



Kollaard Associates
Engineers

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

Civil • Geotechnical •
Structural • Environmental •
Hydrogeology •

(613) 860-0923

FAX: (613) 258-0475

October 26, 2022

Kollaard File # 220022 – LOT364

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

Attn: Catherine Buck
Tel: 613-723-9227 x 191
Email: CBuck@phoenixhomes.ca

**SITE
COPY**
City of Ottawa



**Re: Proposed Single Family Dwelling, Lot # 364 Paakanaak Avenue, Pathways, City of Ottawa,
Kollaard Associates File # 220022**

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

- Phoenix Homes, Lot # 364 Pathways, Pages # 1M to 8M, Dated 26/10/2022
- Grandor, Roof Truss Layout, Newington 'M', Dated 21/07/2021
- Grandor, 2nd Floor Joist Layout, Newington OPT # 1 In-Law Suite, Dated 10/20/2022
- Grandor, 1st Floor Joist Layout, Newington OPT # 1 In-Law Suite, Dated 10/20/2022

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 # 1M 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
6. Ramset a 2x6 to the top flange of all steel beams to attach the above framing, floor joists and flush LVL beams.



Professional Engineers
Ontario

Authorized by the Association of Professional Engineers
of Ontario to offer professional engineering services.



7. The proposed web packing of the steel beam detailed on Phoenix Homes Sheet # 8M is adequate.
8. Truss design is by others.
9. 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).
10. Floor joist design and flush LVL beams within the floor structure are by the manufacturer.

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Basement Plan – Pages # 2M:

11. It is the opinion of Kollaard Associates that the proposed steel beams steel 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 foundation walls at the bottom of the window openings that exceed 47¼" in width (or the sum of the widths of the window openings exceed 25% of the length of the wall) are considered to be laterally unsupported as per 2012 OBC 9.15.4.3. The reinforcement around the window openings noted on Phoenix Homes Sheets # 2M is adequate to withstand the lateral earth pressures.
15. The proposed grading plan (Phoenix Homes, Lot 364 Paakanaak Avenue) shows a maximum finished grade around the dwelling (including interior of garage) at the as 98.98 metres, which is 2.40 metres above the basement slab elevation. It is the understanding of Kollaard Associates that 2-15M bars are installed at the top and bottom of the foundation walls and bent around the corners. It is the opinion of Kollaard Associates that the 8" thick foundation walls with 2-15M bars at the top and bottom of the foundation walls are adequate to withstand the lateral earth pressures as the grade difference between the garage slab (and exterior grade) and basement slab is 0.10 metres greater than the 2.30 metres specified in 2012 OBC Table 9.15.4.2.A.
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. The posts supporting the flush LVL lintels shown on Phoenix Homes Sheet # 2M are adequate.
18. The floor joist layout is to be revised to specify the flush window lintels as shown on Phoenix Homes Sheet # 2M.
19. The proposed deck and steel bracket support are designed and approved by others (DS Structural Design, Dwg. # SK-1, Dated December 2019).

General Notes:

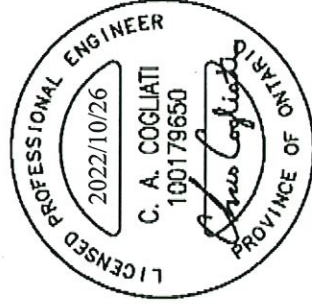
20. All gravity loads to be carried to foundation through solid blocking.
21. Truss design is by others.
22. Floor joist design, flush LVL beams within the floor structure and LVL lintels are by the manufacturer.



23. The self supporting stairs are to be designed by the stair manufacturer.
24. All dimension lumber, except non-load bearing 8 ft 2x6 studs to be No.2 grade SPF or better.
25. Non-load bearing 8 ft 2x6 studs to be No.3 or Stud grade SPF or better.
26. All guards to be as per OBC SB-7, unless otherwise mentioned and designed by others.
27. All brick lintels to be as per OBC Table 9.20.5.2.B.
28. Unless otherwise noted, LVL to be 1.8E 3000Fb LVL (Canadian Limit States bending strength of at least 39.5 MPa) with 1 3/4" nominal width or better.
29. 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".
30. All 3" x 3" x 3/16" HSS posts c/w 6" x 6" x 3/8" top and bottom bearing plates.
31. The assumed soil bearing resistance of 125 kPa is to be verified prior to construction.
32. 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.
33. Comments provided in this report are made in consideration of Part 9 and Part 4 (where applicable) of the 2012 OBC as amended.
34. 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.

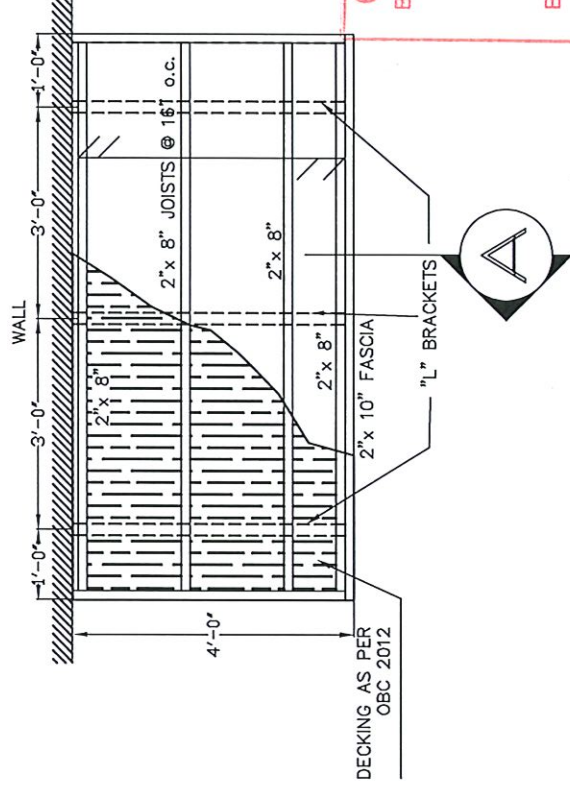
Sincerely,
Kollaard Associates Inc.



