

FILENAME: M:\2026 STEELCON\26052-R1 - Bishop Tonnos CSS - Elevator\26052R1_S1_S2_PLANS.dwg
PLOTDATE: Jun 29, 2026 - 11:39pm

PROJECT DESIGN DATA TABLE		
BUILDING IMPORTANCE CATEGORY		HIGH
SPECIFIED FLOOR LOADS		
REFER TO FLOOR FRAMING PLANS FOR SPECIFIED DESIGN LIVE AND DEAD LOADS		
SPECIFIED SNOW LOADS		
IMPORTANCE FACTOR	I _s	1.15
BASIC ROOF SNOW LOAD	S	1.84
SNOW AND RAIN LOADING (1/50) DESIGN DATA	S _s	0.8
	S _r	0.4
FACTORS USED FOR BASIC ROOF SNOW LOAD	C _D	0.8
	C _W	1.0
	C _S	1.0
	C _A	1.0
ACCUMULATED SNOW LOADS AROUND OBSTRUCTIONS, MECHANICAL ROOF TOP UNITS AND/OR HIGH TO LOW ROOF AREAS ARE INDICATED ON PLAN		
SPECIFIED WIND LOADS		
IMPORTANCE FACTOR I _w	1.15 kPa	
HOURLY WIND PRESSURE (1/50) DESIGN DATA	0.49 kPa	
WIND DESIGN CATEGORY	CATEGORY 2	
TERRAIN	OPEN	
SPECIFIED EARTHQUAKE LOADS		
IMPORTANCE FACTOR	I _E	1.3
SEISMIC DESIGN DATA	S _D (0.2)	0.391
	S _D (0.5)	0.317
	S _D (1.0)	0.177
	S _D (2.0)	0.0814
	S _D (5.0)	0.0209
	S _D (10.0)	0.00644
SEISMIC SITE CLASS	D	
PROBABILITY OF EXCEEDANCE IN 50 YEARS	2%	
SEISMIC FORCE MODIFICATION FACTORS FOR SEISMIC FORCE RESISTING SYSTEM (NORTH-SOUTH)	R _d	1.5
	R _o	1.5
SEISMIC FORCE MODIFICATION FACTORS FOR SEISMIC FORCE RESISTING SYSTEM (EAST-WEST)	R _d	1.5
	R _o	1.5
SEISMIC HAZARD INDEX	W _s (0.2)	SC3
STRUCTURAL IRREGULARITIES: NONE		

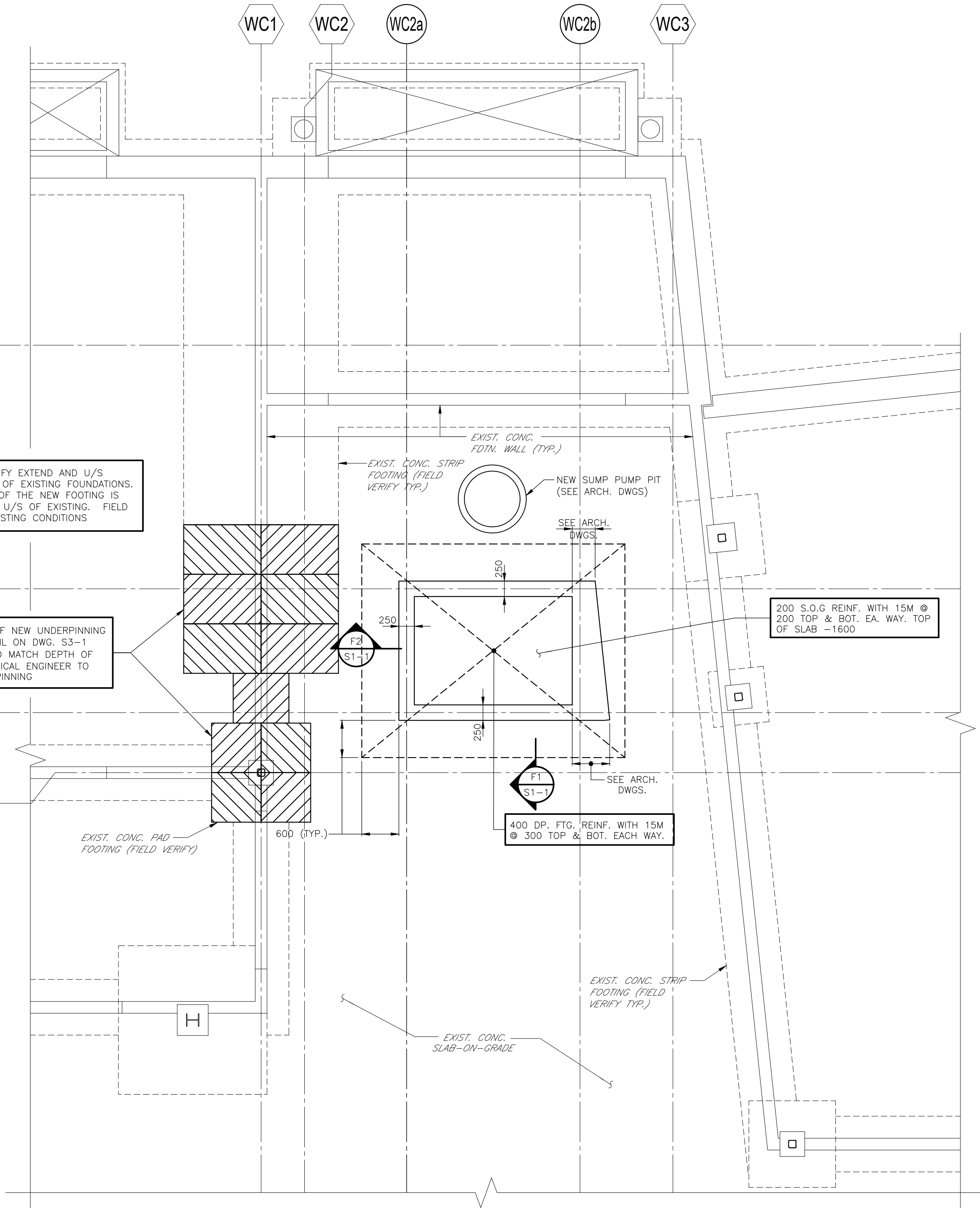
PARTIAL EXISTING & PROPOSED FOUNDATION PLAN NOTES

- FOOTINGS SHALL BE CARRIED DOWN TO NATURAL UNDISTURBED SOIL, CAPABLE OF SUSTAINING 200 kPa (SLS) AND 300 kPa (ULS).
- SOIL OF BEARING CAPACITY IS ASSUMED TO BE FOUND AT THE ELEVATIONS SHOWN. ANY VARIATIONS MUST BE REPORTED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
- SOIL AT THE UNDERSIDE OF THE FOOTINGS IS TO BE INSPECTED AND APPROVED BY A REPRESENTATIVE OF A SOILS CONSULTANT BEFORE PLACING CONCRETE.
- CO-ORDINATE ALL DIMENSIONS WITH THE ARCHITECTURAL DRAWINGS AND REPORT ANY DISCREPANCIES TO ENGINEER PRIOR TO PROCEEDING WITH ANY WORK.
- CENTRE LINES OF COLUMNS, CAPS AND FOOTINGS ARE COINCIDENT UNLESS OTHERWISE NOTED.
- CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AS NOTED IN CONCRETE SCHEDULE ON DRAWING S1-1.
- PROVIDE SLAB DEPRESSIONS AND SLOPES, OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS, AS REQUIRED BY THE ARCHITECTURAL AND MECHANICAL DRAWINGS AND SPECIFICATIONS.
- THE PROJECT SUPERINTENDENT MUST CONTACT THIS OFFICE 24 HOURS PRIOR TO PLACING STRUCTURAL CONCRETE INCLUDING STRIP FOOTINGS.
- ALL GROUT FILL TO CONSIST OF 25 MPa CONCRETE, UNLESS NOTED OTHERWISE.
- SEE TYPICAL NOTES, TYPICAL DETAILS, AND ALL OTHER DRAWINGS.
- PLUMBING PASSING THRU FOUNDATION WALLS TO HAVE 25mm CLEARANCE ALL AROUND AND CLOSED OFF WITH A COMPRESSIBLE MATERIAL.
- REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS AND SPECIFICATIONS FOR PERIMETER AND SUB-FLOOR DRAINAGE SYSTEM.

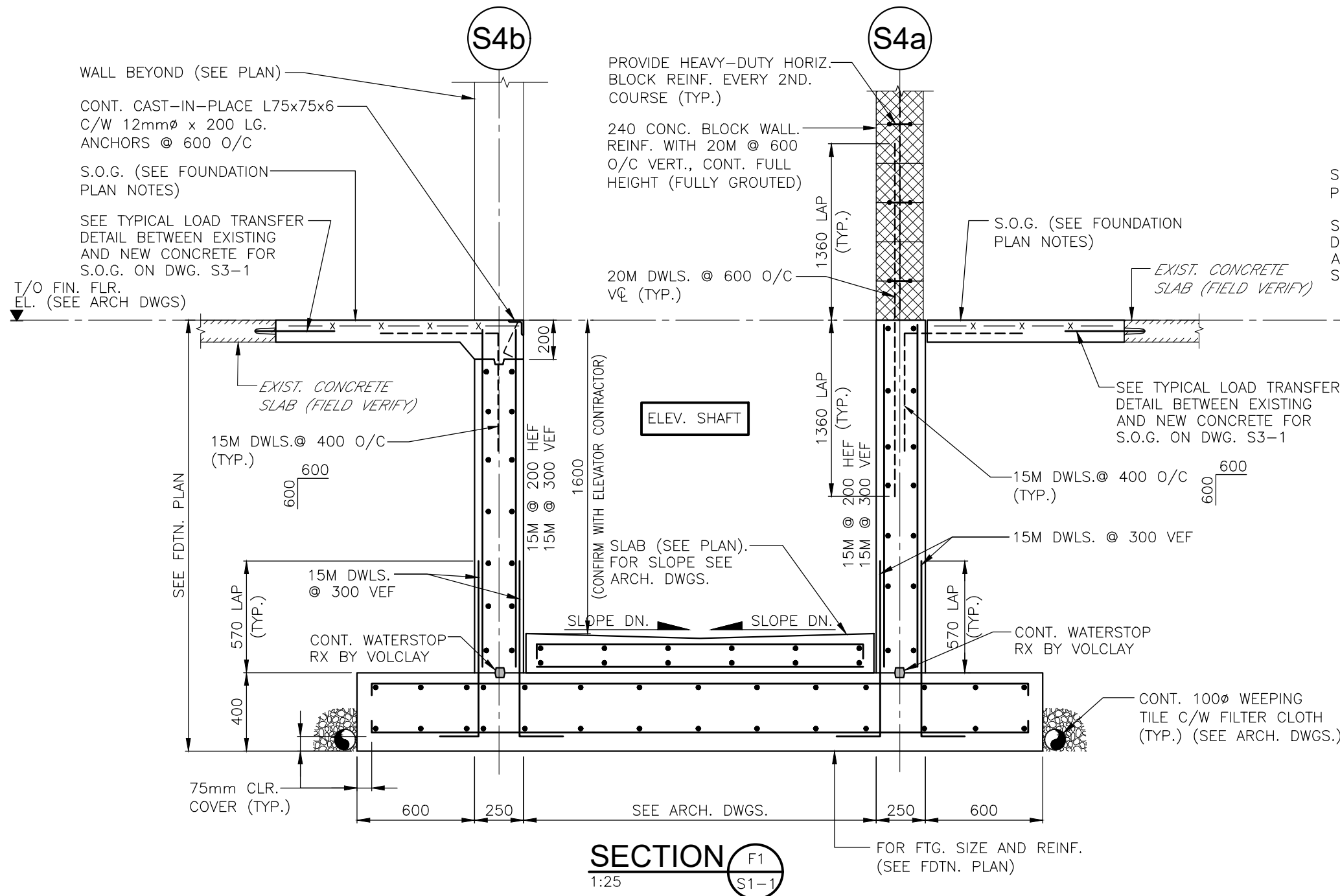
CONCRETE SCHEDULE			
No.	AREA	f'c (MPa)	AIR ENT.
1	FOOTINGS	25	CLASS EXPOSURE N
2	FOUNDATION WALLS	25	CLASS EXPOSURE N
3	INTERIOR SLAB-ON-GRADE	25	CLASS EXPOSURE N

NOTE: FIELD VERIFY EXTEND AND U/S ELEVATION OF EXISTING FOUNDATIONS. THE U/S OF THE NEW FOOTING IS TO MATCH U/S OF EXISTING. FIELD VERIFY EXISTING CONDITIONS

