010000 GENERAL

1. CONFORM TO THE REQUIREMENTS OF THE ONTARIO BUILDING CODE 2006, AND ANY APPLICABLE ACTS OF AUTHORITY HAVING JURISDICTION.
2. READ STRUCTURAL DRAWINGS IN CONJUNCTION WITH THE SPECIFICATIONS AND ALL OTHER CONTRACT DOCUMENTS.
3. BEFORE PROCEEDING WITH WORK, CHECK ALL THE DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS WITH THE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AND REPORT DISCREPANCIES TO THE CONSULTANT.
4. REFER TO THE ARCHITECTURAL AND OTHER DRAWINGS FOR LOCATIONS AND DIMENSIONING OF OPENINGS AND SLEEVES NOT SHOWN ON THE STRUCTURAL DRAWINGS. HOWEVER, OBTAIN THE CONSULTANTS PRIOR APPROVAL BEFORE INSTALLING OPENINGS, SLEEVES, ETC. WHICH ARE NOT SHOWN ON STRUCTURAL DRAWINGS.
5. SEE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR LOCATIONS OF PITS, BASES, SUMPS, TRENCHES, DEPRESSIONS, GROOVES, CURBS, CHAMFERS AND SLOPES NOT SHOWN ON STRUCTURAL DRAWINGS.
6. HORIZONTAL AND VERTICAL DESIGN LOADS ARE NOTED. THEY SHALL NOT BE EXCEEDED DURING CONSTRUCTION.
7. TYPICAL STRUCTURAL DETAILS SHALL GOVERN THE WORK. IF DETAILS DIFFER ON THE DRAWINGS, THE MOST STRINGENT SHALL GOVERN.
8. ALL TEMPORARY WORKS INCLUDING SHORING ARE TO BE PROVIDED BY THE CONTRACTOR.
9. SEE SPECIFICATIONS FOR DETAILED REQUIREMENTS.

010001 DESIGN NOTES

1. THE BUILDING IS DESIGNATED AS BELONGING TO THE IMPORTANCE CATEGORY, AS DEFINED IN THE OBC 2006.
2. ALL REINFORCED CONCRETE ELEMENTS HAVE BEEN DESIGNED IN ACCORDANCE WITH CSA STANDARD A23.3-04.
3. ALL STRUCTURAL STEEL ELEMENTS HAVE BEEN DESIGNED IN ACCORDANCE WITH CAN/CSA-S16-01.
4. ALL STRUCTURAL TIMBER ELEMENTS HAVE BEEN DESIGNED IN ACCORDANCE WITH CSA STANDARD O86-01.
5. ALL STRUCTURAL MASONRY ELEMENTS HAVE BEEN DESIGNED IN ACCORDANCE WITH CSA STANDARD S304.1-04.
6. LATERAL FORCES ON STRUCTURAL FRAME
   a. THE LATERAL FORCES ARE RESISTED BY THE WOOD FRAMED WALLS AND CAVITY MASONRY WALLS.
7. LATERAL FORCES ON FOUNDATION WALLS
   a. WALLS RETAINING EARTH ARE DESIGNED TO SAFELY WITHSTAND A HORIZONTAL PRESSURE AT ANY DEPTH (h) GIVEN BY THE EXPRESSION: P = K (? h + q), WHERE
   P IS THE PRESSURE EXERTED HORIZONTALLY
   h IS THE DEPTH BELOW GRADE
   ? IS THE UNIT WEIGHT OF SOIL
   q IS THE SURCHARGE ON THE GROUND SURFACE
   b. FOUNDATION AND OTHER WALLS RETAINING EARTH HAVE BEEN DESIGNED FOR SURCHARGE OF .
   c. THE WALLS HAVE BEEN DESIGNED ASSUMING THAT THERE IS FREE-DRAINING BACKFILL, OR THAT OTHER PROVISIONS HAVE BEEN MADE, SUCH THAT THE WALLS ARE NOT SUBJECT TO HYDROSTATIC PRESSURE.
8. SNOW LOADS ON ROOFS
   a. THE ROOFS HAVE BEEN DESIGNED WITH SS = [1.8 kPa] AND SR = .
   b. THE LIMIT STATES IMPORTANCE FACTORS ARE, IS-ULS = , IS-SLS = [0.75].
   c. ADDITIONAL SNOW ACCUMULATIONS ADJACENT TO HIGHER WALLS, ROOFS AND MECHANICAL UNITS ARE INDICATED ON THE DRAWINGS.
9. LIVE AND OTHER LOADS
   a. SEE NOTES BELOW FLOOR PLANS.
   b. THE INDICATED LIVE LOADS HAVE NOT BEEN REDUCED AS PER TRIBUTARY AREA CONSIDERATIONS OF THE ONTARIO BUILDING CODE.
10. FUTURE EXTENSIONS
   a. THE STRUCTURE HAS NOT BEEN DESIGNED FOR ANY FUTURE EXTENSIONS.

030000 CONCRETE

1. MATERIALS
   a. CONCRETE
   i) CONFORM TO THE REQUIREMENTS OF CSA STANDARD A23.1-04 AND THE FOLLOWING FOR STRENGTH, SLUMP, WATER-TO-CEMENTING MATERIALS CONTENT AND AIR CONTENT.
   ii) NOMINAL MAXIMUM SIZE OF AGGREGATE SHALL BE 20 mm.

