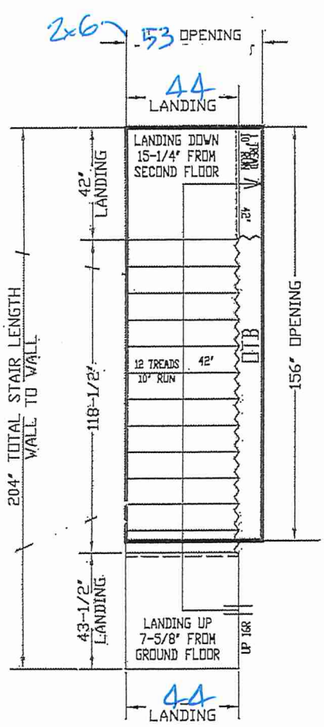
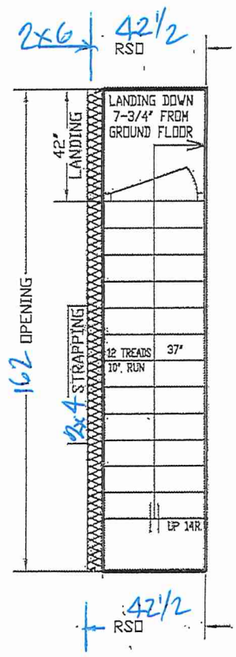
GROUND TO SECOND
122" HT 11-7/8" JOIST




BASEMENT TO GROUND
BSMT 11-7/8" JOIST




STAIRS LINE UP BY
EXTERIOR WALL

ALL OPENINGS ARE ALLOWED
FOR 1 LAYER OF DRY WALL
ANY ADDITIONAL LAYERS MUST
BE ALLOWED BY CARPENTERS

NO WALLS UNTIL
STAIRS INSTALLED

GARAGE RIGHT >

ALPA STAIRS AND RAILINGS INC.
Quality To Step Up To

ALL LANDINGS TO BE SUPPLIED AND SUPPORTED BY OTHERS UNLESS SPECIFIED ABOVE

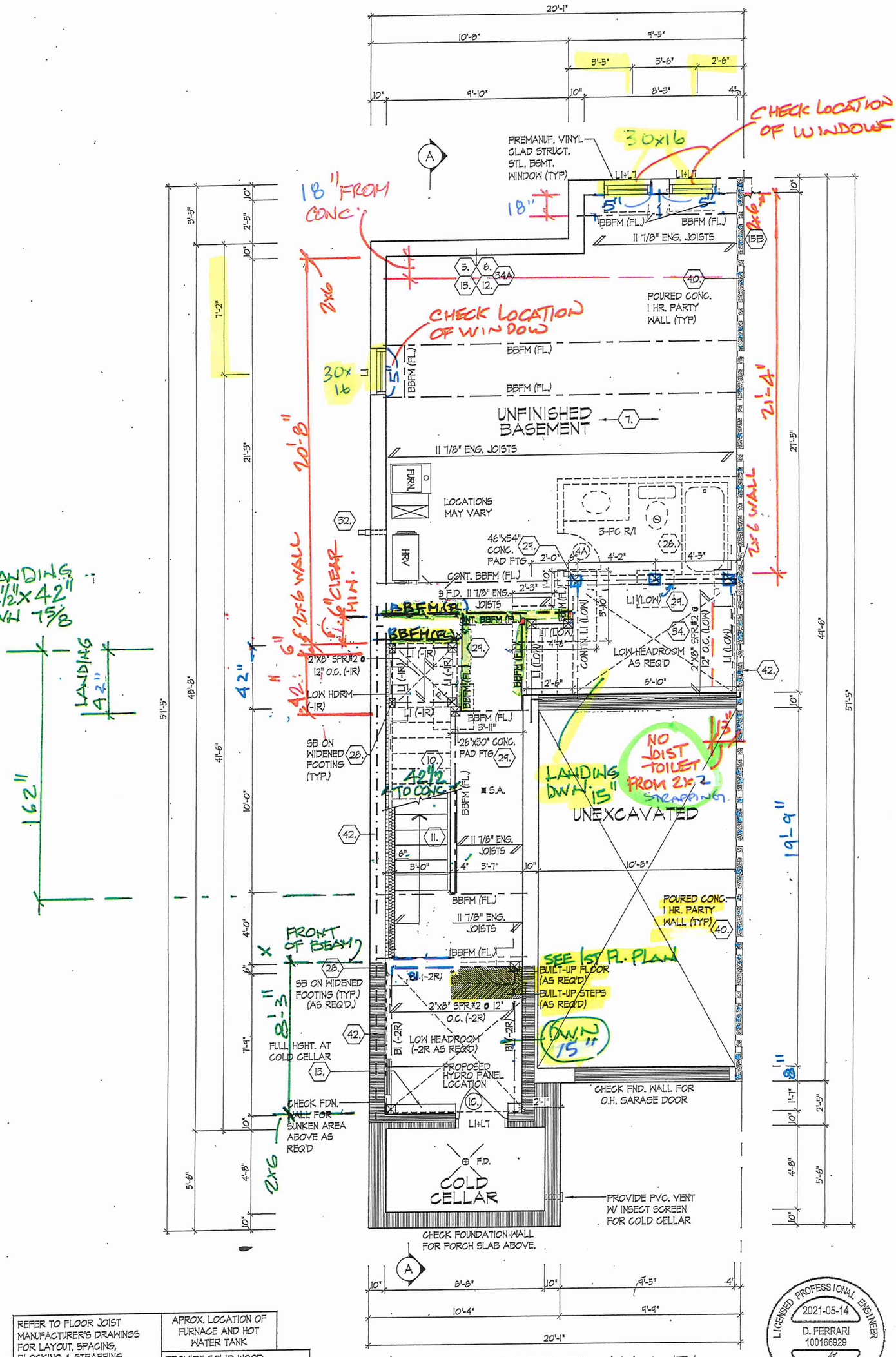
ANY STRAPPING ALLOWANCES TO BE COMPENSATED BY CARPENTERS

ALL STAIR DIMENSIONS MAY BE MODIFIED FROM ORIGINAL BLUE PRINTS OR SPECS AS SUPPLIED TO ALPA STAIRS AND RAILINGS INC. MEASUREMENTS SHOWN ON LAYOUTS ARE SCALED TO INSTALL OUR STAIRS. ANY PROBLEM WITH HEADROOM OR STRAPPING ALLOWANCES, ALPA STAIRS AND RAILINGS INC. WILL NOT BE RESPONSIBLE. STAIR LAYOUTS SHOULD BE CHECKED BY CARPENTERS OR SITE SUPERS TO MAKE SURE THERE ARE NO DISCREPANCIES BEFORE PROCEEDING WITH CONSTRUCTION

ALPA STAIRS AND RAILINGS INC.
3770 NASHUA DRIVE, UNIT 3 MISSISSAUGA, ONTARIO L4V 1H6
TEL: (905) 694-9556 | www.alpastairs.com

| | | | |
|---|---|---|---|
| SITE | CENTREFIELD | DRAWN BY | PARAMJEET |
| LOT # | | NAME | PARAMJEET |
| Model | 20-9 END W/UNFIN. & UNFIN. BSMT | DATE | APRIL 7, 2025 |
| CLIENT | ROYAL PINE HOMES | LAYOUT # | |
| | | SCALE 1:35 | |

BLK 234 - TH 62




| REFER TO FLOOR JOIST MANUFACTURER'S DRAWINGS FOR LAYOUT, SPACING, BLOCKING & STRAPPING REQUIREMENTS, INSTALLATION DETAILS AND HANGER SIZES, & SUBFLOOR THICKNESS | APROX. LOCATION OF FURNACE AND HOT WATER TANK |
|---|---|
| | PROVIDE SOLID WOOD BLOCKING @ 24" O.C. FOR FIRST JOIST SPAN WHEN PARALLEL W/ EXTERIOR WALL |

# BASEMENT PLAN, EL. 'A' & 'B' - END COND.

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2021-05-14
D. FERRARI
100166929
PROVINCE OF ONTARIO

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BLK 234-62

BASEMENT PLAN, ELEV. 'A' & 'B'

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QUALIFICATION INFORMATION
Derek R. Santos — SIGNATURE — 37308 BCIN
NAME
REGISTRATION INFORMATION
HUNT DESIGN ASSOCIATES INC. — 19695

HUNT DESIGN ASSOCIATES INC.
www.huntdesign.ca

ROYAL PINE HOMES - 216102
'CENTREFIELD', WEST GORMLEY, RICHMOND HILL, ON.
UNIT 2009-END
REV.2021.05.11

| Drawn By | Checked By | Scale | File Number | Page Number |
|---|---|---|---|---|
| KM | DS | 3/16"=1'-0" | 216102WT2009-END | 2 of 18 |

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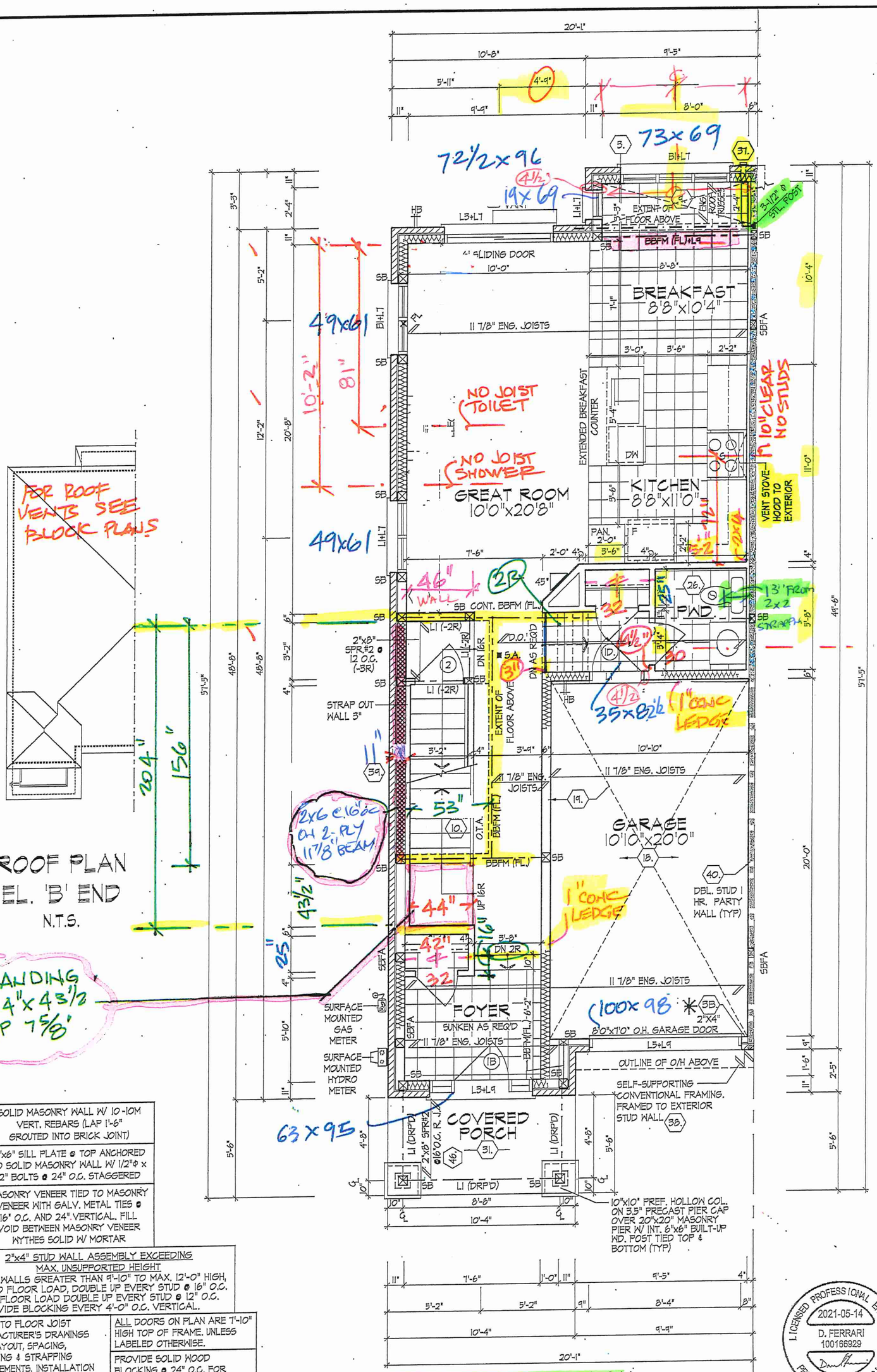


| MASONRY WALL | |
|---|---|
| | SOLID MASONRY WALL W/ 10-10M VERT. REBARS (LAP 1'-6" GROUTED INTO BRICK JOINT) |
| | 2"x6" SILL PLATE @ TOP ANCHORED TO SOLID MASONRY WALL W/ 1/2"ø x 12" BOLTS @ 24" O.C. STAGGERED |
| | MASONRY VENEER TIED TO MASONRY VENEER WITH GALV. METAL TIES @ 16" O.C. AND 24" VERTICAL. FILL VOID BETWEEN MASONRY VENEER WYTHES SOLID W/ MORTAR |

* 2"x4" STUD WALL ASSEMBLY EXCEEDING MAX. UNSUPPORTED HEIGHT
FOR WALLS GREATER THAN 9'-10" TO MAX. 12'-0" HIGH,
- W/O FLOOR LOAD, DOUBLE UP EVERY STUD @ 16" O.C.
- W/ FLOOR LOAD DOUBLE UP EVERY STUD @ 12" O.C.
PROVIDE BLOCKING EVERY 4'-0" O.C. VERTICAL.

| | |
|---|---|
| REFER TO FLOOR JOIST MANUFACTURER'S DRAWINGS FOR LAYOUT, SPACING, BLOCKING & STRAPPING REQUIREMENTS, INSTALLATION DETAILS AND HANGER SIZES, & SUBFLOOR THICKNESS | ALL DOORS ON PLAN ARE 7'-10" HIGH TOP OF FRAME. UNLESS LABELED OTHERWISE. |
| | PROVIDE SOLID WOOD BLOCKING @ 24" O.C. FOR FIRST JOIST SPAN WHEN PARALLEL W/ EXTERIOR WALL |

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GROUND FLOOR PLAN, ELEV. 'B'

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NAME: Derek R. Santos — SIGNATURE — BCIN: 37308
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ROYAL PINE HOMES - 216102
'CENTREFIELD', WEST GORMLEY, RICHMOND HILL, ON.
UNIT 2009-END
REV.2021.05.11