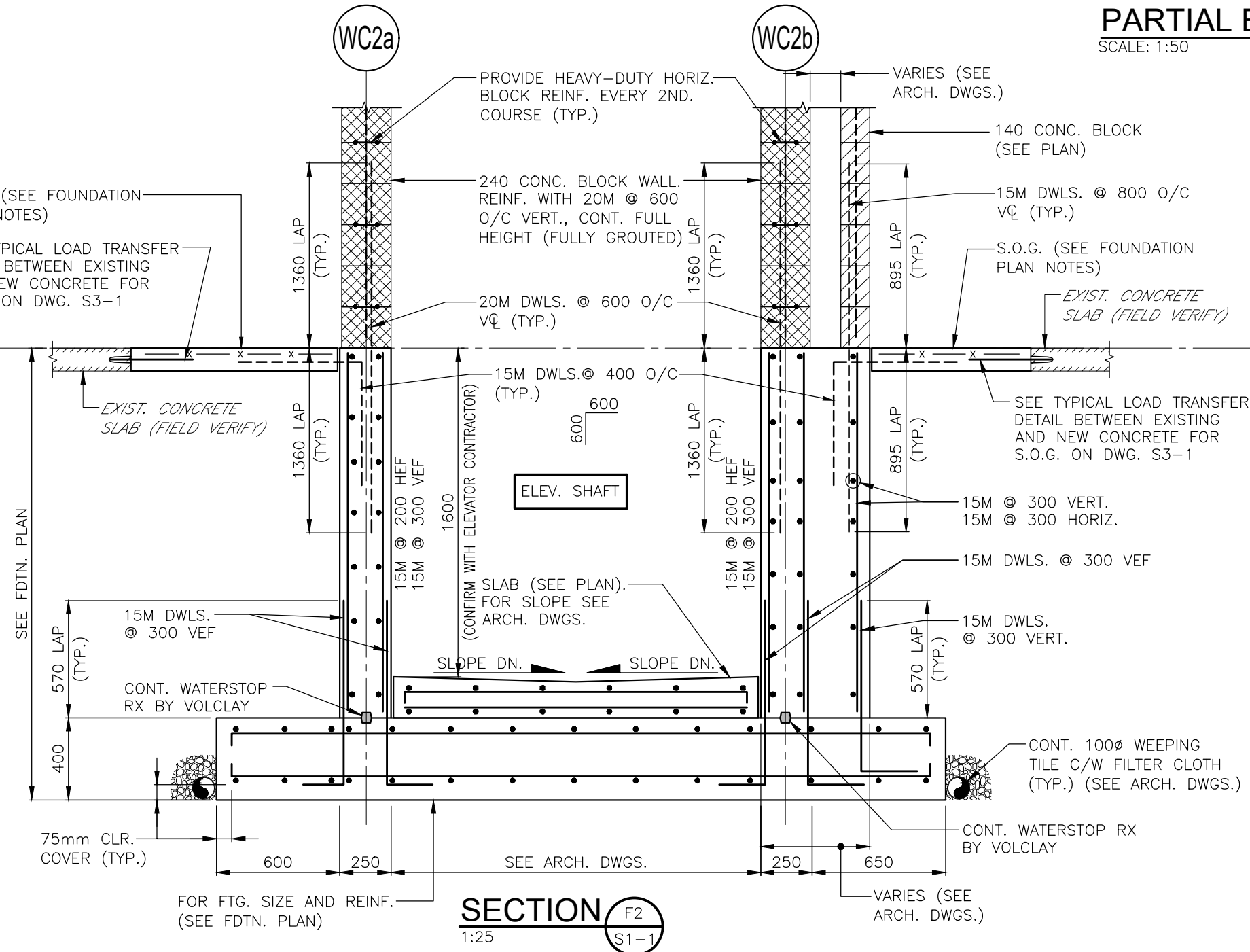
ZZZ DENOTES EXTENT OF NEW UNDERPINNING (TYP.). SEE TYPICAL DETAIL ON DWG. S3-1 (U/S OF UNDERPINNING TO MATCH DEPTH OF NEW FOOTING). GEOTECHNICAL ENGINEER TO VERIFY EXTENT OF UNDERPINNING



PARTIAL EXISTING AND PROPOSED FOUNDATION PLAN
SCALE: 1:50



SECTION F1
S1-1
1:25



SECTION F2
S1-1
1:25

GENERAL NOTES

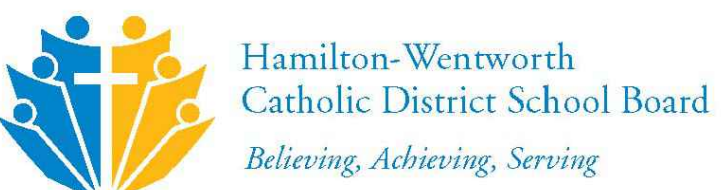
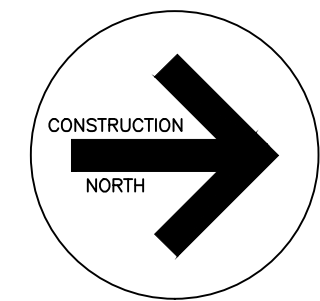
Contractor must verify all dimensions on the Project Site and report any discrepancies before proceeding with the Work.

This drawing is a part of the Contract Documents and is to be read in conjunction with all other Contract Documents.

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C	06/29/26	ISSUED FOR PERMIT/TENDER
B	05/06/26	ISSUED FOR REVIEW
A	02/06/26	ISSUED FOR COORDINATION
No.	DD/MM/YY	DESCRIPTION

REVISIONS



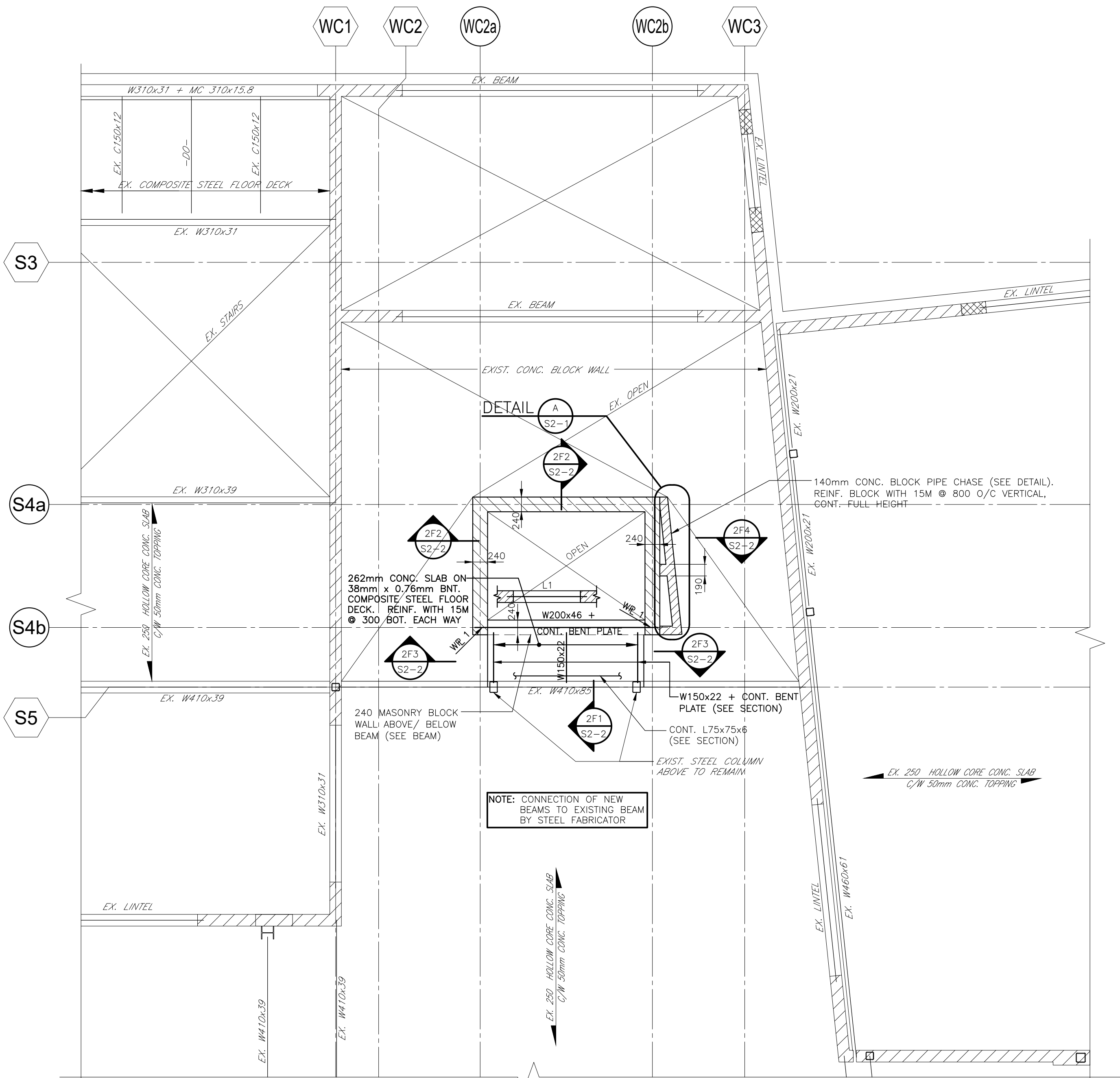
LANHACK Steelcon Inc.
Consulting Engineers
1709 Upper James Street
Hamilton, ON L9B 1K7
Tel: (905) 777-1454
Fax: (905) 336-8142

**ELEVATOR
FOR
BISHOP TONNOS
CATHOLIC SECONDARY SCHOOL**

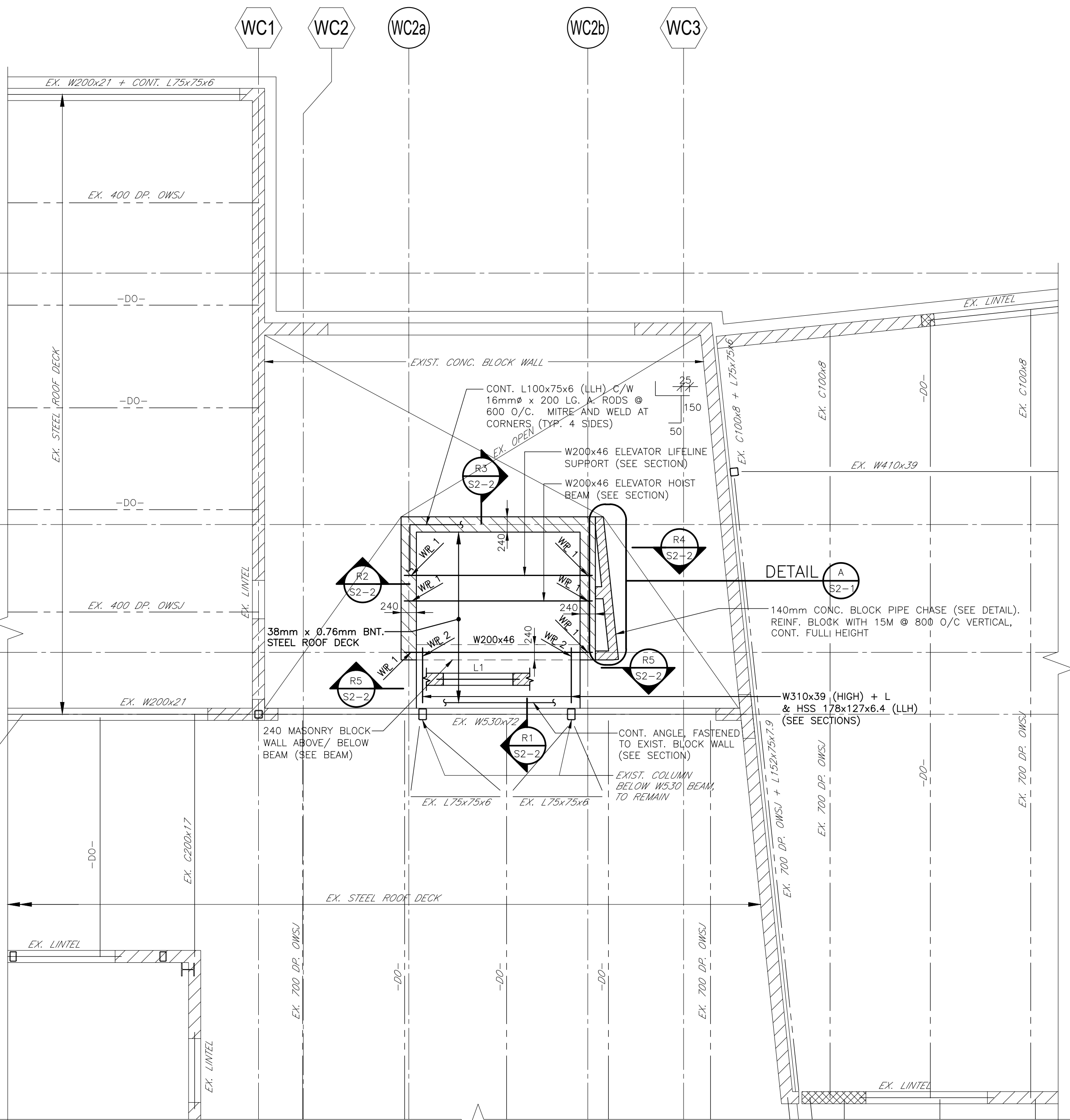
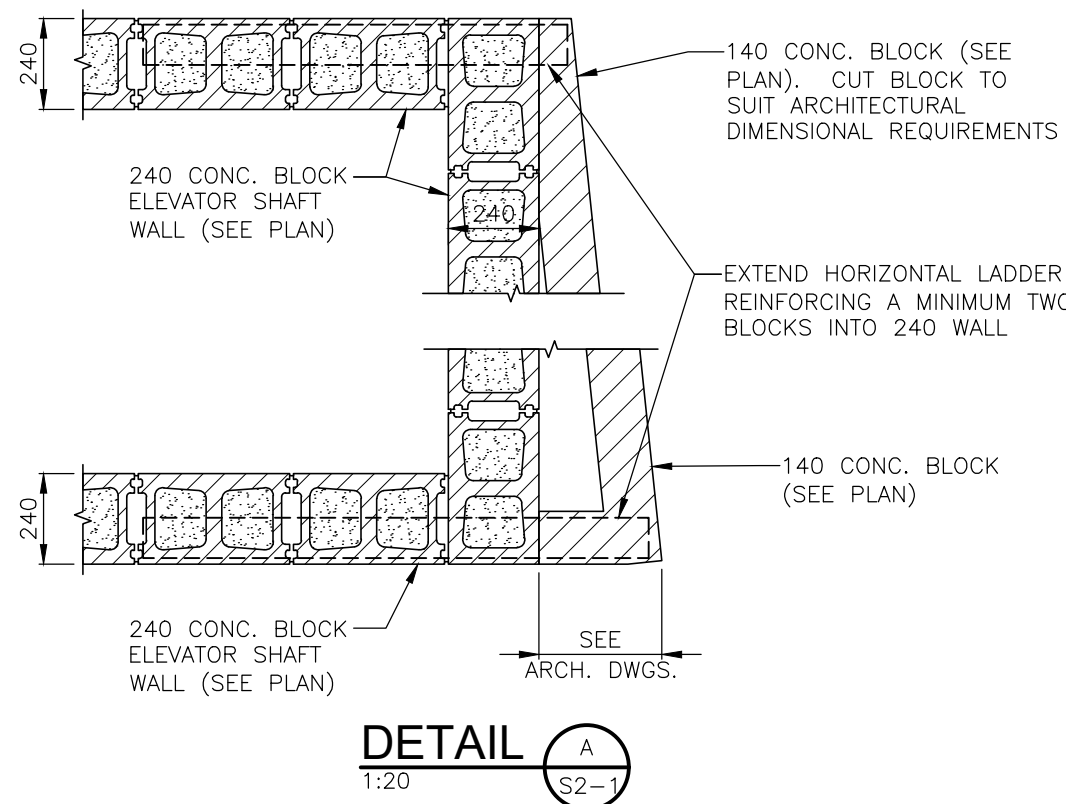
**100 PANABAKER DR.
ANCASTER
ONTARIO**

