

CONSTRUCTION NOTES (Unless otherwise noted)

ALL CONSTRUCTION TO ADHERE TO THESE PLANS AND SPEC'S AND TO CONFORM TO THE ONTARIO BUILDING CODE AND ALL OTHER APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION. THESE REQUIREMENTS ARE TO BE TAKEN AS MINIMUM SPECIFICATIONS. O.N.T. REG. 332/12-2012 OBC.

1. ROOF CONSTRUCTION

NO.210 (10.2mm) ASPHALT SHINGLES, 10mm (3/8") FLYWOOD SHEATHING WITH 1/4" CLIPS. APPROVED ROOF TRUSSES @ 610mm (24") O.C. MAX. APPROVED EAVES PROTECTION TO EXTEND 900mm (3'-0") FROM EDGE OF ROOF AND MIN. 300mm (12") BEYOND INNER FACE OF EXTERIOR WALL. (EAVES PROTECTION NOT REQUIRED FOR ROOF SLOPES 8:12 OR GREATER) 30x30 (2"x4") TRUSS BRACING @ 1800mm (6'-0") O.C. AT BUTT JOINTS. PREPARE ALUM. CAVESTROOF, FASMA, RUL & VENTED SOFFIT. PROVIDE ICE & WATER SHEET TO ALL ROOF/WALL SURFACES SUSCEPTIBLE TO ICE DAMMING. ROOF SHEATHING TO BE FASTENED 150 (6") C/C ALONG EDGES & INTERMEDIATE SUPPORTS WHEN TRUSSES SPACED GREATER THAN 405 (16"). ATTIC VENTILATION 1:300 OF INSULATED CEILING AREA WITH MIN. 25% AT EAVES & MIN. 25% AT RIDGE (OBC 9.19.1.2).

2. FRAME WALL CONSTRUCTION (2"x6") (REFER TO R.O.P. FORM)

SIDING, HARDY BOARD, STUCCO BOARD OR EQUIV. AS PER ELEVATION. 15x4 (1"x3") VERTICAL WOOD FLOORING, APPROVED SHEATHING PAPER, MIN. RSL 0.88 (R-5) RIGID INSULATION, 38x140 (2"x6") STUDS @ 400mm (16") O.C. FILLED WITH MIN. RSL 3.87 (R-22) BATT INSULATION, TOTAL MIN. RSL 4.75 (R-27). APPROVED DIAGONAL WALL BRACING, VAPOUR BARRIER AND CONT. AIR BARRIER, 13mm (1/2") INT. DRYWALL FINISH.

2B. FRAME WALL CONSTRUCTION - GARAGE WALLS

SIDING AS PER ELEV. 15x38 (1"x2") WEATHER WOOD FLOORING, CONTIN. SHEATHING UNDERLAYER, 9.5mm (3/8") EXT. SHEATHING, 38x38 (2"x4") STUDS @ 400mm (16") O.C. (FOR MAX. HEIGHT 3000mm) OR 38x140 (2"x6") STUDS @ 400mm (16") O.C. (FOR MAX. HEIGHT OF 3.6M (11'-10")) WITH APPROVED DIAGONAL WALL BRACING. 13mm (1/2") INTERIOR DRYWALL FINISH. REFER TO NOTE 19 WHERE FLOOR EXISTS ABOVE GARAGE. SIDING TO BE MIN. 250mm (8") ABOVE FINISH GRADE.

2C. STUCCO WALL CONSTRUCTION (2"x6") (REFER TO R.O.P. FORM)

STUCCO CLASSIC SYSTEM CONFORMING TO O.B.C. 9.27.1.1(2) & 9.28 THAT EMPLOY A MEDIUM GRAIN (1/4") AIR SPACE BEHIND THE CLADDING WITH POSITIVE DRAINAGE TO THE EXTERIOR AND APPLIED PER MANUFACTURER'S SPECIFICATIONS ON 25mm (1") MIN. EXTERIOR OR EXTERIOR RIGID POLYSTYRENE, APPROVED SHEATHING PAPER, MINIMUM RSL 0.88 (R-5) RIGID INSULATION, 38x140 (2"x6") STUDS @ 400mm (16") O.C. FILLED WITH MIN. RSL 3.87 (R-22) BATT INSULATION, TOTAL MIN. RSL 4.75 (R-27). APPROVED DIAGONAL WALL BRACING, VAPOUR BARRIER AND CONT. AIR BARRIER, 13mm (1/2") GYPSUM BOARD INTERIOR FINISH. STUCCO TO BE MIN. 250mm (8") ABOVE FINISH GRADE.

2D. STUCCO WALL CONSTRUCTION - GARAGE WALLS

STUCCO CLASSIC SYSTEM CONFORMING TO O.B.C. 9.27.1.1(2) & 9.28 THAT EMPLOY A MEDIUM GRAIN (1/4") AIR SPACE BEHIND THE CLADDING WITH POSITIVE DRAINAGE TO THE EXTERIOR AND APPLIED PER MANUFACTURER'S SPECIFICATIONS ON 25mm (1") MIN. EXTERIOR OR EXTERIOR RIGID POLYSTYRENE ON APPROVED ALUMINUM BARRIER ON 13mm (1/2") EXT. TYPE SHEATHING ON 38x38 (2"x4") STUDS @ 400mm (16") O.C. (FOR MAX. HEIGHT 3000mm) OR 38x140 (2"x6") STUDS @ 400mm (16") O.C. (FOR MAX. HEIGHT OF 3.6M (11'-10")) WITH APPROVED DIAGONAL WALL BRACING. 13mm (1/2") INTERIOR DRYWALL FINISH. REFER TO NOTE 19 WHERE FLOOR EXISTS ABOVE GARAGE. STUCCO TO BE MIN. 250mm (8") ABOVE FINISH GRADE.

3. MASONRY VENEER CONSTRUCTION (2"x6") (REFER TO R.O.P. FORM)

90mm (4") MASONRY, 25mm (1") AIR SPACE, 22x160x70mm (7/8"x4.03") GY. METAL TIES @ 400mm (16") O.C. HORIZONTAL 610mm (24") O.C. VERTICAL. APPROVED SHEATHING PAPER, MIN. RSL 0.88 (R-5) RIGID INSULATION, 38x140 (2"x6") STUDS @ 400mm (16") O.C. FILLED WITH MIN. RSL 3.87 (R-22) BATT INSULATION, TOTAL MIN. RSL 4.75 (R-27). APPROVED DIAGONAL WALL BRACING, VAPOUR BARRIER AND CONT. AIR BARRIER, 13mm (1/2") INT. DRYWALL FINISH. PROVIDE WEAP HOLES @ 800mm (32") O.C. BOTTOM COURSE AND OVER OPENINGS. PROVIDE BASE FLASHING UP MIN. 150mm (6") BEHIND BUILDING PAPER.

3B. MASONRY VENEER CONSTRUCTION - GARAGE WALLS

90mm (4") MASONRY, 25mm (1") AIR SPACE, 22x160x70mm (7/8"x4.03") GY. METAL TIES @ 400mm (16") O.C. HORIZONTAL 610mm (24") O.C. VERTICAL. APPROVED SHEATHING PAPER, MIN. RSL 0.88 (R-5) RIGID INSULATION, 38x140 (2"x6") STUDS @ 400mm (16") O.C. (FOR MAX. HEIGHT 3000mm) OR 38x140 (2"x6") STUDS @ 400mm (16") O.C. (FOR MAX. HEIGHT OF 3.6M (11'-10")) WITH APPROVED DIAGONAL WALL BRACING. 13mm (1/2") INTERIOR DRYWALL FINISH. REFER TO NOTE 19 WHERE FLOOR EXISTS ABOVE GARAGE. PROVIDE WEAP HOLES @ 800mm (32") O.C. BOTTOM COURSE AND OVER OPENINGS. PROVIDE BASE FLASHING UP MIN. 150mm (6") BEHIND BUILDING PAPER. ECK TO BE MIN. 150mm (6") ABOVE FINISH GRADE.

4. INTERIOR STUD PARTITIONS

FOR BRACING PARTITIONS 38x38 (2"x4") @ 400mm (16") O.C. FOR 2 STOREYS AND 38x38 (2"x4") @ 400mm (16") O.C. FOR 3 STOREYS. HIGH-BEARING PARTITIONS 38x38 (2"x4") @ 610mm (24") O.C. PROVIDE 38x38 (2"x4") BOTTOM PLATE AND 2x38x38 (2"x4") TOP PLATE, 13mm (1/2") INT. DRYWALL BOTH SIDES OF STUDS. PROVIDE 38x140 (2"x6") STUDS/PLATES WHERE NOTED.

5. FOUNDATION WALL/FOOTINGS (9.15.3, 9.15.4, 9.15.2, 9.14.2, 9.14.1)

200mm (8") POURED CONC. FDN. WALL 150Pa (2200psi) WITH BIRCHWOOD DRAINPROOFING AND DRAINAGE LAYER. DRAINAGE LAYER REQUIRED WHEN BASEMENT SOIL EXTENDS 900 (2'-11") BELOW FIN. GRADE. DRAINAGE LAYER IS NOT REQUIRED IF FOUNDATION WALL IS WATERPROOFED. MINIMUM FOUR FEET MIN. 2300 (7'-10") ON 50x145 (2"x6") CONTINUOUS KEYED CONC. FIG. BRACE FDN. WALL PRIOR TO BACKFILLING. ALL FOOTINGS SHALL REST ON NATURAL UNDISTURBED SOIL OR COMPACTED ENGINEERED FILL.

* REFER TO UNIT PLANS FOR STRIP FOOTING SIZES *

-MAXIMUM FLOOR LIVE LOAD OF 2.4kPa (50psf) PER FLOOR.
-REFER TO SOILS REPORT FOR SOIL CONDITIONS AND BEARING CAPACITY.

6. FOUNDATION DRAINAGE O.B.C. 9.14.2 & 9.14.3

100mm (4") DIA. FOUNDATION DRAINAGE TILE 150mm (6") CRUSHED STONE OVER AND AROUND DRAINAGE TILES.

7. BASEMENT SLAB O.B.C. 9.3.1.6(1)(b), 9.19.4.5(1), 9.25.3.3(1)(a)

80mm (3") MIN. 250Pa (3600psi) CONC. SLAB ON 100mm (4") COARSE GRANULAR FILL OR 150Pa (2200psi) CONC. WITH DRAINPROOFING BELOW SLAB. UNDER SLAB INSULATION PER R.O.P. FORM where required.
ALL SLAB JOINTS & PENETRATIONS TO BE SEALED TO MAINTAIN AIR BARRIER.

8. WOOD SUBFLOORS (SEE OBC 9.23.1.4 & 9.23.2.1)

-15mm (5/8") MIN. T & G SUBFLOOR UNDER GROUND FLOOR FINISH FLOOR.
16mm (5/8") T&G SUBFLOOR UNDER SECOND FLOOR FINISH FLOOR.
16mm (5/8") PANEL-TYPE UNDERLAY FOR CERAMIC TILE APPLICATION.
6mm (1/4") PANEL-TYPE UNDERLAYMENT UNDER RESILIENT & PARQUET FLOORINGS.

9. ATTIC INSULATION (REFER TO R.O.P. FORM)

RSL 10.56 (R20) BLOWN IN ROOF INSULATION AND APPROVED VAPOUR BARRIER, 16mm (5/8") INT. DRYWALL FINISH OR APPROVED EQUIV. RSL 3.52 (R20) MIN. ABOVE FINISH GRADE OF EXTERIOR WALL.