**SITE
COPY**
City of Ottawa



Christopher Cogliati, P.Eng.



**SITE
COPY**
City of Ottawa

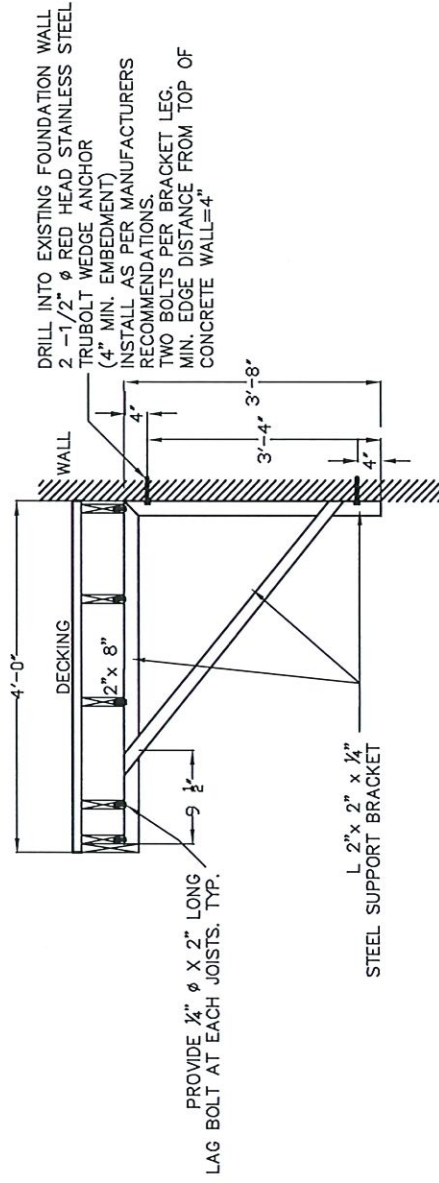
City of Ottawa
Building Services Branch

NOV 04 2022

Building Code Reviewed

Signature

PLAN



NOTES:

STEEL
-ALL STRUCTURAL STEEL WORK INCLUDING DESIGN OF ALL COMPONENTS SHALL BE CARRIED OUT IN ACCORDANCE WITH CAN/CSA-S16-09.
-HOLLOW STRUCTURAL SECTIONS TO CAN/CSA G40.20 GRADE 350, CLASS C OF H
-STRUCTURAL STEEL SHALL CONFORM TO CAN/CSA G40.21 GRADE 300W
ALL WORK SHALL CONFORM OBC 2012
CONTRACTOR TO VERIFY ALL DIMENSIONS ON SITE.
FOR ADDITIONAL INFORMATION, SEE ENGINEERING DWGS.

ALL HARDWARE TO BE HOT-DIP GALVANIZED
CONCRETE MIN. STRENGTH: 25 MPA

SECTION 'A'



Estructura Inc.

TEL (819) 918-4342
EMAIL: estructura-inc@yahoo.com

Client



CUT RITE CONSTRUCTION

Sheet Title
DECK CONNECTION 4'-0"x8'-0"

Drawn By
DS

Project No.

Created By

Scale
N.T.S.

Date
DECEMBER 2019

File Name

Drawing No.
SK-1

No. | Revision | Date | By |
1 | Initial design | 10/20/2019 | D. Segura |
2 | Design complete | 11/04/2019 | D. Segura |
3 | Final design | 11/04/2019 | D. Segura |
4 | Construction documents | 11/04/2019 | D. Segura |
5 | Construction documents | 11/04/2019 | D. Segura |
6 | Construction documents | 11/04/2019 | D. Segura |
7 | Construction documents | 11/04/2019 | D. Segura |
8 | Construction documents | 11/04/2019 | D. Segura |
9 | Construction documents | 11/04/2019 | D. Segura |
10 | Construction documents | 11/04/2019 | D. Segura |

(Building Code Part 9, Residential)

by efficiency design of a house.

This form is applicable where
s doors to the gross area of pe

Use by Principal Authority	
Model/Certification Number	NOV 04 2022
Building Code Reviewed	
Signature	

**SITE
COPY**

Unit number **City of Ottawa** Lot **36**

SB-12 Prescriptive (input design package): Package: A1 Table: 3.1.1.2.A(IP)

Climatic Zone (SB-1):		Heating Equipment Efficiency		Space Heating Fuel Source	
☒ Zone 1 (< 5000 degree days)		☒ ≥ 92% AFUE		☒ Gas	☐ Propane ☐ Solid Fuel
☐ Zone 2 (≥ 5000 degree days)		☐ ≥ 84% < 92% AFUE		☐ Oil	☐ Electric ☐ Earth Energy
Ratio of Windows, Skylights & Glass (W, S & G) to Wall Area			Other Building Characteristics		
Area of walls = _____ m ² or 4074 ft ²		W, S & G % = 13.9		☐ Log/Post&Beam ☐ ICF Above Grade ☐ ICF Basemen	
Area of W, S & G = _____ m ² or 568 ft ²				☐ Slab-on-ground ☐ Walkout Basement ☐ Air Conditioning ☐ Combo Unit ☐ Air Sourced Heat Pump (ASHP) ☐ Ground Sourced Heat Pump (GSHP)	
Utilize window averaging: ☐ Yes ☒ No					