PARTIAL EXISTING AND PROPOSED PLAN AND SECTIONS

SCALE	DRAWN	PROJECT No.
AS NOTED	FG/VE	26052-R1
DATE	CHECKED	DRAWING No.
MAY 2026	YI	S1-1



PARTIAL EXISTING AND PROPOSED SECOND FLOOR FRAMING PLAN
SCALE: 1:50



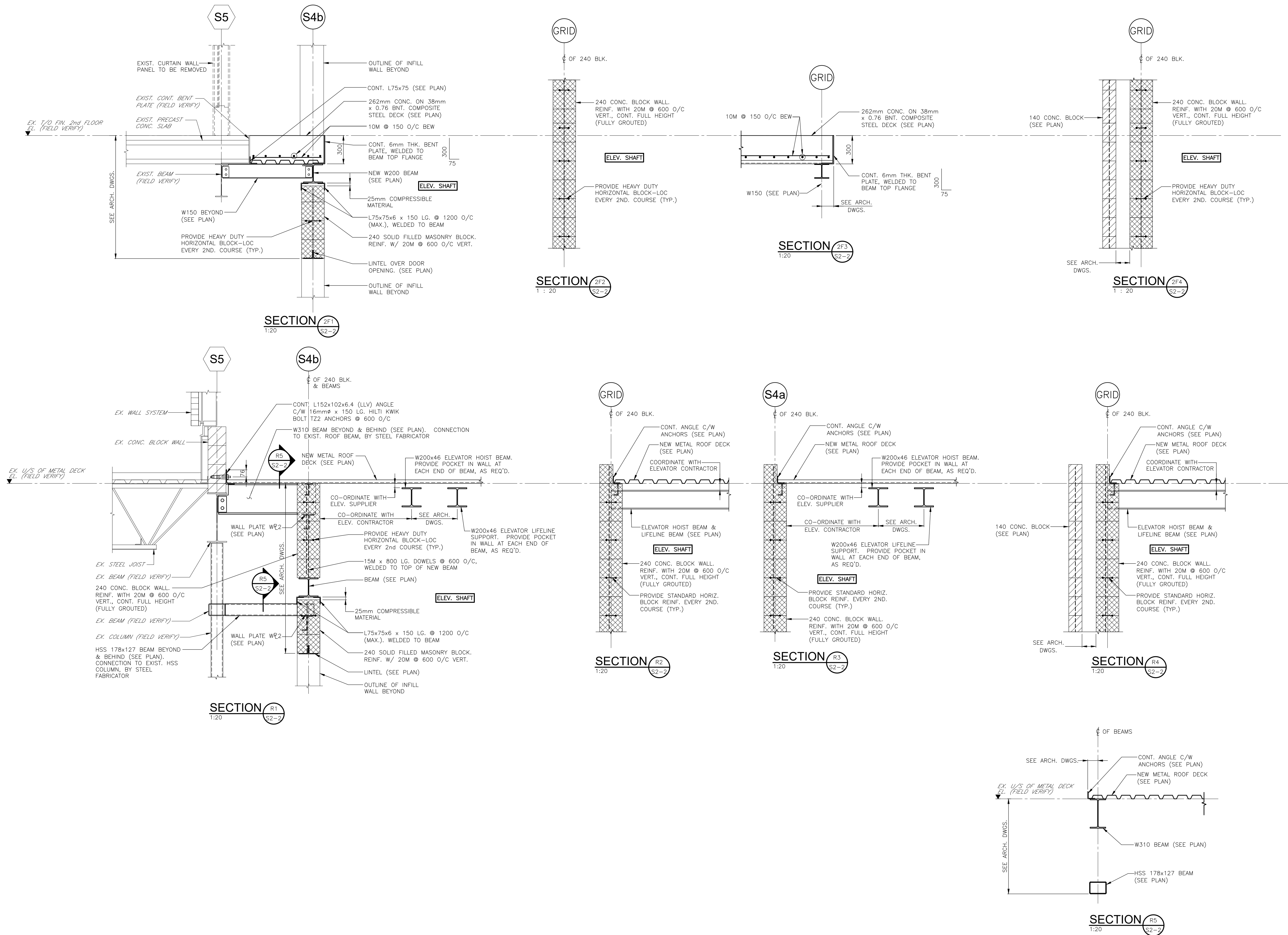
PARTIAL EXISTING AND PROPOSED ROOF FRAMING PLAN
SCALE: 1:50

ELEVATOR ROOF FRAMING PLAN NOTES

- U/S OF ROOF DECK TO BE 0.0m BELOW FINISHED ROOF DATUM ELEVATION (SEE ARCH. DWGS.), UNLESS OTHERWISE NOTED ON PLAN. SEE ALSO ARCH. DWGS.
- TOP OF STEEL BEAMS TO BE 0.0m BELOW ROOF DATUM ELEVATION, EXCEPT AS SHOWN THUS ∇_{EX} ON PLAN.
- TOTAL DEAD LOAD AS FOLLOWS:
ROOF - 1.2 kPa
- STEEL ROOF DECK SHALL BE DESIGNED TO SUPPORT SPECIFIED TOTAL DEAD AND LIVE LOADS. MINIMUM BASE NOMINAL THICKNESS (BNT) OF STEEL DECK SHALL BE AS NOTED PLAN.
- STEEL ROOF DECK SHALL BE INSTALLED FOR DIAPHRAGM ACTION IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE CANADIAN SHEET STEEL BUILDING INSTITUTE AND SPECIFICATIONS. STEEL DECK TO BE FASTENED AT ALL SUPPORTS W/ MIN. 19mm PUDDLE WELDS (36/7 SUPPORT PATTERN) AND 150mm O/C AT PERIMETER. ALL SIDE LAPS TO BE BUTT PUNCHED @ 300mm O/C U.N.O.
- STEEL ROOF DECK SHALL BE DESIGNED BY A LICENSED PROFESSIONAL ENGINEER. SHOP DRAWINGS AND CALCULATIONS BEARING THE STAMP AND SIGNATURE OF THE PROFESSIONAL ENGINEER RESPONSIBLE FOR THE DESIGN SHALL BE SUBMITTED FOR REVIEW PRIOR TO FABRICATION AND ERECTION.
- LIVE LOAD DEFLECTION OF ROOF BEAMS SHALL NOT EXCEED 1/360 OF SPAN.
- LOCATION OF MECHANICAL EQUIPMENT AND MECHANICAL EQUIPMENT LOADS ARE TO BE CONFIRMED BY MECHANICAL CONTRACTOR BEFORE STRUCTURAL STEEL IS FABRICATED. REFER TO MECHANICAL DRAWINGS. MECHANICAL EQUIPMENT AND PIPING MUST BE HUNG FROM THE TOP FLANGE OF THE BEAMS AND HANGER SPACING SHALL NOT EXCEED 3.1m.
- FRAME ALL ROOF OPENINGS AS NOTED IN SPECIFICATIONS AND ON TYPICAL DETAIL.
- SUBMIT DETAILS FOR ALL OPENINGS OTHER THAN THOSE SHOWN ON STRUCTURAL DRAWINGS TO STRUCTURAL CONSULTANT FOR REVIEW.
- AN INDEPENDENT INSPECTION AND TESTING COMPANY IS TO INSPECT STRUCTURAL STEEL AND STEEL DECK IN THE SHOP AND IN THE FIELD FOR WELDING, CONNECTIONS, BOLT TORQUES, AND GENERAL CONFORMANCE WITH THE STRUCTURAL DRAWINGS AND SPECIFICATIONS.
- SEE TYPICAL NOTES, TYPICAL DETAILS, AND ALL OTHER DRAWINGS.
- WALL PLATES (WP) SHALL HAVE LAST DIMENSION PARALLEL TO BEAM. SEE WALL PLATE SCHEDULE ON DRAWING S1-1.

LINTEL SCHEDULE			
REFER TO LINTEL NOTES ON TYPICAL NOTES DRAWING			
MARK	SIZE	TYPE	REMARKS
L1	2L's 100x100x8.0		MIN. 150 BRG. ON SOLID BLOCK EX. END

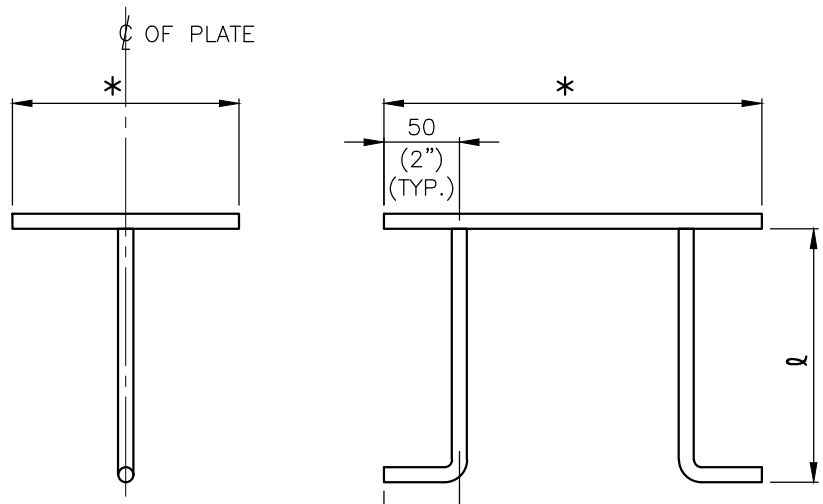
WALL PLATE SCHEDULE		
MARK	SIZE	REMARKS
WP 1	220x13x200	C/W 2-16mm ϕ x 450 LG. DWLS.
WP 2	200x13x220	C/W 2-16mm ϕ x 450 LG. DWLS.



