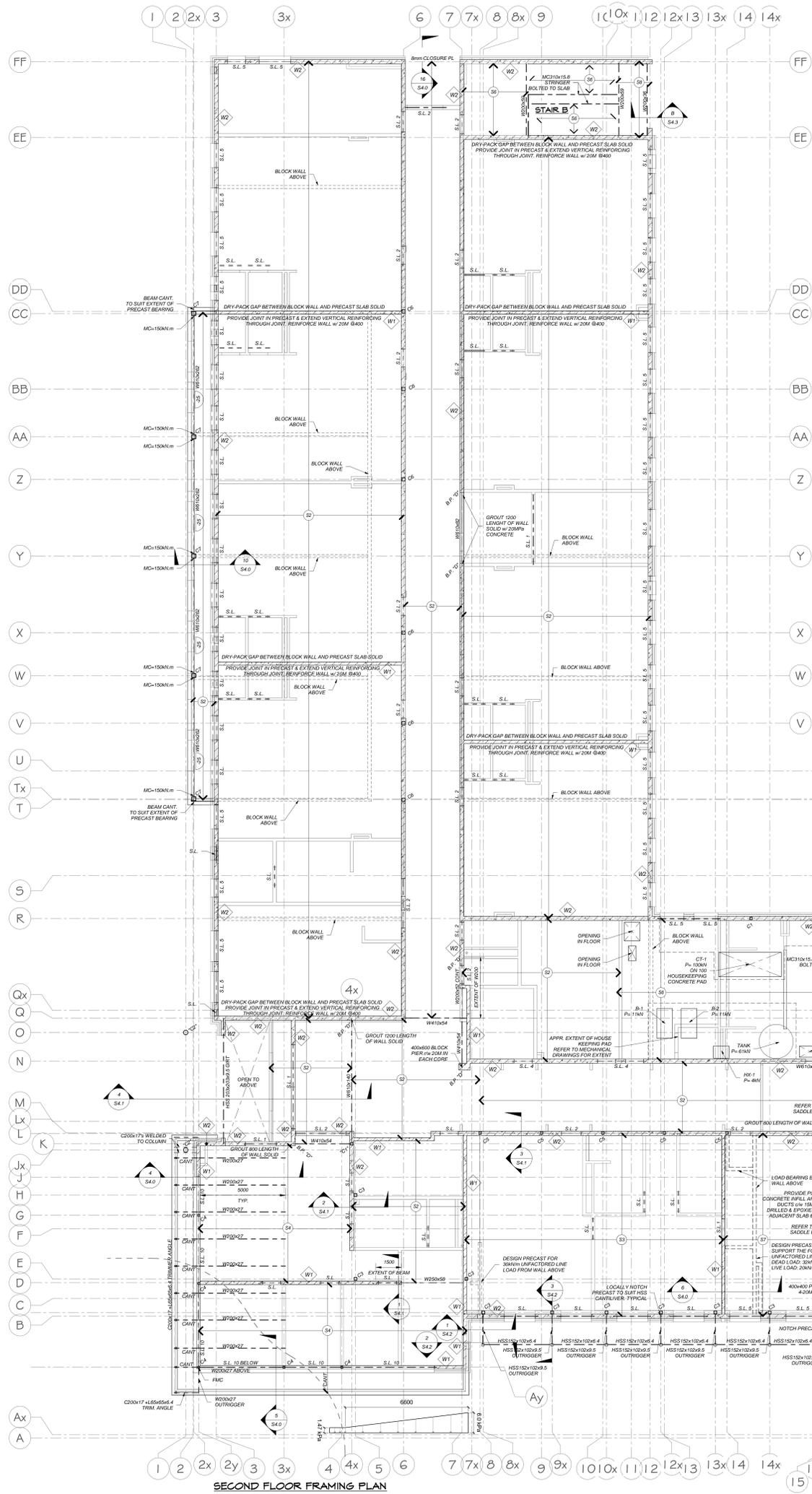


HALTON DISTRICT SCHOOL BOARD
1115 DUNDAS ST. E.
BURLINGTON, ON. L7R 1C7
TEL: (905) 335-3603
FAX: (905) 335-3602

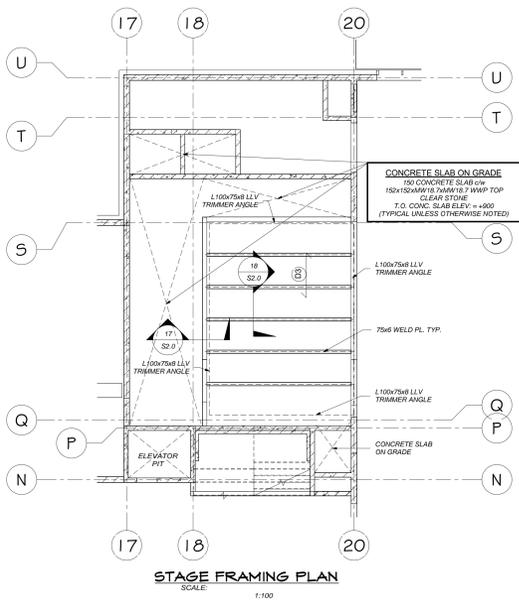
TYPICAL FOUNDATION DETAILS



SCALE	PROJECT
As indicated	19001
DATE	FEB. 2019
DRAWN	S.N.I.V.E
CHECKED	G.F.
PRINT DATE	2/6/2019 1:04:30 PM
REVIT FILE	22291 - Hossack - Oavette S R22.RVT



SECOND FLOOR FRAMING PLAN
SCALE 1:100



STAGE FRAMING PLAN
SCALE 1:100

SLAB LEGEND

S1	203 HOLLOW CORE PRECAST SLAB 50 CONCRETE TOPPING
S2	254 HOLLOW CORE PRECAST SLAB 50 CONCRETE TOPPING
S3	305 HOLLOW CORE PRECAST SLAB 50 CONCRETE TOPPING
S4	254 HOLLOW CORE PRECAST SLAB
S5	300 HOLLOW CORE PRECAST SLAB
S6	254 SOLID PRECAST SLAB 50 CONCRETE TOPPING (EXCLUDING MSLANDING)
S7	300 SOLID PRECAST SLAB 50 CONCRETE TOPPING
S8	200 SOLID PRECAST SLAB

DECK LEGEND

D1	38 STEEL DECK (MIN. 20GA) ACOUSTIC
D2	38 STEEL DECK (MIN. 20GA) ACOUSTIC
D3	38 STEEL DECK CW 62 CONCRETE TOPPING (100 COMPOSITE DECK)

