Building Services Division
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City of Richmond Hill
225 East Beaver Creek Road
Richmond Hill, Ontario
Canada, L4B 3P4

GENERAL NOTES (PART 9 - RESIDENTIAL)

PERMIT NO. RM#-2022-00086

All construction must comply with the Ontario Building Code (OBC) 2012 as amended, including but not limited to the following. As a minimum, the following requirements **shall** be incorporated in the final construction:

1. All footings shall rest on natural undisturbed soil or compacted granular fill with a minimum bearing capacity of 75 KPa (1570 psf) unless known capacity is less and provided for in the foundation design.
2. Step footings shall have a maximum rise of 600 mm (23 5/8") for firm soils, 400 mm (15 3/4") for sand or gravel and a minimum horizontal run of 600 mm (23 5/8").
3. Concrete for exterior steps, garage and carport floors and all exterior flat work shall have a minimum compressive strength of 32 MPa (4650 psi) at 28 days, with air entrainment of 5 to 8%. Concrete floors with no damp proofing shall have a minimum compressive strength of 25 MPa (3000 psi). All other concrete to be 15MPa (2200 psi).
4. Foundations and the soil beneath them shall be protected against freezing during winter construction. Where foundation walls require permanent lateral support, the wall shall be braced or laterally supported before backfilling.
5. When the unsupported height of a foundation wall exceeds 3.0 m (9'-10"), the wall shall be designed by an engineer in accordance with OBC Part 4.
6. Exterior concrete stairs with more than 2 steps shall be supported on unit masonry, concrete walls or piers not less than 150x150 (6"x6") with footings at 1.2 m (4') below grade.
7. Where the top of a foundation wall is reduced in thickness to permit the installation of masonry exterior facing, the reduced section shall be not less than 90 mm (3 ½") thick and tied to the facing material with metal ties conforming to Sentence 9.20.9.4. (3), spaced not more than 200 mm (7 7/8") o.c. vertically and 900 mm (2'-11") o.c. horizontally. The space between the wall and masonry veneer shall be filled with mortar.
8. Provide continuous lateral support to top flange of all steel beams. Steel beams shall have minimum 90 mm (3 1/2") bearing length. Connections to other steel beams shall have a minimum of 2-M20 (3/4" dia.) A325 steel bolts or a full welded connection (with full shear capacity of beam). Steel beams supported on wood shall be designed by an Engineer.
9. Provide solid blocking support under all point loads and continue down to the foundation. Built-up columns shall comply with OBC 9.23.10.7. For engineered systems, follow manufacturer's specifications for correct blocking and bearing requirements.
10. Refer to the approved engineered layout drawings for engineered floor joist and roof truss systems, including beams and supports. Follow manufacturers specifications for bridging, bracing, bearing and connection requirements for built up beams or joists.
11. Tie the lower ends of roof rafters with continuous horizontal ties to the opposing rafters unless lateral thrust is otherwise specifically designed for.
12. Guards shall be constructed in accordance with Supplementary Standard 7 of the OBC or in conformance with OBC Part 4 (including design loads on guards). Min. guard height to comply with OBC 9.8.8. All guards to be non-climbable.
13. All masonry veneer ties shall be corrosion-resistant, minimum of 0.76 mm (0.03") thick, 22 mm (7/8") wide and be spaced in accordance with Table 9.20.9.5 of the OBC
14. Ceramic floor tile and its supporting floor shall be constructed in accordance to OBC 9.30.6.
15. For insulation values, window and door U-values and efficiency of appliances refer to SB-12 requirements: Prescriptive or Performance design or values specified by Energy Star requirements.
16. Foundation walls enclosing heated spaces shall be insulated to not more than 8" above the basement slab and an approved drainage layer is required on the exterior.
17. Exterior Insulated Finished System (EIFS) over wood framed wall and other moisture sensitive substrates shall consist of dual barrier with drained joints (DB/DJ). They shall be constructed in accordance to OBC 9.27.13 and shall conform to CAN/ULC-S716.1. All other exterior applied stucco finishes shall be constructed in accordance with OBC 9.28.
18. Stairs serving a house or dwelling unit shall have min. headroom of 1950 mm (6'-5"), min. width of 860 mm (2'-10"), max. rise of 200 mm (7 7/8") & min. 125 mm (4 7/8") and a min. run of 255 mm (10"). Tapered stairs shall have a min. average run of 255 mm (10") at the point of 300mm measured from the center of the handrail. The tolerance of stair dimensions shall conform to OBC 9.8.4.4. Secure stair stringers at top and bottom.
19. Basement ceiling height shall be min. 2.1 m. (6'-11") over at least 75% of the area and 1.95 m. (6'-5") under beams and ducts.
20. Every floor level containing a bedroom shall be provided with at least 1 outside window with an operable unobstructed opening having a minimum area of 0.35 sq. m. (3.8 sq. ft.), with no dimension less than 380 mm (15"). Every floor level, requiring travel of more than 1 storey to an exit door, shall be provided with an unobstructed escape window opening of not less than 1 m. (3'-3") in height and 0.55 m (21 5/8") in width with the sill not more than 1 m (3'-3") above the floor and 7 m. (23') above adjacent ground level or that floor shall be provided with a balcony. Except for basement locations, all windows shall have a maximum sill height of 1 m. (3'-3") above the floor.
21. Provide window protection to minimize the hazard to children in accordance with OBC 9.7.1.6.
22. Exterior walls, which are less than 1.2 m (4'-0") from the lot line, shall have no unprotected opening and be constructed with a ¾ hr. fire resistance rating. These walls shall be rated from the interior. Exterior walls, which are less than 0.6 m (2'-0") from the lot line, shall in addition have non-combustible cladding.
23. All entrance doors, doors between the dwelling unit and the attached garage, patio doors and windows within 2m (6'-7") of adjacent ground level shall conform to OBC Subsections 9.6.8 & 9.7.6 'Resistance to Forced Entry'.
24. Roof vents shall be provided on the basis of 1 sq. ft./300 sq. ft. of insulated ceiling area. Where the roof slope is less than 1 in 6 or in cathedral ceilings, roof vents shall be provided on the basis of 1 sq. ft./150 sq. ft. of insulated ceiling area. Roof vents shall be uniformly distributed to ventilate each roof space with a minimum of 25% of the required vent space to be located at the top and the bottom of the roof.
25. Eave protection is required, beneath the start strip, from the edge of the roof to a minimum distance of 900 mm (3'-0") up the roof slope to not less than 300 mm (12") inside the inner face of the exterior wall on shingled, shake or tile roofs except as provided by 9.26.5.1.(2).
26. Foamed plastic insulation shall be protected with interior finishes according to OBC 9.10.17.10.
27. The wall and ceiling between an attached garage and the dwelling unit shall be constructed and sealed so as to provide an effective barrier to exhaust fumes. Door between the garage and the dwelling unit shall be tight fitting, weather-stripped and equipped with a self closing device.
28. Smoke alarms shall be provided on each floor level and be located within each bedroom. Smoke alarms shall be interconnected and hard wired with no disconnect switch. Smoke alarms are required to have a visual signaling component conforming to NFPA 72.
29. A carbon monoxide detector conforming to CAN/CGA-6.19 or UL 2034 shall be installed on every building containing a fuel burning appliance or an attached garage in conformance with the OBC 9.33.4.
30. In addition to the above carbon monoxide detectors, Town of Richmond Hill By-law No. 245-99 requires that a carbon monoxide detector, equipped with an alarm that is audible within bedrooms when the intervening doors are closed and conforming to CAN/CGA-6.19 or UL 2034, be installed in accordance with the manufacturer's instructions in every dwelling unit. Where the carbon monoxide detector is electrically powered, it must be approved by the Canadian Standards Association and be equipped with a visual indicator indicating that it is in operating condition and have NO switch between the carbon monoxide alarm and the power distribution panel.
31. A mechanical ventilation system is required in every dwelling. An exhaust only' ventilation system is permitted only where forced air heating is used, there is no electric heating or fireplace (other than a direct vent gas fireplace), and where a mechanically vented induced draft or direct vented furnace and hot water tank are used. A ventilation system with a heat recovery ventilator or Part 6 design is required in all other cases.
32. All exterior doors greater than 600mm above grade which do not exit onto a deck shall be permanently adjusted to prevent opening as per 9.6.4.1(2) of the OBC or be guarded as per 9.8.8 of the OBC
33. The main bathroom shall have stud reinforcement to accommodate future installation of grab bars adjacent to water closets and shower or bathtub as per OBC 9.5.2.3.
34. Slopes on roof surfaces shall comply with OBC 9.26.3.1.
35. Windows shall comply with OBC 9.7
36. Exhaust ducts connected to laundry drying equipment shall comply with OBC 6.2.3.8. (7)

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 APPLICABE CODES AND AUTHORITIES HAVING JURISDICTION. THESE REQUIREMENTS ARE TO BE TAKEN AS MINIMUM SPECIFICATIONS. ONT. REG. 332/12 - 2012 OBC.

current

1 ROOF CONSTRUCTION (*SEE OBC 9.19.)

NO. 210 (10.25kg/m2) ASHPHALT SHINGLES. 10mm (3/8") PLYWOOD SHEATHING WITH "H" CLIPS. APPROVED WOOD TRUSSES @600mm 24" o.c. MAX. APPROVED EAVE PROTECTION TO EXTEND 900mm (3'-0") FROM EDGE OF ROOF AND MIN. 300mm (12") BEYOND INNER FACE OF EXTERIOR WALL, 38x89 (2"x4") TRUSS BRACING @ 1830mm (6'-0") o.c. AT BOTTOM CHORD. PREFIN. ALUM. EAVESTROUGH, FASCIA, RWL & VENTED SOFFIT. PROVIDE ICE & WATER SHIELD TO ALL ROOF / WALL SURFACES SUSCEPTIBLE TO DAMMING. ROOF SHEATHING TO BE FASTENED 150 (6") c.c. ALONG EDGES & INTERMEDIATE SUPPORTS WHEN TRUSSES SPACED GREATER THAN 406 (16"). ATTIC VENTILATION 1:300 OF INSULATED CEILING AREA WITH 50% AT EAVES.

2 FRAME WALL CONSTRUCTION (2"X6")

SIDING, HARDIE BOARD, STUCCATO BOARD OR EQUAL AS PER ELEVATION, 19X64 (1"x3") VERTICAL WOOD FURRING, APPROVED SHEATHING PAPER, 7/16" O.S.B. EXTERIOR SHEATHING. 38X140 (2"X6") STUDS @ 400MM (16") O.C. W/APPROVED DIAGONAL WALL BRACING, RSI 3.87 (R22) INSULATION AND APPROVED VAPOUR BARRIER AND APPROVED CONT. AIR BARRIER, 13mm (1/2") INT. DRYWALL FINISH.

3 BRICK VENEER CONSTRUCTION (2"X6")

90mm (4") FACE BRICK 25mm (1") AIR SPACE, 22x180x0.76mm (7/8"x7"x0.03") GALV. METAL TIES @ 400mm (16") o.c. HORIZONTAL 600mm (24") o.c. VERTICAL. APPROVED SHEATHING PAPER, 7/16" O.S.B. EXTERIOR SHEATHING. 38x140 (2"x6") STUDS @ 400mm (16") o.c. W/APPROVED DIAGONAL WALL BRACING, RSI 3.87 (R22) INSUL. APPROVED VAPOUR BARRIER AND APPROVED CONT. AIR BARRIER, 13mm (1/2") INT. DRYWALL FINISH. PROVIDE WEEP HOLES @ 800mm (32") o.c. BOTTOM COURSE AND OVER OPENINGS. PROVIDE BASE FLASHING UP MIN. 150mm (6") BEHIND BUILDING PAPER.

3A STUCCO WALL CONSTRUCTION (2"X6")

STUCCO CLADDING SYSTEM CONFIRMING TO OBC9.27.1.1.(2) & 9.28 THAT EMPLOY A MINIMUM 6mm (1/4") DRAINAGE CAVITY BEHIND THE CLADDING WITH POSITIVE DRAINAGE TO THE EXTERIOR AND APPLIED AS PER MANUFACTURERS SPECIFICATION ON 25mm (1") MINIMUM EXTRUDED OR EXPANDED RIGID INSULATION, APPROVED SHEATHING PAPER, 7/16" O.S.B. EXTERIOR SHEATHING. 38x140 (2"x6") STUDS @ 400mm (16") o.c. W/APPROVED DIAGONAL WALL BRACING, RSI 3.87 (R22) INSUL. APPROVED VAPOUR BARRIER AND APPROVED CONT. AIR BARRIER, 13mm (1/2") INT. DRYWALL FINISH. STUCCO TO BE MIN.200mm (8") ABOVE FINISH GRADE.

4 INTERIOR STUD PARTITIONS

(*SEE OBC 9.23.10.&9.23.11.)

BEARING PARTITION 38x89 (2"x4") @ 400mm (16") o.c. FOR 2 STOREYS AND 300mm (12") o.c. FOR 3 STOREYS. NON-BEARING PARTITIONS 38x89 (2"x4") @ 600mm (24") o.c.. PROVIDE 38x89 (2"x4") BOTTOM PLATE AND 2/38x89 (2-2"x4") TOP PLATE. 13mm (1/2") INTERIOR DRYWALL BOTH SIDES OF STUD, PROVIDE 38x140 (2"x6") STUDS/PLATES WHERE NOTED.

5 FOUNDATION WALL/FOOTINGS:

(*SEE OBC 9.15.3 & 9.15.4.)

MIN. 200mm (8") POURED CONC. FDTN. WALL 15MPa (2200psi) WITH BITUMENOUS DAMPROOFING AND DRAINAGE LAYER. MIN. 480x155 (19"x6") CONTIN. KEYED CONC. FTG. BRACE FOUNDATION WALL PRIOR TO BACKFILLING. ALL FOOTINGS SHALL REST ON NATURAL UNDISTURBED SOIL WITH MINIMUM BEARING CAPACITY OF 120kPa (17.4 psi) OR GREATER.

STRUDET INC.

REGISTERED PROFESSIONAL ENGINEER
B. MARINKOVIC
PROVINCE OF ONTARIO
JUNE 11/ 2021

FOR STRUCTURE ONLY

6 WEEPING TILE (* SEE OBC 9.14.3.)

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

7 BASEMENT SLAB (*SEE OBC 9.16.-)

80mm (3") MIN. 25MPa (3600psi) CONC. SLAB ON 100mm (4") COARSE GRANULAR FILL, OR 15MPa (2200psi) CONC. WITH DAMPROOFING BELOW SLAB.

8 WOOD SUBFLOORS (*SEE OBC 9.23.14. & 9.30.2.)

19mm (3/4") 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 UNDERLAY UNDER RESILIENT & PARQUET FLOORING.

9 ROOF INSULATION (*SEE SB12 - 2.1.1.2.A & 2.1.1.7)

RSI 10.57 (R60) ROOF INSULATION AND APPROVED VAPOUR BARRIER, 16mm (5/8") INT. DRYWALL FINISH OR APPROVED EQUAL.

10 ALL STAIRS/EXTERIOR STAIRS (*SEE OBC 9.8.-)

MAX. RISE	=200	(7-7/8")	
MIN. RUN	=255	(10")	
MAX. RUN/TREAD	=355	(14")	
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. AVG. RUN	= 200	(8")
MIN. RUN	= 150	(6")

11 RAILING (*SEE OBC 9.8.8.)

FINISHED RAILING ON PICKETS SPACED MAXIMUM 100mm (4") BETWEEN PICKETS.

INTERIOR GUARDS:	= 900mm	(2'-11") MIN.
EXTERIOR GUARDS:	= 1070mm	(3'-6") MIN.

12 SILL PLATE (*SEE OBC 9.23.6 & 9.23.7.)

38x89 (2"x4") SILL PLATE WITH 13mm (1/2") DIA. ANCHOR BOLTS 200mm (8") LONG, EMBEDDED MIN. 100mm (4") INTO CONC. @ 2400mm (7'-10") o.c. CAULKING OR 25 (1") MIN. MINERAL WOOL BETWEEN PLATE AND TOP OF FDTN. WALL. USE MORTAR TO LEVEL SILL PLATE WHEN REQUIRED.

13 BASEMENT INSULATION (*SEE OBC 12.3.)

FOUNDATION WALLS ENCLOSING HEATED SPACE SHALL BE INSULATED FROM THE UNDERSIDE OF THE SUBFLOOR TO NOT MORE THAN 152mm (6") ABOVE THE FINISHED FLOOR OF THE BASEMENT AND NOT LESS THAN 50mm (2") TO THE SLAB.
FOUNDATION WALL INSULATION SHALL BE MINIMUM RSI. 3.52 (R20) BLANKET INSULATION, APPROVED VAPOUR BARRIER, DAMPROOFING W/BLDG. PAPER BETWEEN THE FDTN. AND INSUL.

continuous

14 BASEMENT BEARING STUD PARTITION

(*SEE OBC 9.23.10.)

38x89 (2"x4") STUDS @400mm (16") o.c. 38x89 (2"x4") SILL PLATE ON DAMPROOFING MATERIAL, 13mm (1/2") DIA. ANCHOR BOLTS 200mm (8") LONG, EMBEDDED MIN. 100mm (4") INTO CONC. @ 2400mm (7'-10") o.c. (4") HIGH CONC. CURB ON 305x155 (12"x6") CONC. FOOTING. ADD HORIZ. BLOCKING AT MID-HEIGHT IF WALL IS UNFINISHED.

15 STEEL BASEMENT COLUMN (* SEE OBC 9.17.3.)

90mm (3-1/2") DIA. x 4.78mm (.188) STL. COL. WITH 150x150x9.5mm (6"x6"x3/8") STL. TOP & BOTTOM PLATE.

15A STEEL COLUMN (* SEE OBC 9.17.3.)

90mm (3-1/2") DIA. x 4.78mm (.188) STL. COLUMN WITH 100x100x6.4mm (4"x4"x1/4") STEEL TOP & BOTTOM PLATE. FIELD WELD BOTTOM PLATE TO 250x100x12.5mm (10"x4"x1/2") BASE PLATE C/W 2-13mm (1/2") DIA. x 300mm (12") LONG x 50mm (2") HOOK ANCHORS.

16 NIB WALLS (* SEE OBC 9.23.8.)

BEAM POCKET OR 200x200 (8"x8") POURED CONCRETE NIB WALLS. MINIMUM BEARING 90mm (3-1/2")

17 STEEL BEAM STRAPPING (* SEE OBC 9.23.4.3.(3)(c))

19x38 (1"x2") CONTINUOUS WOOD STRAPPING BOTH SIDES OF STEEL BEAM.

18 GARAGE SLAB (*SEE OBC 9.16.-)

100mm (4") 32MPa (4640psi) CONC. SLAB WITH 5-8% AIR ENTRAINMENT ON OPT. 100 (4") COARSE GRANULAR FILL WITH COMPACTED SUB-BASE OR COMPACTED NATIVE FILL. SLOPE TO FRONT 1% MIN.

19 INTERIOR GARAGE WALLS & CEILING

(*SEE OBC 9.10.9.16.)

13mm (1/2") GYPSUM BOARD ON WALL AND CEILING BETWEEN HOUSE AND GARAGE, RSI 3.87 (R22) IN WALLS, RSI 5.46 (R31) IN CEILING. TAPE AND SEAL ALL JOINTS GAS TIGHT.

20 GARAGE DOOR GASPROOFING

(*SEE OBC 9.10.13.15.)

DOOR AND FRAME GASPROOFING. DOOR EQUIPPED WITH SELF CLOSING DEVICE AND WEATHER STRIPPING.

21 EXTERIOR STEP (max. 2 risers for precast)

(*SEE OBC 9.8.9.2, 9.8.9.3 & 9.8.10.)

PRECAST CONCRETE STEP OR WD. STEP WHERE NOT EXPOSED TO WEATHER MAX. RISE 200mm (7-7/8"); MINIMUM TREAD 250mm (9-1/2")

22 DRYER VENT (*SEE OBC 6.2.3.8.(7))

CAPPED DRYER EXHAUST VENTED TO EXTERIOR. USE 1000mm (4") DIA. SMOOTH WALL VENT PIPE.

23 ATTIC ACCESS (*SEE OBC 9.19.2.)

ATTIC ACCESS HATCH 545x700 (22"x28") WITH WEATHERSTRIPPING. RSI 5.46 (R31) RIGID INSULATION BACKING.

24 FIREPLACE CHIMNEYS (*OBC 9.21.-)

TOP OF FIREPLACE CHIMNEY SHALL BE 915mm (3-0") ABOVE THE HIGHEST POINT AT WHICH IT COMES IN CONTACT WITH THE ROOF AND 610mm (2'-0") ABOVE THE ROOF SURFACE WITHIN A HORIZ. DISTANCE OF 3050mm (10'-0") FROM THE CHIMNEY.

25 LINEN CLOSET

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

26 MECHANICAL EXHAUST

(*SEE OBC 9.32.3.5, 9.32.3.10.)

MECHANICAL EXHAUST FAN VENTED TO EXTERIOR.

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 PARTYWALL, ANCHORED W/ 2-19mm (3/4") x200mm (8") LONG GALV. ANCHORS WITHIN SOLID BLOCK COURSE. LEVEL WITH NON-SHRINK GROUT.

28 CLASS "B" VENT

U.L.C. 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 WOOD BASEMENT POST (*OBC 9.17.4.)

3-38x140 (3-2"x6") BUILT-UP POST ON METAL BASE SHOE ANCHORED TO CONC. WITH 12.7 (1/2") DIA. BOLT ON 406x406x203 (16"x16"x8") CONC. FOOTING.

30 STEP FOOTINGS (*OBC 9.15.3.9.)

MIN. HORIZ. STEP = 610mm (24"). MAX. VERT. STEP = 610mm (24")

31 SLAB ON GRADE (*SEE OBC 9.16.-)

100mm (4") 32MPa (4640psi) CONC. SLAB WITH 5-8% AIR ENTRAINMENT ON OPT. 100 (4") COARSE GRANULAR FILL WITH COMPACTED SUB-BASE OR COMPACTED NATIVE FILL. REINFORCED W/ 6x6-W2.9xW2.9 MESH PLACED NEAR MID-DEPTH OF SLAB.

32 DIRECT VENT FURNACE

DIRECT VENT FURNACE TERMINAL MIN. 900mm (36") FROM A GAS REGULATOR. MIN 300mm (12") ABOVE FIN. GRADE, FROM ALL OPENINGS, EXHAUST & INTAKE VENTS. HRV INTAKE TO BE A MIN. OF 1830mm (6'-0") FROM ALL EXHAUST TERMINALS. REFER TO GAS UTILIZATION CODE.

33 DIRECT VENT GAS FIREPLACE

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 & BRIDGING (*SEE OBC 23.9.4.)

ALL FLOOR JOISTS TO BE BRIDGED WITH 38x38 (2"x2") CROSS BRACING OR SOLID BLOCKING @2100mm (6'-11") o.c. MAX. 19x64 (1"x3") @2100mm (6'-11") o.c. UNLESS A PANEL TYPE CEILING FINISH IS APPLIED.

35 EXPOSED BUILDING FACE (* SEE OBC 9.10.15.)

EXTERIOR WALLS TO HAVE A FIRE RESISTANCE RATING OF NOT LESS THAN 45min. WHERE LIMITING DISTANCE IS LESS THAN 1.2M (3'-11") WHERE THE LIMITING DISTANCE IS LESS THAN 600mm (1'-11") THE EXPOSING FACE SHALL BE CLAD IN NON-COMBUSTABLE MATERIAL.

36 COLD CELLAR PORCH SLAB (* SEE OBC 9.40.)

FOR MAX. 2500mm (8'-2") PORCH DEPTH, 125mm (5") 32Mpa (4640 psi) CONC. SLAB WITH 5-8% AIR ENTRAINMENT. REINF. WITH 10M BARS @200mm (8") o.c. EACH WAY IN BOTTOM THIRD OF SLAB, ANCHORED IN PERIMETER FDTN. WALLS W/ 610x610 (24"x24") 10M @600mm (24") o.c. DOWELS. SLOPE SLAB MIN. 1.0% FROM DOOR. SLAB TO HAVE A MIN. 75mm (3") BEARING ON FDTN. WALLS. PROVIDE (WLI) LINTELS OVER CELLAR DOOR.

37 FDTN. WALL REDUCTION IN THICKNESS

(*SEE OBC 9.15.4.7.)

FDTN. WALL SHALL NOT BE REDUCED TO LESS THAN 90mm (3-1/2") THICK TO A MAX. DEPTH OF 660mm (26") FOR 8" FDTN. WALL. 10" FDTN. WALL WHEN REDUCTION IN THICNESS IS GREATER THAN 26". FDTN. WALL SHALL BE TIED TO THE FACING MATERIAL WITH METAL TIES SPACED 200mm (8")o.c. VERTICALLY AND 900mm (36")o.c. HORIZONTALLY. FILL SPACE BETWEEN WALL AND FACING SOLID WITH MORTAR.

38 CONVENTIONAL ROOF FRAMING

(*SEE OBC 9.23.4.2.(1))

FOR MAX. 2240mm (7'-4") SPAN, 38x89 (2"x4") RAFTERS @400mm (16") o.c.. FOR MAX. 3530mm (11'-7") SPAN, 38x140 (2"x6") RAFTERS @400mm (16") o.c.. RIDGE BOARD TO BE 51mm (2") DEEPER. 38x38 (2"x4") COLLAR TIES AT MIDSPANS. CEILING JOISTS TO BE 38x89 (2"x4") @400mm (16") o.c. FOR MAX. 2830mm (9'-3") SPAN & 38x140 (2"x6") @ 400 (16") o.c. FOR MAX. 4450mm (14'-7") SPAN. RAFTERS FOR BUILT-UP ROOF TO BE 38x89 (2"x4") @600mm (24") o.c. WITH A 38x89 (2"x4") CENTER POST TO THE TRUSS BELOW, LATERALLY BRACED @1800mm (6'-0") o.c. VERTICALLY.