FILENAME: M:\2026 STEELCON\26052-R1 - Bishop Tonnos CSS - Elevator\26052R1_S3_TYPICAL NOTES AND DETAILS.dwg
PLOTDATE: Jun 29, 2026 11:36am

LOAD BEARING MASONRY NOTES

- 1.0 GENERAL
- 1.1 THE FOLLOWING INDICATES ONLY THE MINIMUM REQUIREMENTS APPLICABLE TO STRUCTURAL LOAD BEARING MASONRY, BASED UPON CSA 3304-14 (R2010) DESIGN OF MASONRY STRUCTURES, CLAUSE 10.5.2.
- 1.2 REFER ALSO TO ARCHITECTURAL DRAWINGS &/OR THE SPECIFICATION FOR REQUIREMENTS OTHER THAN STRUCTURAL, AND FOR NON-LOAD BEARING WALLS & PARTITIONS.
- 1.3 IF MASONRY CONSTRUCTION IS BASED ON ENGINEERING ANALYSIS "ENGINEERED MASONRY", THEN REFER TO NOTES & DETAILS ON STRUCTURAL DRAWINGS.
- 1.4 MASONRY CONSTRUCTION TO CONFORM TO CSA STANDARDS CSA-5304-14 & CSA A37-14.
- 2.0 PRODUCTS
- 2.1 CONCRETE BLOCKS & BRICKS:- TO CONFORM TO ONE OR MORE OF CSA A165 SERIES-14. BLOCKS TO BE MODULAR UNITS AS SHOWN ON THE ARCHITECTURAL DRAWINGS &/OR SPECIFICATION, AND UNLESS OTHERWISE NOTED SHALL BE:-
1. FOR BELOW GRADE & EXTERIOR EXPOSED WALLS USE NORMAL WEIGHT LOAD BEARING UNITS:-
- STANDARD HOLLOW: TYPE H/15/A/M.
- 75% SOLID: TYPE S/15/A/M.
- 100% SOLID: TYPE S/15/A/M.
2. FOR INTERIOR ABOVE GRADE WALLS USE LIGHTWEIGHT LOAD BEARING BLOCKS:-
- STANDARD HOLLOW: TYPE H/15/C/M.
- 75% SOLID: TYPE S/15/C/M.
- 100% SOLID: TYPE S/15/C/M.
- 2.2 CLAY BRICKS:- TO CONFORM TO ONE OR MORE OF CSA A82-14. SEE ARCHITECTURAL DRAWINGS &/OR SPECIFICATIONS FOR TYPES & STYLES OF BRICKS REQUIRED. UNLESS OTHERWISE NOTED, THE MINIMUM COMPRESSIVE STRENGTH (BRICK FLATWISE) GROSS AREA SHALL BE 20 MPa.
- 2.3 MORTAR:- TO CONFORM TO CSA A179-14. FOR LAYING CONCRETE BLOCKS...USE TYPE "S" MORTAR UNLESS NOTED. FOR LAYING CLAY BRICKS: USE TYPE "N" MORTAR UNLESS NOTED.
- 2.4 MASONRY GROUT:- TO CONFORM TO CSA A179-14. THE SLUMP SHALL BE + 200mm (+8") AND THE MINIMUM 28 DAY COMPRESSIVE STRENGTH SHALL BE 12.5 MPa.
- 2.5 MASONRY CONNECTORS:- (ANCHORS, FASTENERS & TIES) SHALL CONFORM TO CSA A370-14, AND BE INSTALLED TO COMPLY WITH CSA A371-14. SPACING, STRENGTH & GALVANIZING OF STRIP TIES, DOVETAIL ANCHORS, ROD ANCHORS, STRAP ANCHORS, WALL & PARTITION ANCHORS SHALL COMPLY WITH CSA A371-14.
- 2.6 BRICK VENEER AND MASONRY TIES TO BE DESIGNED AND CERTIFIED BY MASONRY CONTRACTOR'S ENGINEER. PROVIDE CALCULATIONS AND DETAILS, CERTIFIED BY A PROFESSIONAL ENGINEER, LICENSED IN THE PROVINCE OF ONTARIO. TIES TO CONFORM TO O.B.C. 2012 AND CSA A370-14 & CSA A371-14. TIES TO BE DESIGNED FOR SEISMIC REQUIREMENTS, IN ACCORDANCE WITH O.B.C. 2012 AND CSA 5304-14.
- 2.7 VERTICAL REINFORCING FOR ALL NON-LOAD BEARING WALLS AND PARTITIONS: THE FOLLOWING ARE MINIMUM REQUIREMENTS:-
1. 90 (4") BLOCK = 10M @ 800mm (2'-8") O/C
- 140 (6") BLOCK = 15M @ 1000mm (3'-4") O/C
- 190 (8") BLOCK = 15M @ 800mm (2'-8") O/C
- 240 (10") BLOCK = 15M @ 600mm (2'-0") O/C
- 290 (12") BLOCK = 15M @ 400mm (1'-4") O/C
- 2.8 HORIZONTAL JOINT REINFORCEMENT FOR ALL MASONRY WALLS: THE FOLLOWING ARE MINIMUM REQUIREMENTS:-
1. CONFORM TO CSA A370-14 & A371-14.
2. REINFORCEMENT SHALL BE AN APPROVED CONTINUOUS "LADDER" TYPE, PREFABRICATED WITH 3.66mm DIAMETER (9 GAUGE) LONGITUDINAL & CROSS WIRES.
3. SPACING:- PROVIDE REINFORCING IN THE TOP COURSE IMMEDIATELY BELOW FLOOR & ROOF BEARING LEVELS AND THE FIRST TWO COURSES ABOVE AND BELOW EVERY WALL OPENING. THE REINFORCING SHALL EXTEND 600mm (24") BEYOND SUCH OPENINGS. FOR THE REMAINDER OF WALLS, THE VERTICAL SPACING SHALL NOT EXCEED 400mm (16").
4. OVERLAP SPLICES:- SHALL BE A MIN. OF 150mm (6") FOR KNURLED WIRE & 300mm (12") FOR PLAIN WIRE. LAPS SHALL BE STAGGERED A MINIMUM OF 750mm (30") FROM COURSE TO COURSE. REINFORCING SHALL NOT PASS THROUGH A VERTICAL CONTROL JOINT UNLESS OTHERWISE SHOWN.
5. CORROSION RESISTANCE:- JOINT REINFORCING FOR ALL WALLS IN CONTACT WITH SOIL, EXTERIOR WALLS & WALLS IN A MOIST ENVIRONMENT SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION TO ASTM A153/A153M-09, 45g gm/sq. meter (1.5oz./sq.foot).
6. COMPOSITE & CAVITY WALLS:- WHERE COURSING OF WYTHES DO NOT ALIGN OF WHERE IT IS DESIRABLE & PERMITTED TO BUILD ONE WYTHE BEFORE THE OTHER, REINFORCING SHALL BE AN APPROVED ADJUSTABLE TYPE WITH A BOX OR EYE SECTION WHICH EXTENDS INTO THE CORNER JOINT OR CAVITY AND RESTRAINS THE TRANSVERSE MOVEMENT OF THE TWO WYTHES. FOR CAVITY WALLS WITH RIGID INSULATION, EXTENSION SHALL BE DESIGNED TO HOLD THE INSULATION IN PLACE BY USE OF PLASTIC WEDGES OR APPROVED EQUAL. GALVANIZED HOOK STYLE "BOX TIES" OR "PIN-TIES" SHALL EXTEND INTO THE FACE WYTHE TO COMPLETE THE ASSEMBLY.
7. PROVIDE ALL PREFABRICATED CORNER AND TIE SECTIONS.
- 2.9 COMPOSITE WALLS:- SHALL HAVE THE VERTICAL COLLAR JOINTS BETWEEN WYTHES COMPLETELY FILLED WITH MORTAR OR GROUT.
- 2.10 BOND BEAMS:- MADE FROM LINTEL BLOCKS, OR HALF WEB BLOCKS WHERE SHOWN ON STRUCTURAL DRAWINGS SHALL CONFORM TO CSA A371-14.
- 2.11 GROUTING:- BY FILLING VOIDS OF HOLLOW UNITS & REINFORCED HOLLOW UNITS SHALL CONFORM TO CSA A371-14 (MORTAR IS NOT ACCEPTABLE).
- 2.12 EXPANSION & CONTROL JOINTS:- SHALL BE PROVIDED. SEE ARCHITECTURAL DRAWINGS &/OR SPECIFICATION FOR DETAILS.
- 3.0 EXECUTION
- 3.1 BEARINGS ON MASONRY:-
1. MINIMUM BEARING ON MASONRY UNLESS OTHERWISE NOTED:-
- BEAMS (STEEL, CONC., WOOD).....200mm (8") NOMINAL
- LINTELS (STEEL, CONC., WOOD).....150mm (6") NOMINAL
- JOISTS (STEEL, WOOD).....100mm (4") NOMINAL
- SLABS (CAST-IN-PLACE, PRECAST).....100mm (4") NOMINAL
- STEEL DECKING (ON WELD PLATE).....100mm (4") NOMINAL
2. MASONRY BEARINGS SHALL BE OF SOLID BLOCKS (OR GROUTED SOLID) OR BRICKS LAID IN MORTAR. ALL JOINTS ARE TO BE FULLY FILLED WITH TYPE "S" MORTAR.
3. MIN. SIZE OF SOLID BEARINGS AT BEAMS AND LINTELS UNLESS NOTED SHALL BE EQUAL TO TWICE THE BEARING/WALL PLATE (WP) LENGTH AND FOR A DEPTH EQUAL TO THE BEARING/WALL PLATE (WP) LENGTH, AND IN NO CASE LESS THAN 400 LONG x 200 DEEP (16" x 8"), SYMMETRICAL UNDER BEARING POINT.
4. PROVIDE A MINIMUM OF ONE CONTINUOUS COURSE 200mm (8") OF SOLID OR GROUTED VOID BLOCKS OR BRICKS LAID IN MORTAR AT THE TOP COURSE IMMEDIATELY BELOW ALL FLOOR AND ROOF BEARING LEVELS.
- 3.2 TOLERANCES:- UNLESS OTHERWISE NOTED ON THE ARCHITECTURAL DRAWINGS &/OR SPECIFICATION, SHALL CONFORM TO CSA A371-14.
- 3.3 COLD WEATHER CONSTRUCTION:- REQUIREMENTS & PROTECTION SHALL CONFORM TO CSA A371-14 AND UNDER NO CIRCUMSTANCES SHALL MASONRY CONSTRUCTION BE PERMITTED WHEN THE AIR TEMPERATURE FALLS BELOW - 12°C.
- 4.0 QUALITY CONTROL
- 4.1 WHEN REQUESTED SAMPLING AND TESTING SHALL CONFORM TO CSA 5304-14. REFER ALSO TO GENERAL NOTES.



TYPICAL WALL PLATE DETAIL

1. ALL BENT ANCHORS TO BE FABRICATED FROM DEFORMED BAR WITH A MIN. YIELD OF 400 MPa.
2. * = SEE PLANS AND WALL PLATE SCHEDULE
3. $\bar{L}$ = (SPECIFIED TOTAL LENGTH -50 (-2\"))
- SEE WALL PLATE SCHEDULE FOR LENGTH

