

## CONSTRUCTION NOTES

ALL CONSTRUCTION TO ADHERE TO THESE PLANS AND SPEC'S AND TO CONFORM TO THE ONTARIO BUILDING CODE AND ALL OTHER APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION. THESE REQUIREMENTS ARE TO BE TAKEN AS MINIMUM SPECIFICATIONS. ONT. REG. 332/12

- ROOF CONSTRUCTION NO.210 (10.25kg/m2) ASPHALT SHINGLES, 11.1mm (7/16")

  NO.210 (10.25kg/m2) ASPHALT SHINGLES, 11.1mm (7/16")

  ASPENITE SHEATHING WITH "H" CLIPS. APPROVED WOOD

  TRUSSES @ 600mm (24") O.C. MAX. APPROVED EAVES

  PROTECTION TO EXTEND 900mm (3'-0") FROM EDGE OF ROOF

  AND MIN. 300mm (12") BEYOND INNER FACE OF EXTERIOR WALL, (EAVES PROTECTION NOT REQ'D. FOR ROOF 8:12 OR GREATER) 38x89 (2"x4") TRUSS BRACING @ 1830mm (6'-0") O.C. AT BOTTOM CHORD. PREFIN. ALUM. EAVESTROUGH, FASCIA, RWL & VENTED SOFFIT. ATTIC VENTILATION 1:300 OF INSULATED CEILING AREA WITH 25% AT EAVES. AND 25% AT RIDGE (OBC
- FRAME WALL CONSTRUCTION (2"x6")
  SIDING AS PER ELEVATION, APPROVED AIR BARRIER 11.1mm SIDING AS PER ELEVATION, APPROVED AIM BARKIER 11.1mm (7/16") EXTERIOR TYPE SHEATHING, 38x140 (2"x6") STUDS @ 400mm (16") O.C., RSI 3.87 (R22) INSULATION AND APPROVED VAPOUR BARRIER AND APPROVED CONT. AIR BARRIER, 13mm (1/2") INT. DRYWALL FINISH. SIDING TO BE MIN. 200mm (8") ABOVE FIN. GRADE
- 2A.) FRAME WALL CONSTRUCTION (2"x4" GARAGE WALL) SIDING AS PER ELEVATION, APPROVED AIR BARRIER, 38x89 SIDING AS PER ELEVATION, APPROVED AIR BARKIER, 38x99 (2"x4") STUDS @ 400mm (16") O.C., [FOR CLIENT UPGRADE ONLY — RSI 3.35 (R19) INSULATION AND APPROVED VAPOUR BARRIER, 13mm (1/2") INT. DRYWALL FINISH.] SIDING TO BE MIN. 200mm (8") ABOVE FIN. GRADE
- 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
  AIR BARRIER 11.1mm (7/16") EXTERIOR TYPE SHEATHING,
  38x140 (2"x6") STUDS @ 400mm (16") O.C., RSI 3.87 (R22)
  INSULATION AND APPROVED VAPOUR BARRIER WITH APPROVED
  CONTIN. AIR BARRIER. 13mm (1/2") INT. DRYWALL FINISH.
  PROVIDE WEEP HOLES @ 800mm (32") O.C. BOTTOM COURSE
  AND OVER OPENINGS. PROVIDE THRU-WALL FLASHING UP MIN.
  150mm (6") BEHIND BUILDING PAPER. BRICK TO BE MIN.
  150mm (6") ABOVE FINISH GRADE. 150mm (6") ABOVE FINISH GRADE.
- BRICK VENEER CONSTRUCTION (2"x4" GARAGE WALL)
  90mm (4") FACE BRICK 25mm (1") AIR SPACE,
  22x180x0.76mm (7/8"x7"x0.03") GALV. METAL TIES @ 400mm 22x180x0.76mm (7/8"x"x0.03") CALV. METAL TIES @ 400mm (16") O.C. HORIZONTAL 600mm (24") O.C. VERTICAL. APPROVED ARR BARRIER, 38x89 (2"x4") STUDS @ 400mm (16") O.C. [FOR CLIENT UPGRADE ONLY — RSI 3.35 (R19) INSULATION AND APPROVED VAPOUR BARRIER, 13mm (1/2") INT. DRYWALL FINISH.] PROVIDE WEEP HOLES @ 800mm (32") O.C. BOTTOM COURSE AND OVER OPENINGS. PROVIDE THRU-WALL FLASHING UP MIN. 150mm (6") BEHIND BUILDING PAPER. BRICK TO BE MIN. 150MM(6") ABOVE FINISH GRADE.
- INTERIOR STUD PARTITIONS FOR BEARING PARTITIONS 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") INT. DRYWALL BOTH SIDES OF STUDS, PROVIDE 38x140 (2"x6") STUDS/PLATES WHERE NOTED.
- FOUNDATION WALL/FOOTINGS: -SEE OBC 9.15.3, 9.15.4 200mm (8") POURED CONC. FDTN. WALL 20MPG (c/w 2-15M REBAR TOP & BOTTOM) WITH BITUMENOUS DAMPPROOFING AND OPT. DRAINAGE LAYER. DRAINAGE LAYER REQ. WHEN BASEMENT INSUL. DRAINAGE LAYER. DRAINAGE LAYER REQ. WHEN BASEMENT INSUL. EXTENDS 900 (2'-11") BELOW FIN. GRADE. MAXIMUM POUR HEIGHT 2390 (7'-10") ON 500x155 (20"%6") CONTINUOUS KEYED CONC. FTG. BRACE FOTN. WALL PRIOR TO BACKFILLING. ALL FOOTINGS SHALL REST ON NATURAL UNDISTURBED SOIL OR COMPACTED ENGINEERED FILL, WITH MIN. BEARING CAPACITY OF 100kPa OR GREATER. IF SOIL BEARING DOES NOT MEET MIN. CAPACITY, ENGINEERED FOOTINGS ARE REQUIRED. MAX. FLOOR LIVE LOAD OF 2.4kpa(50psf) PER FLOOR, AND MAX. LENGTH OF SUPPORTED JOISTS IS 4.9m (16'-1"). REFER TO SOILS REPORT FOR SOILS CONDITIONS AND BEARING CAPACITY.
- 6. 100mm (4") DIA. WEEP TILE 150mm (6") CRUSHED STONE OVER AND AROUND WEEPING TILES.
- <u>BASEMENT SLAB</u> OBC. 9.3.1.6.(1)(b) & 9.16.4.5.(1) 80mm (3")Min. 25MPa (3600psi) CONC. SLAB ON 100mm (4") COARSE GRANULAR FILL, OR 15MPa. (2200psi) CONC. WITH DAMPPROOFING BELOW SLAB.
- (8.) EXPOSED FLOOR TO EXTERIOR PROVIDE RSI 5.46 (R31) INSULATION, APPROVED VAPOUR BARRIER AND CONTINUOUS AIR BARRIER, FINISHED SOFFIT.
- OBC. 12.3.2.1 & 12.3.3.7  $\underline{\text{ATTIC INSULATION}}$  RSI 8.81 (R60) BLOWN IN ROOF INSULATION AND APPROVED VAPOUR BARRIER, 13mm (1/2") INT. DRYWALL FINISH OR APPROVED EQUAL.
- STAIRS, STEPS, HANDRAILS -OBC. 9.8.--9.8.2.1(2) STAIR WIDTH MEASURED BETWEEN WALL FACES OR GUARDS SHALL BE NOT LESS THAN 860mm (33 &") FOR REQUIRED EXIT STAIRS SERVING A HOUSE OR DWELLING UNIT. —9.8.2.2(3) CLEAR HEIGHT OVER STAIRS SHALL NOT BE LESS THAN 1950mm (76 3")

-9.8<u>.4</u> STEP DIMENSIONS (TABLE 9.8.4.1) MINIMUM MAXIMUM
125mm (4 15") 200mm (7 8") STAIR COMPONENT RUN 255mm (10 fb") 355mm (14") -9.8.4.4 UNIFORMITY & TOLERANCES FÖR RISERS & TREADS -BETWEEN ADJACENT TREADS & LANDINGS = 5mm -BETWEEN TALLEST & SHORTEST RISER IN FLIGHT=10mm

-9.8.4.6(1)(b) MAX. NOSING 25mm (1") -9.8.7.5(1)(b) CLEARANCE BETWEEN HANDRAIL AND SURFACE BEHIND IT TO BE MIN. 50mm (1  $^{15}_{8}$ ") -9.8.7.6(1) HANDRAILS SHALL NOT PROJECT MORE THAN 100mm (3 15") INTO REQUIRED WIDTH OF STAIR <SEE 9.8.2.1(1)>

- GUARDS -OBC. 9.8.8.3.-(1) EXT. GUARDS HEIGHT: =1070mm (42  $\frac{1}{8}$ ") MIN. (2) INT. GUARDS HEIGHT: =900mm (35  $\frac{7}{16}$ ") MIN. (1) STAIR LANDING GUARDS: =1070mm (42  $\frac{1}{8}$ ") MIN. -9.8.8.5(1) MAX. OPENINGS THROUGH GUARDS = 100mm (3  $\frac{15}{16}$ )
- 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. USE NON-SHRINK GROUT TO LEVEL SILL PLATE WHEN REQUIRED. (SEE 0BC. 9.23.7) L PLATE TO BE PRESSURE TREATED OR 6 MIL POLY BELOW R.12 (34") CONTINUOUS BATT INSULATION. 2"x4" STUD WALL 36
- PLACED 32" AWAY FROM WALL. FILL STUD CAVITY WITH R10 BATT INSULATION. APPROVED VB TO 8" ABOVE FLOOR LEVEL. OR

-APPROVED BLANKET INSULATION (R20) MECHANICALLY SECURED TO CONCRETE FOUNDATION WALL WITH 100mm HILTI PINS (COMES WITH PLASTIC WASHER)

DAMPPROOF WITH BUILDING PAPER BETWEEN THE FOUNDATION WALL AND INSULATION UP TO GRADE LEVEL.  $\label{eq:paper}$ 

(SEE DETAIL ON "SB-12 DETAILS" PAGE)

- (14.) BEARING STUD PARTITION
  38x89 (2"x4") STUDS @ 400mm (16") 0.C. 38x89 (2"x4")
  SILL PLATE ON DAMPPROOFING MATERIAL, 13mm (1/2") DIA. ANCHOR BOLTS 200mm (8") LONG, EMBEDDED MIN. 100mm (4") INTO CONC. @ 2400mm (7"-10") C.C. 100mm (4") HIGH CONC. CURB ON 350x155 (14"x6") CONC. FOOTING. ADD HORIZ. BLOCKING AT MID—HEIGHT IF WALL IS UNFINISHED.
- STEEL BASEMENT COLUMN (SEE O.B.C. 9.17.3.1 9.17.3.4)
  75mm (3") DIA. ADJUSTABLE STL. COL. CONFORMING TO
  CAN/CCSB-7.2M, AND WITH 102x150x9.5 (4"x6"x3/8") STL.
  PLATE TOP & BOTTOM. 910x910x300 (36"x36"x12") CONC.
  FOOTING ON UNDISTURBED SOIL OR ENGINEERED FILL CAPABLE
  OF SUSTAINING A PRESSURE OF 100 Kpg. MINIMUM AND AS PER
  SOILS REPORT
- STEEL BASEMENT COLUMN (SEE O.B.C. 9.17.3.1, 9.17.3.4) 3"x3"x(.188) NON-ADJUSTABLE STL, COL, WITH 150x150x9.5 (7%6"x3/8") STL. TOP & BOTTOM PLATE ON 910x910x300 (36"x36"x12"). CONC. FOOTING ON UNDISTURBED SOIL OR ENGINEERED FILL CAPABLE OF SUSTAINING A PRESSURE OF 100 Kpa. MIN. AND AS PER SOILS REPORT.
- 5B) STEEL COLUMN (SEE OBC. 9.17.3.1, 9.17.3.4) 3"x3"x(.188) NON-ADJUSTABLE STL. COL. TO BE ON 150x150x9.5 (6"x6"x3/8") STEEL TOP PLATE, & BOTTOM PLATE. BASE PLATE 120x250x12.5 (4 1/2"x10"x1/2") WITH 2-12mm DIA. x 300mm LONG x50mm HOOK ANCHORS (2-1/2"x12"x2") FIELD WELD COL. TO BASE PLATE
- STEEL COLUMN (SEE OBC. 9.17.3.1, 9.17.3.4) 90mm(3 DIA.X4.78mm(.188) NON-ADJUSTABLE STL. COL. TO BE ON 150x150x9.5 (6"x6"x3/8") STEEL TOP PLATE, & BOTTOM PLATE. BASE PLATE 120x250x12.5 (4 1/2"x10"x1/2") WITH 2-12mm DIA. x 300mm LONG x50mm HÓOK ANCHÓRS (2-1/2"x12"x2") FIELD WELD COL. TO BASE PLATE.
- BEAM POCKET OR 300x150 (12"x6") POURED CONC. NIB WALLS. MIN. BEARING 90mm (3-1/2")
- 19x64 (1"x3") CONTINUOUS WD. STRAPPING BOTH SIDES OF STEEL BEAM.
- GARAGE SLAB: 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 AT 1% MIN.
- 13mm (1/2") GYPSUM BD. ON WALL AND CEILING BETWEEN HOUSE AND GARAGE, RSI 3.87 (R22) IN WALLS, RSI 5.46 (R31) IN CEILING. PROVIDE APPROVED AIR BARRIER. TAPE AND SEAL
- 20. DOOR AND FRAME GASPROOFED. DOOR EQUIPPED WITH SELF CLOSING DEVICE AND WEATHERSTRIPPING. PER OBC 9.10.13.15
- WOOD STEP, C/W HANDRAIL & LANDING IF MORE THAN 3RISERS, MAX.RISE 200mm (7-7/8") MIN.TREAD 255mm (10-1/16") SEE OBC 9.8.9.2, 9.8.9.3 & 9.8.10
- CAPPED DRYER EXHAUST VENTED TO EXTERIOR. (USE 100mm(4") DIA. SMOOTH WALL VENT PIPE) OBC 6.2.3.8.(7)
- ATTIC ACCESS HATCH 545x610 (21.5"x24") WITH A MIN. AREA OF 3.44 SF WITH WEATHERSTRIPPING RSI 7.0 (R40) RIGID INSUL. BACKING OBC 9.19.2
- FIREPLACE CHIMNEYS -OBC. 9.21.- TOP OF FIREPLACE CHIMNEY SHALL BE 915mm (3'-O") 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.
- MECHANICAL EXHAUST FAN, VENTED TO EXTERIOR, TO PROVIDE AT LEAST ONE AIR CHANGE PER HOUR.
- 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 WITH 2-19mm (3/4") x 200mm (8") LONG GALV. ANCHORS WITHIN SOLID BLOCK COURSE. LEVEL WITH NON-SHRINK GROUT