LOCATION OR MEMBER	EXPOSURE CLASS PER A23.1	CONCRETE STRENGTH f'c (MPa)	SLUMP* (mm)	MAXIMUM W/C RATIO	AIR** CONTENT
ELEVATOR PIT WALLS, FOOTINGS AND CAPS		25	80		
PIERS ADJACENT TO PAVING	C-1	35	80	0.40	5%-8%
FDN WALLS	F-2	25	80	0.55	4%-7%
SLABS ON GRADE		20	80		

TOLERANCE FOR SLUMP SHALL BE ±20 mm FOR SPECIFIED SLUMP 80 mm OR LESS AND ±30 mm FOR SPECIFIED SLUMP BETWEEN 80 mm AND 170 mm

   a. REINFORCEMENT:
   i) CONFORM TO THE REQUIREMENTS OF CSA STANDARD G30 SERIES.
   ii) REINFORCING BARS SHALL HAVE A MINIMUM YIELD STRENGTH fy = 400 MPa, AND WELDED WIRE FABRIC SHALL HAVE A MINIMUM YIELD STRENGTH OF fy = 386 MPa, SUPPLY IN FLAT SHEETS.
2. EXECUTION
   a. SLAB ON GRADE
   i) PLACE SLABS ON GRADE ON MATERIAL CAPABLE OF SUSTAINING WITHOUT SETTLEMENT RELATIVE TO THE BUILDING FOOTINGS.
   ii) BEFORE PLACING SLAB, PLACE 200 mm OF 20 mm MAXIMUM SIZE CLEAR CRUSHED STONE OVER THE SUB GRADE. THOROUGHLY ROLL AND CONSOLIDATE TO THE LINES AND LEVELS REQUIRED.
   b. CONCRETE AND REINFORCEMENT
   i) CONSTRUCTION JOINTS:
   * PROVIDE 38x89 KEYS AT CONSTRUCTION JOINTS UNLESS NOTED OTHERWISE.
   ii) CONCRETE COVER TO REINFORCEMENT: CONFORM TO THE REQUIREMENTS OF CSA STANDARD A23.1-04 AND THE FOLLOWING FOR COVER TO REINFORCEMENT (mm[CAZ1]):
   COVER REQUIREMENTS AS APPLICABLE:
   * CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: i. 35M BARS AND SMALLER: 75mm
   * CONCRETE EXPOSED TO CHLORIDES (C-1, C-3) (DOES NOT INCLUDE CONCRETE PROTECTED BY A WATERPROOFING MEMBRANE): i. 30M BARS AND SMALLER: 60mm
   * EXPOSED TO EARTH AND WEATHER (F-1, F-2) i. 25M AND SMALLER: 40mm

031000 FOUNDATIONS

1. A SOIL INVESTIGATION HAS BEEN DONE BY TERRAPROBE AS REPORTED IN THEIR SOIL REPORT NO.1-08-3182, DATED 4 SEPT 2008. READ THIS REPORT, AND BE THOROUGHLY FAMILIARIZED WITH ITS FINDINGS.
2. FOUND ALL FOOTINGS ON NATURALLY CONSOLIDATED UNDISTURBED SOIL CAPABLE OF SAFELY SUSTAINING AN ULTIMATE BEARING VALUE OF 180kPa AND AN ALLOWABLE BEARING VALUE OF 120kPa.
3. FOUND FOOTINGS EXPOSED TO FREEZING BELOW THE LEVEL AT WHICH POTENTIAL DAMAGE RESULTING FROM FROST ACTION CAN OCCUR, BUT A MINIMUM OF BELOW FINISHED GRADE IF NOT NOTED TO BE FOUNDED LOWER.
4. THE LINE OF SLOPE BETWEEN ADJACENT FOOTINGS OR EXCAVATIONS OR ALONG STEPPED FOOTINGS SHALL NOT EXCEED A RISE OF 7 IN A RUN OF 10.
5. CARRY OUT BACKFILLING AGAINST FOUNDATION WALLS WHERE THERE IS GRADE ON BOTH SIDES IN SUCH A MANNER THAT THE LEVEL OF BACKFILLING ON ONE SIDE OF THE WALL IS NEVER MORE THAN 500 mm DIFFERENT FROM THE LEVEL ON THE OTHER SIDE OF THE WALL.

040000 MASONRY

1. MATERIALS
   a. ALL MASONRY UNITS SHALL COMPLY WITH THE REQUIREMENTS OF CSA STANDARD A371-04, MINIMUM NET AREA COMPRESSIVE STRENGTH, 15 MPa.
   b. GROUT FILL - MINIMUM 28-DAY COMPRESSIVE STRENGTH, 15 MPA
   c. MORTAR - CONFORM TO THE REQUIREMENTS OF CSA STANDARD A179-04, TYPE [DB2].
2. EXECUTION
   a. WHERE REINFORCING BARS, DOWELS, ANCHOR BOLTS, ETC. ARE SHOWN EMBEDDED IN MASONRY, BUILD THESE TIGHT INTO MASONRY VOIDS WITH GROUT FILL.
   b. BENEATH STEEL AND CONCRETE BEAMS AND COLUMNS, PROVIDE A MINIMUM DEPTH OF 400 mm OF 100 % SOLID MASONRY UNITS OR HOLLOW MASONRY UNITS FILLED SOLID, PROJECTING A MINIMUM OF 200 mm BEYOND THE EDGES OF BEARING PLATES, EXCEPT AS NOTED OTHERWISE.
   c. BENEATH SLABS, METAL OR TIMBER DECK, AND STEEL OR TIMBER JOISTS, PROVIDE A MINIMUM DEPTH OF 200 mm OF 100 % SOLID MASONRY UNITS OR HOLLOW MASONRY UNITS FILLED SOLID.
   d. BENEATH STEEL, CONCRETE OR REINFORCED MASONRY LINTELS PROVIDE A MINIMUM LENGTH OF 200 mm AND A MINIMUM DEPTH OF 200 mm OF 100 % SOLID MASONRY UNITS OR HOLLOW MASONRY UNITS FILLED SOLID.
   e. BUILD MASONRY TIGHT INTO WEBS OF ALL WALL BEARING STEEL BEAMS AT THEIR POINTS OF BEARING.
   f. WHERE 100% SOLID MASONRY UNITS ARE NOTED, THE MASONRY SHALL BE SET WITH FULLY FILLED JOINTS USING TYPE [DB3] MORTAR AS DEFINED IN CSA STANDARD A179-04.
3. LINTELS
   a. PROVIDE LINTELS OVER ALL OPENINGS OR RECESSES IN MASONRY WALLS, INCLUDING THOSE FOR MECHANICAL OR ELECTRICAL SERVICE OR EQUIPMENT. SEE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
   b. SEE TYPICAL DETAIL 0402 FOR LINTEL SIZES AND DETAILS UNLESS NOTED OTHERWISE.