39 TWO STOREY VOLUME SPACES

FOR A MAXIMUM 5490mm (18'-0") HEIGHT, PROVIDE 2-38x140 (2-2"x6") CONTINUOUS STUDS @300mm (12") o.c. FOR BRICK AND 400mm (16") o.c. FOR SIDING. PROVIDE SOLID WOOD BLOCKING BETWEEN STUDS @1220mm (4'-0") o.c. VERT. 7/16" EXT. PLYWOOD.

40 EXPOSED FLOOR TO EXTERIOR (*SB12 - 2.1.1.2.A)

PROVIDE RSI 5.46 (R31) INSULATION, APPROVED VAPOUR BARRIER AND CONTINUOUS AIR BARRIER, FINISHED SOFFIT.

PARTYWALLS

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

42 EXTERIOR WALLS FOR WALK-OUT CONDITION

THE EXTERIOR BASEMENT STUD WALL TO BE 38x140mm (2"x6") STUDS @400mm (16") o.c. MATCH FLOOR JOIST SPACING WHEN PARALEL WITH FLOOR JOISTS.

43 SMOKE ALARM (*OBC 9.10.19)

WITHIN DWELLING UNITS, SUFFICIENT SMOKE ALARMS SHALL BE INSTALLED SO THAT,

a. THERE IS AT LEAST ONE SMOKE ALARM INSTALLED ON EACH STOREY, INCLUDING BASEMENTS AND
b. ON ANY STOREY OF A DWELLING UNIT CONTAINING SLEEPING ROOMS, A SMOKE ALARM IS INSTALLED,
   1. IN EACH SLEEPING ROOM, AND
   2. IN A LOCATION BETWEEN THE SLEEPING ROOMS AND THE REMAINDER OF THE STOREY , AND IF THE SLEEPING ROOMS ARE SERVED BY A HALLWAY, THE SMOKE ALARM SHALL BE LOCATED IN THE HALLWAY.

A SMOKE ALARM SHALL HAVE A VISUAL SIGNALING COMPONENT CONFORMING TO THE REQUIREMENTS IN 18.5.3. (LIGHT, COLOR AND PULSE CHARACTERISTIC) OF NFPA 72, "NATIONAL FIRE ALARM AND SIGNALING CODE".

A SMOKE ALARM SHALL BE INSTALLED IN CONFORMANCE WITH CAN/ULC-S553, "INSTALLATION OF SMOKE ALARMS".

SMOKE ALARMS SHALL BE INSTALLED ON OR NEAR THE CEILING.

44 CARBON MONOXIDE ALARM (*OBC 9.33.4.)

WHERE A FUEL-BURNING APPLIANCE IS INSTALLED IN A SUITE OF RESIDENTIAL OCCUPANCY, A CARBON MONOXIDE ALARM SHALL BE INSTALLED TO EACH SLEEPING AREA IN THE SUITE.

THE CARBON MONOXIDE ALARM SHALL

a. BE PERMANENTLY CONNECTED TO AN ELECTRICAL CIRCUIT AND SHALL HAVE NO DISCONNECT SWITCH BETWEEN THE OVERCURRENT DEVICE AND THE CARBON MONOXIDE ALARM,
b. BE EQUIPPED WITH AN ALARM THAT IS AUDIBLE WITHIN BEDROOMS WHEN THE INTERVENING DOORS ARE CLOSED, WHERE LOCATED ADJACENT TO A SLEEPING AREA, AND
c. CONFORM TO
   1. CAN/CSA-6.19, "RESIDENTIAL CARBON MONOXIDE ALARMING DEVICES", OR
   2. UL2034, "SINGLE AND MULTIPLE STATION CARBON MONOXIDE ALARMS"

45 SOIL GAS CONTROL (*OBC 9.13.4.)

PROVIDE CONSTRUCTION TO PREVENT LEAKAGE OF SOIL GAS INTO THE BUILDING AS REQUIRED.

2012 CODE
COMPLIANCE PACKAGE "A1"

5.		
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2.		
1.	ISSUED FOR PERMIT	JUL 30, 2018

REVISIONS

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.
QUALIFICATION INFORMATION
Required unless design is exempt under Division C, Subsection 3.2.5 of the building code

VIKAS GAJJAR — SIGNATURE — 28770 BCIN

REGION DESIGN INC.
8700 DUFFERIN ST.
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REGION DESIGN INC.

SHEET TITLE: GENERAL NOTES
SCALE: N.T.S.
DATE: JULY 2018
PAGE No.: 1

CONTRACTOR SHALL CHECK ALL DIMENSIONS AND ELEVATIONS BEFORE COMMENCING WITH WORK AND REPORT ANY DISCREPANCIES TO THE DESIGNER. PRINTS ARE NOT TO BE SCALED.

Greenpark™

PROJECT NAME: ROUNDEL

CITY OF MARKHAM
BUILDING DIVISION
09/22/2022
RECEIVED
Per: joshua.nabua

March 14, 2022 4:00:02 PM M:\STANDARD DETAILS\P E R M I T S E T\2021\A1 PACKAGE (ROUNDEL)\P 1&2 - STANDARD NOTES PACKAGE A1.DWG

WINDOWS - CANADA ZONE C

(1) **MINIMUM BEDROOM WINDOW** (*OBC 9.9.10.1.)

AT LEAST ONE BEDROOM WINDOW ON A GIVEN FLOOR IS TO HAVE MIN. 0.35m2 (3.8 SQ.FT.) UNOBSTRUCTED GLAZED OPENABLE AREA WITH MIN. CLEAR WIDTH OF 380mm (1'-3")

GLASS AREA NOT MORE THAN 17% OF GROSS PERIPHERAL WALL AREA.
MAXIMUM U-VALUE 0.28

(2) **WINDOW GUARDS** (*OBC 9.8.8.1(6))

A GUARD IS REQUIRED WHERE THE TOP OF THE WINDOW SILL IS LOCATED LESS THAN 480mm (1'-6") ABOVE FIN. FLOOR AND THE DISTANCE FROM THE FIN. FLOOR TO THE ADJACENT GRADE IS GREATER THAN 1800mm (5'-11")

GENERAL:

(1) **MECHANICAL VENTILATION**

MECHANICAL VENTILATION IS REQUIRED TO PROVIDE 0.3 AIR CHANGES PER HOUR AVERAGED OVER 24 HOURS. SEE MECHANICAL DRAWINGS.

(2) **RAINFORCEMENT FOR GRAB BARS** (*OBC 9.5.2.3.)

RAINFORCEMENT OF STUD WALLS FOR FUTURE GRAB BARS SHALL BE INSTALLED ADJACENT TO WATER CLOSETS AND SHOWER OR BATHTUB IN MAIN BATHROOM. SEE DETAIL ON PAGE 11.

LUMBER:

1.) ALL LUMBER SHALL BE SPRUCE-PINE-FIR No.1&2 GRADE, UNLESS NOTED OTHERWISE.

2.) LUMBER EXPOSED TO THE EXTERIOR TO BE SPRUCE-PINE-FIR No.1&2 GRADE PRESSURE TREATED OR CEDAR, UNLESS NOTED OTHERWISE.

3.) ALL BEAMS, GIRDER TRUSSES, AND METAL HANGER CONNECTIONS SUPPORTING ROOF FRAMING TO BE DESIGNED & CERTIFIED BY TRUSS MANUFACTURER.

4.) LVL BEAMS SHALL BE 2.0E (Fb=2800psi MIN.). NAIL EACH PLY OF LVL WITH 89mm (3-1/2") LONG COMMON WIRE NAILS @300mm (12") o.c. STAGGERED IN 2 ROWS FOR 184, 240, & 300mm (7-1/4",9-1/2",11-7/8") DEPTHS AND STAGGERED IN 3 ROWS FOR GREATER DEPTHS AND FOR 4 PLY MEMBERS ADD 1/2" (13mm) DIA. GALVANIZED BOLTS BOLTED AT MID-DEPTH OF BEAM @ 915mm (3'-0")o.c.

5.) PROVIDE TOP MOUNT BEAM HANGERS FOR ALL LVL BEAM TO BEAM CONNECTIONS UNLESS NOTED OTHERWISE.

6.) PROVIDE METAL JOIST HANGERS FOR ALL JOISTS AND BULIT-UP WOOD MEMBERS INTERSECTING FLUSH BUILT-UP WOOD MEMBERS.

7.) WOOD FRAMING NOT TREATED WITH A WOOD PRESERVATIVE, IN CONTACT WITH CONCRETE, SHALL BE SEPARATED FROM THE CONC. BY AT LEAST 2mil. POLYETHYLENE FILM, No.50 (45lbs) ROLL ROOFING OR OTHER DAMPROOFING MATERIAL, EXCEPT WHERE THE WOOD MEMBER IS AT LEAST 150mm (6") ABOVE THE GROUND.

STEEL:

STRUCTURAL STEEL AND HOLLOW STRUCTURAL SECTIONS SHALL CONFORM TO CAN/CSA-G40-21 GRADE 350W.

REINFORCING STEEL SHALL CONFORM TO CSA-G30-18M GRADE 400R.

ELECTRIC VEHICLE CHARGING SYSTEM (EVCS):

ROUGH-IN FOR FUTURE VEHICLE SUPPLY EQUIPMENT (CHARGING SYSTEM) TO BE INSTALLED. ROUGH-IN SHALL INCLUDE:

- A MINIMUM 200amp PANEL BOARD,
- CONDUIT THAT IS NOT LESS THAN 1 1/16" (27mm) TRADE SIZE,
- A SQUARE 4 11/16" (119mm) TRADE SIZE ELECTRICAL OUTLET BOX,
- FUME-PROFFED ELECTRICAL OUTLET BOX TO BE INSTALLED IN THE GARAGE OR CARPORT OR ADJACENT TO DRIVEWAY.

REFER TO 2012 O.B.C. 9.34.4

STRUDET INC.

REGISTERED PROFESSIONAL ENGINEER
B. MARINKOVIC
June 11/ 2021
PROVINCE OF ONTARIO

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STABILITY OF NARROW (20'-25') & TALL (±30') HOUSES

BUILDER TO PROVIDE SUFFICIENT TEMPORARY BRACING TO RESIST WIND LOADING WHEN UNDER CONSTRUCTION. FURTHER RECOMMENDATIONS:

1.) REDUCE THE FOUNDATION WALL SILL PLATE ANCHOR BOLT SPACING FROM 2400mm o.c. (7'-10") TO 1220mm o.c. (4'-0") FOR STANDARD CONDITIONS.

2.) USE 9.5mm (3/8") THICK PLYWOOD OR WAFERBOARD FOR THE EXTERIOR WALL SHEATHING.

3.) TO STIFFEN THE STRUCTURE IN TRANSVERSE DIRECTION USE 9.5mm (3/8") THICK PLYWOOD NAILED TO THE INTERIOR PARTITIONS ON EACH FLOOR FOR A MINIMUM 2 INTERIOR PARTITION WALLS ON BOTH SIDES AND PERPENDICULAR TO THE LONG WALLS.

BRICK VENEER LINTELS

WL1 = 3-1/2"x3-1/2"x1/4"L (90x90x6.0L) + 2-2"x8" SPR. No.2
WL2 = 4"x3-1/2"x5/16"L (100x90x8.0L) + 2-2"x8" SPR. No.2
WL3 = 5"x3-1/2"x5/16"L (125x90x8.0L) + 2-2"x10" SPR. No.2
WL4 = 6"x3-1/2"x3/8"L (150x90x10.0L) + 2-2"x12" SPR. No.2
WL5 = 6"x4"x3/8"L (150x100x10.0L) + 2-2"x12" SPR. No.2
WL6 = 5"x3-1/2"x5/16"L (125x90x8.0L) + 2-2"x12" SPR. No.2
WL7 = 5"x3-1/2"x5/16"L (125x90x8.0L) + 3-2"x10" SPR. No.2
WL8 = 5"x3-1/2"x5/16"L (125x90x8.0L) + 3-2"x12" SPR. No.2
WL9 = 6"x4"x3/8"L (150x100x10.0L) + 3-2"x12" SPR. No.2

WOOD LINTELS AND BEAMS

WB1 = 2-2"x8" SPR. No.2 (2-38x184 SPR. No.2)
WB2 = 3-2"x8" SPR. No.2 (3-38x184 SPR. No.2)
WB3 = 2-2"x10" SPR. No.2 (2-38x235 SPR. No.2)
WB4 = 3-2"x10" SPR. No.2 (3-38x235 SPR. No.2)
WB5 = 2-2"x12" SPR. No.2 (2-38x286 SPR. No.2)
WB6 = 3-2"x12" SPR. No.2 (3-38x286 SPR. No.2)
WB7 = 5-2"x12" SPR. No.2 (5-38x286 SPR. No.2)
WB11 = 4-2"x10" SPR. No.2 (4-38x235 SPR. No.2)
WB12= 4-2"x12" SPR. No.2 (4-38x286 SPR. No.2)

LOOSE STEEL LINTELS

L1 = 3-1/2"x3-1/2"x1/4"L (90x90x6.0L)
L2 = 4"x3-1/2"x5/16"L (100x90x8.0L)
L3 = 5"x3-1/2"x5/16"L (125x90x8.0L)
L4 = 6"x3-1/2"x3/8"L (150x90x10.0L)
L5 = 6"x4"x3/8"L (150x100x10.0L)
L6 = 7"x4"x3/8"L (175x100x10.0L)

LAMINATED VENEER LUMBER (LVL) BEAMS

LVL1A = 1-1 3/4" x 7 1/4" (1-45x184)
LVL1 = 2-1 3/4" x 7 1/4" (2-45x184)
LVL2 = 3-1 3/4" x 7 1/4" (3-45x184)
LVL3 = 4-1 3/4" x 7 1/4" (4-45x184)
LVL4A = 1-1 3/4" x 9 1/2" (1-45x240)
LVL4 = 2-1 3/4" x 9 1/2" (2-45x240)
LVL5 = 3-1 3/4" x 9 1/2" (3-45x240)
LVL5A = 4-1 3/4" x 9 1/2" (4-45x240)
LVL6A = 1-1 3/4" x 11 7/8" (1-45x300)
LVL6 = 2-1 3/4" x 11 7/8" (2-45x300)
LVL7 = 3-1 3/4" x 11 7/8" (3-45x300)
LVL7A = 4-1 3/4" x 11 7/8" (4-45x300)
LVL8 = 2-1 3/4" x 14" (2-45x356)
LVL9 = 3-1 3/4" x 14" (3-45x356)
LVL10 = 2-1 3/4" x 18" (2-45x456)

DOOR SCHEDULE

1 = 2'-10" x 6'-8" (865x2033) - INSULATED ENTRANCE DOOR
1a = 2'-8" x 6'-8" (815x2033) - INSULATED FRONT DOORS
2 = 2'-8" x 6'-8" (815x2033) - WOOD & GLASS DOOR
3 = 2'-8" x 6'-8 x 1-3/4" (815x2033x45) - EXTERIOR SLAB DOOR
4 = 2'-8" x 6'-8" x 1-3/8" (815x2033x35) - INTERIOR SLAB DOOR
5 = 2'-6" x 6'-8" x 1-3/8" (760x2033x35) - INTERIOR SLAB DOOR
6 = 2'-2" x 6'-8" x 1-3/8" (660x2033x35) - INTERIOR SLAB DOOR
7 = 1'-6" x 6'-8" x 1-3/8" (460x2033x35) - INTERIOR SLAB DOOR

LEGEND

DJ	DOUBLE JOIST
TJ	TRIPLE JOIST
GT	GIRDER TRUSS
	POINT LOAD
	SOLID WOOD BEARING. SOLID BEARING TO BE WIDE AT LEAST AS SUPPORTED MEMBER. MIN. 3 PIECES.
	LOAD-BEARING WALL
	TWO-STOREY WALL. SEE NOTE 39
	FLAT ARCH
F.D.	FLOOR DRAIN
SA	SMOKE ALARM. SEE NOTE 43
SA CMA	SMOKE ALARM & CARBON MONOXIDE ALARM. SEE NOTE 44

This review does not exempt the owner, designer and the builder from complying with all applicable regulations and by-laws of the City of Richmond Hill and the Ontario Building Code.

Refer to attached general notes and drawings.

These drawings have been reviewed under Compliance Option: A1 of the OBC 2012, SB-12.

Windows, sliding glass doors and skylights shall comply with OBC 2012, SB-12, 3.1.1.9 for maximum U-Value.

City of Richmond Hill
Building Division

REVIEWED

By: KER Date: 10/31/2022

Building Permit #: RM#-2022-00086

All construction shall comply with the Ontario Building Code and all other applicable statutory regulations. The reviewed documents must be kept on site at all times.

Building inspection line: 905-771-5465 (24 hr)
buildinginspections@richmondhill.ca
Building inquiry line 905-771-8810
building@richmondhill.ca

City of Richmond Hill
Building Division

INSPECTION NOTICES - HOUSING

You are required to notify the Inspection Section of the readiness to inspect at the following construction stages:
- Footings (prior to concrete placement)
- Building sewers (laterals)
- Water service pipe (lateral)
- Foundation (prior to backfill)
- Building drains (under slab)
- Plumbing rough-in
- HVAC rough-in
- Air barrier (prior to exterior cladding)
- Structural Framing (exterior cladding completed)
- Insulation (include vapour barrier)
- Solid fuel burning appliances
- Occupancy Permit

Please contact the Inspection Section by one of the following methods:
- E-mail: buildinginspections@richmondhill.ca
- Inspection fax line: 905-771-2528
- Inspection Request Line: 905-771-5465

A minimum of 2 business days is required.
An inspection may be refused if permit documents and a copy of the permit are not present on site.
Please refer to other inspection information on the reverse of the permit card.

CITY OF RICHMOND HILL
BUILDING DIVISION
09/22/2022
RECEIVED
Per: joshua.nabua

2012 CODE
COMPLIANCE PACKAGE "A1"

5.		
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1.	ISSUED FOR PERMIT	JAN 31, 2015

REVISIONS

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QUALIFICATION INFORMATION
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REGION DESIGN INC.

SHEET TITLE: GENERAL NOTES

CONTRACTOR SHALL CHECK ALL DIMENSIONS AND ELEVATIONS BEFORE COMMENCING WITH WORK AND REPORT ANY DISCREPANCIES TO THE DESIGNER. PRINTS ARE NOT TO BE SCALED.

SCALE: N.T.S.

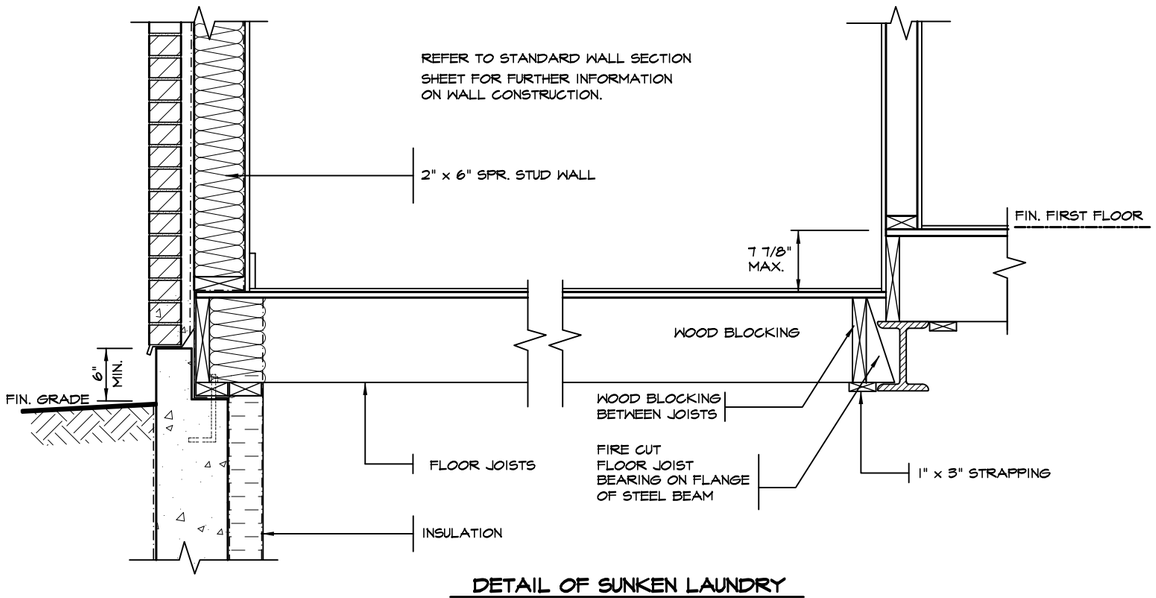
DATE: JULY 2018

PAGE No.: 2

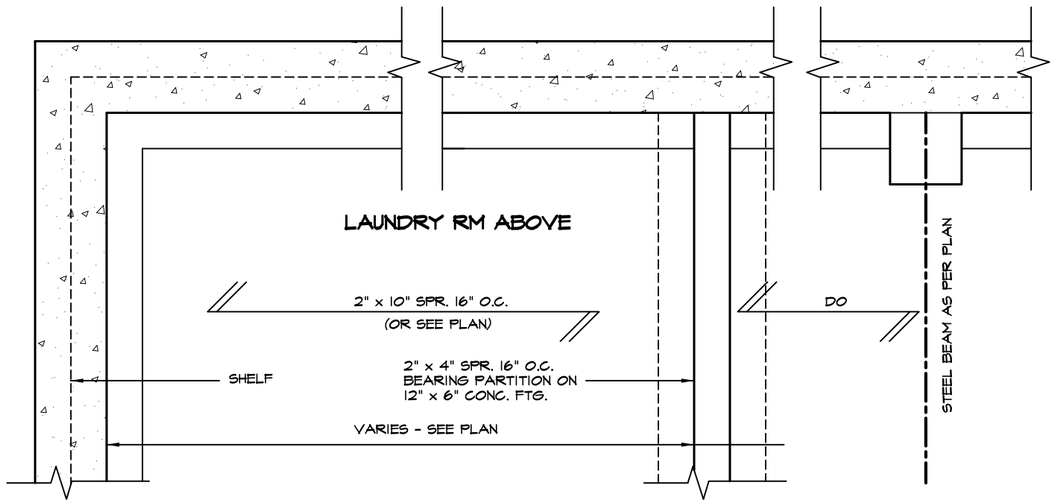
Greenpark™

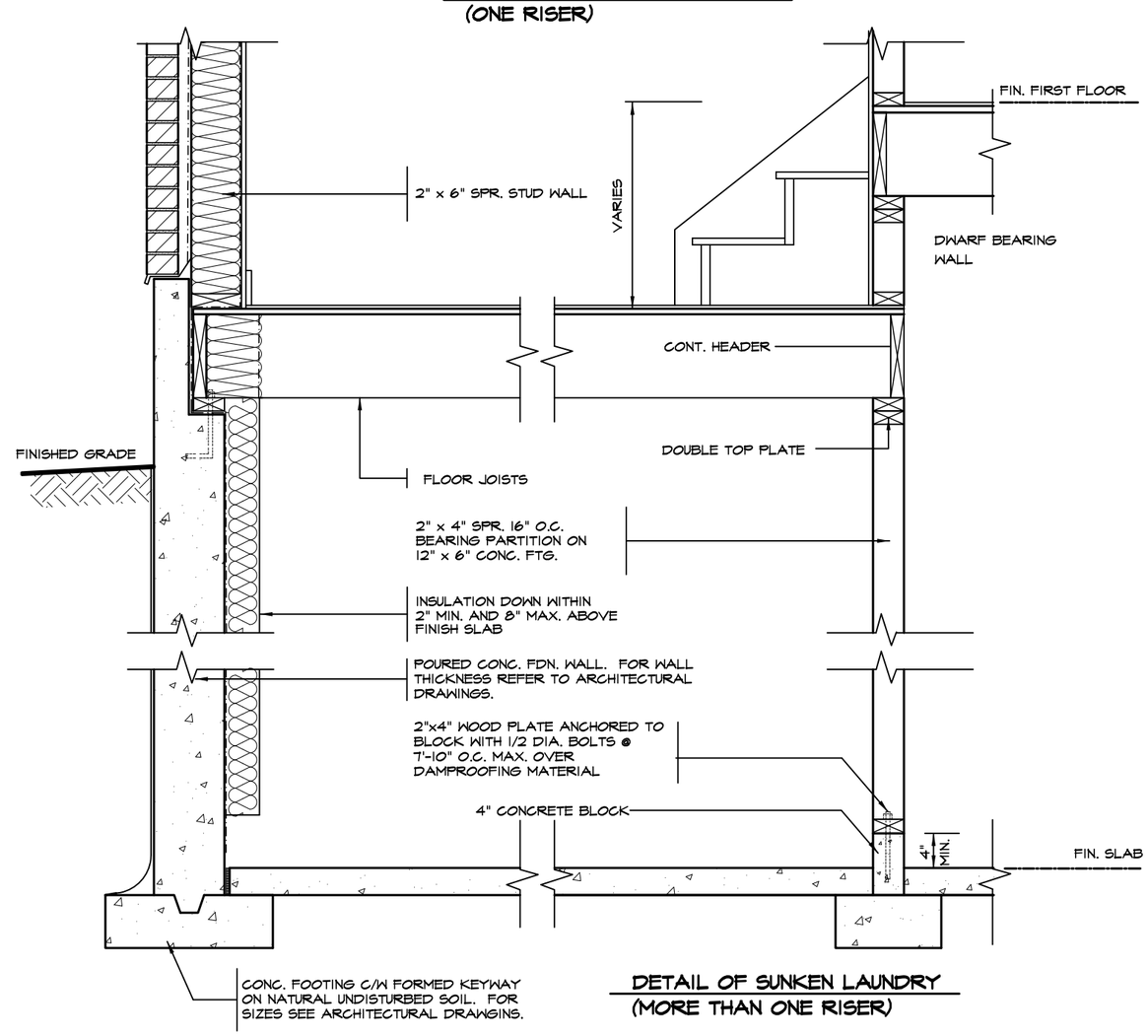
PROJECT NAME: ROUNDEL

June 1, 2021 9:17:46 AM M:\STANDARD DETAILS\P E R M I T S E T\2021\A1 PACKAGE (ROUNDEL)\P 1&2 - STANDARD NOTES PACKAGE A1.DWG

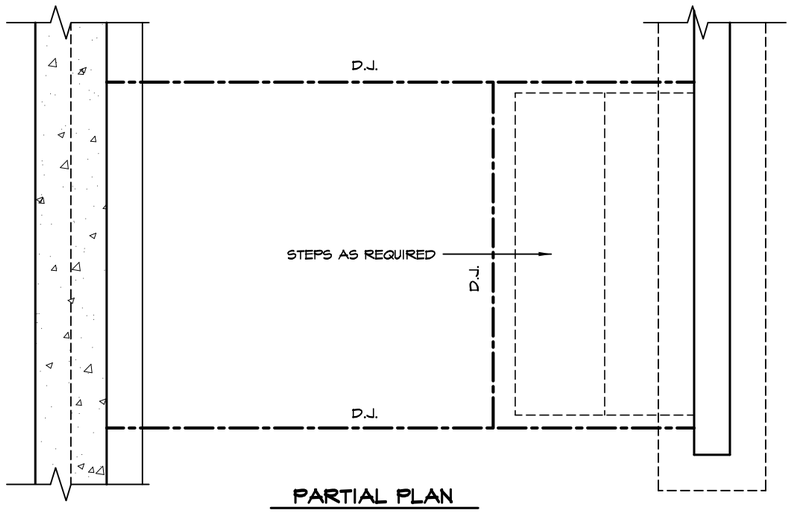


DETAIL OF SUNKEN LAUNDRY (ONE RISER)





DETAIL OF SUNKEN LAUNDRY (MORE THAN ONE RISER)



PARTIAL PLAN

STRUDET INC.