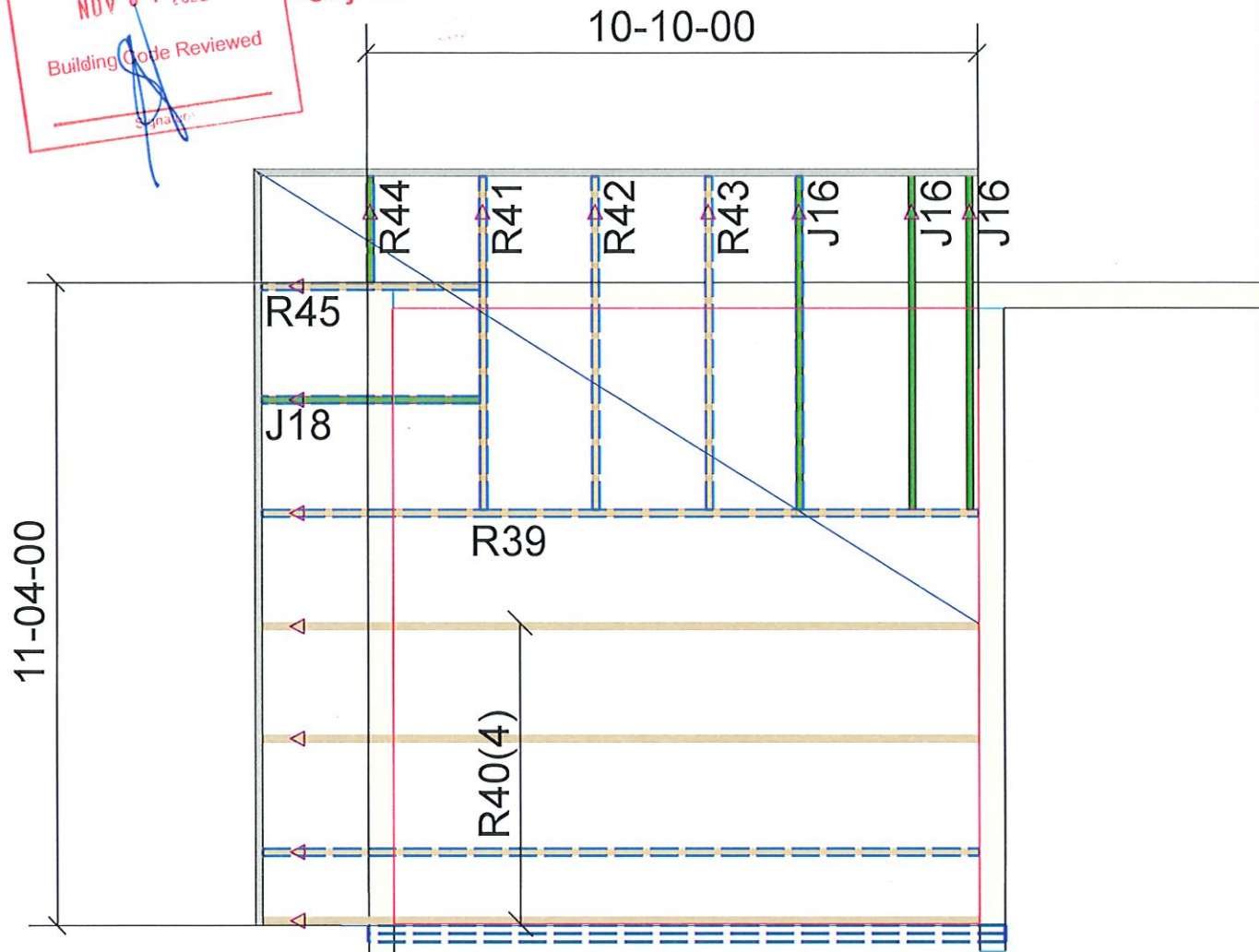
Energy Efficiency Substitutions							
☐ ICF (3.1.1.2.(5) & (6) / 3.1.1.3.(5) & (6)) ☐ Combined space heating and domestic water heating systems (3.1.1.2.(7) / 3.1.1.3.(7))							
☐ Airtightness substitution(s) Airtightness test required (Refer to Design Guide Attached) ☐ Table 3.1.1.4.B Required: _____ Permitted Substitution: _____ ☐ Table 3.1.1.4.C Required: _____ Permitted Substitution: _____ Required: _____ Permitted Substitution: _____							
Building Component		Minimum RSI / R values or Maximum U-Value ⁽¹⁾		Building Component		Efficiency Ratings	
Thermal Insulation		Nominal	Effective	Windows & Doors Provide U-Value ⁽¹⁾ or ER rating			
Ceiling with Attic Space		R60		Windows/Sliding Glass Doors		25	
Ceiling without Attic Space		R31		Skylights/Glazed Roofs		0.49	
Exposed Floor		R31		Mechanicals			
Walls Above Grade		R22		Heating Equip.(AFUE)		96%	
Basement Walls			R21.12	HRV Efficiency (SRE% at 0°C)		75%	
Slab (all >600mm below grade)		--		DHW Heater (EF)		0.8	
Slab (edge only ≤600mm below grade)		R10		DWHR (CSA B55.1 (min. 42% efficiency))			# Showers _____
Slab (all ≤600mm below grade, or heated)		R10		Combined Heating System		NO	

E. Designer(s) [name(s) & BCIN(s), if applicable, of person(s) providing information herein to substantiate that design meets the building code]

Qualified Designer Declaration of designer to have reviewed and take responsibility for the design work.		
Name Catherine Buck	BCIN 46674	Signature 

City of Ottawa
Building Services Branch
NOV 04 2022
Building Code Reviewed
Signature: _____

**SITE
COPY**
City of Ottawa



City of Ottawa
OCT 20 2022
BCSB
101 Centrepointe Dr.

