

**Date:** 03/10/2022

**To:** **Jacob Ayala**  
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**Re:** **Damaged Roof Truss**  
Location: Lot 13 Lafayette Meadows (250 Long Meadow Lane Fuquay-Varina, NC)  
JDS Project No.: RDU2202372  
Date of Inspection: 3/9/2022

A representative of JDS Consulting arrived on site to observe the issues reported to us by the client, which are presented, along with our recommendations, in this report.

### Observations

The client requested evaluation of the 1<sup>st</sup> truss from the front (Front A). The following was observed:

- The top chord between joint 7 and joint 9 is broken and missing.
- The top chord between joint 6 and joint 7 is broken and missing.
- The horizontal top chord over the platform between joint 6 and joint 8 is missing.

### Recommendations

Based on our on-site evaluation and review, the contractor shall do the following:

- Squarely cut the top chord biased toward joint 9. Install (1) SYP#2 2x4 block between the cut end and the ridge. Secure the block into place with (2) 6' long 2x4 scabs centered at the butted joint. Attach each scab with (2) 10d nails spaced 6" o.c., offsetting the opposing rows 3".
- Squarely cut the top chord biased toward joint 5. Install (1) SYP#2 2x4 block between the cut end and the ridge. Secure the block into place with (2) 6' long 2x4 scabs centered at the butted joint. Attach each scab with (2) 10d nails spaced 6" o.c., offsetting the opposing rows 3".
- Install a 3-ply 2x4 6-8 web between the diagonal webs per the corresponding A roof truss profile.
- Fur out the diagonal webs on both sides with 6' long 2x4 scabs on both sides beginning at the top of the member. Secure all scabs with (2) 10d nails spaced 6" o.c., offsetting the opposing rows 3".
- At joint 6 and joint 8, install, install (1) 24"x24"x7/16" OSB gusset centered on both sides of the furred out joint. Attach with (2) 6d nails spaced 3" o.c. The OSB gussets may be cut to match the roof's pitch.
- At the ridge (Joint 7), install (1) 24"x24"x7/16" OSB gusset centered on both sides of the joint. Attach with (2) 6d nails spaced 3" o.c. The OSB gussets may be cut to match the roof's pitch.
- At joint 5 and joint 9, install (1) 16"x16"x7/16" OSB gusset centered on both sides of the joint. Attach with (2) 6d nails spaced 3" o.c.

- At joint 16 and joint 23, install (1) 24"x24"x7/16" OSB gusset centered on both sides of the joint. Attach with (2) 6d nails spaced 3" o.c.
- Centered at joint 4 and joint 10, install (1) 6' long 2x4 scab on both sides of the web. Attach with (2) 10d nails spaced 6" o.c., offsetting the opposing row 3".

If you have any questions or if I can be of further assistance to you on this project, please contact me at 984-297-5949.

Respectfully Submitted,  
John Lowrance

