



Kollaard Associates
Engineers

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

FAX: (613) 258-0475

(613) 860-0923

Civil • Geotechnical
Structural • Environmental
Hydrogeology

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

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

Re: Proposed Single Family Dwelling, 69 Wingover Private, Lot # 25 Diamond View Estates, City of Ottawa, Kollaard Associates File # 201107

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

- Phoenix Homes, Lot # 25 Diamondview Estates, Pages # 1 to 8, Dated November 9, 2020
- Grandor Lumber Inc., Roof Truss Layout, Madison "C", Dated 09/11/2020
- Grandor Lumber Inc., 2nd Floor Joist Layout, 43-10 Madison 4Bed A/C, Dated 11/03/2020
- Grandor Lumber Inc., 1st Floor Joist Layout, 43-10 Madison 4Bed A/C, Dated 11/03/2020

Kollaard Associates offers the following comments:

Second Floor Plan – Pages # 4:

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

Ground Floor Plan – Pages # 3:

4. It is the opinion of Kollaard Associates that the proposed lintels, beams and supporting posts shown on Phoenix Homes Pages # 4 are adequate
5. Ramset a 2x6 to the top flange of all dropped steel beams to attach the above framing, floor joists and flush LVL beams.
6. Truss design is by others.
7. Floor joist design and flush LVL beams within the floor structure are by the manufacturer



Basement Plan – Pages # 2:

8. It is the opinion of Kollaard Associates that the proposed beams and posts shown on Phoenix Homes Pages # 2 are adequate.
9. The intermediate landings may be supported by framed 2x4 walls supported directly on the concrete basement slab.

10. The front porch slab reinforcement described on Phoenix Homes Pages # 1 is adequate.
11. With the exception of the below comments, the proposed 7'-10" high foundation walls conform to 2012 OBC Table 9.15.4.2.A.
12. The foundation walls at the bottom of the window openings that exceed 47 1/4" 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 is designed and approved by others (ATA Engineering Inc., Dwg. # SK03, Dated 2017/10/13).
13. The strip footings and proposed interior pad footings shown on Phoenix Homes Page # 2 and noted on Phoenix Homes Page # 7 are adequate.

14. The proposed deck and steel bracket support are designed and approved by others (DS Structural Design, Dwg. # SK-1, Dated December 2019)

15. Floor joist design, flush LVL beams within the floor structure and LVL lintels are by the manufacturer.

General Notes:

16. All gravity loads to be carried to foundation through solid blocking.
17. Truss design is by others.
18. Floor joist design, flush LVL beams within the floor structure and LVL lintels are by the manufacturer.
19. The self supporting stairs are to be designed by the stair manufacturer.
20. All dimension lumber, except non-load bearing 8 ft 2x6 studs to be No.2 grade SPF or better.
21. Non-load bearing 8 ft 2x6 studs to be No.3 or Stud grade SPF or better.
22. All guards to be as per OBC SB-7, unless otherwise mentioned and designed by others.
23. All brick lintels to be as per OBC Table 9.20.5.2.B.
24. Unless otherwise noted, LVL to be 1.8E 3000Fb LVL (Canadian Limit States bending strength of at least 39.5 MPa) with 1 1/4" nominal width or better.
25. The foundation has been designed in accordance with the 100 kPa SLS soil bearing resistance and a Site Class D as specified on Table 1 of Paterson Group Memorandum, File # PG2450-MEMO.11 R Revision 1 (Dated May 11, 2018) in order to limit the post construction settlement to 25mm total and 20mm differential.
26. The assumed soil bearing resistance of 100 kPa is to be verified prior to construction.

27. 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.

28. Comments provided in this report are made in consideration of Part 9 and Part 4 (where applicable) of the 2012 OBC as amended.

29. 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.