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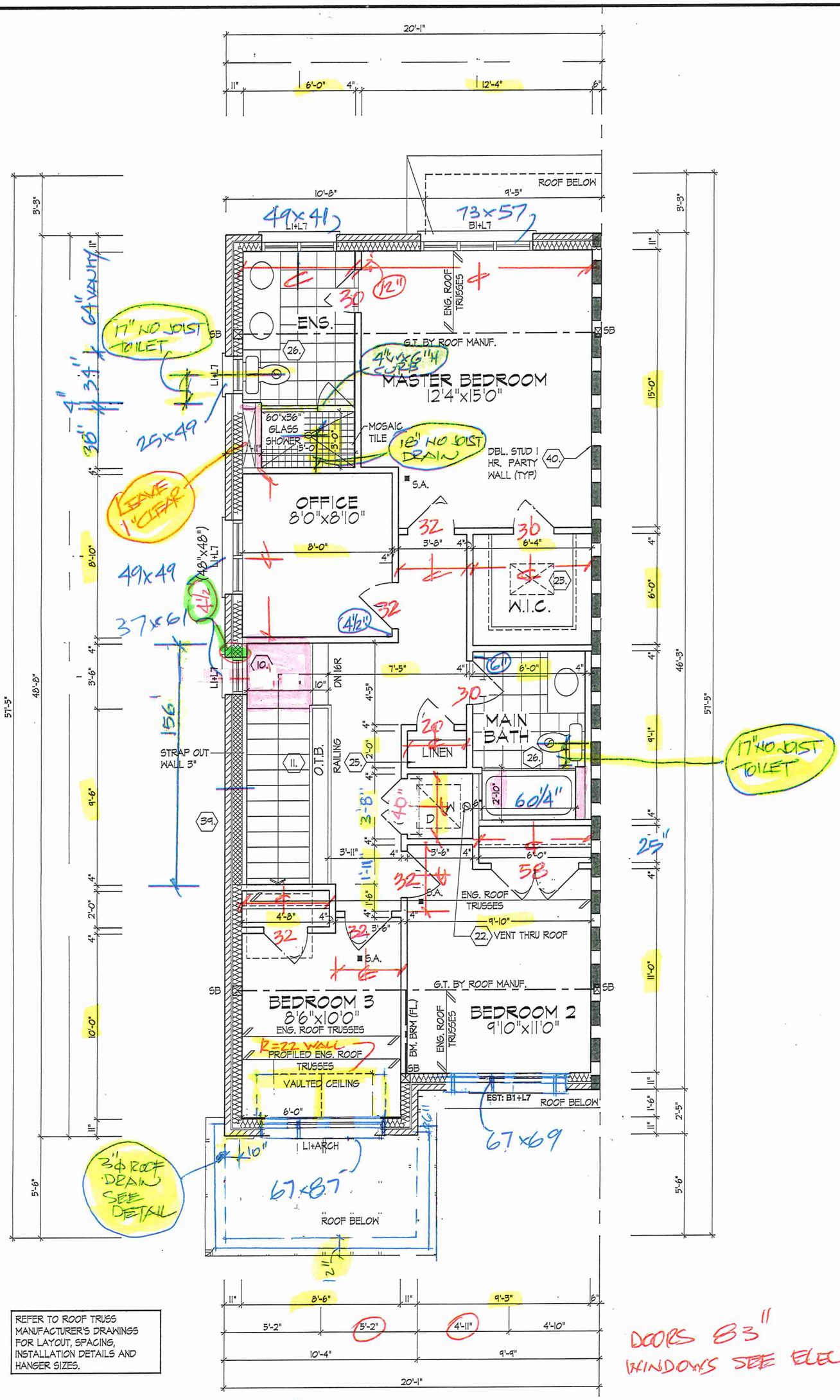


REFER TO ROOF TRUSS MANUFACTURER'S DRAWINGS FOR LAYOUT, SPACING, INSTALLATION DETAILS AND HANGER SIZES.

DOORS 83"
WINDOWS SEE ELEV.

OPT. SECOND FLOOR PLAN, EL. 'B'
OFFICE / FLEX SPACE LAYOUT

## 20-09 END THE MACKENZIE

BK 234-62

**opt. SECOND FLOOR PLAN, ELEV. 'A1/A2'**

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**ROYAL PINE HOMES - 216102** **UNIT 2009-END**
'CENTREFIELD', WEST GORMLEY, RICHMOND HILL, ON. REV.2025.03.13

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GARAGE ROOF
18'0" H + 18/12 PITCH

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100168929
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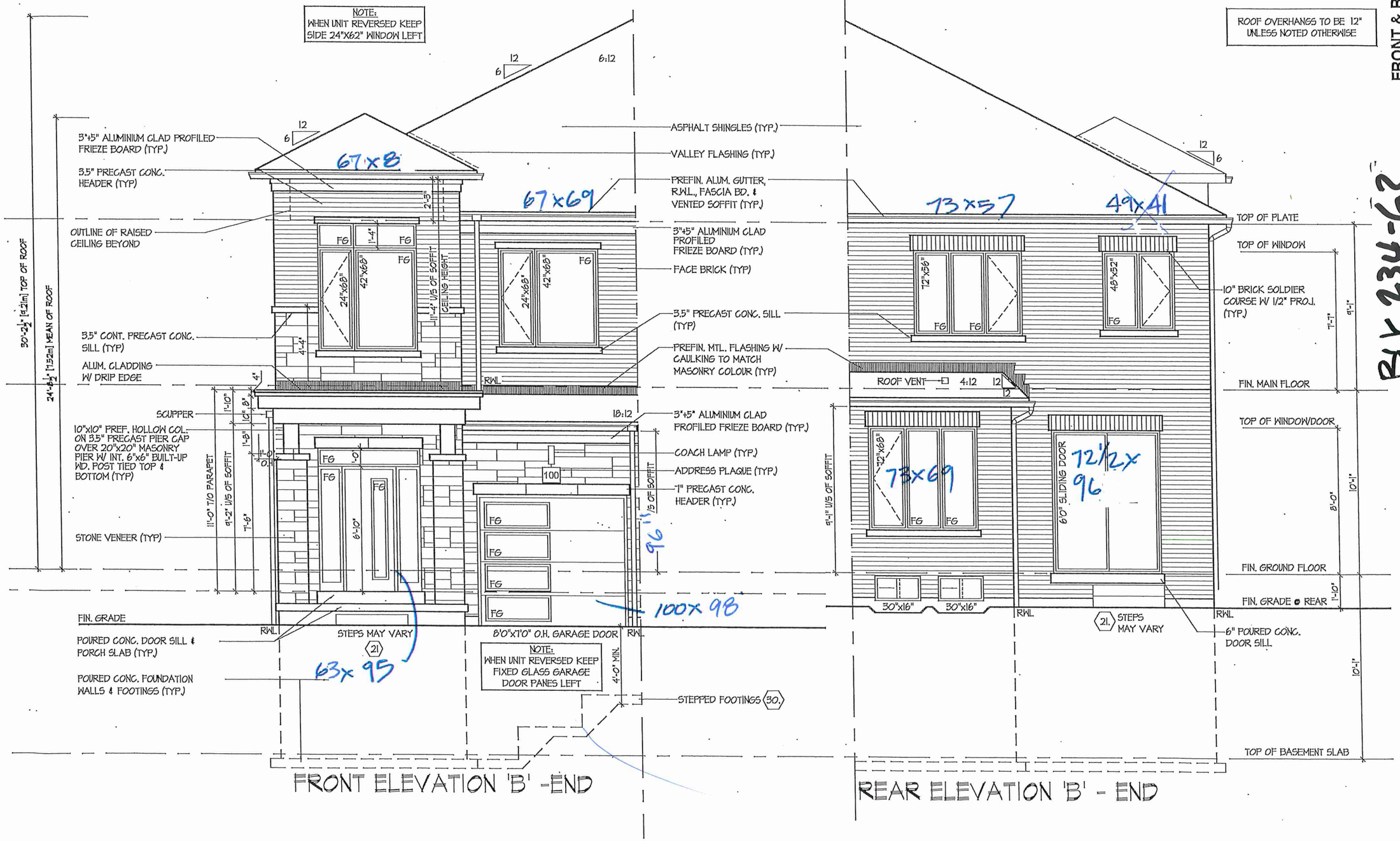
NOTE:
WHEN UNIT REVERSED KEEP
SIDE 24"X62" WINDOW LEFT

ROOF OVERHANGS TO BE 12"
UNLESS NOTED OTHERWISE




FRONT ELEVATION 'B' -END

REAR ELEVATION 'B' - END

BLK 234-62

FRONT & REAR ELEVATION 'B'

UNIT 2009-END

REV.2021.05.31

ROYAL PINE HOMES - 216102
'CENTREFIELD', WEST GORMLEY, RICHMOND HILL, ON.

Page Number 12 of 18

File Number 216102WT2009-END

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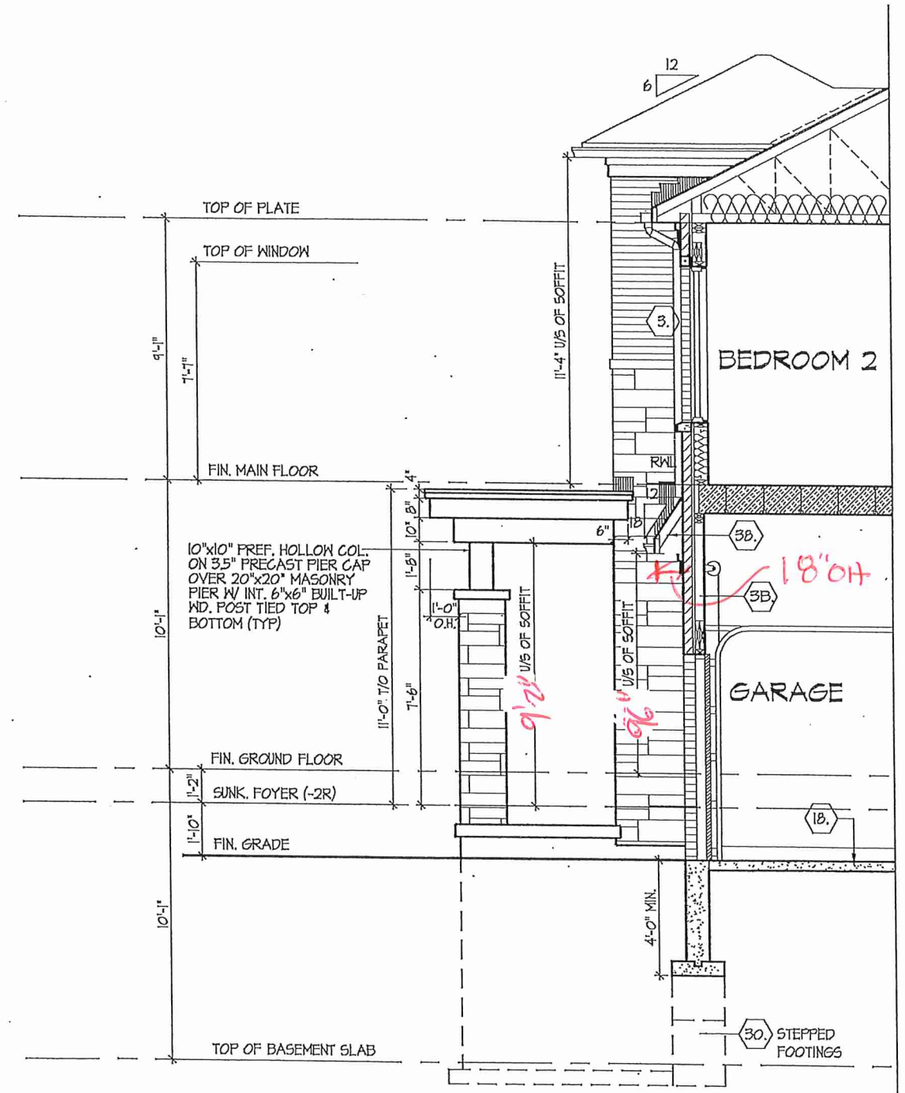
**PART. SECTION 'C'**

**UNIT 2009-END**
REV.2021.05.31




PARTIAL SECTION 'C', EL. 'B'

BLK 234-62

**ROYAL PINE HOMES - 216102**
'CENTREFIELD', WEST GORMLEY, RICHMOND HILL, ON.

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| File Number | Page Number |
|---|---|
| 216102WT2009-END | 13 of 18 |

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| SPATIAL CALCULATION | | | |
|---|---|---|---|
| PER O.B.C. TABLE 9.10.15.4 | | | |
| LEFT SIDE ELEVATION B | | | |
| EXPOSING BUILDING FACE AREA | | 1086.55 | S.F. |
| | | 100.94 | S.M. |
| PORTION WALL AREA | | 1086.55 | S.F. |
| | | 100.94 | S.M. |
| LIMITING DISTANCE | | 1.5 m | |
| MAX. % OPENINGS | | 7 | % |
| QUAN. | WIDTH | DEPTH | WINDOW / DOOR FRAME SIZE (S.F.) |
| 1 | 36" | 62" | 12.89 |
| 2 | 48" | 62" | 35.44 |
| 1 | 20" | 66" | 7.11 |
| 1 | 30" | 16" | 2.17 |
| 1 | 24" | 48" | 6.11 |
| OPENINGS ALLOWED | | 76.06 | S.F. |
| OPENINGS PROVIDED | | 63.72 | S.F. |
| ADDITIONAL NOTES | | | |
| GLAZED AREA CALCULATED W/ FRAME SIZE MINUS 2" AROUND ENTIRE PERIMETER | | | |