TYPICAL OTTAWA DESIGN LOADS

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

TYPICAL SPACING = 24.0 IN C/C

THIS DESIGN COMPLIES WITH:

- 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 TIES:

- 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.

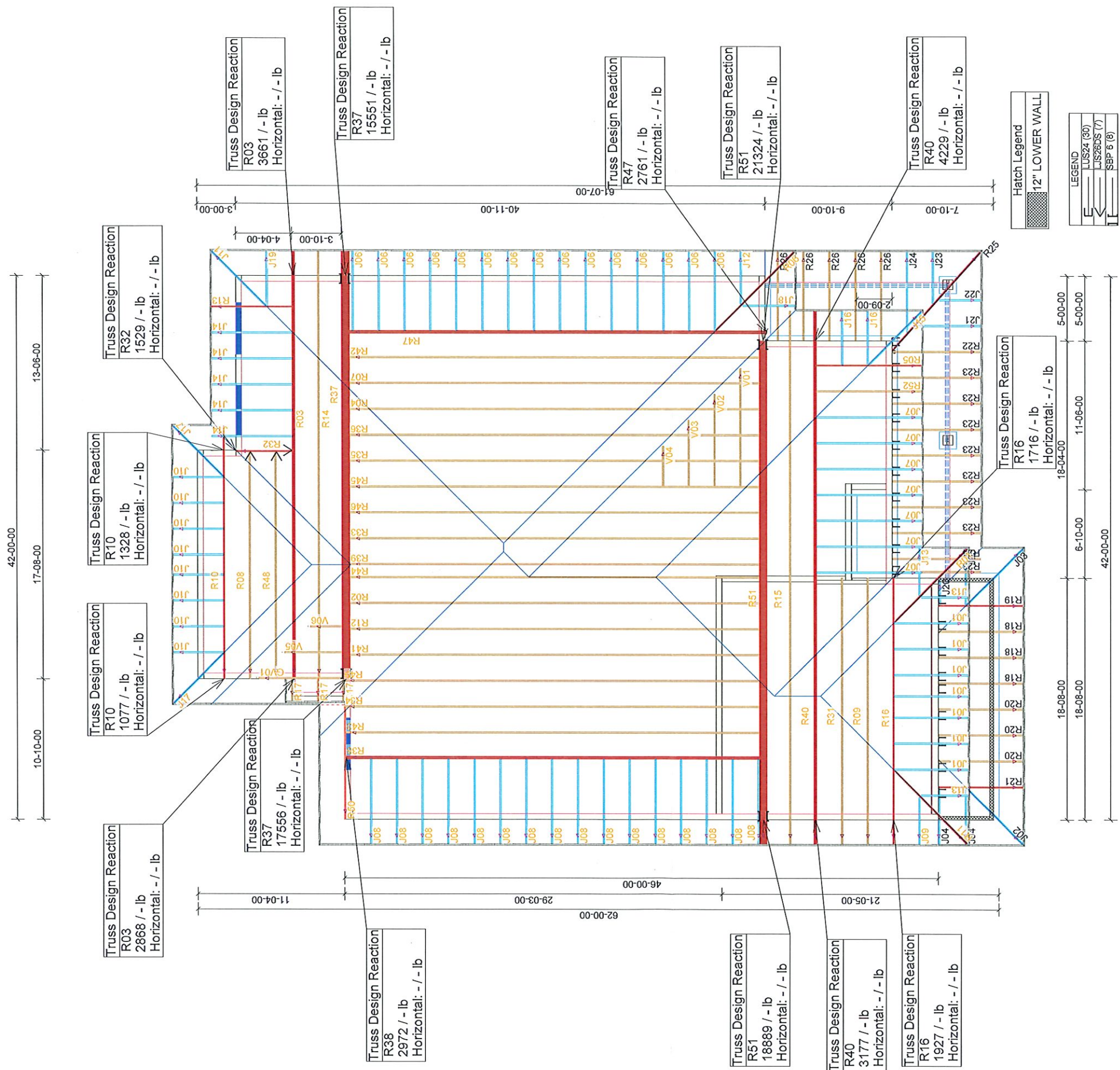


JOB:

PHOENIX HOMES
NEWINGTON
EXTENDED IN-LAW
SUITE (BEDROOM #2)
OPTION #1
B2200275

DATE:

4/29/2022



SITE COPY
City of Ottawa

City of Ottawa
Building Services Branch
NOV 04 2022
Building Code Reviewed

City of Ottawa
Building Services Branch
NOV 07 2022
Zoning Reviewed

A22-007396
OCT 20 2022
SBO Paakanaak
BCSB
Centre Pointe

HURRICANE AND SEISMIC TIES:
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- (REFER TO INDIVIDUAL TRUSS DRAWINGS FOR SPECIFIC LOADS & SPACING)