- FRAMING NOTES**
- TOP OF STEEL ELEVATION 3700 UNLESS NOTED THUS (S4.0)
 - TOP OF PRECAST SLAB 3650 UNLESS NOTED THUS (S4.0)
 - REFER TO ARCHITECTURAL DRAWINGS AND MECHANICAL DRAWINGS FOR DIMENSIONS.
 - REFER TO DRAWING S3.0 FOR NOTES AND S4.0 STANDARD DETAILS AND FOR CONCRETE BLOCK WALL REINFORCING.
 - REFER TO ARCH. MECH. AND ELEC. DWGS. FOR SIZE AND LOCATION OF ALL OPENINGS IN BLOCK WALLS. SEE LITEL SCHEDULE DRAWING S4.0 FOR LITEL SIZES.
 - ELEVATION SHOWN FOR TOP OF JOISTS AND ROOF CHANNELS ARE APPROXIMATE ONLY. REFER TO ARCH. ROOF PLAN FOR DRAIN LOCATIONS AND SET STEEL TO FALL EVENLY TO DRAIN.
 - REFER TO S3.0 FOR PRECAST SLAB CONFIGURATION AND LOADING.
 - REFER TO S3.0 FOR COLUMN SCHEDULE.
 - PROVIDE STEEL LITELS FOR ALL OPENINGS AS SHOWN ON ARCHITECTURAL, MECHANICAL & ELECTRICAL DRAWINGS. (NOT ALL SHOWN ON THIS DRAWING) REFER TO S4.0 FOR SIZES. PROVIDE LITELS AT ALL DUCT OPENINGS. ALL LITELS SHALL BE PROVIDED BY THE STRUCTURAL STEEL TRADE.
 - COORDINATE PRECAST SLABS w/ WITH MECHANICAL EQUIPMENT & ASSOCIATED PENETRATIONS.

STAIR FRAMING NOTES

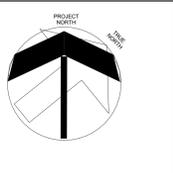
- THE HANDRAILS MUST BE DESIGNED TO WITHSTAND LOADING AS SPECIFIED IN O.B.C. DIV. B. ARTICLE 3.4.6.4. & GUARD RAILS MUST BE DESIGNED TO WITHSTAND LOADING AS SPECIFIED IN ARTICLES 4.1.3.15. & 4.1.5.17. SHOP DRAWINGS ARE TO BE STAMPED BY A PROFESSIONAL ENGINEER.

WALL LEGEND

W1	190 CONCRETE BLOCK WALL
W2	240 CONCRETE BLOCK WALL

WALL SCHEDULE

W1	190 CONCRETE BLOCK WALL
W2	240 CONCRETE BLOCK WALL



NO.	REVISIONS	DATE
1	ISSUED FOR PERMIT	23-10-18
2	ISSUED FOR TENDER	26-02-09

NO. ISSUED DATE
NO. ISSUED DATE

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MILTON #13 PUBLIC SCHOOL
1345 TROUDEAU DRIVE, MILTON, ON.

LEGAL DESCRIPTION:
BLOCK 9A, REGISTERED PLAN 50A-000-000
TOWN OF GAVELLE, REGION OF HALTON



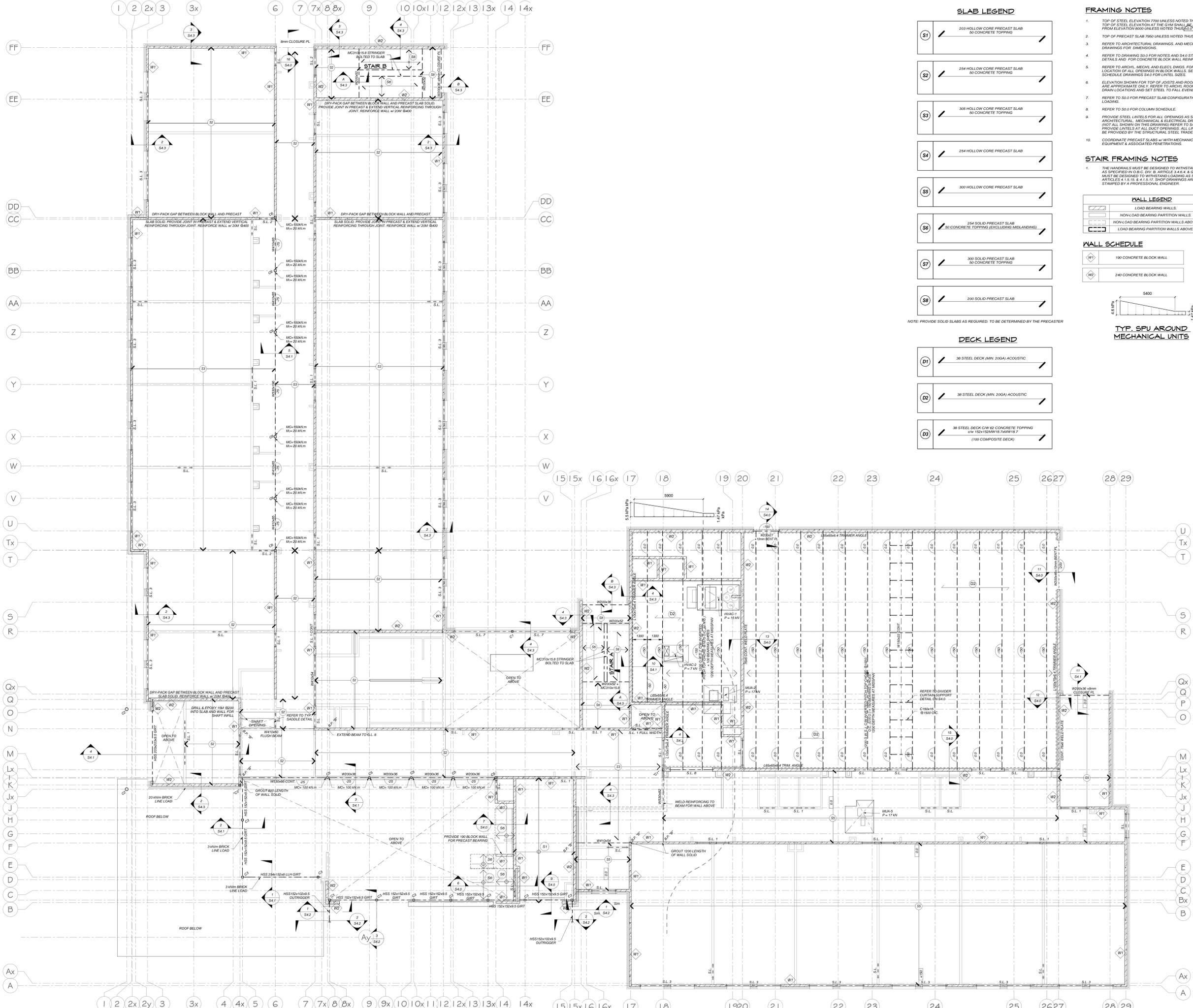
HALTON DISTRICT SCHOOL BOARD
1100 GUELPH LINE
BURLINGTON, ON. L7R 5Z7
TEL: (905) 335-3633
FAX: (905) 335-3632

SECOND FLOOR FRAMING PLAN

HOSSACK & ASSOCIATES ARCHITECTS

SCALE: As indicated
DATE: FEB. 2019
DRAWN: S.N.U.V.E.
CHECKED: G.F.
PRINT DATE: 2/6/2020 1:04:34 PM
REVIT FILE: 22291 - Hossack - Gaville S R22.RVT

