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Date: 03/12/2024

To: Chris Hare

Mattamy Homes 2127 Ayrsley Town Boulevard Charlotte, NC 28273 chris.hare@mattamycorp.com 984-270-0812

Re: Damaged Roof Trusses

Location: Lot 23 Riverfall (110 Denali Dr. Angier, NC)

JDS Project No.: RDU2402606 Date of Inspection: 03/12/2024

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 several issues with the T03S trusses. It was observed that:

- 1) The 1<sup>st</sup> T03S truss from the left exterior wall has pulled gussets at joint 8 on the left side, and joint 7 on the right side.
  - The 2<sup>nd</sup> T03S truss from the left exterior wall has pulled gussets at joint 7 and joint 8 on the right side.
  - The 4<sup>th</sup> T03S truss from the left exterior wall has pulled gussets on both sides of joint 7, and one side of joint 8.
- 2) The 2<sup>nd</sup> T03S truss from the left has a crack in the top chord between joints 6 and 7. A 6' long scab was installed, but the nailing pattern was unable to be determined.
- 3) While on site it was also observed that the T03S trusses hanging at the girder truss at the front of the garage had hanger gaps that were too large (between 3/8" and 3/4"), in T03S trusses 1 through 9 from the left exterior wall.

## Recommendations

Based on our observations and review, the following corrective measures are recommended for the corresponding items above:

- 1) For each of the 1<sup>st</sup>, 2<sup>nd</sup>, and 4<sup>th</sup> T03S trusses with damaged gussets at joint 7 and 8:
  - a. Install a 6' long 2x6 scab on both sides of truss centered on joint 7 and 8. Attach with (3) rows of 10d nails spaced 4" o.c., staggered through both sides.
  - b. Then fur out on both sides of the vertical web below joint 7 with 2x4 blocking, attached with (2) rows of 10d nails spaced 4" o.c.
  - c. Then attach a 24"x24"x7/16" OSB gusset plate to both sides of the furred out truss, centered on joint 7, top edge flush with the top of the truss. Attach with (3) rows of 10d nails spaced 4" o.c. through the top chord, and (2) rows of 10d nails spaced 4" o.c. through the vertical web.



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- 2) For the 2<sup>nd</sup> T03S truss with a crack in the top chord between joints 6 and 7, install a second 6' long 2x6 SP No. 2 scab on the other side of the truss centered on the crack. Attach with (3) rows of 10d nails spaced 4" o.c.
  - Add additional nails in existing scab to achieve (3) rows of 10d nails spaced 4" o.c.
- 3) At the front bearing end of each of the leftmost (9) T03S trusses, install a 6' long 2x6 scab along the bottom chord on both sides of the truss, with one end flush against the girder. Attach to the bottom chord with (3) rows of 10d nails spaced 4" o.c. Then attach each scab to the girder with a Simpson L70 angle.

If you have any questions or if I can be of further assistance to you on this project, please contact me at 984-332-1637.

Respectfully Submitted, Benjamin Lambert



Reviewing Engineer: Uchenna Onwuemene, PE