TYPICAL OTTAWA DESIGN LOADS

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

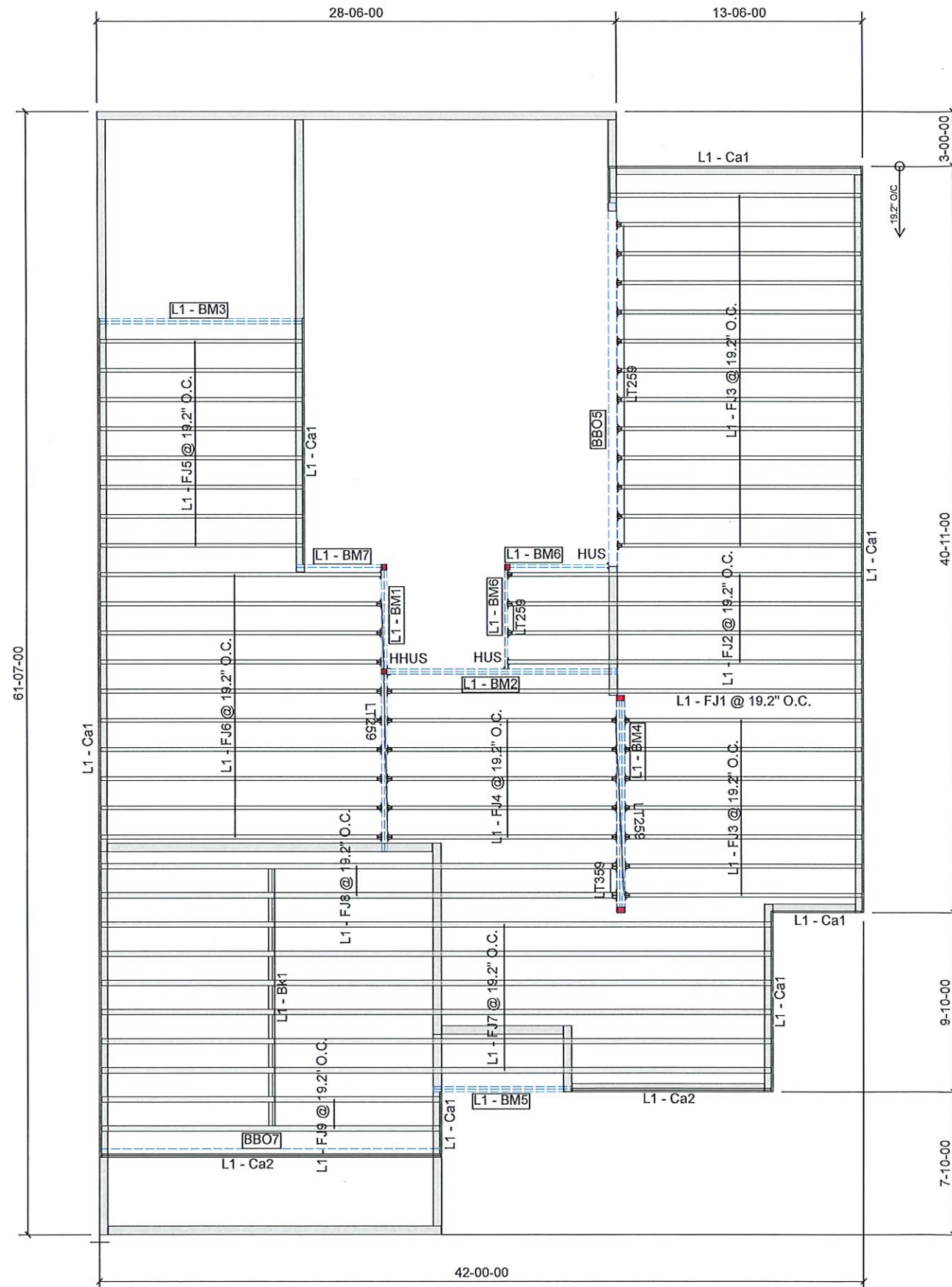
TYPICAL SPACING = 24.0 IN C/C

JOB: PHOENIX HOMES
NEWINGTON 'M'
PNEVM



GRANDOR LUMBER INC.
ALPHA LUMBER GROUP

DATE: 21/07/2021



GLUED AND NAILED

LEVEL AND FLOOR CONTAINER NOTES	
Current Date:	10/20/2022
File Name:	Newington M Option Ext.mmdl
Level Name:	2nd Floor
Building Code - Design Methodology:	NBCC 2015
Floor Container:	FC2
Floor Area Loading is:	40 Live Load & 15 Dead Load
Maximum Allowed Deflection	L/480 Live Load & L/240 Total Load

Products					
PlotID	Length	Product	Plies	Net Qty	Fab Type
L1 - FJ1 @ 19.2" O.C.	28-00-00	9 1/2" NI-20	1	1	MFD
L1 - FJ2 @ 19.2" O.C.	20-00-00	9 1/2" NI-20	1	4	MFD
L1 - FJ3 @ 19.2" O.C.	14-00-00	9 1/2" NI-20	1	20	MFD
L1 - FJ4 @ 19.2" O.C.	13-00-00	9 1/2" NI-20	1	5	MFD
L1 - FJ5 @ 19.2" O.C.	12-00-00	9 1/2" NI-20	1	8	MFD
L1 - FJ6 @ 19.2" O.C.	16-00-00	9 1/2" NI-40x	1	10	MFD
L1 - FJ7 @ 19.2" O.C.	38-00-00	9 1/2" NI-80	1	6	MFD
L1 - FJ8 @ 19.2" O.C.	30-00-00	9 1/2" NI-80	1	2	MFD
L1 - FJ9 @ 19.2" O.C.	19-00-00	9 1/2" NI-80	1	2	MFD
L1 - BM1	16-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	2	2	MFD
L1 - BM2	13-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	2	2	MFD
L1 - BM3	12-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	2	2	MFD
L1 - BM4	12-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	3	3	MFD
L1 - BM5	8-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	2	2	MFD
L1 - BM6	6-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	1	2	MFD
L1 - BM7	5-00-00	1 3/4" x 9 1/2" (2.0E 3100) WestFraser LVL	1	1	MFD
L1 - Ca1	12-00-00	1 1/8" x 9 1/2" APA Rim Board	1	12	MFD
L1 - Ca2	12-00-00	1 1/8" x 9 1/2" APA Rim Board	2	6	MFD
L1 - Bk1	12-00-00	9 1/2" NI-20	1	1	MFD