CAST IN PLACE CONCRETE NOTES

- 1.0 GENERAL
- 1.1 PROVIDE ALL LABOUR, MATERIALS, TOOLS AND EQUIPMENT REQUIRED TO CARRY OUT THE WORK.
- 1.2 REFER ALSO TO GENERAL NOTES, NOTES UNDER PLANS AND SCHEDULES, TYPICAL DETAILS AND SPECIFICATION.
- 2.0 PRODUCTS
- 2.1 PORTLAND CEMENT, WATER AND AGGREGATES SHALL CONFORM TO CAN/CSA-A23-1-14.
- 2.2 PROVIDE AN APPROVED WATER REDUCING ADDITIVE IN ALL CONCRETE. PROVIDE AN APPROVED AIR ENTRAINING ADDITIVE IN ALL CONCRETE WHICH WILL BE EXPOSED TO A FREEZE/THAW CYCLE AND/OR THE ACTION OF DE-ICING SALT. ADMIXTURES SHALL CONFORM TO CAN/CSA A23.1-14.
- 2.3 FORMWORK SHALL CONFORM TO CAN/CSA A23.1-14 AND CAN/CSA-S269.3-M92 (R2013) AND FALSEWORK SHALL CONFORM TO CSA S269.3-M92 (R2013).
- 2.4 IF SO INSTRUCTED, THE DESIGNS FOR THE FORMWORK SHALL BE SUBMITTED FOR REVIEW BEFORE CONSTRUCTION. FORMWORK DRAWINGS AND DESIGN SHALL BEAR THE STAMP OF A LICENSED PROFESSIONAL ENGINEER.
- 2.5 UNLESS OTHERWISE NOTED PROVIDE SLAB & BEAM FORMS WITH AN UPWARD CAMBER OF 2mm/1000mm (1/4" PER 10'-0") OF SPAN, AND UPLIFT ENDS OF CANTILEVERED SLAB & BEAM FORMS 3mm/1000mm (1/4" PER 8'-0") OF CANTILEVER LENGTH.
- 2.6 PROVIDE STANDARD ADJUSTABLE MASONRY ANCHOR SLOTS FOR ALL MASONRY FACING OR ABUTTING CONCRETE FACES.
- 2.7 PROVIDE AND/OR INSTALL STANDARD ADJUSTABLE INSERTS & ALL OTHER CAST-IN INSERTS AS REQUIRED BY THE ARCHITECTURAL, STRUCTURAL, MECHANICAL & ELECTRICAL DRAWINGS & SPECIFICATION.
- 2.8 REINFORCING STEEL UNLESS SPECIFICALLY NOTED, SHALL BE DEFORMED BARS CONFORMING TO CAN/CSA G30.18-09 GRADE 400 (80000 PSI).
- 2.9 WELDED WIRE FABRIC TO CONFORM TO CSA G30.18-09.
- 2.10 REINFORCING SHALL BE DETAILED, BENT, PLACED AND SUPPORTED TO CONFORM TO ACI STANDARD 315-99 AND THE MANUAL OF STANDARD PRACTICE PUBLISHED BY THE REINFORCING STEEL INSTITUTE OF CANADA, 2004.
- 2.11 DRY-PACK GROUT TO BE 1 PART PORTLAND CEMENT TO 1 1/2 PARTS SAND TO 2 PARTS OF 8mm PEA GRAVEL WITH ONLY SUFFICIENT WATER TO DAMPEN MIXTURE. COMPRESSIVE STRENGTH 50 MPa AT 28 DAYS.
- 2.12 NON-SHRINK GROUT TO BE AN APPROVED PRE-MIXED PROPRIETARY PRODUCT.
- 2.13 PROVIDE APPROVED EXTRUDED PVC WATERSTOPS OF SIZE & STYLES INDICATED WITH PRE-WELDED CORNERS & INTERSECTIONS. SEE ALSO TYPICAL DETAILS.
- 2.14 CURING AND SEALING COMPOUNDS WHERE APPROVED FOR USE TO CONFORM TO ASTM STANDARD C309. GENERALLY, ALL CONCRETE SURFACES ARE TO BE SEALED UNLESS NOTED OTHERWISE. COMPOUNDS ARE TO BE COMPATIBLE WITH APPLIED FINISHES.
- 3.0 EXECUTION
- 3.1 MINIMUM COMPRESSIVE STRENGTH FOR CONCRETE @ 28 DAYS SHALL BE AS NOTED ON THE DRAWINGS (20 MPa MINIMUM).
- 3.2 SLUMP AT THE POINT OF DISCHARGE SHALL BE CONSISTENT AT 90mm + 20mm (3 1/2" + 3/4") UNLESS NOTED OTHERWISE. GREATER SLUMPS ARE NOT ACCEPTABLE.
- 3.3 CONCRETE MIXING, TRANSPORTATION, HANDLING AND PLACING SHALL CONFORM TO CAN/CSA A23.1-14.
- 3.4 CONSTRUCTION JOINTS FOR WALLS ARE BASED UPON VERTICAL JOINTS AT A MAXIMUM SPACING OF 1000mm (30'-0").
- 3.5 CONSTRUCTION JOINTS FOR WALLS, SLABS, AND BEAMS NOT SHOWN ON THE DRAWINGS SHALL BE APPROVED BY THE STRUCTURAL CONSULTANT BEFORE CONSTRUCTION. GENERALLY JOINTS IN SLABS SHALL BE AT RIGHT ANGLES TO THE SPANS, AT MID-SPAN IF POSSIBLE AND BE CLEAR OF SUPPORTS AND POINT LOADS.
- 3.6 INSERTS, FRAME-OUTS, SLEEVES, BRACKETS, CONDUITS AND FASTENING DEVICES, SHALL BE INSTALLED AS REQUIRED BY THE DRAWINGS AND SPECIFICATIONS IN A MANNER THAT SHALL NOT IMPAIR THE STRUCTURAL STRENGTH OF THE SYSTEM, BE SO INSTALLED THAT THEY SHALL NOT REQUIRE THE CUTTING, BENDING, OR DISPLACEMENT OF THE REINFORCING OTHER THAN AS SHOWN ON THE TYPICAL DETAILS.
- 3.7 ELECTRICAL CONDUIT SHALL NOT PASS THROUGH A COLUMN, SHALL NOT BE LARGER IN OUTSIDE DIAMETER THAN 1/3 SLAB THICKNESS OR WALL OR BEAM IN WHICH IT IS EMBEDDED, SHALL NOT BE SPACED CLOSER THAN 3 DIAMETERS ON CENTRE UNLESS APPROVED AND HAVE A MINIMUM CONCRETE COVER OF 25mm (1") AND UNLESS SPECIFICALLY PERMITTED OTHERWISE, SHALL NOT RUN HORIZONTALLY IN A CONCRETE WALL.
- 3.8 OPENINGS AND DRIVEN FASTENERS REQUIRED IN THE CONCRETE AFTER THE CONCRETE IS PLACED SHALL BE APPROVED BY THE STRUCTURAL CONSULTANT BEFORE PROCEEDING.
- 3.9 FINISHING, REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR REQUIRED FINISH TO EXPOSED CONCRETE. ALL HONEYCOMBING SHALL BE CUT OUT AND FILLED. FLOOR FINISHES SHALL BE AS REQUIRED BY THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS AND SHALL CONFORM TO CSA STANDARD CAN/CSA A23.1-14 (CLASS A FINISH UNLESS NOTED).
- 3.10 TOLERANCES FOR PLACING STRUCTURAL CONCRETE, REINFORCING STEEL, CAST-IN HARDWARE AND FOR FLOOR & ROOF FINISHES SHALL BE AS SPECIFIED IN CSA STANDARD CAN/CSA A23.1.
- 3.11 MINIMUM REINFORCING FOR ANY CONCRETE WALL TO BE AS SHOWN ON TYPICAL DETAIL FOR CONCRETE WALLS.
- 3.12 MINIMUM REINFORCING FOR ANY SUSPENDED SLAB SHALL BE TEMPERATURE BARS BOTTOM EACH WAY PLUS 10M @ 400 (16") DOWELS 600x600 (2'-0" x 2'-0") TOP AROUND PERIMETER. REFER TO TYPICAL DETAIL OF ONE WAY SLABS.
- 4.0 QUALITY CONTROL
- 4.1 FOR INSPECTION AND TESTING, SEE GENERAL NOTES.

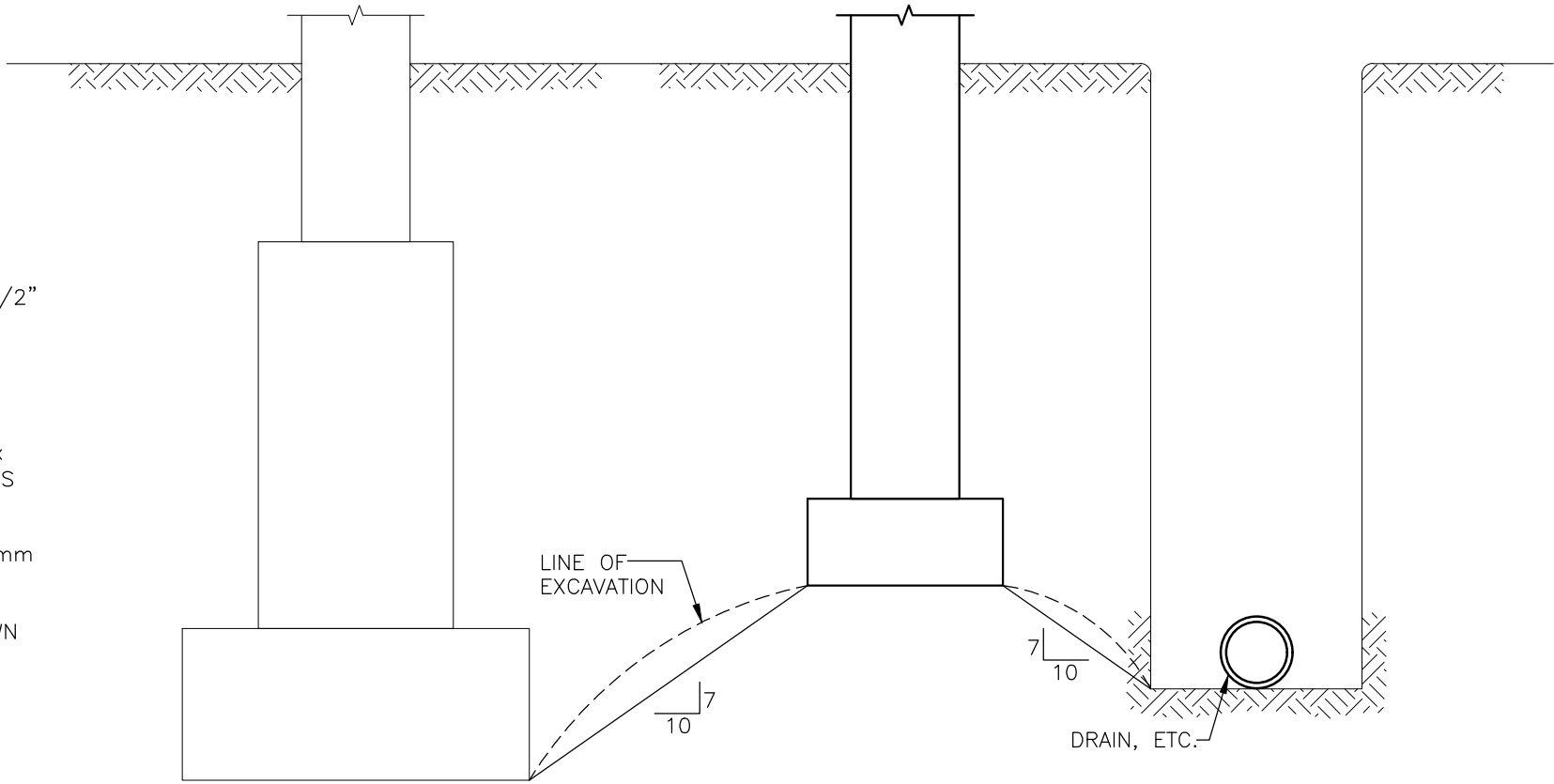
LINTEL NOTES

UNLESS OTHERWISE SHOWN OR NOTED ON THE STRUCTURAL DRAWINGS, PROVIDE LINTELS OVER ALL OPENINGS IN MASONRY WALLS, AS FOLLOWS:-

1. FOR OPENINGS UP TO 1200mm (4'-0") CLEAR; ONE ANGLE 90 x 90 x 6 (3 1/2" x 3 1/2" x 1/4) FOR EACH 100mm (4") OF WALL THICKNESS OR PORTION THEREOF. OR 200mm (8") DEEP MASONRY LINTEL BLOCK REINFORCED WITH 1-10M BOTTOM FOR REACH 100mm (4") OF WALL THICKNESS OR PORTION THEREOF.
2. FOR OPENINGS FROM 1200mm (4'-0") CLEAR TO 1800mm (6'-0") CLEAR; ONE ANGLE 125 x 90 x 8 LONG LEG VERTICAL (5 x 3 1/2 x 5/16) FOR EACH 100mm (4") OF WALL THICKNESS OR PORTION THEREOF. OR 200mm (8") DEEP MASONRY LINTEL BLOCK REINFORCED WITH 1-15M BOTTOM FOR EACH 100mm (4") OF WALL THICKNESS OR PORTION THEREOF.
3. ALL LINTELS TO BEAR 150mm (6") MINIMUM AT EACH END ON SOLID MASONRY, UNLESS SHOWN OTHERWISE.
4. PAIRS OF LINTEL ANGLES ARE TO BE BOLTED OR WELDED TOGETHER, PRIOR TO SHIPMENT, AT MAXIMUM 450mm (18") CENTRES.
5. MASONRY LINTEL BLOCKS MAY ONLY BE USED IN LOAD-BEARING WALLS WITH PERMISSION & MUST BE FILLED WITH 20 MPa CONCRETE. MORTAR IS NOT ACCEPTABLE AND WILL BE REJECTED.
6. STEEL LINTELS ARE TO BE SUPPLIED BY STEEL CONTRACTOR BUT PLACED BY GENERAL CONTRACTOR OR MASONRY SUB-CONTRACTOR.
7. STEEL CONTRACTOR TO SUPPLY ALL NECESSARY DIRECTIONS REQUIRED FOR PLACING STEEL LINTELS.
8. WHILE EVERY EFFORT HAS BEEN MADE TO SHOW ON THE STRUCTURAL DRAWINGS EACH AND EVERY Lintel OVER DOORS, MECHANICAL AND ELECTRICAL SERVICES, RECESSES & POCKETS ETC., THROUGH LOAD-BEARING MASONRY WALLS, IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO CO-ORDINATE AND SUPPLY ALL LINTELS REQUIRED THROUGH ALL WALLS (INCLUDING NON-LOAD BEARING WALLS) THROUGHOUT THE PROJECT. UNLESS OTHERWISE DIRECTED, LINTELS SHALL CONFORM TO THE ABOVE REQUIREMENTS.
9. REFER ALSO TO TYPICAL DETAILS.