10. ALL STAIRS/EXTERIOR STAIRS - OBC 9.8.9

UNIFORM RISE
-5mm (1/4") MAX. BETWEEN ADJACENT TREADS
-10mm (1/2") MAX. BETWEEN VALLEYS & SHORTEST RISE IN FLIGHT

MAX. RISE = 200 (7'-7/8")
MIN. RUN = 210 (8'-11/4")
MIN. TREAD = 235 (9'-1/4")
MAX. NOSING = 25 (1")
MIN. HEADROOM = 1950 (6'-5")
RAIL @ LANDING = 900 (2'-11")
RAIL @ STAIR = 865 (2'-10") TO 965 (3'-2")
MIN. STAIR WIDTH = 860 (2'-10")

FOR CURVED STAIRS

MIN. RUN = 150 (6")
MIN. AVG. RUN = 200 (8")

HANDRAILS - OBC 9.8.7

FISHED RAILING ON PICKETS SPACED MAXIMUM 100mm (4") BETWEEN PICKETS. CLEARANCE BETWEEN HANDRAIL AND SURFACE BEHIND IT TO BE 50 (2") MIN. HANDRAILS TO BE CONTINUOUS EXCEPT FOR NEEL POST AT CHANGES OF DIRECTION.
INTERIOR GUARDS - OBC 9.8.9 -
INTERIOR GUARDS: 900mm (2'-11") MIN. HIGH
EXTERIOR GUARDS - OBC 9.8.9 -
900mm (38") HIGH GUARD WHERE DISTANCE FROM PORCH TO FIN. GRADE IS LESS THAN 1800mm (71"). 1070mm (42") HIGH GUARD IS REQUIRED WHERE DISTANCE EXCEEDS 1800mm (71").

SILL PLATE ANCHORAGE

38x38 (2"x4") SILL PLATE WITH 13mm (1/2") DIA. ANCHOR BOLTS 250mm (8") LONG, EMBEDDED MIN. 100mm (4") INTO CONC. @ 2400mm (7'-10") O.C. CALULING OR 25 (1") MIN. MINERAL WOOL BETWEEN PLATE AND TOP OF FDN. WALL. USE NON-SHRINK GROUT TO LEVEL SILL PLATE WHEN REQUIRED.
BASEMENT INSULATION (REFER TO R.O.P. FORM)
FOUNDATION WALLS ENCLOSING HEATED SPACE SHALL BE INSULATED FROM THE UNDERSIDE OF THE SUBFLOOR TO NOT MORE THAN 200mm (8") ABOVE THE FINISHED FLOOR & NO CLOSER THAN 50mm (2") OF THE BASEMENT SLAB. FOUNDATION WALL INSULATION SHALL BE MINIMUM RSL 3.52 (R20). INSULATION TO HAVE APPROVED VAPOUR BARRIER. DAMPPROOF WITH BUILDING PAPER BETWEEN THE FOUNDATION WALL AND INSULATION UP TO GRADE LEVEL. NOTE: FULL HEIGHT INSULATION AT COLD CELLAR WALLS. AIR BARRIER TO BE SEALED TO FOUNDATION WALL WITH CHALKING.

14. BASEMENT BEARING STUD PARTITION

38x38 (2"x4") SILL PLATE ON DAMPPROOFING MATERIAL, 13mm (1/2") DIA. ANCHOR BOLTS 250mm (8") LONG, EMBEDDED MIN. 100mm (4") INTO CONCRETE @ 2400mm (7'-10") O.C. 100mm (4") HIGH CONCRETE CURB ON 305x155 (12"x6") FOR 2nd STUO WALL OR 400x155 (16"x6") FOR 2nd STUO WALL, CONCRETE FOOTING AND HORIZONTAL BLOCKING AT 120-HIGH IF WALL IS UNFINISHED.
15. STEEL BASEMENT COLUMN (SEE O.B.C. 9.17.3)
88mm (3-1/2") DIA. x 4.76mm (0.188") STEEL COLUMN WITH 150x150x6.5 (6"x6"x3/8") STEEL TOP & BOTTOM PLATE.
16A. STEEL COLUMN (SEE O.B.C. 9.17.3)
90mm (3-1/2") DIA. x 4.76mm (0.188") STEEL COLUMN WITH 100x100x6.0 (4"x4"x1/4") TOP & BOTTOM PLATES. FIELD FIELD BOTTOM PLATE TO 100x250x12.5 (4"x10"x1/2") BASE PLATE C/W 2-12mm DIA. x 300mm LONG x50mm DIA. ANCHORS (2-1/2"x12"x2"). BE COLUMN TO STUO WALL WITH 2-32x3.175 (1-1/4"x1/8") STEEL STRAP WELDED TO COLUMN AND FASTENED TO STUO WITH 2-505 x 3.25x38 (1-1/4"x1/2") SCREWS MINIMUM BY SUSPENSION STRONG T.E.

CONCRETE PLASTER

BEAM POCKET OR 200x200 (8"x8") POURED CONC. NB WALLS. MIN. BEARING 90mm (3-1/2")

17. 19x38 (1"x2") CONTINUOUS WOOD STRAPPING BOTH SIDES OF STEEL BEAM. (OBC 9.23.4.3(3a))

18. GARAGE SLAB

100mm (4") 320Pa (4600psi) CONC. SLAB WITH 5-6% AIR ENHANCEMENT ON OPTION. 100 (4") COARSE GRANULAR FILL WITH COMPACTED SUB-BASE OR COMPACTED NATIVE FILL. SLOPE TO FRONT (EXTERIOR) AT 1% MIN.

19. INTERIOR GARAGE WALLS & CEILINGS (REFER TO R.O.P. FORM)

13mm (1/2") GYPSUM BOARD ON WALL AND CEILING BETWEEN WALLS AND GARAGE. WALL INSULATION = RSL 3.87 (R22) BRITS + RSL 0.88 (R5) CONTINUOUS ROOF INSUL. CEILING INSUL. = RSL 5.48 (R31). TAPE AND SEAL ALL JOINTS AIRTIGHT PER O.B.C. 9.10.9.16.

20. DOOR AND FRAME GASPROOFED. DOOR EQUIPPED WITH SELF CLOSING DOOR AND WEATHERSTRIPPING PER OBC 9.10.13.15.

EXTERIOR STEP

PRECAST CONCRETE STEP OR WOOD STEP WHERE NOT EXPOSED TO WEATHER. MAX. RISE 200mm (7-7/8") MIN. TREAD 250mm (8-1/2"). SEE OBC 9.8.9.2, 9.8.9.3 & 9.8.10.

21. DRIVER VENT (OBC 9.2.3.8(7), 9.24.1.1 & 9.24.1.1)

CAPPED DRIVER EXHAUST VENTED TO EXTERIOR.
(USE 100mm (4") DIA. SMOOTH WALL VENT PIPE).

22. INSULATED ATTIC ACCESS (OBC 9.19.2.1)

ATTIC ACCESS MATCH WITH MIN. DIMENSION OF 345x700mm (21'-1/2"x2'-2") & A MIN. AREA OF 0.32 SQ.M. (3.44 SQ.FT.) WITH WEATHERSTRIPPING. RSL 3.52 (R20) RIGID INSULATION BACKING.

23. FIREPLACE CHIMNEYS - OBC 9.21

TOP OF FIREPLACE CHIMNEY SHALL BE 910mm (3'-0") ABOVE THE HIGHEST POINT AT WHICH IT CROSSES IN CONTACT WITH THE ROOF AND 610mm (2'-0") ABOVE THE ROOF SURFACE WITHIN A HORIZ. DISTANCE OF 3050mm (10'-0") FROM THE CHIMNEY.

24. LINEN CLOSET

4 SHELVES MIN. 350mm (14") DEEP.

26. MECHANICAL EXHAUST

MECHANICAL EXHAUST FAN, VENTED TO EXTERIOR AS REQUIRED BY OBC 9.32.3.5 & 9.32.3.10.

27. STEEL BEARING PLATE FOR MASONRY WALLS

280x280x16 (11"x11"x5/8") STL. PLATE FOR STL BEAMS AND 280x280x12 (11"x11"x1/2") STL. PLATE FOR WOOD BEAMS BEARING ON CONC. BLOCK PARTIAL WALL, ANCHORED WITH 2-19mm (3/4") x 200mm (8") LONG GALV. ANCHORS WITHIN SOLID BLOCK COURSE. LEVEL WITH NON-SHOCK GROUT.

27A. SOLID WOOD BEARING FOR WOOD STUD WALLS

SOLID BEARING TO BE AT LEAST AS WIDE AS THE SUPPORTED MEMBER. SOLID WOOD BEARING COMPOSED OF BUILT-UP WOOD STUDS TO BE CONSTRUCTED IN ACCORDANCE WITH OBC 9.17.4.2(2).

28. CLASS "B" VENT

ULC. RATED CLASS "B" VENT 610mm (2'-0") ABOVE THE POINT IN CONTACT WITH THE ROOF FOR SLOPES UP TO 9:12, REFER TO THE ONTARIO GAS UTILIZATION CODE.

29. BASEMENT WOOD POST (OBC 9.17.4)

3-38x140 (3-2"x4") BUILT-UP POST OF METAL BASE SHOE ANCHORED TO CONC. WITH 12.7 DIA. BOLT, 408x408x203 (16"x16"x8") CONC. FIG. OR AS OTHERWISE SPECIFIED ON DRAWING.

30. STEPPED FOOTINGS (OBC 9.15.3.1)

MIN. HORIZ. STEP = 600mm (24").
MAX. VERT. STEP = 600mm (24").

31. SLAB ON GRADE

MIN. 100mm (4") CONCRETE SLAB ON GRADE ON 100mm (4") COARSE GRANULAR FILL. REINFORCED WITH 865-102x102x9.5 MESH PLACED NEAR TOP-UPPER OF SLAB. CONC. STRENGTH 32 MPa (4600 psi) WITH 5-6% AIR ENHANCEMENT ON COMPACTED SUB-GRADE. UNDER SLAB INSULATION AS PER R.O.P. FORM where required.
ALL JOINTS & PENETRATIONS OF INTERIOR SLABS TO BE SEALED TO MAINTAIN AIR BARRIER.

32. DIRECT VENTING GAS FURNACE VENT

DIRECT VENT FURNACE TERMINAL MIN. 900mm (36") FROM A GAS REGULATOR. MIN. 300mm (12") ABOVE FIN. GRADE. FROM ALL OPENINGS, EXHAUST AND INTAKE VENTS. MIN. HORIZ. TO BE A MIN. OF 1800mm (6'-0") FROM ALL EXHAUST TERMINALS. REFER TO GAS UTILIZATION CODE.

33. DIRECT VENTING GAS FIREPLACE VENT

DIRECT VENT GAS FIREPLACE VENT TO BE A MINIMUM 300mm (12") FROM ANY OPENING AND ABOVE FIN. GRADE. REFER TO GAS UTILIZATION CODE.

34. JOIST STRAPPING AND BRIDGING (SEE OBC 9.23.9.4)

ALL CONVENTIONAL FRAISED FLOOR JOISTS WITH SPANS OVER 2100mm (6'-11") TO BE BRIDGED WITH 38x38 (2"x4") CROSS BRACING OR SOLID BLOCKING @ 2100mm (6'-11") O.C. MAX. AND WHERE SPECIFIED BY JOIST TABLES A-1 OR A-2 STRAPPING SHALL BE 19x64 (1"x3") @ 2100mm (6'-11") O.C. UNLESS A PANEL TYPE CEILING FINISH IS APPLIED. (SEE OBC 9.23.9.4 & 9.23.9.5)
REFER TO FLOOR LAYOUTS FOR ENGINEERED FLOOR JOISTS.

35. EXPOSED BUILDING FACE - OBC 9.10.15

EXTERIOR WALLS TO HAVE A FIRE RESISTANCE RATING OF NOT LESS THAN 45 MIN. WHERE LATHING DISTANCE (LD) IS LESS THAN 1.2M (3'-11"). WHERE THE LD IS LESS THAN 610mm (2'-0") THE EXPOSURE FACE SHALL BE CLAD IN NON-COMBUSTIBLE MATERIAL. SEE ELEVATIONS FOR ADDITIONAL NOTES.