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

- 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.
- 3-2"x6" BUILT-UP-POST ON 24"x24"x10" CONCRETE FOOTING. (SEPARATE WOOD FROM CONCRETE W/ 6mil POLY AS PER OBC 9.17.4)
- STEP FOOTINGS: MIN. HORIZ. STEP = 600mm (23-5/8"). 30. STEP FOOTINGS: MIN. HURIZ. SIEF = 00011111 \( \) MAX. VERT. STEP = 600mm (23-5/8") FOR FIRM SOILS.
- PORCH SLAB/STEPS: 130 mm (5") MIN. CONC. 32 MPo SLAB AIR ENTRAINMENT MIN. 5 TO 8% AT 28 DAYS, 10 M BARS © 250 O/C EACH WAY 10M DOWELS @400 (16") O.C. 2-15m IN THICKENED AREA FROM WALL TO SLAB ALL SIDES (SEE DETAIL)
- DIRECT VENT FURNACE TERMINAL MIN. 900mm (36") FROM A GAS REGULATOR. MIN. 300mm (12") ABOVE FIN. GRADE, FROM ALL OPENINGS, EXHAUST AND INTAKE VENTS. HRV INTAKE TO BE A MIN. OF 1830mm (6"-0") FROM ALL EXHAUST TERMINALS. REFER TO GAS UTILIZATION CODE.
- DIRECT VENT GAS FIREPLACE. VENT TO BE A MINIMUM 300mm (12") FROM ANY OPENING AND ABOVE FIN. GRADE. REFER TO GAS UTILIZATION CODE.
- SUBFLOOR -19mm (3/4") T & G SUBFLOOR GLUED AND SCREWED TO ENGINEERED FLOOR JOIST SYSTEM. SUPPLY AND INSTALL BLOCKING AND OD DDIDOING IT INDICATED BY FLOOD JOIST DESIGNED TO MANUFACTURER'S LAYOUTS AND INSTALLATION INSTRUCTIONS)
- EXPOSED BUILDING FACE -OBC. 9.10.14.5- EXTERIOR WALLS TO HAVE A FIRE RESISTANCE RATING OF NOT LESS THAN 45 min. 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-COMBUSTIBLE MATERIAL.
- $\begin{array}{c} \underline{\text{LINTEL SPECIFICATION}} \\ \text{ALL WINDOW AND DOOR LINTELS TO BE COMPRISED OF } 2-2\text{X}10 \end{array}$ BUILT-UP WOOD BEAM, EACH END BEARING ON P2s (UNLESS

THE FDTN. WALL SHALL NOT BE REDUCED TO LESS THAN 90mm (3 &") THICK TO A MAX. DEPTH OF 350mm (13 &") AND EXTIFIED PERIVIT CONCENTRAL WITH METAL TIES SAVEED TIFIED PERIVIT CONCENTRAL WITH METAL TIES SAVEED TIFIED PERIVIT CONCENTRAL WITH METAL TIES SAVEED THE PERIVIS AND 900mm (36") O.C. VERTICALLY AND 900mm (36") O.C. HORIZONTALLY. FILL SPACE BETWEEN WALL AND FARROW ORT the permit plans of documents with MORTAR. (SEE OBC 9.15.4.7) Shall be kept & maintained on single participations of the permit plans of the permit p

available to an inspector Upon request 2023-11-11

38.) CONVENTIONAL ROOF FRAMING 38x140 (2"x6") RAFTERS @ CONVENTIONAL ROOF HAMING 38x140 (2 x6°) RAFTERS 9
400mm (16°0-C.), FOR MAX. 11'-7" SPAN. 38x184 (2"x8")
RIDGE BOARD. 38x89 (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") @ 400mm (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") CENTRE POST TO THE TRUSS BELOW, LATERALLY BRACED
AT 1800mm (6'-0") O. VERTICALLY AT 1800mm (6'-0") O.C. VERTICALLY.

TWO STOREY VOLUME SPACES FOR HIGH WALL UP TO 18'=0": CONSTRUCTION: 2"X6" SPACING AS INDICATED BLOCKING: 3 ROWS @ 4'-6" O/C ± SHEATHING: 7/16" ASPENITE NAILING: 2" STAPLES BET. 4" AND 6" O/C

STUD SPACING WITH VARIOUS FINISHES:

SIDING-METAL OR VINYL- 2"X6" @12" O/C STUCCO -2"X6" @16" O/C BRICK TO 4'-0" -2"X6" @16" O/C BRICK FULL HEIGHT -2-2"X6" @12" 0/C STRIP FOOTING SUPPORTING EXTERIOR WALLS
-SEE OBC 9.15.3.

-ASSUMING MASONRY VENEER CONSTRUCTION, MAX. FLOOR -ASSUMING MASONITY VENEER CONSTRUCTION, MAX. FLOUR
LIVE LOAD OF 2.4kPa. (50psf.) PER FLOOR, AND MAX. LENGTH
OF SUPPORTED FLOOR JOISTS IS 4.9m (16"-1").
THE STRIP FOOTING SIZE IS AS FOLLOWS:
2 STOREY ( STANDARD ) 500x155 (20"x6")
2 STOREY ( WALK-OUT BASEMENT ) 545x175 (22"x7") (UNLESS OTHERWISE NOTED ON PLAN)

EXTERIOR WALLS FOR WALK-OUT CONDITIONS THE EXTERIOR BASEMENT STUD WALL TO BE 38x140 (2"x6") STUDS @ 16" o.c. OR 38x89 (2"x4") STUDS @ 12"o.c.

FLASHING FOR EXT. WALL OPENINGS (0.B.C.9.27.3.8.(3)

44\ SUMP PITS (WHERE REQ'D) SEE 0.B.C. 9.14.5.2
-MUST BE SEALED AS PER 9.25.3.3.(16)

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

#### WINDOWS:

- MINIMUM\_BEDROOM\_WINDOW -OBC. 9.9.10. AT LEAST ONE BEDROOM\_WINDOW ON A GIVEN FLOOR IS TO HAVE MIN. 0.35m2 UNOBSTRUCTED\_GLAZED\_OR\_OPENABLE\_AREA\_WITH MIN. CLEAR\_WIDTH\_OF\_380 mm (1'-3"). WINDOW\_GUARDS -OBC. 9.8.8.1. A GUARD\_IS REQUIRED WHERE THE TOP\_OF\_THE WINDOW SILL IS LOCATED\_LESS THAN 480mm (1'-7") ABOVE FIN. FLOOR AND THE DISTANCE FROM THE FIN. FLOOR TO THE ADJACENT\_GRADE IS GREATER THAN 1800mm (5'-11")
  ALL WINDOWS TO COMPLY WITH THERMAL\_RESISTANCE\_REQUIREMENTS\_STATED\_IN\_OBC\_12.3.2.6. AND SB12

  PEPSCRIPTIVE COMPLIANCE PACKAGE\_AND\_OBC\_9.5.96.9.7
- PRESCRIPTIVE COMPLIANCE PACKAGE, AND OBC 9.5, 9.6, 9.7

GENERAL

- MECHANICAL VENTILATION IS REQUIRED TO PROVIDE 0.3 AIR CHANGES PER HOUR AVERAGED OVER 24 HOURS. SEE
- ALL DOWNSPOUTS TO DRAIN AWAY FROM THE BUILDINGAS PER OBC 9.26.18.2 AND MUN. STANDARDS.
  ALL WINDOW WELLS TO DRAIN TO FOOTING LEVEL PER OBC 9.14.6.3 CHECK WITH LOCAL AUTHORITY.
  PROVIDE STUD WALL REINFORCEMENT FOR FUTURE GRAB BARS IN BATHROOMS. REINF. OF STUD WALLS SHALL BE
  INSTALLED ADJACENT TO WATER CLOSETS AND SHOWER OR BATHTUB IN MAIN BATHROOM, SEE OBC 9.5.2.3.

LUMBER:

- ALL LUMBER SHALL BE SPRUCE NO.2 GRADE, UNLESS NOTED OTHERWISE.
  STUDS SHALL BE STUD GRADE SPRUCE, UNLESS NOTED OTHERWISE.
  LUMBER EXPOSED TO THE EXTERIOR TO BE SPRUCE No.2 GRADE PRESSURE TREATED OR CEDAR, UNLESS NOTED
- OTHERWISE.

  ALL LAMINATED VENEER LUMBER (L.V.L.) BEAMS, GIRDER TRUSSES, AND METAL HANGER CONNECTIONS SUPPORTING ROOF FRAMING TO BE DESIGNED & CERTIFIED BY TRUSS MANUF.

  LVL BEAMS SHALL BE 2.0E WS MICRO-LAM LVL (Fb=2800psi.MIN.) OR EQUIVALENT. NAIL EACH PLY OF LVL WITH 89mm (3 1/2") LONG COMMON WIRE NAILS @ 300mm (12") 0.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 13mm (1/2") DIA. GALVANIZED BOLTS BOLTED AT MID-DEPTH OF BEAM @ 915mm (3"-0") 0.C. PROVIDE TOP MOUNT BEAM HANGERS TYPE "SCL" MANUFACTURED BY MGA CONNECTOR LTD. Tel. (905) 642-3175 OR EQUAL FOR ALL LVL BEAM TO BEAM CONNECTIONS UNLESS OTHERWISE NOTED.

  JOIST HANGERS: PROVIDE METAL HANGERS FOR ALL JOISTS AND BUILT-UP WOOD MEMBERS.

  WOOD FRAMING NOT TREATED WITH A WOOD PRESERVATIVE, IN CONTACT WITH CONCRETE, SHALL BE SEPARATED FROM THE CONCRETE BY AT LEAST 2 mil. POLYFTHYLENE ILM, No. 50 (451bs.) ROLL ROOFING OR OTHER DAMPPROOFING MATERIAL

- CONCRETE BY AT LEAST 2 mil. POLYETHYLENE FILM, No. 50 (45lbs.) ROLL ROOFING OR OTHER DAMPPROOFING MATERIAL, EXCEPT WHERE THE WOOD MEMBER IS ST LEAST 150mm (6") ABOVE THE GROUND.

STEEL:

- STRUCTURAL STEEL SHALL CONFORM TO CAN/CSA-G40-21 GRADE 300W. HOLLOW STRUCTURAL SECTIONS SHALL CONFORM TO CAN/CSA-G40-21 GRADE 350W CLASS "H".
  REINFORCING STEEL SHALL CONFORM TO CSA-G30-18M GRADE 400R.

