

March 4, 2023

IQ Homebuilders Attn: Brett Shelton

Re: 2026 SW Red Barn Lane, Lee's Summit, MO (Lot 68, Retreat at Hook Farms)

Vista Structural Engineering, LLC, was asked to address the following rough-in inspection item for the project located at the above referenced address. Please see the following attached partial plan mark up for reference.

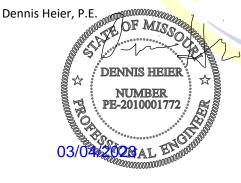
Inspection comment: Plans call for 3-stud pack under deck beam. Not built to plans.

Vista Structural's response: The plans show a 4-ply 2x12 beam that extends into the walls at the outer corners of the deck and bears on triple 2x studs at each end. A 3-ply 2x12 beam was installed, fastened to the house rim at each end with a Simpson HUC210-3 hanger. The triple 2x studs were installed in the house wall at each corner of the deck. The design load imposed on the HUC210-3 hanger is 2,000 pounds; the allowable load posted by Simpson is 2,680 pounds – therefore, we recommend approval of the hanger connection. We recommend installing the specified fourth 2x12 ply to the outside face of the existing triple 2x12. The fourth ply should be fastened to the existing triple 2x12 with two rows of 10d nails @ 6" o.c., with 2" of top/bottom clearance. The fourth ply does not need to rest in a hanger. The hanger connection to the house rim transfers the loading to the triple 2x studs in the house wall; we recommend approval of the existing triple 2x studs at these locations in the house wall, at the outer corners of the deck.

Our firm appreciates the opportunity to serve you. If you have any questions or if you need anything further, please feel free to contact us.

Sincerely,

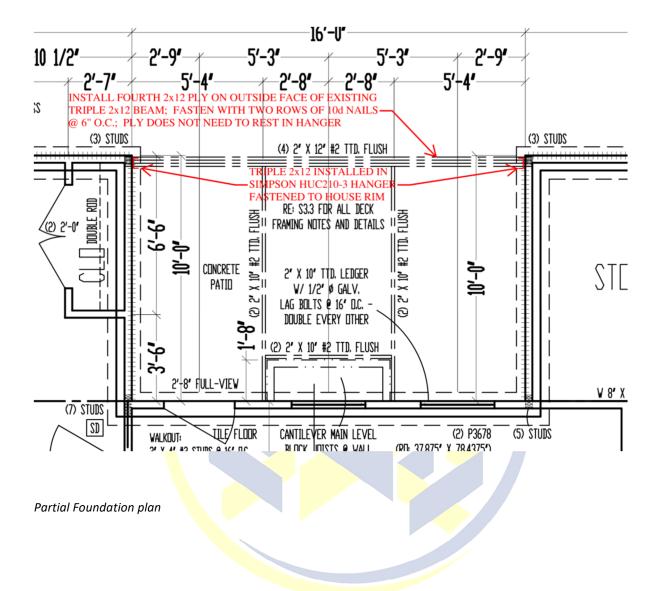
Vista Structural Engineering, LLC



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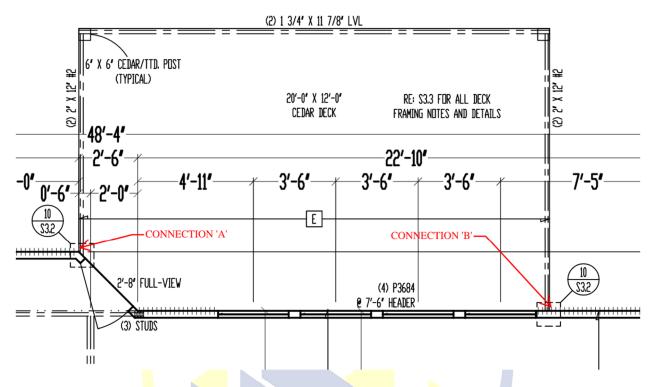




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Partial plan view of main floor – Location of connections in question

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Connection A – header framed into house and attached with strap (left side of covered deck)



Connection B – header framed into house and attached with strap (right side of covered deck)

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