STRUCTURAL STEEL NOTES

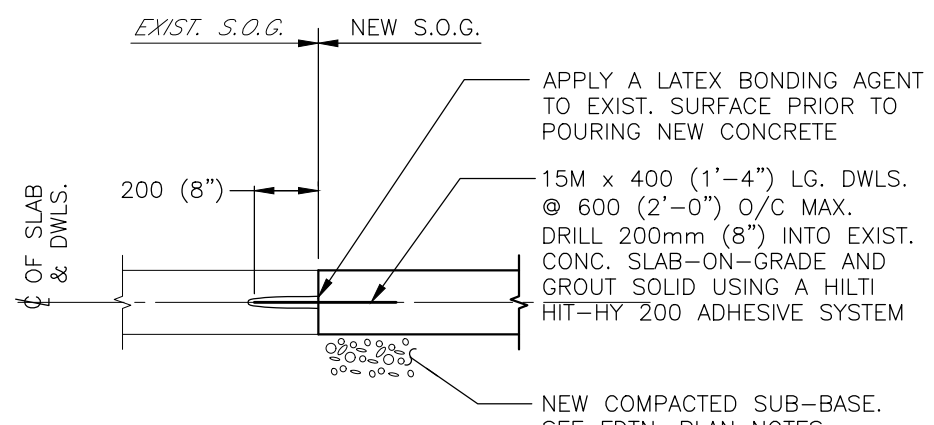
- 1.0 GENERAL
- 1.1 STRUCTURAL STEEL CONNECTIONS SHALL CONFORM TO CSA STANDARD CAN/CSA S16-14 (LIMIT STATES DESIGN) & SHALL BE DESIGNED BY A LICENSED PROFESSIONAL ENGINEER EXPERIENCED IN THIS TYPE OF WORK.
- 1.2 REFER ALSO TO GENERAL NOTES AND NOTES UNDER PLANS.
- 1.3 WELDING SHALL CONFORM TO CSA STANDARD W59-13 AND BE PERFORMED BY A FABRICATOR CERTIFIED TO CSA W47.1-09 (R2014).
- 1.4 BEAM CONNECTIONS SHALL BE DESIGNED FOR A MINIMUM OF 50% OF THE BEAM SHEAR CAPACITY UNLESS OTHERWISE NOTED, & IN NO CASE BE LESS THAN THE LOADS SHOWN ON OR IMPLIED BY THE DRAWINGS.
- 2.0 PRODUCTS
- 2.1 ALL STRUCTURAL STEEL MEMBERS SHALL CONFORM TO CAN/CSA G40.20-13/G40.21-13. ROLLED SECTIONS, PLATES, S&C RODS, STRAP ANCHORS & BARS, EXCEPT WIDE FLANGE BEAMS SHALL BE TYPE 350W AND HOLLOW STRUCTURAL AND WIDE FLANGE BEAMS SECTIONS SHALL BE TYPE 350W, CLASS H FOR SQUARE HSS & CLASS C FOR ROUND HSS.
- 2.2 BOLTS, NUTS & WASHERS FOR CONNECTIONS TO CONFORM TO ASTM A325-14 UNLESS NOTED.
- 2.3 ANCHOR BOLTS, NUTS & WASHERS FOR BASE PLATES, BEARING PLATES & WELD PLATES TO CONFORM TO ASTM A307-14 UNLESS NOTED.
- 2.4 WELDING MATERIALS TO CONFORM TO CSA W48-14 (SERIES).
- 2.5 PRIMER PAINT TO CONFORM TO CGSB 1.40-M89 OR CISC/CPMA 2-75.
- 3.0 EXECUTION
- 3.1 FABRICATION, HANDLING & ERECTION TO CONFORM TO CAN/CSA S16-14.
- 3.2 PROVIDE A MINIMUM OF 2-12mm (1/2") DIAMETER BY 250 (10") LONG WALL ANCHORS FOR ALL BEAM WALL PLATES ON MASONRY, OR AN APPROVED EQUAL, UNLESS OTHERWISE NOTED. BEAMS TO BE WELDED TO BEARING PLATES.
- 3.3 PROVIDE ADJUSTABLE ANCHORS TO ALL STEEL TO BE BUILT INTO, ABUTTED BY, OR FACED WITH MASONRY (REFER ALSO TO DETAILS IF SHOWN). SPACING OF ANCHORS TO BE:
1. FOR VERTICAL SPACING: 600 (24") MAX. CENTRES
2. FOR HORIZONTAL SPACING: 10 TIMES WALL THICKNESS* MAX. 2000 (6'-8") CENTRES
- (* NOTE, USE BACK-UP WYTHE ONLY FOR CAVITY WALLS.)
3. WHERE STEEL PROVIDES LATERAL BRACING ONLY TO MASONRY (IE. DOES NOT SUPPORT MASONRY) ANCHORS SHALL PERMIT DIFFERENTIAL VERTICAL MOVEMENT BETWEEN STRUCTURAL MEMBER & MASONRY.
- 3.4 CLEAN, PREPARE SURFACES AND SHOP PRIME STRUCTURAL STEEL WITH ONE COAT OF SPECIFIED PRIMER PAINT IN ACCORDANCE WITH CSA CAN3-S16-14, EXCEPT WHERE MEMBERS ARE TO BE ENCASED IN CONCRETE. FIELD "TOUCH-UP" BOLTS, WELDS, BURNED OR SCRAPPED SURFACES AFTER ERECTION.
- 3.5 PROVIDE ALL NECESSARY TEMPORARY BRACING TO KEEP STRUCTURE SAFE AND PLUMB. BRACING SHOWN ON STRUCTURAL DRAWINGS IS PERMANENT FOR FINISHED BUILDING ONLY.
- 3.6 CO-ORDINATE WITH MECHANICAL & ELECTRICAL CONSULTANTS & SUB-TRADES WHOSE WORK MAY EFFECT DETAILING, FABRICATION & ERECTION OF THE STEEL STRUCTURE.
- 3.7 TOLERANCES: VARIATION FROM PLUMB & LEVEL EXTERIOR COLUMNS, COLUMNS AT ELEVATOR SHAFTS & SPANDREL BEAMS INCLUDING ANGLES: 1:1000 MAX 25mm (1/8" IN 10'-0" MAX. 1") OTHER PIECES: 1:500 (1/4" IN 10'-0")
- 3.8 NO HOLES OTHER THAN THOSE SHOWN ON REVIEWED SHOP DRAWINGS SHALL BE MADE IN ANY STEEL MEMBER WITHOUT WRITTEN PERMISSION OF THE STRUCTURAL CONSULTANT.
- 4.0 QUALITY CONTROL
- 4.1 SEE GENERAL NOTES, NOTES UNDER PLANS, AND/OR SPECIFICATION FOR INSPECTION & TESTING REQUIREMENTS.



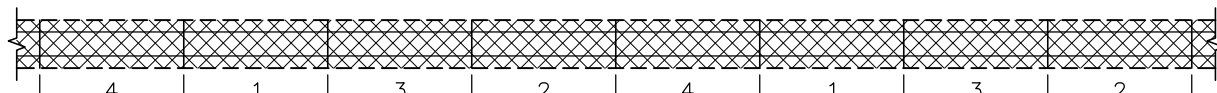
TYPICAL ELEVATION OF ADJACENT FOOTINGS & EXCAVATIONS

GENERAL NOTES

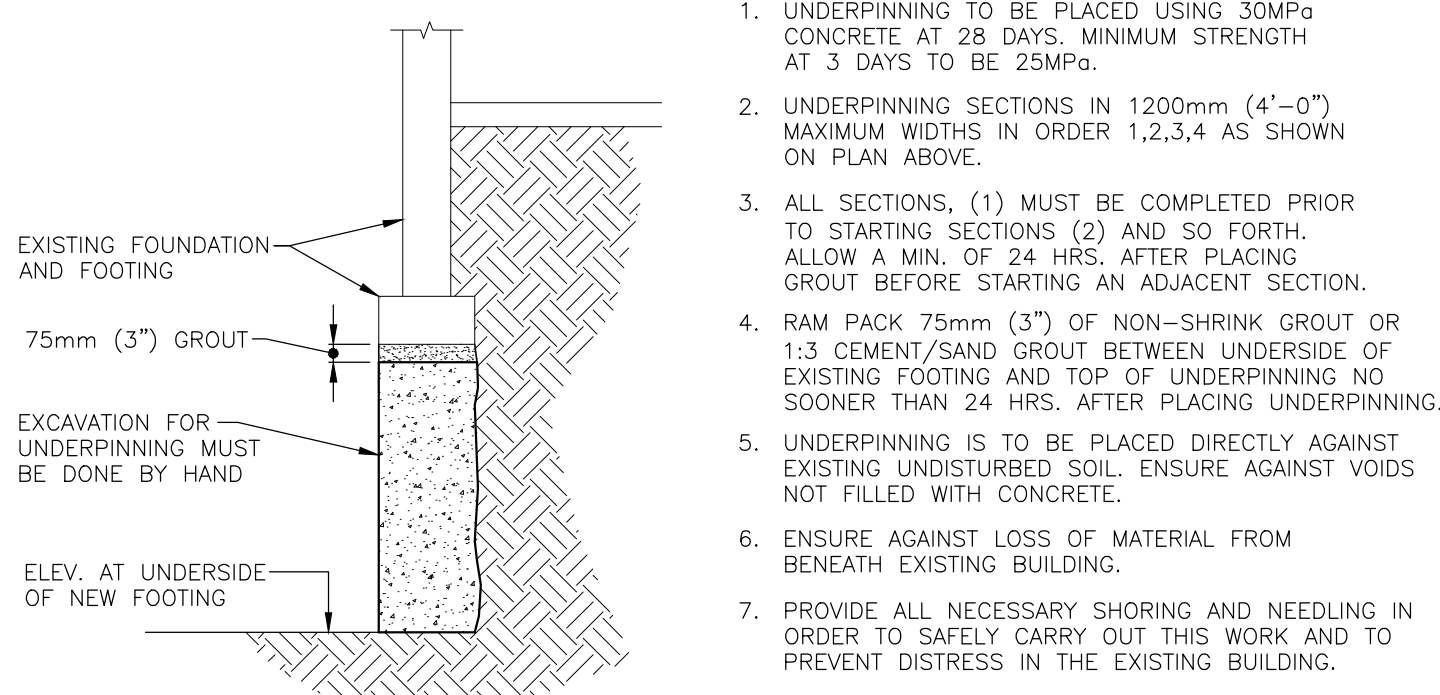
- 1.0 GENERAL
- 1.1 DESIGN AND CONSTRUCTION IS TO CONFORM TO THE REQUIREMENTS OF THE ONTARIO BUILDING CODE. REFER ALSO TO TYPICAL DETAILS, NOTES UNDER PLANS & SCHEDULES ON THE STRUCTURAL DRAWINGS, AND TO THE SPECIFICATION. ALL CODES, MANUALS, STANDARDS AND SPECIFICATIONS REFERRED TO SHALL BE THE LATEST EDITIONS INCLUDING ALL REVISIONS AND ADDENDA. ALL DIMENSIONS, OTHER THAN PURELY STRUCTURAL DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS MUST BE CHECKED AGAINST THE ARCHITECTURAL DRAWINGS AND ANY INCONSISTENCIES REPORTED TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK. STRUCTURAL DRAWINGS MUST NOT BE SCALED.
- 1.2 REFER TO ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR LOCATIONS AND SIZES OF OPENINGS, TRENCHES, PITS, SUMPS, EQUIPMENT, SLEEVES, DEPRESSIONS, GROOVES AND CHAMFERS NOT INDICATED ON THE STRUCTURAL DRAWINGS. UNLESS SPECIFICALLY NOTED OTHERWISE, THE ABOVE ITEMS WHERE SHOWN ON THE STRUCTURAL DRAWINGS ARE INDICATED ONLY APPROXIMATELY AS TO SIZE AND LOCATION.
- 1.3 UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS, NO PROVISION HAS BEEN MADE IN THE DESIGN FOR CONDITIONS OCCURRING DURING CONSTRUCTION. THE CONTRACTOR IS TO PROVIDE ALL NECESSARY BRACINGS AND SHORING REQUIRED FOR STRESSES AND INSTABILITY OCCURRING FROM ANY CAUSE DURING CONSTRUCTION. THE CONTRACTOR SHALL ACCEPT FULL RESPONSIBILITY FOR ALL SUCH MEASURES. IT SHALL ALSO BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL NECESSARY BRACINGS, SHORINGS, SHEET PILING OR OTHER TEMPORARY SUPPORTS TO SAFEGUARD ALL EXISTING OR ADJACENT STRUCTURES EFFECTED BY THIS WORK.
- 2.0 SHOP DRAWINGS, PLACING DRAWINGS & BAR LISTS:-
- 2.1 FOR ALL STRUCTURAL COMPONENTS SHOWN ON THE STRUCTURAL DRAWINGS, SUBMIT COPIES OF SHOP DRAWINGS AS DIRECTED, FOR REVIEW BY THE STRUCTURAL CONSULTANT. SHOP DRAWINGS TO SHOW COMPLETE INFORMATION FOR THE FABRICATION AND ERECTION OF THE STRUCTURAL COMPONENTS.
- 2.2 REVIEW BY THE STRUCTURAL CONSULTANT SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR SEEING THAT THE WORK IS COMPLETE, ACCURATE AND IN CONFORMITY WITH THE STRUCTURAL DRAWINGS AND SPECIFICATIONS.
- 3.0 INSPECTION AND TESTING:-
- 3.1 A SOILS CONSULTANT AND AN INDEPENDENT INSPECTION AND TESTING COMPANY ARE TO BE ENGAGED TO CARRY OUT THE FOLLOWING SERVICES:-
1. SOIL - REFER TO NOTES ON STRUCTURAL DRAWINGS AND ALSO TO THE SOIL REPORT.
2. FILL UNDER SLABS-ON-GRADE - CONFIRM THAT FILL MATERIAL USED IS SATISFACTORY AND THAT THE REQUIRED DEGREE OF COMPACTION HAS BEEN ATTAINED
3. CAST-IN-PLACE & CONCRETE - ROUTINE INSPECTION OF MATERIALS, INCLUDING SLUMP, CYLINDER AND AIR ENTRAINMENT TESTS & REINFORCING ROD TESTS WHEN REQUIRED OR DIRECTED IN ACCORDANCE WITH CAN/CSA A23.2-14.
4. STRUCTURAL STEEL - ROUTINE SHOP AND FIELD INSPECTION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF CAN/CSA S16-14.
5. STEEL DECK - SEE STEEL DECK NOTES.
6. MASONRY - WHEN REQUIRED OR DIRECTED, CONCRETE BLOCKS SHALL BE TESTED IN ACCORDANCE WITH CSA A165 SERIES-14; BRICKS IN ACCORDANCE WITH CSA A165.2-14; AND MORTAR AND/OR GROUT IN ACCORDANCE WITH CSA A179-14.
- 3.2 ALL INSPECTION AND TESTING SERVICES ARE TO BE PERFORMED BY COMPANIES CERTIFIED BY THE CANADIAN STANDARDS ASSOCIATION AND FOR WELDING, INSPECTORS ARE TO BE CERTIFIED BY THE CANADIAN WELDING BUREAU.
- 4.0 FOUNDATIONS
- 4.1 REFER TO NOTES UNDER FOUNDATION PLANS. ALL EXTERIOR FOOTINGS OR OTHER FOOTINGS EXPOSED TO FREEZING IN THE FINISHED BUILDING SHALL BE FOUND AT A MINIMUM OF 1200mm (4'-0") BELOW FINISHED GRADE, UNLESS OTHERWISE NOTED. FOOTINGS EXPOSED TO FROST ACTION DURING CONSTRUCTION SHALL BE PROTECTED BY A MINIMUM OF 1200mm (4'-0") OF EARTH OR ITS EQUIVALENT SUFFICIENT TO PREVENT FREEZING.
- 4.2 THE LINE OF SLOPE BETWEEN ADJACENT EXCAVATIONS FOR FOOTINGS OR ALONG STEPPED FOOTINGS SHALL NOT EXCEED A RISE OF 7 IN A RUN OF 10, MAXIMUM STEP APPROX. 600mm (2'-0").
- 4.3 ALL DEPTHS AND FOOTING ELEVATIONS SHOWN ON THE STRUCTURAL DRAWINGS ARE BASED UPON INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THE STRUCTURAL DRAWINGS.
- 4.4 IF ACTUAL JOB SITE OR SOIL CONDITIONS VARY FROM THOSE ASSUMED, THEN WRITTEN DIRECTIONS MUST BE OBTAINED FROM THE STRUCTURAL CONSULTANT BEFORE PROCEEDING WITH THE WORK.
- 4.5 KEEP EXCAVATIONS CONTINUOUSLY DRY BEFORE CONCRETE IS PLACED. IF THE SOIL IS SOFTENED BY WATER, THE EXCAVATION SHALL BE EXTENDED BELOW THE SOFTENED MATERIAL AND THE BOTTOM OF THE FOOTINGS LOWERED TO SUIT.
- 5.0 BACKFILLING AND COMPACTION:-
- 5.1 SLABS-ON-GRADE AND ALL STRUCTURAL ELEMENTS FRAMING INTO WALLS WHICH RETAIN EARTH MUST BE IN PLACE BEFORE BACKFILLING.
- 5.2 AT FOUNDATION WALLS WITH GRADE BOTH SIDES, UNLESS ADEQUATELY SHORED, BACKFILL & COMPACT EACH SIDE OF WALL SIMULTANEOUSLY.
- 5.3 UNDER SLABS-ON-GRADE, REMOVE SOFT SPOTS, ORGANIC AND FOREIGN MATTER IN THE SUB-GRADE. (WHERE SUB-GRADE CONSISTS OF COMPACTED FILL, REFER TO SPECIFIC NOTES ON THE DRAWINGS).
- 5.4 BACKFILL UNDER SLAB-ON-GRADE, IN FOOTING EXCAVATIONS AND IN TRENCHES ONLY WITH APPROVED MATERIAL UNLESS SPECIFICALLY NOTED OTHERWISE, BACKFILLING SHALL BE CARRIED OUT IN MAXIMUM OF 200mm (8") THICK LIFTS OF LOOSE FILL EACH COMPACTED TO A MINIMUM OF 98% STANDARD PROCTOR MAXIMUM DRY DENSITY.
- 5.5 UNLESS OTHERWISE NOTED, PROVIDE IMMEDIATELY UNDER SLABS-ON-GRADE A MINIMUM OF 200mm (8") OF COMPACTED (MTC) GRANULAR 'B' MATERIAL. COMPACTION TO ACHIEVE A MINIMUM OF 98% STANDARD PROCTOR MAXIMUM DRY DENSITY.