## WOOD LINTELS AND BUILT-UP WOOD BEAMS

- 2/38 x 184 (2/2" x 8") SPR.#2 3/38 x 184 (3/2" x 8") SPR.#2 4/38 x 184 (4/2" x 8") SPR.#2
- 2/38 x 235 (2/2" x 10") SPR.#2 3/38 x 235 (3/2" x 10") SPR.#2 4/38 x 235 (4/2" x 10") SPR.#2
- 2/38 x 286 (2/2" x 12") SPR.#2 3/38 x 286 (3/2" x 12") SPR.#2 4/38 x 286 (4/2" x 12") SPR.#2
- LAMINATED VENEER LUMBER (LVL) BEAMS
- 2-1 3/4"x7 1/4" (2-45x184) 3-1 3/4"x7 1/4" (3-45x184) 4-1 3/4"x7 1/4" (4-45x184) 2-1 3/4"x9 1/2" (2-45x240) 3-1 3/4"x9 1/2" (3-45x240) LVL5
- 2-1 3/4"x11 7/8" (2-45x300) 3-1 3/4"x11 7/8" (3-45x300)

# LOOSE STEEL LINTELS

M.C. MEDICINE CABINET

**≥**6,2

- 90 x 90 x 6.0L (3-1/2" x 3-1/2" x 1/4"L) 90 x 90 x 8.0L (3-1/2" x 3-1/2" x 5/16"L) 100 x 90 x 8.0L (4" x 3-1/2" x 5/16"L) 125 x 90 x 8.0L (5" x 3-1/2" x 5/16"L) 125 x 90 x 10.0L (5" x 3-1/2" x 3/8"L)
- L12 150 x 100 x 10.0L (6"x 4" x 3/8"L)
- STEEL COLUMNS (UNLESS NOTED OTHERWISE)

DOUBLE VOLUME WALL SEE NOTE (39.)

P2 - 2 MEMBER BUILT-UP STUD P3 - 3 MEMBER BUILT-UP STUD P4 - 4 MEMBER BUILT-UP STUD P5 - 5 MEMBER BUILT-UP STUD

NOTE: SOLID BEARING TO BE AS WIDE AS SUPPORTED MEMBER, SOLID

BEARING TO BE A MINIMUM OF P2 (ONE CONTINUOUS STUD AND ONE JACK STUD, UNLESS OTHERWISE NOTED ON PLAN.)

SMOKE ALARM (AUDIBLE/VISUAL)—OBC 9.10.19.
PROVIDE 1 PER FLOOR, NEAR THE STAIRS CONNECTING THE FLOOR
LEVEL. ONE PER SLEEPING ROOM, INCLUDING HALLWAYS BE CONNECTED
TO AN ELECTRICAL CIRCUIT AND INTERCONNECTED TO ACTIVATE ALL
ALARMS WHEN ONE ALARM SOUNDS.

-9.10.19.1(2) REQUIRED SMOKE ALARMS TO HAVE A VISUAL COMPONENT

CARBON MONOXIDE ALARM (OBC 9.33.4)
WHERE A FUEL-BURNING APPLIANCE IS INSTALLED IN A DWELLING UNIT,

SOLID WOOD BEARING

TP = (1) 3" DIA. ADJ. ST. POST 2TP = (2) 3" DIA. ADJ. ST. POSTS HSS = 3.5"X3.5" HOLLOW STRUCTURAL SECTION STEEL POST

MASONRY VENEER LINTEL SCHEDULE [OBC2012] PROVIDE 6"MINIMUM BEARING EACH END 9.20.5.2B					
OPENINGS	LINTEL SIZE				
UP TO 8'-0"	3 1\2" × 3 1\2" × 1/4"				
8'-0" TO 8'-8"	4" × 3 1\2" × 1/4"				
8'-8" TO 10'-10"	5" x 3 1\2" x 5/16"				
10'-10" TO 11'-5"	5" x 3 1\2" x 7/16"				
11'-5" TO 11'-9"	5" x 3 1\2" x 1/2"				
11'-9" TO 12'-6"	6" x 3 1/2" x 7/16"				
12'-6" TO 13'-4"	6" x 3 1/2" x 1/2"				

# **LEGEND**

- EXHAUST VENT
- $\rightarrow$ DUPLEX OUTLET (12" HIGH)
- WEATHERPROOF DUPLEX OUTLET  $\Rightarrow$   $^{46}$
- lacksquareHEAVY DUTY OUTLET **₽**6
- LIGHT FIXTURE (CEILING MOUNTED)
- LIGHT FIXTURE (WALL MOUNTED) SWITCH
- \$3 SWITCH (3-WAY) FLOOR DRAIN
- **⊗**(< HOSE BIB
- DOUBLE JOIST DJ LVL
- LAMINATED VENEER LUMBER \\ POINT LOAD FROM ABOVE
- A CARBON MONOXIDE ALARM CONFORMING TO CAN/CSA-6.19, CSA 6.19 OR UL2034 SHALL BE INSTALLED ADJACENT TO EACH SLEEPING AREA. CARBON MONOXIDE ALARM(S) SHALL BE PERMANENTLY WIRED SO THAT ITS ACTIVATION WILL ACTIVATE ALL CARBON MONOXIDE ALARMS AND BE EQUIPPED WITH AN ALARM THAT IS AUDIBLE WITHIN BEDROOMS WHEN THE INTERVENING DOORS ARE CLOSED.

WHERE REQUIRED. (SEE ALSO O.B.C. 9.1.1.7.(1)

CONTRACTOR MUST VERIFY ALL DIMENSIONS ON THE JOB AND REPORT ANY DISCREPANCY TO THE BUILDER BEFORE PROCEEDING WITH THE WORK. DO NOT SCALE DRAWINGS, USE DIMENSIONS PROVIDED. ALL DRAWINGS TO BE USED FOR CONSTRUCTION ONLY AFTER BUILDING PERMIT HAS BEEN ISSUED.



KINGSWOOD-M-2022

SITE: WHITE TAIL RIDGE PH.4

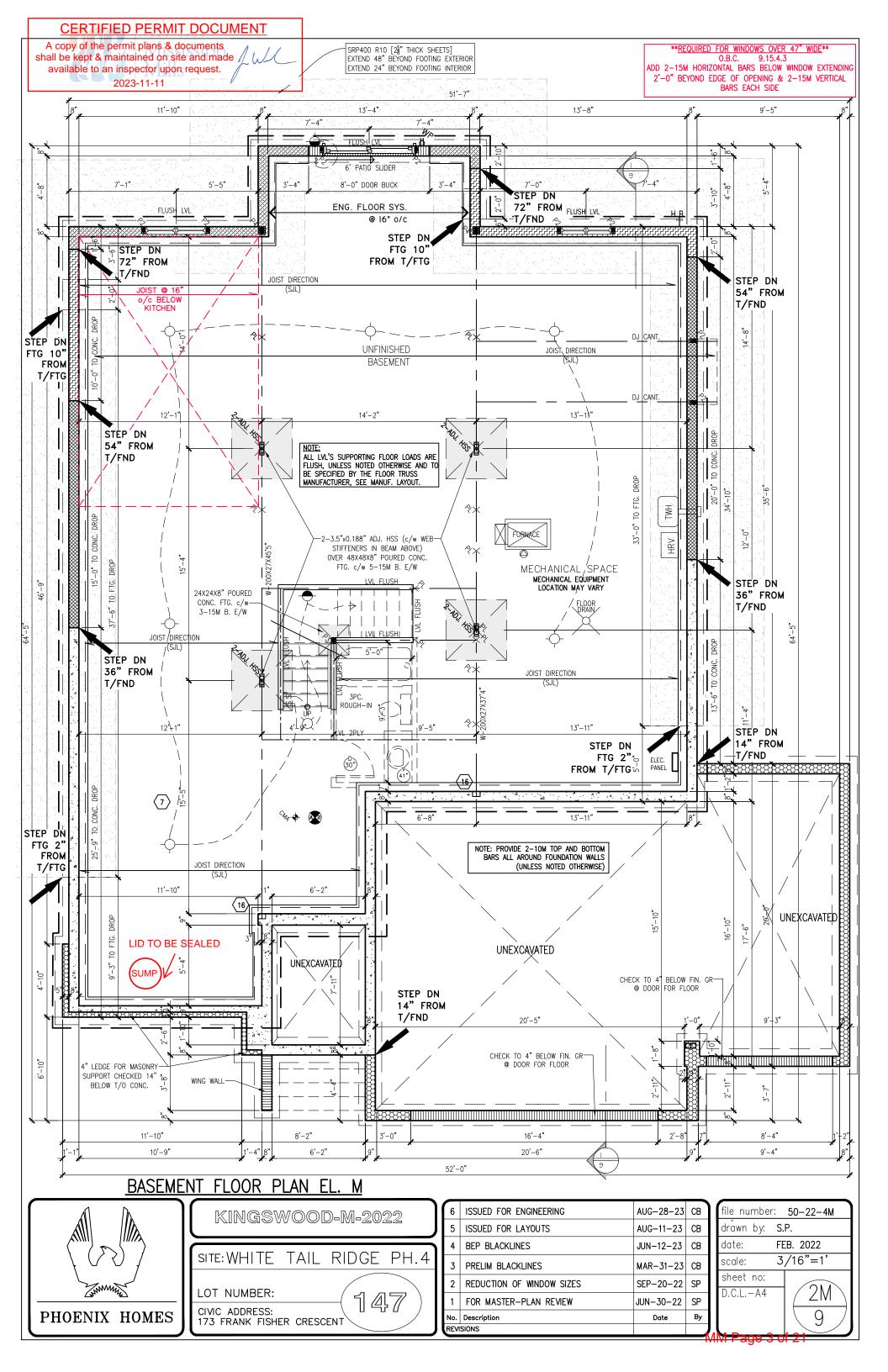
LOT NUMBER: CIVIC ADDRESS:

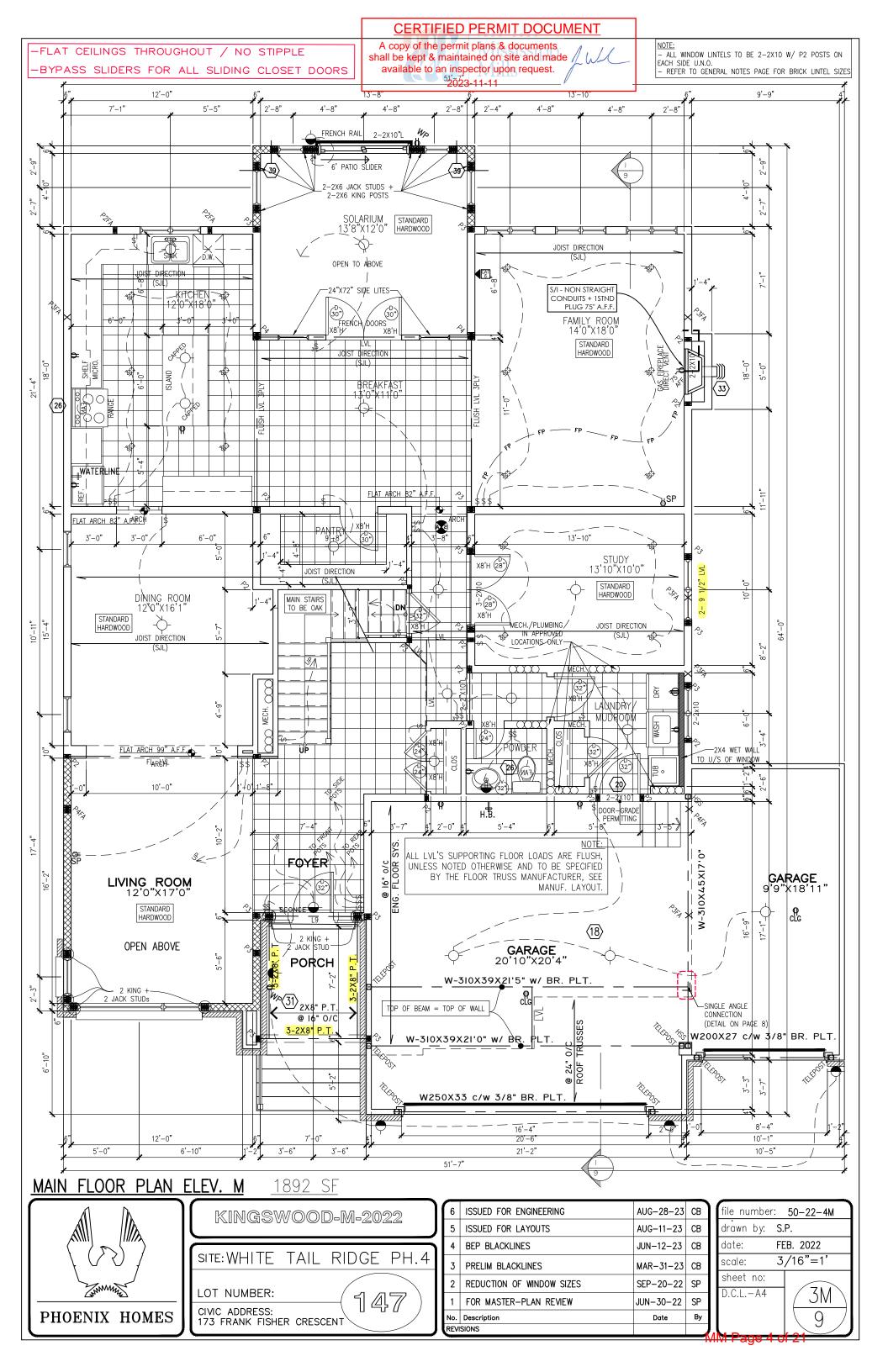
173 FRANK FISHER CRESCENT

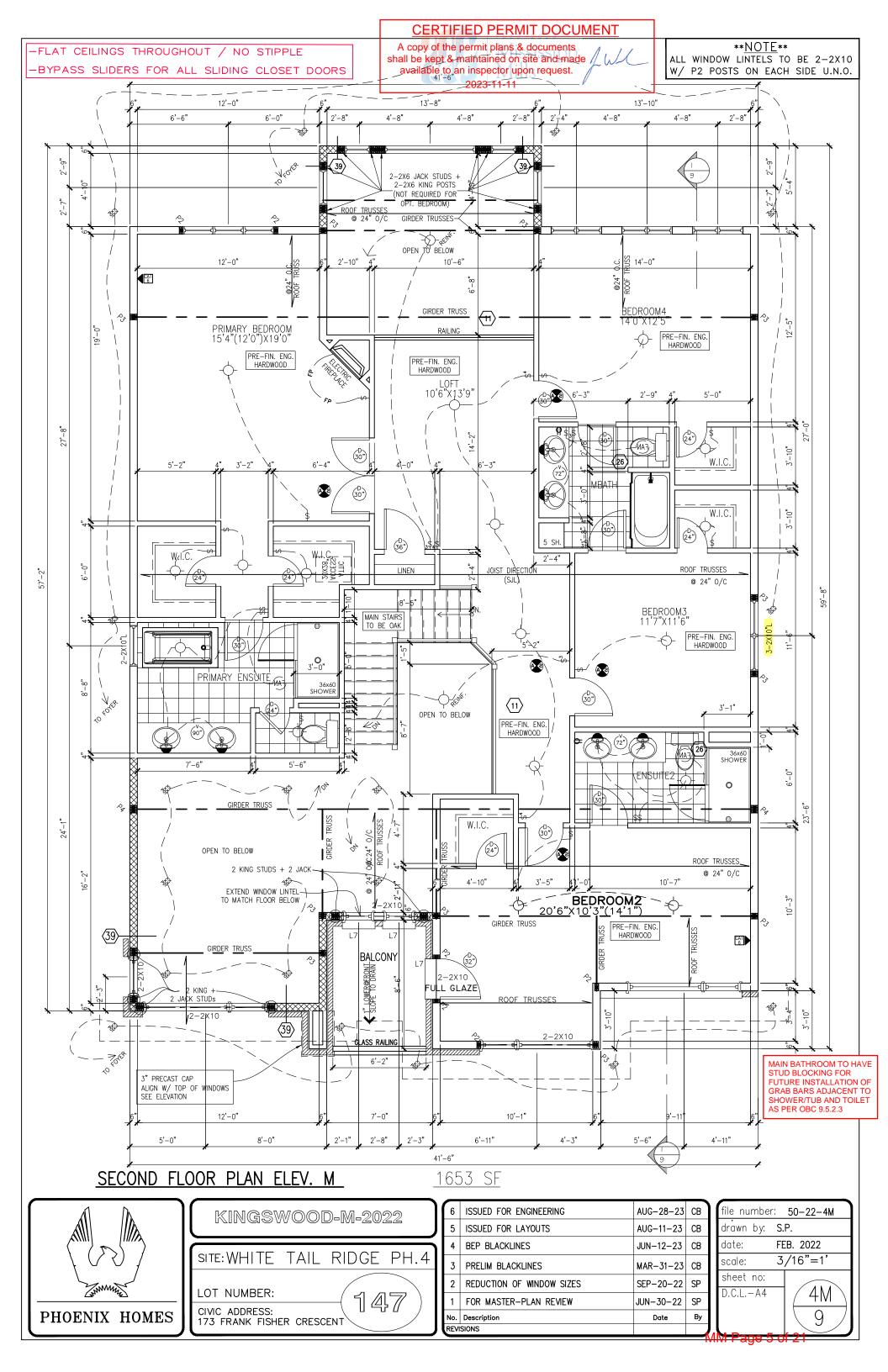
47

ISSUED FOR ENGINEERING AUG-28-23 CB ISSUED FOR LAYOUTS AUG-11-23 CB BEP BLACKLINES JUN-12-23 CB PRELIM BLACKLINES MAR-31-23 3 CB REDUCTION OF WINDOW SIZES SEP-20-22 FOR MASTER-PLAN REVIEW JUN-30-22 Ву No. Description Date REVISIONS

file number: 50-22-4M drawn by: S.P. FEB. 2022 date: 3/16"=1scale: sheet no: D.C.L.-A4 1 M

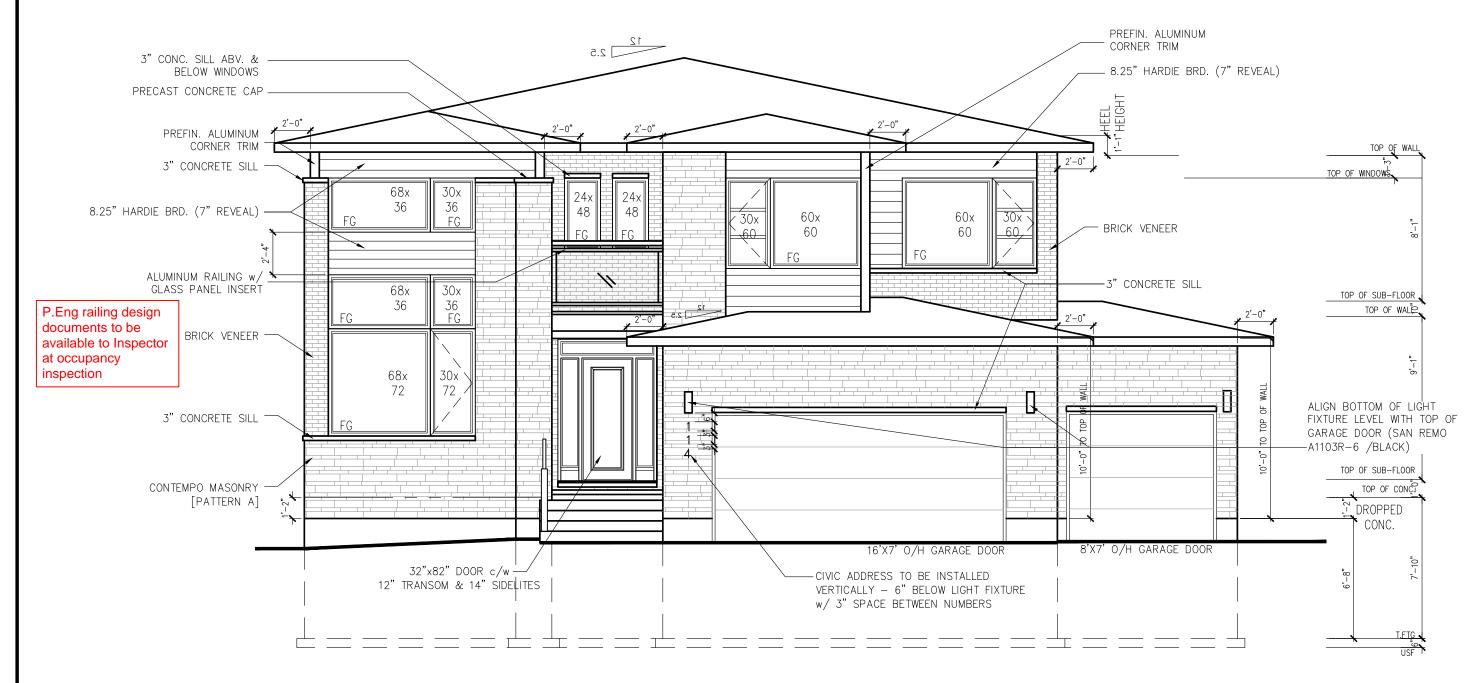






CONTRACTOR MUST VERIFY ALL DIMENSIONS ON THE JOB AND REPORT ANY DISCREPANCY TO DCR/PHOENIX BEFORE PROCEEDING WITH THE WORK.
ALL DRAWINGS AND SPECIFICATIONS ARE INSTRUMENTS OF SERVICE AND THE PROPERTY OF THE DCR/PHOENIX WHICH MUST BE RETURNED AT THE COMPLETION OF THE WORK.
ALL DRAWINGS TO BE USED FOR CONSTRUCTION ONLY AFTER BUILDING PERMIT HAS BEEN ISSUED.

DO NOT SCALE DRAWINGS, USE DIMENSIONS PROVIDED.



# ELEVATION 'M' FRONT ELEVATION



KINGSWOOD-M-2022 SITE: WHITE TAIL RIDGE PH.4 LOT NUMBER: 147 CIVIC ADDRESS: 173 FRANK FISHER CRESCENT

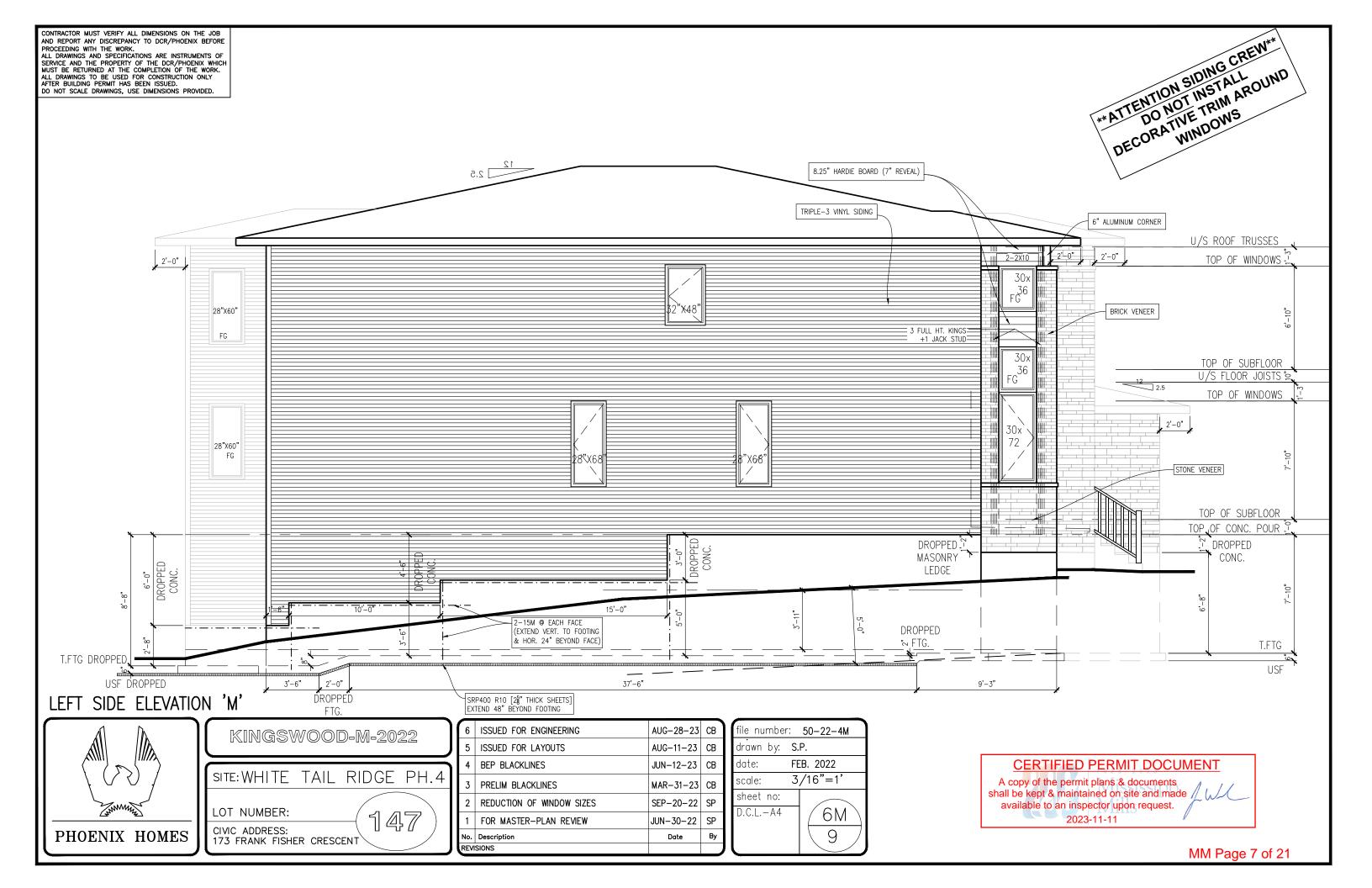
1	6	ISSUED FOR ENGINEERING	AUG-28-23	СВ		
Л	5	ISSUED FOR LAYOUTS	AUG-11-23	СВ		
١	4	BEP BLACKLINES	JUN-12-23	СВ		
4	3	PRELIM BLACKLINES	MAR-31-23	СВ		
	2	REDUCTION OF WINDOW SIZES	SEP-20-22	SP		
	1	FOR MASTER-PLAN REVIEW	JUN-30-22	SP		
	No.	Description	Date	Ву		
Ж	REVISIONS					