36. COLD CELLAR PORCH SLAB (OBC 9.39.1)

FOR MAX. 2500 mm (8'-2") PORCH DEPTH (SHORTEST DIA.), 125mm (4 7/8") 320Pa (4600psi) CONC. SLAB WITH 5-6% AIR ENHANCEMENT. REIN. WITH 10M BARS @ 200mm (7 7/8") O.C. EACH WAY IN BOTTOM THIRD OF SLAB. 600x600 (23 5/8" x 23 5/8") 10M DONUTS @ 600mm (23 5/8") O.C. ANCHORED IN PERIMETER FDN. WALLS. SLAB MIN. 102 FROM DECOR. SLAB TO HAVE MIN. 75mm (3") BEARING ON FDN. WALLS. PROVIDE (W/L) UNITS OVER CELLAR DOOR AND WITH 100mm (4") DIA. BEARING.

37. FOUNDATION LEDGE FOR BRICK MASONRY

THE FDN. WALL SHALL NOT BE REDUCED TO LESS THAN 90mm (3-1/2") THICK TO A MAX. DEPTH OF 600mm (26") AND SHALL BE TIED TO THE FACING MATERIAL WITH METAL TIES SPACED 200mm (8") O.C. VERTICALLY AND 500mm (36") O.C. HORIZONTALLY. FILL SPACE BETWEEN WALL AND FACING SOLID WITH MORTAR.

38. CONVENTIONAL ROOF FRAMING (2.0kPa SNOW LOAD)

38x140 (2"x6") RAFTERS @ 400mm (16") O.C. FOR MAX. 11'-7" SPAN. 38x184 (2"x6") ROOF BOARD. 38x38 (2"x4") COLLAR TIES AT MIDSPAN. CEILING JOISTS TO BE 38x38 (2"x4") @ 400mm (16") O.C. FOR MAX. 2630mm (8'-7") SPAN & 38x140 (2"x6") @ 405 (16") O.C. FOR MAX. 4450mm (14'-7") SPAN.
RAFTERS FOR BUILT-UP ROOF TO BE 38x38 (2"x4") @ 610mm (24") O.C. WITH A 38x38 (2"x4") CENTRE POST TO THE TRUSS BELOW, LATERALLY BRACED @ 1800mm (6'-0") O.C. VERTICALLY.

39. TWO STOREY VOLUME SPACES

FOR A VOLUME 5400 mm (18'-0") HEIGHT AND MINIMUM SUPPORTED ROOF TRUSS LENGTH OF 6.0m, PROVIDE 2-38x140 (2"x6") SPR-2 DONUT STUDS @ 305mm (12") O.C. (TRIPLE UP AT EVERY THIRD DONUT STUD FOR BRICK WALLS) C/W 9.8 (5/8") THICK EXT. PLYWOOD SHEATHING PROVIDE SOLID WOOD BLOCKING BETWEEN ROOF STUDS @ 1220 mm (4'-0") O.C. VERTICALLY. FOR WALLS WITH HORIZ. DISTANCES NOT EXCEEDING 2900 (9'-6"), PROVIDE 38x140 (2"x6") STUDS @ 405 (16") O.C. WITH CONTINUOUS 2-38x140 (2"x6") TOP PLATES & 1-38x140 (2"x6") BOTTOM PLATE & MINIMUM OF 3-38x184 (2"x6") CONT. HEADER AT GROUND CEILING LEVEL, TOP-NAILED & CLIPPED AT TOP, BOTTOM PLATES AND HEADERS.

40. EXPOSED FLOOR TO EXTERIOR (REFER TO R.O.P. FORM)

PROVIDE RSL 3.48 (R21) INSULATION, APPROVED VAPOUR BARRIER AND CONTINUOUS AIR BARRIER, FINISHED SOFFIT.

41. PARQUET FLOOR

TYPICAL 1 HOUR RATED PARTIAL WALL.
REFER TO DETAILS FOR TYPE AND SPECIFICATIONS.

42. EXTERIOR WALLS FOR WALK-OUT CONDITIONS

THE EXTERIOR BASEMENT WALL SHALL TO BE 38x140 (2"x6") STUDS @ 400mm (16") O.C. OR 38x38 (2"x4") STUDS @ 305mm (12") O.C. WALL INSULATION TO BE AS PER STANDARD ABOVE GARAGE WOOD STUD WALLS (R20-M5).

MINIMUM CANADA ZONE 5

- 1) MINIMUM REDUCTION WINDOW - OBC 9.8.10.1 -
AT LEAST ONE REDUCTION WINDOW ON A GIVEN FLOOR IS TO HAVE MIN. 0.56m² UNOBSTRUCTED GLAZED OR OPENABLE AREA WITH MIN. CLEAR WIDTH OF 380 mm (1'-3").
GLASS AREA NOT MORE THAN 17% OF GROSS PERIMETER WALL AREA.
MINIMUM U-VALUE 1.57 & MIN. R-VALUE 28.
- 2) WEATHER GUARDS - OBC 9.8.10.1 (b)
A GROUND IS REQUIRED WHERE THE TOP OF THE WINDOW SILL IS LOCATED LESS THAN 600mm (1'-7") ABOVE FIN. FLOOR AND THE DISTANCE FROM THE FIN. FLOOR TO THE ADJACENT GRADE IS GREATER THAN 1200mm (5'-11").
- 3) WEATHER WELLS - OBC 9.14.6.3
ALL WINDOW WELLS TO DRAIN TO FOOTING LEVEL PER OBC 9.14.6.3. CHECK WITH THE LOCAL AUTHORITY.

DOORS

- 1) EXTERIOR DOORS - THERMAL RESISTANCE
ALL EXTERIOR DOORS TO COMPLY WITH THERMAL RESISTANCE AS STATED IN R.O.P. FORM.
- 2) EXTERIOR SLIDING GLASS DOORS - THERMAL RESISTANCE
ALL EXTERIOR SLIDING GLASS DOORS TO COMPLY WITH THERMAL RESISTANCE AS STATED IN R.O.P. FORM.

GENERAL

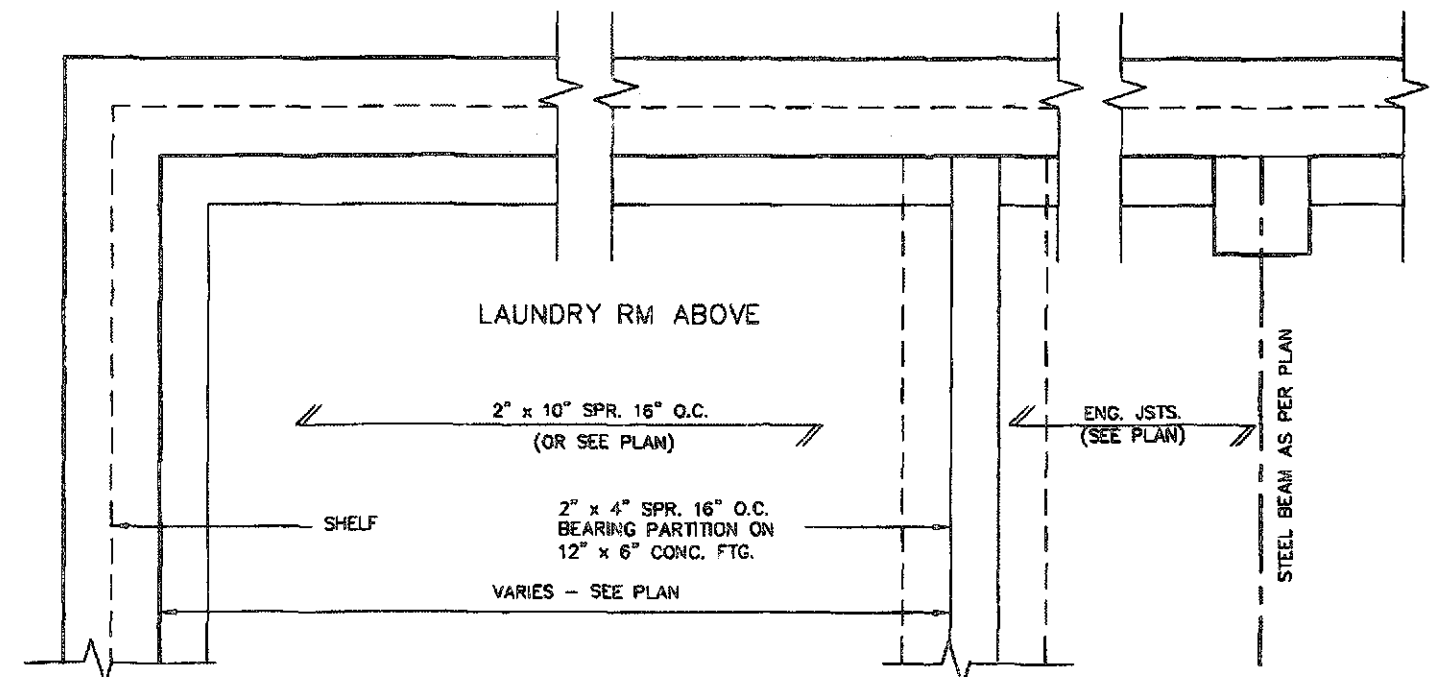
- 1) MECHANICAL VENTILATION IS REQUIRED TO PROVIDE 0.3 AIR CHANGES PER HOUR AVERAGE OVER 24 HOURS. SEE MECHANICAL DRAWINGS.
- 2) ALL DOWNSPUTS TO DRAIN AWAY FROM THE BUILDING AS PER OBC 9.23.15.2 AND UNIFORM STANDARDS.
- 3) SOLID WALL REINFORCEMENT FOR FINISH GRADE BASE IN WALL BATHROOM. REINFORCEMENT OF SUE WALLS SHALL BE INSTALLED ADJACENT TO WATER CLOSETS AND SHOWERS OR BATHING IN WALL BATHROOM. REFER TO OBC 9.5.2.3, 9.5.2.4(1)(a) & 9.5.2.4(1)(b).
- 4) AIR BARRIERS
ALL AIR BARRIER SYSTEMS TO COMPLY WITH O.B.C. DIV. 9, 9.23.3.

