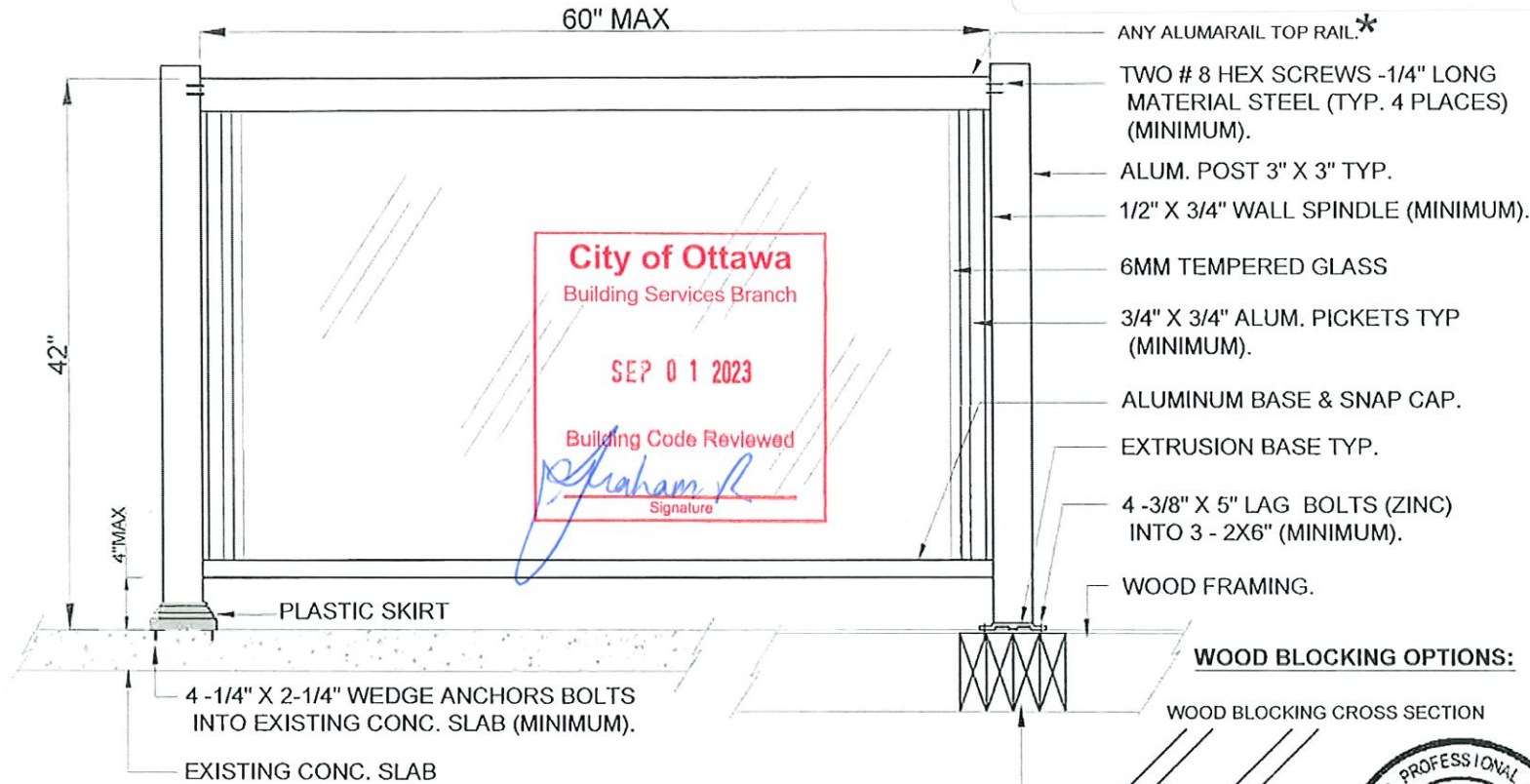


* PLATINUM
EMPRESS
ALUMA
SPRINT
ELITE
PRIMO

ALUMARAIL MFG INC.

There are red notes on these plans,
acceptance of the Building Permit
includes acceptance of these red
notes.