050000 STRUCTURAL STEEL:

1. MATERIALS
   a. WIDE FLANGE SHAPES - CONFORM TO THE REQUIREMENTS OF CSA G40.21-04 GRADE 350W
   b. HSS MEMBERS - CONFORM TO THE REQUIREMENTS OF CSA G40.21-04 GRADE 350W, CLASS C[CAZ4].
   c. BOLTS, NUTS AND WASHERS - ASTM A325
   d. ALL OTHER - CONFORM TO THE REQUIREMENTS OF CSA G40.21-04 GRADE 300W
2. EXECUTION
   a. PROVIDE A MINIMUM BEARING OF 200 mm FOR ALL STEEL BEAMS BEARING ON MASONRY AND A MINIMUM OF 100 mm ON STRUCTURAL STEEL, UNLESS NOTED OTHERWISE.
   b. CENTRE BEARING PLATES UNDER BEAMS, OR AS NOTED.
   c. BEARING PLATE DIMENSION GIVEN FIRST INDICATES SIDE PARALLEL TO BEAM WEB.
   d. NO STRUCTURAL STEEL SHALL BE CUT WITHOUT THE PERMISSION OF THE CONSULTANT.
   e. PROVIDE FULL HEIGHT WEB STIFFENERS AT ALL BEAMS BEARING ON COLUMNS AND ALL BEAMS SUPPORTING COLUMNS. WEB STIFFENERS SHALL BE OF THE SAME SIZE AND THICKNESS AS THE COLUMN FLANGES AND SHALL ALIGN WITH THE FLANGES OF THE SUPPORTING COLUMN.

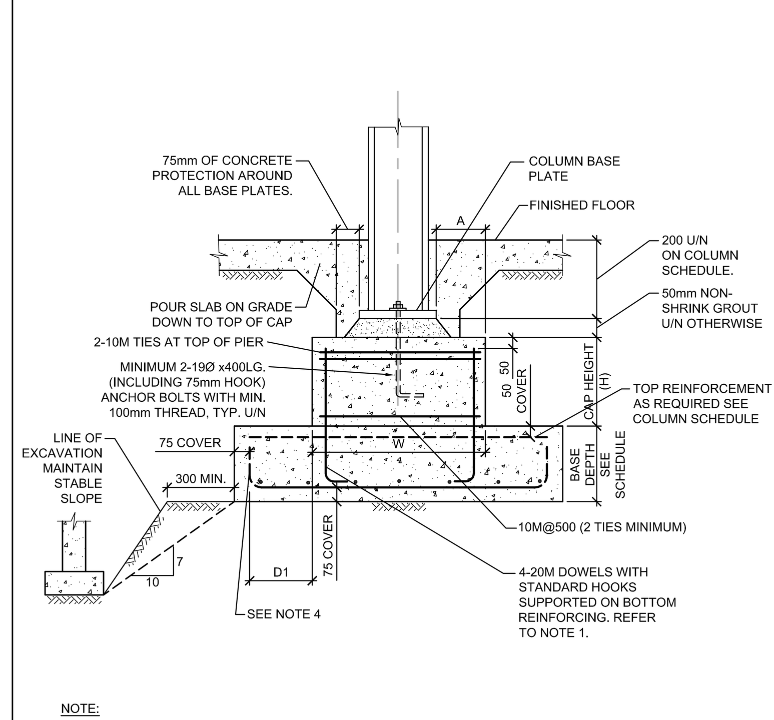
060000 WOOD

1. MATERIALS
   a. SAWN LUMBER
   i) CONFORM TO THE REQUIREMENTS OF CSA-O141-05
   ii) SPECIES - [DB5]
   iii) GRADE - [DB6]
   b. PLYWOOD SHEATHING
   i) CONFORM TO THE REQUIREMENTS OF CSA O121 AND CSA O151
   ii) FLOOR AND ROOF SHEATHING TO BE TONGUE AND GROOVE.
   iii) APPEARANCE GRADE -
   c. LAMINATED VENEER LUMBER (LVL)
   i) MICROLLAM AS MANUFACTURED BY WEYERHAEUSER OR APPROVED EQUIVALENT
   ii) BENDING MEMBERS PROPERTIES - E = 1.8x10^6 psi, Fb = 2,900 psi
   d. CONNECTIONS
   i) ALL LAG BOLTS, THRU BOLTS AND OTHER HARDWARE TO BE HOT DIPPED GALVANIZED
   ii) ALL LAG BOLTS SHALL HAVE SHARP THREADS FOR AT LEAST ONE-HALF THE TOTAL BOLT LENGTH, UP TO 152 mm (6") THREADED LENGTH. LAG BOLT WITH DULL THREADS, OR INSUFFICIENT THREADED LENGTH, WILL BE REJECTED OUTRIGHT.
   iii) UNLESS OTHERWISE APPROVED BY THE CONSULTANT, ALL NAILS ARE TO HAVE FULL ROUND HEADS; CLIPPED HEAD NAILS ARE NOT ACCEPTABLE.
2. EXECUTION
   a. DIMENSION LUMBER WITH SMALLER NOMINAL DIMENSION OF 2 INCHES ("2-BY-") PRESERVATIVE TREATED FOR EXTERIOR APPLICATIONS SHALL NOT BE INCISED. IF INCISED LUMBER IS TO BE USED, CONFIRM MEMBER SIZES WITH THE ENGINEER PRIOR TO CONSTRUCTION.
   b. MUST BEAR FULLY 38mm MINIMUM ON THE SUPPORT SURFACE. IF HANGERS ARE USED, THEY MUST ADEQUATELY SUPPORT THE FULL SHEAR CAPACITY OF THE MEMBER, UNLESS NOTED OTHERWISE.
   c. ENGINEERED WOOD TRUSSES
   i) UNLESS OTHERWISE NOTED BUILDING LATERAL STABILITY IS PROVIDED BY WOOD SHEAR WALLS SHEATHED WITH EITHER GYPSUM WALLBOARD OR WOOD BASED PANELS. LATERAL LOADS ARE TRANSFERRED TO THE PERIMETER WALLS THROUGH THE ROOF DIAPHRAGM. ENGINEERED TRUSSES PLAY NO ROLE IN THE OVERALL LATERAL STABILITY OF THE BUILDING.
   ii) THE WOOD TRUSS SUPPLIER IS RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY AND PERMANENT BRACING REQUIRED FOR THE STABILITY OF THE TRUSSES.
   iii) ERECT TRUSSES IN CONFORMANCE WITH THE GUIDELINES PRODUCED BY TPIC IN THE DOCUMENT "HANDLING, ERECTION AND BRACING OF WOOD TRUSSES"