TYPICAL LOAD TRANSFER DETAIL BETWEEN EXISTING AND NEW CONCRETE FOR S.O.G.



TYPICAL UNDERPINNING PLAN

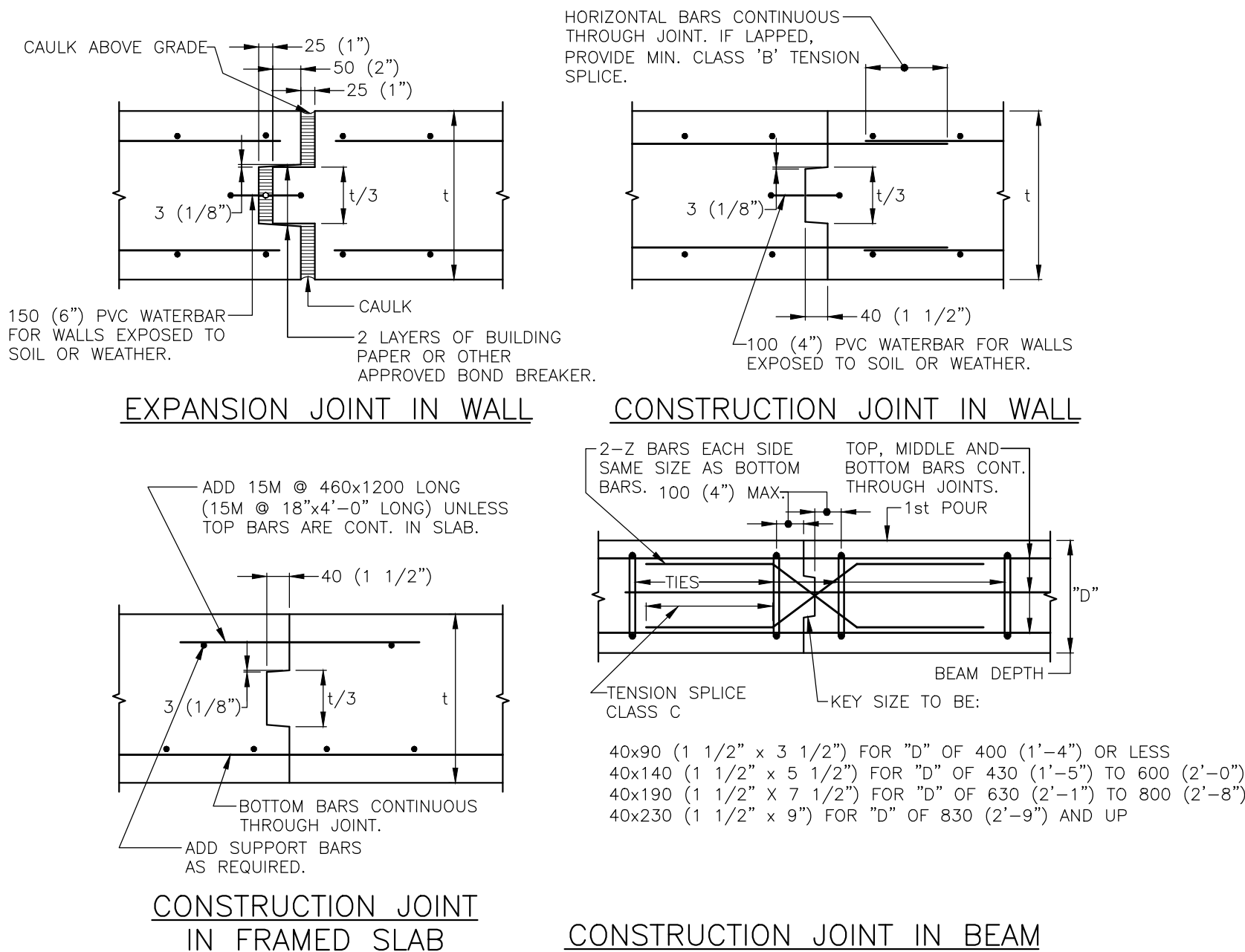


UNDERPINNING NOTES:

1. UNDERPINNING TO BE PLACED USING 30MPa CONCRETE AT 28 DAYS. MINIMUM STRENGTH AT 3 DAYS TO BE 25MPa.
2. UNDERPINNING SECTIONS IN 1200mm (4'-0") MAXIMUM WIDTHS IN ORDER 1,2,3,4 AS SHOWN ON PLAN ABOVE.
3. ALL SECTIONS, (1) MUST BE COMPLETED PRIOR TO STARTING SECTIONS (2) AND 30 FORTH. ALLOW A MIN. OF 24 HRS. AFTER PLACING GROUT BEFORE STARTING AN ADJACENT SECTION.
4. RAM PACK 75mm (3") OF NON-SHRINK GROUT OR 1:3 CEMENT/SAND GROUT BETWEEN UNDERSIDE OF EXISTING FOOTING AND TOP OF UNDERPINNING. NO SOONER THAN 24 HRS. AFTER PLACING UNDERPINNING.
5. UNDERPINNING IS TO BE PLACED DIRECTLY AGAINST EXISTING UNDISTURBED SOIL. ENSURE AGAINST VOIDS NOT FILLED WITH CONCRETE.
6. ENSURE AGAINST LOSS OF MATERIAL FROM BENEATH EXISTING BUILDING.
7. PROVIDE ALL NECESSARY SHORING AND NEEDLING IN ORDER TO SAFELY CARRY OUT THIS WORK AND TO PREVENT DISTRESS IN THE EXISTING BUILDING.
8. DETAILS SHOWN ARE FOR ASSUMED CONDITIONS, ANY VARIATIONS MUST BE REPORTED TO THE STRUCTURAL CONSULTANT BEFORE PROCEEDING.