LUMBER

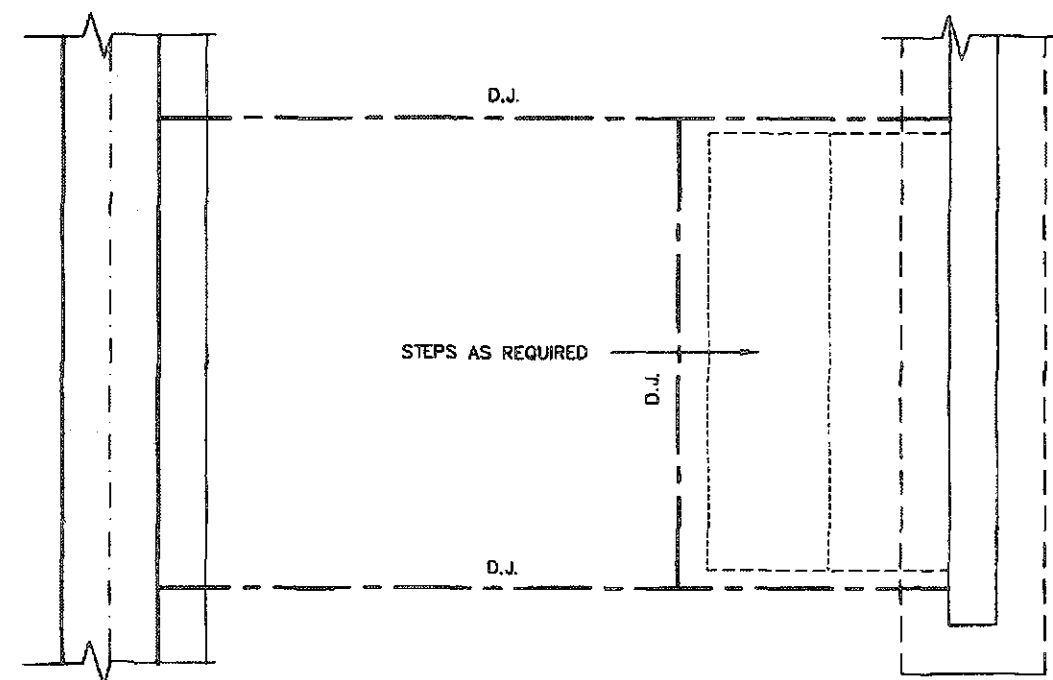
- 1) ALL LUMBER SHALL BE SPRUCE NO.2 GRADE, UNLESS NOTED OTHERWISE.
- 2) LUMBER EXPOSED TO THE EXTERIOR TO BE SPRUCE NO.2 GRADE PRESERVE TREATED OR EQUIV. UNLESS NOTED OTHERWISE.
- 3) ALL LUMBER VENEER UNDER (LVL) BEAMS, OTHER VENEERS, AND METAL NUMBER CONNECTIONS SUPPORTING ROOF FRAMING TO BE DESIGNED & CERTIFIED BY ROOF TRUSS MANUFACTURER.
- 4) LVL BEAMS NOT SPECIFIED ON ENGINEERED FLOOR OR ROOF LAYOUTS SHALL BE VENEER LVL OR EQUIV. LVL EACH PLY OF LVL WITH 48mm (3 1/2") LONG DONUTS VENE LVL'S @ 300mm (12") O.C. STAGGERED IN 2 PLYS FOR 184x240 & 300mm (7 1/4" x 9 1/2", 11 7/8") DONUTS AND STAGGERED IN 3 PLYS FOR GREATER DEPTHS AND FOR 4 PLY VENEERS AND 15mm (1/2") DIA. GALV. BOLTS BOLTED AT 120-DEPTH OF BEAM @ 610mm (5'-0") O.C.
- 5) PROVIDE FACE MOUNT BEAM BRACKETS TYPE "SOL" MANUFACTURED BY STUCCO STRONG-TIE OR EQUIV. FOR ALL LVL BEAM TO BEAM CONNECTIONS UNLESS OTHERWISE NOTED.
REFER TO ENGINEERED FLOOR LAYOUTS.
- 6) JOIST HANGERS: PROVIDE METAL HANGERS FOR ALL JOISTS AND BUILT-UP WOOD VENEERS INTERSECTING FLUSH BUILT-UP WOOD MEMBERS.
- 7) WOOD MEMBERS NOT TREATED WITH A WOOD PRESERVATIVE, IN CONTACT WITH CONCRETE, SHALL BE SEPARATED FROM THE CONCRETE BY AT LEAST 2 (2") FULL CROSS SECTION VENEER WALL BOARD OR OTHER DAMPPROOFING MATERIAL EXCEPT WHERE THE WOOD MEMBER IS AT LEAST 150mm (6") ABOVE THE GROUND.

STEEL

- 1) STRUCTURAL STEEL SHALL CONFORM TO CSA/CAN-540.21 GRADE 350L.
- 2) REINFORCING STEEL SHALL CONFORM TO CSA-600-100 GRADE 4



PARTIAL FOUNDATION PLAN



RECEIVED
JUN 13 2009
TOWN OF CALFEON
BUILDING SECTION
FILE NO

2012 CODE ENERGY STAR

[illegible]

【例題】 求下列各函数的定义域。

All drawings, specifications, related documents and bills of materials shall be submitted to the Engineer, in accordance with the provisions of the contract documents, for review and approval. The Engineer's review and approval shall not constitute a warranty or a guarantee of the accuracy or completeness of the drawings, specifications, related documents and bills of materials, or a representation that the drawings, specifications, related documents and bills of materials are in accordance with the contract documents. The Engineer's review and approval shall not constitute a representation that the drawings, specifications, related documents and bills of materials are in accordance with the contract documents.

2" x 2" PICKETS CHAMFERED AT BOTTOM WITH 2" x 6" TOP CAP AND 2" x 4" TOP RAIL (REFER TO DETAIL 1)

3'-6" HIGH WOOD RAILING IF DECK FLOOR IS MORE THAN 5'-11" ABOVE GRADE AND 3'-0" HIGH WOOD RAILING IF DECK IS LESS THAN 5'-11" ABOVE GRADE

MAX. 4" OPENING BETWEEN PICKETS

5/4 x 6 PRESSURE TREATED DECKING WITH 1/4" GAP

WB1 RIM JOISTS (PRESSURE TREATED)

GUARDS FOR STAIRS SHALL NOT BE LESS THAN 2'-11" HIGH MEASURED VERTICALLY FROM A LINE DRAWN THROUGH THE OUTSIDE EDGES OF THE STAIR NOSINGS

2" x 4" WOOD BLOCKING @ 4'-0" O.C. MIN. BETWEEN STRINGERS

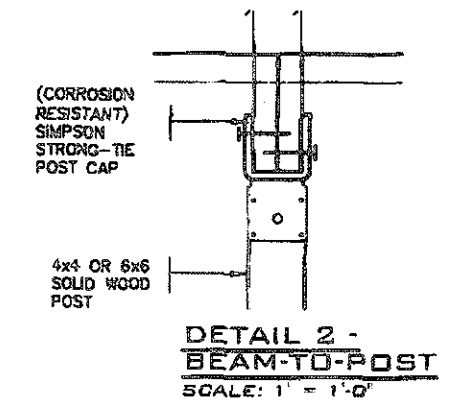
2" x 12" STRINGER

PRECAST CONCRETE SLAB

(CORROSION RESISTANT) SIMPSON STRONG-TIE COLUMN BASE. 1/2" DIA. ANCHOR BOLT.

12" CONC. PIER

OPENINGS WITHIN GUARDS AND SPACES BETWEEN GUARDS AND ALL FINISHED SURFACES SHALL NOT EXCEED 100 MM. GUARDS SHALL BE DESIGNED TO NOT FACILITATE CLIMBING



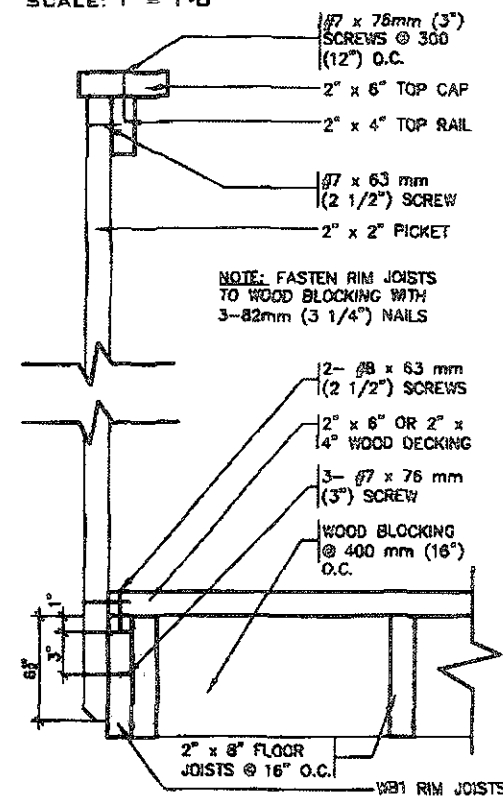
THIS STRUCTURE MUST BE CONSTRUCTED TO MEET OR EXCEED THE PROVISIONS OF THE ONTARIO BUILDING CODE

WOOD DECK SECTION WITH BRICK VENEER
SCALE: 1/2" = 1'-0"

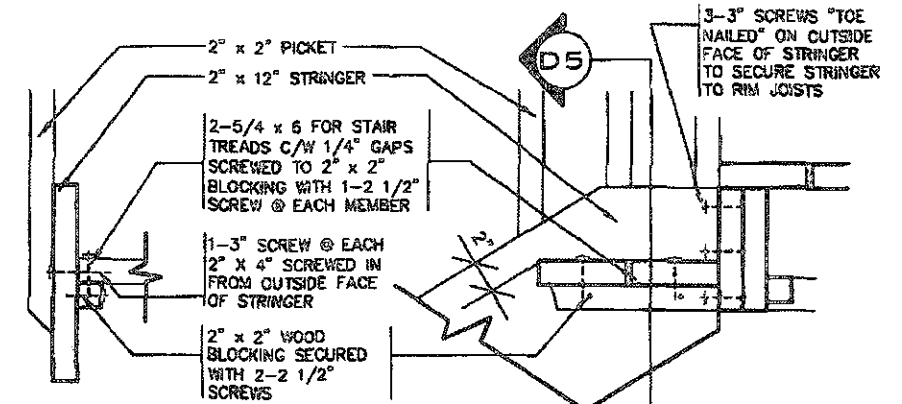
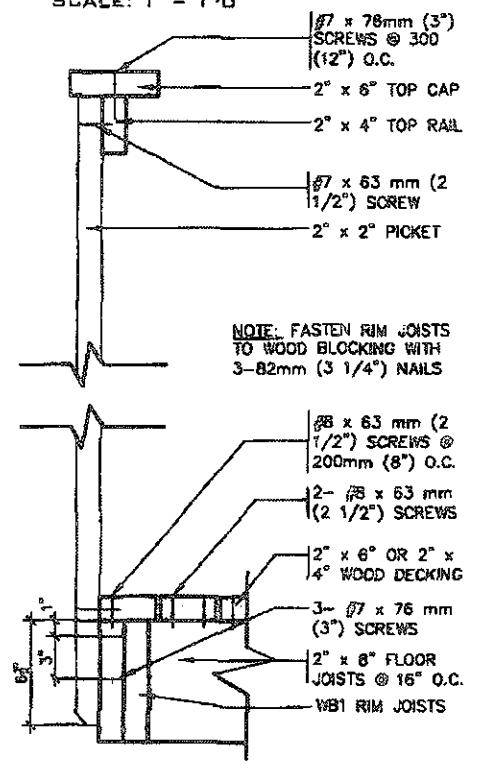
DETAIL 1

CANTILEVERED PICKET SCREWED TO RIM JOIST AND DECK

GUARD PARALLEL TO FLOOR JOISTS
SCALE: 1" = 1'-0"



GUARD PERPENDICULAR TO FLOOR JOISTS
SCALE: 1" = 1'-0"



DETAIL 5
SECTION THROUGH STAIR STRINGER
SCALE: 1" = 1'-0"

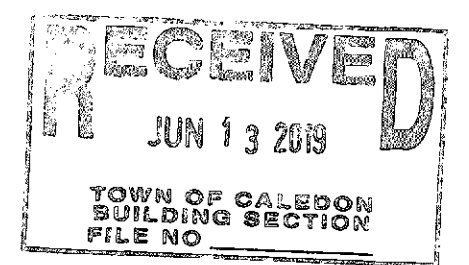
DETAIL 4
SECTION @ TREAD AND STRINGER SECUREMENT
SCALE: 1" = 1'-0"

GENERAL NOTES

1. BRICK TO BE COMPRESSIVE STRENGTH OF 15 mPA (2200 p.s.i.) MIN. UNITS TO BE LAID WITH FULL HEAD AND BED JOINTS.
2. MORTAR TO BE TYPE S WITH JOINT THICKNESS OF 10mm (3/8") MIN. AND 20mm (3/4") MAX.
3. ALL NAILS AND SCREWS TO BE GALVANIZED.
4. WB1 = 2- 2 x 8 (PRESSURE TREATED)
WB3 = 2- 2 x 10 (PRESSURE TREATED)
5. WOOD FOR CANTILEVERED PICKETS SHALL BE DOUGLAS FIR-LARCH, SPRUCE-PINE-FIR, OR HEM-FIR SPECIES.