ABBREVIATIONS 0001

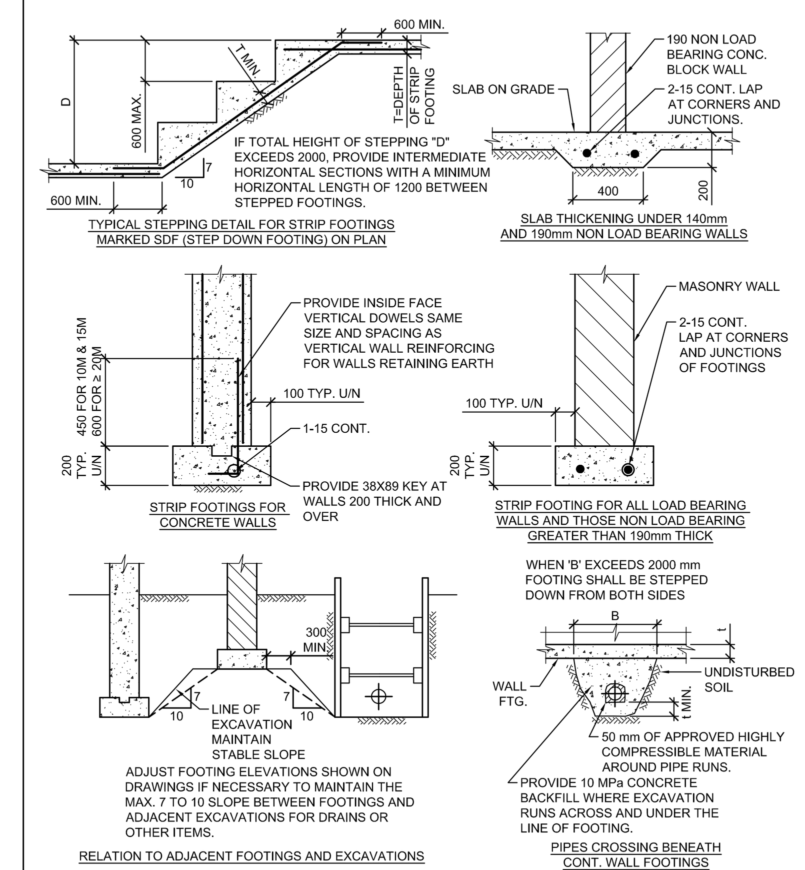
A.BOLT	= ANCHOR BOLT	kN	= KILONEWTON		
ADJ.	= ADJUSTABLE	kg	= KILOGRAM		
ALT.	= ALTERNATE	kN.m	= KILONEWTON METRES		
ARCH.	= ARCHITECTURAL	kN/sq.m	= KILONEWTON PER SQUARE METRE		
		kN/m	= KILONEWTON PER METRE		
B	= BOTTOM	L.L.	= LIVE LOAD		
B.L.	= BOTTOM LOWER LAYER	LG.	= LONG		
BUL	= BOTTOM UPPER LAYER	LLV.	= LONG LEG VERTICAL		
BLDG.	= BUILDING	LLH.	= LONG LEG HORIZONTAL		
BM.	= BEAM				
BR.	= BASE OR BEARING PLATE	MAX.	= MAXIMUM		
BSMT.	= BASEMENT	MECH.	= MECHANICAL		
CA	= COLUMN ABOVE	MEZZ.	= MEZZANINE		
C/C	= CENTRE TO CENTRE	MIN.	= MINIMUM		
℄	= CENTRE LINE	MISC.	= MISCELLANEOUS		
CANT.	= CANTILEVER	ML	= MIDDLE LAYER		
COL.	= COLUMN	mm	= MILLIMETRE		
CONC.	= CONCRETE	MOM.	= MOMENT		
CONSTR.	= CONSTRUCTION	m	= METRIC,METRE		
CONT.	= CONTINUOUS	MPa	= MEGAPASCAL		
c/w	= COMPLETE WITH	Mf	= FACTORED MOMENT		
DET.	= DETAIL	N	= NEWTONS		
DIAG.	= DIAGONAL	N.F.	= NEAR FACE		
DIA.	= DIAMETER	N-S	= NORTH-SOUTH		
Ø	= DIAMETER, BAR DIAMETER	NTS.	= NOT TO SCALE		
DIM.	= DIMENSION	OWSJ	= OPEN WEB STEEL JOISTS		
D.J.	= DOUBLE JOIST	OPEN	= OPENING		
DO.	= DITTO	PL	= PLATE		
D.L.	= DEAD LOAD	P.C.	= PRECAST		
DWG.	= DRAWING	PROJ.	= PROJECTION		
DWL.	= DOWEL	R	= REACTION		
EA.	= EACH	RAD	= RADIUS		
EA.F.	= EACH FACE	REF.	= REFERENCE		
EA.W.	= EACH WAY	REINF.	= REINFORCING,REINFORCEMENT		
EL.	= ELEVATION	REQ'D	= REQUIRED		
ELECT.	= ELECTRICAL	REV.	= REVISION,REVISED		
ELEV.	= ELEVATOR	r/w	= REINFORCED WITH		
E-W	= EAST-WEST	SECT.	= SECTION		
EQ.	= EQUAL	SDF	= STEP DOWN FOOTING		
EXIST.	= EXISTING	SL.	= SLAB		
EXP.J.	= EXPANSION JOINT	SPEC'S.	= SPECIFICATIONS		
EXT.	= EXTERIOR	STD.	= STANDARD		
F.F.	= FAR FACE	SQ.	= SQUARE		
FDN.	= FOUNDATION	STRUCT.	= STRUCTURAL		
FIN.	= FINISHED	T	= TOP		
FL.	= FLOOR	T.J.	= TIE JOIST		
FTG.	= FOOTING	T.L.	= TOP LOWER LAYER		
		TUL	= TOP UPPER LAYER		
GA.	= GAUGE	TEMP.	= TEMPERATURE		
GALV.	= GALVANIZED	TYP.	= TYPICAL		
GEN.	= GENERAL	U/N	= UNLESS OTHERWISE NOTED		
		U/S	= UNDERSIDE		
H. HOR.	= HORIZONTAL	Vf	= FACTORED SHEAR FORCE		
HH	= HOOKED EACH END	V. VERT.	= VERTICAL		
INT.	= INTERIOR	WWF	= WELDED WIRE FABRIC		
		w/	= WITH		
JT.	= JOINT	wD, wL	= UNIFORMLY DISTRIBUTED LOADS		

