## BODO AND ASSOCIATES, INC.

Consulting Engineers P. O. Box 357605 Gainesville, FL 32635-7605

Tel.: 352.378.8806 Email: bodoinc@aol.com State of Florida Registry Number: 2719

October 29, 2020

Restoration Specialists Attention: **Mr. Chris Pierce** 6201 NW 123<sup>rd</sup> Place, Suite 10 Gainesville, FL 32653

> RE: Damage Assessment and Remediation Brewer Residence 6779 SW County Road 240, Lake City, Florida 32024

Liberty Mutual Insurance Company Claim No.: 042891745-01

Date of Loss: June 27, 2020

Bodo and Associates, Inc. File No.: 5090135

## Dear Mr. Pierce:

Per your request and authorization, Bodo and Associates, Inc. completed an investigation of the Brewer residence located at 6779 SW County Road 240 in Lake City, Florida. The purpose of the investigation was to determine the proper methodology of restoring the structural integrity of roof framing and exterior walls reportedly damaged by a tree falling on the house. The investigation included a review of photographs provided by you, a review of a report dated July 16, 2020 and prepared by *Donan Engineering Co., Inc.*, also provided by you, a visual inspection of the premises by the undersigned on October 7, 2020, an assessment of the structural damage, and the development of a remediation protocol.

The structure is a one-story, single-family residence. Exterior walls are of concrete masonry construction. The floor is a concrete slab on grade. The roof is a gable design covered with metal roofing on wood sheathing supported by pre-engineered wood trusses. For purposes of orientation in this report, the front door of the house is assumed to be on the south side.

The tree, which was located south-southwest of the southwest corner of the house, fell in a northeasterly direction, and generally impacted the west portion of the structure. Structural damage related to this claim consists of punctured and/or broken roof sheathing, broken and/or cracked truss members, and damage to concrete masonry along the west side and near the northwest and southwest corners of the house. Nonstructural damage generally includes damaged metal roofing, siding, fascia, soffits, and interior.

Based on our observations and evaluation of the damage, the following repair recommendations are made to restore the structural integrity of the affected components:

- 1. At least the first thirteen trusses from the west were damaged beyond repair and should be replaced with like new trusses in their entirety. New trusses should be connected at each end to the filled concrete masonry tie beam using one Simpson MTSM16 twist strap attached with (7) 0.148 x 1½" common nails to the truss and (4) ¼ x 2¼" Titen 2 screws. The new gable end truss should be connected near each end and at the midpoint to the filled concrete masonry tie beam using Simpson HGMA10KTA connector kits.
- 2. Roof sheathing damaged by the event or removed to facilitate framing repair or replacement should be replaced with new sheathing. New sheathing should be the same as the existing and should be attached to framing using 8d (0.131" x 2½") common or ring-shank nails at 4" o.c. at edges and 6" o.c. at intermediate framing. Use ring-shank nails within five feet of roof edges.
- 3. Cracked or displaced concrete masonry units in the west wall and near the southwest and northwest corners of the house should be removed and replaced with new units. The top course should be filled with concrete containing pea-gravel aggregate to provide a proper tie beam.
- 4. Except as noted herein, all connections and connectors used in the repair work should be the same size, type, and material as those used in the original construction.
- 5. Cosmetic repairs to other damaged elements may be made after completion of structural repairs.
- 6. The overall structural integrity of the residence does not appear to have been compromised. The structural repairs recommended herein will restore the damaged components to their pre-damaged structural capacity.

Bodo and Associates, Inc. should be advised of any additional damage discovered subsequent to this report so that appropriate additional remedial recommendations may be made, if needed.

We appreciate the opportunity to be of service. If you have any questions or require additional assistance, please do not hesitate to contact us.

Sincerely,

BODO AND ASSOCIATES, INC.



This document has been digitally signed and sealed by Mr. Attila A. Bodo, PE, on October 29, 2020, using a Digital Signature. Printed copies of this document are not considered signed and sealed and the SHA authentication code must be verified on any electronic copies.

Attila A. Bodo, PE Professional Engineer Florida License No. 15834

Attila A. Bodo, PE Digitally signed by Attila A. Bodo, PE Date: 2020.10.29 10:41:57 -04'00'

## Limitations

While due care has been exercised in the performance of this investigation, Bodo and Associates, Inc. can make no representations, warranties, or guarantees with respect to latent or concealed conditions which may exist that may be beyond the limits of detection with the methodologies used. This report is prepared for the exclusive use of the current homeowner(s), Restoration Specialists, their agents, and assigns. Any use by other parties for any purpose is not authorized.