STRUDET INC.
FOR STRUCTURE ONLY



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2. INSUL. UPDATED, RE-ISSUED FOR PERMIT. JAN 30/19 GW 1. ISSUED FOR PERMIT. DEC 19/18 GW	The undersigned has reviewed and takes responsibility for this design and has the qualifications and meets the requirements set out in the Ontario Building Code to be a Designer. signature: <i>R. Vink</i> 24486 name: Richard Vink registration information: 6229 firm: VAS Design Inc. 42658	VA3 DESIGN 255 Consumers Rd Suite 120 Toronto ON M2J 1R4 t 416.630.2255 f 416.630.4782 vasdesign.com	Greenpark project name: LAMBERTS LANE HOME CORP. PH.2 location: CALEDON date: SEPT. 2018 drawn by: As Shown checked by: As Shown WOOD DECK DETAILS 18023-CP-STD_DETAILS_ES17	project no. 18023 sheet no. 5
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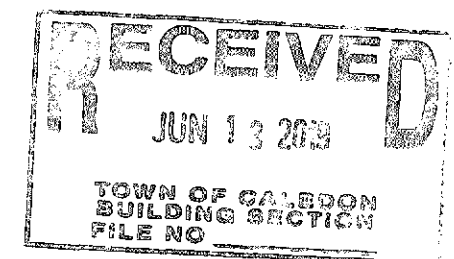
OPENINGS WITHIN GUARDS AND SPACES
BETWEEN GUARDS AND ALL FINISHED
SURFACES SHALL NOT EXCEED 100 MM.
GUARDS SHALL BE DESIGNED TO
NOT FACILITATE CLIMBING



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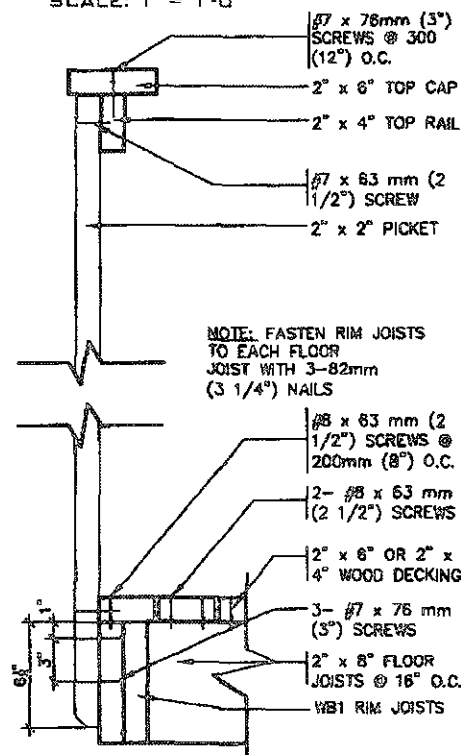
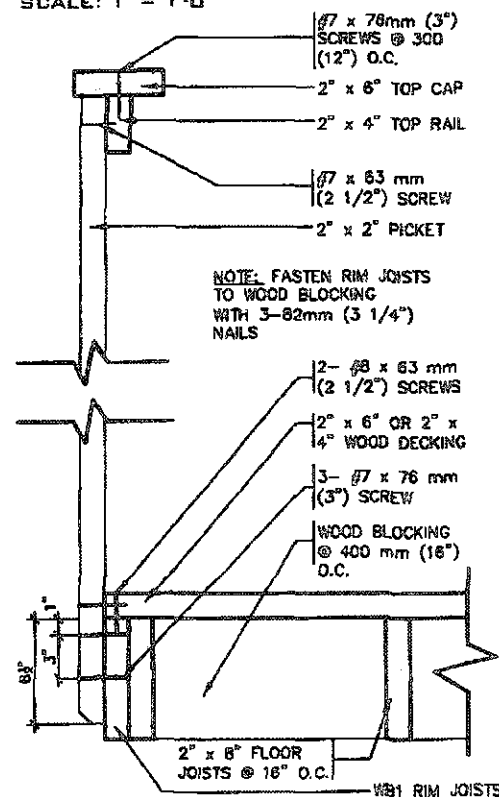
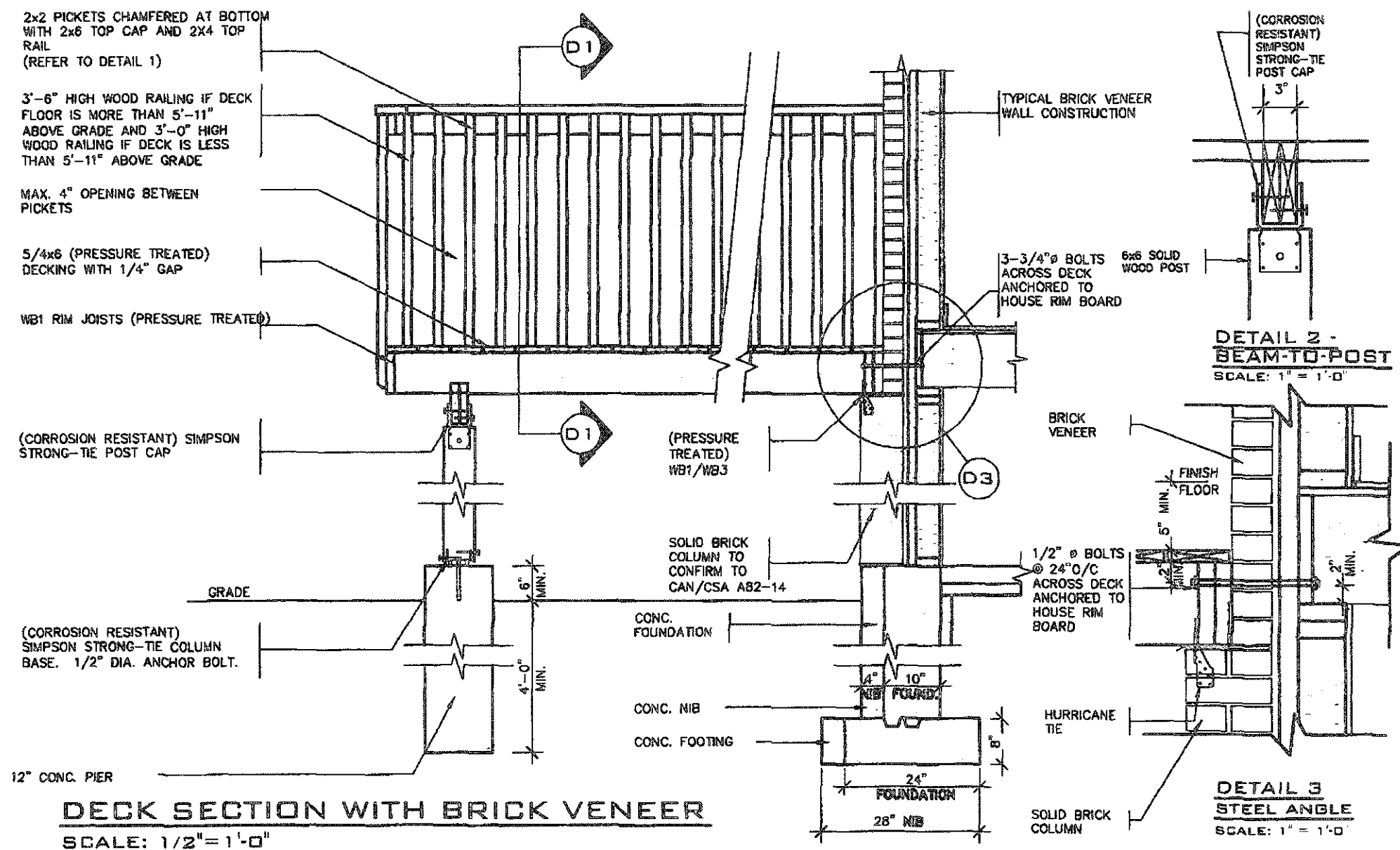
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此項報告係根據該局所屬各分區之調查結果彙編而成，其內容詳載於該局所屬各分區之調查報告中。



OPENINGS WITHIN GUARDS AND SPACES
BETWEEN GUARDS AND ALL FINISHED
SURFACES SHALL NOT EXCEED 100 MM
GUARDS SHALL BE DESIGNED TO
NOT FACILITATE CLIMBING

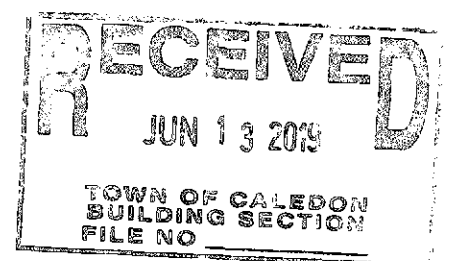
GENERAL NOTES

1. BRICK TO BE COMPRESSIVE STRENGTH OF 15 MPa (2200 p.s.i.) MIN. UNITS TO BE LAID WITH FULL HEAD AND BED JOINTS.
2. MORTAR TO BE TYPE S WITH JOINT THICKNESS OF 10mm (3/8") MIN. AND 20mm (3/4") MAX.
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WB3 = 2- 2 x 10 (PRESSURE TREATED)
5. WOOD FOR CANTILEVERED PICKETS SHALL BE DOUGLAS FIR-LARCH, SPRUCE-PINE-FIR, OR HEM-FIR SPECIES.

THE STRUCTURE MUST BE
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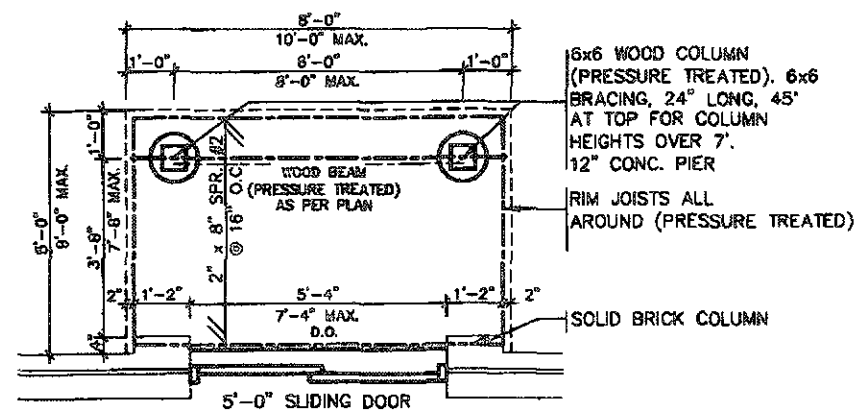
9				The undersigned has reviewed and taken responsibility for this design and how the specifications and details the requirements set out in the Ontario Building Code to be a design.	
8					
7				qualification information	
6				Richard Vink	24480
5				signature	R Vink
4				qualification information	652
3				VAS Design Inc.	42658
2	ISSUED, UPDATED, RE-ISSUED FOR PERMIT.	JAN 30/19	GW	Orderer must verify all dimensions on job card report any discrepancy to the Designer before proceeding with the work. All drawings and specifications are instruments of service and the property of the Designer which must be returned at the completion of the work.	
1	ISSUED FOR PERMIT.	DEC 19/16	GW	Drawings may not be used.	
	no. description		date by		

VA3
DESIGN
255 Consumers Rd Suite
Toronto ON M2J 1R4
t 416.630.2255 f 416.630.
va3design.com

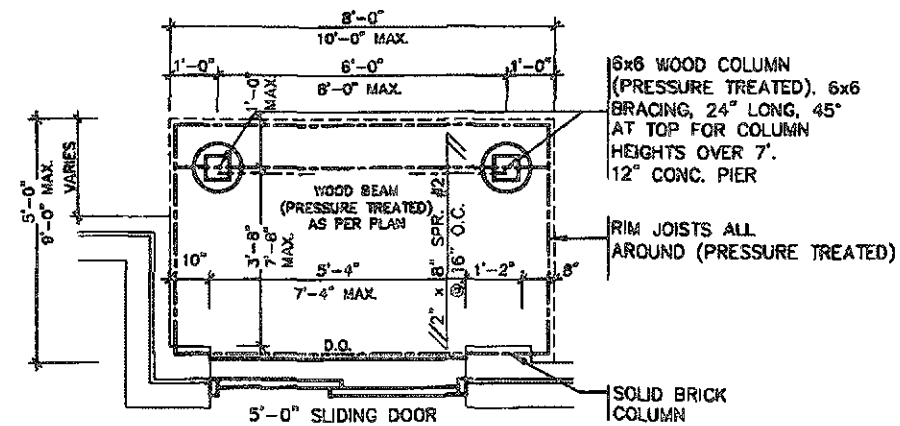


project no.	location	project no.
LAMBERTS LANE HOME CORP. PH.2	CALEDON	18023
date	description	drawing no.
SEPT. 2016	WOOD DECK -WALK-OUT CONDITION	
drawn by	checked by	date
GW	As Shown	18023-GP-STD_DETAILS_E317