FOOTINGS AND BASES FOR STEEL COLUMNS 0303

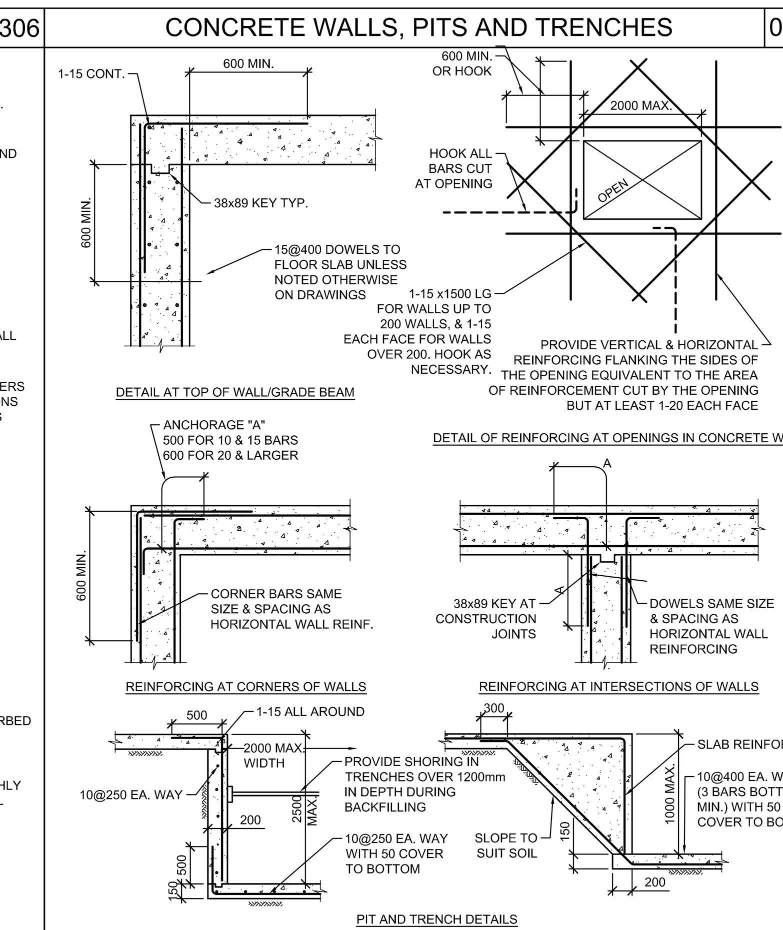


NOTE:
1. WHERE RATIO OF CAP HEIGHT TO CAP WIDTH (H/W) EXCEEDS 3, PROVIDE 0.5% VERTICAL STEEL (8-20 MINIMUM) WITH 10M TIES SPACED AT THE LESSER OF 500 o/c OR THE LEAST CAP DIMENSION (2 TIES MINIMUM).
2. HEIGHT (H) OF CAP SHALL BE A MINIMUM OF 2 X PROJECTION (A) BUT NOT LESS THAN 200.
3. SEE COLUMN SCHEDULE FOR ADDITIONAL REQUIREMENTS.
4. IF D1 IS LESS THAN THE TENSION DEVELOPMENT LENGTH FOR THE SPECIFIED BAR (REFER TO TABLE 1, DETAIL 0301), PROVIDE STANDARD HOOK.

WALL FOOTINGS 0306



CONCRETE WALLS, PITS AND TRENCHES 0312

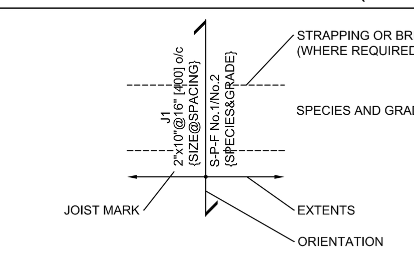


LINTELS FOR MASONRY WALLS 0402

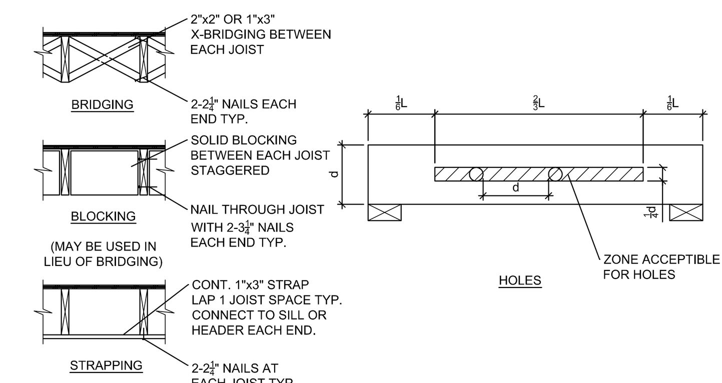
WALL TYPE	UP TO 1200 SPAN	OVER 1200 BUT NOT MORE THAN 1800 SPAN	OVER 1800 BUT NOT MORE THAN 2200 SPAN
90 VENEER	L89X89X7.9	L102X89X7.9	L127X89X7.9
90 SOLID WALL	LINTEL BLOCK REINF. WITH 1-10M T & B	LINTEL BLOCK REINF. WITH 1-15M T & B	NOT APPLICABLE
140 SOLID WALL	LINTEL BLOCK REINF. WITH 1-15M T & B	LINTEL BLOCK REINF. WITH 1-15M T & B	NOT APPLICABLE
190 SOLID WALL	2Ls - 89X89X7.9	2Ls - 102X89X7.9	2Ls - 127X89X7.9
240 SOLID WALL	2Ls - 102X102X7.9	2Ls - 102X102X9.5	2Ls - 152X102X7.9
290 SOLID WALL	3Ls - 89X89X7.9	3Ls - 127X89X7.9	3Ls - 152X102X7.9
90 + 90 CAVITY WALL	1L - 89X89X7.9 + LINTEL BLOCK REINF. WITH 1-10M T& B	1L - 102X89X7.9 + LINTEL BLOCK REINF. WITH 1-15M T & B	NOT APPLICABLE
90 + 140 CAVITY WALL	1L - 89X89X7.9 + LINTLE BLOCK REINF. WITH 1-15M T & B	1L - 102X89X7.9 + LINTEL BLOCK REINF. WITH 1-15M T & B	NOT APPLICABLE
90 + 190 CAVITY WALL	1L - 89X89X7.9 + 2Ls - 102X102X7.9	1L - 102X89X7.9 + 2Ls - 102X89X7.9	1L - 127X89X7.9 + 2Ls - 127X89X7.9
90 + 240 CAVITY WALL	1L - 89X89X7.9 + 2Ls - 102X102X7.9	1L - 102X89X7.9 + 2Ls - 102X102X9.5	1L - 127X89X7.9 + 2Ls - 152X102X7.9
90 + 290 CAVITY WALL	1L - 89X89X7.9 + 3Ls - 89X89X7.9	1L - 102X89X7.9 + 3Ls - 127X89X7.9	2Ls - 127X89X7.9 + 3Ls - 152X102X7.9