PROJECT: 19001
DRAWING: S3.0



SLAB LEGEND

S1	203 HOLLOW CORE PRECAST SLAB 50 CONCRETE TOPPING
S2	254 HOLLOW CORE PRECAST SLAB 50 CONCRETE TOPPING
S3	305 HOLLOW CORE PRECAST SLAB 50 CONCRETE TOPPING
S4	254 HOLLOW CORE PRECAST SLAB
S5	300 HOLLOW CORE PRECAST SLAB
S6	254 SOLID PRECAST SLAB 50 CONCRETE TOPPING (EXCLUDING MIDLANDS)
S7	300 SOLID PRECAST SLAB 50 CONCRETE TOPPING
S8	200 SOLID PRECAST SLAB

NOTE: PROVIDE SOLID SLABS AS REQUIRED. TO BE DETERMINED BY THE PRECASTER

DECK LEGEND

D1	38 STEEL DECK (MIN. 20GA) ACOUSTIC
D2	38 STEEL DECK (MIN. 20GA) ACOUSTIC
D3	38 STEEL DECK C/W 60 CONCRETE TOPPING C/W 152x152MM W/8.7MM W/18.7 (100 COMPOSITE DECK)

FRAMING NOTES

- TOP OF STEEL ELEVATION 7700 UNLESS NOTED THUS (S4.0)
- TOP OF STEEL ELEVATION AT THE CMV SHALL BE REFERENCED FROM ELEVATION 8000 UNLESS NOTED THUS (S4.0)
- REFER TO ARCHITECTURAL DRAWINGS AND MECHANICAL DRAWINGS FOR DIMENSIONS
- REFER TO DRAWING S0.0 FOR NOTES AND S4.0 STANDARD DETAILS AND FOR CONCRETE BLOCK WALL REINFORCING
- REFER TO ARCH. MECH. AND ELEC. DWGS. FOR SIZE AND LOCATION OF ALL OPENINGS IN BLOCK WALLS. SEE LINTEL SCHEDULE DRAWINGS S4.0 FOR LINTEL SIZES.
- ELEVATION SHOWN FOR TOP OF JOISTS AND ROOF CHANNELS ARE APPROXIMATE ONLY. REFER TO ARCH. ROOF PLAN FOR DRAIN LOCATIONS AND SET STEEL TO FALL EVENLY TO DRAIN.
- REFER TO S0.0 FOR PRECAST SLAB CONFIGURATION AND LOADING.
- REFER TO S0.0 FOR COLUMN SCHEDULE.
- PROVIDE STEEL LINTELS FOR ALL OPENINGS AS SHOWN ON ARCHITECTURAL, MECHANICAL & ELECTRICAL DRAWINGS. (NOT ALL SHOWN ON THIS DRAWING) REFER TO S4.0 FOR SIZES. PROVIDE LINTELS AT ALL DOOR OPENINGS. ALL LINTELS SHALL BE PROVIDED BY THE STRUCTURAL STEEL TRADE.
- COORDINATE PRECAST SLABS w/ WITH MECHANICAL EQUIPMENT & ASSOCIATED PENETRATIONS.

STAIR FRAMING NOTES

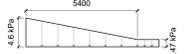
- THE HANDRAILS MUST BE DESIGNED TO WITHSTAND LOADING AS SPECIFIED IN O.C.C. DIV. 8, ARTICLE 3.4.6.4 & GUARD RAILS MUST BE DESIGNED TO WITHSTAND LOADING AS SPECIFIED IN ARTICLES 4.1.5, 4.1.6, 4.1.7. SHOP DRAWINGS ARE TO BE STAMPED BY A PROFESSIONAL ENGINEER.

WALL LEGEND

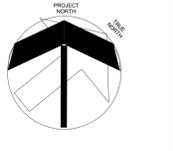
W1	LOAD BEARING WALLS
W2	NON-LOAD BEARING PARTITION WALLS
W3	NON-LOAD BEARING PARTITION WALLS ABOVE
W4	LOAD BEARING PARTITION WALLS ABOVE

WALL SCHEDULE

W1	190 CONCRETE BLOCK WALL
W2	240 CONCRETE BLOCK WALL



TYP. SPU AROUND MECHANICAL UNITS



NO.	REVISIONS	DATE
2	ISSUED FOR TENDER	20-02-09
1	ISSUED FOR PERMIT	23-10-18

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

MILTON #13 PUBLIC SCHOOL
1345 TROUDER DRIVE, MILTON, ON.

LEGAL DESCRIPTION:
BLOCKS W/ REGISTERED PLAN 50A-0000
TOWN OF OAKVILLE, REGION OF HALTON



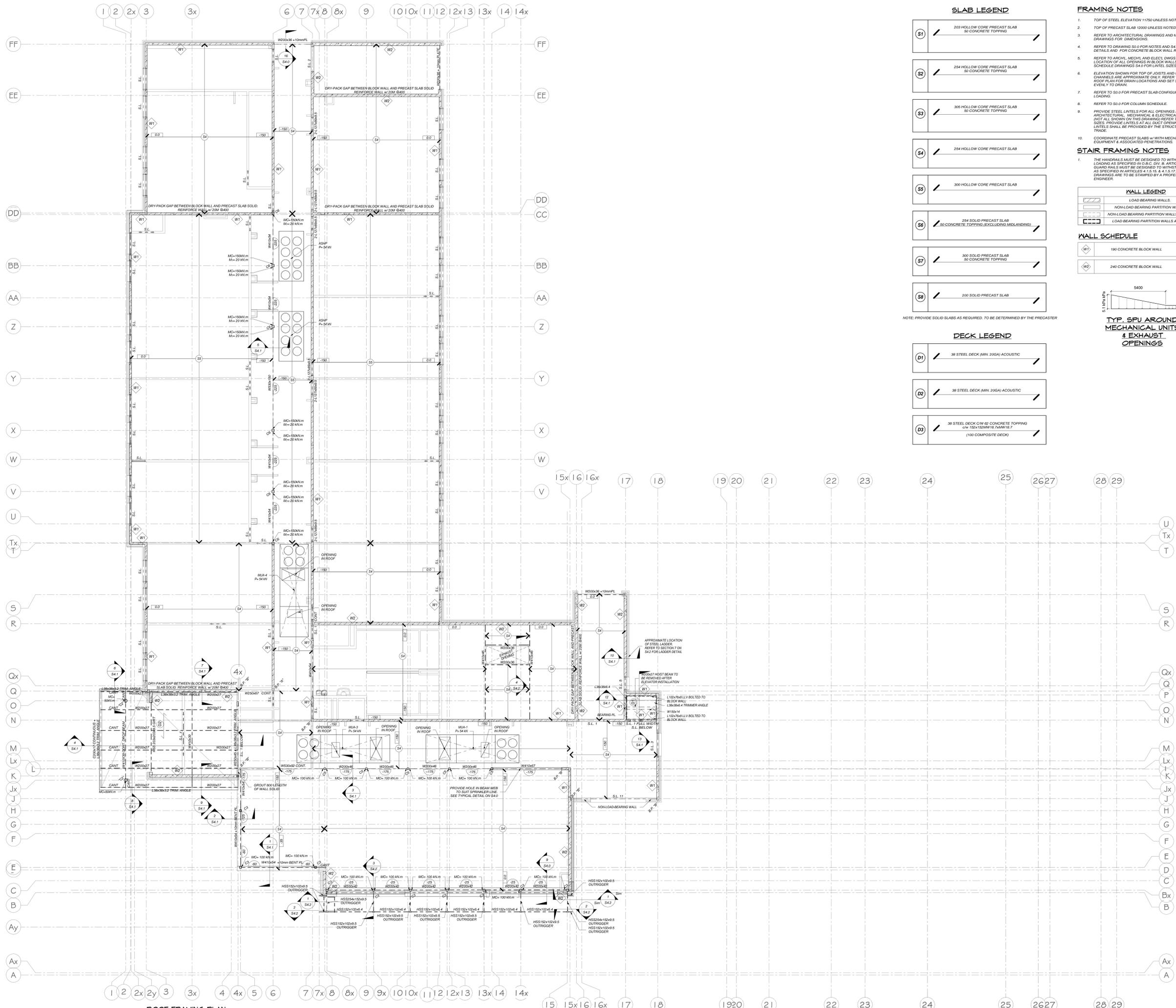
HALTON DISTRICT SCHOOL BOARD
L/W SINGLTON EDUCATION CENTRE
1050 CLEVELAND AVE
BURLINGTON, ON. L7R 5Z7
TEL: (905) 335-1803
FAX: (905) 335-1802