| REFER TO FRONT ELEVATION FOR TYPICAL NOTES & INFORMATION | ROOF OVERHANGS TO BE 12" UNLESS NOTED OTHERWISE |
|---|---|

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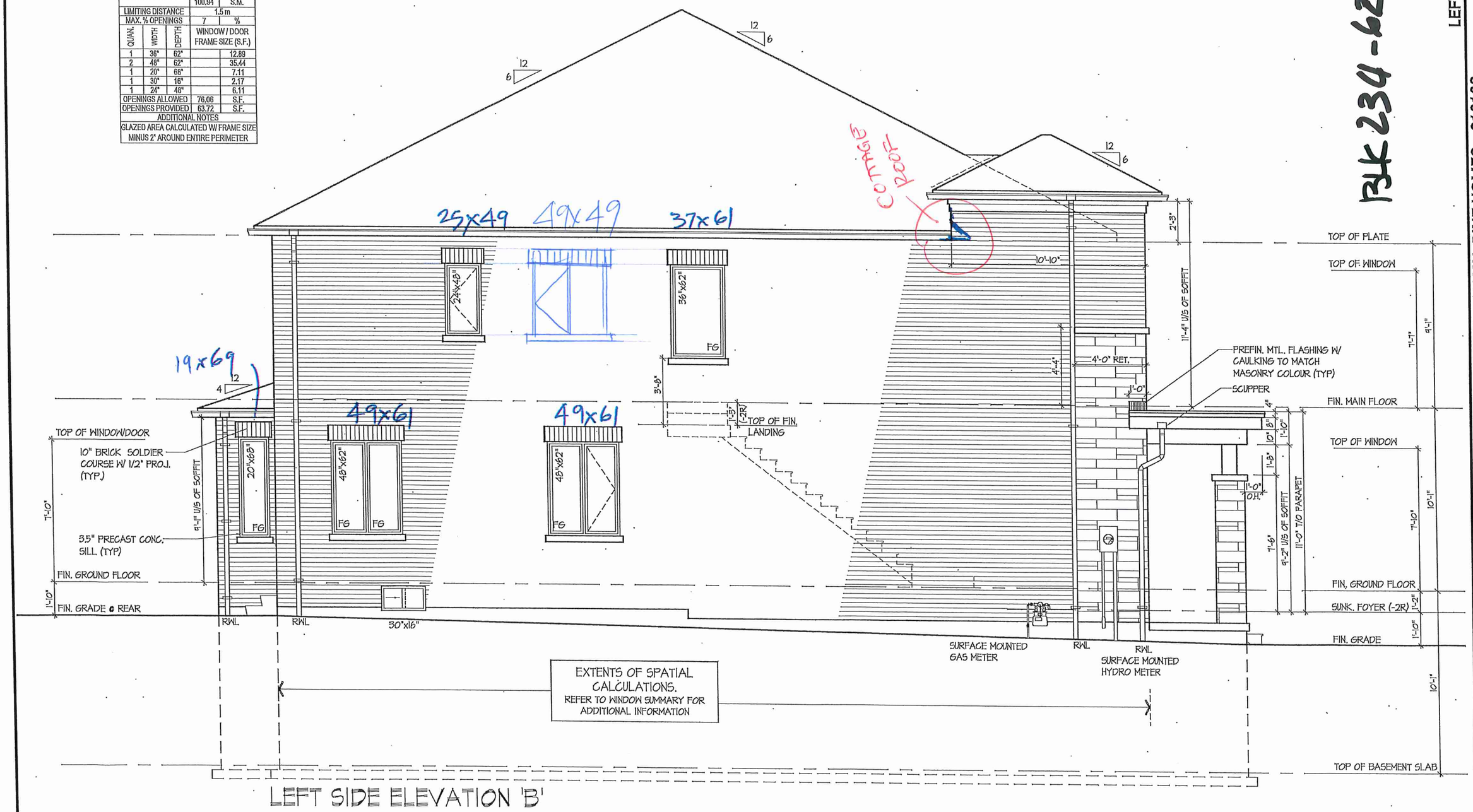


LEFT SIDE ELEVATION 'B'

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ROYAL PINE HOMES - 216102
'CENTREFIELD', WEST GORMLEY, RICHMOND HILL, ON.

UNIT 2009-END
REV.2021.05.31

LEFT SIDE ELEVATION 'B'

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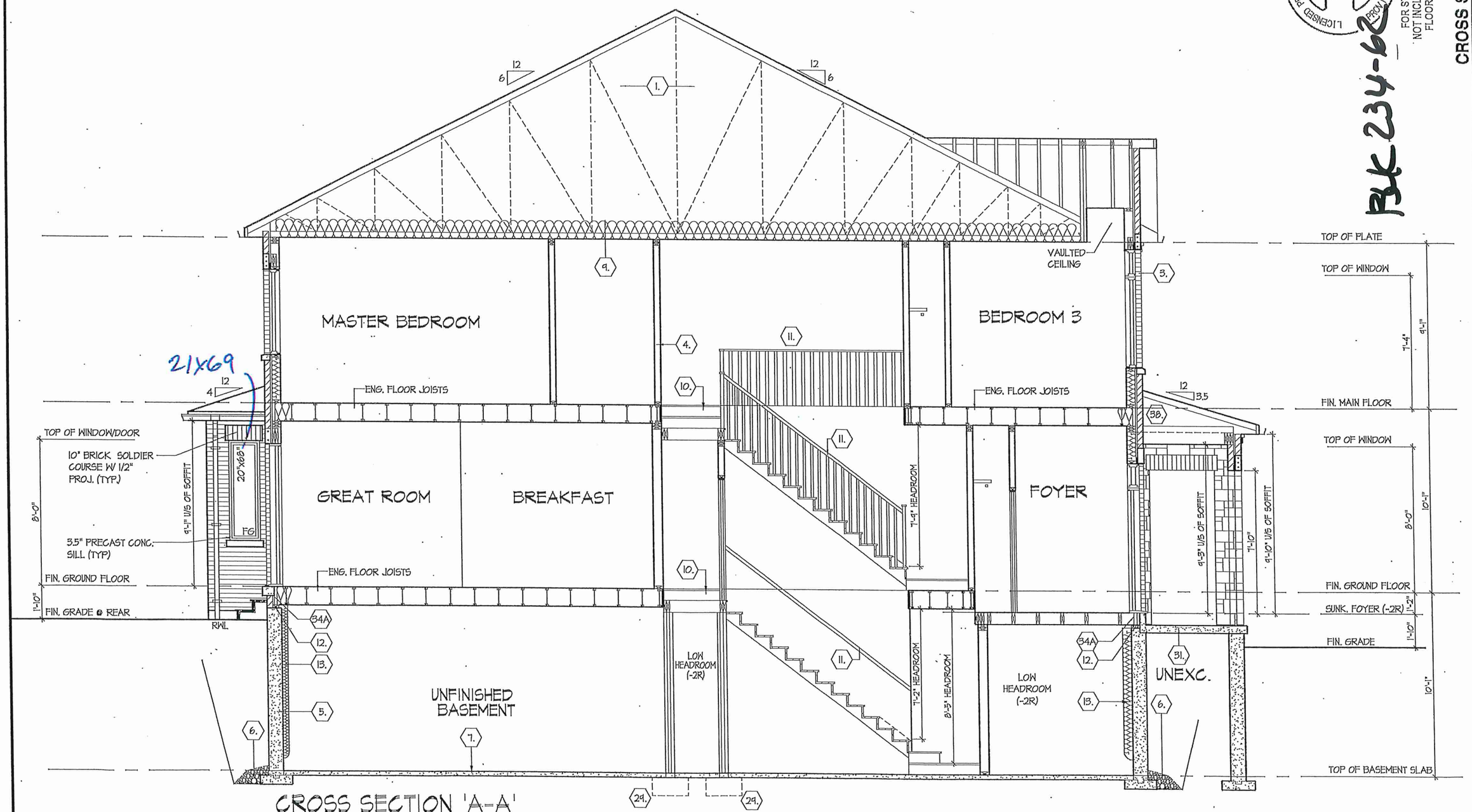
| KM | DS | 3/16"=1'-0" | 216102WT2009-END | 14 of 18 |




CROSS SECTION 'A-A'

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# CROSS SECTION 'A-A'

UNIT 2009-END
REV.2021.05.11

**ROYAL PINE HOMES - 216102**
'CENTREFIELD', WEST GORMLEY, RICHMOND HILL, ON.

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| KM | DS | 3/16"=1'-0" | 216102WT2009-END | 15 of 18 |

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| NAME | SIGNATURE | BCIN |

| REGISTRATION INFORMATION | |
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| HUNT DESIGN ASSOCIATES INC. | 19685 |

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# SECTION 1.0. CONSTRUCTION NOTES

**1 ROOF CONSTRUCTION** (9.19., 9.23.13., 9.23.15.)
NO. 210 (10.25 KG/M2) ASPHALT SHINGLES, 3/8" (9.5) PLYWOOD SHEATHING WITH "H" CLIPS. APPROVED WOOD TRUSSES @ 24" (610) O.C. MAX. APPROVED EAVES PROTECTION TO EXTEND 2'-11" (900) FROM EDGE OF ROOF AND MIN. 12" (305) BEYOND INNER FACE OF EXTERIOR WALL, 2"X4"(38X89) TRUSS BRACING @ 6'-0" (1830) O.C. AT BOTTOM CHORD. PREFIN. ALUM. EAVESTROUGH, FASCIA, RWL & VENTED SOFFIT. ATTIC VENTILATION 1:300 OF INSULATED CEILING AREA WITH MIN. 25% OR REQUIRED OPENINGS LOCATED AT TOP OF SPACE & MIN. 25% OF REQUIRED OPENINGS LOCATED AT BOTTOM OF SPACE. EAVESTROUGH TO BE 4" MIN. WITH RWL DISCHARGING ONTO CONCRETE SPLASH PADS OR PER MUNICIPAL REQUIREMENTS. TOWNHOUSES TO HAVE 5" MIN. EAVESTROUGH WITH ELEC. TRACED HEATER CABLE ALONG EAVESTROUGH AND DOWN RWL.

**1A ICE AND WATER SHIELD**
PROVIDE ICE AND WATER SHIELD IN THE AREAS INDICATED. THE ICE AND WATER SHIELD SHALL BE A SELF ADHERING AND SELF SEALING MEMBRANE. SIDE LAPS MUST BE A MINIMUM 3 1/2" (90) AND END LAPS A MINIMUM 6" (152), AND TO EXTEND UP DORMER WALLS A MINIMUM 12" (305).

**1B PROFILED ROOF TRUSSES**
ROOF TRUSSES SHALL BE PROFILED AND/OR STEPPED AT RAISED COFFER/TRAY CEILINGS. ANGLED TRAY CEILINGS WILL BE SHEATHED W/ 3/8" (9.5) PLYWOOD.

**2 SIDING WALL CONSTRUCTION (2"x6")**
SIDING MATERIAL AS PER ELEVATION ATTACHED TO FRAMING MEMBERS, FURRING MEMBERS OR BLOCKING BETWEEN THE FRAMING MEMBERS ON APPROVED SHEATHING PAPER ON 3/8" (9.5) EXT. GRADE SHEATHING ON STUDS CONFORMING TO O.B.C (9.23.10.1.) & SECTION 1.1., INSULATION, APPROVED 6 MIL POLYETHYLENE AIR/VAPOUR BARRIER, ON 1/2" (12.7) GYPSUM WALLBOARD INT. FIN. (GYPSUM SHEATHING, RIGID INSULATION, AND FIBERBOARD SHALL NOT BE USED FOR THE ATTACHMENT OF SIDING (9.23.16.3.(1.)) (REFER TO 35 NOTE AS REQ.)

**2A SIDING WALL CONSTRUCTION (2"x6") W/ CONTIN. INSULATION**
SIDING MATERIAL AS PER ELEVATION ATTACHED TO FURRING MEMBERS ON APPROVED AIR/WATER BARRIER AS PER O.B.C. 9.27.3. ON EXTERIOR TYPE RIGID INSULATION (JOINTS UNTAPED) MECHANICALLY FASTENED AS PER MANUFACTURER'S SPECIFICATIONS ON 3/8" (9.5) EXT. GRADE SHEATHING ON STUDS CONFORMING TO O.B.C (9.23.10.1.) & SECTION 1.1., INSULATION, APPROVED 6 MIL POLYETHYLENE AIR/VAPOUR BARRIER, ON 1/2" (12.7) GYPSUM WALLBOARD INT. FIN. (GYPSUM SHEATHING, RIGID INSULATION, AND FIBERBOARD SHALL NOT BE USED FOR THE ATTACHMENT OF SIDING (9.23.16.3.(1.)) (REFER TO 35 NOTE AS REQ.)

**2B SIDING WALL @ GARAGE CONSTRUCTION**
SIDING MATERIAL AS PER ELEVATION ATTACHED TO FRAMING MEMBERS, FURRING MEMBERS OR BLOCKING BETWEEN THE FRAMING MEMBERS ON APPROVED SHEATHING PAPER ON 3/8" (9.5) EXTERIOR TYPE SHEATHING ON STUDS CONFORMING TO O.B.C (9.23.10.1.) & SECTION 1.1.,1/2" (12.7) GYPSUM WALLBOARD INTERIOR FINISH. (GYPSUM SHEATHING, RIGID INSULATION AND FIBERBOARD SHALL NOT BE USED FOR THE ATTACHMENT OF SIDING (9.23.16.3.(1.)) (REFER TO 35 NOTE AS REQ.)

**3 BRICK VENEER WALL CONSTRUCTION (2"x6")**
3 1/2" (90) BRICK VENEER 1" (25) AIR SPACE, 7/8"x7"x0.03" (22x180x0.76) GALV. METAL TIES @ 16" (400) O.C. HORIZ. 24" (600) O.C. VERT. BONDING AND FASTENING FOR TIES TO CONFORM WITH 9.20.9. ON APPROVED SHEATHING PAPER, 3/8" (9.5) EXTERIOR TYPE SHEATHING, STUDS CONFORMING TO O.B.C (9.23.10.1.) & SECTION 1.1., INSULATION AND 6 mil POLYETHYLENE VAPOUR BARRIER WITH APPROVED CONTIN. AIR BARRIER. 1/2" (12.7) GYPSUM WALLBOARD INTERIOR FINISH. PROVIDE WEEP HOLES @ 32" (800) O.C. BOTTOM COURSE AND OVER OPENINGS. PROVIDE BASE FLASHING UP MIN. 6" (150) BEHIND BUILDING PAPER (9.20.13.6.) (REFER TO 35 NOTE AS REQUIRED)

**3A BRICK VENEER WALL CONSTRUCTION (2"x6") W/ CONTIN. INSULATION**
3 1/2" (90) BRICK VENEER 1" (25) AIR SPACE, 7/8"x7"x0.03" (22x180x0.76) GALV. METAL TIES @ 16" (400) O.C. HORIZ. 24" (600) O.C. VERT. BONDING AND FASTENING FOR TIES TO CONFORM WITH 9.20.9. ON APPROVED AIR/WATER BARRIER AS PER O.B.C. 9.27.3. ON EXTERIOR TYPE RIGID INSULATION (JOINTS UNTAPED) MECHANICALLY FASTENED AS PER MANUFACTURER'S SPECIFICATIONS, ON 3/8" (9.5) EXTERIOR TYPE SHEATHING, STUDS CONFORMING TO O.B.C (9.23.10.1.) & SECTION 1.1., INSULATION AND 6 mil POLYETHYLENE VAPOUR BARRIER WITH APPROVED CONTIN. AIR BARRIER. 1/2" (12.7) GYPSUM WALLBOARD INTERIOR FINISH. PROVIDE WEEP HOLES @ 32" (800) O.C. BOTTOM COURSE AND OVER OPENINGS. PROVIDE BASE FLASHING UP MIN. 6" (150) OVER RIGID INSULATION (9.20.13.6.) (REFER TO 35 NOTE AS REQUIRED)

**3B BRICK VENEER WALL @ GARAGE CONSTRUCTION**
3 1/2" (90) BRICK VENEER, MIN. 1" (25) AIR SPACE, 7/8"x7"x0.03" (22x180x0.76) GALV. METAL TIES @ 16" (400) O.C. HORIZ. 24" (600) O.C. VERT. BONDING AND FASTENING FOR TIES TO CONFORM WITH 9.20.9. ON APPROVED SHEATHING PAPER, 3/8" (9.5) EXTERIOR TYPE SHEATHING ON STUDS CONFORMING TO O.B.C (9.23.10.1.) & SECTION 1.1., 1/2" (12.7) GYPSUM WALLBOARD INTERIOR FINISH, PROVIDE WEEP HOLES @ 32" (800) O.C. AT BOTTOM COURSE AND OVER OPENINGS, PROVIDE BASE FLASHING UP 6" (150) MIN. BEHIND BUILDING PAPER (9.20.13.6.) (REFER TO 35 NOTE AS REQ.)