NOTE:
1. LINTELS DESCRIBED ON THIS TYPICAL DETAIL SHALL ONLY BE USED IN LOAD BEARING MASONRY WALLS IF THE HEIGHT OF THE MASONRY ABOVE THE OPENING IS EQUAL TO OR GREATER THAN HALF THE CLEAR SPAN OF THE OPENING AND IF THERE ARE NO CONCENTRATED LOADS DIRECTLY ABOVE THE LINTEL.
2. PROVIDE STEEL PACKING PLATES UNDER THE ENDS OF LINTELS AS REQUIRED TO ENSURE EVEN BEARING
3. FOR OPENINGS OVER 600mm IN WIDTH, BOLT DOUBLE ANGLES BACK TO BACK USING 16mm DIAM. BOLTS AT 450mm C/C. PROVIDE BOLTS 75mm FROM EACH END. ALTERNATIVELY, PROVIDE 6mm X 50mm LONG FILLET WELDS AT 450mm C/C TOP AND BOTTOM.
4. FILL LINTEL BLOCKS WITH CONCRETE HAVING AN ULTIMATE COMPRESSIVE STRENGTH OF 20 MPa AT 28 DAYS, OR WITH TYPE "N" MORTAR.
5. PROVIDE 200mm MINIMUM LENGTH OF BEARING AT EACH END. PROVIDE A MINIMUM LENGTH OF 200mm AND A MINIMUM DEPTH OF 200mm OF 100% SOLID MASONRY BELOW THE LINTEL BEARING EACH END.
6. WHERE LINTELS ABUT CONCRETE COLUMNS AND WALLS, OR STEEL MEMBERS, PROVIDE L100X100X10 ANCHORED TO CONCRETE WITH 2-20mm DIAM. BOLTS WITH ADJUSTABLE ANCHORS, OR WELDED TO STEEL FOR V=10kN
7. HORIZONTAL REINFORCEMENT SHALL EXTEND 200mm BEYOND FACE OF OPENING
8. LINTELS IN EXTERIOR WALLS EXPOSED TO WEATHER SHALL BE HOT-DIPPED GALVANIZED.

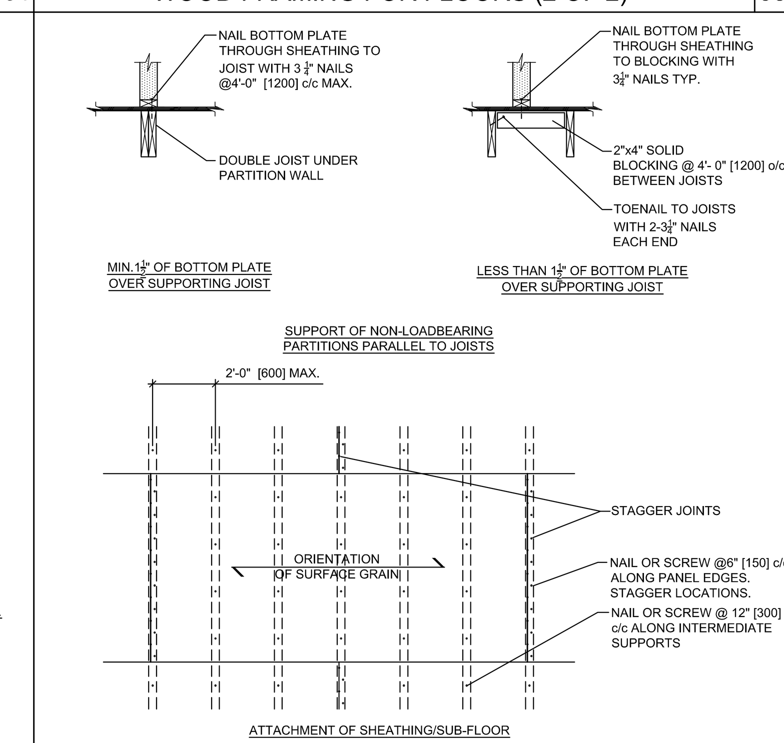
WOOD FRAMING FOR FLOORS (1 OF 2) 0601



NOTES:
1. SEE PLANS FOR JOIST SIZE, SPACING, SPECIES AND LUMBER GRADE. SPACING NOT TO EXCEED 16" [406].
2. UNLESS NOTED OTHERWISE ON THE DRAWINGS, PROVIDE BRIDGING AS PER THE DETAIL BELOW AND THE SPACING REQUIREMENTS OF NOTE 4.
3. WHERE SPECIFIED ON THE DRAWINGS, PROVIDE STRAPPING AS PER THE DETAIL BELOW AND THE SPACING REQUIREMENTS OF NOTE 4.
4. LINES OF BRIDGING AND/OR STRAPPING ARE TO BE LOCATED NOT MORE THAN 7'-0" FROM A SUPPORT AND SPACED AT NOT GREATER THAN 7'-0" o/c.
5. UNLESS NOTED OTHERWISE, JOISTS ARE NOT TO BE NOTCHED.
6. WHERE HOLES ARE REQUIRED IN UNIFORMLY LOADED JOISTS FOR WIRING OR PLUMBING, THEIR DIAMETER SHALL NOT EXCEED ONE QUARTER OF THE JOIST DEPTH. CENTRE HOLES AT THE MID-DEPTH OF THE JOISTS, WITHIN THE MIDDLE TWO-THIRDS OF THE SPAN. HOLES SHALL BE SPACED NO CLOSER THAN A CLEAR DISTANCE OF ONE FULL JOIST DEPTH FROM ONE ANOTHER AS PER THE DETAIL BELOW.
7. HOLES NOT CONFORMING TO THE REQUIREMENTS OF NOTE 6 MUST BE APPROVED BY THE CONSULTANT.