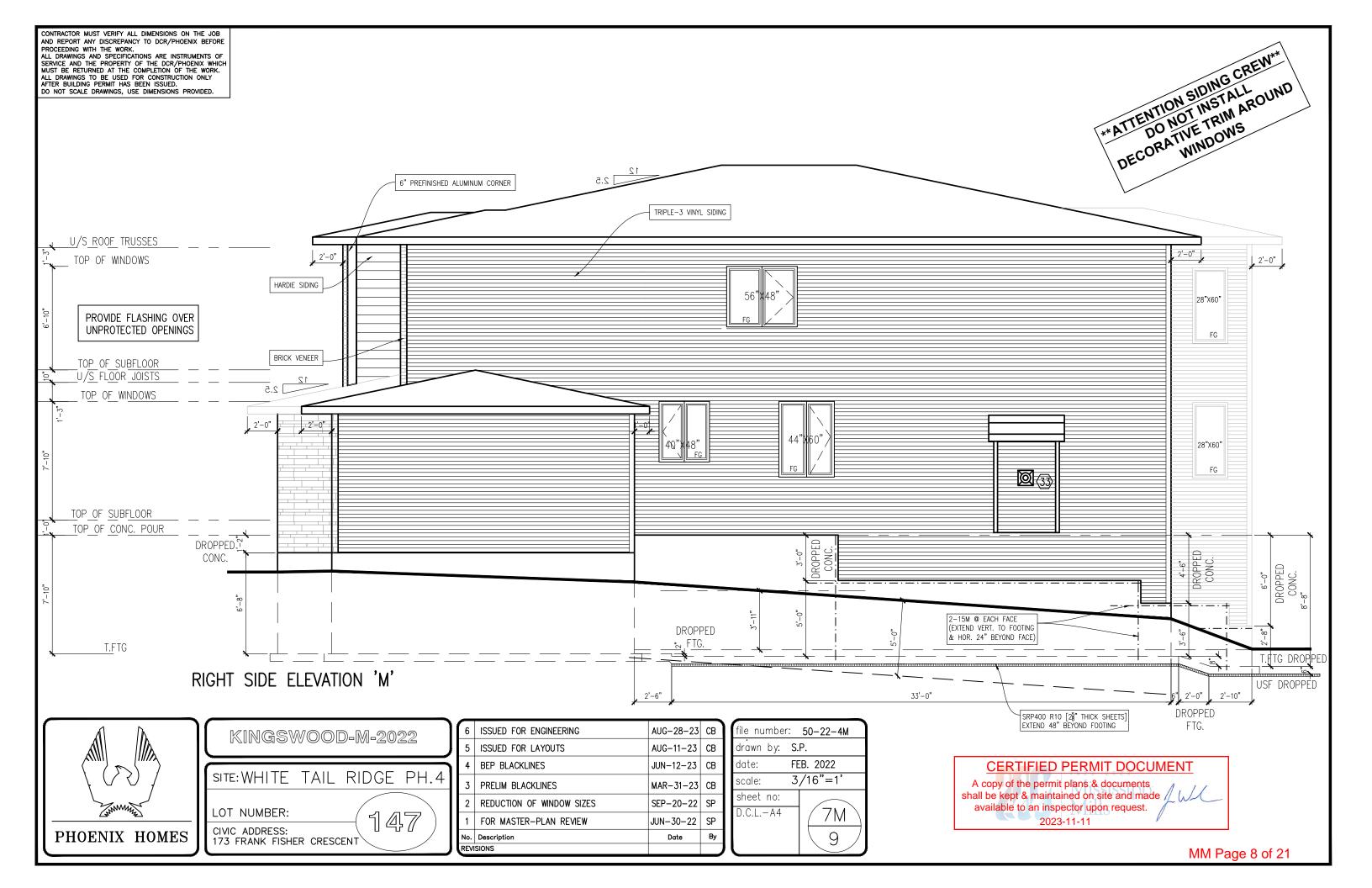
file nur	mber: <b>50-22-4M</b>
drawn	by: <b>S.P.</b>
date:	FEB. 2022
scale:	3/16"=1'
sheet	10:
D.C.L	$^{A4}$ / 5M $\setminus$
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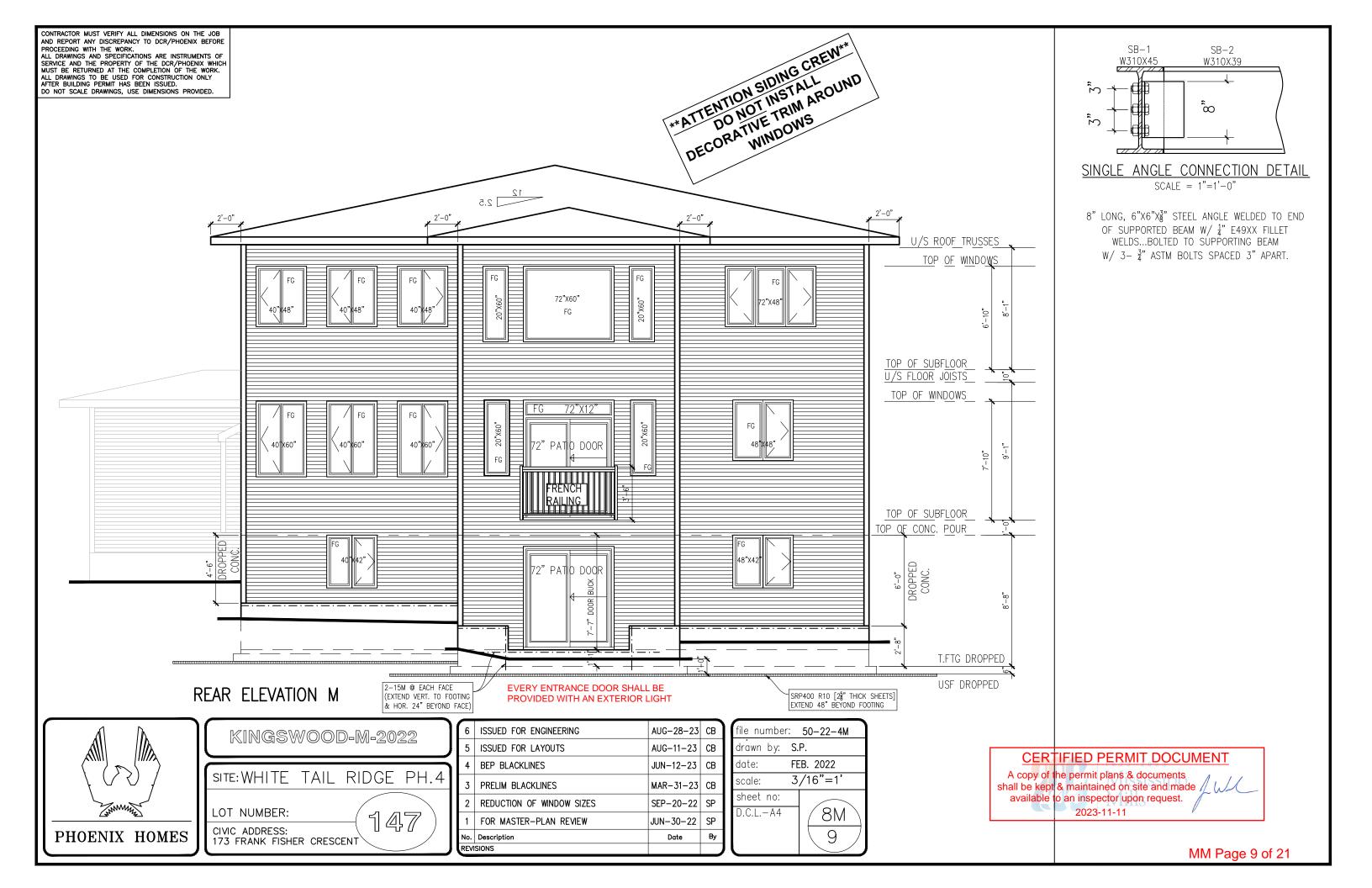
# **CERTIFIED PERMIT DOCUMENT**

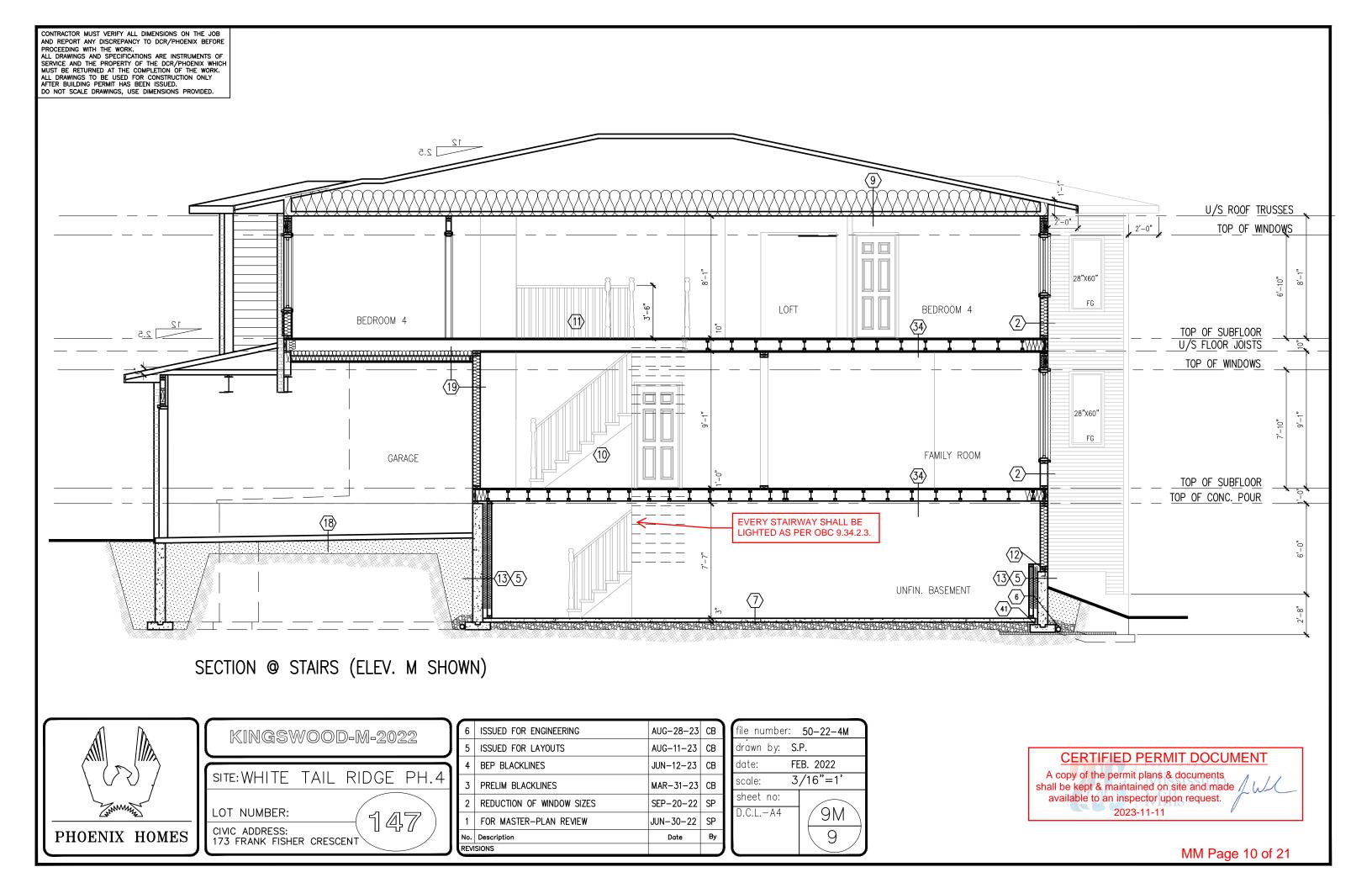
A copy of the permit plans & documents shall be kept & maintained on site and made available to an inspector upon request.