**4 INTERIOR STUD PARTITIONS** (9.23.9.8. , 9.23.10)
BEARING PARTITIONS SHALL BE A MINIMUM 2"x4" (38x89) @ 16" (406) O.C. FOR 2 STOREY AND 12" (305) O.C. FOR 3 STOREY, NON-BEARING PARTITIONS 2"x4" (38x89) @ 24" (610) O.C. PROVIDE 2"x4" (38x89) BOTTOM PLATE AND 2-2"x4" (2-38x89) TOP PLATE. 1/2" (12.7) INT. DRYWALL BOTH SIDES OF STUDS, PROVIDE 2"x6" (38x140) STUDS WHERE NOTED. PROVIDE 2"x4" (38x89) @ 24" (610) O.C. LADDER FRAMING WHERE WALLS INTERSECT PERPENDICULAR TO ONE ANOTHER. PROVIDE 2"x4" (38x89) WOOD BLOCKING ON FLAT @ 3'-11" (1194) O.C. MAX. BETWEEN FLOOR JOISTS WHEN NON-LOADBEARING WALLS ARE PARALLEL TO FLOOR JOISTS.

**4A EXT. LOFT WALL CONSTRUCTION (2"x6") - NO CLADDING**
3/8" (9.5) EXTERIOR TYPE SHEATHING, STUDS CONFORMING TO O.B.C (9.23.10.1.) & SECTION 1.1., INSULATION AND 6 mil POLYETHYLENE VAPOUR BARRIER WITH APPROVED CONT. AIR BARRIER. 1/2" (12.7) GYPSUM WALLBOARD INT. FINISH. (9.23.)

**4B EXT. LOFT WALL CONSTRUCTION (2"x6") NO CLADDING W/ CONTINUOUS INSULATION**
APPROVED AIR/WATER BARRIER AS PER O.B.C. 9.27.3. ON EXTERIOR TYPE RIGID INSULATION (JOINTS UNTAPED) MECHANICALLY FASTENED AS PER MANUFACTURER'S SPECIFICATIONS, ON 3/8" (9.5) EXTERIOR TYPE SHEATHING, STUDS CONFORMING TO O.B.C (9.23.10.1.) & SECTION 1.1., INSULATION AND 6 mil POLYETHYLENE VAPOUR BARRIER WITH APPROVED CONT. AIR BARRIER. 1/2" (12.7) GYPSUM WALLBOARD INT. FINISH. (9.23.)

**5 FOUNDATION WALL/FOOTINGS**
POURED CONC. FOUNDATION WALL AS PER CHART BELOW ON CONTINUOUS KEYED CONCRETE FOOTING. FOUNDATION WALLS SHALL EXTEND NOT LESS THAN 6" (150) ABOVE FINISHED GRADE. THE OUTSIDE OF THE FOUNDATION SHALL BE DAMPROOFED FROM THE TOP OF THE FOOTING TO FINISHED GRADE AND BRUSH COAT FROM THE TOP TO 2" BELOW GRADE. PROVIDE A DRAINAGE LAYER ON THE OUTSIDE OF THE FOUNDATION WALL. SEAL THE DRAINAGE LAYER AT THE TOP. THE TOP OF THE CONC. FOOTING SHALL BE DAMPROOFED.
CONCRETE FOOTINGS SUPPORTING JOIST SPANS GREATER THAN 16'-1" (4900) SHALL BE SIZED IN ACCORDANCE WITH 9.15.3.4 (1),(2) OF THE O.B.C, (REFER TO CHART BELOW FOR RESPECTIVE SIZE). BRACE FOUNDATION WALL PRIOR TO BACKFILLING. ALL FOOTINGS SHALL REST ON NATURAL UNDISTURBED SOIL OF 75kPa OR COMPACTED ENGINEERED FILL WITH MIN. BEARING CAPACITY OF 150kPa. IF SOIL BEARING DOES NOT MEET MINIMUM CAPACITY, ENGINEERED FOOTINGS ARE REQUIRED. ACTUAL SOIL BEARING CAPACITY TO BE VERIFIED WITH SOIL ENGINEERING REPORT.
REFER TO CONSTRUCTION DRAWINGS AND DETAILS FOR FOUNDATION WALL STRENGTH AND THICKNESS AND 9.15.4.
FOUNDATION WALLS SHALL NOT EXCEED 9'-10" (3.0m) IN UNSUPPORTED HEIGHT UNLESS OTHERWISE NOTED. [9.15.4.2.(1.)]

UNREINFORCED SOLID CONCRETE FOUNDATION WALLS (9.15.4.2.)

| STRENGTH | THICKNESS | MAX. HEIGHT FROM FIN. SLAB TO GRADE: UNSUPPORTED AT TOP | SUPPORTED AT TOP ≤2.5m | SUPPORTED AT TOP >2.5m & ≤2.75m | SUPPORTED AT TOP >2.75m & ≤3.0m |
|---|---|---|---|---|---|
| 15 MPa | *8" | 3'-11" (1.20m) | 7'-0" (2.15m) | 7'-0" (2.15m) | 6'-10" (2.10m) |
| | 10" | 4'-7" (1.40m) | 7'-6" (2.30m) | 8'-6" (2.60m) | 8'-2" (2.50m) |
| | 12" | 4'-11" (1.50m) | 7'-6" (2.30m) | 8'-6" (2.60m) | 9'-3" (2.85m) |
| 20 MPa | *8" | 3'-11" (1.20m) | 7'-6" (2.30m) | 7'-6" (2.30m) | 7'-2" (2.20m) |
| | 10" | 4'-7" (1.40m) | 7'-6" (2.30m) | 8'-6" (2.60m) | 9'-3" (2.85m) |
| | 12" | 4'-11" (1.50m) | 7'-6" (2.30m) | 8'-6" (2.60m) | 9'-3" (2.85m) |

*9" MIN. THICK FOUNDATION WALL IS REQUIRED FOR MASONRY VENEER FINISHED EXTERIOR WALLS WITH CONTINUOUS INSULATION CONDITION, TO PROVIDE MIN. BEARING FOR SILL PLATES, BEAMS AND FLOOR JOIST AS PER 9.23.7.2., 9.23.8.1., & 9.23.9.1. OF THE O.B.C.

MINIMUM STRIP FOOTING SIZES (9.15.3.)

| NUMBER FLOORS SUPPORTED | SUPPORTING INT. LOAD BEARING MASONRY WALLS | SUPPORTING EXTERIOR | SUPPORTING PARTYWALL |
|---|---|---|---|
| 1 | 16" WIDE x 6" THICK | 16" WIDE x 6" THICK | 16" WIDE x 6" THICK |
| 2 | 24" WIDE x 8" THICK | 20" WIDE x 6" THICK | 24" WIDE x 8" THICK |
| 3 | 36" WIDE x 14" THICK | 26" WIDE x 9" THICK | 36" WIDE x 14" THICK |

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
Derek R. Santos 37308
NAME SIGNATURE BCIN
REGISTRATION INFORMATION
HUNT DESIGN ASSOCIATES INC. 19695

REFER TO SB-12 ENERGY EFFICIENCY DESIGN MATRIX ON THE TITLE PAGE FOR ALL VALUES AS REQUIRED PER 3.1.1., 3.1.2., 3.1.3. OF THE OBC.

**5A FOUNDATION REDUCTION IN THICKNESS FOR MASONRY**
WHERE THE TOP OF THE FOUNDATION WALL IS REDUCED IN THICKNESS TO PERMIT THE INSTALLATION OF MASONRY EXTERIOR FACING, THE REDUCED SECTION SHALL BE NOT LESS THAN 3 1/2" (90) THICK. THE BRICK VENEER SHALL BE TIED TO THE FOUNDATION WALL WITH CORROSION RESISTANT METAL TIES @ 7 7/8" (200) VERTICAL AND 2'-11" (889) HORIZONTAL. FILL VOID WITH MORTAR BETWEEN WALL AND BRICK VENEER (9.15.4.7(2)(3) & 9.20.9.4(3))

**5B FOUNDATION REDUCTION IN THICKNESS FOR JOISTS**
WHERE THE TOP OF THE FOUNDATION WALL IS REDUCED IN THICKNESS TO PERMIT THE INSTALLATION OF FLOOR JOISTS, THE REDUCED SECTION SHALL BE NOT MORE THAN 13 3/4" (350) HIGH & NOT LESS THAN 3 1/2" (90) THICK (9.15.4.7(1))

**6 WEEPING TILE** (9.14.3.)
4" (100) Ø WEEPING TILE W/ FILTER CLOTH WRAP & 6" (152) CRUSHED STONE COVER

**7 BASEMENT SLAB OR SLAB ON GRADE** (9.16.4.3.)
3" (80) MIN. 25MPa (3600psi) CONC. SLAB ON 4" (100) COARSE GRANULAR FILL, OR 20MPa (2900psi) CONC. WITH DAMPPROOFING BELOW SLAB. PROVIDE 1/2" (12.7) IMPERVIOUS BOARD FOR BOND BREAK AT EDGE. (9.13.) WHERE A BASEMENT SLAB IS WITHIN 24" (610) OF THE EXTERIOR GRADE PROVIDE RIGID INSUL. AROUND THE PERIMETER EXTENDING MIN. 24" (610) BELOW GRADE. FOR SLAB ON GRADE CONDITIONS RIGID INSULATION SHALL BE APPLIED TO THE UNDERSIDE OF THE ENTIRE SLAB. ([SB-12] 3.1.1.7.(5) & (6))

**8 EXPOSED FLOOR TO EXTERIOR** (9.10.17.10 , & CAN/ULC-S705.2)
PROVIDE SPRAY FOAM INSULATION BETWEEN CANT. JOIST AND INSTALL FIN. SOFFIT OR CLADDING AS PER ELEVATION TO U/S OF EXPOSED CANT. JOIST.

**9 EXPOSED CEILING TO EXTERIOR w/ ATTIC** (9.25.2.4)
INSULATION, 6 mil POLYETHYLENE VAPOUR BARRIER, 1/2" (12.7) GYPSUM BOARD INTERIOR FINISH OR APPROVED EQ.

**EXPOSED CEILING TO EXTERIOR w/o ATTIC**
JOISTS/TRUSSES AS PER PLANS W/ 2"x2" (38x38) PURLINS @ 16" (406) O.C. PERPENDICULAR TO JOISTS (PURLINS NOT REQ. W/ SPRAY FOAM OR ROOF TRUSSES), W/ INSULATION BETWEEN JOIST, 6 mil POLYETHYLENE VAPOUR BARRIER, 1/2" (12.7) GYPSUM BOARD INT. FINISH OR APPROVED EQ. (CAN/ULC-S705.2, 9.19.1, 9.10.17.1)

**10 ALL STAIRS/EXTERIOR STAIRS** (9.8.1.2., 9.8.2., 9.8.4.)

| | MAX. RISE | MIN. RISE | MAX. RUN | MIN. RUN | MAX. TREAD | MIN. TREAD |
|---|---|---|---|---|---|---|
| PRIVATE | 7 7/8" (200) | 5" (125) | 14" (355) | 8 1/4" (210) | 14" (355) | 9 1/4" (235) |
| PUBLIC | 7" (180) | 5" (125) | NO LIMIT | 11" (280) | NO LIMIT | 11" (280) |
| | MIN. STAIR WIDTH | CURVED STAIRS | | | ALL STAIRS | |
| PRIVATE | 2'-10" (860) | MIN. RUN | | 5 7/8" (150) | MAX. NOSING | 1" (25) |
| PUBLIC | 2'-11" (900) | MIN. AVG. RUN | | 7 7/8" (200) | | |

** HEIGHT OVER STAIRS (HEADROOM) IS MEASURED VERTICALLY ACROSS WIDTH OF STAIRS FROM A STRAIGHT LINE TO THE TREAD & LANDING NOSING TO LOWEST POINT ABOVE AND NOT LESS THAN 6'-5" (1950) FOR SINGLE DWELLING UNIT & 6'-8 3/4" (2050) FOR EVERYTHING ELSE, (9.8.2.2.)
REQUIRED LANDING IN GARAGE - O.B.C. 9.8.6.2.(3.)
FOR AN EXTERIOR STAIR SERVING A GARAGE W/ MORE THAN 3 RISERS. GUARDS, HANDRAILS & STEPS AS PER CONSTRUCTION HEX NOTE 10 & 11.

**11 GUARDS/RAILINGS** (9.8.7., 9.8.8.)
GUARDS TO BE DESIGNED NOT TO FACILITATE CLIMBING AND PROVIDING MAX. OPENING CONFORMING TO O.B.C. 9.8.8.5. & 9.8.8.6. AND BE ABLE TO RESIST LOADS AS PER TABLE 9.8.8.2.
GUARD HEIGHTS - O.B.C. 9.8.8.
INTERIOR GUARDS: 2'-11" (900) MIN.
EXTERIOR GUARDS: 2'-11" (900) MIN. (LESS THAN 5'-11" (1800) TO GRADE)
3'-6" (1070) MIN. (MORE THAN 5'-11" (1800) TO GRADE)
GUARDS FOR EXIT STAIRS: 3'-0" (920) MIN.
GUARDS FOR LANDINGS @ EXIT STAIRS: 3'-6" (1070) MIN.
GUARDS FOR FLOORS & RAMPS IN GARAGES (SERVICE STAIRS)
FLOOR OR RAMP W/O EXTERIOR WALLS THAT IS 23 5/8" (600) OR MORE ABOVE ADJACENT SURFACE REQUIRES CONT. CURB MIN. 6" (150) HIGH, AND GUARD MIN. 3'-6" (1070) HIGH.
REQUIRED GUARDS
BETWEEN WALKING SURFACE & ADJACENT SURFACE WITH A DIFFERENCE IN ELEVATION MORE THAN 23 5/8" (600) OR ADJACENT SURFACE WITHIN 3'-11" (1200) & WALKING SURFACE W/ A SLOPE MORE THAN 1 IN 12 SHALL BE PROTECTED WITH GUARDS PER CONSTRUCTION HEX NOTE 11.
HANDRAIL HEIGHTS - O.B.C. 9.8.7. - REQUIRED AS PER 9.8.7.1.(3)
MIN. HEIGHT AT STAIRS OR RAMP: 2'-10" (865)
MAX. HEIGHT AT STAIRS OR RAMP: 3'-2" (965)
MAX. HEIGHT AT LANDING: 3'-6" (1070)
STAIRS OR RAMP MIN. 7'-3" (2200) WIDE: 2'-9" (865) MIN. HEIGHT

**12 SILL PLATES**
2"x4" (38x89) SILL PLATE WITH 1/2" (12.7)Ø ANCHOR BOLTS 8" (200) LONG, EMBEDDED MIN. 4" (100) INTO CONC. @ 7'-10" (2388) O.C., CAULKING OR GASKET BETWEEN PLATE AND TOP OF FOUNDATION WALL. USE NON-SHRINK GROUT TO LEVEL SILL PLATE WHEN REQUIRED (9.23.7.)