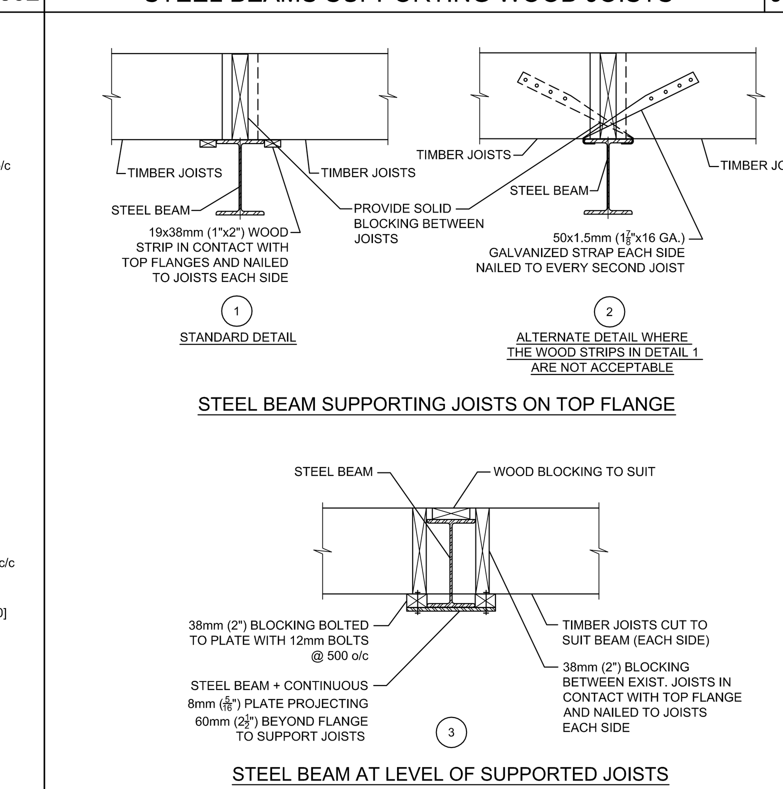


WOOD FRAMING FOR FLOORS (2 OF 2) 0602



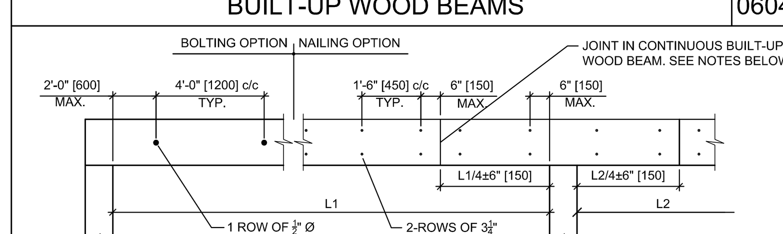
NOTE:
1. EDGES OF FLOOR SHEATHING TO BE TONGUE AND GROOVE.
2. USE 2" NAILS OR 1¾" SCREWS FOR SHEATHING LESS THAN ¾" THICK.
3. USE 2¼" NAILS OR 2" SCREWS FOR ¾" TO 1" SHEATHING
4. USE PRESSURE TREATED PLYWOOD FOR FLOORS OF KITCHENS AND BATHROOMS.
5. MINIMUM THICKNESS OF SUB-FLOOR SHALL BE ⅝" FOR JOIST SPACING UP TO 1'-8" [500] AND ¾" FOR JOIST SPACING OF 2'-0" [600]

STEEL BEAMS SUPPORTING WOOD JOISTS 0603

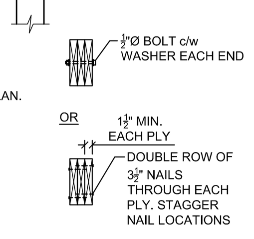


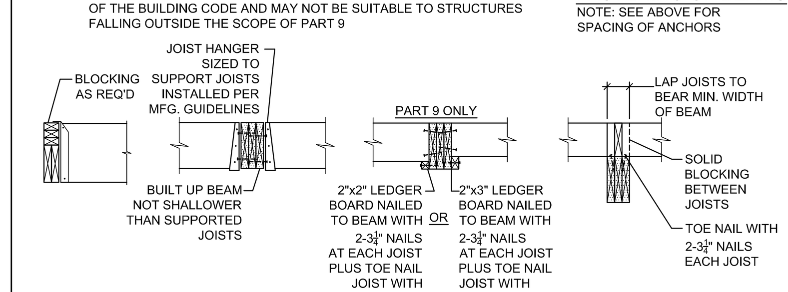
NOTE:
1. WHERE BEAMS ARE BEING INSTALLED TO SUPPORT EXISTING JOISTS, SAFELY SUPPORT JOISTS AND ANY OTHER LOADS ABOVE, UNTIL THE NEW BEAM IS INSTALLED AND PROPERLY SUPPORTED.
2. SEE PLANS AND/OR SECTIONS FOR SIZES OF JOISTS AND BEAMS