REGISTERED PROFESSIONAL ENGINEER
B. MARINKOVIC
PROVINCE OF ONTARIO
June 11, 2021

FOR STRUCTURE ONLY

2012 CODE
COMPLIANCE PACKAGE "A1

5.		
4.		
3.		
2.		
1.	ISSUED FOR PERMIT	JUL 30, 2018

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REGION DESIGN INC.

SHEET TITLE: LAUNDRY DETAILS SUNKEN

SCALE: 3/4"=1'-0"

DATE: JULY 2018

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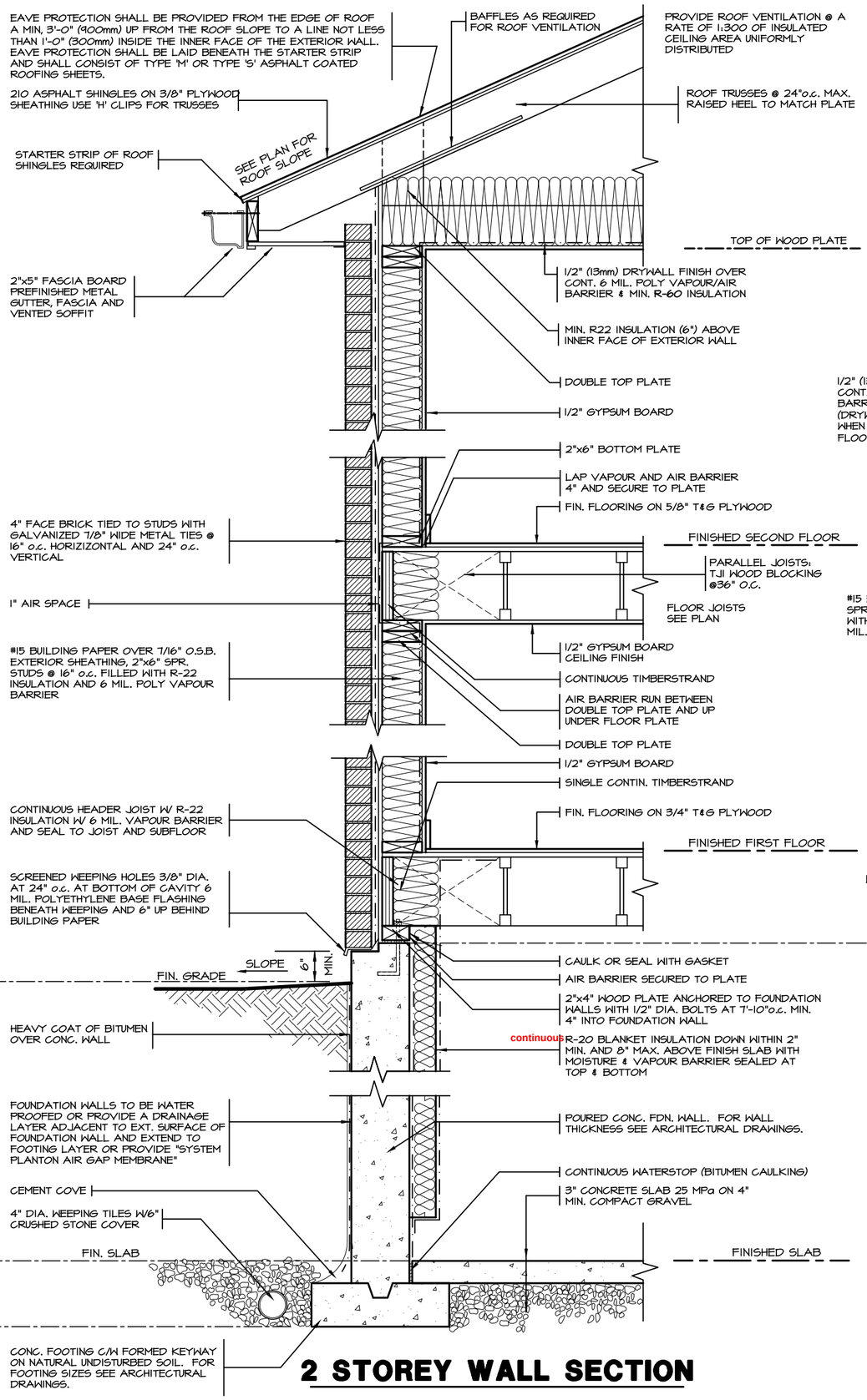
PAGE No. 5

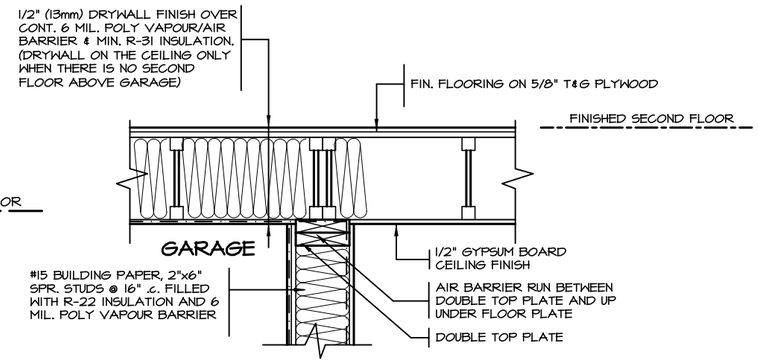
Greenpark

PROJECT NAME: ROUNDEL

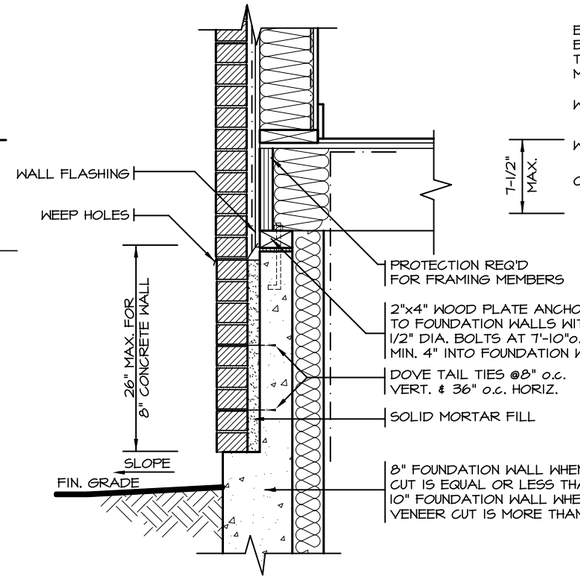
June 1, 2021



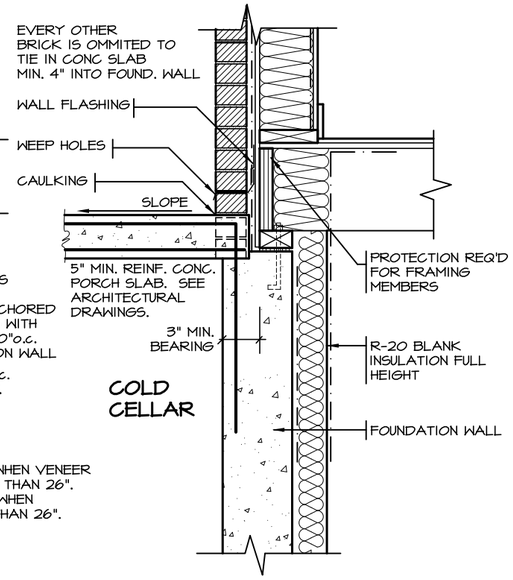
2 STOREY WALL SECTION



DETAIL FOR INTERIOR GARAGE WALLS & CEILINGS



DETAIL FOR CONCRETE VENEER DROPPED GRADE



DETAIL FOR COLD CELLAR PORCH SLAB

2012 CODE
COMPLIANCE PACKAGE "A1"

STRUDET INC.

REGISTERED PROFESSIONAL ENGINEER
B. MARINKOVIC
PROVINCE OF ONTARIO
June 14, 2021

FOR STRUCTURE ONLY

5.		
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REGION DESIGN INC.

SHEET TITLE: 2"X6" BRICK VENEER 2 STOREY SECTION

SCALE: 3/4"=1'-0"

DATE: JULY 2018

CONTRACTOR SHALL CHECK ALL DIMENSIONS AND ELEVATIONS BEFORE COMMENCING WITH WORK AND REPORT ANY DISCREPANCIES TO THE DESIGNER. PRINTS ARE NOT TO BE SCALED.

PAGE No. 6

Greenpark™

PROJECT NAME: ROUNDEL

CITY OF BRAMPTON
BUILDING DIVISION
09/22/2022
RECEIVED
Per: joshua.nabua

June 1, 2021 9:34:51 AM M:\STANDARD DETAILS\P E R M I T S E T\20211A1 PACKAGE (ROUNDEL)\P 6 - 2 STOREY SECTION 2X6 PACKAGE A1.DWG

EAVE PROTECTION SHALL BE PROVIDED FROM THE EDGE OF ROOF A MIN, 3'-0" (900mm) UP FROM THE ROOF SLOPE TO A LINE NOT LESS THAN 1'-0" (300mm) INSIDE THE INNER FACE OF THE EXTERIOR WALL. EAVE PROTECTION SHALL BE LAID BENEATH THE STARTER STRIP AND SHALL CONSIST OF TYPE 'M' OR TYPE 'S' ASPHALT COATED ROOFING SHEETS.

BAFFLES AS REQUIRED FOR ROOF VENTILATION

PROVIDE ROOF VENTILATION @ A RATE OF 1:300 OF INSULATED CEILING AREA UNIFORMLY DISTRIBUTED

210 ASPHALT SHINGLES ON 3/8" PLYWOOD SHEATHING USE 'H' CLIPS FOR TRUSSES

ROOF TRUSSES @ 24"o.c. MAX. RAISED HEEL TO MATCH PLATE

STARTER STRIP OF ROOF SHINGLES REQUIRED

SEE PLAN FOR ROOF SLOPE

TOP OF WOOD PLATE

2"x5" FASCIA BOARD PREFINISHED METAL GUTTER, FASCIA AND VENTED SOFFIT

1/2" (13mm) DRYWALL FINISH OVER CONT. 6 MIL. POLY VAPOUR/AIR BARRIER & MIN. R-50 INSULATION

MIN. R22 INSULATION ABOVE INNER FACE OF EXTERIOR WALL

1 1/2"X6" RAISED STUCCO FRIEZE BAORD (TYP.)

DOUBLE TOP PLATE

MESH BACKWRAPPED

1/2" GYPSUM BOARD

2"x6" BOTTOM PLATE

LAP VAPOUR AND AIR BARRIER 4" AND SECURE TO PLATE

FIN. FLOORING ON 5/8" T&G PLYWOOD

FINISHED SECOND FLOOR

- FIN. COAT OF EXTERIOR ACRYLIC STUCCO
- FIBER MESH EMBEDDED IN PREP COAT
- INSULATION BOARD, (MIN. R5) W/ GEOMETRICALLY DEFINED DRAINAGE CAVITY HAVING A MIN. CAVITY DEPTH OF 1/4"
- AIR/MOISTURE BARRIER
- 7/16" EXTERIOR GRADE OSB SHEATHING
- 2" X 6" STUDS
- MIN. R-22 BATT INSULATION
- CONT. VAPOUR / AIR BARRIER
- 1/2" DRYWALL

(EIFS APPROVED SYSTEM, ALL MATERIALS AND SYSTEMS SHALL CONFORM TO CAN/ULC-S716.1)

PARALLEL JOISTS: TJI WOOD BLOCKING @36" O.C.

FLOOR JOISTS SEE PLAN

1/2" GYPSUM BOARD CEILING FINISH

SINGLE CONT. TIMBERSTRAND

AIR BARRIER RUN BETWEEN DOUBLE TOP PLATE AND UP UNDER FLOOR PLATE

DOUBLE TOP PLATE

1/2" GYPSUM BOARD

SINGLE CONTIN. TIMBERSTRAND

FIN. FLOORING ON 3/4" T&G PLYWOOD

FINISHED FIRST FLOOR

A 6-2

CONCRETE SILL

CONTINUOUS HEADER JOIST W/ R-22 INSULATION W/ 6 MIL. VAPOUR BARRIER AND SEAL TO JOIST AND SUBFLOOR

4" FACE BRICK TIED TO STUDS WITH GALVANIZED 7/8" WIDE METAL TIES @ 16" o.c. HORIZIZONTAL AND 24" o.c. VERTICAL

SCREENED WEEPING HOLES 3/8" DIA. AT 24" o.c. AT BOTTOM OF CAVITY 6 MIL. POLYETHYLENE BASE FLASHING BENEATH WEEPING AND 6" UP BEHIND BUILDING PAPER

SLOPE 6" MIN.

FIN. GRADE

CAULK OR SEAL WITH GASKET

AIR BARRIER SECURED TO PLATE

2"x4" WOOD PLATE ANCHORED TO FOUNDATION WALLS WITH 1/2" DIA. BOLTS AT 7'-10"o.c. MIN. 4" INTO FOUNDATION WALL

HEAVY COAT OF BITUMEN OVER CONC. WALL

continuous R-20 BLANKET INSULATION DOWN WITHIN 2" MIN. AND 8" MAX. ABOVE FINISH SLAB WITH MOISTURE & VAPOUR BARRIER SEALED AT TOP & BOTTOM

MIN. 4'-0" FROST COVERAGE

FOUNDATION WALLS TO BE WATER PROOFED OR PROVIDE A DRAINAGE LAYER ADJACENT TO EXT. SURFACE OF FOUNDATION WALL AND EXTEND TO FOOTING LAYER OR PROVIDE "SYSTEM PLANTON AIR GAP MEMBRANE"

POURED CONC. FDN. WALL. FOR WALL THICKNESS SEE ARCHITECTURAL DRAWINGS.

CONTINUOUS WATERSTOP (BITUMEN CAULKING)

CEMENT COVE

3" CONCRETE SLAB 25 MPa ON 4" MIN. COMPACT GRAVEL

4" DIA. WEEPING TILES W/6" CRUSHED STONE COVER

FIN. SLAB

FINISHED SLAB

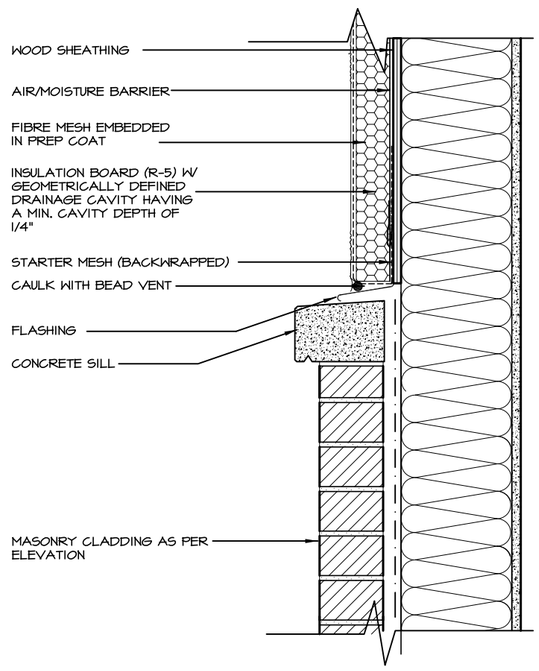
CONC. FOOTING C/W FORMED KEYWAY ON NATURAL UNDISTURBED SOIL. FOR FOOTING SIZES SEE ARCHITECTURAL DRAWINGS.

2 STOREY WALL SECTION

STRUDET INC.

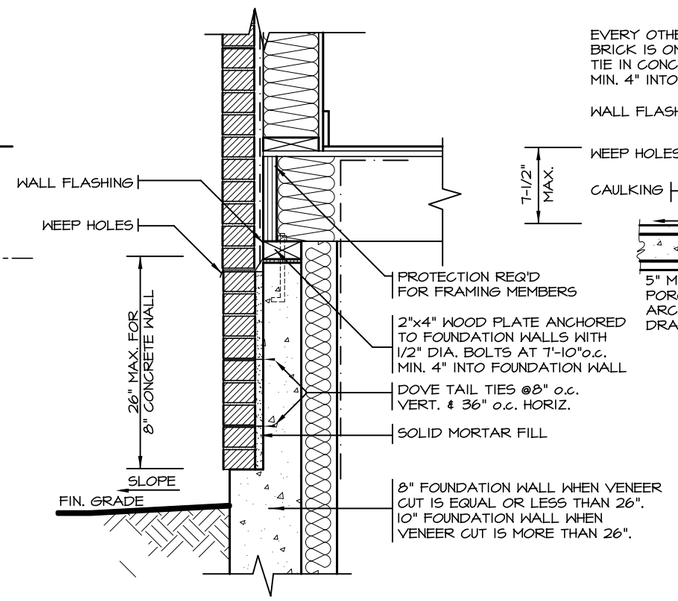
REGISTERED PROFESSIONAL ENGINEER
B. MARINKOVIC
June 11/ 2021
PROVINCE OF ONTARIO

FOR STRUCTURE ONLY

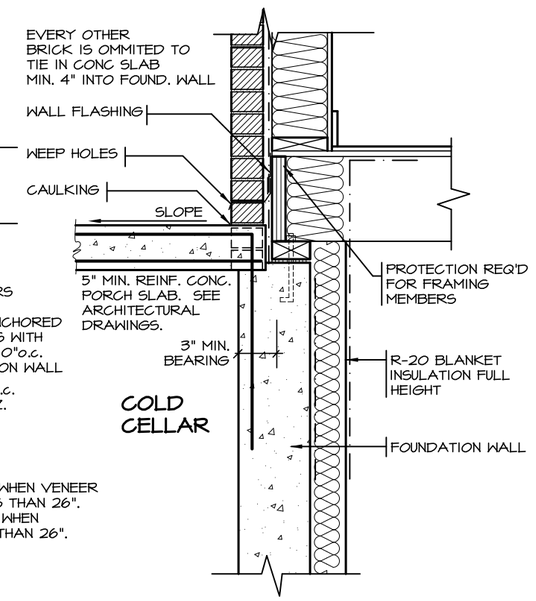


A. TERMINATION AT MASONRY CLADDING WITH SEALANT

1 1/2"=1'0"



DETAIL FOR CONCRETE VENEER DROPPED GRADE



DETAIL FOR COLD CELLAR PORCH SLAB

2012 CODE
COMPLIANCE PACKAGE "A1"

5.		
4.		
3.		
2.		
1.	ISSUED FOR PERMIT	JUL 30, 2018

REVISIONS

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.

QUALIFICATION INFORMATION

Required unless design is exempt under Division C, Subsection 3.2.5 of the building code

VIKAS GAJJAR — NAME — SIGNATURE — 28770 — BCIN

REGION DESIGN INC.
8700 DUFFERIN ST.
CONCORD, ONTARIO
L4K 4S6
P (416) 736-4096
F (905) 660-0746

REGION DESIGN INC.

SHEET TITLE: 2"X6" STUCCO WALL 2 STOREY SECTION

SCALE: AS NOTED

DATE: JULY 2018

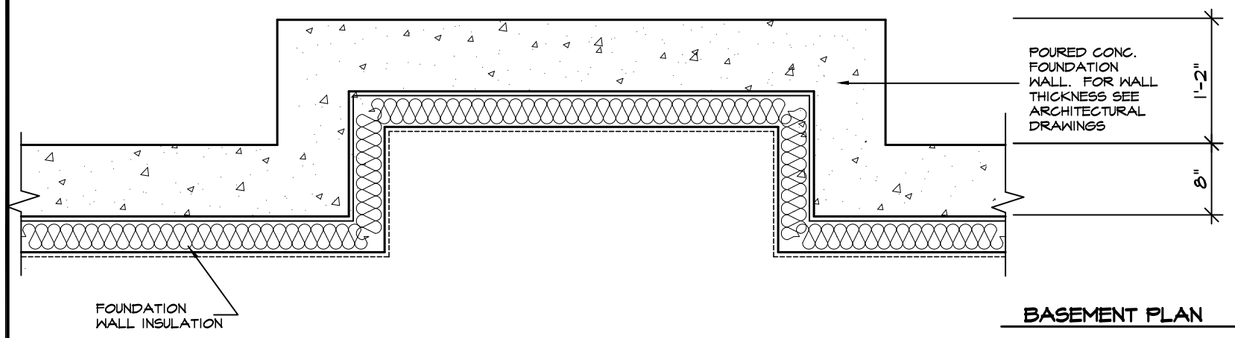
CONTRACTOR SHALL CHECK ALL DIMENSIONS AND ELEVATIONS BEFORE COMMENCING WITH WORK AND REPORT ANY DISCREPANCIES TO THE DESIGNER. PRINTS ARE NOT TO BE SCALED.