**13 BASEMENT INSULATION** ([SB-12] 3.1.1.7.)
PROVIDE CONTINUOUS BLANKET INSULATION W/ BUILT IN 6 mil POLYETHYLENE VAPOUR BARRIER. INSULATION TO EXTEND NO MORE THAN 8" (200) ABOVE FINISHED BASEMENT FLOOR. DAMPROOFED WITH BUILDING PAPER BETWEEN THE FOUNDATION WALL AND INSULATION UP TO GRADE LEVEL.

**14 BEARING STUD PARTITION IN BASEMENT** (9.15.3.6., 9.23.10.1.)
2"x4" (38x89) STUDS @ 16" (406) O.C., 2"x4" (38x89) SILL PLATE (2"x6" (38x140) AS REQUIRED) ON DAMPPROOFING MATERIAL OR 2 mil POLYETHYLENE FILM, 1/2" (12.7) Ø ANCHOR BOLTS 8" (200) LONG, EMBEDDED 4" (100) MIN. INTO CONC. @ 7'-10" (2390) O.C. 4" (100) HIGH CONC. CURB ON CONC. FOOTING. FOR SIZE REFER TO HEX NOTE 5. ADD HORIZ. BLOCKING AT MID-HEIGHT IF WALL IS UNFINISHED.

**15 ADJUSTABLE STEEL BASEMENT COLUMN** (9.15.3.4.)
9'-10" (3000) MAX. SPAN BETWEEN COLUMNS. 3 1/2" (90)Ø SINGLE TUBE ADJUSTABLE STEEL COLUMN CONFORMING TO CAN/CGSB-7.2M, AND WITH 6"x6"x3/8" (152x152x9.5) STEEL PLATE TOP & BOTTOM. FIELD WELD BASEMENT COLUMN CONNECTION. POURED CONCRETE FOOTING ON NATURAL UNDISTURBED SOIL OF 75kPa OR COMPACTED ENGINEERED FILL WITH MIN. BEARING CAPACITY OF 150kPa AS PER SOILS REPORT.
SUPPORTING 2 STOREY FLR. LOAD PROVIDE 34"x34"x16" (870x870x410) CONC. FOOTING
SUPPORTING 3 STOREY FLR. LOAD PROVIDE 40"x40"x19" (1060x1060x480) CONC. FOOTING

**15A NON-ADJUSTABLE STEEL BASEMENT COLUMN**
3 1/2" (90)Ø x 0.188" (4.78) NON-ADJUSTABLE STEEL COLUMN WITH 6"x6"x3/8" (152x152x9.5) STEEL PLATE TOP & BOTTOM, FIELD WELD BASEMENT COLUMN CONNECTION. POURED CONCRETE FOOTING ON NATURAL UNDISTURBED SOIL OF 75kPa OR COMPACTED ENGINEERED FILL WITH MIN. BEARING CAPACITY OF 150kPa AS PER SOILS REPORT.
SUPPORTING 2 STOREY FLR. LOAD PROVIDE 42"x42"x18" (1070x1070x460) CONC. FOOTING
SUPPORTING 3 STOREY FLR. LOAD PROVIDE 48"x48"x24" (1220x1220x610) CONC. FOOTING

**15B NON-ADJUSTABLE STL. COLUMN AT FOUNDATION WALL**
3 1/2" (90)Ø x 0.188" (4.78) NON-ADJUSTABLE STEEL COLUMN WITH 6"x6"x3/8" (152x152x9.5) STEEL TOP PLATE & 6"x4"x3/8" (152x100x9.5) BOTTOM PLATE. BASE PLATE 4-1/2"x10"x1/2" (120x250x12.7) WITH 2- 1/2"Ø x 12" LONG x 2" HOOK ANCHORS (2- 12.7Øx305x50). FIELD WELD COLUMN TO BASE PLATE & STEEL BM.

**16 STEEL BEAM BEARING AT FOUNDATION WALL** (9.23.8.1.)
BEAM POCKET OR 8"x8" (200x200) POURED CONC. NIB WALLS, MIN. BEARING 3 1/2" (90). CONC. NIB WALLS TO HAVE EXTENDED FOOTINGS

**17 WOOD STRAPPING AT STEEL BEAMS** (9.23.4.3.(3.), 9.23.9.3.)
1"x3" (19x64) CONTIN. WOOD STRAPPING BOTH SIDES OF STEEL BEAM.

**18 GARAGE SLAB** (9.16., 9.35.)
4" (100) 32MPa (4640psi) CONC. SLAB WITH 5-8% AIR ENTRAINMENT ON OPT. 4" (100) COARSE GRANULAR FILL WITH COMPACTED SUB-BASE OR COMPACTED NATIVE FILL. SLOPE TO FRONT @ 1% MIN.

**19 GARAGE TO HOUSE WALLS/CEILING** (9.10.9.16.)
1/2" (12.7) GYPSUM BOARD ON WALL AND CEILING BETWEEN HOUSE AND GARAGE, PLUS REQUIRED INSULATION IN WALLS AND SPRAY FOAM FOR CEILINGS. TAPE AND SEAL ALL JOINTS GAS TIGHT. (9.10.17.10, CAN/ULC-S705.2)

**19A GARAGE TO HOUSE WALLS/CEILING W/ CONTIN. INSULATION**
1/2" (12.7) GYPSUM BOARD ON CEILING AND ON WALLS INSTALLED OVER EXTERIOR TYPE RIGID INSULATION (JOINTS UNTAPED) MECHANICALLY FASTENED AS PER MANUFACTURER'S SPECIFICATIONS ON 3/8" EXTERIOR GRADE SHEATHING ON STUDS BETWEEN HOUSE AND GARAGE, PLUS REQUIRED INSULATION IN WALLS & SPRAY FOAM FOR CEILINGS, TAPE AND SEAL ALL JOINTS GAS TIGHT. (9.10.9.16., 9.10.17.10, CAN/ULC-S705.2)

**20 GARAGE DOOR TO HOUSE** (9.10.9.16., 9.10.13.10., 9.10.13.15.)
GAS-PROOF DOOR AND FRAME. DOOR EQUIPPED WITH SELF CLOSING DEVICE AND WEATHER STRIPPING.

**21 EXTERIOR AND GARAGE STEPS**
PRECAST CONC. STEP OR WOOD STEP WHERE NOT EXPOSED TO WEATHER. MAX RISE 7 7/8" (200), MIN. TREAD 9 1/4" (235), FOR THE REQUIRED NUMBER OF STEPS REFER TO SITING AND GRADING DRAWINGS. EXTERIOR CONCRETE STAIRS WITH MORE THAN 2 RISERS AND 2 TREADS SHALL BE PROVIDED WITH FOUNDATION AS REQUIRED BY ARTICLE 9.8.9.2. OR SHALL BE CANTILEVERED AS PER SUBSECTION 9.8.10.

**22 DRYER EXHAUST**
CAPPED DRYER EXHAUST VENTED TO EXT. CONFORMING TO PART 6, OBC 9.32.

**23 ATTIC ACCESS** (9.19.2.1.)
ATTIC ACCESS HATCH WITH MIN. AREA OF 0.32m2 AND NO DIM. LESS THAN 21 1/2" (545) WITH WEATHER STRIPPING. HATCHWAYS TO THE ATTIC OR ROOF SPACE WILL BE FITTED WITH DOORS OR COVERS AND WILL BE INSULATED WITH MIN. R20 (RSI 3.52) ([SB-12] 3.1.1.8.(1))

**24 FIREPLACE CHIMNEYS** (9.21.)
TOP OF FIREPLACE CHIMNEY SHALL BE 2'-11" (889) ABOVE THE HIGHEST POINT AT WHICH IT COMES IN CONTACT WITH THE ROOF AND 2'-0" (610) ABOVE THE ROOF SURFACE WITHIN A HORIZ. DISTANCE OF 10'-0" (3048) FROM THE CHIMNEY.

**25 LINEN CLOSET**
PROVIDE 4 SHELVES MIN. 14" (356) DEEP.

**26 MECHANICAL VENTILATION** (9.32.1.3.)
MECHANICAL EXHAUST FAN, VENTED TO EXTERIOR, TO PROVIDE AT LEAST ONE AIR CHANGE PER HOUR. SEE GENERAL NOTE 2.3.

**27 PARTY WALL BEARING** (9.23.8)
12"x12"x5/8" (305x305x15.9) STEEL PLATE FOR STEEL BEAMS AND 12"x12"x1/2" (305x305x12.7) STEEL PLATE FOR WOOD BEAMS BEARING (MIN. 3-1/2" (89)) ON CONC. BLOCK PARTY WALL, ANCHORED WITH 2-3/4" (2-19) x 8" (200) LONG GALV. ANCHORS WITHIN SOLID BLOCK COURSE. LEVEL W/ NON-SHRINK GROUT. REFER TO NOTE SOLID BEARING (SECTION 3.0) FOR WD. STUD PARTY WALL.

**28 WOOD FRAMING IN CONTACT TO CONCRETE**
WOOD BEARING WALLS, THE UNDERSIDE OF BUILT-UP WOOD POSTS AND SILLS SHALL BE WRAPPED WITH 2 mil POLY. STRIP FOOTINGS SUPPORTING THE FOUNDATION WALL SHALL BE WIDENED 6" (152) BELOW THE BEARING WALL AND/OR WOOD POST. (9.17.4.3.)

**29 BUILT-UP WOOD POST AND FOOTING** (9.17.4.1., 9.15.3.7.)
3-2"x6" (3-38x140) BUILT-UP WOOD POST (UNLESS OTHERWISE NOTED) ON METAL BASE SHOE ANCHORED TO CONC. WITH 1/2" (12.7) Ø BOLT, 24"x24"x12" (610x610x305) CONC. FOOTING OR AS PROVIDED ON PLAN. REFER TO NOTE 28

**30 STEP FOOTINGS** (9.15.3.9.)
MIN. HORIZ. STEP = 23 5/8" (600). MAX. VERT. STEP = 23 5/8" (600).

**31 CONC. PORCH SLAB** (9.16.4.)
MIN. 4" (100) CONCRETE SLAB ON GRADE ON 4" (100) COARSE GRANULAR FILL, REINFORCED WITH 6x6xW2.9xW2.9 MESH PLACED NEAR MID-DEPTH OF SLAB. CONC. STRENGTH 32MPa (4640psi) WITH 5-8% AIR ENTRAINMENT ON COMPACTED SUB-GRADE.

**32 FURNACE VENTING** (9.32.)
DIRECT VENT FURNACE TERMINAL MIN. 3'-0" (915) FROM A GAS REGULATOR. MIN. 12" (305) ABOVE FIN. GRADE, FROM ALL OPENINGS, EXHAUST AND INTAKE VENTS. HRV INTAKE TO BE A MIN. OF 6'-0" (1830) FROM ALL EXHAUST TERMINALS. REFER TO GAS UTILIZATION CODE.

**33 FIREPLACE VENTING** (9.32.3.)
DIRECT VENT GAS FIREPLACE VENT TO BE A MIN. 12" (305) FROM ANY OPENING AND ABOVE FIN. GRADE. REFER TO GAS UTILIZATION CODE.

**34 FLOOR FRAMING** (9.23.3.5., 9.23.9.4., 9.23.14.)
T&G SUBFLOOR ON WOOD FLOOR JOISTS. FOR CERAMIC TILE APPLICATION SEE O.B.C. 9.30.6. ALL JOISTS WHERE REQUIRED TO BE BRIDGED WITH 2"x2" (38x38) CROSS BRACING OR SOLID BLOCKING @ 6'-11" (2108) O.C. MAX. ALL JOISTS TO BE STRAPPED WITH 1"x3" (19x64) @ 6'-11" (2108) O.C. UNLESS A PANEL TYPE CEILING FINISH IS APPLIED.

**34A HEADER CONSTRUCTION**
PROVIDE CONTINUOUS APPROVED AIR/VAPOUR BARRIER (HEADER WRAP) UNDER THE SILL PLATE, AROUND THE RIM BOARD AND UNDER THE BOTTOM PLATE. THE HEADER WRAP SHALL EXTEND 6" (152) BELOW THE TOP OF FOUNDATION WALL AND WILL BE SEALED TO THE CONCRETE FOUNDATION WALL. EXTEND HEADER WRAP 6" (152) UP THE INTERIOR SIDE OF THE STUD WALL AND OVERLAP WITH THE VAPOUR BARRIER AND SEAL THE JOINT. ALL EDGES/JOINTS MUST BE MECHANICALLY CLAMPED.

**35 EXPOSED BUILDING FACE w/ LIMITING DISTANCE <= 3'-11" (1.20m)**
WALL ASSEMBLY CONTAINS INSULATION CONFORMING TO CAN/ULC-S702 & HAVING A MASS OF NOT LESS THAN 1.22 KG/M2 OF WALL SURFACE AND 1/2" (12.7) TYPE X GYPSUM WALLBOARD INTERIOR FINISH. EXTERIOR CLADDING MUST BE NON-COMBUSTIBLE WHEN LIMITING DISTANCE IS 23 5/8" (0.60m) OR LESS. WALL ASSEMBLY REQUIRES TO HAVE A FIRE RESISTANCE RATING OF NOT LESS THAN 45 MINUTES & CONFORMING TO O.B.C. (9.10.14. OR 9.10.15.). REFER TO DETAILS FOR TYPE & SPECS. ** AN OPENING IN AN EXPOSING BUILDING FACE NOT MORE THAN 20 in² (130cm²) *SHALL NOT BE CONSIDERED AN UNPROTECTED OPENING AS PER* 9.10.14.6.