Accessories					
PlotID	Length	Product	Plies	Net Qty	Fab Type
3/4" Plywood or OSB (23/32" APA Rated Sheathing 48/24 Exposure 1)			1	52	MFD

Connector Summary				
Qty	Manuf	Product	Skew	Supported Mill
2	SIMPSON	HUS18110	-	1 3/4" x 9 1/2" WF LVL
1	SIMPSON	HHUS410	-	2- 1 3/4" x 9 1/2" WF LVL
44	SIMPSON	LT259	-	9 1/2" NI-20
2	SIMPSON	LT359	-	9 1/2" NI-80

THIS DESIGN COMPLIES WITH:

- PART 4 OR 9 OF OBC 2012 Reg. 332/12
- NORDIC LAM CCMC: 13216-R
- NORDIC JOISTS CCMC: 13032-R
- WEST FRASER CCMC: 12904

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

FLOOR NOTES:

- FLOOR JOIST SYSTEMS ABOVE THE GARAGE HAS BEEN DESIGNED WITHOUT A DIRECTLY APPLIED CEILING. USE APPLICABLE BLOCKING OR STRAPPING WHERE REQUIRED AS INDICATED ON THE FRAMING PLAN.
- BLOCKING MATERIAL WILL BE SUPPLIED AND INDICATED AS "BLOCKING". NO LONGER ONLY 12' LENGTHS.