PAGE No. 6-2

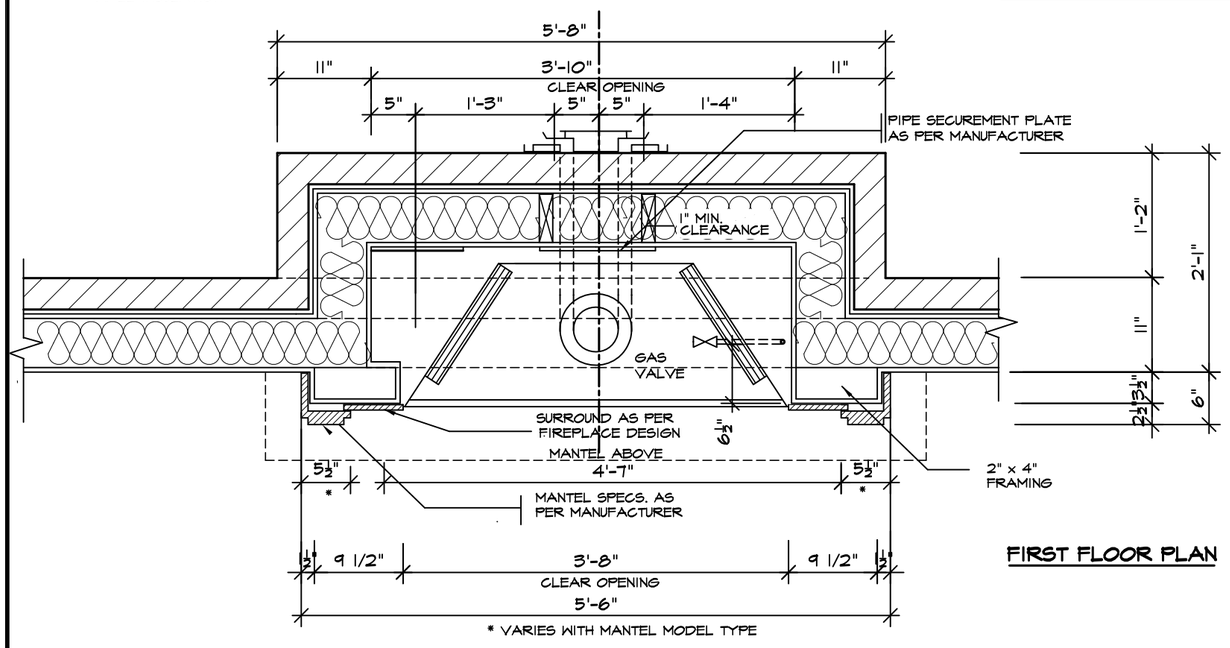
Greenpark

PROJECT NAME: ROUNDEL

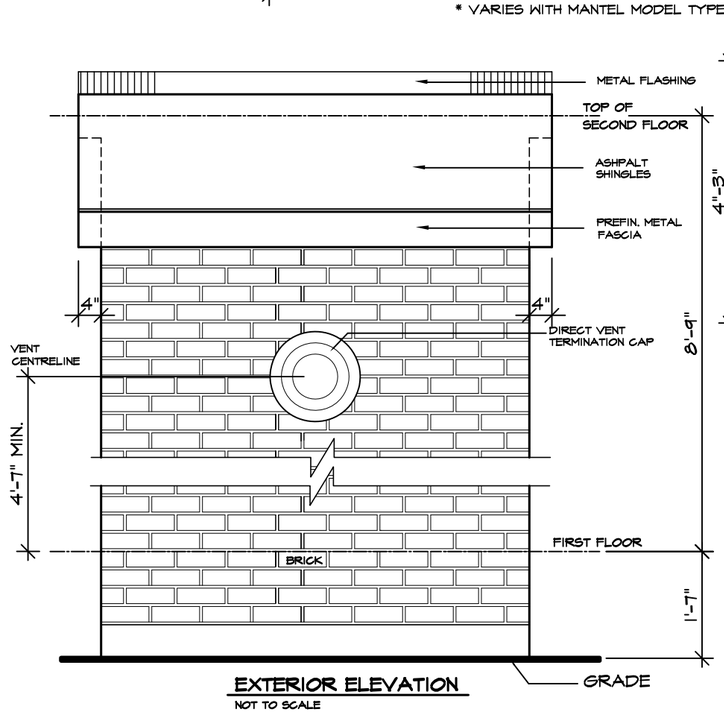
June 1, 2021



BASEMENT PLAN

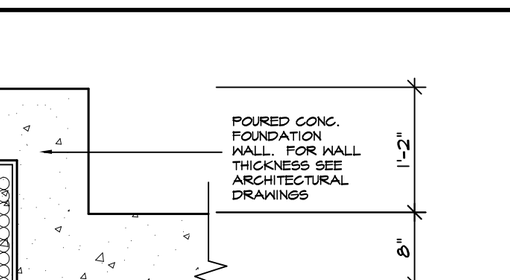


FIRST FLOOR PLAN



EXTERIOR ELEVATION

NOT TO SCALE



FRONT/SIDE ELEVATION

NOT TO SCALE

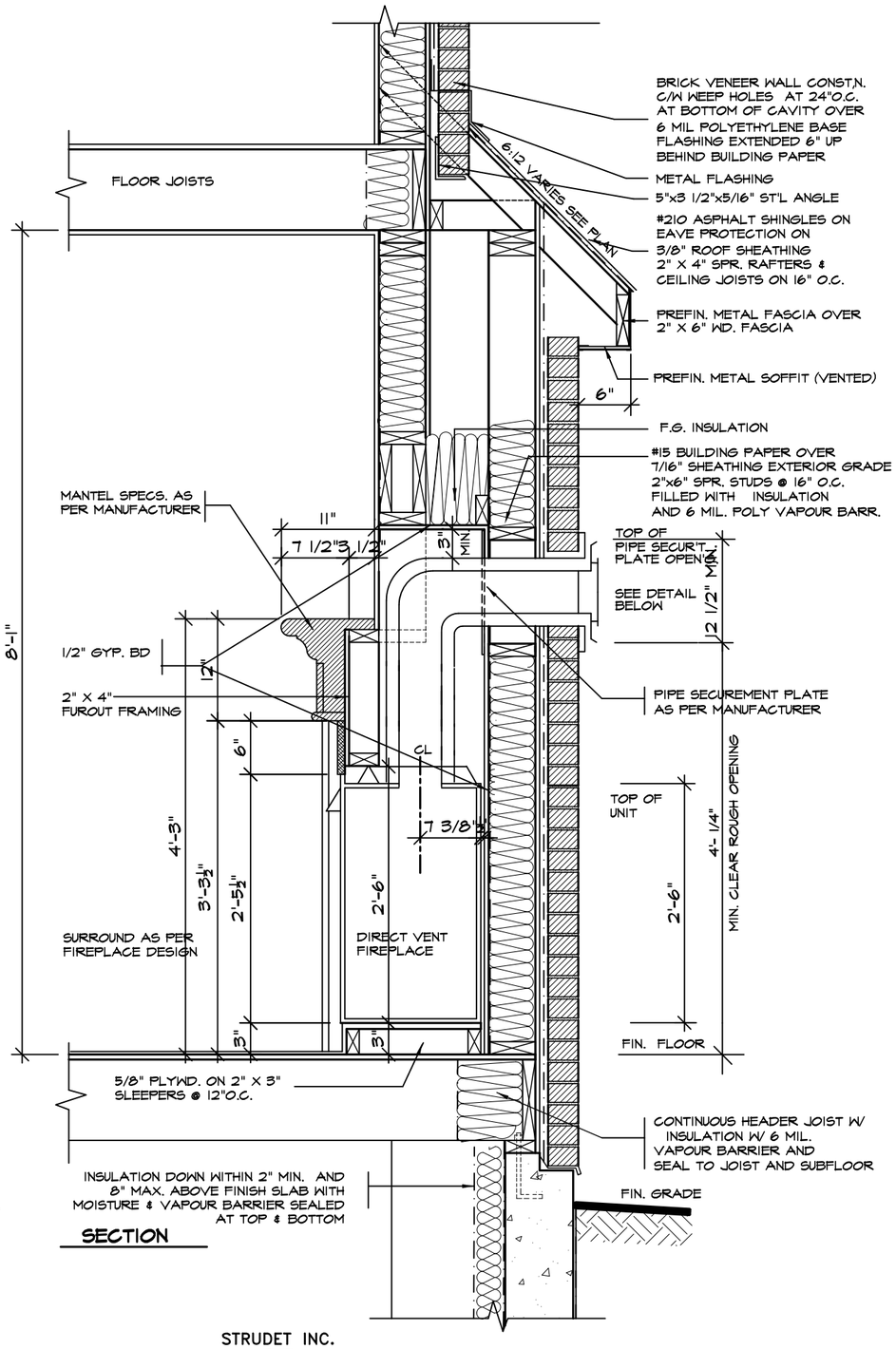
GENERAL INSTALLATION NOTES

1.0 UNIT INSTALLATION TO STRICTLY CONFORM TO MANUFACTURERS INSTALLATION MANUAL AND ALL APPLICABLE CODES OF LOCAL AUTHORTIES HAVING JURISDICTION INCLUDING CAN/OGA-B149.1 & 2.

2.0 INSTALL WITH THE FOLLOWING MINIMUM CLEARANCES TO COMBUSTIBLES:
- -FROM TOP OF UNIT 0"
- -FROM BACK OF UNIT 1/2"
- -FROM SIDES OF UNIT 1/2"
- -FROM TOP OF HORIZ.VENT 3"
- -FROM SIDES TO VENT 1"

3.0 THE DIRECT VENT UNIT ILLUSTRATED IS THE GC150 MODEL AS MANUFACTURED BY HEATILATOR.

4.0 THE MANTEL ILLUSTRATED IS THE S-2 GB AS SUPPLIED BY GREATER TORONTO FIREPLACE.



SECTION

STRUDET INC.

REGISTERED PROFESSIONAL ENGINEER
B. MARINKOVIC
June 11/ 2021
PROVINCE OF ONTARIO

FOR STRUCTURE ONLY

2012 CODE COMPLIANCE PACKAGE "A1"

5.		
4.		
3.		
2.		
1.	ISSUED FOR PERMIT	JULY 30, 2018

REVISIONS

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QUALIFICATION INFORMATION

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VIKAS GAJJAR — NAME — SIGNATURE — 28770 BCIN

REGION DESIGN INC.
8700 DUFFERIN ST.
CONCORD, ONTARIO
L4K 4S6
P (416) 736-4096
F (905) 660-0746

REGION DESIGN INC.

SHEET TITLE: VENT FIREPLACE DIRECT

SCALE: 3/4"=1'-0"

DATE: JULY 2018

CONTRACTOR SHALL CHECK ALL DIMENSIONS AND ELEVATIONS BEFORE COMMENCING WITH WORK AND REPORT ANY DISCREPANCIES TO THE DESIGNER. PRINTS ARE NOT TO BE SCALED.

PAGE No. 7

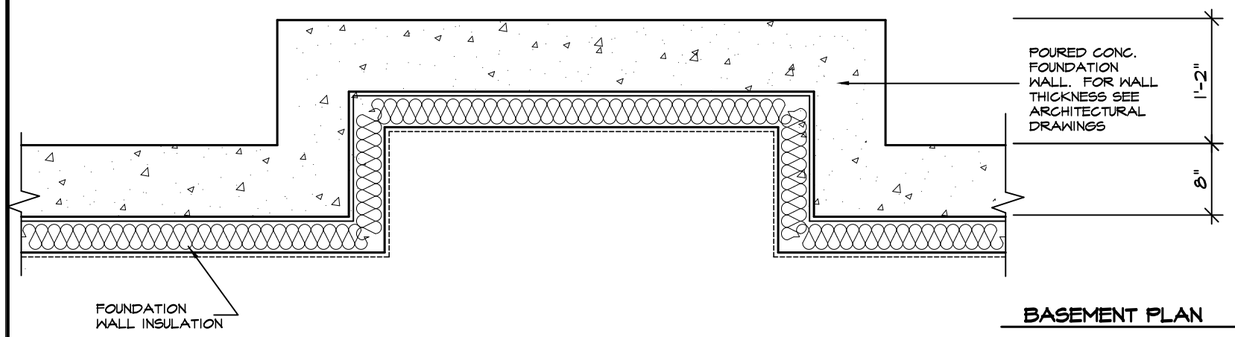
Greenpark™

PROJECT NAME: ROUNDEL

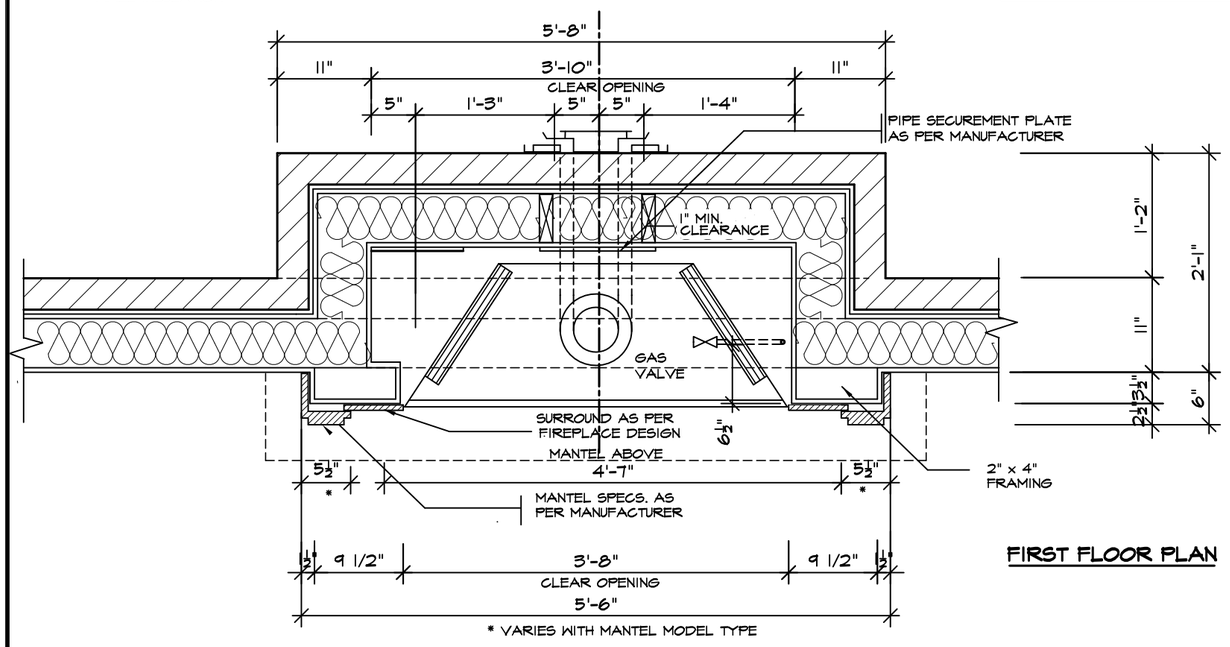
CITY OF RICHMOND HILL BUILDING DIVISION 09/22/2022 RECEIVED Per: joshua.nabua

June 1, 2021

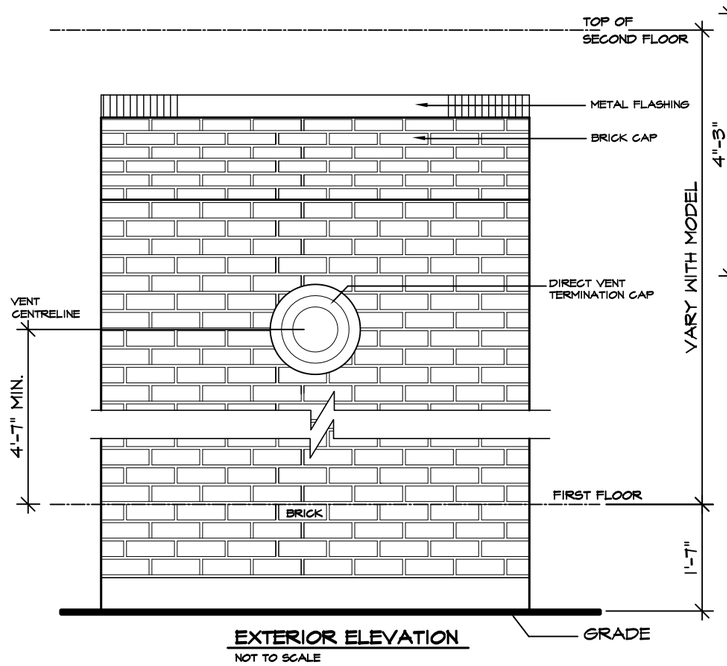
9:36:10 AM M:\STANDARD DETAILS\P E R M I T S E T\2021\A1 PACKAGE (ROUNDEL)\P 7 - DIRECT VENT FIRE PLACE PACKAGE A1.DWG



BASEMENT PLAN

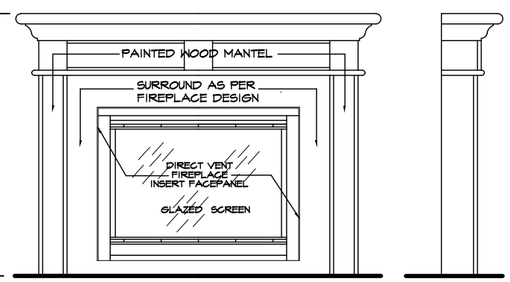


FIRST FLOOR PLAN



EXTERIOR ELEVATION

NOT TO SCALE



FRONT/SIDE ELEVATION

NOT TO SCALE

GENERAL INSTALLATION NOTES

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-FROM SIDES TO VENT 1"
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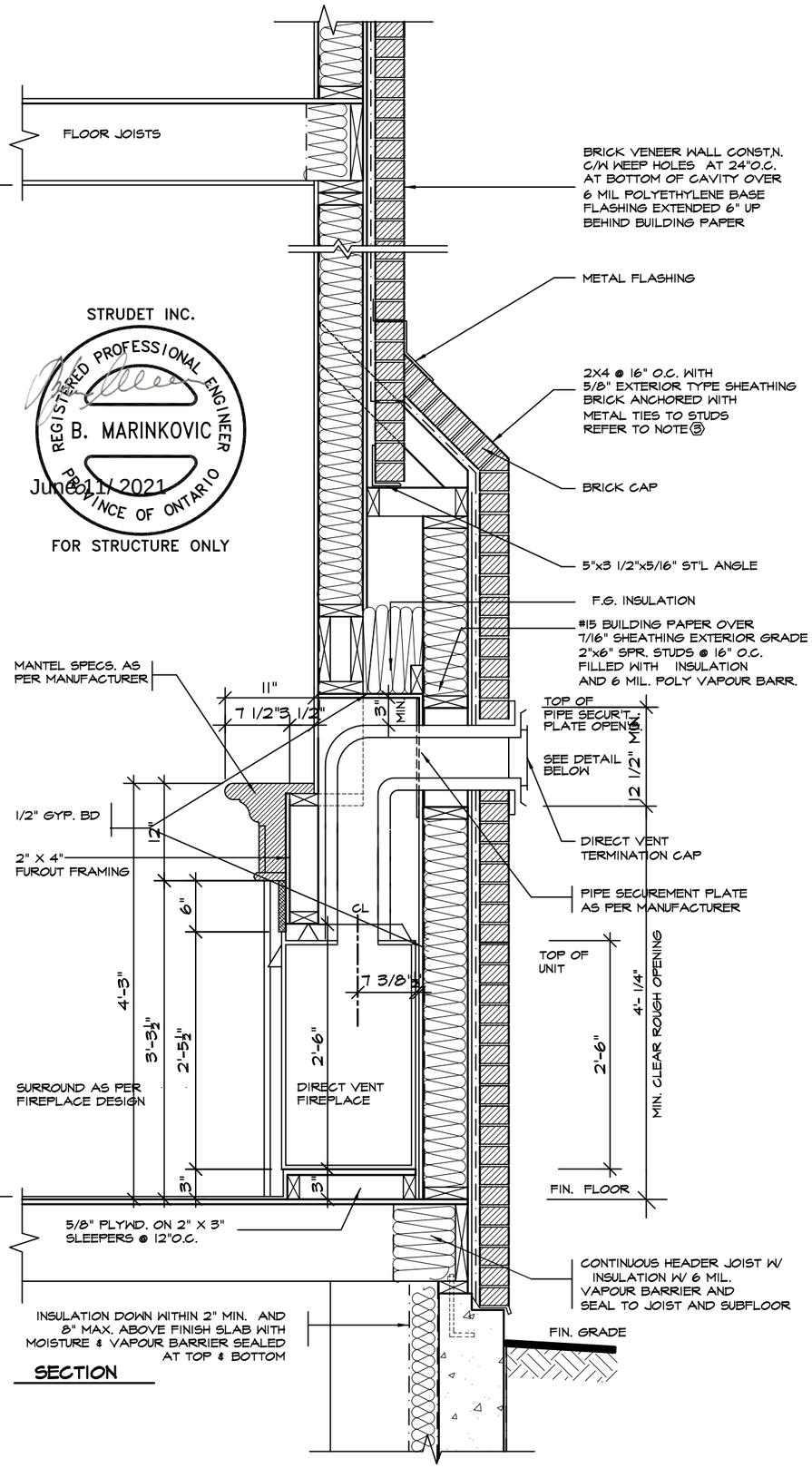
4.0 THE MANTEL ILLUSTRATED IS THE S-2 GB AS SUPPLIED BY GREATER TORONTO FIREPLACE.

VARY REFERE TO MODEL



SECTION

STRUDET INC.

REGISTERED PROFESSIONAL ENGINEER
B. MARINKOVIC
June 11, 2021
PROVINCE OF ONTARIO

FOR STRUCTURE ONLY

2012 CODE
COMPLIANCE PACKAGE "A1"

5.		
4.		
3.		
2.		
1.	ISSUED FOR PERMIT	JUL 30 , 2018

REVISIONS

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QUALIFICATION INFORMATION
Required unless design is exempt under Division C, Subsection 3.2.5 of the building code

VIKAS GAJJAR — NAME — SIGNATURE — 28770 BCIN

REGION DESIGN INC.
8700 DUFFERIN ST.
CONCORD, ONTARIO
L4K 4S6
P (416) 736-4096
F (905) 660-0746

REGION DESIGN INC.

SHEET TITLE: VENT FIREPLACE DIRECT

SCALE: 3/4"=1'-0"

DATE: JULY 2018

CONTRACTOR SHALL CHECK ALL DIMENSIONS AND ELEVATIONS BEFORE COMMENCING WITH WORK AND REPORT ANY DISCREPANCIES TO THE DESIGNER. PRINTS ARE NOT TO BE SCALED.

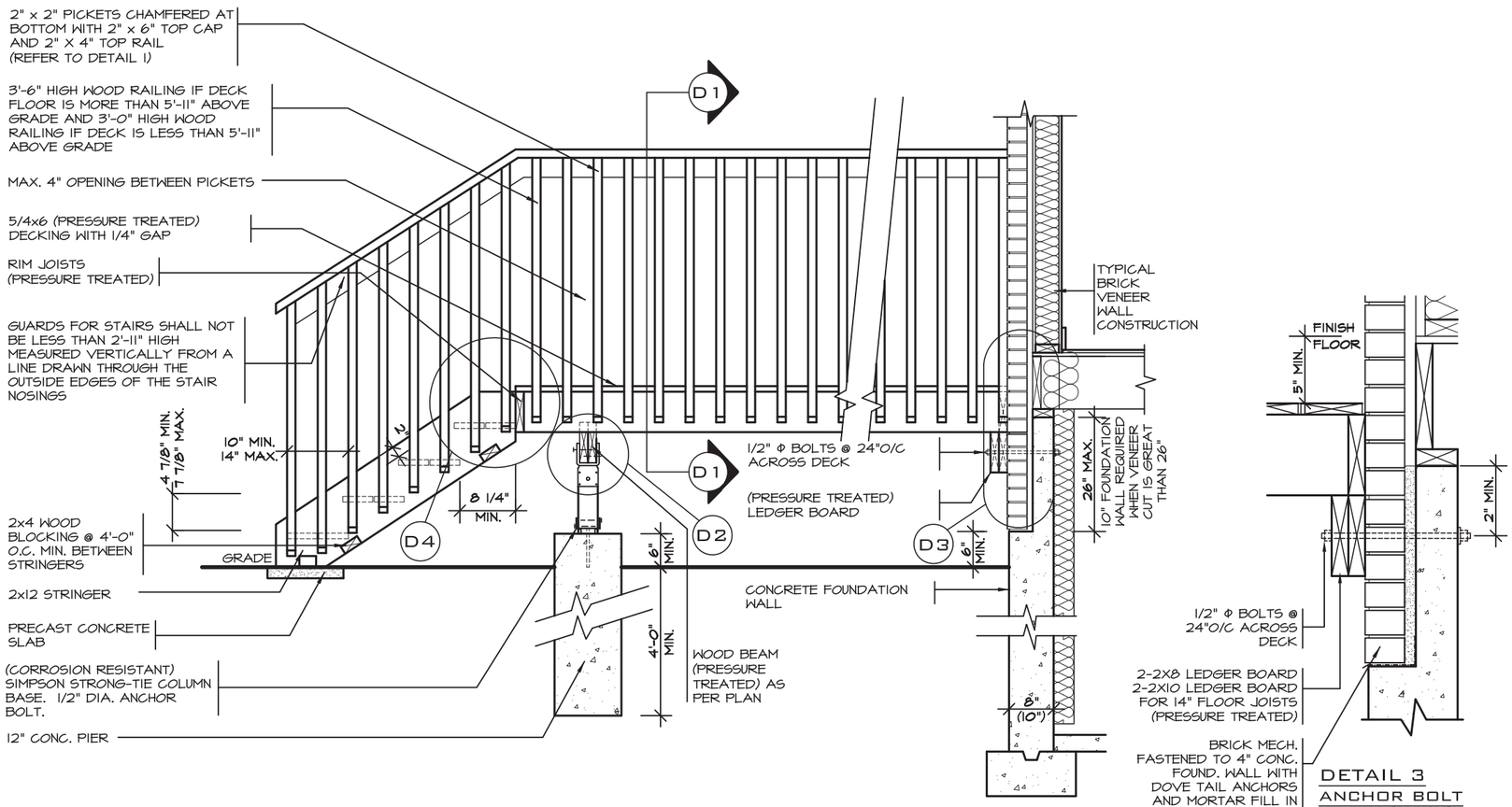
PAGE No. 7-2

Greenpark™

PROJECT NAME: ROUNDEL

CITY OF RICHMOND HILL BUILDING DIVISION 09/22/2022 RECEIVED Per: joshua.nabua

June 1, 2021 9:56:37 AM M:\STANDARD DETAILS\P E R M I T S E T\2021\A1 PACKAGE (ROUNDEL)\P 7-2 - DIRECT VENT FIRE PACKAGE A1.DWG



DECK SECTION WITH BRICK VENEER

SCALE: 1/2"=1'-0"

DETAIL 2 - BEAM-TO-POST

SCALE: 1" = 1'-0"

DETAIL 3 ANCHOR BOLT

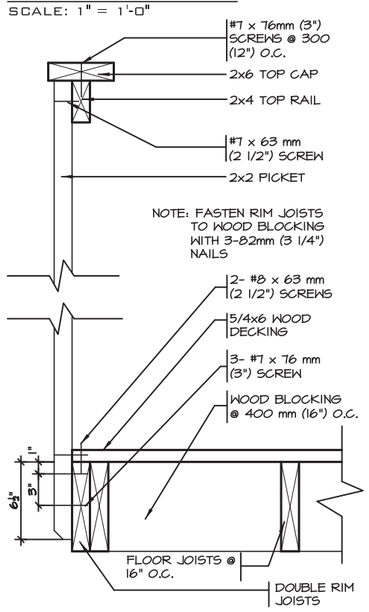
SCALE: 1" = 1'-0"

DETAIL 1

CANTILEVERED PICKET SCREWED TO RIM JOIST AND DECK

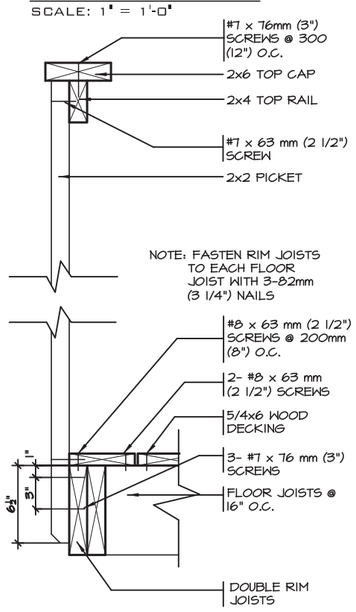
GUARD PARALLEL TO FLOOR JOISTS

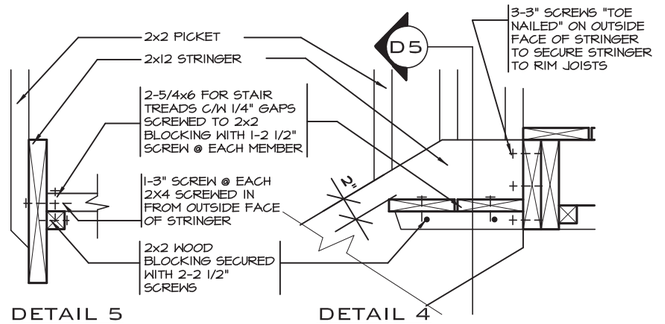
SCALE: 1" = 1'-0"



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 15mPa (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. WOOD FOR CANTILEVERED PICKETS PICKETS SHALL BE DOUGLAS FIR-LARCH, SPRUCE-PINE-FIR, OR HEM-FIR SPECIES.
5. THE DECK HAS BEEN DESIGNED TO SAFELY SUPPORT A SUPERIMPOSED LOAD OF 1.9kPa [40psf].
6. CONCRETE SHALL HAVE COMPRESSIVE STRENGTH OF 20MPa AT 28 DAYS AND 5-8% AIR ENTRAINED.
7. FOOTING TO BE PLACED ON UNDISTURBED SOIL WITH MIN. BEARING PRESSURE OF 150kPa [3130psf].

STRUDET INC.