THIRD FLOOR FRAMING PLAN



SCALE	As indicated	PROJECT	19001
DATE	FEB. 2019	DRAWING	S3.1
DRAWN	S.N.V.E.	CHECKED	G.F.
PRINT DATE	2/6/2020 1:04:30 PM	REVIT FILE	22281 - Hossack - Oakville 5 R22.RVT

THIRD FLOOR FRAMING PLAN & GYM ROOF FRAMING PLAN
SCALE 1:100



SLAB LEGEND

S1	203 HOLLOW CORE PRECAST SLAB 50 CONCRETE TOPPING
S2	254 HOLLOW CORE PRECAST SLAB 50 CONCRETE TOPPING
S3	305 HOLLOW CORE PRECAST SLAB 50 CONCRETE TOPPING
S4	254 HOLLOW CORE PRECAST SLAB
S5	300 HOLLOW CORE PRECAST SLAB
S6	254 SOLID PRECAST SLAB 50 CONCRETE TOPPING (EXCLUDING MIDLANDINGS)
S7	300 SOLID PRECAST SLAB 50 CONCRETE TOPPING
S8	200 SOLID PRECAST SLAB

NOTE: PROVIDE SOLID SLABS AS REQUIRED. TO BE DETERMINED BY THE PRECASTER

DECK LEGEND

D1	38 STEEL DECK (MIN. 20GA) ACOUSTIC
D2	38 STEEL DECK (MIN. 20GA) ACOUSTIC
D3	38 STEEL DECK CW & CONCRETE TOPPING ON 150x150x16 SWA16 (100 COMPOSITE DECK)

FRAMING NOTES

- TOP OF STEEL ELEVATION 11750 UNLESS NOTED THIS (40)
- TOP OF PRECAST SLAB 10000 UNLESS NOTED THIS (20)
- REFER TO ARCHITECTURAL DRAWINGS AND MECHANICAL DRAWINGS FOR DIMENSIONS.
- REFER TO DRAWING 50.0 FOR NOTES AND S4.0 STANDARD DETAILS AND FOR CONCRETE BLOCK WALL REINFORCING.
- REFER TO ARCHIT. MECH. AND ELEC. DWGS. FOR SIZE AND LOCATION OF ALL OPENINGS IN BLOCK WALLS. SEE LITEL SCHEDULE DRAWINGS S4.0 FOR LITEL SIZES.
- ELEVATION SHOWN FOR TOP OF JOISTS AND ROOF CHANNELS ARE APPROXIMATE ONLY. REFER TO ARCHIT. ROOF PLAN FOR DRAIN LOCATIONS AND SET STEEL TO FALL EVENLY TO DRAIN.
- REFER TO S0.0 FOR PRECAST SLAB CONFIGURATION AND LOADING.
- REFER TO S0.0 FOR COLUMN SCHEDULE.
- PROVIDE STEEL LITELS FOR ALL OPENINGS AS SHOWN ON ARCHITECTURAL, MECHANICAL & ELECTRICAL DRAWINGS. (NOT ALL SHOWN ON THIS DRAWING REFER TO S4.0 FOR SIZES. PROVIDE LITELS AT ALL SUCH OPENINGS. ALL LITELS SHALL BE PROVIDED BY THE STRUCTURAL STEEL TRADE.
- COORDINATE PRECAST SLABS WITH MECHANICAL EQUIPMENT & ASSOCIATED PENETRATIONS.

STAIR FRAMING NOTES

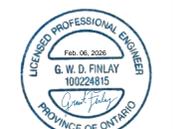
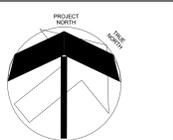
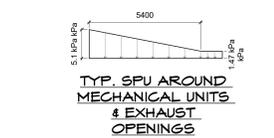
- THE HANDRAILS MUST BE DESIGNED TO WITHSTAND LOADING AS SPECIFIED IN O.C. DIV. 8, ARTICLE 3.4.6.4. & GUARD RAILS MUST BE DESIGNED TO WITHSTAND LOADING AS SPECIFIED IN ARTICLES 4.1.6, 4.1.6.4 & 4.1.6.7. SHOP DRAWINGS ARE TO BE STAMPED BY A PROFESSIONAL ENGINEER.

WALL LEGEND

W1	190 CONCRETE BLOCK WALL
W2	240 CONCRETE BLOCK WALL

WALL SCHEDULE

W1	190 CONCRETE BLOCK WALL
W2	240 CONCRETE BLOCK WALL



NO.	REVISIONS	DATE
1	ISSUED FOR PERMIT	23-10-18
2	ISSUED FOR TENDER	26-02-09

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

MILTON #13 PUBLIC SCHOOL
1345 TROUDEAU DRIVE, MILTON ON.

