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April 21, 2025

Mr. Travis Euler and Mr. Jerome Alton
50 Day Brewing Company LLC
116 Kettle Moraine Drive South
Slinger WI 53086

## 50 Day Brewery Roof Truss Assessment

116 Kettle Moraine Dr, Slinger, WI
WJE No. 2025.1556

Dear Travis and Jerome

It was a pleasure discussing the roof truss issues and general concerns you have regarding the above referenced project. As discussed, Wiss, Janney, Elstner Associates, Inc. (WJE) prepared this proposal for a preliminary structural assessment of the four roughhewn heavy timber roof trusses at the proposed 50 Day Brewery building, which is a former church, located at 116 Kettle Moraine Dr. in Slinger, Wisconsin (Figure 1). As we discussed, our proposed scope of work is to be a phased approach to review and design repairs for the roof structure. We understand that two prior structural engineers have inspected the property and have expressed concerns regarding the heavy timber roof trusses and recommended their replacement. The purpose of the WJE assessment is to help determine if repairs are feasible, and if so, assist with longer-term repair recommendations as appropriate.



Figure 1. Aerial view of church building that is to house the new brewery. The approximate location of the four trusses are shown with dashed lines.

## DESCRIPTION

The building that is to accommodate the new 50 Day Brewery is a load-bearing masonry wall structure with a timber-framed gable roof. This church building, which has a truncated transept in plan, had been

reportedly constructed circa 1864, as indicated by Zillow. The timber trusses in question span the width of the church nave (approximately 34 feet) and are spaced approximately 12 feet on center, bearing on the mass-masonry limestone walls. The truss framing is comprised of mortice and tenon joinery. These trusses support timber purlins that span parallel to the roof ridge above, the purlins support log rafters, which support the spaced plank decking and roofing above. As discussed, Treece LLC (Treece), a structural engineering firm out of Madison, WI, had examined the trusses and opined in a draft report that these trusses are unsafe should be replaced. Examples of the truss images from the Treece report have been included below in Figure 2 and Figure 3.



Figure 2. Attic images provided in draft inspection report by Treece.

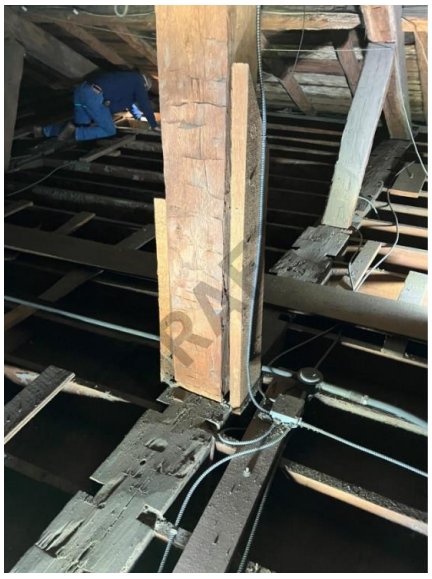


Figure 3. . Attic images provided in draft inspection report by Treece.

Treece reported that truss framing has experienced isolated failures in the vicinity of the king-post connections to the bottom chords and implies that the trusses may be in an unsafe condition per the criteria outlined in the International Existing Building Code (IEBC). However, the Treece report disclaimer, (Figure 4), states that they have not performed a condition assessment, material testing, or structural analysis of the trusses. Thus, an evaluation of repairs necessary to address truss deficiencies has not been provided; although, they did develop roof-truss replacement documents as a remediation option for the building.

**Disclaimer**

This report documents observed conditions for determining necessary roof replacement scope. It does not constitute a full damage nor condition assessment. No material sampling, testing, or nor calculations have been performed on the existing construction.

Figure 4. Treece report disclaimer.

As we discussed, WJE understands that the owner is interested in identifying repair options for the roof structure that would enable salvaging the existing roof trusses.