REGISTERED PROFESSIONAL ENGINEER
B. MARINKOVIC
JUNE 11, 2021
PROVINCE OF ONTARIO

FOR STRUCTURE ONLY

2012 CODE

COMPLIANCE PACKAGE "A1"

5.		
4.		
3.		
2.		
1.	ISSUED FOR PERMIT	JULY 30, 2018

REVISIONS

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QUALIFICATION INFORMATION

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VIKAS GAJJAR — NAME — SIGNATURE — 28770 BCIN

REGION DESIGN INC.
8700 DUFFERIN ST.
CONCORD, ONTARIO
L4K 4S6
P (416) 736-4096
F (905) 660-0746

REGION DESIGN INC.

SHEET TITLE: WOOD DECK DETAIL

SCALE: AS SHOWN

DATE: JULY 2018

CONTRACTOR SHALL CHECK ALL DIMENSIONS AND ELEVATIONS BEFORE COMMENCING WITH WORK AND REPORT ANY DISCREPANCIES TO THE DESIGNER. PRINTS ARE NOT TO BE SCALED.

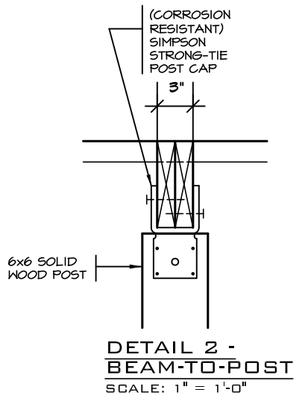
PAGE No. 8

Greenpark™

PROJECT NAME: ROUNDEL

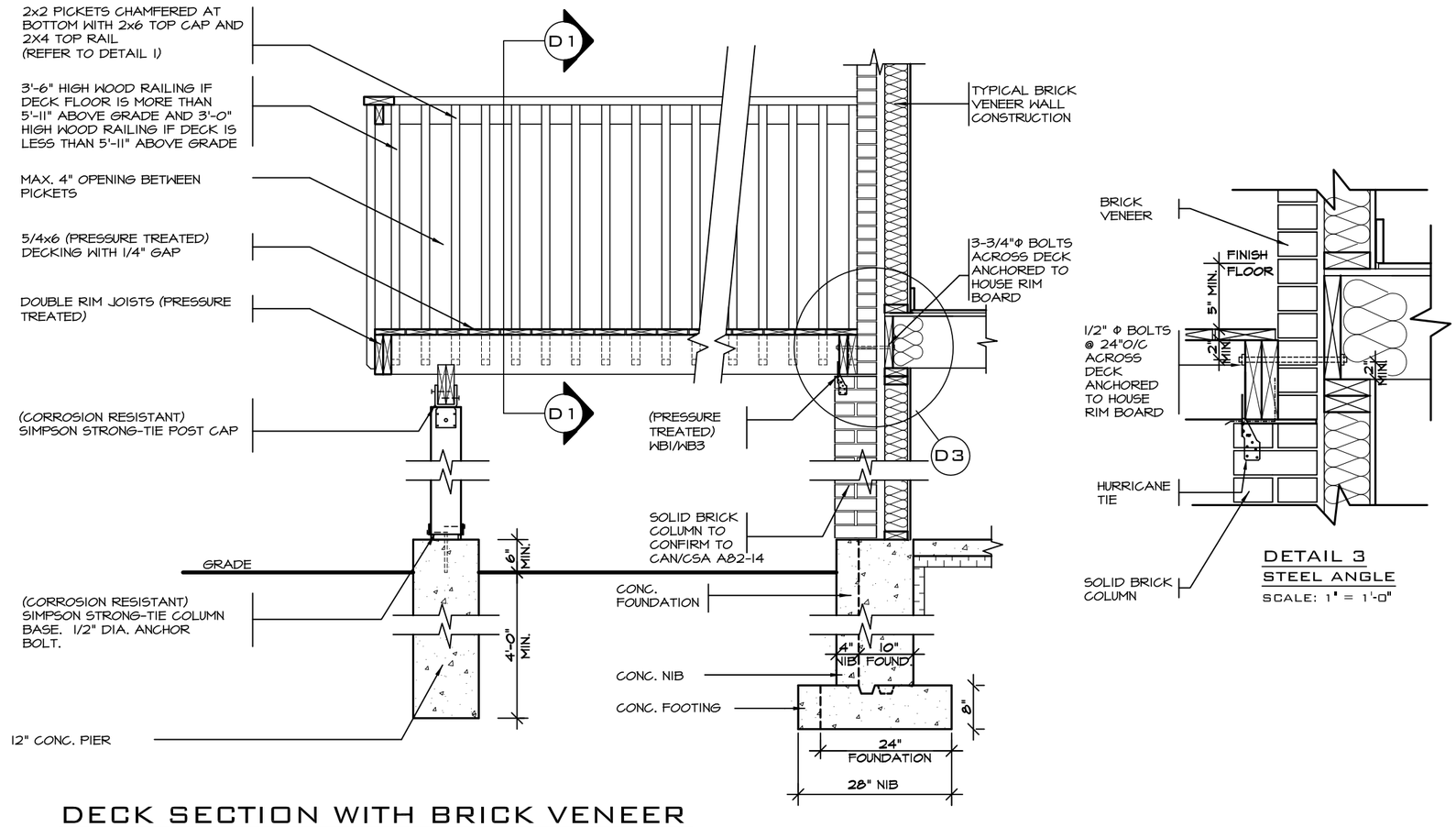
CITY OF RICHMOND HILL BUILDING DIVISION
09/22/2022
RECEIVED
Per: joshua.nabua

March 14, 2022 4:10:20 PM M:\STANDARD DETAILS\P E R M I T S E T\2021\A1 PACKAGE (ROUNDEL)\P 8 - DECK DETAIL PACKAGE A1.DWG



DETAIL 2 - BEAM-TO-POST

SCALE: 1" = 1'-0"



DECK SECTION WITH BRICK VENEER

SCALE: 1/2"=1'-0"

DETAIL 3

STEEL ANGLE

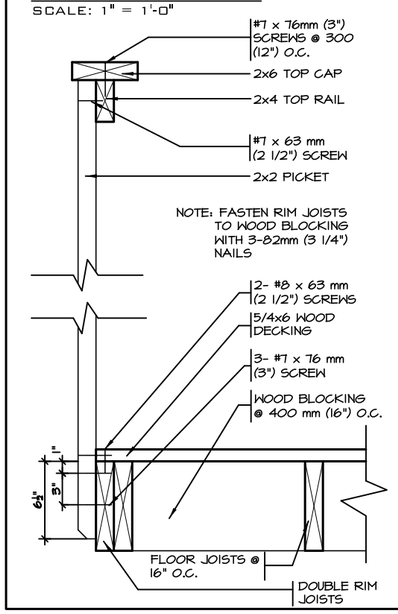
SCALE: 1" = 1'-0"

DETAIL 1

CANTILEVERED PICKET SCREWED TO RIM JOIST AND DECK

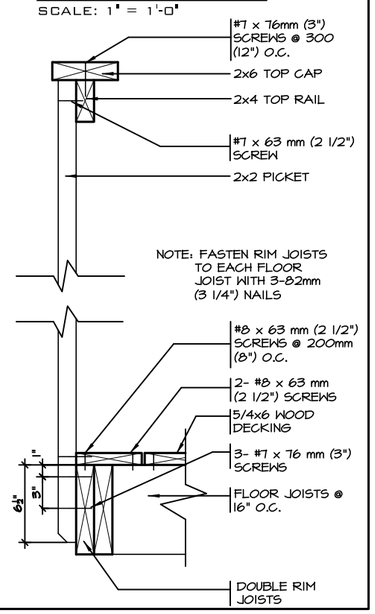
GUARD PARALLEL TO FLOOR JOISTS

SCALE: 1" = 1'-0"



GUARD PERPENDICULAR TO FLOOR JOISTS

SCALE: 1" = 1'-0"



GENERAL NOTES

1. BRICK TO BE COMPRESSIVE STRENGTH OF 15mPa (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. WOOD FOR CANTILEVERED PICKETS PICKETS SHALL BE DOUGLAS FIR-LARCH, SPRUCE-PINE-FIR, OR HEM-FIR SPECIES.
5. THE DECK HAS BEEN DESIGNED TO SAFELY SUPPORT A SUPERIMPOSED LOAD OF 1.9kPa [40psf].
6. CONCRETE SHALL HAVE COMPRESSIVE STRENGTH OF 20MPa AT 28 DAYS AND 5-8% AIR ENTRAINED.
7. FOOTING TO BE PLACED ON UNDISTURBED SOIL WITH MIN. BEARING PRESSURE OF 150kPa [3130psf].

STRUDET INC.

REGISTERED PROFESSIONAL ENGINEER
B. MARINKOVIC
PROVINCE OF ONTARIO
June 11, 2021

FOR STRUCTURE ONLY

2012 CODE

COMPLIANCE PACKAGE "A1"

5.		
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CONCORD, ONTARIO
L4K 4S6
P (416) 736-4096
F (905) 660-0746

REGION DESIGN INC.

SHEET TITLE: WALK-OUT DECK DETAILS

SCALE: AS SHOWN

DATE: JULY 2018

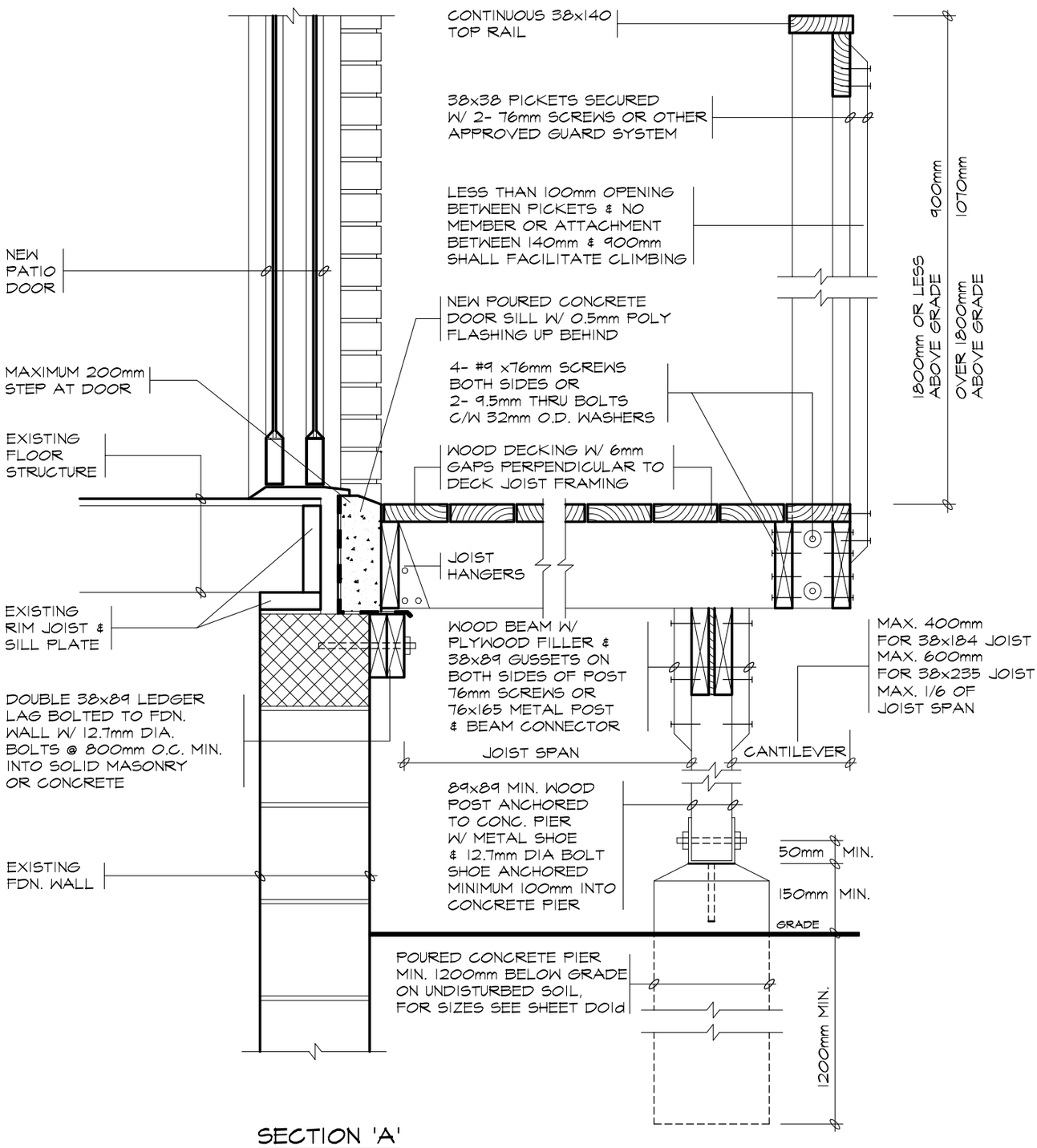
CONTRACTOR SHALL CHECK ALL DIMENSIONS AND ELEVATIONS BEFORE COMMENCING WITH WORK AND REPORT ANY DISCREPANCIES TO THE DESIGNER. PRINTS ARE NOT TO BE SCALED.

PAGE No. 8-2

Greenpark™

PROJECT NAME: ROUNDEL

June 1, 2021 10:02:52 AM M:\STANDARD DETAILS\P E R M I T S E T\2021\A1 PACKAGE (ROUNDEL)\P 8-2 - WALK-OUT DECK DETAIL PACKAGE A1.DWG



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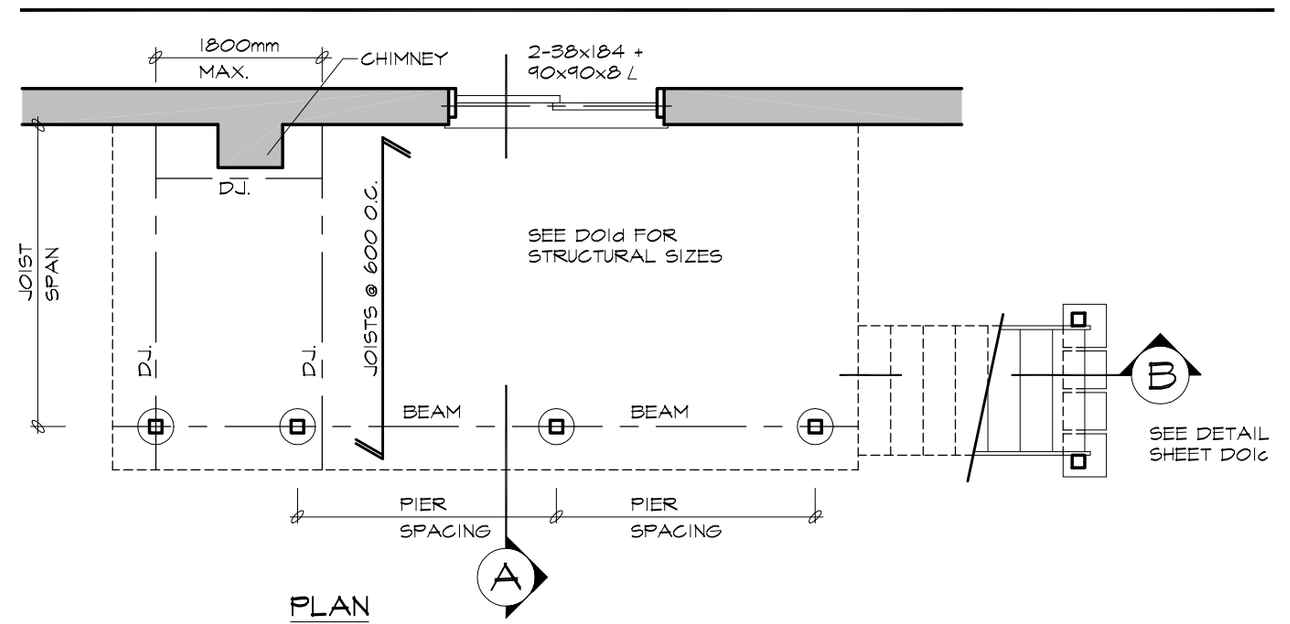


PLAN

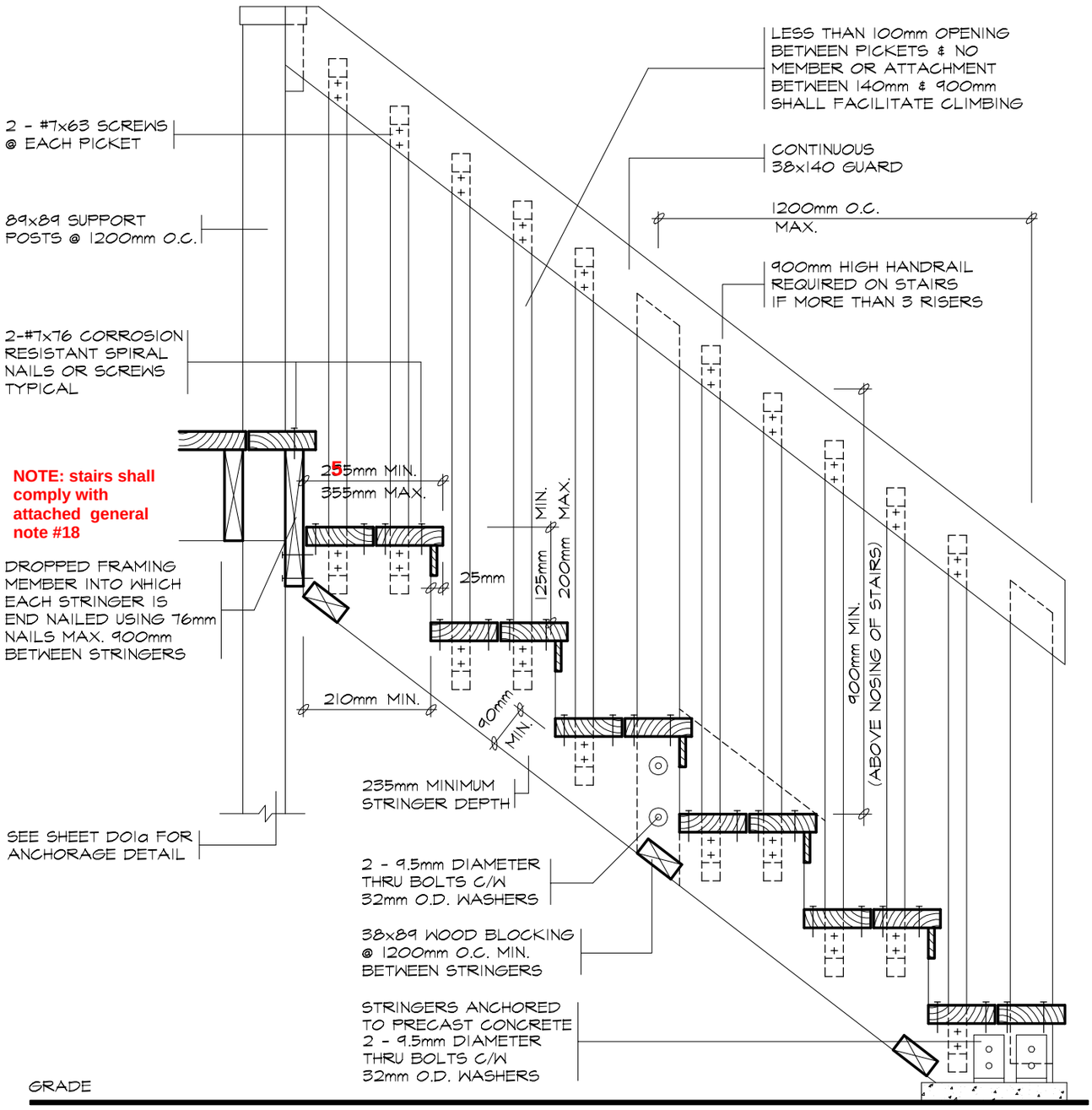
LMCBO STANDARD DETAILS

TITLE: WOOD DECK — FIXED TO SOLID MASONRY FOUNDATION WALL — PLAN & SECTION

DWG. NO. D01a

2012

NOTE: UNDER THE BUILDING CODE ACT, THE LOCAL MUNICIPALITY IS THE AUTHORITY HAVING JURISDICTION FOR ENFORCING THE ACT AND IT'S REGULATIONS. IT IS THE RESPONSIBILITY OF THE OWNER/DESIGNER TO ENSURE THAT ALL DESIGNS SUBMITTED FOR A PERMIT ARE IN ACCORDANCE WITH THE BUILDING CODE ACT, BUILDING CODE AND ANY OTHER APPLICABLE LAW.



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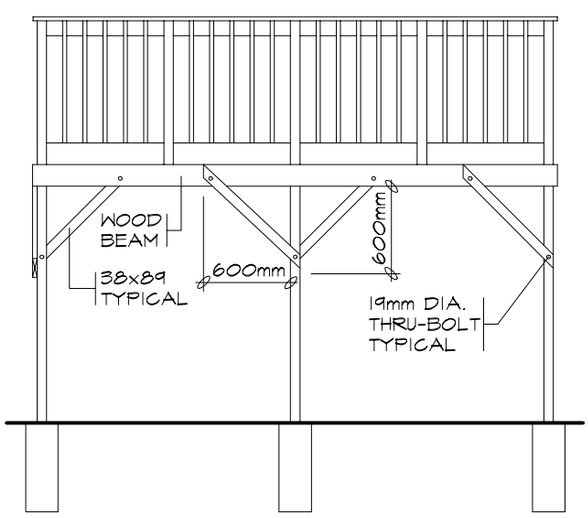
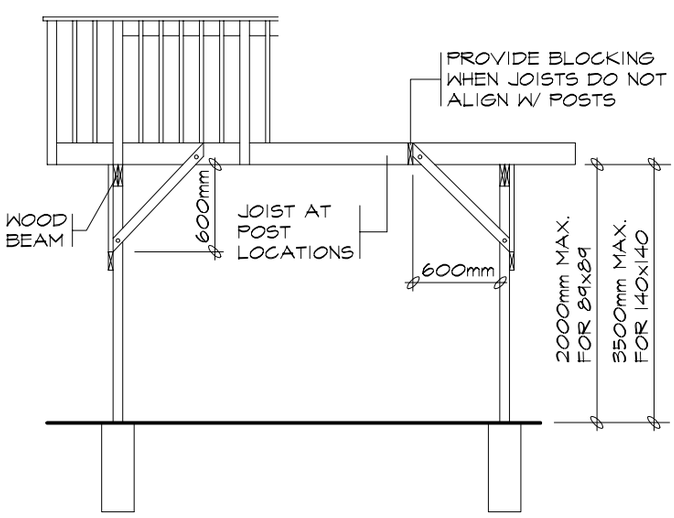


BRACING PARALLEL TO BEAM



BRACING PERPENDICULAR TO BEAM

FREE STANDING DECKS GREATER THAN 600mm ABOVE GRADE SHALL RESIST LATERAL LOADING & MOVEMENT. ALL POSTS MUST BE BRACED WHERE THE SUPPORTED AREA EXCEEDS THOSE LISTED IN THE TABLE ON D01d

LMCBO STANDARD DETAILS

TITLE WOOD DECK — STAIR SECTION
LATERAL SUPPORT FOR FREE STANDING DECKS

DWG. NO. D01c

2012

BEAM SIZING TABLE

SUPPORTED JOIST LENGTH (mm)	LIVE LOAD 1.9 kPa			LIVE LOAD 2.5 kPa			LIVE LOAD 3.0 kPa		
	PIER SPACING (mm)			PIER SPACING (mm)			PIER SPACING (mm)		
	2000	3000	4000	2000	3000	4000	2000	3000	4000
1500	2/38x140	2/38x184	3/38x235	2/38x140	3/38x184	3/38x235	3/38x140	2/38x235	2/38x286
2000	2/38x140	3/38x184	3/38x235	2/38x184	2/38x235	3/38x286	2/38x184	2/38x235	3/38x286
2500	2/38x184	2/38x235	3/38x286	2/38x184	3/38x235	3/38x286	2/38x184	3/38x235	4/38x286
3000	2/38x184	2/38x235	3/38x286	2/38x184	3/38x235	4/38x286	2/38x184	3/38x235	4/38x286
3500	2/38x184	3/38x235	3/38x286	2/38x184	3/38x235	4/38x286	3/38x184	3/38x286	N/A
4000	2/38x184	3/38x235	4/38x286	2/38x184	3/38x286	N/A	3/38x184	3/38x286	N/A

JOIST SIZING TABLE

JOIST SPAN (mm)	LIVE LOAD 1.9 kPa			LIVE LOAD 2.5 kPa			LIVE LOAD 3.0 kPa		
	JOIST SPACING (mm)			JOIST SPACING (mm)			JOIST SPACING (mm)		
	305	406	610	305	406	610	305	406	610
2000	38x140	38x140	38x140	38x140	38x140	38x140	38x140	38x140	38x140
2500	38x140	38x140	38x184	38x140	38x140	38x184	38x140	38x184	38x184
3000	38x140	38x184	38x184	38x184	38x184	38x235	38x184	38x184	38x235
3500	38x184	38x184	38x235	38x184	38x235	38x235	38x235	38x235	38x235
4000	38x235	38x235	38x286	38x235	38x235	38x286	38x235	38x235	38x286

FOOTING SIZES

SOIL BEARING CAPACITIES (kPa)	
SOIL TYPE	BEARING PRESSURE (kPa)
SOFT CLAY	40
LOOSE SAND OR GRAVEL	50
FIRM CLAY	75
DENSE OR COMPACT SILT	100
STIFF CLAY	150
DENSE COMPACT SAND OR GRAVEL	150
TILL	200
CLAY SHALE	300
SOUND ROCK	500