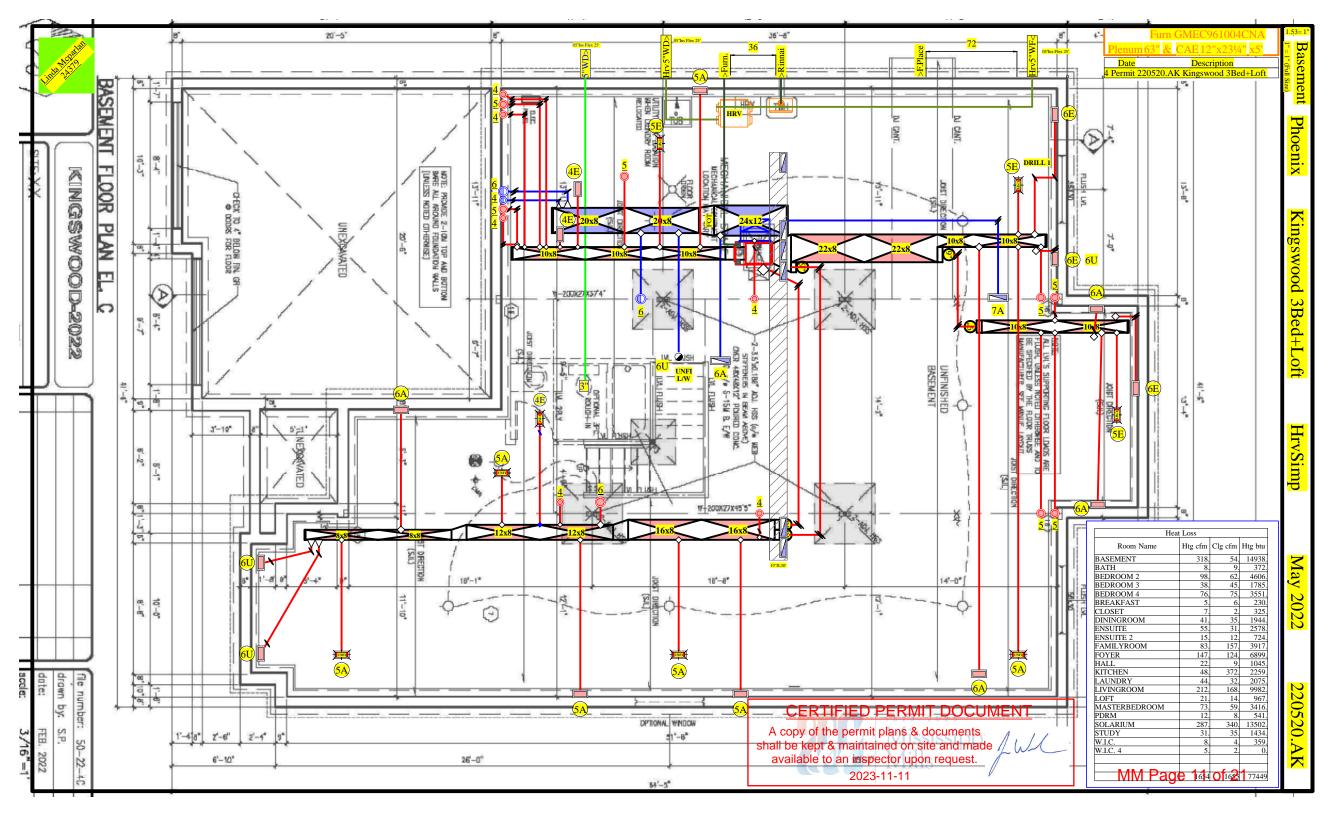
2023-11-11

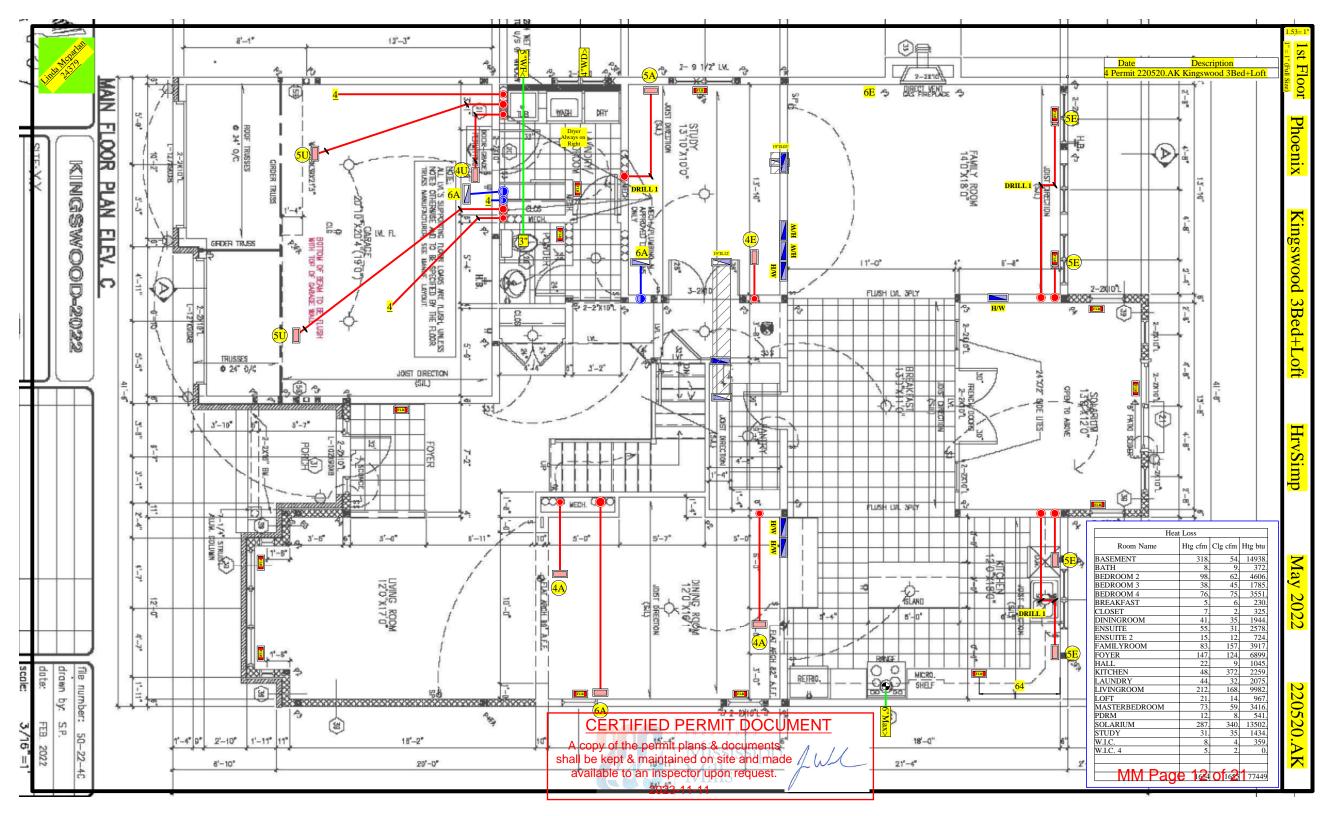


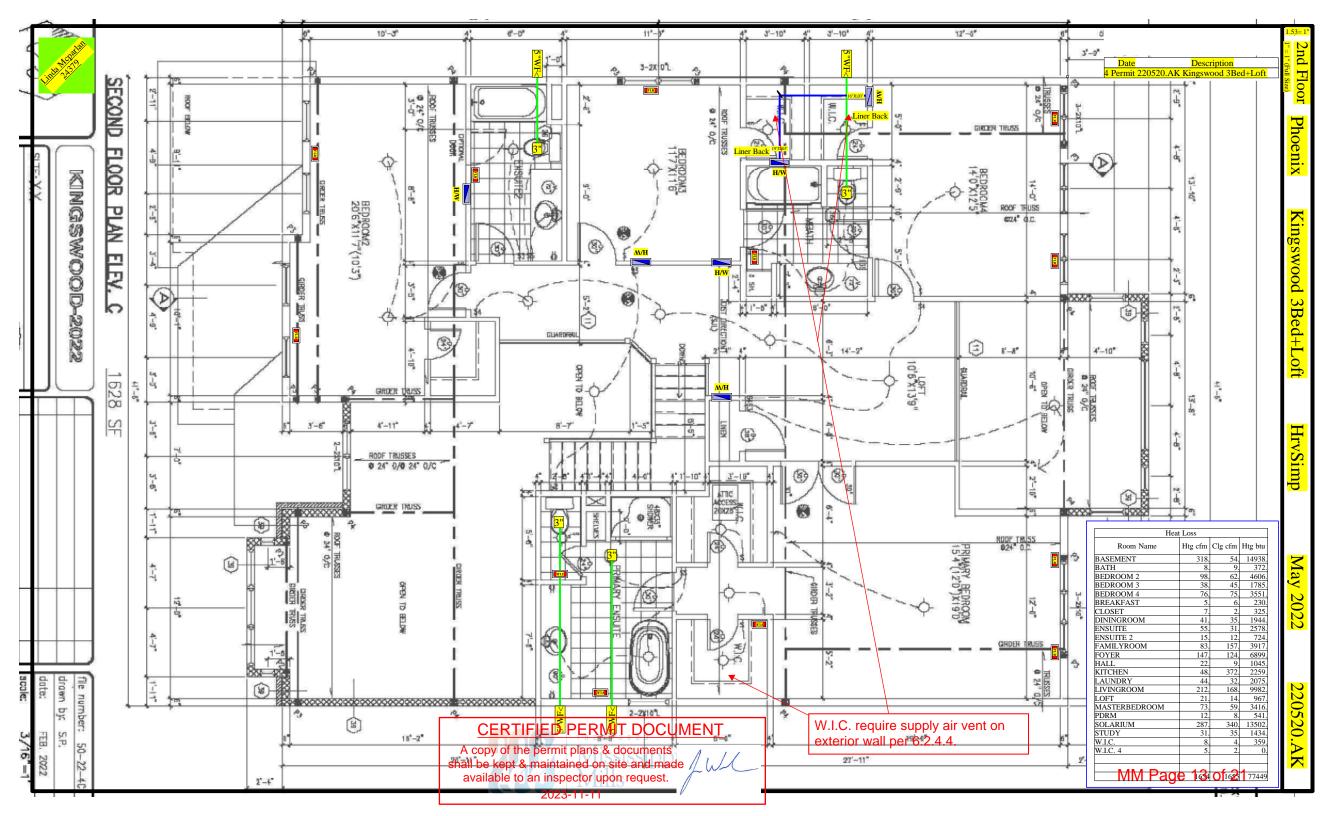


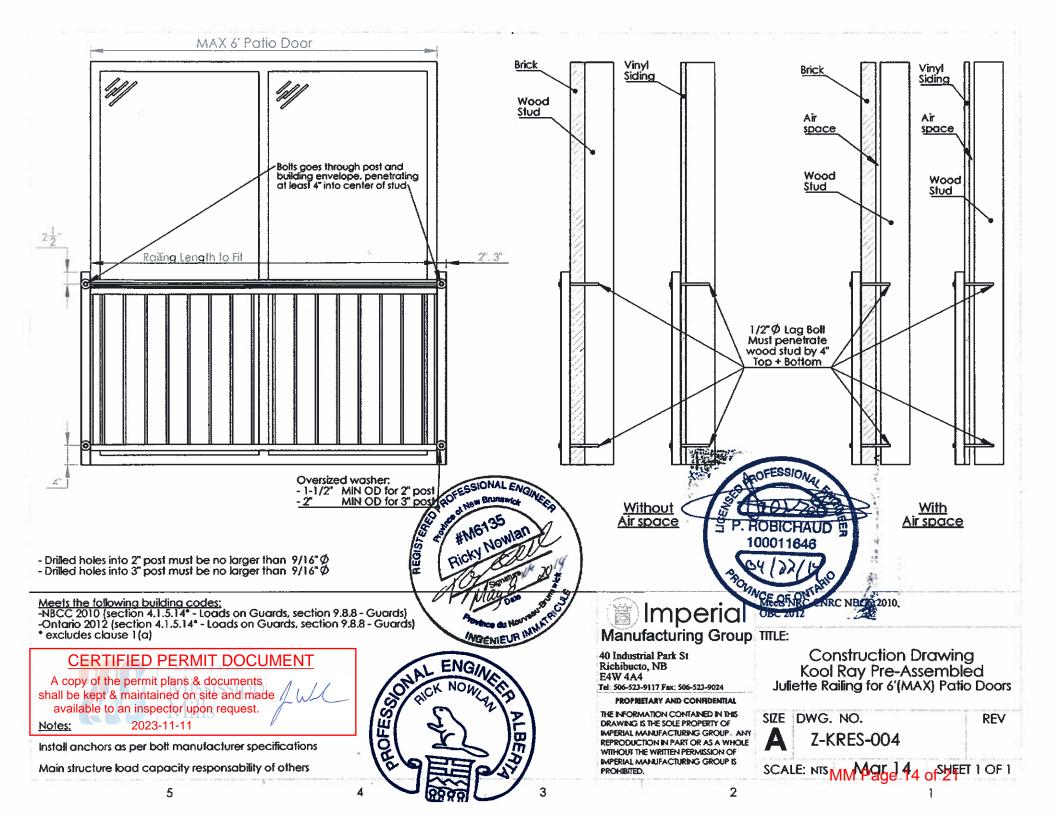


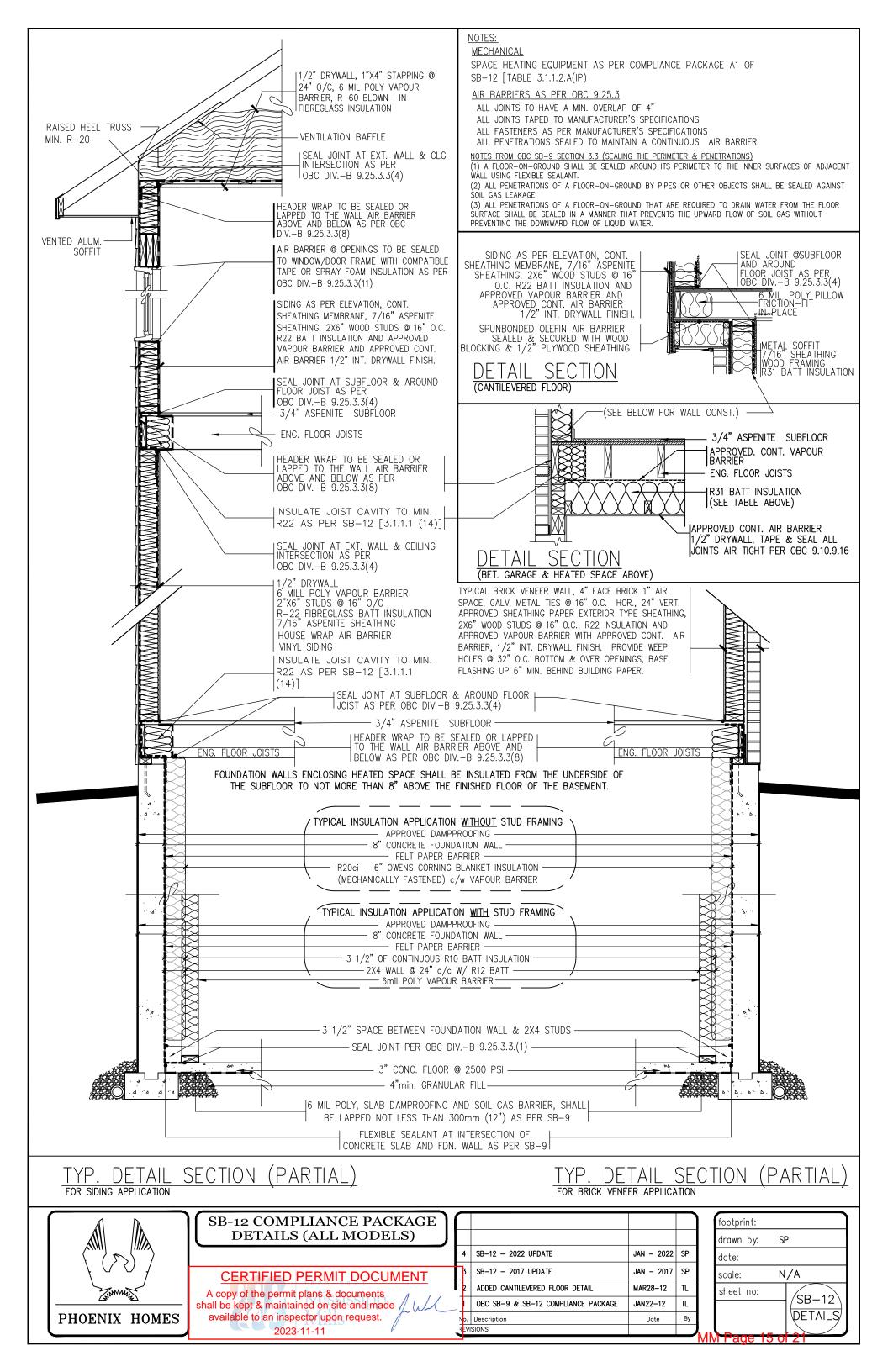












210 Prescott Street P.O. Box 189 Kemptville, Ontario K0G 1J0 Civil • Geotechnical •

Structural • Environmental •

Hydrogeology •

(613) 860-0923

FAX: (613) 258-0475

August 29, 2023

Kollaard File # 230020 - LOT147

Phoenix Homes 18A Bentley Avenue Ottawa, Ontario K2E 6T8

Attn: Catherine Buck Tel: 613-723-9227 x 191

Email: CBuck@phoenixhomes.ca

## CERTIFIED PERMIT DOCUMENT

A copy of the permit plans & documents shall be kept & maintained on site and made available to an inspector upon request.

2023-11-11

Re: Proposed Single Family Dwelling, 173 Frank Fisher Crescent, Lot # 147 White Tail Ridge, Arnprior, Kollaard Associates File # 230020

With regard to structural issues only, Kollaard Associates has reviewed the following drawings:

- Phoenix Homes, Lot # 147, White Tail Ridge, Pages # 1M to 9M, Dated August 28, 2023
- Grandor, High Roof Truss Layout, Kingswood Elevation 'M', WTR4-147, Dated 08/24/2023
- Grandor, 2<sup>nd</sup> Floor Joist Layout, WTR4-147, Kingswood M, Dated 2023/08/24
- Grandor, 1<sup>st</sup> Floor Joist Layout, WTR4-147, Kingswood M, Dated 2023/08/24

Kollaard Associates offers the following comments:

#### Second Floor Plan – Pages # 4M:

- 1. It is the opinion of Kollaard Associates that the proposed lintels and supporting posts shown on Phoenix Homes Pages # 4M are adequate.
- 2. The proposed tall wall noted on Phoenix Homes Pages # 1 is adequate.
- 3. Posts supporting girders may consist of built up 2x6 posts as indicated on Phoenix Homes Pages # 4M and are laterally supported by plywood or OSB sheathing (i.e. posts form part of sheathed exterior walls unless noted).
- 4. Truss design is by others.

#### Ground Floor Plan – Pages # 3M:

5. It is the opinion of Kollaard Associates that the proposed lintels, beams and supporting posts shown on Phoenix Homes Pages # 3M are adequate





- Ramset a 2x6 to the top flange of all steel beams to attach the above framing, floor joists and flush LVL beams.
- 7. The proposed single angle connection of two steel beams noted on Phoenix Homes Sheet # 8M is adequate.
- 8. Posts supporting girders may consist of built up 2x6 posts as indicated on Phoenix Homes Pages # 3M and are laterally supported by plywood or OSB sheathing (i.e. posts form part of sheathed exterior walls unless noted).
- 9. Truss design is by others.
- 10. Floor joist design and flush LVL beams within the floor structure are by the manufacturer.

#### Basement Plan - Pages # 2M:

- 11. It is the opinion of Kollaard Associates that the proposed steel beams and posts shown on Phoenix Homes Sheet # 2M are adequate.
- 12. The front porch slab reinforcement described on Phoenix Homes Sheet # 1M is adequate.
- 13. As noted on Phoenix Homes Sheet # 2M, the framed walls supporting the intermediate landing may be supported by the basement slab.