KALOS Engineering Inc.
300 YORK ST. 10TH FLOOR, WILLOWDALE, ONT. M2H 1P7
PROJECT NO. 22280

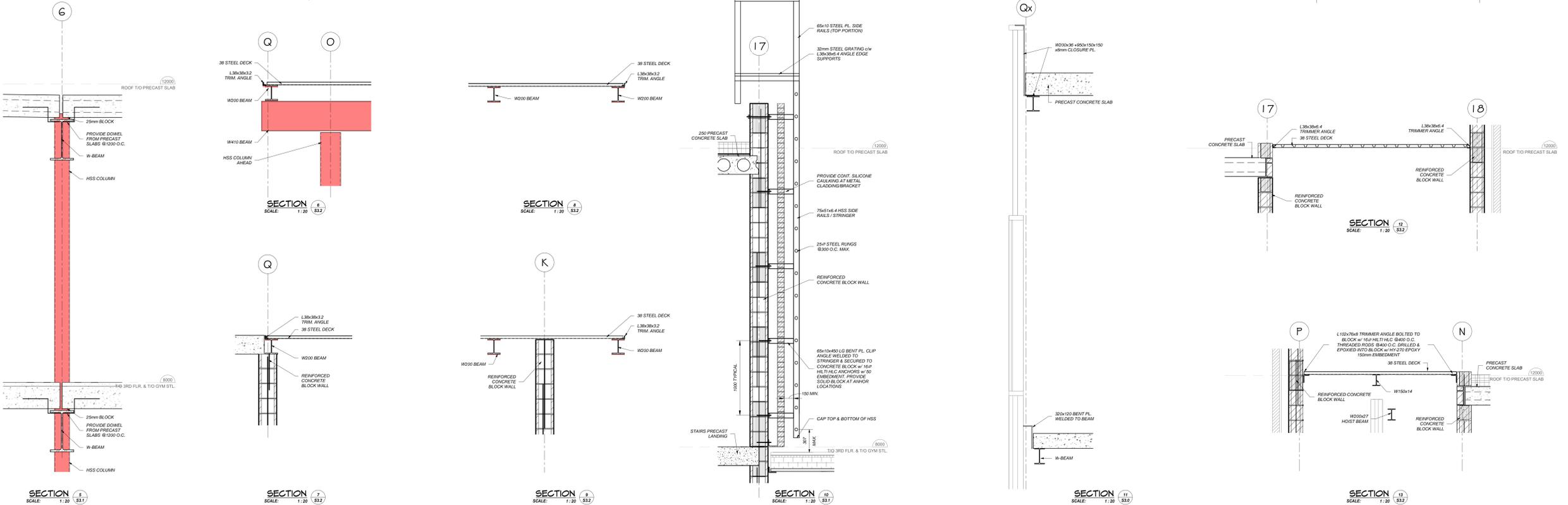
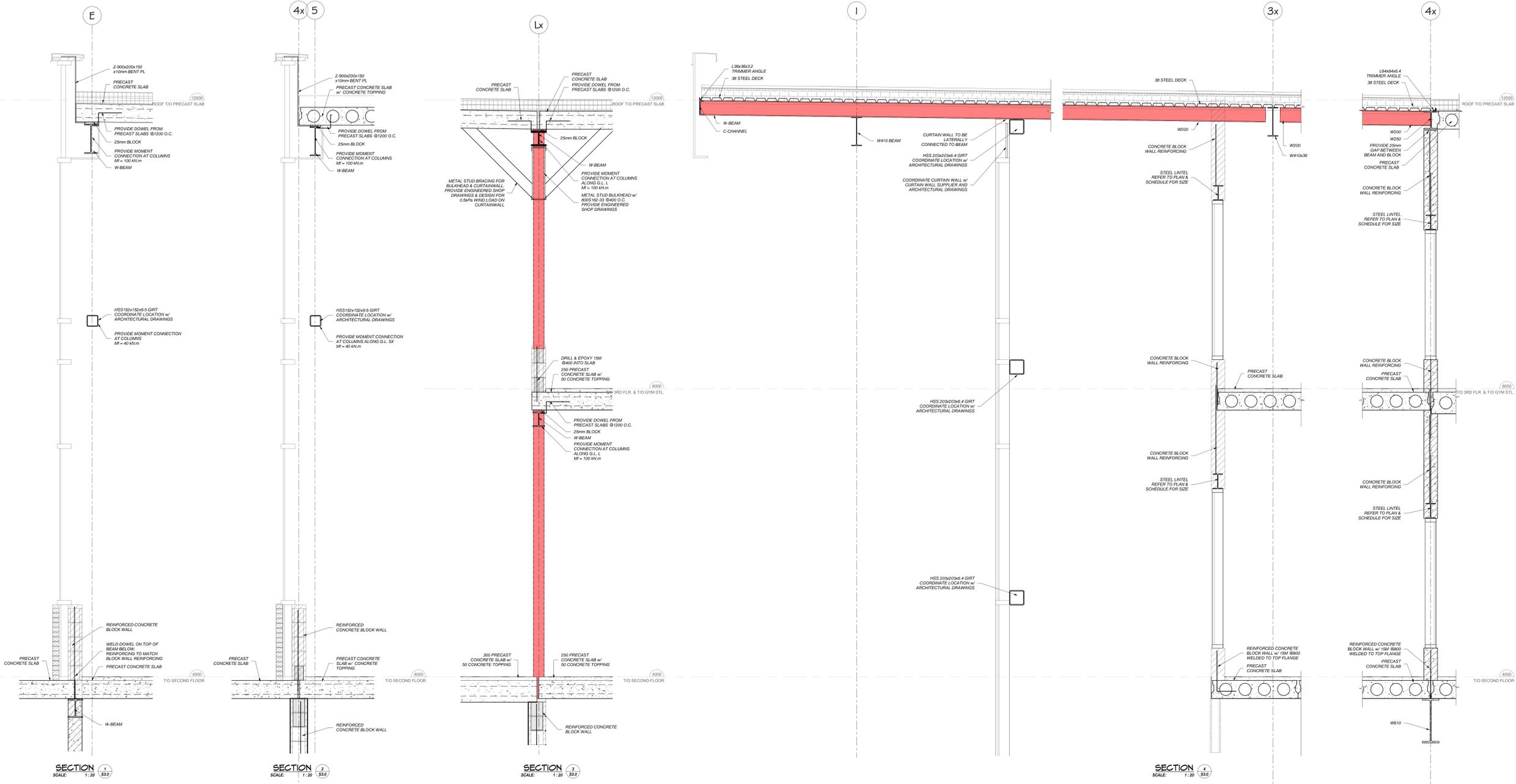
HALTON DISTRICT SCHOOL BOARD
1100 KINGSTON ROAD, WILLOWDALE, ONT. M2H 1P7
TEL: (905) 335-1603 FAX: (905) 335-1602

ROOF FRAMING PLAN

HOSSACK & ASSOCIATES ARCHITECTS

1175 DUNDAS ST. W. 2ND FLOOR
MISSISSAUGA, ONT. L4X 1L2
TEL: (905) 897-5254 FAX: (905) 897-6200

SCALE	As indicated	PROJECT	19001
DATE	FEB. 2019	DRAWING	S3.2
DRAWN	S.N.I.V.E.	CHECKED	G.F.
PRINT DATE	2/6/2020 1:04:41 PM	REVIT FILE	22281 - Hossack - Oshville 5 R22.RVT



NO	REVISIONS	DATE
1	ISSUED FOR PERMIT	23-10-18
2	ISSUED FOR TENDER	28-02-09

MILTON #13 PUBLIC SCHOOL
1345 TROUDEAU DRIVE, MILTON, ON.