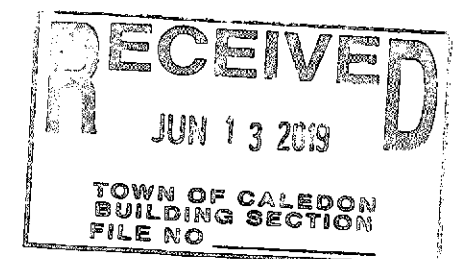
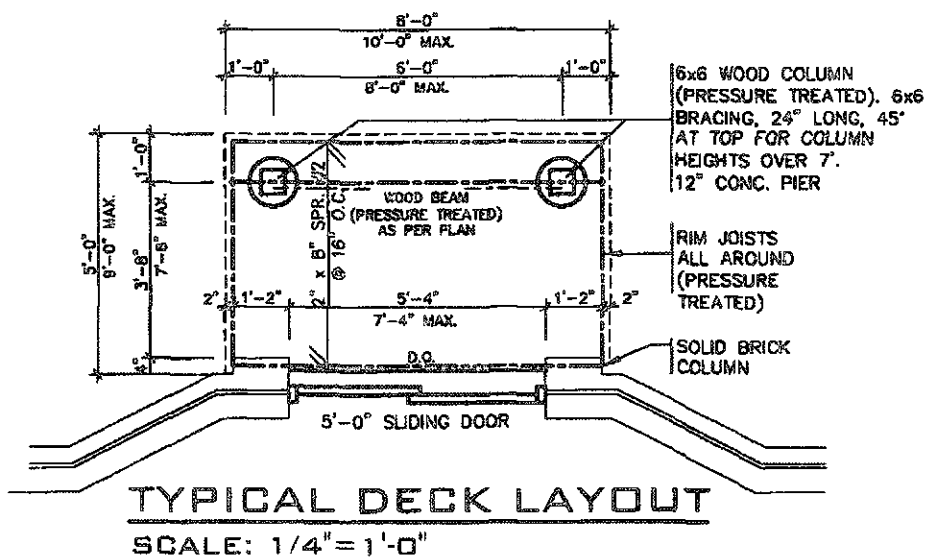
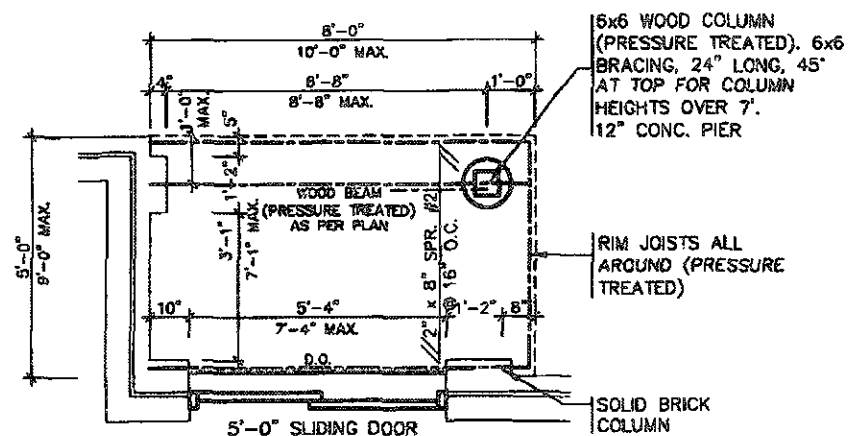
5-3



OPENINGS WITHIN GUARDS AND SPACES
BETWEEN GUARDS AND ALL FINISHED
SURFACES SHALL NOT EXCEED 100 MM.
GUARDS SHALL BE DESIGNED TO
NOT FACILITATE CLIMBING



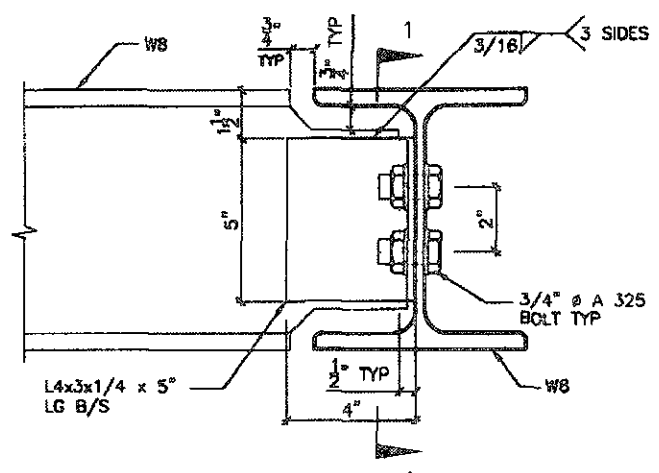
THIS STRUCTURE MUST BE
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THE 2015 IBC BUILDING CODE



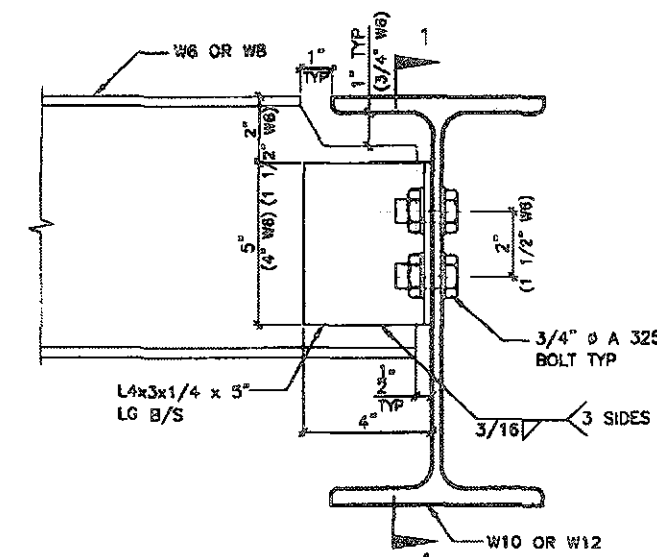
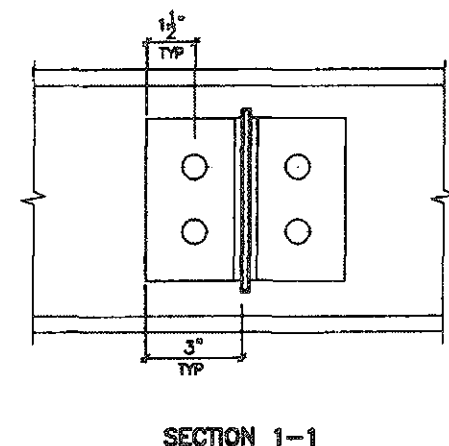
FEB 14 2019

2012 CODE
ENERGY STAR

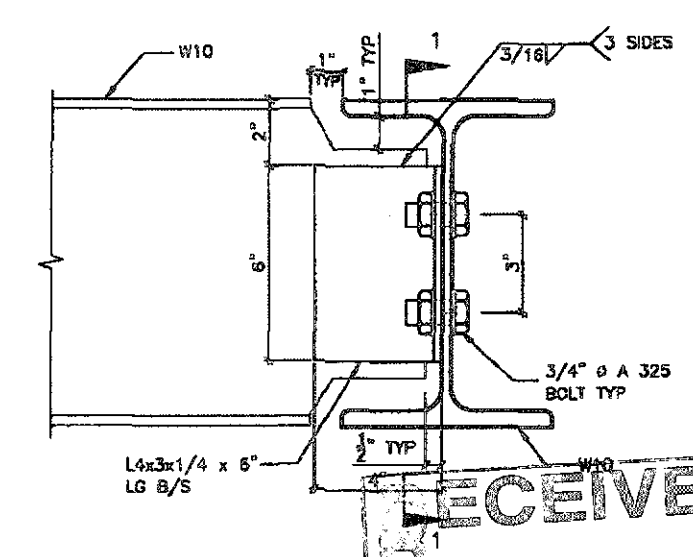
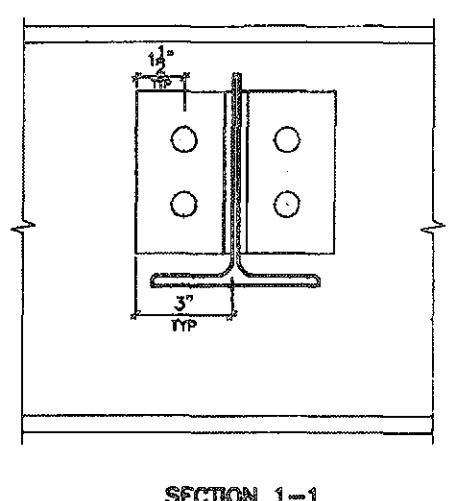
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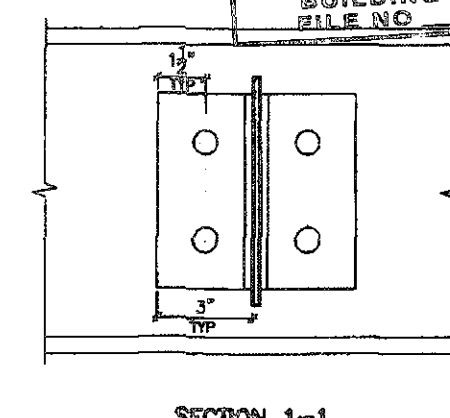
DETAIL 1.
W8
TO
W8
CONNECTION



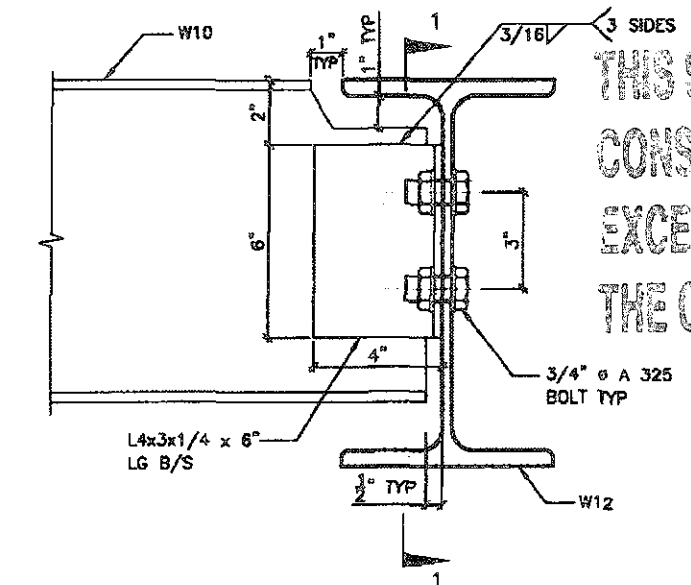
DETAIL 2.
W6(W8)
TO
W10(W12)
CONNECTION



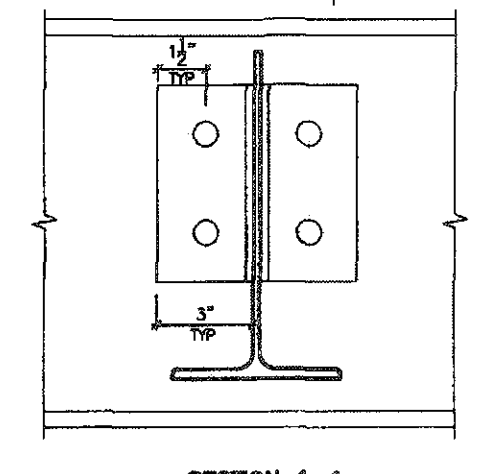
DETAIL 3.
W10
TO
W10
CONNECTION



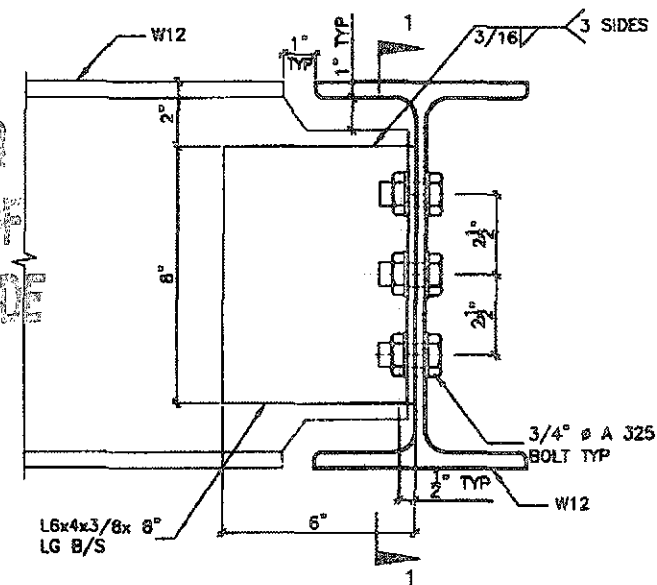
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TOWN OF CALEDON
BUILDING SECTION
FILE NO.