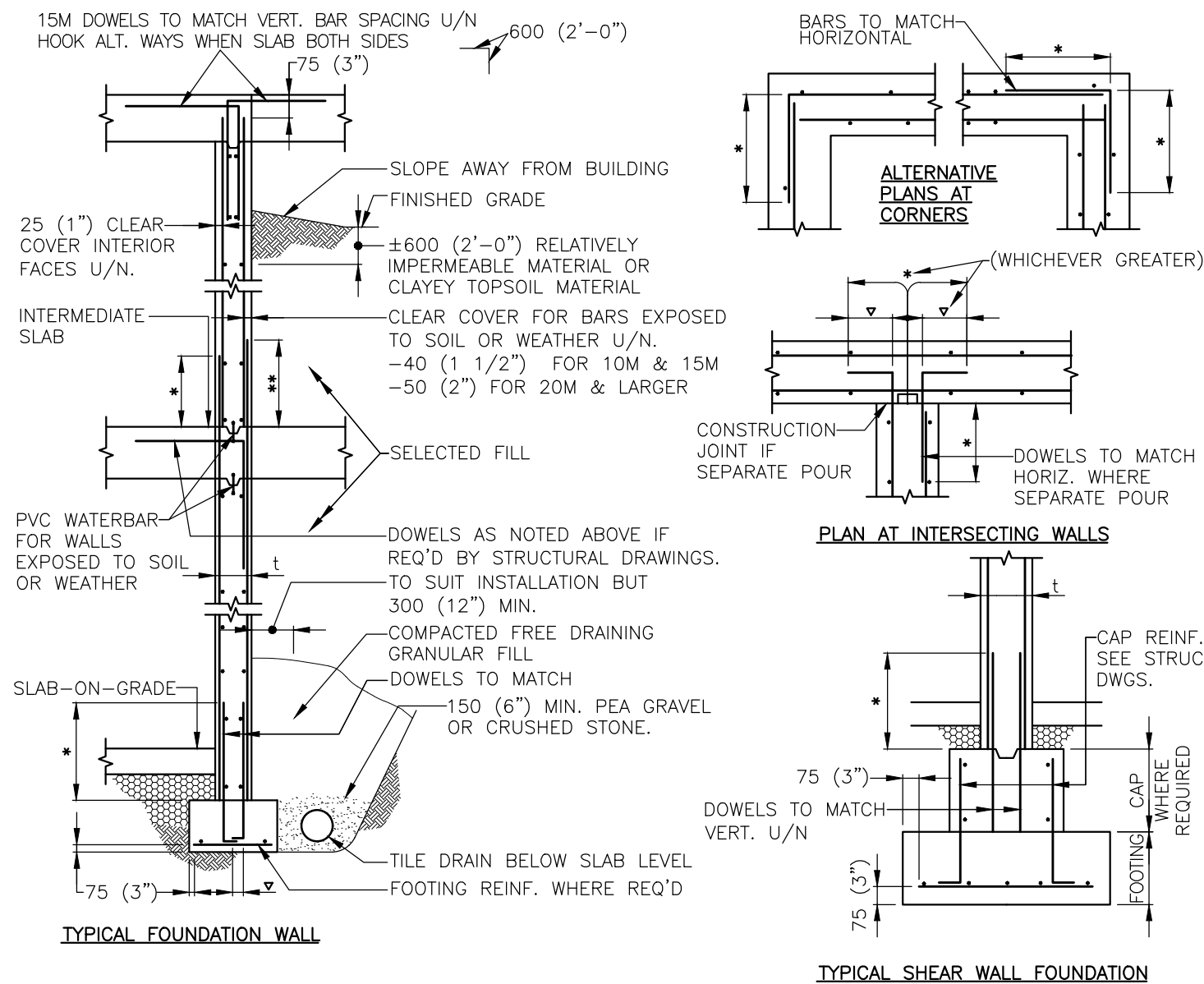
GENERAL NOTES		
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No.	DD/MM/YY	DESCRIPTION
REVISIONS		
LANHACK Steelcon Inc. Consulting Engineers 1709 Upper James Street Hamilton, ON L9B 1K7 Tel: (905) 777-1454 Fax: (905) 336-8142		
ELEVATOR FOR BISHOP TONNOS CATHOLIC SECONDARY SCHOOL		
100 PANABAKER DR. ANCASTER ONTARIO		
TYPICAL NOTES AND DETAILS		
SCALE	DRAWN	PROJECT No.
N.T.S.	FG/VE	26052-R1
DATE	CHECKED	DRAWING No.
MAY 2026	YI	S3-1

FILENAME: M:\2026 STEELCON\26052-R1 - Bishop Tonnos CSS - Elevator\26052R1_S3_TYPICAL NOTES AND DETAILS.dwg
PLOTDATE: Jun 29, 2026 11:36am



- CONSTRUCTION JOINTS SHALL BE MADE AND LOCATED SO AS NOT TO IMPAIR THE STRENGTH OF THE STRUCTURE. IF JOINTS ARE NOT SPECIFICALLY LOCATED AND/OR THERE IS ANY DOUBT CONCERNING THEIR LOCATION, THE CONTRACTOR MUST CONSULT WITH THE STRUCTURAL CONSULTANT.
- WHERE A CONSTRUCTION JOINT IS TO BE MADE, THE SURFACE OF THE SET CONCRETE IS TO BE THOROUGHLY CLEANED OF ALL FOREIGN MATTER AND LAITANCE, SATURATED WITH WATER AND BE LEFT IN A DAMP CONDITION WITH NO FREE WATER ON THE SURFACE IMMEDIATELY BEFORE PLACING ADJACENT CONCRETE.
- REINFORCING PROJECTING THROUGH A JOINT SHALL BE THOROUGHLY CLEANED OF LOOSE FLAKY RUST, MUD, OIL, DRIED CONCRETE OR OTHER COATINGS WHICH WOULD DESTROY OR REDUCE BOND.
- FOR FRAMED SLABS & BEAMS, FORMS & SHORES TO REMAIN IN PLACE ON BOTH SIDES OF JOINT UNTIL CONCRETE IN LAST POUR HAS ACHIEVED ITS SPECIFIED DESIGN STRENGTH.
- FOR JOINTS IN SLAB-ON-GRADE SEE SEPARATE TYPICAL DETAIL.

JOINTS IN CONCRETE MEMBERS



NOTES:

- LAP HOR. WALL REINF. WITH CLASS 'B' BASIC TENSION SPLICE FOR 10M BARS AND CLASS 'C' BASIC TENSION SPLICE FOR 15M & LARGER U/N.
- PROVIDE A MIN. OF 2-15M BARS IN ALL HEADS, SILLS & JAMBS OF OPENING THROUGH CONC. WALLS, SUCH BARS TO EXTEND A MIN. OF 600 (2'-0") BEYOND EDGE OF OPENING.
- WALLS & FOOTINGS ARE DESIGNED ASSUMING BOTH FACES ARE FORMED. IF WALL &/OR FOOTINGS ARE TO BE PLACED DIRECTLY AGAINST SOIL (I.E.: NO FORM USED), PERMISSION & INSTRUCTIONS MUST BE OBTAINED FROM THE STRUCTURAL CONSULTANT.

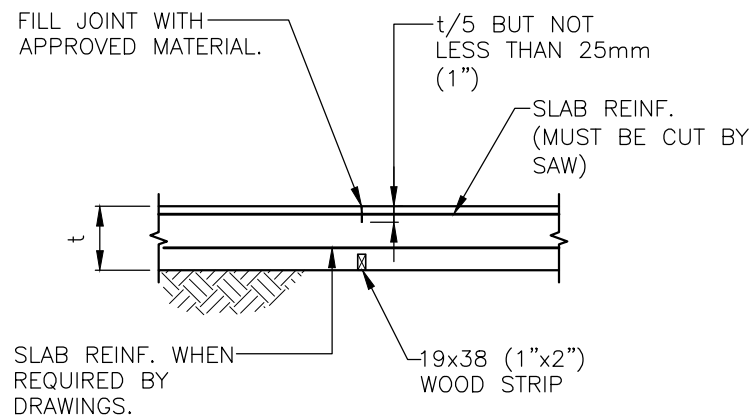
MINIMUM REINFORCEMENT FOR CONCRETE WALLS TO BE AS FOLLOWS UNLESS NOTED				
t	150	200	250	300
VERT.	10Ø440	10Ø460	10Ø460	10Ø460
HORIZ.	10Ø320	10Ø460	10Ø400	10Ø320
VERT.	10Ø17	10Ø18	10Ø18	10Ø18
HORIZ.	10Ø12	10Ø18	10Ø15	10Ø12

- COMPRESSION LAP SPLICE MIN. 300 (12") U/N.
- CLASS C BASIC TENSION SPLICE
- STANDARD HOOK MIN. 150 (6") U/N.

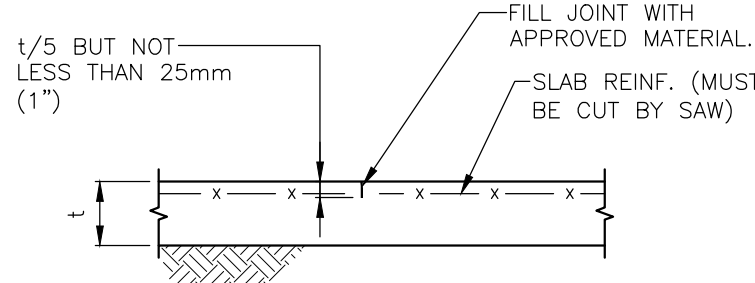
TYPICAL CONCRETE WALLS

NON LOAD BEARING BLOCK WALL LINTELS						
CLEAR SPAN T. NOMINAL	300 TO 550 (12" TO 22")	550 TO 1220 (22" TO 4'-0")	1220 TO 1830 (4'-0" TO 6'-0")	1830 TO 2440 (6'-0" TO 8'-0")	2440 TO 3080 (8'-0" TO 10'-0")	3080 TO 3660 (10'-0" TO 12'-0")
100	75x8	1L-90x90x6	1L-125x90x8 (LLV)	1L-125x90x8 (LLV)	N/A	N/A
(4")	3"x5/16"	1L-3 1/2x3 1/2x1/4 (LLH)	1L-5x3 1/2x5/16 (LLV)	1L-5x3 1/2x5/16 (LLV)	N/A	N/A
150	125x8	1L-100x90x6 (LLH)	1L-125x125x8	1L-125x125x8	1L-125x125x8	N/A
(6")	5"x5/16"	1L-4x3 1/2x1/4 (LLV)	1L-5x5x5/16	1L-5x5x5/16	1L-5x5x5/16	N/A
200	175x8	2Ls-90x90x6	2Ls-125x90x8 (LLV)	2Ls-125x90x8 (LLV)	W200x27 + 175x8	W200x27 + 175x8
(8")	7"x5/16"	2Ls-3 1/2x3 1/2x1/4	2Ls-5x3 1/2x5/16 (LLV)	2Ls-5x3 1/2x5/16 (LLV)	W8x18 + 7"x1/4"	W8x18 + 7"x1/4"
250	225x8	2Ls-100x90x6 (LLH)	2Ls-100x100x8	2Ls-150x100x8 (LLV)	W200x27 + 225x8	W200x27 + 225x8
(10")	9"x5/16"	2Ls-4x3 1/2x1/4 (LLH)	2Ls-4x4x5/16	2Ls-6x4x5/16 (LLV)	W8x18 + 9"x1/4"	W8x18 + 9"x1/4"
300	275x8	3Ls-90x90x6	3Ls-125x90x8 (LLV)	N/A	N/A	N/A
(12")	11"x5/16"	3Ls-3 1/2x3 1/2x1/4	3Ls-5x3 1/2x5/16 (LLV)	N/A	N/A	N/A
100	N/A	2Ls-45x45x5	2Ls-64x35x6 (LLV)	N/A	N/A	N/A
(4")	N/A	2Ls-1 3/4x1 3/4x3/16	2Ls-2 1/2x1 1/2x1/4 (LLV)	N/A	N/A	N/A
150	N/A	2Ls-65x50x6 (LLV)	2Ls-65x65x6	2Ls-90x85x8 (LLV)	N/A	N/A
(6")	N/A	2Ls-2 1/2x2 1/4x1/4 (LLV)	2Ls-2 1/2x2 1/2x1/4 (LLV)	2Ls-3 1/2x2 1/2x1/4 (LLV)	N/A	N/A

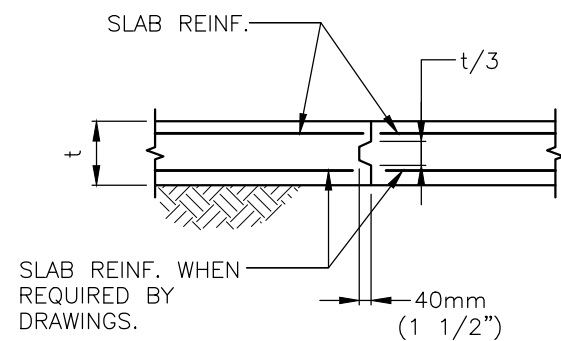
- ALTERNATIVES WHERE EXPOSED FACE OF SINGLE ANGLE IS NOT ACCEPTABLE:
 1. REINFORCED MASONRY LINTEL BLOCKS (SEE LINTEL NOTES)
 2. DOUBLE ANGLES (SEE ABOVE) (CUT BLOCKS TO SUIT)



SAWCUT CONTROL JOINT FOR SLAB t GREATER THAN 150mm (6")



SAWCUT CONTROL JOINT FOR SLAB t UP TO 150mm (6")



CONTROL JOINT

REINF. MUST NOT CONTINUE THROUGH JOINT

USE SAME DETAILS WHEN SLAB IS REQUIRED WITH POLYPROPYLENE FIBERS & MESH IS OMITTED.

SLAB ON GRADE DETAILS

GENERAL NOTES

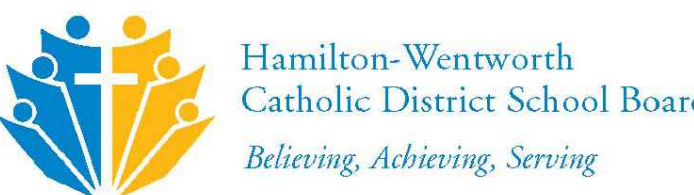
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Consulting Engineers
1709 Upper James Street
Hamilton, ON L9B 1K7
Tel: (905) 777-1454
Fax: (905) 336-8142

ELEVATOR FOR BISHOP TONNOS CATHOLIC SECONDARY SCHOOL

100 PANABAKER DR.
ANCASTER
ONTARIO

TYPICAL NOTES AND DETAILS

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