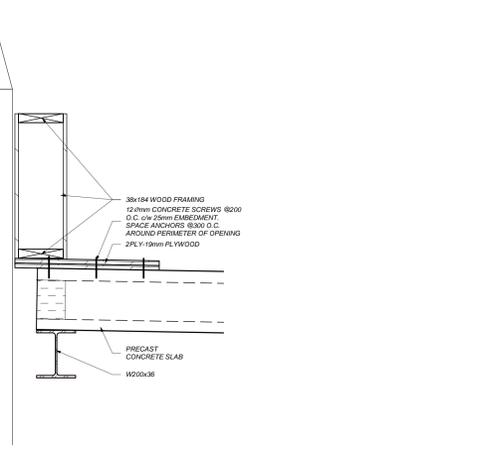
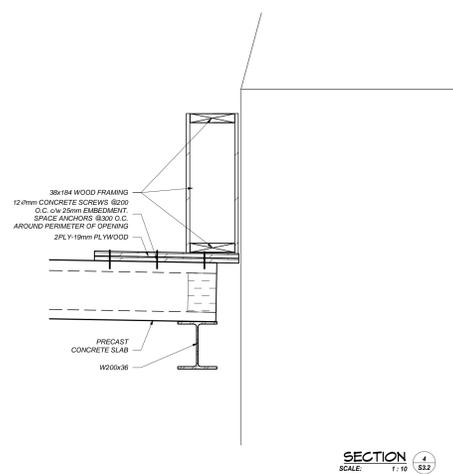
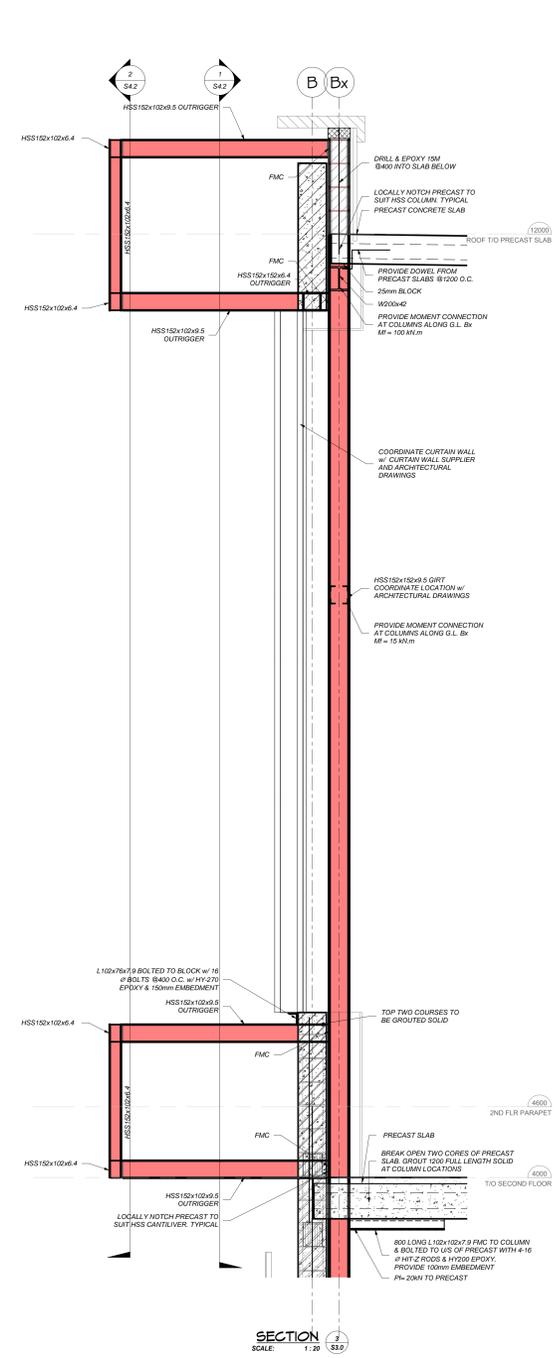
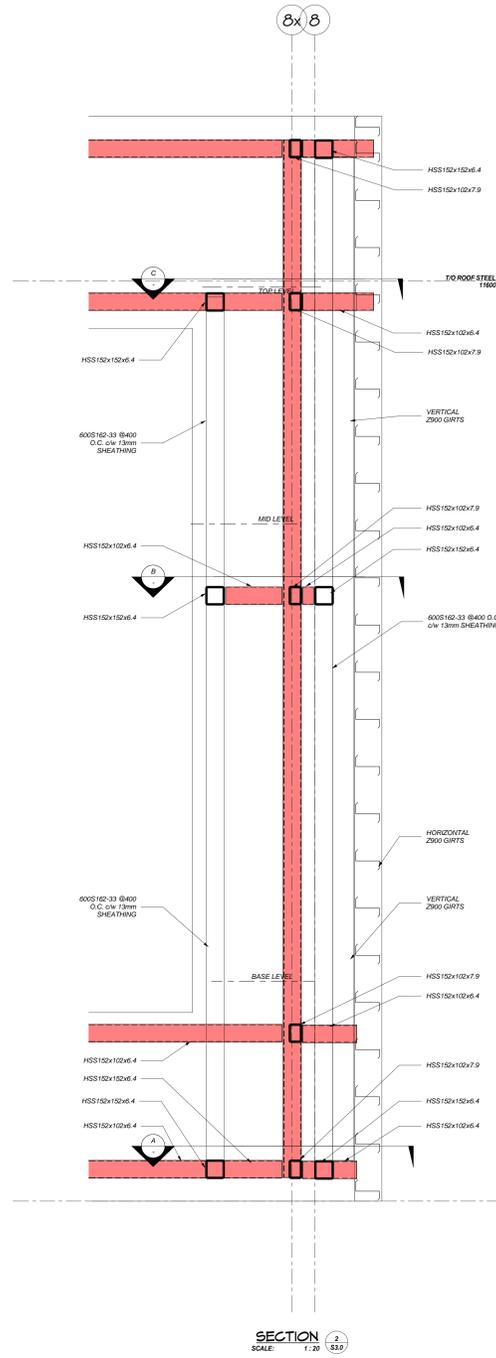
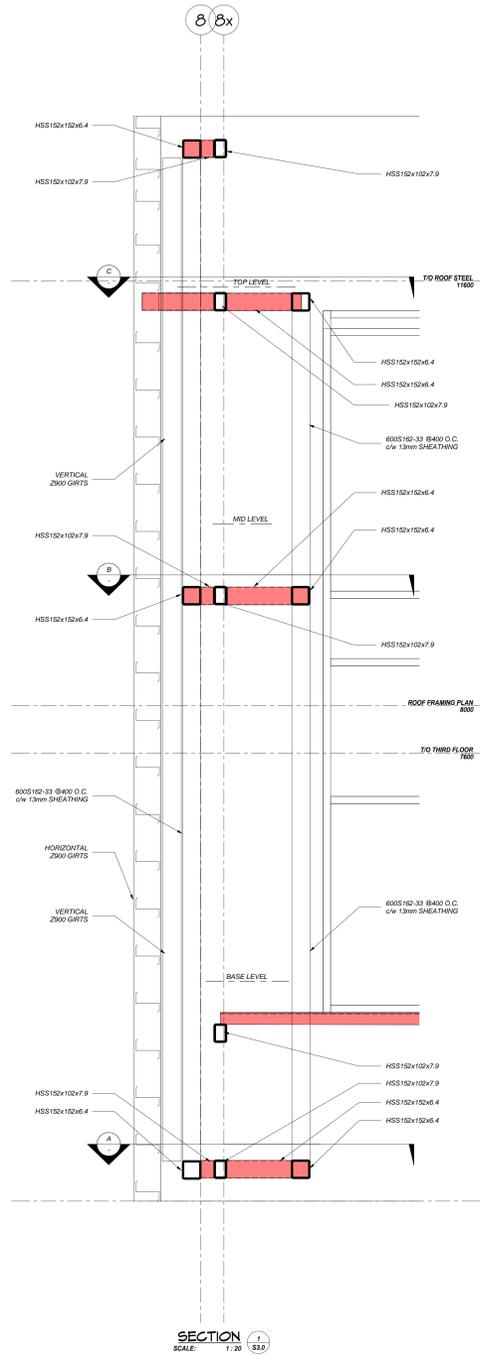
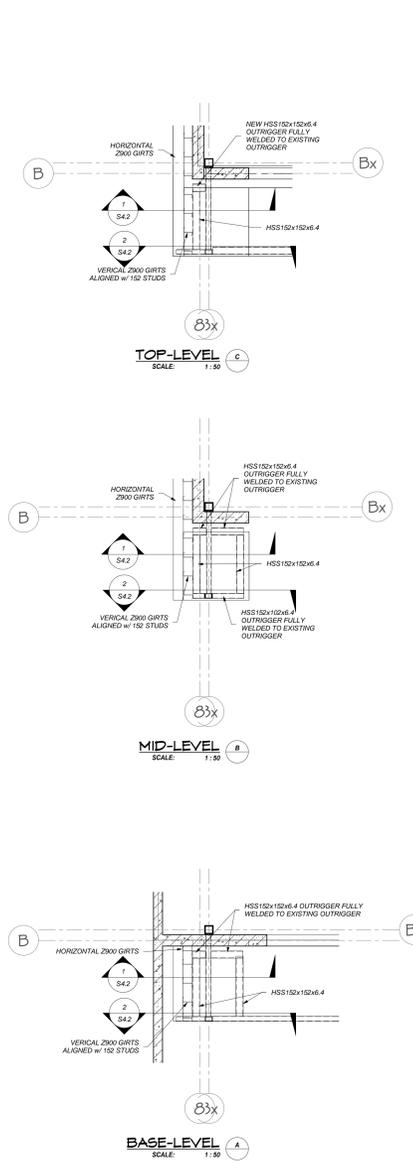
KALOS Engineering Inc.
300 YORK ST. 10TH FLOOR, WILSON ONT. L9R 3K6
PROJECT NO. 22801