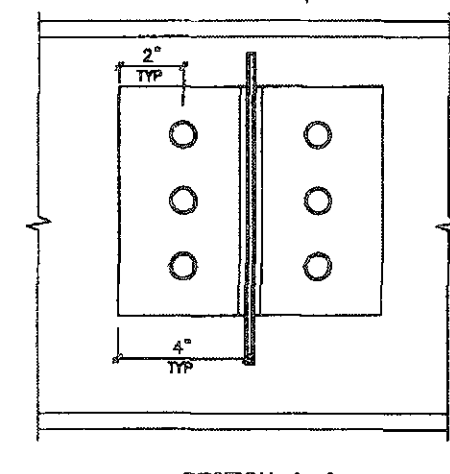
DETAIL 4.
W10
TO
W12
CONNECTION



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THE ONTARIO BUILDING CODE

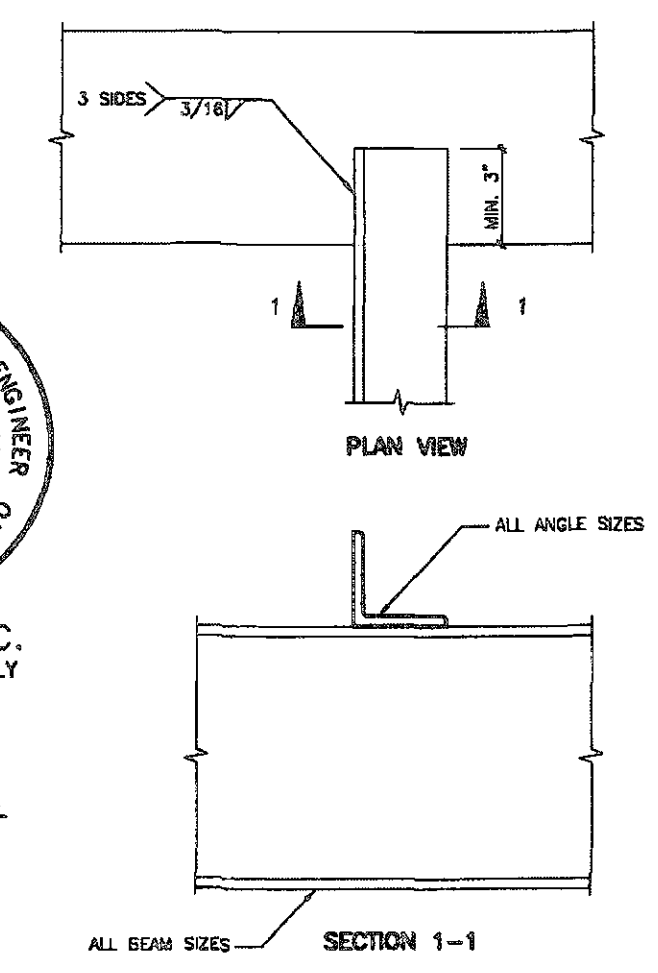


DETAIL 5.
W12
TO
W12
CONNECTION



REGISTERED PROFESSIONAL ENGINEER
B. MARINKOVIC
PROVINCE OF ONTARIO
STRUDET INC.
FOR STRUCTURE ONLY

DETAIL 6.
ANGLE
TO
BEAM
CONNECTION



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ENERGY STAR

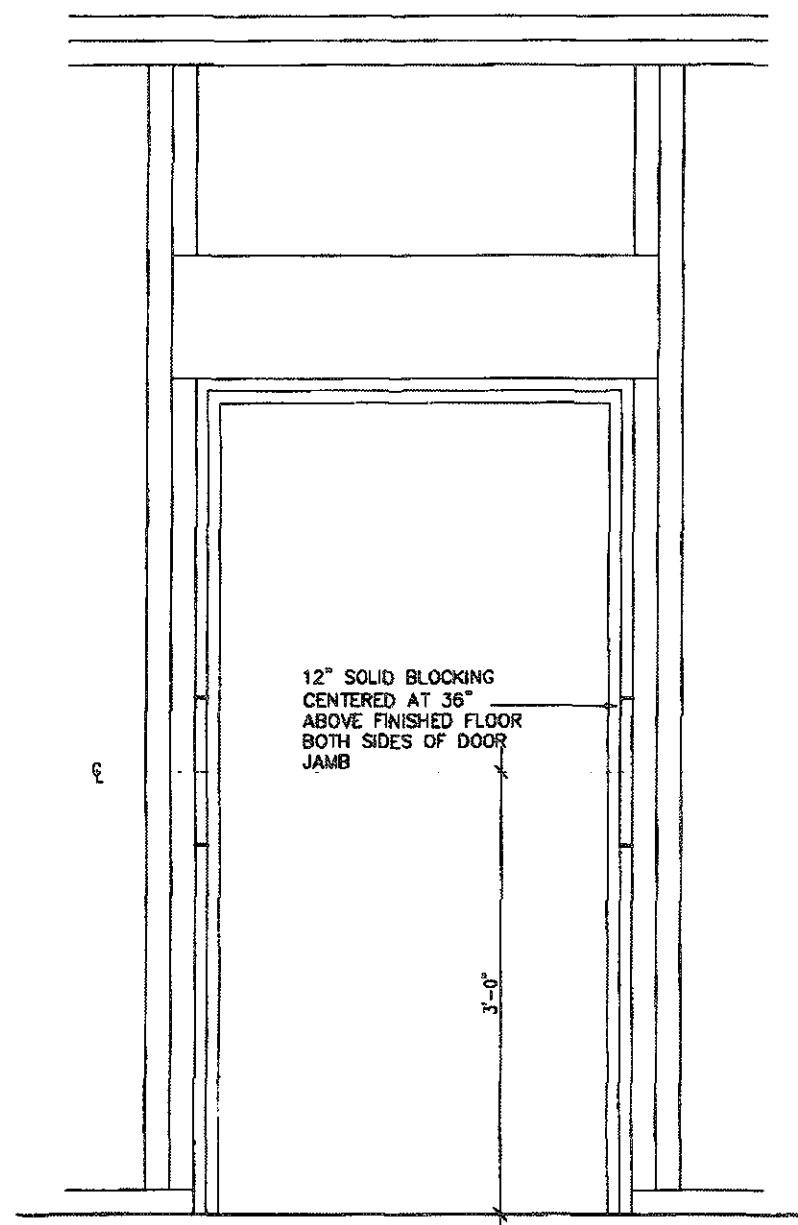
9					
8					
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6					
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3					
2	INSUL. UPDATED, RE-ISSUED FOR PERMIT.	JAN 30/19	GW		
1	ISSUED FOR PERMIT.	DEC 19/18	GW		
no.	description	date	by		

VAS DESIGN
255 Consumers Rd Suite 120
Toronto ON M2J 1R9
t 416.630.2255 f 416.630.4782
vasdesign.com

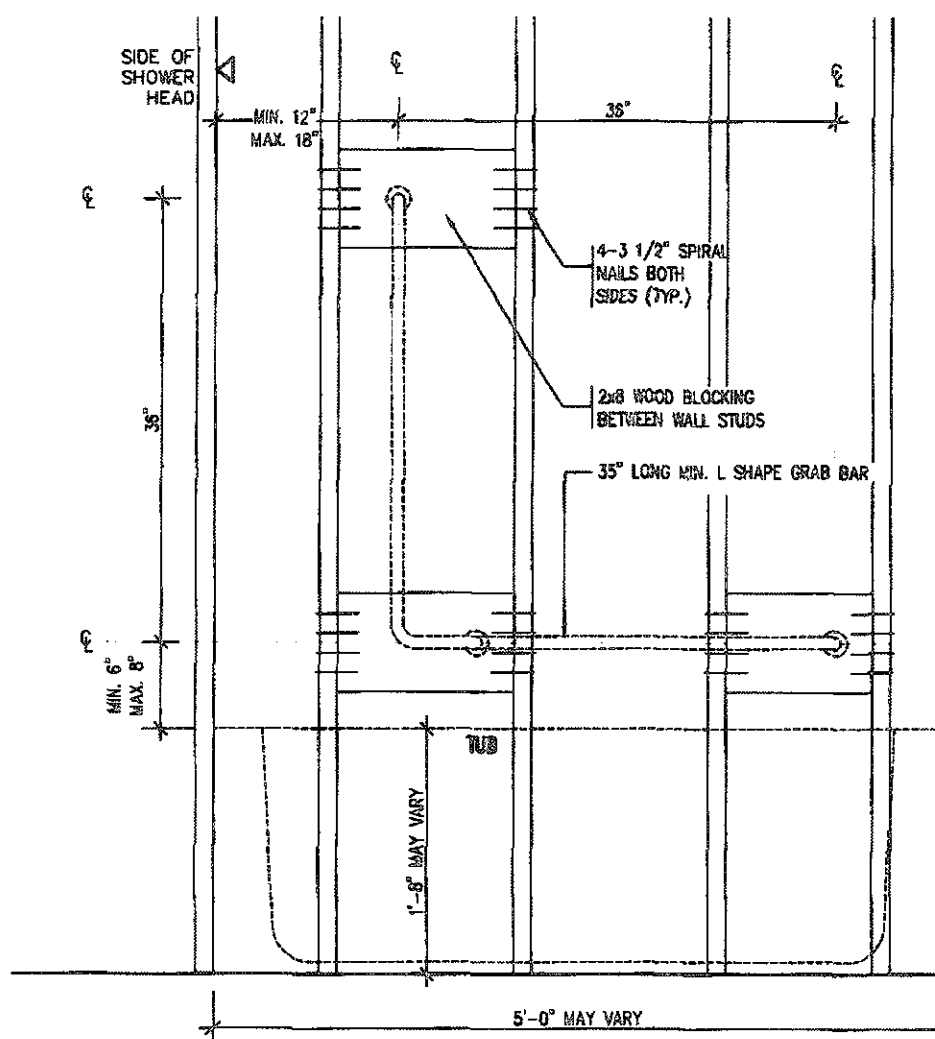
Greenpark.
project name
LAMBERTS LANE HOME CORP. PH.2
city
CALEDON
date
SEPT. 2018
drawn by
Kot to Spalo
checked by
Kot to Spalo
project no.
18023
sheet no.
6