## SCOPE OF SERVICES

In order to determine the as-built conditions and general repair options for the roof trusses, which we anticipate including reinforcement of the roof trusses to enable salvaging the existing framing, we have developed the following three-phased approach for this assessment:

### Phase 1: Assessment of Existing Trusses

1. Review available documents provided by you including design drawings, repair documents, maintenance records, and any prior inspection reports as they relate to the building roof structure. We also request that any original architectural and structural drawings for the building should be made available, if possible. These documents should be provided for review several days prior to the site inspection work.
2. Perform a one-day inspection of the building to examine the roof trusses, purlins and associated roof framing components as follows:
    a. Visually examine the building structure from the interior and exterior at selected accessible locations to identify potential truss damage or distress. The roof ridge and exterior masonry near the truss support locations will be reviewed from grade, accessible roof levels, and with the assistance of binoculars or drones.
    b. The timber truss and roof framing elements will be visually examined from the attic and building interior to identify damage and distress. Non-destructive testing techniques will be employed, including probes, mallets, and moisture meters to assess the general condition of the wood components. Ceiling finishes and conditions within the building interior will also be visually examined. As part of the inspection, general conditions, dimensions, and geometries will be documented as appropriate for analysis purposes.
    c. Wood samples will be obtained from select truss and framing members to identify the wood species. Material defects, such as knots, grain slopes and checks will be reviewed. Wood species and defect assessments will help us to select appropriate allowable stresses for use in our structural analysis.
3. A structural analysis of a representative truss and purlin members will be performed. Design loads for the analysis will be based on the observed construction for dead load (self-weight). Live loads (which include any required snow, wind, seismic, and maintenance loading) will be applied based on requirements within the 2015 Wisconsin Dwelling Code (the 2015 International Building Code and 2015 International Existing Building Code, as amended).
4. The truss analysis will be used to evaluate repair needs for the structure. Conceptual repairs will be developed in the form of written narrative and sketches that will be provided to you for preliminary pricing by your contractor. Note that the conceptual repair documents will not be suitable for permitting and detailed construction documents will be part of Phase 2, as appropriate. The conceptual repair documents are intended to help the owner, contractor, and design team to understand the anticipated budgets for a repair approach.
5. The findings of this review will be summarized in a letter report, including general repair recommendations and the sketches noted above.

## Phase 2: Repair Design and Construction Document Preparation

Provided that the preliminary costs associated with Phase 1 are feasible for implementation, Phase 2 includes development of repair documents that would enable the implementation of permanent truss and purlin repairs. A preliminary scope of work for Phase 2 is as follows:

1. Hold a meeting with the project team to review findings from Phase 1 and to resolve repair options that are to be incorporated into the proposed building improvements. It is anticipated that this meeting could be performed via Teams, or similar, video conference. Repair needs and strategies will be reviewed as related to the roof structure.
2. Based on the findings from the truss analysis and framing review, we will finalize reinforcing systems and corresponding details to address deficiencies identified within the truss and purlin framing. This will also include reviews of the log rafters, and truss bracing assemblies. It is anticipated that additional site-inspection time may be required for detailing purposes. The structural repair documents will be sealed for permit by a Professional Engineer licensed in the State of Wisconsin.
3. Repair drawings (including details and the specifications captured within general notes on the drawings) will be assembled for the recommended repairs that can be submitted to contractors for pricing.
    a. Drawings to be prepared for the repairs will include truss plans and elevations showing the location of repairs, based on inspection findings. Permit acquisition shall be the responsibility of the contractor.
    b. Construction-logistics issues will be covered, including repair sequencing, shoring strategies, and site utilization in accordance with Owner requirements.
    c. The location and scope of each type of work will be either called out on the drawings or within the general notes.
4. A bid form may be developed, if needed, for the framing repairs and reinforcement to be included. Contingencies and unit prices may also be considered, depending upon the resolved work scope items that are identified in Phase 1.