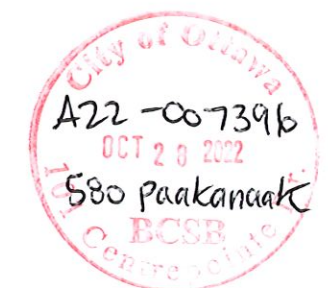


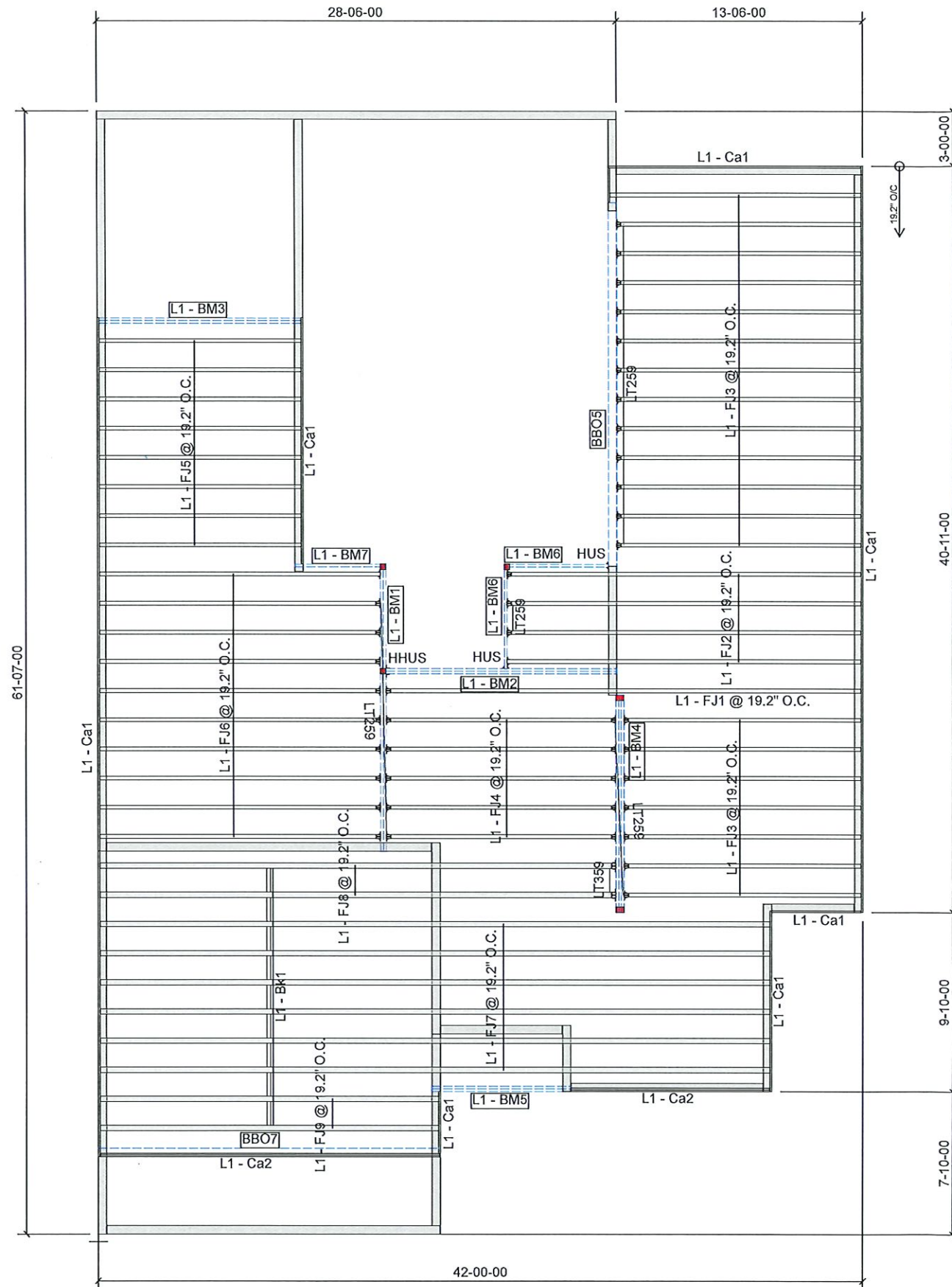
JOB:
PHOENIX HOMES
NEWINGTON
OPT #1 IN-LAW SUITE
2ND FLOOR 2 OF 2

DATE: 10/20/2022



SITE COPY
City of Ottawa





GLUED AND NAILED

LEVEL AND FLOOR CONTAINER NOTES	
Current Date:	10/20/2022
File Name:	Newington M Option Ext.mmdl
Level Name:	2nd Floor
Building Code - Design Methodology:	NBCC 2015
Floor Container:	FC2
Floor Area Loading is:	40 Live Load & 15 Dead Load
Maximum Allowed Deflection	L/480 Live Load & L/240 Total Load

Products					
PlotID	Length	Product	Plies	Net Qty	Fab Type
L1 - FJ1 @ 19.2" O.C.	28-00-00	9 1/2" NI-20	1	1	MFD
L1 - FJ2 @ 19.2" O.C.	20-00-00	9 1/2" NI-20	1	4	MFD
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(REFER TO INDIVIDUAL FLOOR DRAWINGS FOR SPECIFIC LOADS & SPACING)

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JOB:
PHOENIX HOMES
NEWINGTON
OPT #1 IN-LAW SUITE
2ND FLOOR 2 OF 2

DATE: 10/20/2022



SITE COPY
City of Ottawa



Mechanical Design Report

Low rise residential



Location of Installation	Address	House Builder PHOENIX	
	Application Number	House Model (if applicable) NEWINGTON 5BED	
Installing Contractor	Name HARDING MECHANICAL	SITE COPY NOV 04 2022 City of Ottawa Building Services Branch Building Code Reviewed Signature	
	Address 2210 CAVANMORE RD		A22-007396 OCT 28 2022
	City OTTAWA		590 Paakanaak K0A 0H0 BCSB City of Ottawa
	Telephone Number 613-831-2257		Fax Number 613-831-9011

SYSTEM DESIGN PARAMETERS

Combustion Appliances 9.32.3.1.(1) a) ☒ Direct vent (sealed combustion) only b) ☐ Positive venting induced draft (except fireplaces) c) ☐ Natural draft, B-vent or induced draft fireplace d) ☐ Solid Fuel (including fireplaces) e) ☐ No Combustion Appliances	Heating System ☒ Forced Air ☐ Non-Forced Air (Other - _____) ☐ Electric Space Heat ☐ Radiant Floor Heat (attach pipe details) ☐ Geothermal (attach loop, pipe & well details) ☐ High Velocity Residential (attach duct details)
House Type 9.32.3.1.(2) ☒ I Type a) or b) appliances only, no solid fuel ☐ II Type I except with solid fuel (including fireplace) ☐ III Any Type c) appliance = Part 6 Design ☐ IV Electric space heat ☐ Other: No forced air = Option 4	Ventilation System ☐ CAN/CSA-F326 ☐ HRV - Exhaust Ducts / Forced Air System ☒ HRV - Simplified Connection to Forced Air System ☐ HRV - Full Ducting / Not Coupled to Forced Air System ☐ Part 6 Design (Other - _____)

EQUIPMENT DESIGN REQUIREMENTS

Total Ventilation Capacity 9.32.3.3.(1)	TOTAL
Master Bedroom 1 x 10 L/s = 10 L/s	
Unfinished Basement 1 x 10 L/s = 10	
Other Habitable Rooms 14 x 5 L/s = 70	90
Principal Ventilation Capacity 9.32.3.4.(1)	T.V.C.
Master Bedroom 1 x 15 L/s = 15	
Other Bedrooms 4 x 7.5 L/s = 30	- 45
Required Supplemental Ventilation Capacity (T.V.C. less P.V.C.) = 45	

Furnace size: _____ GMEC960804CNA 80,000 BTU'S _____ KJ

Air conditioner size: _____ GSX13042 3.5 TON _____ KJ (If provided / applicable)

Heating / Cooling Equipment sized according to heat loss/gain calculations of CAN/CSA F280: Yes

Geothermal Equipment designed according to CAN/CSA-C448.2: No

Hydronic Equipment designed according to CAN/CSA-B214: No

Duct (and pipe) schematic attached including sizes, runs and material used: Yes

VENTILATION EQUIPMENT

Heat Recovery Ventilator

Model: CLEAN COMFORT VH30100RNC HRV

90 L/s High 45 L/s Low

Exhaust Fans

	Location	Model	L/s	Sones	Principal or Supplemental
1	PDRM	DX90	45	2.5	PRINCIPAL
2	ENSUITE	EC50	25	3.	SUPPLEMENTAL
3	BATH/BATH 2	EC50/EC50	25/25	3./3.	SUPPLEMENTAL
4	GUEST BATH	EC50	25	3.	SUPPLEMENTAL

EQUIPMENT EFFICIENCIES (Please also refer to Energy Efficiency Design Summary)

Heating system:

Cooling system (if applicable):

Water heater:

HRV: 75 % sensible efficiency at 0 degrees:

60 % sensible efficiency at -25 degrees:

SITE
COPY
City of Ottawa



DESIGNER CERTIFICATION

I hereby certify that this ventilation system has been designed in accordance with the 2012 Ontario Building Code.