HALTON DISTRICT SCHOOL BOARD
1100 DUNDAS ST. W. 10TH FLOOR
MILTON, ON. L7L 1C7
TEL: (905) 335-1803
FAX: (905) 335-1802

FRAMING SECTIONS

HOSSACK & ASSOCIATES ARCHITECTS

SCALE: 1:20
DATE: FEB. 2019
DRAWING NO.: 19001
PROJECT: MILT
S/N/VE: S4.1
CHECKED: S.N/VE
G.F.:
PRINT DATE: 2/6/2020 1:04:53 PM
REVIT FILE: 22281 - Hossack - Oshville 5 R22.RVT



NO.	REVISIONS	DATE
1	ISSUED FOR PERMIT	23-10-18
2	ISSUED FOR TENDER	20-02-09

DRAWINGS ARE NOT TO BE SCALED. CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS ON THE PROJECT AND REPORT ANY DISCREPANCIES TO THE CONSULTANT IMMEDIATELY UPON DISCOVERY. THE USE OF THIS DRAWING OR PART THEREOF IS FORWARDED WITHOUT THE WRITTEN APPROVAL OF THE CONSULTANT.

MILTON #13 PUBLIC SCHOOL
1345 TRUDEAU DRIVE, MILTON ON.

KALOS Engineering Inc.
300 YORK ST. 10. HAMILTON ONT. L8R 3K5
PROJECT NO. 22280

HALTON DISTRICT SCHOOL BOARD
1100 BURLINGTON ROAD
BURLINGTON, ON. L7R 5C7
TEL: (905) 335-3603
FAX: (905) 335-3602

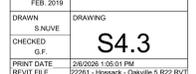
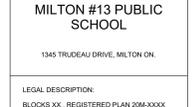
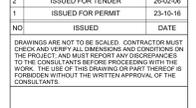
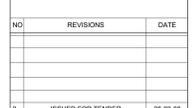
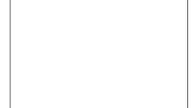
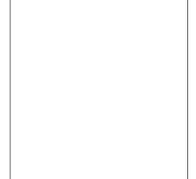
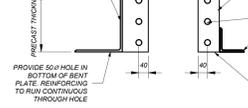
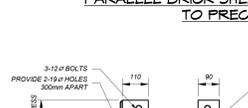
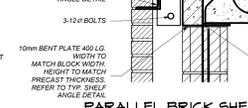
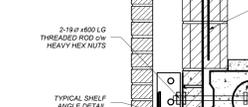
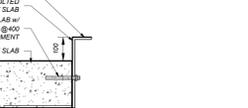
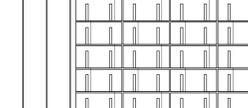
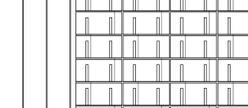
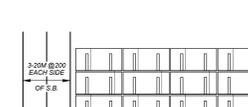
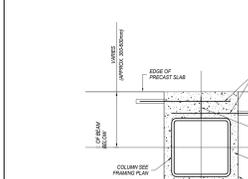
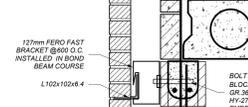
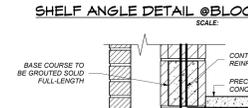
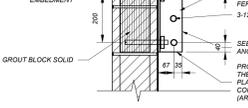
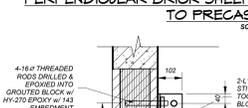
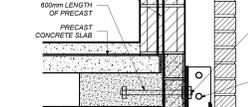
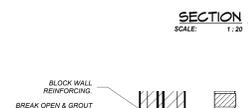
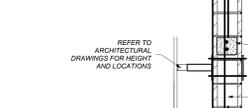
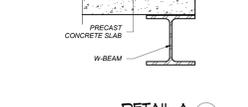
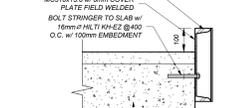
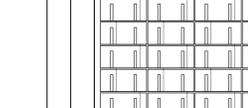
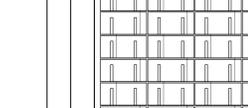
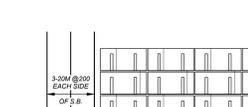
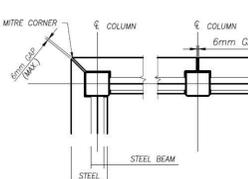
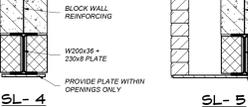
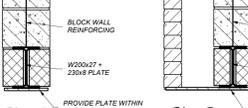
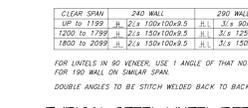
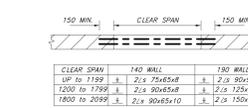
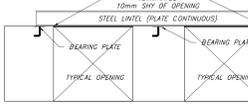
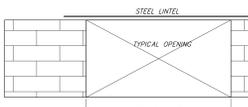
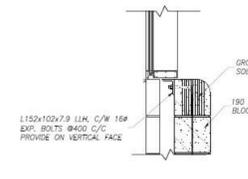
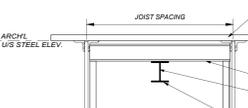
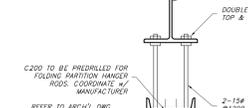
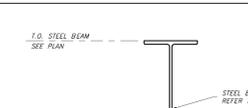
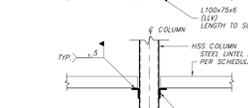
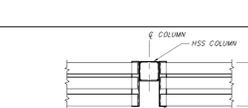
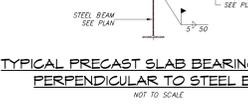
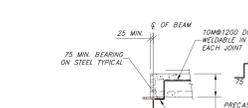