**36 COLD CELLAR PORCH SLAB** (9.39.)
FOR MAX. 8'-2" (2500) PORCH DEPTH, 5" (127) 32 MPa (4640psi) CONC. SLAB W/ 5-8% AIR ENTRAINMENT. REINF. WITH 10M BARS @ 7 7/8" (200) O.C. EACH DIRECTION, W/ 1 1/4" (32) CLEAR COVER FROM BOTTOM OF SLAB TO FIRST LAYER OF BARS & SECOND LAYER OF BARS LAID DIRECTLY ON TOP OF LOWER LAYER IN OPPOSITE DIR. 24"x24" (610x610) 10M DOWELS @ 23 5/8" (600) O.C., ANCHORED IN PERIMETER FND. WALLS. SLOPE SLAB 1.0% FROM DOOR.

**37 RANGE HOODS AND RANGE-TOP FANS**
COOKING APPLIANCE EXHAUST FANS VENTED TO EXTERIOR MUST CONFORM TO OBC 9.10.22, 9.32.3.9. & 9.32.3.10.

**38 CONVENTIONAL ROOF FRAMING** (9.23.13., 9.23.15.)
2"x6" (38x140) RAFTERS @ 16" (406) O.C., 2"x8" (38x184) RIDGE BOARD. 2"x4" (38x89) COLLAR TIES AT MID-SPAN. CEILING JOISTS TO BE 2"x4" (38x89) @ 16" (406) O.C. FOR MAX. 9'-3" (2819) SPAN & 2"x6" (38x140) @ 16" (406) O.C. FOR MAX. SPAN 14'-7" (4450). RAFTERS FOR BUILT UP ROOF OVER PRE-ENGINEERED ROOF TRUSSES AND OR CONVENTIONAL FRAMING TO BE 2"x4" (38x89) @ 24" (610) O.C. UNLESS OTHERWISE SPECIFIED.

**39 TWO STOREY VOLUME SPACES** (9.23.10.1., 9.23.11., 9.23.16.)

| WALL ASSEMBLY: EXTERIOR | WALL ASSEMBLY: STUDS | WIND LOADS <= 0.5 kPA (q50): SPACING | <= 0.5 kPA (q50): MAX HEIGHT | > 0.5 kPa (q50): SPACING | > 0.5 kPa (q50): MAX HEIGHT |
|---|---|---|---|---|---|
| BRICK | 2-2"x6" (2-38x140) SPR.#2 | 12" (305) O.C. | 18'-4" (5588) | 8" (200) O.C. | 18'-4" (5588) |
| SIDING | | 16" (406) O.C. | 18'-4" (5588) | 12" (305) O.C. | 18'-4" (5588) |
| BRICK | 2-2"x8" (2-38x184) SPR.#2 | 12" (305) O.C. | 21'-0" (6400) | 12" (305) O.C. | 21'-0" (6400) |
| SIDING | | 16" (406) O.C. | 21'-0" (6400) | 16" (406) O.C. | 21'-0" (6400) |
| ** STUD SIZE & SPACING TO BE VERIFIED BY STRUCTURAL ENGINEER ** | | | | | |

STUDS ARE TO BE CONTINUOUS, C/W 3/8" (9.5) THICK EXTERIOR PLYWOOD SHEATHING. PROVIDE SOLID WOOD BLOCKING BETWEEN WOOD STUDS @ 4'-0" (1220) O.C. VERTICALLY.
-FOR HORIZ. DISTANCES LESS THAN 9'-6" (2896) PROVIDE 2"x6" (38x140) STUDS @ 16" (406) O.C. WITH CONTIN. 2-2"x6" (2-38x140) TOP PLATE + 1-2"x6" (1-38x140) BOTTOM PLATE & MIN. OF 3-2"x8" (3-38x184) CONT. HEADER AT GROUND FLOOR CEILING LEVEL TOE-NAILED & GLUED AT TOP, BOTTOM PLATES & HEADERS.

STAMP

LICENSED PROFESSIONAL ENGINEER
2021-05-14
D. FERRARI
100166929
PROVINCE OF ONTARIO

FOR STRUCTURAL ONLY NOT INCLUDING ENGINEERED FLOOR OR ROOF SYSTEM

CONSTRUCTION NOTES

ROYAL PINE HOMES - 216102
'CENTREFIELD', WEST GORMLEY, RICHMOND HILL, ON.
UNIT 2009-END
REV.2021.05.11

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## cont. SECTION 1.0. CONSTRUCTION NOTES

**40** **1 HR. PARTY WALL (CONC. BLOCK)** ([SB-3] WALL TYPE 'B6e' & 'B1b')
1/2" (12.7) GYPSUM SHEATHING ON EACH SIDE ON 2"x2" (38x38) VERTICAL WD. STRAPPING @ 24" (610) O.C. ON 8" (200) CONC. BLOCK FILL STRAPPING CAVITY EACH SIDE WITH AT LEAST 90% OF ABSORPTIVE MATERIAL PROCESSED FROM ROCK, SLAG OR GLASS. TAPE, FILL & SAND ALL GYPSUM JOINTS. EXPOSED BLOCK MUST BE SEALED W/ 2 COATS OF PAINT OR FURRED WITH 2"x2" (38x38) WD. STRAPPING & 1/2" (12.7) GYPSUM SHEATHING.

**40 DBL STUD** **1 HR. PARTY WALL (DOUBLE STUD)** ([SB-3] WALL TYPE 'W13c')
5/8" (15.9) TYPE 'X' GYPSUM SHEATHING ON EXTERIOR SIDE OF 2 ROWS OF 2"x4" (38x89) STUDS @ 16" (406) O.C., MIN. 1" (25) APART ON SEPARATE 2"x4" (38x89) SILL PLATES. (2"x6" (38x140) AS REQUIRED) FILL ONE SIDE OF STUD CAVITY WITH AT LEAST 90% OF ABSORPTIVE MATERIAL PROCESSED FROM ROCK, SLAG OR GLASS. TAPE FILL AND SAND ALL GYPSUM JOINTS.

**40A** **2 HR. FIREWALL** ([SB-3] WALL TYPE 'B6e' & 'B1b')
1/2" (12.7) GYPSUM SHEATHING ON EACH SIDE ON 2"x2" (38x38) VERTICAL WOOD STRAPPING @ 24" (610) O.C ON 8" (200) CONC. BLOCK 75% SOLID. FILL STRAPPING CAVITY EACH SIDE WITH AT LEAST 90% OF ABSORPTIVE MATERIAL PROCESSED FROM ROCK, SLAG OR GLASS. TAPE, FILL & SAND ALL GYPSUM JOINTS. AT UNFINISHED AREAS, EXTERIOR FACE OF CONC. BLOCK TO BE SEALED WITH 2 COATS OF PAINT. GYPSUM SHEATHING TO BE ATTACHED TO CONC. BLOCK. (REFER TO DETAILS)

**41** **STUCCO WALL CONSTRUCTION (2"x6")**
STUCCO FINISH CONFORMING TO O.B.C. SECTION 9.28. AND APPLIED PER MANUFACTURERS SPECIFICATIONS OVER 1 1/2" (38) E.I.F.S. (MINIMUM) ON APPROVED DRAINAGE MAT ON 1/2" (12.7) DENSGLASS GOLD GYPSUM BOARD ON STUDS CONFORMING TO O.B.C (9.23.10.1.) & SECTION 1.1., INSULATION, APPROVED 6 MIL. POLYETHYLENE VAPOUR BARRIER, 1/2" (12.7) GYPSUM WALLBOARD INT. FINISH. (REFER TO 35 NOTE AS REQUIRED)

**41A** **STUCCO WALL CONSTRUCTION (2"x6") W/ CONTIN. INSUL.**
STUCCO FINISH CONFORMING TO O.B.C. SECTION 9.28. AND APPLIED PER MANUFACTURERS SPECIFICATIONS OVER 1 1/2" (38) E.I.F.S. (MINIMUM) ON APPROVED DRAINAGE MAT ON APPROVED AIR/WATER BARRIER AS PER O.B.C. 9.27.3. ON EXTERIOR TYPE RIGID INSULATION (JOINTS UNTAPED) MECHANICALLY FASTENED AS PER MANUFACTURER'S SPECIFICATIONS, ON 7/16" EXTERIOR TYPE SHEATHING ON STUDS CONFORMING TO O.B.C (9.23.10.1.) & SECTION 1.1., INSULATION, APPROVED 6 MIL. POLYETHYLENE VAPOUR BARRIER, 1/2" (12.7) GYPSUM WALLBOARD INT. FINISH. (REFER TO 35 NOTE AS REQUIRED)

**41B** **STUCCO WALL @ GARAGE CONST.**
STUCCO FINISH CONFORMING TO O.B.C. SECTION 9.28. AND APPLIED PER MANUFACTURERS SPECIFICATIONS OVER 1 1/2" (38) E.F.I.S (MINIMUM) ON APPROVED DRAINAGE MAT ON 1/2" (12.7) DENSGLASS GOLD GYPSUM BRD. ON STUDS CONFORMING TO O.B.C (9.23.10.1.) & SECTION 1.1., 1/2" (12.7) GYPSUM WALLBOARD INT. FINISH. (REFER TO 35 NOTE AS REQ.)
*** FOR DWELLINGS USING CONTIN. INSULATION CONSTRUCTION, PROVIDE APPROVED DRAINAGE MAT ON 7/16" (11) EXTERIOR TYPE SHEATHING OVER FURRING (AS REQ.) AND STUDS IN LIEU OF 1 1/2" (38) E.F.I.S (MINIMUM) ON APPROVED DRAINAGE MAT ON 1/2" (12.7) DENSGLASS GOLD GYPSUM BRD.

**42** **UNSUPPORTED FOUNDATION WALLS** (9.15.4.2.)
REINFORCING AT STAIRS AND SUNKEN FLOOR AREAS
2-20M BARS IN TOP PORTION OF WALL (UP TO 8'-0" OPENING)
3-20M BARS IN TOP PORTION OF WALL (8'-0" TO 10'-0" OPENING)
4-20M BARS IN TOP PORTION OF WALL (10'-0" TO 15'-0" OPENING)
- BARS STACKED VERTICALLY AT INTERIOR FACE OF WALL
REINFORCING AT BASEMENT WINDOWS
2-15M HORIZ. REINFORCING ON THE INSIDE AND OUTSIDE FACE OF THE FOUNDATION WALL BELOW THE WIN. SILL. EXTEND BARS 24" (610) BEYOND THE OPENING. 2-15M VERTICAL REINFORCING ON THE INSIDE AND OUTSIDE FACE OF THE FOUNDATION WALL ON EACH SIDE OF THE WINDOW OPENING.
- BARS TO HAVE MIN. 1" (25) CONC. COVER
- BARS TO EXTEND 2'-0" (610) BEYOND BOTH SIDES OF OPENING

**43** **STUD WALL REINFORCEMENT**
PROVIDE STUD WALL REINFORCEMENT IN MAIN BATHROOM CONFORMING TO O.B.C. (9.5.2.3.(1) AND 3.8.3.8.(3)) (REFER TO DETAILS)

**44** **WINDOW WELLS**
WHERE A WINDOW OPENS INTO A WINDOW WELL, A CLEARANCE OF NOT LESS THAN 21 5/8" (550) SHALL BE PROVIDED IN FRONT OF THE WINDOW. EVERY WINDOW WELL SHALL BE DRAINED TO THE FOOTING LEVEL OR OTHER SUITABLE LOCATION WITH A 4" (100) WEEPING TILE C/W A FILTER CLOTH WRAP AND FILLED WITH CRUSHED STONE. (9.9.10.1.(5), 9.14.6.3.)

**45** **SLOPED CEILING CONSTRUCTION** ([SB-12] 2.1.1.7., 9.23.4.2.)
2"x12" (38x286) ROOF JOISTS @ 16" (406) O.C. MAX. (UNLESS OTHERWISE NOTED) W/ 2"x2" (38x38) PURLINS @ 16" (406) O.C. PERPENDICULAR TO ROOF JOIST (PURLINS NOT REQ. W/ SPRAY FOAM), W/ INSULATION BETWEEN JOIST, 6 mil POLYETHYLENE VAPOUR BARRIER, 1/2" (12.7) GYPSUM WALLBOARD INT. FINISH OR APPROVED EQ. INSULATION VALUE DIRECTLY ABOVE THE INNER SURFACE OF EXTERIOR WALLS SHALL NOT BE LESS THAN R20 (3.52 RSI).

**46** **FLAT ROOF/BALCONY CONSTRUCTION**
WATERPROOFING MEMBRANE (9.26.11, 9.26.15, 9.26.16) FULLY ADHERED TO 5/8" (15.9) T&G EXTERIOR GRADE PLYWOOD SHEATHING ON 2"x2" (38x38) PURLINS ANGLED TOWARDS SCUPPER @ 2% MINIMUM LAID PERPENDICULAR TO 2"x8" (38x184) FLOOR JOISTS @ 16" (406) O.C. (UNLESS OTHERWISE NOTED). BUILT UP CURB TO BE 4" (100) MIN. ABOVE FINISHED BALCONY FLOOR. CONTINUOUS 'L' TRIM DRIP EDGE TO BE PROVIDED ON OUTSIDE FACE OF CURB. SCUPPER DRAIN TO BE LOCATED 24" (610) MIN. AWAY FROM HOUSE. PREFINISHED ALUMINUM OR PANEL FOR UNDERSIDE OF SOFFIT (9.23.2.3). REMOVE CURB WHERE REQ.
**BALCONY CONDITION**
SEE FLAT ROOF/BALCONY CONSTRUCTION NOTE. INCLUDE 2"x4" (38x89) PT. DECKING W/ 1/4" (6.4) GAPS LAID FLAT PARALLEL TO JOISTS ON 2"x4" (38x89) PT. SLEEPERS @ 12" (305) O.C. LAID FLAT PERPENDICULAR TO JOISTS
**BALCONY OVER HEATED SPACE CONDITION**
SEE FLAT ROOF/BALCONY CONSTRUCTION NOTE FOR ASSEMBLY. REFER TO PLANS FOR FLOOR JOIST SIZE & REFER TO HEX NOTE 9 FOR INSULATION AND INTERIOR FINISH

**47** **BARREL VAULT CONSTRUCTION**
CANTILEVERED 2"x4" (38x89) SPACERS LAID FLAT ON 2"x10" (38x235) SPR. #2 ROOF JOIST NAILED TO BUILT-UP 3-3/4" (19) PLYWOOD HEADER PROFILED FOR BARREL. SPRAY FOAM INSULATION BETWEEN JOISTS W/ GYPSUM BOARD. INTERIOR FIN. (REFER TO DETAILS)

REFER TO SB-12 ENERGY EFFICIENCY DESIGN MATRIX ON THE TITLE PAGE FOR ALL VALUES AS REQUIRED PER 3.1.1., 3.1.2., 3.1.3. OF THE OBC.