**SITE
COPY**
City of Ottawa



NOTES:

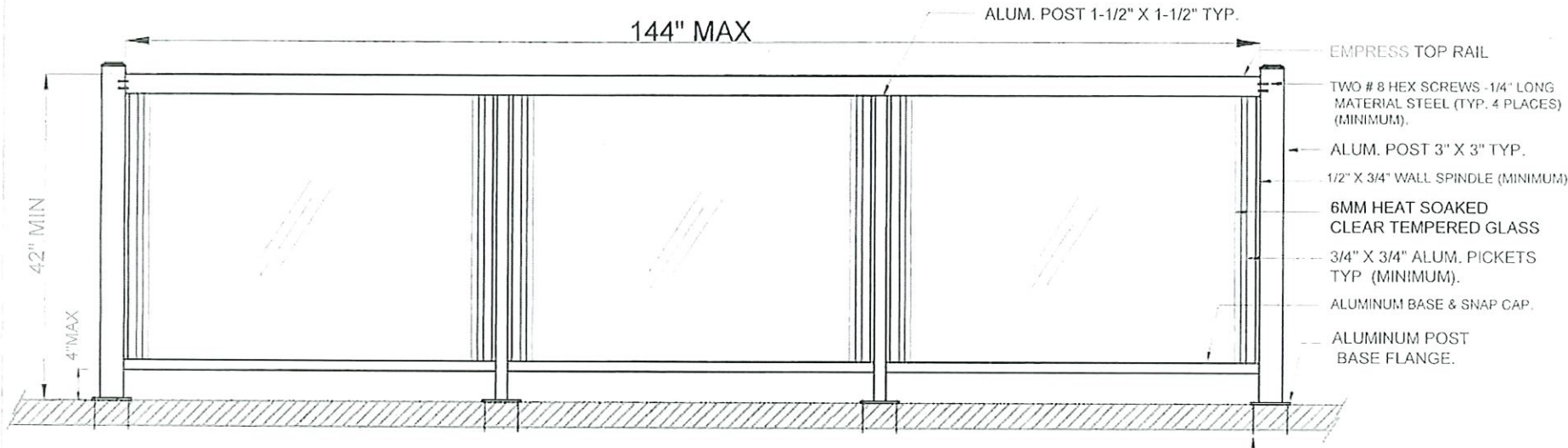
1. RAILING DESIGN IN ACCORDANCE WITH 2010 NATIONAL BUILDING CODE & 2012 ONTARIO BUILDING CODE + SB13 , PART 9 RESIDENTIAL
2. ALL RAILING MATERIAL ALUMINUM ALLOY 6063-T5
3. ALL COMPONENTS SHOULD BE FROM ALUMARAIL MFG INC. OTHERWISE THIS DRAWING IS VOIDED.



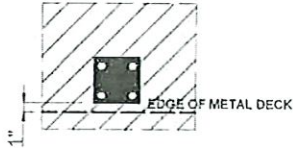
DATE: 18 / 01 / 2016	PROJECT NO.
SCALE: 1 / 2" = 1'-0"	DWG NO.
DRAWN BY: ALUMARAIL MFG INC	GR1



ALUMARAIL MFG INC.



LOCATE POST BASE FLANGE MIN. 1" FROM EDGE OF EVOLUTIONDECK METAL DECK EDECK625, AND INSTAL 4 BOLTS THROUGH CLEARANCE HOLE IN SURFACE FINISH AND THROUGH STEEL DECKPAN, USING MIN. 1/4" DIM. X 3.5" SAE GR. 2 GALVANIZED STEEL BOLTS, WITH MIN. CLAMP LOAD 1350 LBS. INSERT GALVANIZED WASHERS BETWEEN BOLTS AND BASE FLANGE AND NUTS AND METAL DECK.



DATE:
28 / 01 / 2016
SCALE:
3 / 4" = 1'-0"
DRAWN BY:
ALUMARAIL MFG INC

PROJECT NO.
DWG NO.
GR1 INNER POST





Signature

[illegible]



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

July 6, 2023

Kollaard File # 230566--S1

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, 495 Duvernay Drive, Orleans, City of Ottawa, Kollaard Associates File # 230566

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

- Phoenix Homes, 495 Duvernay Drive, Sheets # 1 to 13, Dated 21/06/2023
- Grandor Lumber Inc., Roof Truss Layout, Job # B2300408, Dated 05/09/2023
- Grandor Lumber Inc., 3rd Floor Joist Layout, Job # B2300408-F, Dated 05/31/2023
- Grandor Lumber Inc., 2nd Floor Joist Layout, Job # B2300408-F, Dated 05/31/2023
- Grandor Lumber Inc., 1st Floor Joist Layout, Job # B2300408-F, Dated 05/31/2023

Kollaard Associates offers the following comments:

Third Floor Plan – Sheet # 5:

1. It is the opinion of Kollaard Associates that the proposed lintels and supporting posts shown on Phoenix Homes Sheet # 5 are adequate.
2. The proposed tall wall construction (including posts supporting lintels within the tall wall) shown on Phoenix Homes Sheet # 4 and Sheet # 1 are adequate.
3. Posts supporting girders may consist of built up 2x6 posts as indicated on Phoenix Homes Sheet # 5 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.