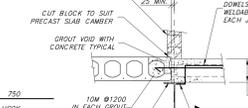
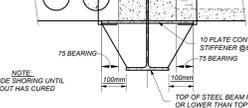
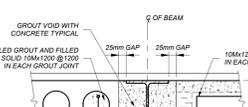
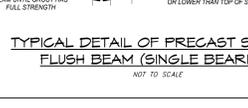
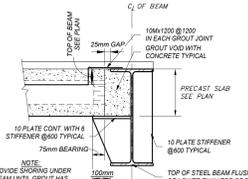
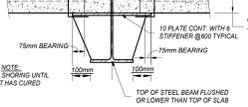
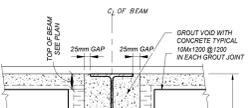
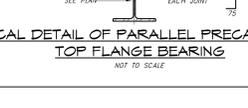
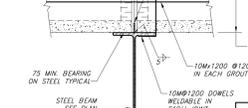
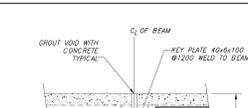
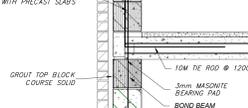
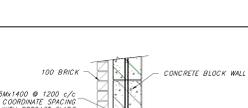
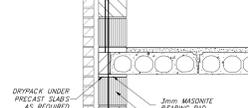
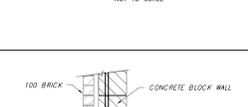
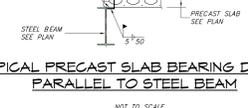
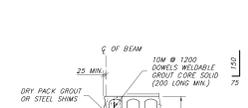
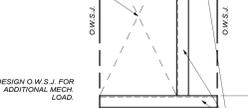
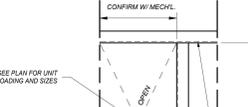
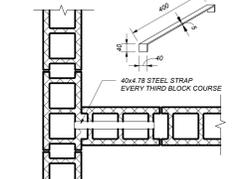
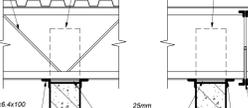
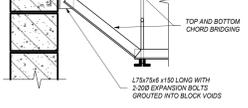
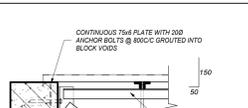
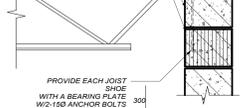
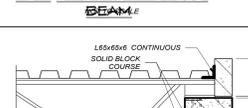
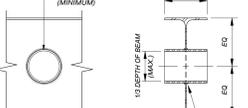
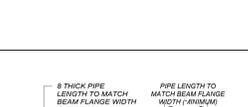
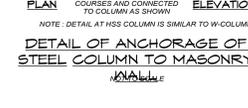
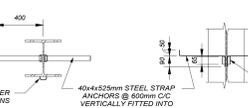
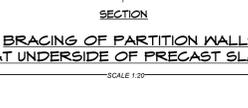
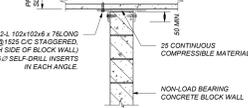
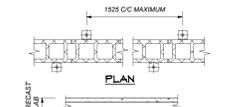
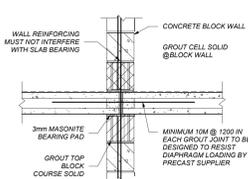
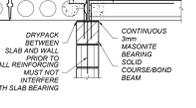
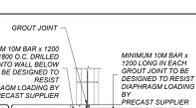
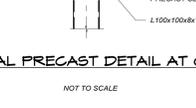
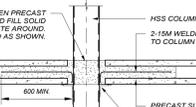
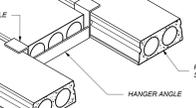
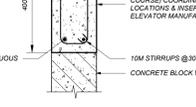
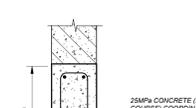
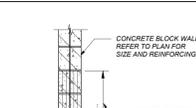
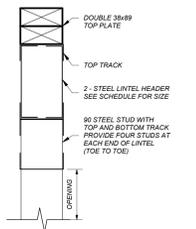
FRAMING SECTIONS

HOSSACK & ASSOCIATES ARCHITECTS

SCALE: As indicated
DATE: FEB. 2019
DRAWN: S.N.I.V.E.
CHECKED: G.F.
PRINT DATE: 2/6/2020 1:04:57 PM
REVIT FILE: 22281 - Hossack - Oakville 5 R22.RVT



CLEAR SPAN	HEADER SIZE
UP TO 1200	2 - 90 x 16 Gs. (1.52mm)
1200 to 1400	2 - 100 x 16 Gs. (1.52mm)
1400 to 2100	2 - 150 x 16 Gs. (1.52mm)
2100 to 2800	2 - 200 x 14 Gs. (1.91mm)



NO.	REVISIONS	DATE
1	ISSUED FOR PERMIT	23-10-18
2	ISSUED FOR TENDER	28-02-09
3	ISSUED FOR PERMIT	23-10-18

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

MILTON #13 PUBLIC SCHOOL
1345 TRUDEAU DRIVE, MILTON, ON.

LEGAL DESCRIPTION:
BLOCK 54, REGISTERED PLAN 50A/0000
TOWN OF GAVILLE, REGION OF HALTON

KALOS Engineering Inc.
300 YORK ST. 10TH FLOOR
MILTON, ON L9T 5K6
PROJECT NO. 2280

HALTON DISTRICT SCHOOL BOARD
1100 GUELPH LINE
BURLINGTON, ON L7R 5Z2
TEL: (905) 335-3663
FAX: (905) 335-3662

PROJECT: 19001
DATE: FEB. 2019
DRAWN: S.N.I.V.E.
CHECKED: S4.3
PRINT DATE: 2/6/2020 1:05:51 PM
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