## Phase 3: Construction Observation

The actual scope of construction period services can be developed when the extent of needed repairs is determined, and the construction schedule is resolved. The following serves as a preliminary scope of services for Phase 3:

1. Attend a pre-construction/repair start-up meeting with the selected contractor and project team as appropriate to review proposed work schedule, sequencing for the framing repairs in question from Phase 2. The selected contractor will be responsible for obtaining all applicable permits.
2. Review project submittals from the contractor as they relate to the designated repair work scopes. These submittals may include repair material literature and information, physical samples, to help review compliance with the project requirements.
4. Perform as many as 3 periodic site visits, as requested by you or the owner, to observe ongoing repair work to help ensure that project requirements are satisfied. The number of site visits will be based on

the actual scope of repairs and duration of construction. The final visit(s) will include an inspection of the substantially completed repair with a punch list review, as needed.

## BUDGET

We recommend that the following budget be established for the tasks outlined above, including time and expenses:

**Phase 1:** Site Assessment / Analysis / Conceptual Repairs $16,500

Note that budgets for Phase 2 and Phase 3 can be developed upon completion of the work in Phase 1, as appropriate. An updated budget can be established when the scope of repairs needed is resolved, and the actual number of visits is known.

**Schedule of Hourly Rates:**

| Professional Staff | |
|---|---|
| Senior Principal | $420.00 |
| Principal | $345.00 |
| Associate Principal | $295.00 |
| Senior Associate | $265.00 |
| Associate III | $230.00 |
| Associate II | $195.00 |
| Associate I | $160.00 |

| Professional Support Staff | |
|---|---|
| Senior Specialist | $185.00 |
| Specialist | $165.00 |
| | |
| Senior Technician | $145.00 |
| Technician II | $125.00 |
| Technician I | $110.00 |
| Admin Support | $125.00 |

## Note:

Charges for all WJE services will be based on hours worked and expenses incurred. All charges will be billed in accordance with the schedule of hourly rates that is in effect at the time the work is performed (current rates provided in the table below). Additional project meetings and/or tasks not listed above that may be required will be billed on an hourly basis per our standard hourly rates. No additional tasks or work items will be performed without your written authorization. All WJE work will be performed in accordance with our *Terms and Conditions for Professional Services* (version V2.1NAT, copyright 2022), a copy of which has been attached to this proposal.

If you are in agreement with the terms of this proposal, please sign in the space provided, and email a copy of the executed proposal to tcrowe@wje.com, as authorization for WJE to proceed and schedule Phase 1 work discussed above.

If you have any comments or questions regarding this proposal, please call.

Sincerely,

**WISS, JANNEY, ELSTNER ASSOCIATES, INC.**



Timothy Crowe, SE, RA, FAPT
Associate Principal / Project Manager

Attachment
cc: Katie Augestine, EIT (WJE)

**Agreed and approved.**

The following party is responsible for payment to WJE for these services:

Name: _____ (please print)

Signature: _____

Title: _____

As Agent or Principal for:

_____

Date: _____

**Wiss, Janney, Elstner Associates, Inc**. or **WJE Engineers & Architects, P.C. (WJE)** has been requested to perform certain professional and other services ("Project"). The parties agree that these services shall be performed under the following Terms and Conditions, and that Client's acceptance of WJE's proposal or its direction for WJE to commence any services constitutes acceptance of these Terms.

**1. Independent Contractor.** WJE is an independent contractor, and all persons employed to furnish services hereunder are employees of WJE or its subcontractors/subconsultants and not of the Client. WJE and Client agree to be solely responsible for compliance with all federal, state, and local laws, rules and regulations, and ordinances that apply to their own respective employees.

**2. Performance.** The standard of care for all professional services performed or furnished by WJE will be the skill and care ordinarily used by members of WJE's professions performing similar services and practicing under similar circumstances at the same time and in the same locality. WJE makes no guarantees or warranties, express or implied, with regard to the performance of its services. WJE shall not have control over or be in charge of and shall not be responsible for construction means, methods, techniques, sequences or procedures or for construction safety precautions and programs since these are the responsibilities of others. WJE agrees to perform its services in as timely a manner as is consistent with the professional standard of care and to comply with applicable laws, regulations, codes and standards that relate to WJE's services and that are in effect as of the date when the services are provided. Client agrees that no claim may be brought against any WJE employee individually for any claim involving performance of services.