PIER SIZES

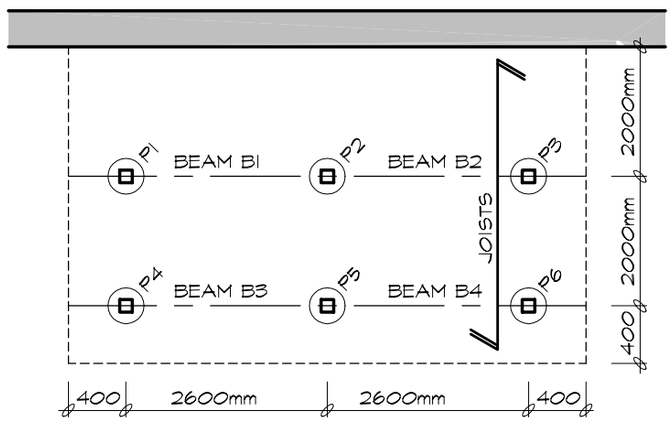
DIAMETER (mm)	M^2
200	0.03
250	0.05
300	0.08
350	0.10
400	0.13
500	0.20
600	0.30

POST SIZING TABLE

POST SIZE (mm)	MAXIMUM HEIGHT (M)	MAX. SUPPORTED DECK AREA (M2)		
		LIVE LOAD (kPa)		
		1.9	2.5	3.0
89x89	1.0	10.86	8.71	7.48
	1.5	5.93	4.76	4.09
	2.0	3.15	2.53	2.17
140x140	2.0	13.67	10.98	9.43
	2.5	9.32	7.48	6.43
	3.0	6.35	5.10	4.38
	3.5	4.41	3.54	3.04

EXAMPLE PLAN

PIERS	SUPPORTED DECK AREA
P1	2 x 1.7 = 3.4m^2
P2	2 x 2.6 = 5.2m^2
P3	2 x 1.7 = 3.4m^2
P4	1.4 x 1.7 = 2.4m^2
P5	1.4 x 2.6 = 3.6m^2
P6	1.4 x 1.7 = 2.4m^2
BEAMS	**SUPPORTED JOIST LENGTH**
B1	2000mm
B2	2000mm
B3	1400mm
B4	1400mm
BEAM SPAN =	2600mm
JOIST SPAN =	2000mm



PIER SIZE (M2) = SUPPORTED DECK AREA (M2) x MIN. 1.9 (kpa) LIVE LOAD / SOIL BEARING CAPACITY (kpa)

GENERAL NOTES

1. A MINIMUM LIVE LOAD OF 1.9 (kPa) SHALL BE APPLIED IN ALL LOCATIONS.
2. THE PRESCRIBED SNOW LOAD FOR 225 SELECTED ONTARIO LOCATIONS IS INDICATED IN COLUMN 12 OF TABLE 1.2 IN SUPPLEMENTARY GUIDELINE SB-1 OF THE ONTARIO BUILDING CODE. THE SNOW LOAD SHALL BE APPLIED AS THE MINIMUM LIVE LOAD WHERE IT IS GREATER THAN 1.9 (kPa)
3. A SITE PLAN OR SURVEY IS REQUIRED SHOWING ALL LOT LINES & DIMENSIONS, SIZE & LOCATION OF ALL EXISTING BUILDINGS & DECKS.
4. LUMBER NO. 2 SPF OR BETTER WOOD POSTS MIN. 89x89 (SOLID). USE CORROSION RESISTANT SPIRAL NAILS OR SCREWS.
5. A DECK IS NOT PERMITTED TO BE SUPPORTED ON BRICK VENEER.
6. CANTILEVERED JOISTS AND BEAMS ARE LIMITED TO 1/6 THE MEMBERS LENGTH.
7. CONCRETE PIERS SHALL BEAR ON UNDISTURBED SOIL. THE BEARING CAPACITY OF THE SOIL SHALL BE DETERMINED PRIOR TO CONSTRUCTION.
8. MAXIMUM HEIGHT REFERS TO THE HEIGHT OF THE POST FROM THE TOP OF THE PIER TO THE DECK SURFACE.
9. BEAMS WITH MORE THAN 2 MEMBERS MUST BE SUPPORTED BY 140x140 POSTS.
10. THE ALLOWABLE SOIL BEARING PRESSURE SHALL BE REDUCED BY 50% WHILE THE WATER IS AT OR NEAR THE BOTTOM OF THE FOOTING EXCAVATION.
11. CONTACT YOUR LOCAL BUILDING DEPARTMENT FOR FURTHER INFORMATION ABOUT LOCAL SOIL BEARING CAPACITIES.
12. JOISTS SPANNING MORE THAN 2100mm ARE TO HAVE BRIDGING AT LEAST EVERY 2100mm O.C..

LMCBO STANDARD DETAILS

TITLE

WOOD DECK STRUCTURAL SIZING TABLES

DWG. NO.

D01d

2012

NOTE: UNDER THE BUILDING CODE ACT, THE LOCAL MUNICIPALITY IS THE AUTHORITY HAVING JURISDICTION FOR ENFORCING THE ACT AND IT'S REGULATIONS. IT IS THE RESPONSIBILITY OF THE OWNER/DESIGNER TO ENSURE THAT ALL DESIGNS SUBMITTED FOR A PERMIT ARE IN ACCORDANCE WITH THE BUILDING CODE ACT, BUILDING CODE AND ANY OTHER APPLICABLE LAW.

SB-7 Guards for Housing and Small Buildings

2.1. Materials

2.1.1. Lumber Grades

(1) The minimum grade of softwood dimension lumber for posts, rails and joists shall be Northern Species, No. 2.

(2) The minimum grade of softwood dimension lumber for pickets shall be Northern Species, No. 2 Picket grade.

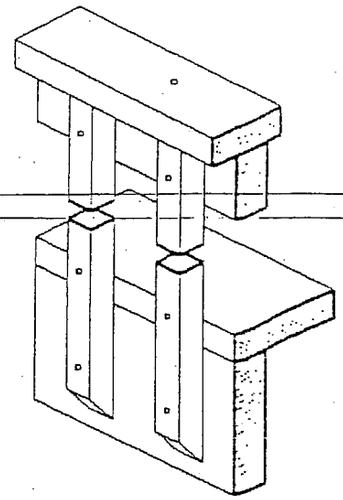
(3) Wood for pickets shall be free of loose knots.
(See Appendix A.)

Table 2.1.2.
Minimum Size of Loadbearing Elements

Guard Element	Minimum Size, mm (in)
Post	89 x 89 (4" x 4" nominal)
Top Rail	38 x 89 (2" x 4" nominal)
Bottom Rail	38 x 89 (2" x 4" nominal)
Picket / Baluster	32 x 32 ($1\frac{5}{32}$" x $1\frac{5}{32}$")
Column 1	2

Table 2.1.3.
Minimum Size of Floor Elements

Floor Element	Minimum size, mm (in)
Dimension Lumber Decking	25 x 140 ($\frac{5}{4}$" x 6" nominal), when each is plank fastened with 2 - 63 mm (2½") nails
	38 x 89 (2" x 4" nominal), when each plank is fastened with 2 - 76 mm (3") nails
Dimension Lumber Joists	38 x 184 (2" x 8" nominal)
Column 1	2



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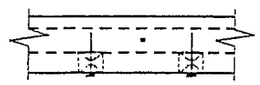
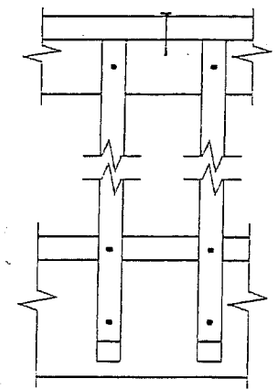
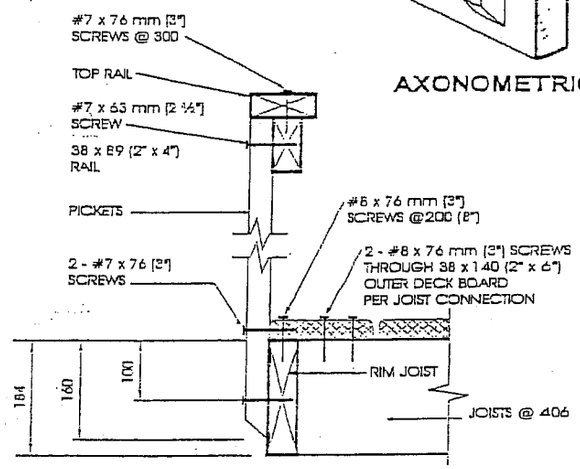


PLAN



FRONT ELEVATION

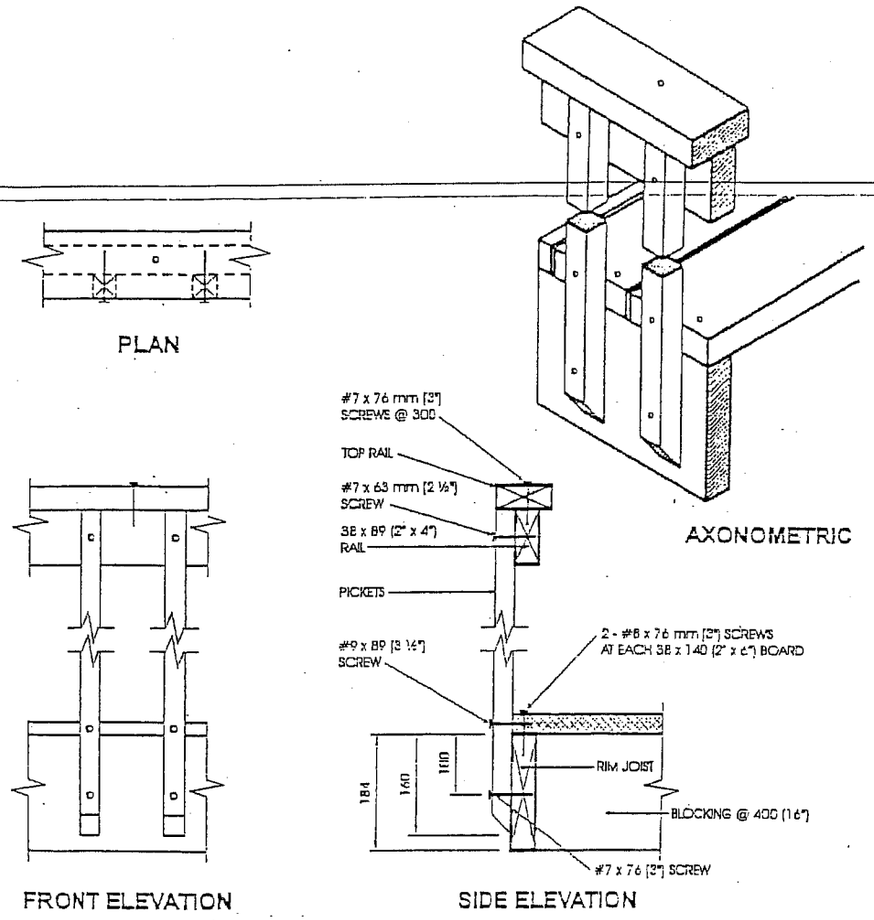


SIDE ELEVATION

Detail ED-3

Exterior Connection: Cantilevered Picket Screwed to Rim Joist and Deck

Notes:
1. Provide a suitable post, return, or solid support at each end of the guard.
2. Wood for cantilevered pickets shall be Northern Species.
3. Fasten rim joist to each floor joist with 3 - 82 mm (3¼") nails.
4. Dimensions shown are in mm unless otherwise specified.

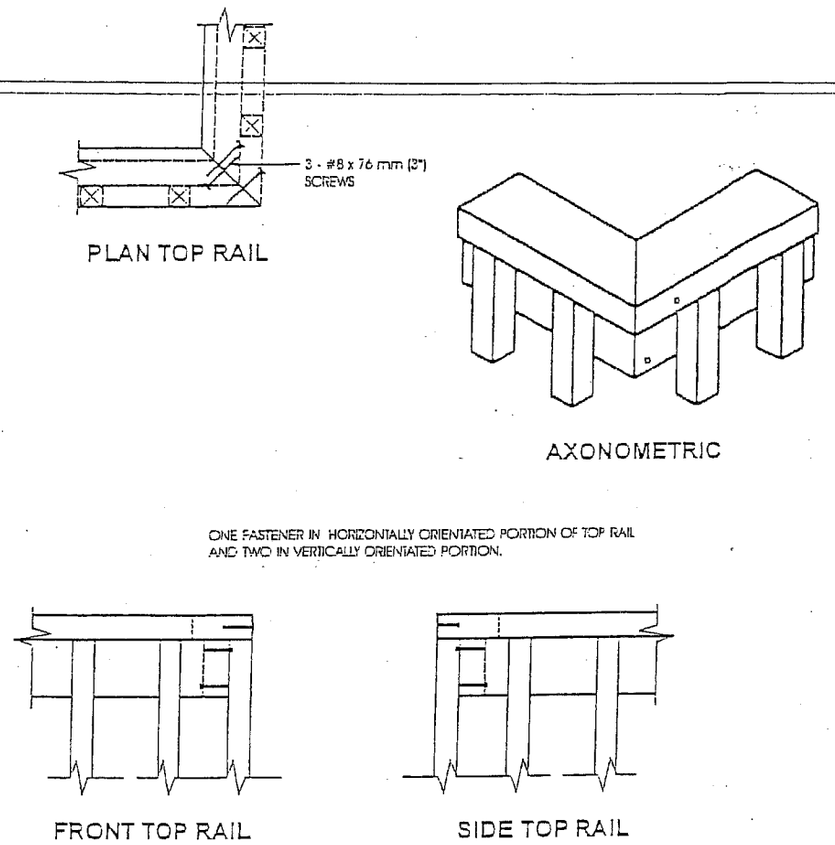


Detail ED-4

Exterior Connection: Cantilevered Picket Screwed to Rim Joist and Deck, Guard Parallel to Floor Joists

Notes:

1. Provide a suitable post, return, or solid support at each end of the guard.
2. Wood for cantilevered pickets shall be Northern Species.
3. Fasten rim joist to blocking with 3 - 82 mm (3¼") nails.
4. Dimensions shown are in mm unless otherwise specified.

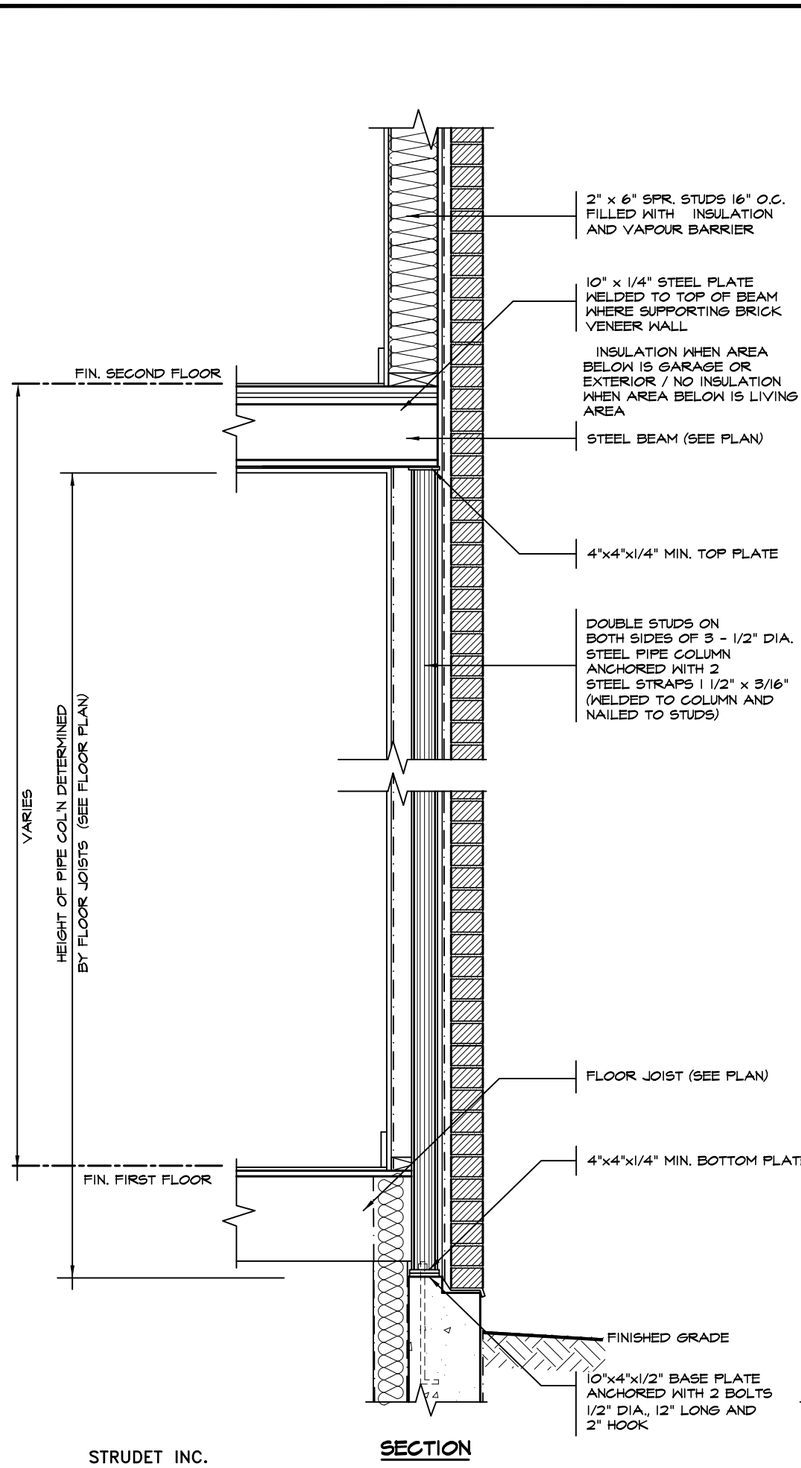


Detail ED-5

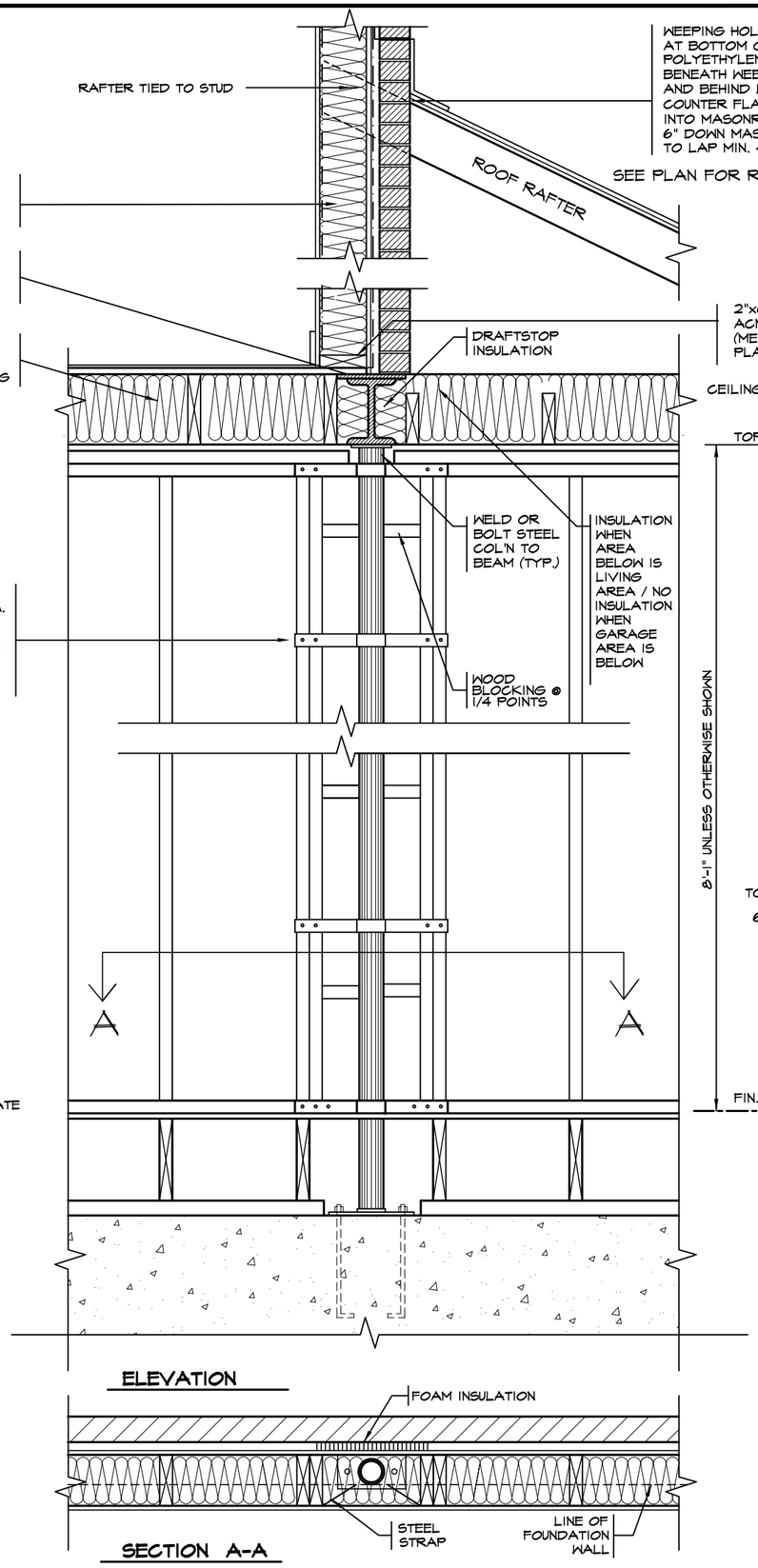
Exterior Connection: Corner Joint

Notes:

1. Screws fastening pickets are omitted for clarity.
2. Provide a minimum of 10 pickets beyond the return if end restraint of the guard is provided by this return detail only.



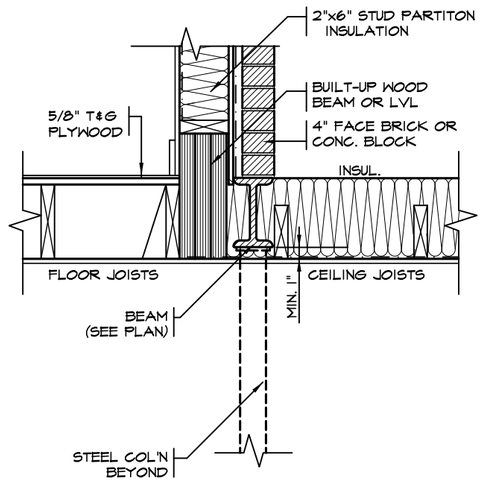
SECTION

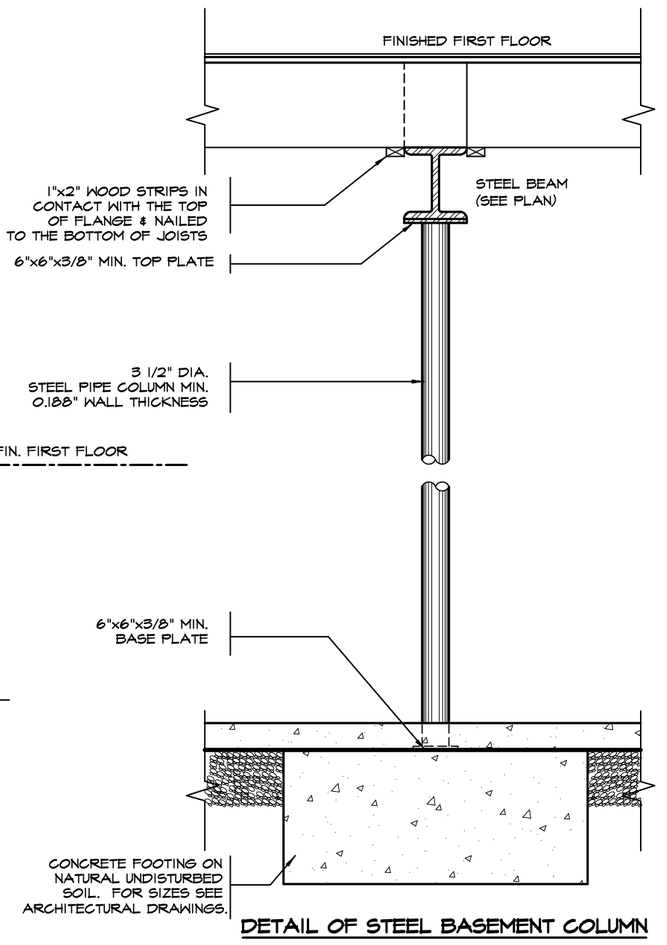


ELEVATION

SECTION A-A

SECTION THROUGH STEEL BEAM SUPPORTING MASONRY & BEARING STUD PARTITION





DETAIL OF STEEL BASEMENT COLUMN

STRUDET INC.

REGISTERED PROFESSIONAL ENGINEER
B. MARINKOVIC
June 11/ 2021
PROVINCE OF ONTARIO

FOR STRUCTURE ONLY

2012 CODE
COMPLIANCE PACKAGE "A1"

5.		
4.		
3.		
2.		
1.	ISSUED FOR PERMIT	JUL 30, 2018

REVISIONS

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.

QUALIFICATION INFORMATION

Required unless design is exempt under Division C, Subsection 3.2.5 of the building code

VIKAS GAJJAR — NAME — SIGNATURE — 28770 — BCIN

REGION DESIGN INC.
8700 DUFFERIN ST.
CONCORD, ONTARIO
L4K 4S6
P (416) 736-4096
F (905) 660-0746

RDI REGION DESIGN INC.

SHEET TITLE: COLUMN DETAILS STEEL

SCALE: 3/4"=1'-0"

DATE: JULY 2018

CONTRACTOR SHALL CHECK ALL DIMENSIONS AND ELEVATIONS BEFORE COMMENCING WITH WORK AND REPORT ANY DISCREPANCIES TO THE DESIGNER. PRINTS ARE NOT TO BE SCALED.

PAGE No. 9

Greenpark

PROJECT NAME: ROUNDEL

CITY OF BRAMPTON HILL BUILDING DIVISION
09/22/2022
RECEIVED
Per: joshua.nabua

June 1, 2021

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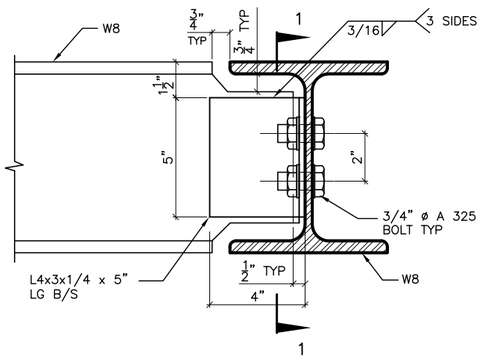
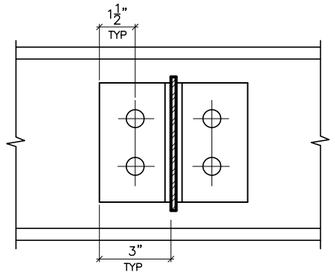


DETAIL 1.

