



January 16, 2023

New Mark Homes

Re: 2602 SW Farm Field Rd
Lot 39 Hook Farms
Lee's Summit, MO
Permit#: PRRES20216094

Apex Engineers Inc. observed the existing house at the above referenced address. Our firm has been retained to address city comments. See below for our findings and recommendations. For the purpose of this report, the home will be referred to as facing east.

- Address rafters landing on blocks throughout
 - Rafters bearing on (4) plate plys is acceptable if each plate and rafters were fastened per detail 8/S3.2 as shown on permit plans.
- Address rafter to top plate and rafter to ceiling joist connection in garage N&S walls
 - Rafters bearing on single plate fastened to ceiling joist is acceptable if fastened per detail 9/S3.2 as shown on permit plans.
- Address over notched studs at pfh for electrical.
 - On north side of 16' garage door, new 2x4 stud shall be laid flat on interior side of notched (2)2x4 and fastened with (2)10D common nails, (1) into each stud, at 8" on center. New 2x4 shall be same height of notched studs.
 - On south side of 16' garage door, a new 2x6 stud shall be laid flat on interior side of notched (3)2x4 and fastened with (3)10D common nails at 8" on center. New 2x6 shall be same height of notched studs.
- CS-PF at breakfast wall
 - Interior side of west exterior wall shall be braced with 7/16" thick wood structural panel and fastened per CS-PF requirements with strapping. Minimum width of panel shall be 16". Simpson DTT2Z tie downs between floors shall be attached at each end of braced panel as shown on detail 1/S5.0.
- Address holes drilled closer than 2" to one another above entry for DWV and pex
 - Bored section of double 2x10 has enough bending and shear capacity to support existing loads.
- Over notched double joist above owners bathroom.
 - An additional #2-2x10 ply shall be fastened to notched (2)2x10 with (3) HeadLok (4-1/2" length) structural screws staggered at 12" on center. New ply can be sistered on either side to allow access for ductwork. New ply shall span from exterior wall to load bearing wall on north side of bathroom.

*****Built-up wood column - Each 2x4 or 2x6 ply shall be fastened with 1 row of 10d nails at 9" on center alternating side to side, 1.4" min edge distance, and starting 2.5" from each end.***

Note: Contractor is responsible for the proper and applicable bracing of all structural elements during construction. Apex Engineers, Inc. has not been retained to design temporary shoring.

Please call if our firm can be of further assistance. This report does not constitute approval by the enforcing jurisdiction.

LIMITATIONS

Upon demolition, If on-site conditions differ from those in the report above that could affect any of the recommendations given in this report, Apex Engineers, Inc. shall be called back and allowed to re-evaluate our previous recommendations and/or conclusions. If changes in the condition of the site occur and Apex Engineers, Inc. is not allowed the opportunity to re-evaluate to respond to any of these changes, our firm cannot be responsible for the effect of any of the conditions that differed from those reported herein.

The scope of our services includes only those items specifically addressed herein. All other items are outside the scope of this inspection; including any environmental assessment (such as, but not limited to mold, mildew, or presence of any other toxic substance or environmental risks).

In addition, the scope our services does not include any evaluation of the building or site for job-site safety and/or hazardous conditions. All construction shall be performed in compliance with IRC and OSHA standards at all times. Our firm has not been retained to examine the site or building for any of these conditions. In addition, the contractor shall retain sole responsibility for the quality of work, for adhering to plans, specifications, appropriate codes, and, for repairing defects, deficiencies or omission, regardless of when they are found. By the use of this report it is understood the above conditions are agreed to.

Apex Engineers, Inc. has performed our services in a manner consistent with the standard of care and skill ordinarily exercised by firms of our type practicing under similar conditions at this time and locality.

This report is intended for the confidential and exclusive use of Apex Engineers, Inc.'s client. No other person or company is authorized to use this report for any purpose without Apex Engineers, Inc.'s client permission. Please call if Apex Engineers, Inc. can be of further assistance.

Best Regards,
Apex Engineers, Inc.

Joshua A. Elizondo
Project Engineer

Clayton J. Hess, P.E.
Principal