**3. Client Duties**. In order for WJE to perform the services requested, the Client shall, at no expense to WJE, (1) provide all necessary information regarding Client's requirements as necessary for the orderly progress of the work; (2) designate a person to act as Client's representative for the services who shall have the authority to transmit instructions, receive instructions and information, and interpret and define Client's policies and requests for WJE's services; and (3) provide access to and make all provisions for WJE to enter, without cost, limitation, or burden to WJE, the specific property as required to perform the work, including the use of scaffolds or similar mechanical equipment. WJE is entitled to rely upon the information and services provided by the Client.

**4. Safety.** Field work will be performed only under conditions deemed safe by WJE personnel. Charges may be made for safety or security measures required by hazardous job conditions that WJE may encounter. Client understands that WJE is only responsible for the safety of its own employees and those of its subconsultants and is not responsible for the safety of other persons or property.

**5. Compensation and Expenses.** Client agrees to pay for WJE's requested services in accordance with WJE's standard hourly rate schedule or negotiated fee. Charges generally will be billed in monthly intervals with applicable taxes included. Travel, subsistence, and expenses incurred; communications; reproduction; and shipping charges will be billed at cost plus 5 percent and invoiced as an expense service fee. Use of vehicles will be billed at $0.75 per mile. Expended materials for field and laboratory work, rental equipment, and any fees advanced on Client's behalf will be billed at cost plus 10 percent and invoiced as an expense service fee. WJE equipment used in field or laboratory work is billed at WJE's equipment usage rate schedule in effect at the time the work is performed, subject to adjustment for minimum or extended usage. Portal-to-portal equipment usage rates are comparable to prevailing commercial rental rates (if available). Billing rates may be increased annually. Any subcontracted service will be billed at cost plus 10 percent providing the subcontract firm has in place adequate insurance coverage determined by WJE; otherwise, the cost will be marked up 20 percent and invoiced as an expense service fee. Client agrees to pay WJE's then-current time charges, attorneys' fees, and other expenses resulting from required attendance at depositions, administrative proceedings, or responding to subpoenas or court orders relating to the Project, but not for such expenses attributed to WJE's negligent performance of its services.

Payment for WJE's services is expected in full in US dollars upon receipt of the invoice. Invoices more than 30 days past due are subject to a 2% interest charge per month (but no more than the maximum extent allowed by law) compounded annually and any related attorneys' fees and collection expenses. WJE reserves the right to suspend its services if the Client fails to make payment when due. In such an event, WJE shall have no liability to the Client for delay or damage caused the Client because of such suspension.

**6. Termination.** Both the Client and WJE have the right to terminate WJE's services for convenience upon seven calendar days' written notice to the other party. In the event the Client terminates without cause, WJE shall be entitled to compensation for its services and expenses up to the time of such notification, including fees for any transition services, and shall have no liability for delay or damage to Client because of such termination.

**7. Reports, Drawings, and Work Product.** WJE retains ownership of reports, drawings, specifications, test data, techniques, photographs, letters, notes, and other work product, including those in electronic form, it has created. These documents or parts thereof may not be reproduced or used by the Client for any purpose other than the purpose for which they were prepared, including, but not limited to, use on other projects or future modifications to this Project, without the prior written consent of WJE. Upon request, WJE will provide Client with a copy of documentation for information and reference purposes and bill for such reproduction in accordance with Paragraph 5 above. Any unauthorized use of WJE's work product shall be at the Client's sole risk and Client shall indemnify WJE for any liability or legal exposure to WJE. To the extent WJE terminates its services due to non-payment of fees by Client, Client shall not be entitled to use the documents described herein for any purpose whatsoever.