W8
TO
W8
CONNECTION



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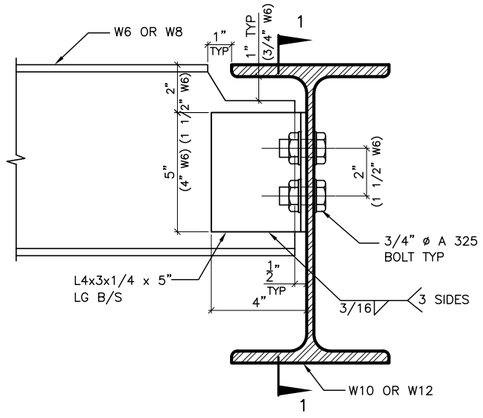
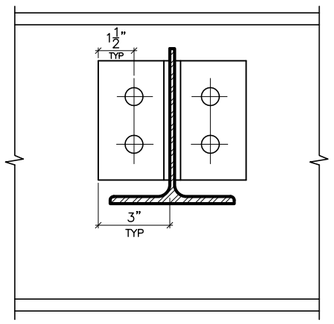


DETAIL 2.

W6(W8)
TO
W10(W12)
CONNECTION



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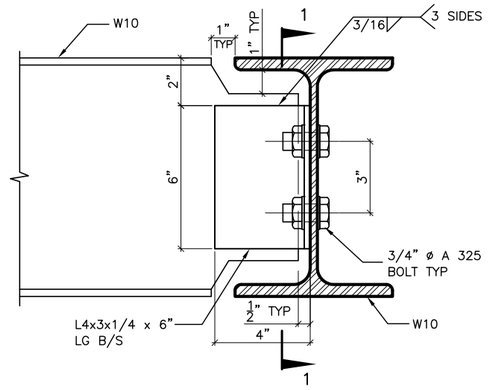
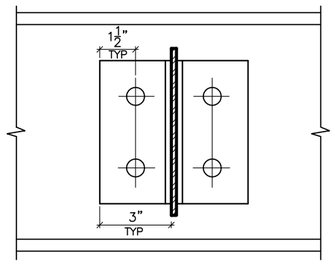
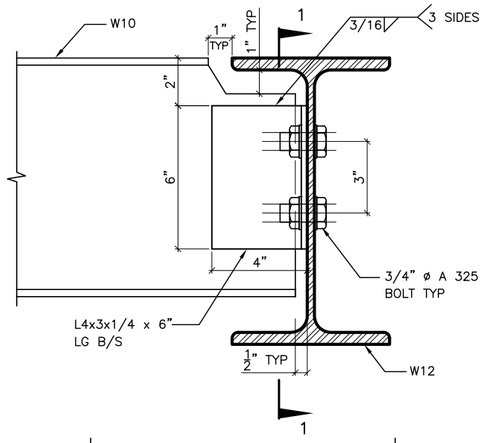


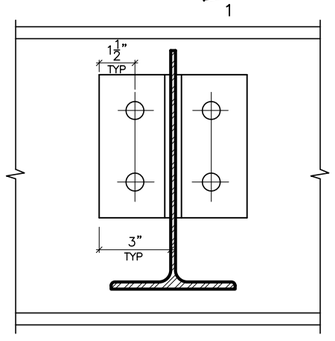
DETAIL 3.

W10
TO
W10
CONNECTION



SECTION 1–1

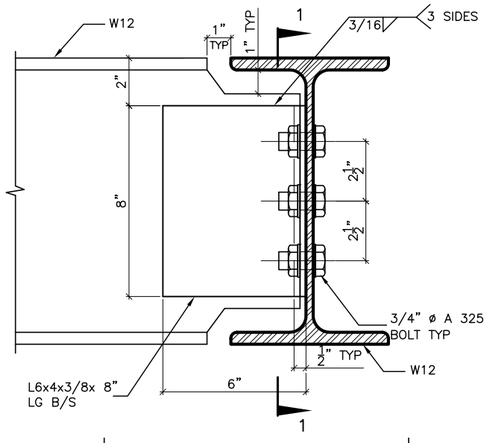


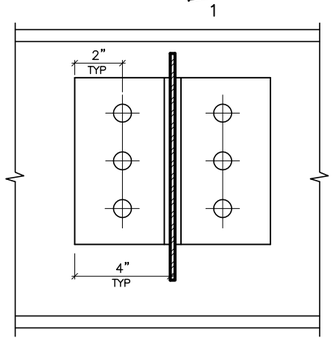


DETAIL 4.

W10
TO
W12
CONNECTION

SECTION 1–1

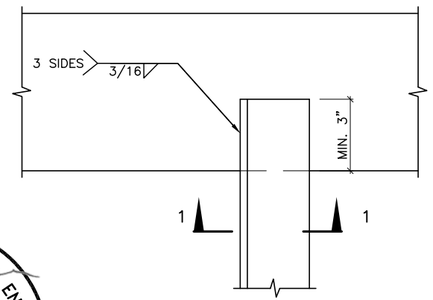




DETAIL 5.

W12
TO
W12
CONNECTION

SECTION 1–1

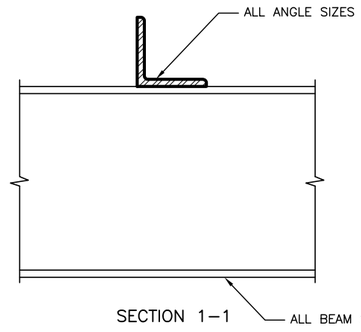


PLAN VIEW

STRUDET INC.

REGISTERED PROFESSIONAL ENGINEER
B. MARINKOVIC
June 11, 2021
PROVINCE OF ONTARIO

FOR STRUCTURE ONLY



SECTION 1–1

DETAIL 6.

ANGLE
TO
BEAM
CONNECTION

2012 CODE COMPLIANCE PACKAGE "A1"

5.		
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2.		
1.	ISSUED FOR PERMIT	JULY 30, 2018

REVISIONS

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QUALIFICATION INFORMATION

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VIKAS GAJJAR — NAME — SIGNATURE — 28770 — BCIN

REGION DESIGN INC.
8700 DUFFERIN ST.
CONCORD, ONTARIO
L4K 4S6
P (416) 736-4096
F (905) 660-0746

REGION DESIGN INC.

SHEET TITLE: BEAM DETAILS STEEL

SCALE: N.T.S.

DATE: JULY 2018

CONTRACTOR SHALL CHECK ALL DIMENSIONS AND ELEVATIONS BEFORE COMMENCING WITH WORK AND REPORT ANY DISCREPANCIES TO THE DESIGNER. PRINTS ARE NOT TO BE SCALED.

PAGE No. 10

Greenpark™

PROJECT NAME: ROUNDEL

CITY OF BRAMPTON HILL BUILDING DIVISION
09/22/2022
RECEIVED
Per: joshua.nabua

June 1, 2021

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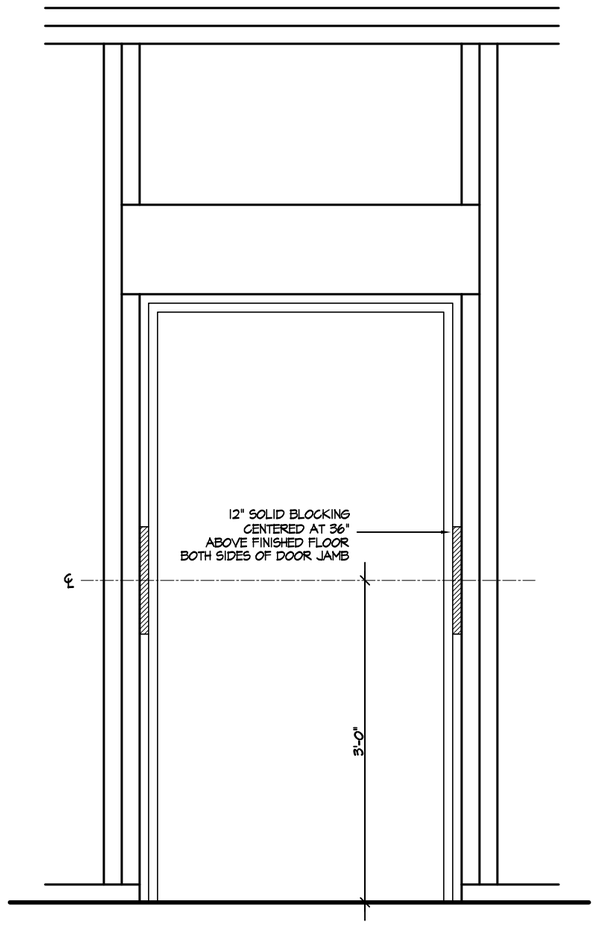
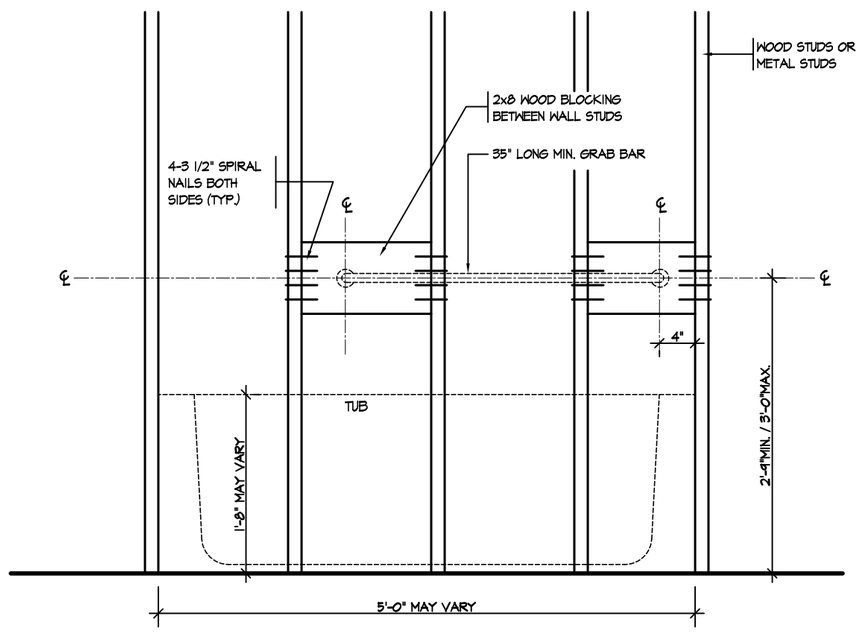
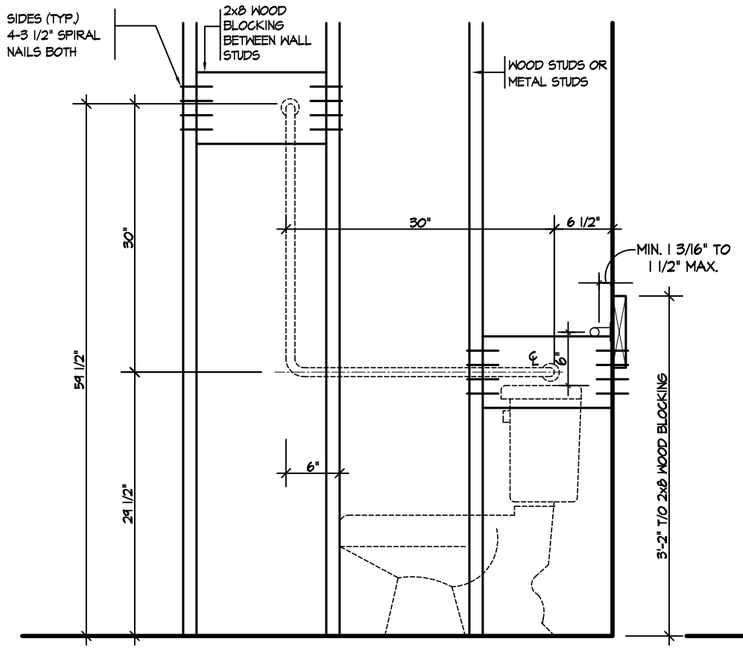


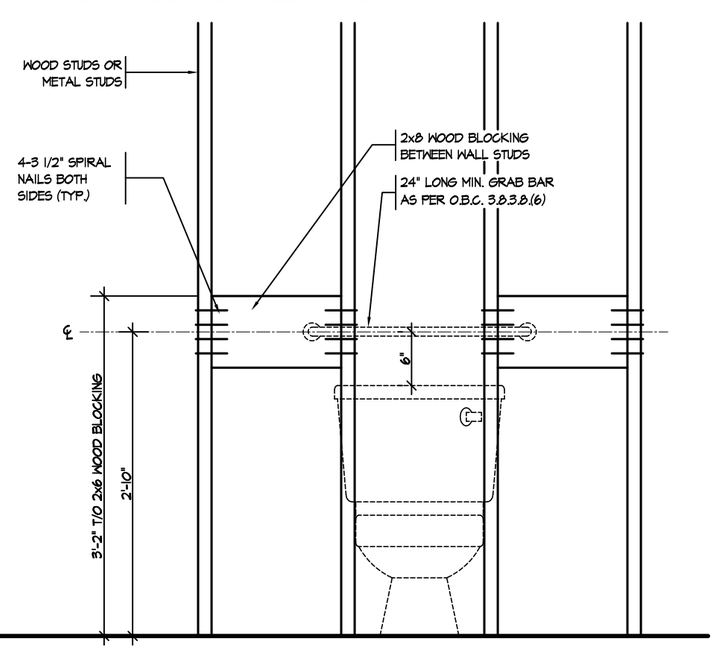
RESISTANCE TO FORCED ENTRY (OBC 9.6.8.)



BATH TUB FRONT ELEVATION



TOILET SIDE ELEVATION



TOILET FRONT ELEVATION

STRUCTURAL REINFORCEMENT FOR GRAB BAR (OBC 9.5.2.3.)

STRUDET INC.

REGISTERED PROFESSIONAL ENGINEER
B. MARINKOVIC
PROVINCE OF ONTARIO
June 1, 2021

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2012 CODE
COMPLIANCE PACKAGE "A1

5.		
4.		
3.		
2.		
1.	ISSUED FOR PERMIT	JUL 30, 2018

REVISIONS

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8700 DUFFERIN ST.
CONCORD, ONTARIO
L4K 4S6
P (416) 736-4096
F (905) 660-0746

RDI REGION DESIGN INC.

SHEET TITLE: BLOCKING
FORCED ENTRY & GRAB BAR

SCALE: 3/4"=1'-0"

DATE: JULY 2018

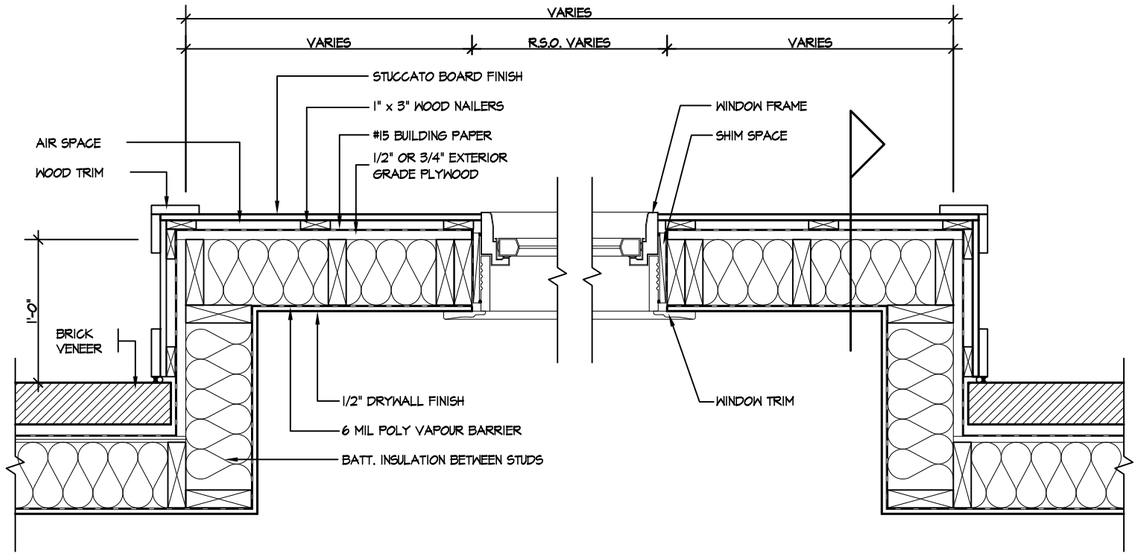
CONTRACTOR SHALL CHECK ALL DIMENSIONS AND ELEVATIONS BEFORE COMMENCING WITH WORK AND REPORT ANY DISCREPANCIES TO THE DESIGNER. PRINTS ARE NOT TO BE SCALED.

PAGE No. 11

Greenpark™

PROJECT NAME: ROUNDEL

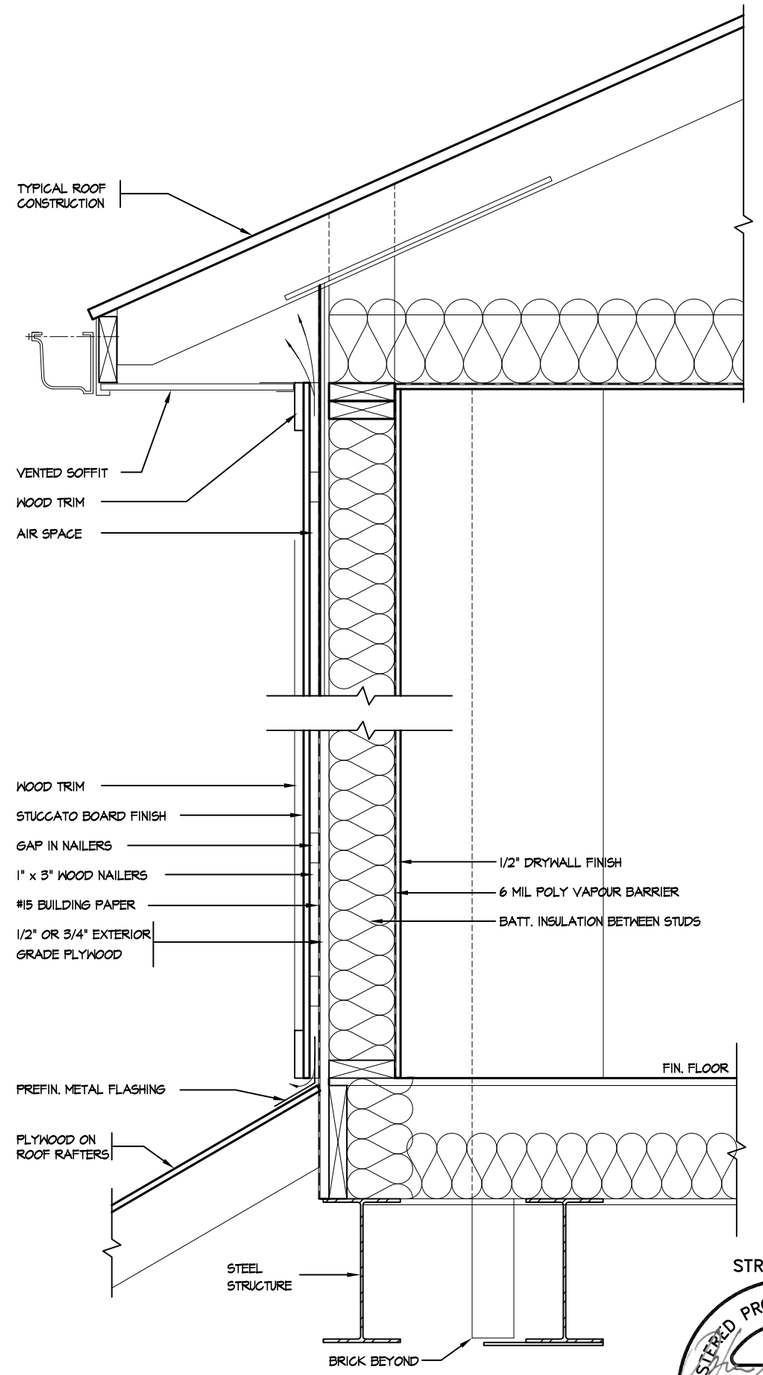
June 1, 2021 10:06:33 AM M:\STANDARD DETAILS\P E R M I T S E T\2021\A1 PACKAGE (ROUNDEL)\P 11 - BLOCKING PACKAGE A1.DWG



PLAN VIEW

STUCCATO BOARD FINISH CLADDING (OBC 9.27.)

NOTE: Insulation as per SB-12 pkg. A1



CROSS SECTION

STRUDET INC.

REGISTERED PROFESSIONAL ENGINEER
B. MARINKOVIC
PROVINCE OF ONTARIO

June 1, 2021

FOR STRUCTURE ONLY

2012 CODE
COMPLIANCE PACKAGE "A1"

5.		
4.		
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REGION DESIGN INC.
8700 DUFFERIN ST.
CONCORD, ONTARIO
L4K 4S6
P (416) 736-4096
F (905) 660-0746

REGION DESIGN INC.

SHEET TITLE: STUCCATO BOARD FINISH CLADDING

CONTRACTOR SHALL CHECK ALL DIMENSIONS AND ELEVATIONS BEFORE COMMENCING WITH WORK AND REPORT ANY DISCREPANCIES TO THE DESIGNER. PRINTS ARE NOT TO BE SCALED.

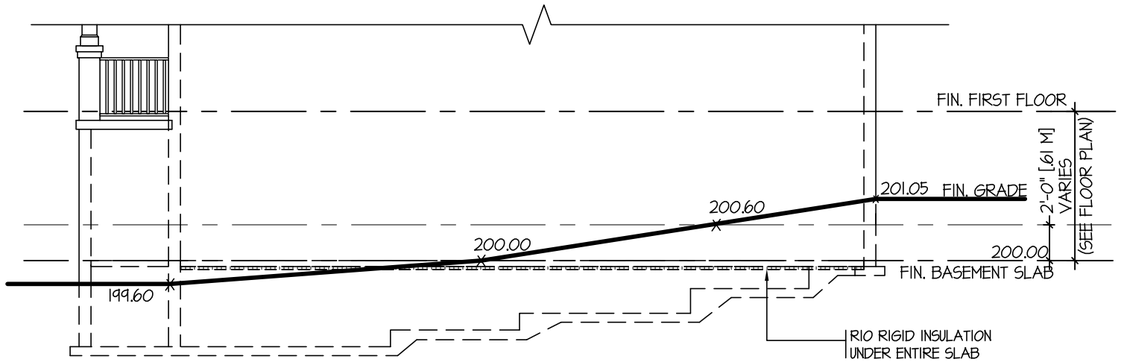
SCALE: 1/2"=1'-0"