## SECTION 1.1. WALL STUDS

- REFER TO THIS CHART FOR STUD SIZE & SPACING AS REQUIRED FOR EXTERIOR WALLS ONLY. REFER TO SITING & GRADING PLAN OF THIS UNIT FOR CONFIRMATION OF TOP OF FOUNDATION WALL AND ADDITIONAL INFORMATION.
- IF STUD WALL HEIGHT EXCEEDS MAX. UNSUPPORTED HEIGHT, WALL NEEDS TO BE REVIEWED AND APPROVED BY ENGINEER.

SIZE & SPACING OF STUDS: (OBC REFERENCE - TABLE 9.23.10.1.)

| MIN. STUD SIZE, in (mm) | SUPPORTED LOADS (EXTERIOR) | | | |
|---|---|---|---|---|
| | ROOF w/ OR w/o ATTIC | ROOF w/ OR w/o ATTIC & 1 FLOOR | ROOF w/ OR w/o ATTIC & 2 FLOOR | ROOF w/ OR w/o ATTIC & 3 FLOOR |
| | MAX. STUD SPACING, in (mm) O.C. | | | |
| | MAX. UNSUPPORTED HGT., ft-in (m) | | | |
| 2"x4" (38x89) | 24" (610) | 16" (405) | 12" (305) | N/A |
| | 9'-10" (3.0) | 9'-10" (3.0) | 9'-10" (3.0) | N/A |
| 2"x6" (38x140) | - | 24" (610) | 16" (406) | 12" (305) |
| | - | 9'-10" (3.0) | 11'-10" (3.6) | 5'-11" (1.8) |

## SECTION 2.0. GENERAL NOTES

**2.1. WINDOWS**
1) EXCEPT WHERE A DOOR ON THE SAME FLOOR LEVEL AS THE BEDROOM PROVIDES DIRECT ACCESS TO THE EXTERIOR, EVERY FLOOR LEVEL CONTAINING A BEDROOM IS TO HAVE AT LEAST ONE OUTSIDE WINDOW W/ MIN. 0.35m2 UNOBSTRUCTED OPEN PORTION W/ NO DIMENSION LESS THAN 1'-3" (380), CAPABLE OF MAINTAINING THE OPENING WITHOUT THE NEED FOR ADDITIONAL SUPPORT, CONFORMING TO 9.9.10.

2) WINDOW GUARDS: A GUARD OR A WINDOW WITH A MAXIMUM RESTRICTED OPENING WIDTH OF 4" (100) IS REQUIRED WHERE THE TOP OF THE WINDOW SILL IS LOCATED LESS THAN 1'-7" (480) ABOVE FIN. FLOOR AND THE DISTANCE FROM THE FINISHED FLOOR TO THE ADJACENT GRADE IS GREATER THAN 5'-11" (1800). (9.8.8.1.)

3) WINDOWS IN EXIT STAIRWAYS THAT EXTEND TO LESS THAN 2'-11" (900) [3'-6" (1070) FOR ALL OTHER BUILDINGS] SHALL BE PROTECTED BY GUARDS IN ACCORDANCE WITH NOTE #2 (ABOVE). OR THE WINDOW SHALL BE NON-OPERABLE AND DESIGNED TO WITHSTAND THE SPECIFIED LOADS FOR BALCONY GUARDS AS PROVIDED IN 4.1.5.15 OR 9.8.8.2

4) REFER TO TITLE PAGE FOR MAX. U-VALUE REQUIREMENTS

**2.2. CEILING HEIGHTS**
THE CEILING HEIGHTS OF ROOMS AND SPACES SHALL CONFORM TO TABLE 9.5.3.1.

| ROOM OR SPACE | MINIMUM HEIGHTS |
|---|---|
| LIVING ROOM, DINING ROOM AND KITCHEN | 7'-7" OVER 75% OF REQUIRED FLOOR AREA WITH A CLEAR HEIGHT OF 6'-11" AT ANY POINT |
| BEDROOM | 7'-7" OVER 50% OF REQUIRED FLOOR AREA OR 6'-11" OVER ALL OF THE REQUIRED FLOOR AREA. |
| BASEMENT | 6'-11" OVER AT LEAST 75% OF THE BASEMENT AREA EXCEPT THAT UNDER BEAMS AND DUCTS THE CLEARANCE IS PERMITTED TO BE REDUCED TO 6'-5". |
| BATHROOM, LAUNDRY AREA ABOVE GRADE | 6'-11" IN ANY AREA WHERE A PERSON WOULD NORMALLY BE STANDING |
| FINISHED ROOM NOT MENTIONED ABOVE | 6'-11" |
| MEZZANINES | 6'-11" ABOVE & BELOW FLOOR ASSEMBLY (9.5.3.2.) |
| STORAGE GARAGE | 6'-7" (9.5.3.3.) |

**2.3. MECHANICAL / PLUMBING**
1) MECHANICAL VENTILATION IS REQUIRED TO PROVIDE 0.7 AIR CHANGE PER HOUR IF NOT AIR CONDITIONED 1 PER HOUR IF AIR CONDITIONED AVERAGED OVER 24 HOURS. WHEN A VENTILATION FAN (PRINCIPAL EXHAUST) IS REQUIRED, CONFORM TO 9.32.3.11. REFER TO MECHANICAL DRAWINGS.

2) REFER TO HOT WATER TANK MANUFACTURER SPECS. CONFORM TO OBC 9.31.6.

3) REFER TO TITLE PAGE FOR SPACE HEATING EQUIPMENT, HRV AND DOMESTIC HOT WATER HEATER MINIMUM EFFICIENCIES.

4) DRAIN WATER HEAT RECOVERY UNIT(S) WILL BE INSTALLED CONFORMING TO THE REQUIREMENTS OF 3.1.1.12. OF THE O.B.C.

**2.4. LUMBER**
1) ALL LUMBER SHALL BE SPRUCE No.2 GRADE OR BETTER, UNLESS NOTED OTHERWISE.

2) STUDS SHALL BE STUD GRADE SPRUCE, UNLESS NOTED OTHERWISE.

3) LUMBER EXPOSED TO THE EXTERIOR TO BE SPRUCE No. 2 GRADE PRESSURE TREATED OR CEDAR, UNLESS NOTED OTHERWISE.

4) ALL LAMINATED VENEER LUMBER (LVL) BEAMS, GIRDER TRUSSES, AND METAL HANGER CONNECTIONS SUPPORTING ROOF FRAMING TO BE DESIGNED & CERTIFIED BY FLOOR AND ROOF TRUSS MANUFACTURER.

5) JOIST HANGERS: PROVIDE APPROVED METAL HANGERS FOR ALL JOISTS AND BUILT-UP WOOD MEMBERS INTERSECTING WITH FLUSH BUILT-UP WOOD MEMBERS.

6) WOOD FRAMING NOT TREATED WITH A WOOD PRESERVATIVE, IN CONTACT WITH CONCRETE, SHALL BE SEPARATED FROM THE CONC. BY AT LEAST 2 mil POLYETHYLENE FILM, No.50 (45lbs) ROLL ROOFING OR OTHER DAMPPROOFING MATERIAL, EXCEPT WHERE THE WOOD MEMBER IS AT LEAST 6" (152) ABOVE THE GROUND.

**2.5. STEEL** (9.23.4.3.)
1) STRUCTURAL STEEL SHALL CONFORM TO CAN/CSA-G40-21 GRADE 300W. HOLLOW STRUCT. SECTIONS SHALL CONFORM TO CAN/CSA-G40-21 GRADE 350W CLASS "H".
2) REINFORCING STEEL SHALL CONFORM TO CSA-G30-18M GRADE 400R.

**2.6. FLAT ARCHES**
1) FOR 8'-0" (2440) CEILINGS, FLAT ARCHES SHALL BE 6'-10" (2080) A.F.F.
2) FOR 9'-0" (2740) CEILINGS, FLAT ARCHES SHALL BE 7'-10" (2400) A.F.F.
3) FOR 10'-0" (3040) CEILINGS, FLAT ARCHES SHALL BE 8'-6" (2600) A.F.F.

**2.7. ROOF OVERHANGS**
1) ALL ROOF OVERHANGS SHALL BE 1'-0" (305). UNLESS NOTED OTHERWISE.

**2.8. FLASHING** (9.20.13., 9.26.4. & 9.27.3.)
1) FLASHING MATERIALS & INSTALLATION SHALL CONFORM TO O.B.C.

**2.9. GRADING**
1) THE BUILDING SHALL BE LOCATED OR THE BUILDING SITE GRADED SO THE WATER WILL NOT ACCUMULATE AT OR NEAR THE BUILDING AND WILL NOT ADVERSELY AFFECT ADJACENT PROPERTIES. CONFORM TO 9.14.6.

**2.10. ULC SPECIFIED ASSEMBLIES**
ALL REQUIRED INDIVIDUAL COMPONENTS THAT FORM PART OF ANY *'ULC LISTED ASSEMBLY'*, SPECIFIED WITHIN THESE DRAWINGS, CANNOT BE ALTERED OR SUBSTITUTED FOR ANY OTHER MATERIAL/PRODUCT OR SPECIFIED MANUFACTURER THAT IS IDENTIFIED IN THAT *'SPECIFIED ULC LISTING'*. THERE SHALL BE NO DEVIATIONS UNDER ANY CIRCUMSTANCES IN ANY *'ULC LISTED ASSEMBLY'* IDENTIFIED IN THESE DRAWINGS.

## SECTION 3.0. LEGEND

**3.1. WOOD LINTELS AND BUILT-UP WOOD**
**(DIVISION B PART 9. TABLES A8 TO A10 AND A12, A15 & A16)**
FORMING PART OF SENTENCE 9.23.4.2.(3), 9.23.4.2.(4), 9.23.12.3.(1),(3), 9.23.13.8.(2), 9.37.3.1.(1)

| 2"x8" SPRUCE #2 | | 2"x10" SPRUCE #2 | | 2"x12" SPRUCE #2 | |
|---|---|---|---|---|---|
| L1 | 2/2"x8" (2/38x184) | L3 | 2/2"x10" (2/38x235) | L5 | 2/2"x12" (2/38x286) |
| B1 | 3/2"x8" (3/38x184) | B3 | 3/2"x10" (3/38x235) | B5 | 3/2"x12" (3/38x286) |
| B2 | 4/2"x8" (4/38x184) | B4 | 4/2"x10" (4/38x235) | B6 | 4/2"x12" (4/38x286) |
| B7 | 5/2"x8" (5/38x184) | B8 | 5/2"x10" (5/38x235) | B9 | 5/2"x12" (5/38x286) |

ENGINEERED LUMBER SCHEDULE

| 1 3/4" x 9 1/2" LVL | | 1 3/4" x 11 7/8" LVL | | 1 3/4" x 14" LVL | |
|---|---|---|---|---|---|
| LVL2 | 1-1 3/4"x9 1/2" | LVL3 | 1-1 3/4"x11 7/8" | LVL10 | 1-1 3/4"x14" |
| LVL4 | 2-1 3/4"x9 1/2" | LVL6 | 2-1 3/4"x11 7/8" | LVL11 | 2-1 3/4"x14" |
| LVL5 | 3-1 3/4"x9 1/2" | LVL7 | 3-1 3/4"x11 7/8" | LVL12 | 3-1 3/4"x14" |
| LVL8 | 4-1 3/4"x9 1/2" | LVL9 | 4-1 3/4"x11 7/8" | LVL13 | 4-1 3/4"x14" |

**3.2. STEEL LINTELS SUPPORTING MASONRY VENEER**
**(DIVISION B PART 9. TABLE 9.20.5.2.B.)**
FORMING PART OF SENTENCE 9.20.5.2.(2) & 9.20.5.2.(3)

| CODE | SIZE | BRICK | STONE |
|---|---|---|---|
| L7 | 3 1/2" x 3 1/2" x 1/4" (89 x 89 x 6.4) | 8'-1" (2.47m) | 7'-6" (2.30m) |
| L8 | 4" x 3 1/2" x 1/4" (102 x 89 x 6.4) | 8'-9" (2.66m) | 8'-1" (2.48m) |
| L9 | 4 7/8" x 3 1/2" x 5/16" (127 x 89 x 7.9) | 10'-10" (3.31m) | 10'-1" (3.09m) |
| L10 | 4 7/8" x 3 1/2" x 3/8" (127 x 89 x 11) | 11'-5" (3.48m) | 10'-7" (3.24m) |
| L11 | 5 7/8" x 3 1/2" x 3/8" (152 x 89 x 11) | 12'-6" (3.82m) | 11'-7" (3.54m) |
| L12 | 7 1/8" x 4" x 3/8" (178 x 102 x 11) | 14'-1" (4.30m) | 13'-1" (3.99m) |

**3.3. DOOR SCHEDULE**
CONFORMING TO SECTIONS 9.5.11, 9.6., 9.7.2.1, 9.7.5.2, & 9.10.13.10

| | | | |
|---|---|---|---|
| 1 | EXTERIOR | 2'-8" x 6'-8" x 1-3/4" (815 x 2030 x 45) INSULATED MIN. R4 (RSI 0.7) | PROVIDE 8'-0" HIGH INTERIOR DOORS FOR ALL 10' CEILING CONDITIONS |
| 1A | EXTERIOR | 2'-10" x 6'-8" x 1-3/4" (865 x 2030 x 45) INSULATED MIN. R4 (RSI 0.7) | |
| 1B | EXTERIOR | 3'-0" x 6'-8" x 1-3/4" (915 x 2030 x 45) INSULATED MIN. R4 (RSI 0.7) | |
| 1C | EXTERIOR | 2'-6" x 6'-8" x 1-3/4" (760 x 2030 x 45) INSULATED MIN. R4 (RSI 0.7) | |
| 1D | EXTERIOR | 2'-8" x 6'-8" x 1-3/4" (815 x 2030 x 45) INS. MIN. R4 (RSI 0.7) (SEE HEX NOTE 20) | |
| 1E | EXTERIOR | 3'-0" x 8'-0" x 1-3/4" (915 x 2440 x 45) INSULATED MIN. R4 (RSI 0.7) | |
| 1F | EXTERIOR | 2'-8" x 8'-0" x 1-3/4" (815 x 2440 x 45) INSULATED MIN. R4 (RSI 0.7) | |
| 2A | EXTERIOR | 2'-8" x 6'-8" x 1-3/4" (815 x 2030 x 45) 20 MIN. F.R.R. DOOR/FRAME WITH APP. SELF CLOSING DEVICE. | |
| 2 | INTERIOR | 2'-6" x 6'-8" x 1-3/8" (815 x 2030 x 35) | |
| 3 | INTERIOR | 2'-6" x 6'-8" x 1-3/8" (760 x 2030 x 35) | |
| 3A | INTERIOR | 2'-4" x 6'-8" x 1-3/8" (710 x 2030 x 35) | |
| 4 | INTERIOR | 2'-0" x 6'-8" x 1-3/8" (610 x 2030 x 35) | |
| 4A | INTERIOR | 2'-2" x 6'-8" x 1-3/8" (660 x 2030 x 35) | |
| 5 | INTERIOR | 1'-6" x 6'-8" x 1-3/8" (460 x 2030 x 35) | |