BUILT-UP WOOD BEAMS 0604



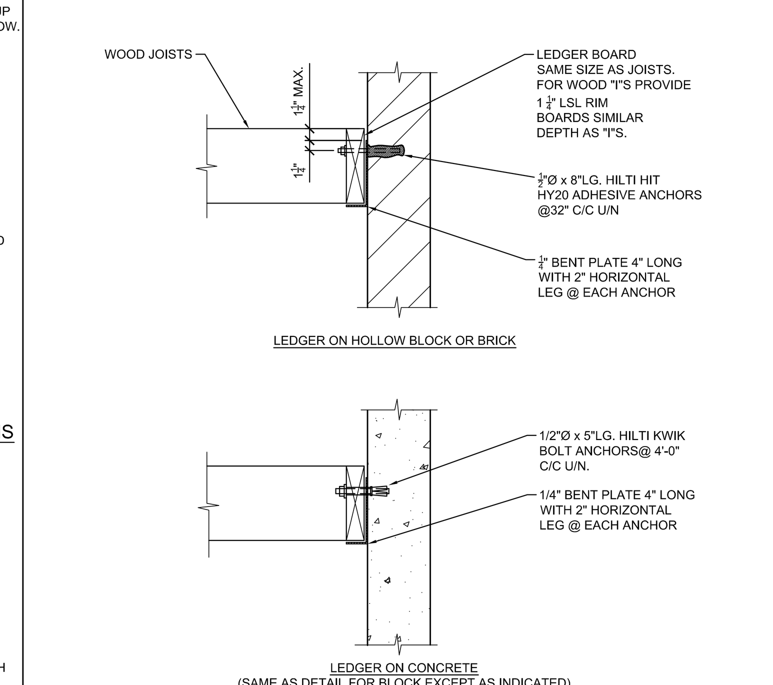
JOINTS SHALL BE MADE IN SUCH A WAY THAT:
1. JOINTS SHALL BE LOCATED AS SHOWN ABOVE.
2. JOINTS SHALL ONLY BE MADE IN MULTIPLE SPAN BEAMS WHICH ARE CONTINUOUS OVER THEIR SUPPORTS AS INDICATED ON PLAN. PLIES OF BEAMS INDICATED AS SINGLE SPAN BEAMS SHALL NOT HAVE JOINTS.
3. JOINTS SHALL NOT BE MADE NEAR END SUPPORTS.
4. NOT MORE THAN ONE JOINT SHALL OCCUR IN ANY INDIVIDUAL MEMBER WITHIN ANY ONE SPAN NOR WITHIN TWO ADJACENT SPANS.
5. JOINTS SHALL NOT BE MADE IN ADJACENT MEMBERS OF A BUILT-UP BEAM AT THE SAME LOCATION.
6. NOT MORE THAN HALF OF THE MEMBERS WITHIN A BUILT UP BEAM SHALL BE JOINED AT ANY ONE LOCATION.
7. THE ABOVE REQUIREMENTS ARE BASED ON THE PROVISIONS OF PART 9 OF THE BUILDING CODE AND MAY NOT BE SUITABLE TO STRUCTURES FALLING OUTSIDE THE SCOPE OF PART 9





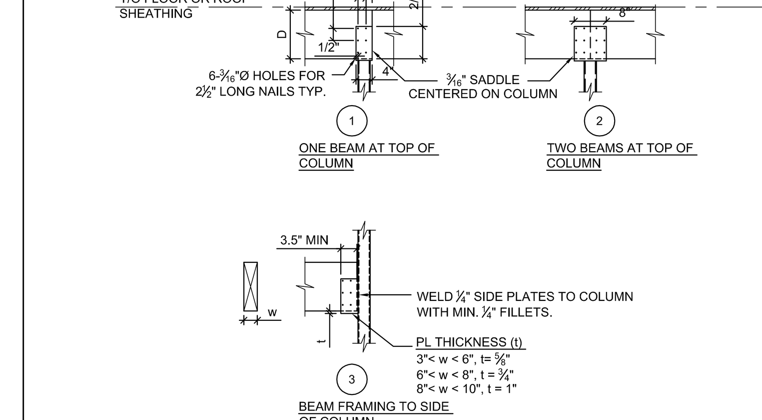
NOTES:
1. THE PLIES OF 4- AND 5-PLY BEAMS ARE TO BE FASTENED USING BOLTS ONLY. 2- AND 3-PLY BEAMS MAY BE NAILED OR BOLTED.
2. 4- AND 5-PLY BEAMS ARE TO BE TOP LOADED WHENEVER POSSIBLE; THEY MAY BE SIDE LOADED PROVIDED THEY ARE LOADED EQUALLY FROM BOTH SIDES.

LEDGERS SUPPORTING WOOD JOISTS 0611



NOTES:
1. SUITABLE FOR RESIDENTIAL FLOORS WITH LL=40 PSF, DL=30 PSF AND MAX. SPAN=17'-0".
2. WHERE LOADS OR SPANS EXCEED THESE ADJUST SPACING TO SUIT: MAXIMUM LOAD PER ANCHOR IS 1600 LBS.

STEEL COLUMN SUPPORTING WOOD BEAMS 0630



NOTES:
1. CONNECTIONS TO BE DESIGNED FOR FORCES SHOWN ON BEAM SCHEDULE BY A STEEL SUPPLIER/DESIGNER. ASSUME EVEN BEARING AT SUPPORT.
2. CONNECTIONS SHOWN FOR INTENT. ACTUAL CONDITIONS MAY VARY.
3. DETAILS APPLY TO SAWN LUMBER AND ENGINEERED LUMBER BEAMS WITH MIN 7½" DEPTH AND MAXIMUM 7" WIDTH.
4. DETAILS APPLY TO STEEL HSS COLUMNS WITH MINIMUM 3" DIMENSION.
5. MAXIMUM WIND UPLIFT FOR 12-2.5" NAILS: 8kN

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ALL DIMENSIONS TO BE CHECKED AND VERIFIED ON THE JOB.
ANY AND ALL DISCREPENCIES TO BE REPORTED TO THE ARCHITECT.
ALL DRAWINGS REMAIN THE PROPERTY OF THE ARCHITECT.
DO NOT SCALE DRAWINGS.

No.	Issue	Date
00	BUILDING PERMIT	28JAN.2010
01	TENDER	04JUN.2010

ADDITION & ALTERATIONS - EGAN FUNERAL HOME

203 Queen St. S., Bolton, ON

GENERAL NOTES AND TYPICAL DETAILS

PROJECT NUMBER	0660
SCALE	N.T.S.
DATE	29 JANUARY 2010
DRAWN	
CHECKED	C.B.
SET NO.	DRAWING NO.

S-001