- 14. The proposed 7'-10" foundation walls conform to 2012 OBC Table 9.15.4.2.A. ensuring that the grade difference between the basement slab and the exterior grade (including the garage slab) does not exceed 7'-6½".
- 15. The proposed stepped down foundation walls (ie. framed knee wall above) conform to 2012 OBC Table 9.15.4.2.A. ensuring that the grade difference between the basement slab and the exterior grade (including the garage slab) does not exceed 3'-11".
- 16. The proposed strip footings, interior pad footings and exterior pad footings shown on Phoenix Homes Page # 2M and noted on Phoenix Homes Sheet # 1M are adequate.
- 17. Floor joist design, flush LVL beams within the floor structure and LVL lintels are by the manufacturer. All posts supporting flush LVL lintels are to be P2 posts unless otherwise noted.

#### General Notes:

- 18. All gravity loads to be carried to foundation through solid blocking.
- 19. Truss design is by others.
- 20. Floor joist design, flush LVL beams within the floor structure and LVL lintels are by the manufacturer.
- The self supporting stairs are to be designed by the stair manufacturer.
- 22. All dimension lumber, except non-load bearing 8 ft 2x6 studs to be No.2 grade SPF or better.
- 23. Non-load bearing 8 ft 2x6 studs to be No.3 or Stud grade SPF or better.
- 24. All guards to be as per OBC SB-7, unless otherwise mentioned and designed by others.

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- 25. All brick lintels to be as per OBC Table 9.20.5.2.B.
- 26. Unless otherwise noted, LVL to be 1.8E 3000Fb LVL (Canadian Limit States bending strength of at least 39.5 MPa) with 1¾" nominal width or better.
- 27. Pemco Steel adjustable posts are designed and approved by the manufacturer. The adjustable steel posts are designed for a maximum allowable load of 106.8 kN at a maximum height of 9'-3".
- 28. All 3" x 3" x 3/16" HSS posts c/w 6" x 6" x 3/8" top and bottom bearing plates.
- 29. The assumed soil bearing resistance of 100 kPa is to be verified prior to construction.
- 30. Note that the truss manufacturer/floor joist supplier has sized the flush LVL beams and girder trusses shown on the building drawings. The comments provided by Kollaard Associates in this report are based in part on the design indicated in the truss and floor layouts. If a different truss and/or floor layout is used in construction, comments made in this report may no longer be valid. Provide Kollaard Associates with the full truss package prior to construction.
- 31. Comments provided in this report are made in consideration of Part 9 and Part 4 (where applicable) of the 2012 OBC as amended.
- 32. This report constitutes a review of the structural information indicated on the building plans cited in this report for the client indicated above.

We trust this letter provides sufficient information for your present purposes. If you have any questions concerning this letter please do not hesitate to contact our office.

Sincerely, Kollaard Associates Inc.