**3.4. ACRONYMS**

| | | | |
|---|---|---|---|
| AFF | ABOVE FINISHED FLOOR | JST | JOIST |
| BBFM | BEAM BY FLOOR MANUFACTURER | LIN | LINEN CLOSET |
| BG | FIXED GLASS W/ BLACK BACKING | LVL | LAMINATED VENEER LUMBER |
| BM | BEAM | OTB/A | OPEN TO BELOW/ABOVE |
| BBRM | BEAM BY ROOF MANUFACTURER | PL | POINT LOAD |
| CRF | CONVENTIONAL ROOF FRAMING | PLT | PLATE |
| C/W | COMPLETE WITH | PT | PRESSURE TREATED |
| DJ/TJ | DOUBLE JOIST/ TRIPLE JOIST | PTD | PAINTED |
| DO | DO OVER | PWD | POWDER ROOM |
| DRP | DROPPED | RWL | RAIN WATER LEADER |
| ENG | ENGINEERED | SB | SOLID BEARING WOOD POST |
| EST | ESTIMATED | SBFA | SB FROM ABOVE |
| FA | FLAT ARCH | SJ | SINGLE JOIST |
| FD | FLOOR DRAIN | SPR | SPRUCE |
| FG | FIXED GLASS | STL | STEEL |
| FL | FLUSH | T/O | TOP OF |
| FLR | FLOOR | TYP | TYPICAL |
| GT | GIRDER TRUSS | U/S | UNDERSIDE |
| HB | HOSE BIB | WD | WOOD |
| HRV | HEAT RETURN VENTILATION UNIT | WIC | WALK IN CLOSET |
| HWT | HOT WATER TANK | WP | WEATHER PROOF |

**3.5. SYMBOLS**
ALL ELECTRICAL FACILITIES SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 9.34.

| | | | |
|---|---|---|---|
| | CLASS 'B' VENT | | EXHAUST VENT |
| | DUPLEX OUTLET (12" HIGH) | | DUPLEX OUTLET (HEIGHT AS NOTED A.F.F.) |
| | HEAVY DUTY OUTLET | (2/3/4) | SWITCH (2/3/4 WAY) |
| | POT LIGHT | | LIGHT FIXTURE (CEILING MOUNTED) |
| | LIGHT FIXTURE (PULL CHAIN) | | LIGHT FIXTURE (WALL MOUNTED) |
| TV | CABLE T.V. JACK | | TELEPHONE JACK |
| VAC | CENTRAL VACUUM OUTLET | | CHANDELIER (CEILING MOUNTED) |

■ SA **SMOKE ALARM** (9.10.19.)
PROVIDE ONE PER FLOOR, NEAR THE STAIRS CONNECTING THE FLOOR LEVEL. ALARMS ARE TO BE INSTALLED IN EACH SLEEPING ROOM AND IN A LOCATION BETWEEN SLEEPING ROOMS AND CONNECTING HALLWAYS AND WIRED TO BE INTERCONNECTED TO ACTIVATE ALL ALARMS IF ONE SOUNDS. ALARMS ARE TO BE CONNECTED TO AN ELECTRICAL CIRCUIT AND WITH A BATTERY BACKUP. ALARM SIGNAL SHALL MEET TEMPORAL SOUND PATTERNS MIN. ALARMS SHALL HAVE A VISUAL SIGNALLING COMPONENT AS PER THE "NATIONAL FIRE ALARM AND SIGNALING CODE 72".

CMD **CARBON MONOXIDE ALARM** (9.33.4.)
** CHECK LOCAL BY-LAWS FOR REQUIREMENTS ** A CARBON MONOXIDE ALARM(S) CONFORMING TO CAN/CGA-6.19 SHALL BE INSTALLED ON OR NEAR THE CEILING IN EACH DWELLING UNIT ADJACENT TO EACH SLEEPING AREA. CARBON MONOXIDE ALARM(S) SHALL BE PERMANENTLY WIRED WITH NO DISCONNECT SWITCH, WITH AN ALARM THAT IS AUDIBLE WITHIN SLEEPING ROOMS WHEN THE INTERVENING DOORS ARE CLOSED.

☒ SB **SOLID BEARING (BUILT-UP WOOD COLUMNS AND STUD POSTS)**
THE WIDTH OF A WOOD COLUMN SHALL NOT BE LESS THAN THAN THE WIDTH OF SUPPORTED MEMBER. BUILT-UP WOOD COLUMNS SHALL BE NAILED TOGETHER WITH NOT LESS THAN 3" (76) NAILS SPACED NOT MORE THAN 11 3/4" (300) O.C. THE NUMBER OF STUDS IN A WALL DIRECTLY BELOW A GIRDER TRUSS OR ROOF BEAM SHALL CONFORM TO TABLES A-34 TO A-37. (9.17.4., 9.23.10.7.)

TWO STOREY VOLUME SPACE. SEE CONSTRUCTION NOTE 39.

VARYING PLATES, BUILT-OUT FLOORS, BEARING WALLS, ICE & WATER SHIELD

EXPOSED BUILDING FACE -O.B.C. 9.10.14. OR 9.10.15. REFER TO HEX NOTE 35. & DETAILS FOR TYPE AND SPECIFICATIONS.

1 HR. PARTY WALL REFER TO HEX NOTE 40.

2 HR. FIREWALL REFER TO HEX NOTE 40A.

## SECTION 4.0. CLIMATIC DATA

DESIGN SNOW LOAD (9.4.2.2.): 1.23 kPa
WIND LOAD (q50) (SB-1.2.): 0.44 kPa

STAMP

LICENSED PROFESSIONAL ENGINEER
2021-05-14
D. FERRARI
100166929
PROVINCE OF ONTARIO

FOR STRUCTURAL ONLY
NOT INCLUDING ENGINEERED FLOOR OR ROOF SYSTEM

CONTRACTOR MUST VERIFY ALL DIMENSIONS ON THE JOB. REPORT ANY DISCREPANCIES TO HUNT DESIGN ASSOCIATES INC. (H.D.A.I.) BEFORE PROCEEDING WITH THE WORK. ALL THE DRAWINGS & SPECIFICATIONS ARE THE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF H.D.A.I. ALL CONSTRUCTION TO ADHERE TO THESE PLANS AND SPECIFICATIONS 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. ONT. REG. 332/12.
CONSTRUCTION NOTE REVISION DATE: MAY 9, 2019

**CONSTRUCTION NOTES 2**

JLTRABALLO | TUE MAY 11/21 03:03 PM | C:\USERS\JLTRABALLO\DESKTOP\216102WT2009-END.DWG

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 | | |
|---|---|---|
| Derek R. Santos | | 37308 |
| NAME | SIGNATURE | BCIN |
| REGISTRATION INFORMATION | | |
| HUNT DESIGN ASSOCIATES INC. | | 19695 |

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ROYAL PINE HOMES - 216102
'CENTREFIELD', WEST GORMLEY, RICHMOND HILL, ON.

UNIT 2009-END
REV.2021.05.11

| Drawn By | Checked By | Scale | File Number | Page Number |
|---|---|---|---|---|
| KM | DS | 3/16"=1'-0" | 216102WT2009-END | 18 of 18 |

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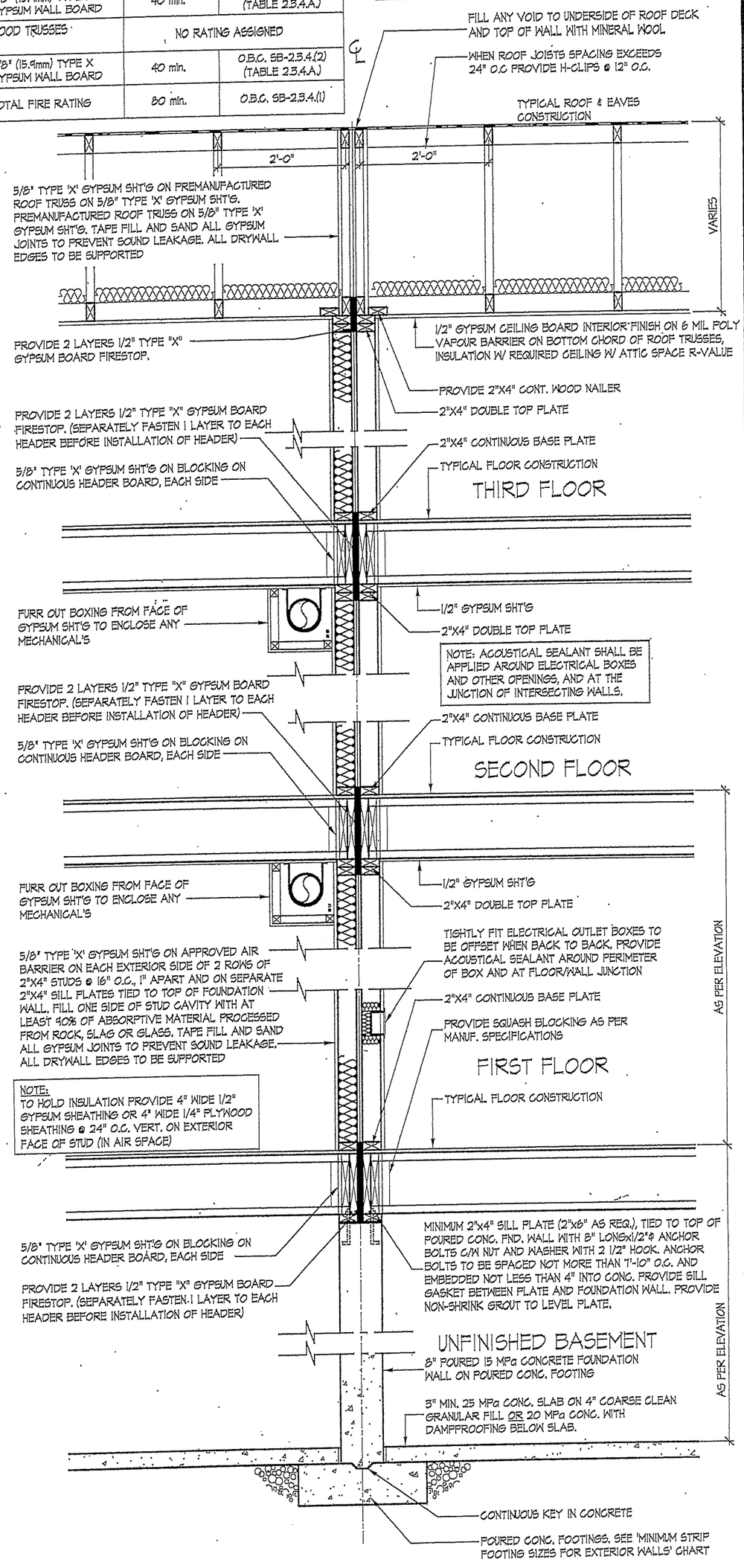
| FIRE RATINGS - PARTY WALL TRUSS SPACE (OBC REF. - SB-2.3) | | |
|---|---|---|
| COMPONENT | FIRE RATING | CODE REFERENCE |
| 5/8" (15.9mm) TYPE X GYPSUM WALL BOARD | 40 min. | O.B.C. SB-2.3.4.(2) (TABLE 2.3.4.A) |
| WOOD TRUSSES | NO RATING ASSIGNED | |
| 5/8" (15.9mm) TYPE X GYPSUM WALL BOARD | 40 min. | O.B.C. SB-2.3.4.(2) (TABLE 2.3.4.A) |
| TOTAL FIRE RATING | 80 min. | O.B.C. SB-2.3.4.(1) |

| FIRE & SOUND RATINGS - PARTY WALL | | | |
|---|---|---|---|
| WALL TYPE | CODE REFERENCE | RATING | |
| W13C | O.B.C. SB-3 | 54 STC | 1.0 HR. FRR |




NOTE: POURED CONC. FOOTING ON NATURAL UNDISTURBED SOIL OF 75kPa OR COMPACTED ENGINEERED FILL WITH MIN. BEARING CAPACITY OF 150kPa. FOOTING SIZE SHOWN FOR 16'-0" (4.9m) MAXIMUM JOIST SPAN ONLY. JOIST SPAN EXCEEDING 16'-0" (4.9m) SHALL BE ENGINEERED. IF SOIL BEARING DOES NOT MEET MINIMUM CAPACITY, ENGINEERED FOOTINGS ARE REQUIRED. ACTUAL SOIL BEARING CAPACITY TO BE VERIFIED WITH SOIL ENGINEERING REPORT.

| MINIMUM STRIP FOOTING SIZES (9.15.3.) | | | |
|---|---|---|---|
| NUMBER FLOORS SUPPORTED | SUPPORTING INT. LOAD BEARING MASONRY WALL | SUPPORTING EXTERIOR | SUPPORTING PARTYWALL |
| 1 | 16" W x 6" D | 16" W x 6" D | 16" W x 6" D |
| 2 | 24" W x 8" D | 20" W x 6" D | 24" W x 8" D |
| 3 | 36" W x 14" D | 26" W x 9" D | 36" W x 14" D |

NOTE: FOOTING SIZE SUBJECT TO CERTIFICATION BY A SOIL CONSULTANT

02 1/2" = 1'-0"

## TYPICAL 1 HR PARTY WALL SECTION, PARALLEL ROOF TRUSSES, 2"X4" DOUBLE STUDS - 3 STOREY

SB-12 E

PRESCRIPTIVE COM

PA

BUILDING COMPON

INSULATION RSI (R)

CEILING W/ ATTIC S

CEILING W/O ATTIC

EXPOSED FLOOR

WALLS ABOVE GRA

BASEMENT WALLS

* PROPOSED VALU

BELOW GRADE SLA

EDGE OF BELOW G

HEATED SLAB OR S

WINDOWS/SLIDING

SKYLIGHTS (MAX. U

APPLIANCE EFFICIE

SPACE HEATING EC

HRV EFFICIENCY (%

DHW HEATER (EF)

AREA CALCULATIONS

GROUND FLOOR AREA

MAIN FLOOR AREA

THIRD FLOOR AREA

SUBTOTAL

DEDUCT ALL OPEN AREAS

TOTAL NET AREA

COVERAGE W/OUT PORCH

COVERAGE W/ PORCH

WINDOW / WALL AREA CALCULATIONS

GROSS WALL AREA

GROSS WINDOW AREA (INCL. GLASS DOORS & SKYLIGHT

TOTAL WINDOW %