DATE: JULY 2018

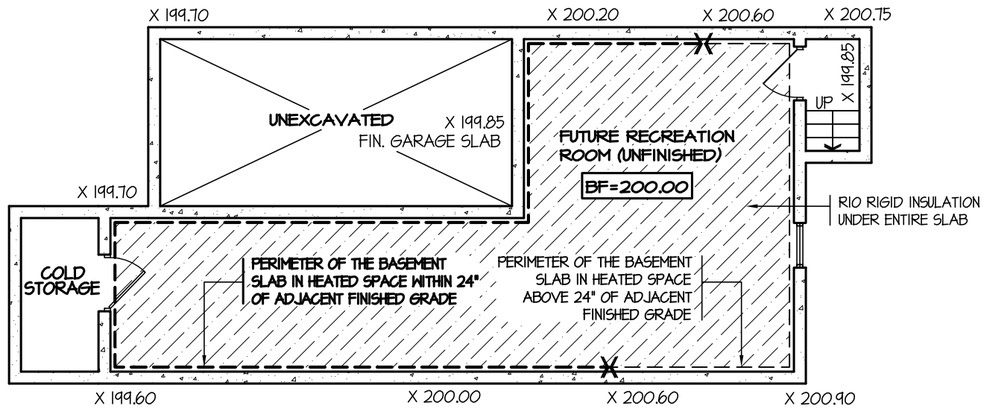
PAGE No. 12

Greenpark™

PROJECT NAME: ROUNDEL



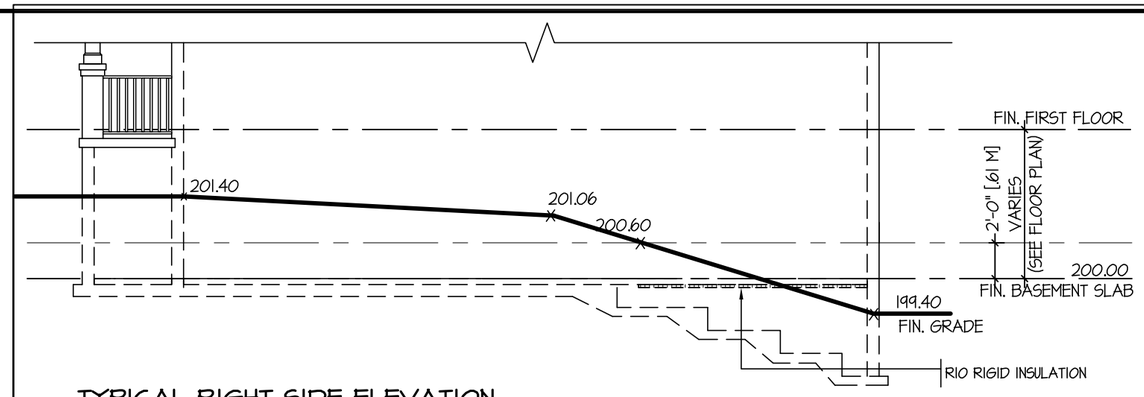
TYPICAL RIGHT SIDE ELEVATION



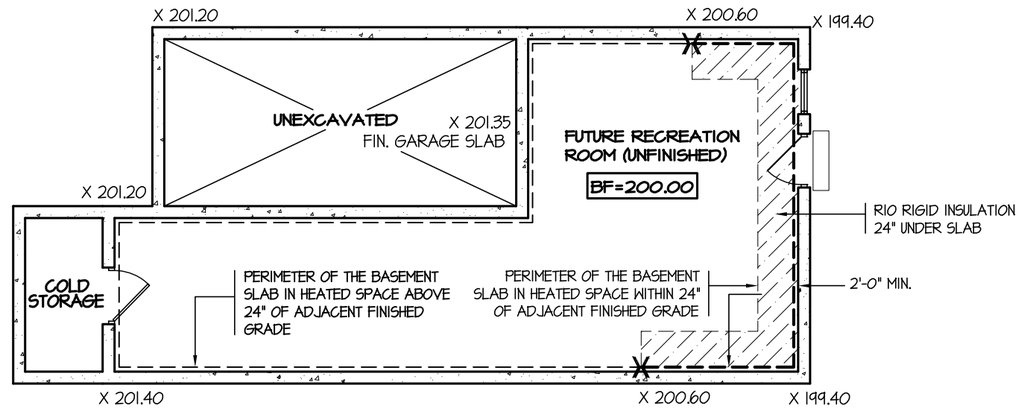
TYPICAL BASEMENT PLAN

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

SLAB ON GRADE CONDITION



TYPICAL RIGHT SIDE ELEVATION



TYPICAL BASEMENT PLAN

NOTES:
1. LEVELS SHOWN ON THE PLANS ARE FOR ILLUSTRATION PURPOSE ONLY, SEE FINAL GRADING PLAN FOR ACTUAL LEVELS
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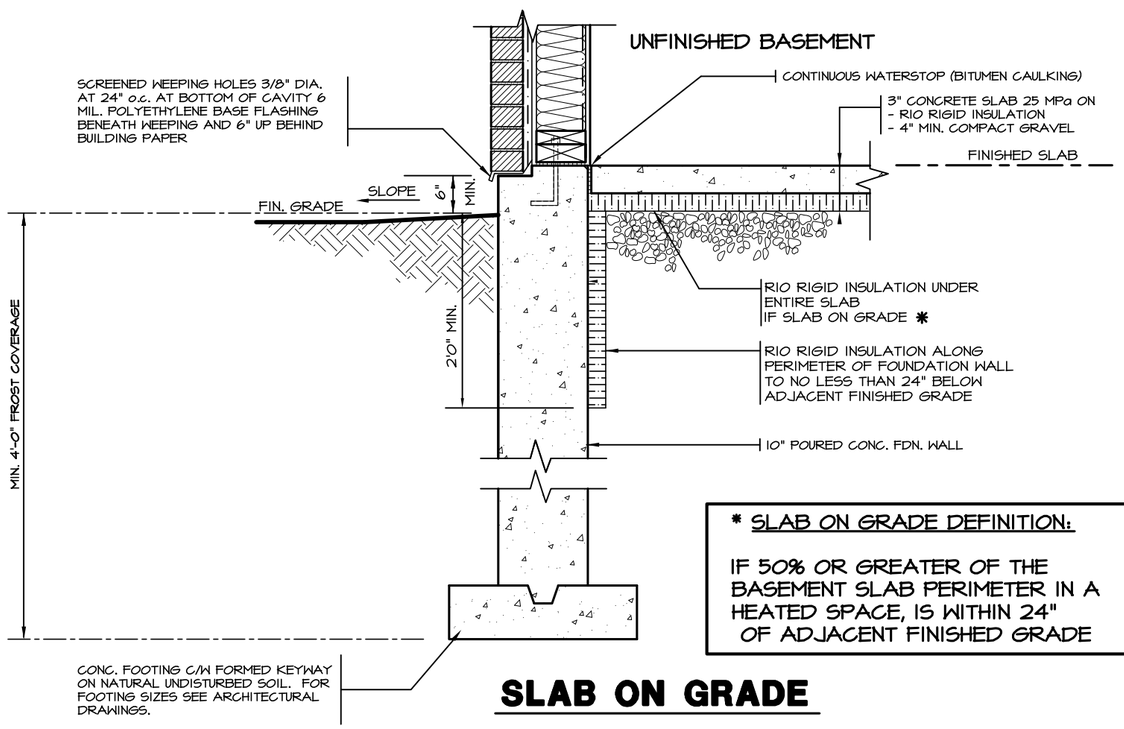
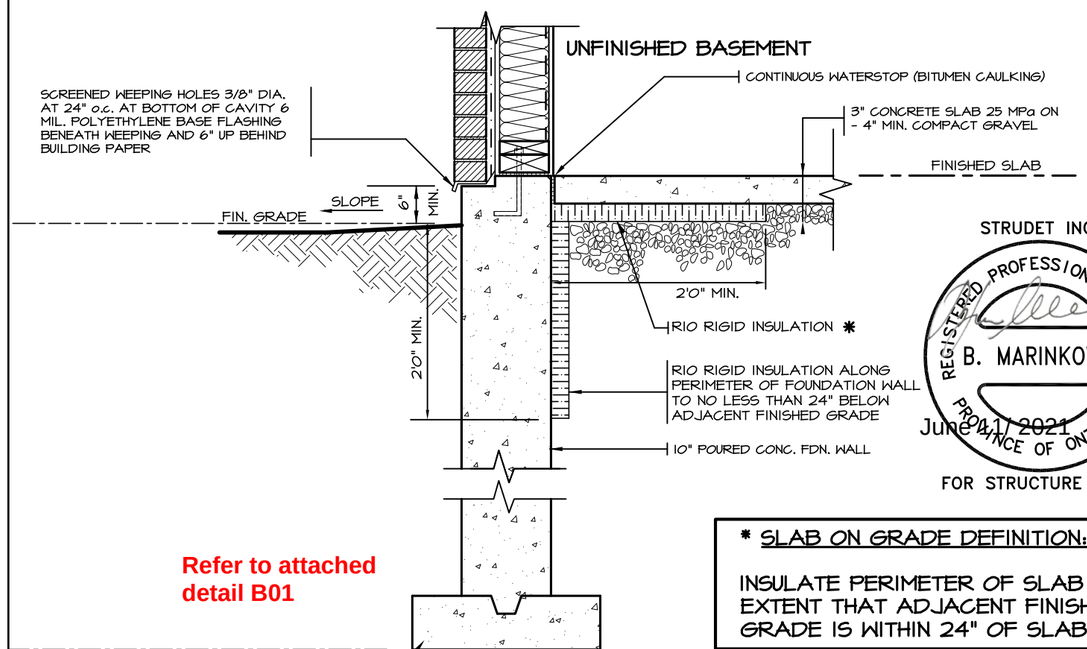
WALK OUT BASEMENT CONDITION



* SLAB ON GRADE DEFINITION:

IF 50% OR GREATER OF THE BASEMENT SLAB PERIMETER IN A HEATED SPACE, IS WITHIN 24" OF ADJACENT FINISHED GRADE

SLAB ON GRADE



* SLAB ON GRADE DEFINITION:

INSULATE PERIMETER OF SLAB TO EXTENT THAT ADJACENT FINISHED GRADE IS WITHIN 24" OF SLAB

WALK OUT BASEMENT

STRUDET INC.
REGISTERED PROFESSIONAL ENGINEER
B. MARINKOVIC
PROVINCE OF ONTARIO
June 11, 2021
FOR STRUCTURE ONLY

2012 CODE COMPLIANCE PACKAGE "A1"

5.		
4.		
3.		
2.		
1.	ISSUED FOR PERMIT	JUL 30, 2018

REVISIONS

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.
QUALIFICATION INFORMATION
Required unless design is exempt under Division C, Subsection 3.2.5 of the building code

VIKAS GAJJAR — NAME — SIGNATURE — 28770 — BCIN

REGION DESIGN INC.
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CONCORD, ONTARIO
L4K 4S6
P (416) 736-4096
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REGION DESIGN INC.

SHEET TITLE: SLAB ON GRADE WALKOUT BASEMENT

CONTRACTOR SHALL CHECK ALL DIMENSIONS AND ELEVATIONS BEFORE COMMENCING WITH WORK AND REPORT ANY DISCREPANCIES TO THE DESIGNER. PRINTS ARE NOT TO BE SCALED.

SCALE: N.T.S.

DATE: JULY 2018

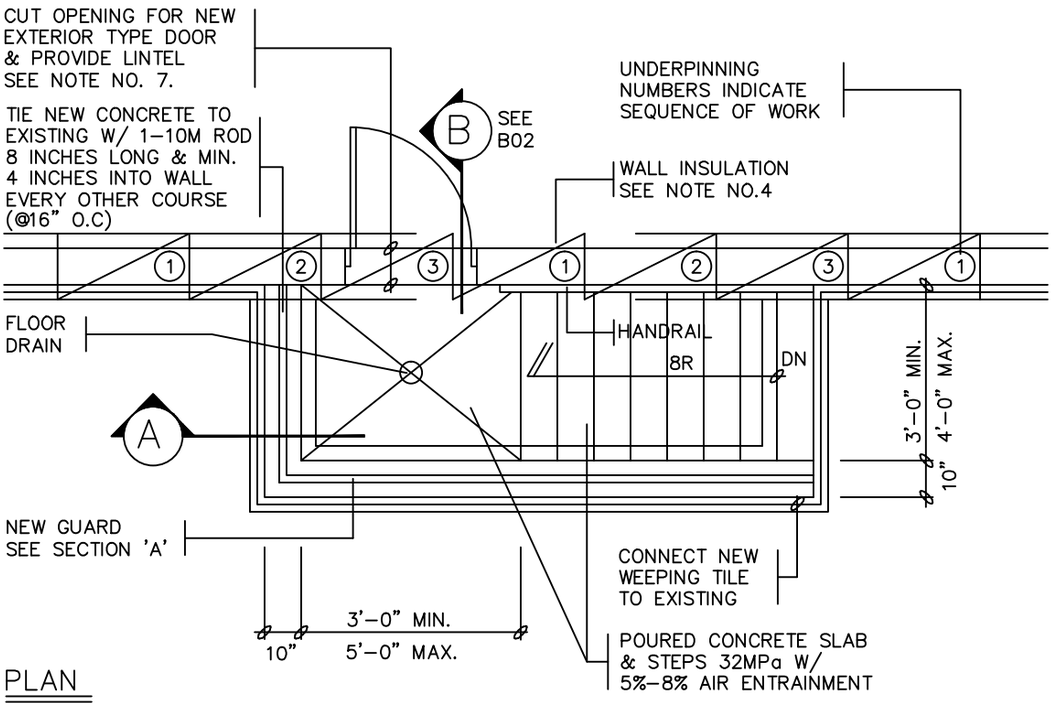
PAGE No.: 13

Greenpark™

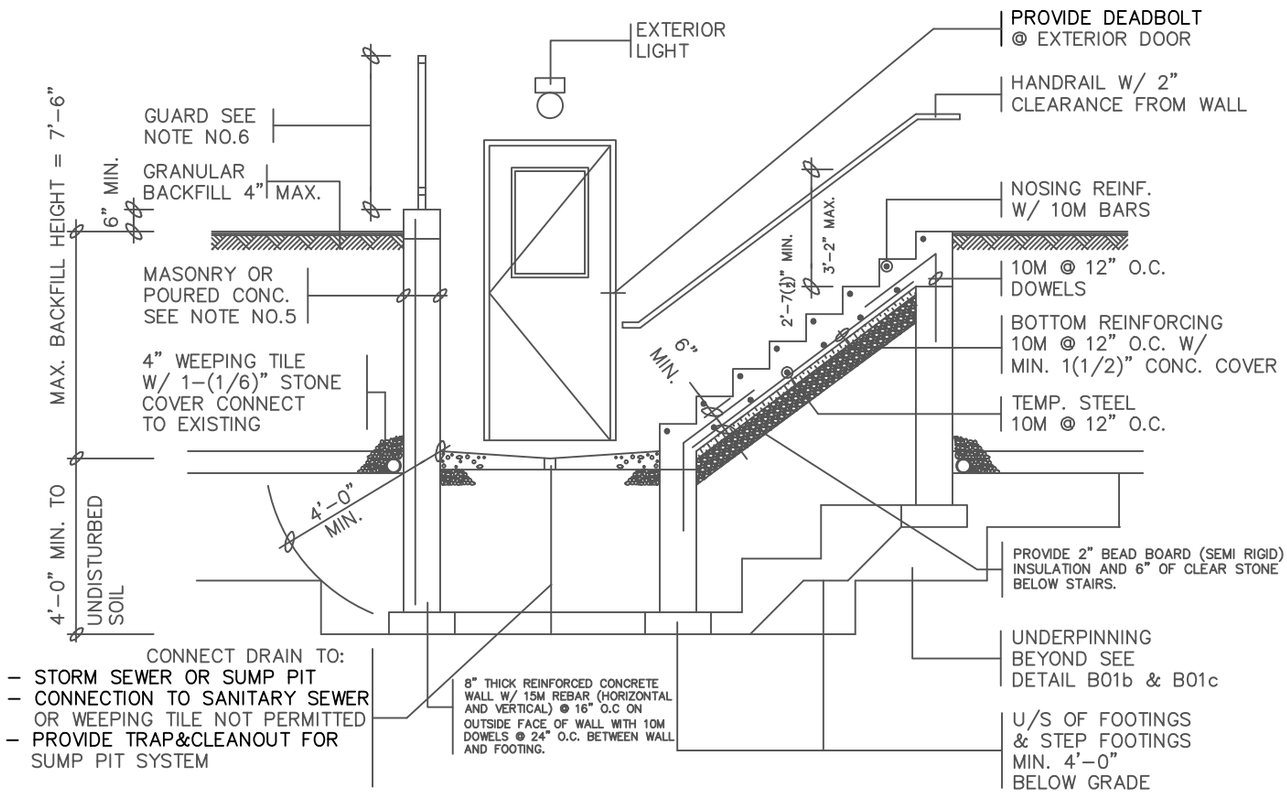
PROJECT NAME: ROUNDEL

CITY OF RICHMOND HILL
BUILDING DIVISION
09/22/2022
RECEIVED
Per: joshua.nabua

June 1, 2021 10:07:58 AM M:\STANDARD DETAILS\P E R M I T S E T\2021\A1 PACKAGE (ROUNDEL)\P 13 - WALKOUT - WALKUP DETAILS PACKAGE A1.DWG



PLAN



SECTION 'A'

GENERAL NOTES:

1. FOOTINGS:

16"x6" POURED CONC. FOOTING
ALL FOOTINGS SHALL REST ON NATURAL UNDISTURBED SOIL OR COMPACTED GRANULAR FILL.

2. CONCRETE:

MINIMUM COMPRESSIVE STRENGTH OF 32 MPA @ 28 DAYS W/ 5% TO 8% AIR ENTRAINMENT.

3. EXTERIOR STAIRS:

RISER: 4(7/8)"MIN. I 7(7/8)"MAX.
RUN: 8(1/4)"MIN. I 14"MAX.
TREAD: 9(1/4)"MIN. I 14"MAX.

4. INSULATION:

MINIMUM R20c.i. INSULATION W/ VAPOUR BARRIER ON THE INSIDE FACE OF THE EXPOSED FOUNDATION WALL.

5. RETAINING WALL:

REINFORCING STEEL IN SIDE WALLS TO BE LOCATED ON OUTSIDE FACE OF WALLS WITH 1(1/2)" CONCRETE COVER.

6. GUARDS:

3'–6" HEIGHT WHERE DISTANCE FROM GRADE TO BOTTOM OF WALKOUT EXCEEDS 5'–11"; 2'–11" FOR LESSER HEIGHTS. MAXIMUM 4" BETWEEN VERTICAL PICKETS. GUARDS SHALL BE NON–CLIMBALE AND IN CONFORMANCE WITH OBC 2012 DIV.B 9.8.8 AND SB–7

7. LINTELS:

– SOLID MASONRY/CONCRETE: 2–3(1/2)"x3(1/2)"x(1/4)" STEEL ANGLES
– BRICK VENEER: 1–3(1/2)"x3(1/2)"x(1/4)"L + 2–2"x8"
– WOOD FRAME/SIDING: 2–2"x8"

8. UNDERPINNING:

UNDERPINNING, OR EXTRA DEPTH FOOTING TO A LEVEL 4 FT. BELOW THE WALKOUT SLAB, IS REQUIRED FOR ALL FOOTINGS WITHIN A 4 FT. RADIUS OF ANY POINT OF THE WALKOUT SLAB.

TITLE

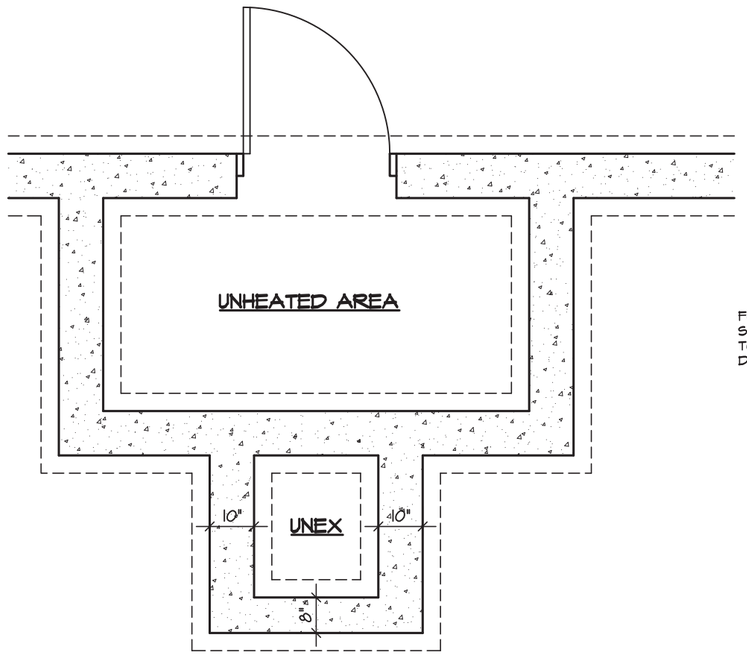
BASEMENT WALKOUT

PLAN & SECTIONS

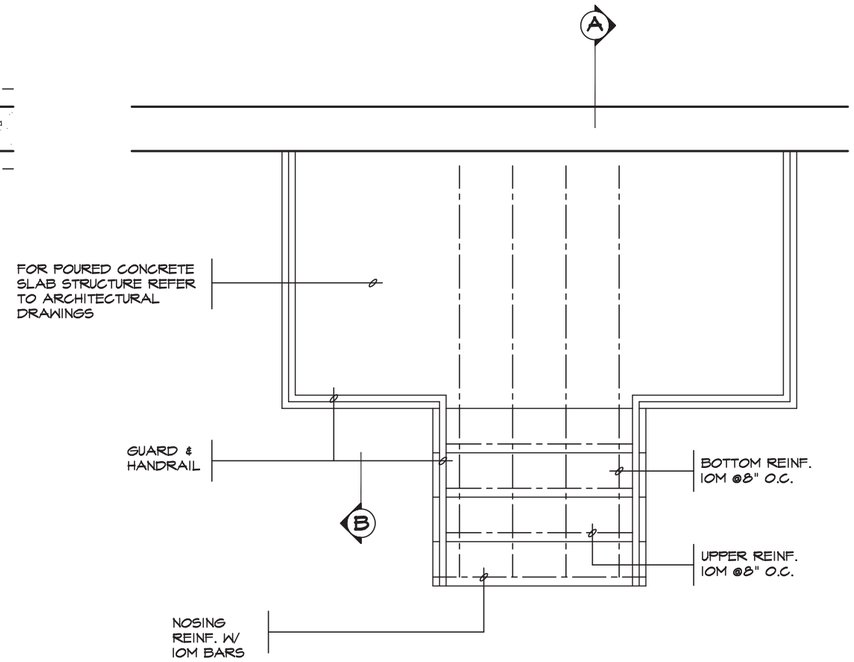
DWG. NO.

B01RH

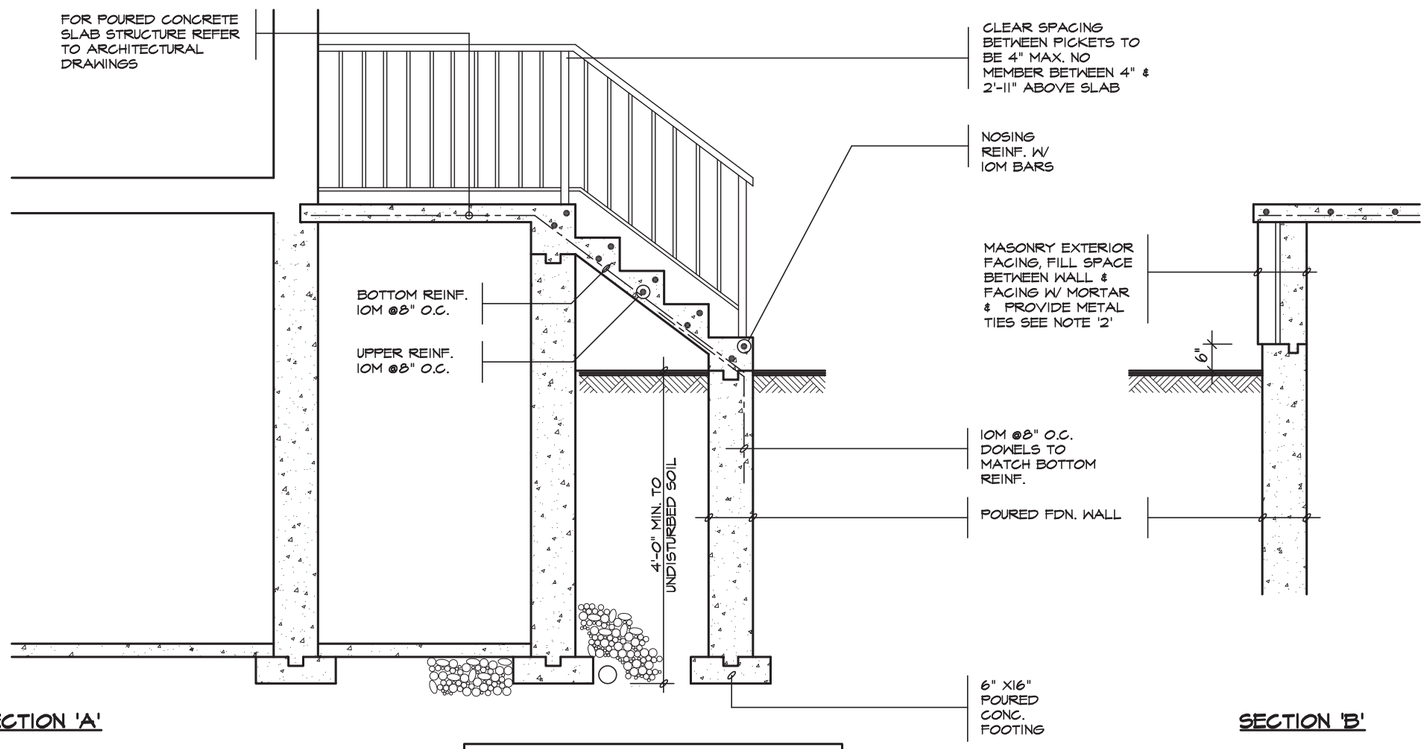
2020



FOUNDATION PLAN



GROUND FLOOR PLAN



SECTION 'A'

SECTION 'B'

NOTE: FOR MORE THAN 8 RISERS

GENERAL NOTES

1. EXTERIOR STAIRS

   7 7/8" RISE MAXIMUM
   10" RUN MINIMUM
   14" TREAD MAXIMUM

2. MASONRY TIES

   WHEN BRICK FACING IS USED ABOVE GROUND LEVEL, PROVIDE 3/16" DIA. CORROSION RESISTANT METAL TIES @ 36" HORIZONTAL & 8" VERTICAL

3. GUARDS

   ARE REQUIRED AROUND CONCRETE SLAB IF MORE THAN 2'-0" ABOVE GRADE & ON BOTH SIDES OF STAIRS CONTAINING MORE THAN 6 RISERS. MINIMUM 31" HIGH FOR STAIRS MINIMUM 35" HIGH FOR PORCHES UP TO 5'-11" ABOVE GRADE. MINIMUM 42" HIGH FOR GREATER HTS.

4. HANDRAIL

   ARE REQUIRED WHERE STEPS HAVE MORE THAN 3 RISERS . HANDRAIL HEIGHT 31" - 38".

5. FOUNDATION WALLS

   THICKNESS OF FOUNDATION WALLS IS DEPENDANT UPON VENEER CUT 8" FOR UP TO 26" VENEER CUT HEIGHT 10" FOR VENEER CUT OVER 26" HIGH

6. CONCRETE

   MINIMUM CONCRETE STRENGTH SHALL BE 4650 PSI [32MPa] W/ 5%-8% AIR ENTRAINMENT MINIMUM CONCRETE SLAB THICKNESS 5"

7. CONCRETE COVER

   PROVIDE MINIMUM 3/4" CLEAR CONCRETE COVER TO REINFORCING BARS

STRUDET INC.

REGISTERED PROFESSIONAL ENGINEER
B. MARINKOVIC
PROVINCE OF ONTARIO
JUNE 11/ 2021

FOR STRUCTURE ONLY

2012 CODE
COMPLIANCE PACKAGE "A1"

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8700 DUFFERIN ST.
CONCORD, ONTARIO
P (416) 736-4096
F (905) 660-0746

REGION DESIGN INC.

SHEET TITLE: POURED CONCRETE STAIRS

SCALE: 3/8"=1'-0"

DATE: JULY 2018

CONTRACTOR SHALL CHECK ALL DIMENSIONS AND ELEVATIONS BEFORE COMMENCING WITH WORK AND REPORT ANY DISCREPANCIES TO THE DESIGNER. PRINTS ARE NOT TO BE SCALED.

PAGE No. 14

Greenpark

PROJECT NAME: ROUNDEL

March 14, 2022 4:11:44 PM M:\STANDARD DETAILS\P E R M I T S E T\2021\A1 PACKAGE (ROUNDEL)\P14 - POURED CONCRETE STAIRS.DWG