STEEL BEAM CONNECTIONS
18023-07-STD_DETAILS_E517

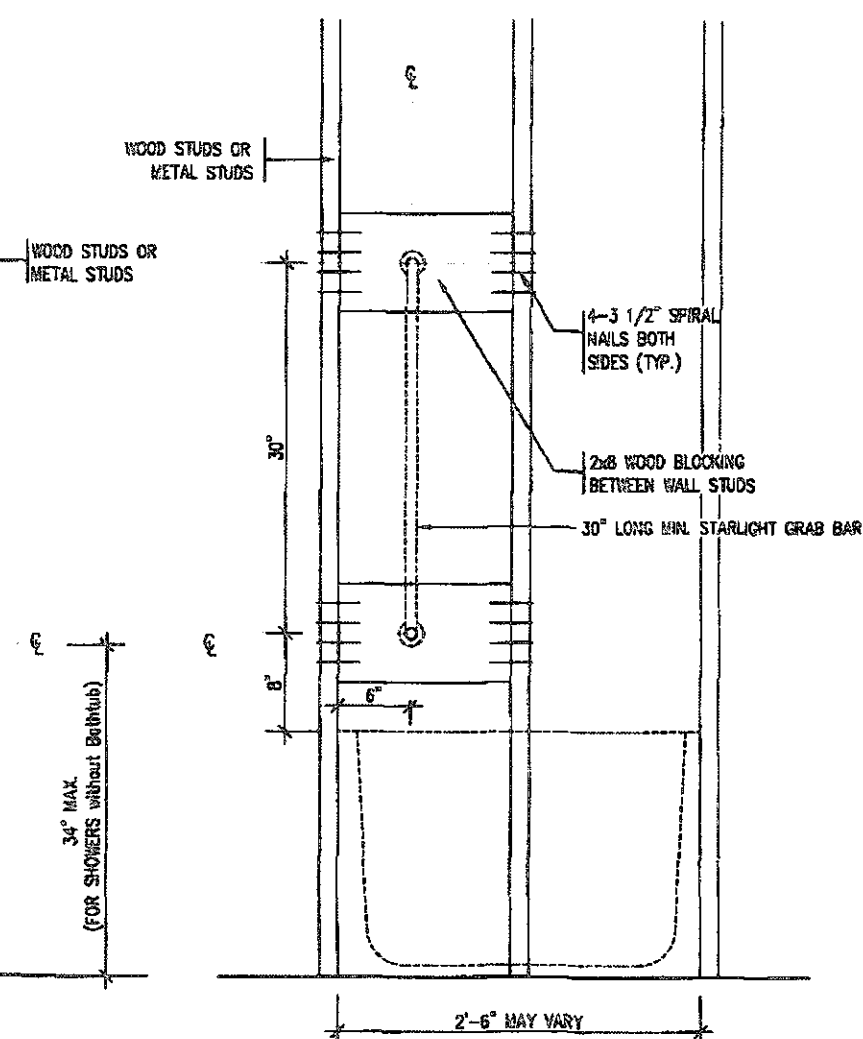
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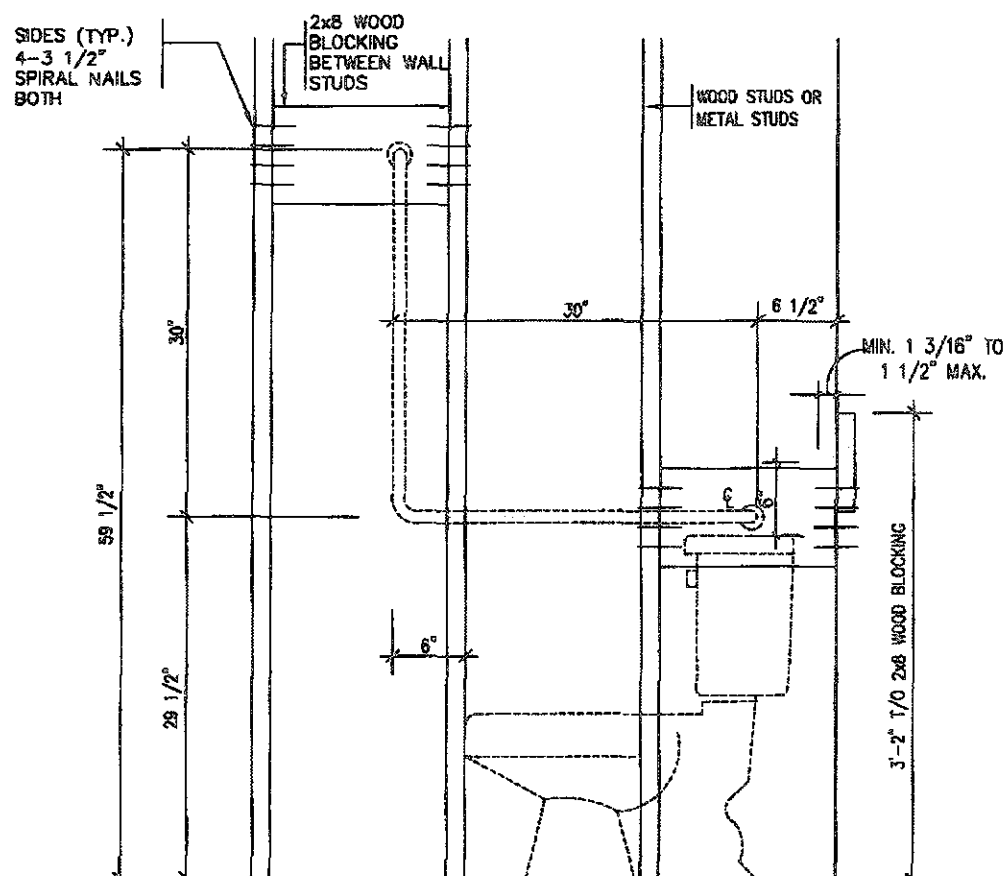
RESISTANCE TO FORCED ENTRY (OBC 9.6.8.)



BATH TUB/ SHOWER FRONT ELEVATION

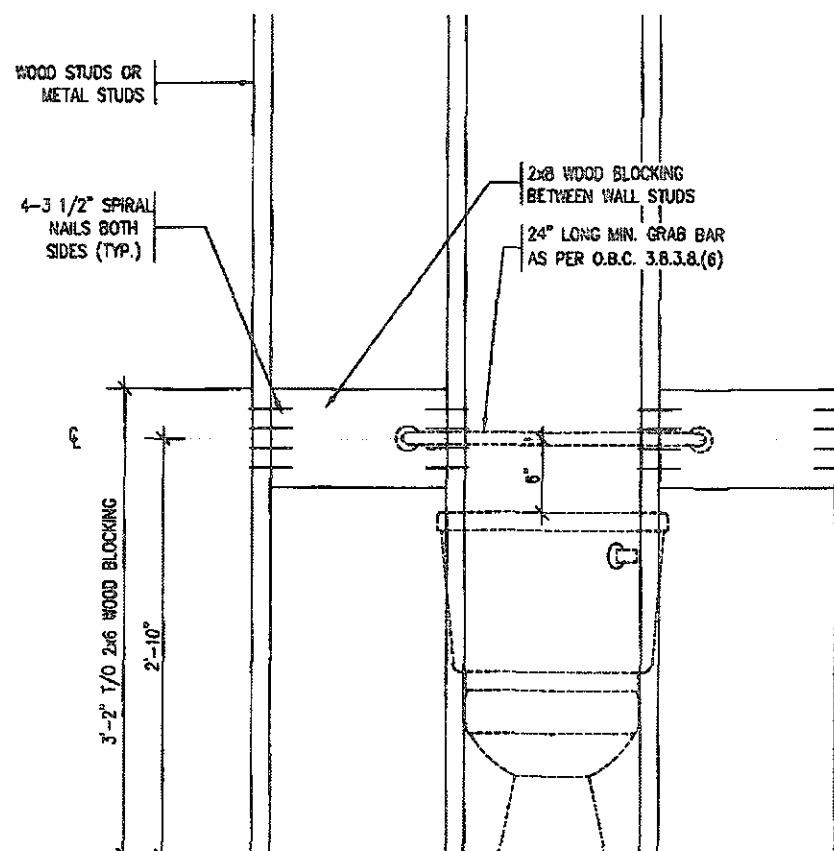


BATH TUB SHOWER HEAD SIDE ELEVATION



TOILET SIDE ELEVATION

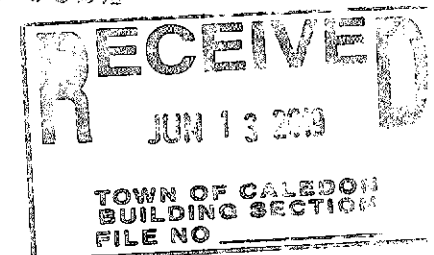
STRUCTURAL REINFORCEMENT FOR GRAB BAR (OBC 9.5.2.3.)
FOR MAIN BATH ONLY



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THE ONTARIO BUILDING CODE



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ENERGY STAR

9					
8					
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5					
4					
3					
2	ISSUED, UPDATED, RE-ISSUED FOR PERMIT.	JAN 30/19	GW		
1	ISSUED FOR PERMIT.	DEC 19/18	GW		
no.	description	date	by		

VAS DESIGN

255 Consumers Rd Suite 120
Toronto ON M2J 1R4
416.630.2255 f 416.630.4782
vasdesign.com

Greenpark.

project name
LAMBERTS LANE HOME CORP. PH.2

location
CALEDON

date
SEPT. 2018

drawn by
GW

checked by
Not to Scale

STUD WALL REINFORCEMENT

18023-GP-STD_DETAILS_ES17

project no.
18023

drawing no.
7

TYPICAL ROOF CONSTRUCTION

VENTED SOFFIT

TRIM_____

AIR SPACE —

STUCCATO/ HARD BOARD FINISH

GAP IN MAILERS

1" x 3" WOOD NAILERS

415 BUILDING PAPER

R5 RIGID _____

PREFN. METAL FLASHING

PLYWOOD ON ROOF RAFTERS	
----------------------------	--

STEEL STRUCTURE

BRICK BEYOND

CROSS SECTION

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JUN 13 2019
TOWN OF CALEDON
BUILDING SECTION
FILE NO

FEB 14 2019

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PLAN VIEW

~~STUCCATO BOARD FINISH CLADDING OR EQUAL (OBC 9.27.)~~



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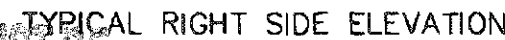
[illegible]

At various meetings, staff members and some of the research subjects of the Institute of the American Studies of the University of California at Berkeley, discussed the results of the study and the implications of the findings.



NOTES:

1. LEVELS SHOWN ON THE PLANS ARE FOR ILLUSTRATION PURPOSE ONLY, SEE FINAL GRADING PLAN FOR ACTUAL LEVELS
2. ALL LEVELS ARE SHOWN IN METRIC



NOTES:
1. LEVELS SHOWN ON THE PLANS ARE FOR ILLUSTRATION PURPOSE ONLY, SEE FINAL GRADING PLAN FOR ACTUAL LEVELS
2. ALL LEVELS ARE SHOWN IN METRIC



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ENERGY STAR

9						The undersigned has reviewed and takes responsibility for this design and has the qualifications and meets the requirements set out in the Job Briefing Order to be a Designer.
8						
7						qualification information
6						Richard Vink
5						name
4						signature
3						VAS Design Inc.
2						426
1	ISSUED, UPDATED, RE-ISSUED FOR PERMIT.	JAN 30/19	GW			Consent to the Designer before proceeding with the work. All drawings and specifications are instruments of service and the proper use of the Designer which must be returned at the completion of the project. Drawings are not to be copied.
	ISSUED FOR PERMIT.	DEC 19/18	GW			
	no. description		date	by		

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DESIGN
255 Consumers Rd Suite
Toronto ON M2J 1W
t 416.630.2256 f 416.63
va3design.com

Greenpark.

project name	contract no.
LAMBERTS LANE HOME CORP. PH.2	CALEDON
date	description
SEPT. 2010	SLAB ON GRADE INSULATION
drawn by	checked by
GW	-
	Not to Scale
	16023-CP-STD DETAILS ES17

Project no.
18023
Page no.
9

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