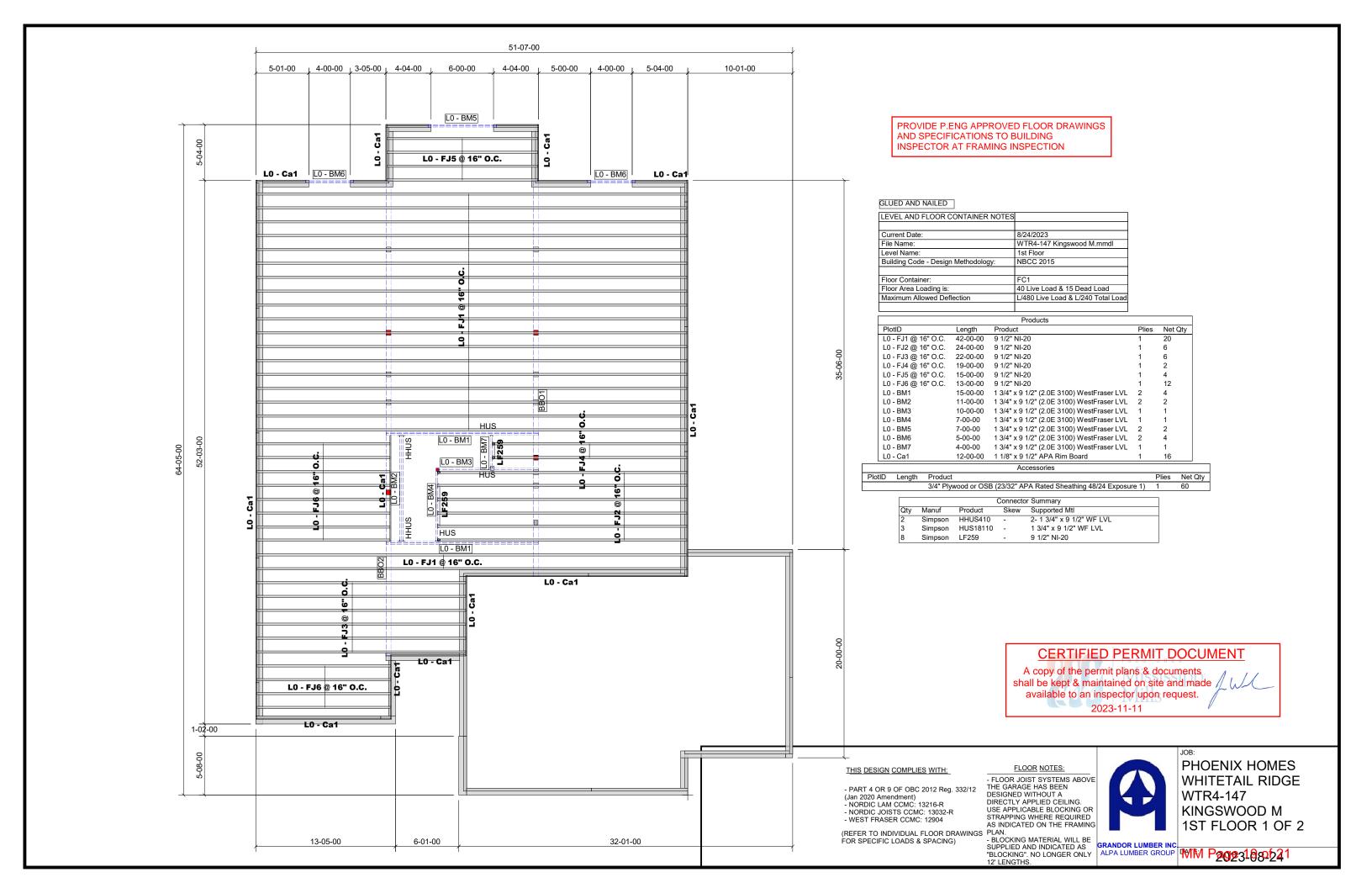


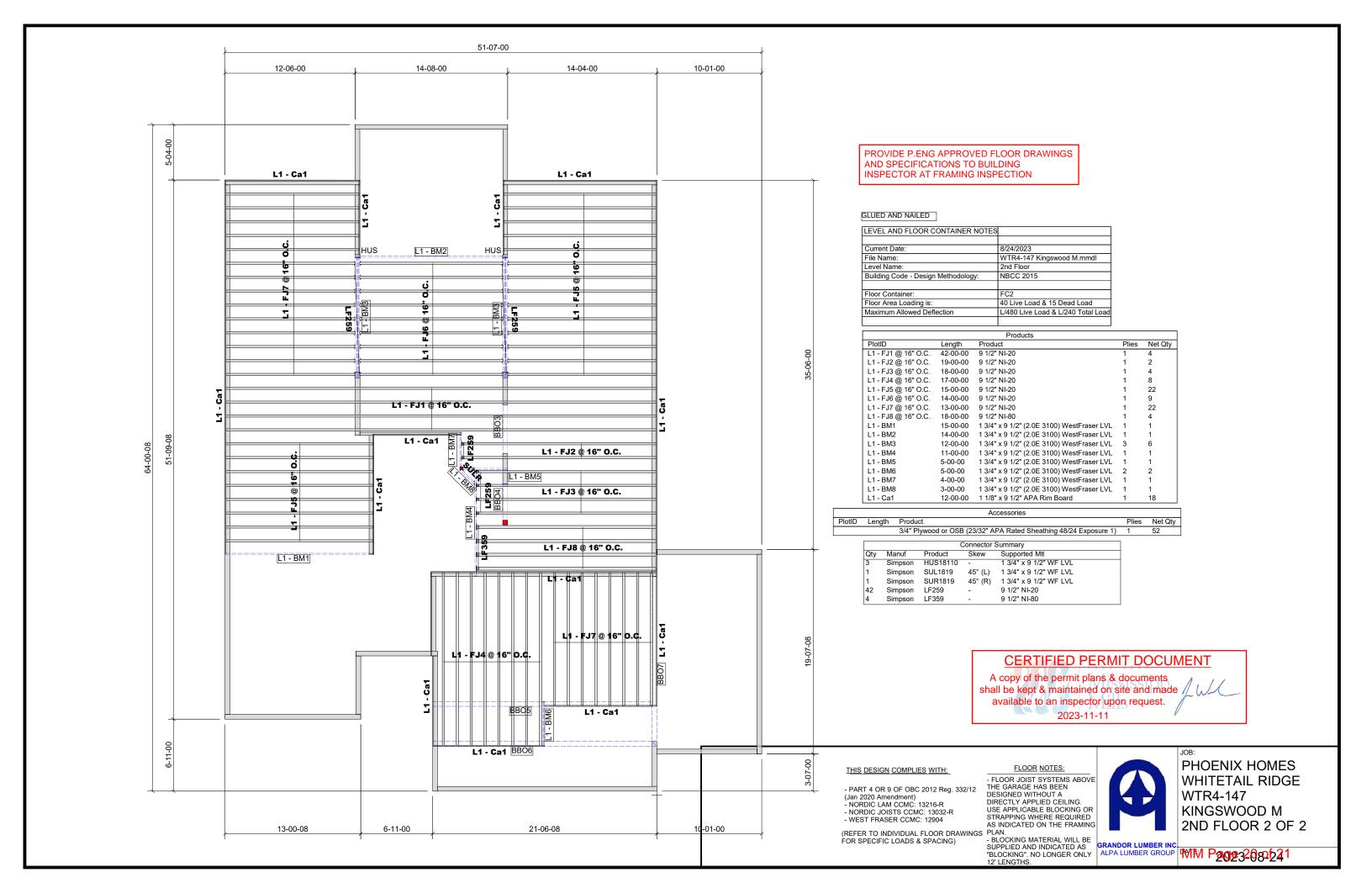
Christopher Cogliati, P.Eng.

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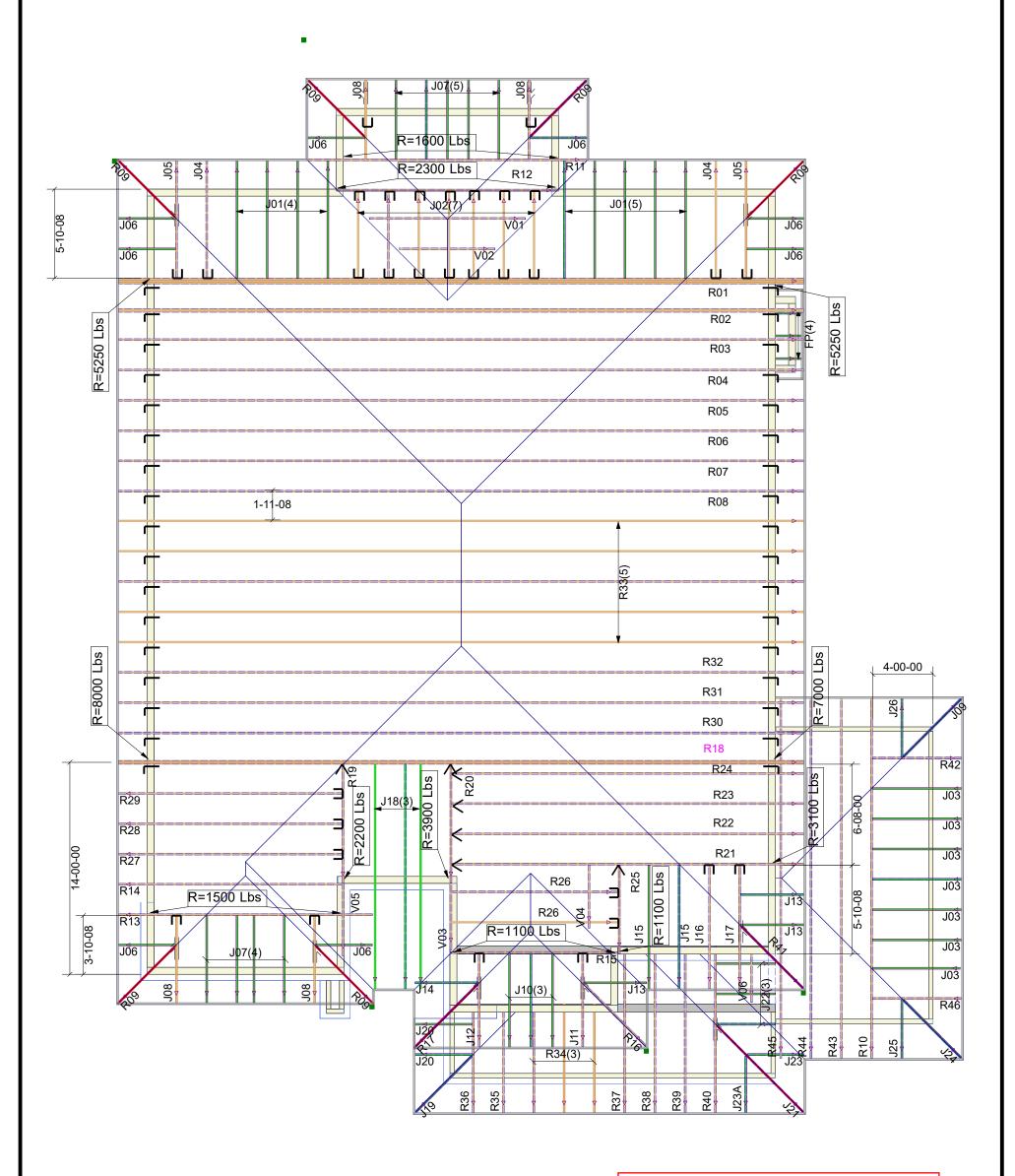
A copy of the permit plans & documents shall be kept & maintained on site and made available to an inspector upon request.

2023-11-11





PROVIDE P.ENG APPROVED TRUSS PACKAGE WITH SPECIFICATIONS TO BUILDING INSPECTOR AT FRAMING INSPECTION



## **CERTIFIED PERMIT DOCUMENT**

A copy of the permit plans & documents shall be kept & maintained on site and made // available to an inspector upon request. 2023-11-11

TYPICAL OTTAWA DESIGN LOADS

Member	Load Type	PT 9	PT 4			
Top Chord	Snow	37.1	50			
Top Chora	Dead	3	5-10	ш		
Bot Chord	Live	0	10	PS		
Bot Chord	Dead	7	7			

TYPICAL SPACING = 24.0 IN C/C

## THIS DESIGN COMPLIES WITH:

HURRICANE AND SEISMIC TIES: - PART 4 OR 9 OF OBC 2012 Reg. 332/12
- CSA 086-09
- CCMC ACCEPTANCE 11996-L, 0319-L, 13270-L
- TPIC 2011

(REFER TO INDIVIDUAL TRUSS DRAWINGS FOR SPECIFIC LOADS & SPACING)

HURRICANE AND SEISMIC JIES:
- ANY TIES SPECIFIED ON THIS LAYOUT FOR UPLIFT OR SEISMIC CONNECTIONS MUST BE REVIEWED AND APPROVED BY THE BUILDING DESIGNER/ ENGINEER, AS STATED IN THE TPIC 2011. THE TRANSFER OF THESE LOADS TO THE ENTIRE STRUCTURE BELOW HAS NOT BEEN ANALYZED.



PHOENIX HOMES **KINGSWOOD** Elevation 'M' WTR4-147 PMINM-1

GRANDOR LUMBER INC.
ALPA LUMBER GROUP 1010 Pagy 24/20231