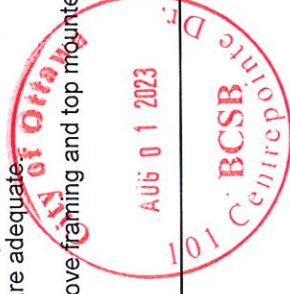
Second Floor Plan – Sheet # 4:

5. It is the opinion of Kollaard Associates that the proposed beams (not specified on the floor joist layout), lintels and supporting posts shown on Phoenix Homes Sheet # 4 are adequate.
6. Ramset a 2x6 to the top flange of the steel beams to fasten the above framing and top mounted joist hangers.



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 to fasten face mounted beam hangers noted on Phoenix Homes Sheet # 4 is adequate.
8. On the exterior side of the W200x27 steel beam, pack the web of the steel beam and fasten the web packing to the web of the steel beam with 2 rows of 1/2" through bolts (c/w) nuts and washers @ staggered 16" o/c with the bolts located 2" from the top and bottom edges of the ledger. The 2x8 ledger is to be screwed to the ledger with 1/4" x 4" SDS screws @ 8" o/c.
9. The proposed tall wall construction (including posts supporting lintels within the tall wall) shown on Sheet # 4 and Sheet # 1 are adequate.
10. Floor joist design and flush LVL beams within the floor structure are by the manufacturer. The posts supporting the flush LVL beams shown on Phoenix Homes Sheet # 4 are adequate.
11. It is the opinion of Kollaard Associates that the proposed beams (not specified on the floor joist layout) lintels and supporting posts shown on Phoenix Homes Sheet # 3 are adequate.
12. Ramset a 2x6 to the top flange of the steel beams to fasten the above framing and top mounted joist hangers.
13. The proposed tall wall construction (including posts supporting lintels within the tall wall) shown on Sheet # 3 and Sheet # 1 are adequate.
14. Floor joist design and flush LVL beams within the floor structure are by the manufacturer. The posts supporting the flush LVL beams shown on Phoenix Homes Sheet # 3 are adequate.

Basement Plan – Sheet # 2:

15. It is the opinion of Kollaard Associates that the proposed beams and posts shown on Phoenix Homes Sheet # 2 are adequate.
16. Ramset a 2x6 to the top flange of the steel beams to fasten the above framing and top mounted joist hangers. The steel beams may be installed as simple spans or continuous over the intermediate post supports.
17. Unless otherwise designed by the stair manufacturer, the landing to the basement may consist of 2x8 joists @ 16" o/c, supported by 2x4 framed walls bearing on the basement slab.
18. The foundation walls adjacent the stairs to the basement are considered to be laterally unsupported as per 2012 OBC 9.15.4.3. The reinforcement around the window openings shown on Phoenix Homes Sheet # 2 is adequate to withstand the lateral earth pressures.
19. 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 shown on Phoenix Homes Sheet # 2 is adequate to withstand the lateral earth pressures.
20. The remaining reinforced foundation walls noted on Phoenix Homes Sheet # 2 is adequate to withstand the lateral earth pressures.
21. The proposed strip footings, interior pad footings and exterior pad footings shown on Phoenix Homes Sheet # 2 and Sheet # 1 are adequate.
22. Floor joist design, flush LVL beams within the floor structure and LVL lintels are by the manufacturer.

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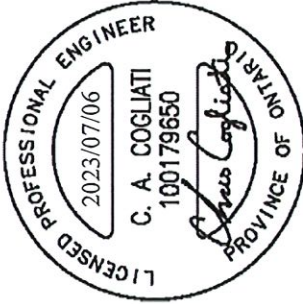


General Notes:

23. All gravity loads to be carried to foundation through solid blocking.
24. Roof truss design and flush girder trusses are by the manufacturer. Note that the roof truss manufacturer has designed the girder trusses mentioned in this report. The comments provided by Kollaard Associates in this report are based in part on the design indicated in the roof truss layout. If a different roof truss 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.
25. Floor joist design and flush LVL beams/lintels are by the manufacturer. Note that the floor joist supplier has designed the flush LVL beams/lintels shown on the building drawings and shown on the floor joist layouts. The comments provided by Kollaard Associates in this report are based in part on the design indicated in the floor joist layouts. If different floor joist layouts are used in construction, comments made in this report may no longer be valid.
26. All dimension lumber, except non-load bearing 8 ft 2x6 studs to be No.2 grade SPF or better.
27. Non-load bearing 8 ft 2x6 studs to be No.3 or Stud grade SPF or better.
28. All guards to be as per OBC SB-7, unless otherwise mentioned or designed by others.
29. The self supporting stairs and landings are to be designed by the stair manufacturer.
30. All brick lintels to be as per OBC Table 9.20.5.2.B.
31. Unless otherwise noted, LVL's to be 1.8E 3000Fb LVL's with 1 3/4" nominal width or better.
32. 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".
33. The assumed soil bearing resistance of 75 kPa is to be verified prior to construction.
34. Comments provided in this report are made in consideration of Part 9 and Part 4 (where applicable) of the 2012 OBC as amended.
35. 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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