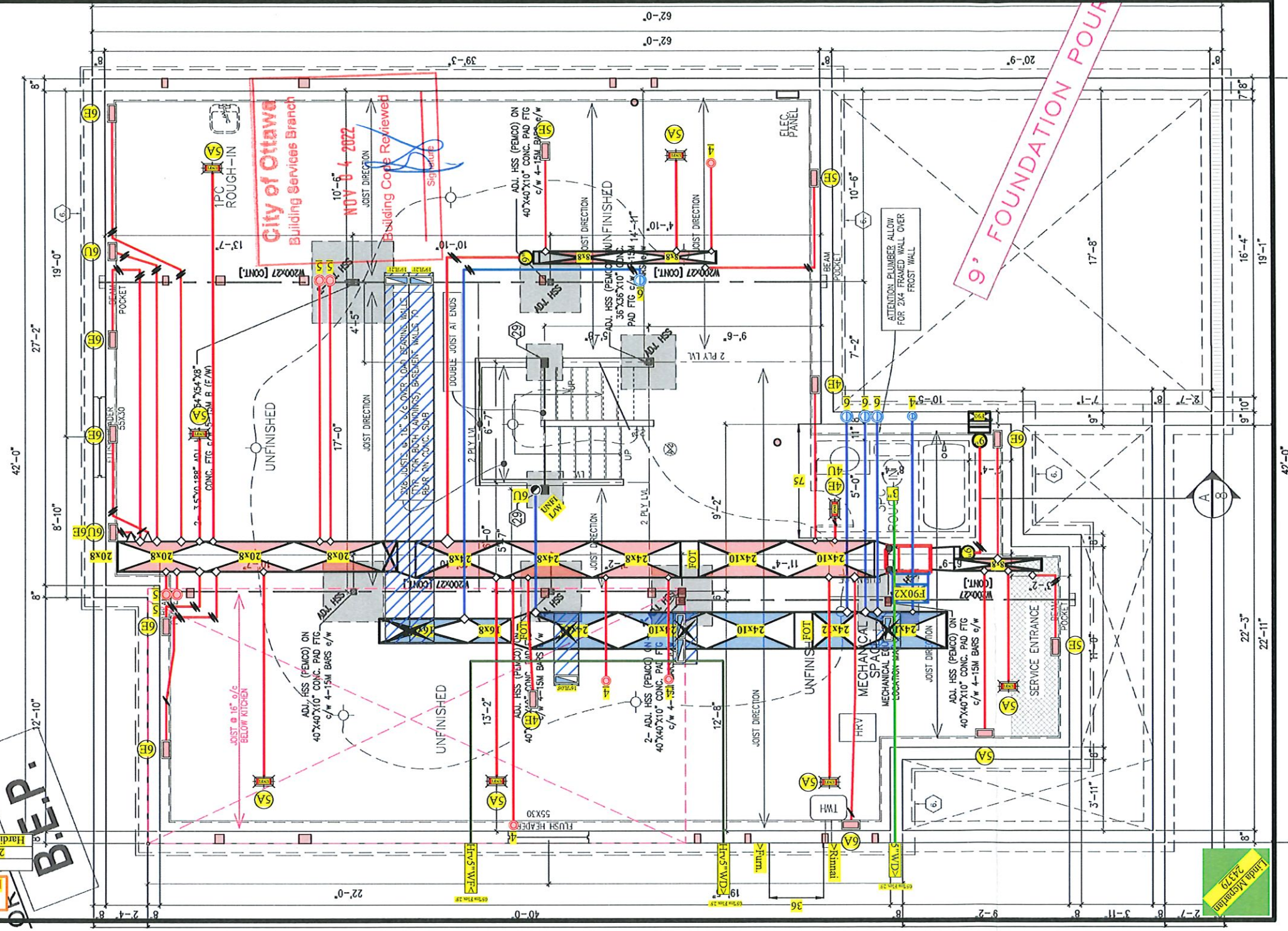
Name: LINDA MCPARLAN Company Name: HARDING MECHANICAL

Signature: Linda McParlan Date: OCT 26/21 BCIN 24379 HRAI # 6080



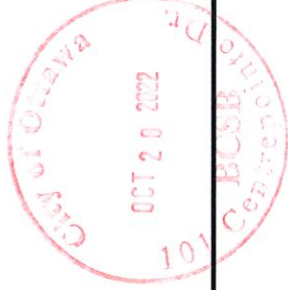
YLNZ

1-DIN
1-ENN
1-FO
1-GR
1-INT
1-KIT
1-LAV
1-OLF
1-PDI
1-SPI
2-BAT
2-BEL
2-BER
2-BO
2-EN
2-HA
2-WA
B-BS



Description
221013.1AR Lot PW 364 Newington 2022 M
Harding-Lot PW 364 Newington 2022 M-221013.1AR

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Room Name	Htg	Cig	Htg
1-DININGROOM	33	22	16
1-FOYER	38	14	1678
1-KITCHEN	313	411	13771
1-LAUNDRY	136	127	9597
1-CL. & SUITE	86	267	799
1-CL. & SUITE	10	15	1765
1-CL. & SUITE	12	8	527
1-CL. & SUITE	17	185	756
1-CL. & SUITE	18	18	771
1-CL. & SUITE	26	19	1130
1-CL. & SUITE	74	53	3239
1-CL. & SUITE	70	55	3058
1-CL. & SUITE	92	64	4057
1-CL. & SUITE	41	1791	
1-CL. & SUITE	23	11	1001
1-CL. & SUITE	83	444	
1-CL. & SUITE	9	4	402
1-CL. & SUITE	294	26	12901
1-CL. & SUITE	1546	1544	67896

FOR P.O. ONLY
B.E.P.

E.&O.E./FOR REFERENCE ON
SUBJECT TO CHANGES