**8. Environmental Hazards.** Client acknowledges that WJE's services do not include the detection, investigation, evaluation, or abatement of environmental conditions that WJE may encounter, such as mold, lead, asbestos, PCBs, hazardous substances, or toxic materials that may be present in buildings and structures involved in this Project. The Client agrees to defend, indemnify, and hold WJE harmless from any claims relating to the actual or alleged

existence or discharge of such materials through no fault of WJE's employees. WJE reserves the right to suspend its services, without liability for consequential or any other damages, if it has reason to believe that its employees may be exposed to hazardous materials and will notify the Client in such event.

**9. Dispute Resolution.** Prior to the initiation of any legal proceedings (except for WJE initiated claims for nonpayment for services), WJE and the Client agree to submit all claims, disputes, or controversies arising out of or in relation to the services provided by WJE to mediation. Such mediation shall be conducted under the auspices of the American Arbitration Association or such other mediation service or mediator upon which the parties agree. Client consents to suit for nonpayment in the state courts of Illinois.

**10. Successors and Assigns.** These Terms shall be binding upon Client and WJE and their respective successors, assigns and legal representatives. Neither party may assign, subcontract, or otherwise delegate its responsibilities without the prior consent of the other party, which consent shall not be unreasonably withheld. Additionally, in no instance shall this paragraph be interpreted to create any rights in any third party.

**11. Insurance.** WJE maintains commercial general liability, automobile, workers' compensation, and employers' liability and professional liability coverages under policies written by national insurance carriers rated by the A.M. Best Company, evidence of which will be provided upon request. Special endorsements are not allowed. No waiver of subrogation is allowed on WJE's professional liability policy. Upon written request, WJE agrees to name the Client as an additional insured to the commercial general liability and automobile coverages. Any request to add other parties as additional insureds must be made in writing and is subject to certain limitations. All policies are subject to annual renewal. Excess coverage is available for exposures over primary policy limits except for professional liability.

**12. Indemnity.** To the fullest extent permitted by law, Client and WJE each agree to indemnify and hold the other harmless, and their respective agents, officers and employees, from and against liability for all direct claims, losses, damages, and expenses, including reasonable attorneys' fees, to the extent such claims, losses, damages, or expenses are for bodily injury, sickness, disease, death, or property damage and to the extent they are caused by the negligent acts, errors, or omissions of the indemnifying party, and/or the indemnifying party's agents, officers, employees, independent contractors, or subcontractors of any tier. In the event such claims, losses, damages, or expenses are caused by the joint or concurrent negligence of Client and WJE, or their respective agents, officers, employees, independent contractors, or subcontractors of any tier, they shall be borne by each party in proportion to that negligence.

**13. Agreed Remedy.** To the fullest extent permitted by law, the total liability, in the aggregate, of WJE and WJE's officers, directors, employees, agents, and consultants to Client and anyone claiming by, through, or under Client, for any and all injuries, claims, losses, expenses, or damages, including, without limitation, attorneys' fees, arising out of or in any way related to WJE's services, the Project, or these Terms, from any cause or causes whatsoever, including but not limited to, negligence, strict liability, indemnity or breach of contract shall not exceed an amount equal to the proceeds obligated to be paid under WJE's applicable insurance policy for such claims. If, for any reason, the applicable insurance policy does not provide coverage for any particular claim described herein, then the liability amount shall not exceed WJE's fees for the services performed hereunder.

In no event shall WJE be liable in contract, tort, strict liability, warranty or otherwise, for any special, incidental or consequential damages, such as, but not limited to, delay, disruption, loss of product, loss of anticipated profits or revenue, loss of use of equipment or system, non-operation or increased expense of operation of other equipment or systems, cost of capital, or cost of purchase or replacement equipment systems or power.

**14. Third-Party Beneficiaries.** Nothing contained in these Terms shall create a contractual relationship with, or a cause of action in favor of, a third party against either the Client or WJE. WJE's services hereunder are being performed solely for the benefit of the Client, and no other entity shall have any claim against WJE because of these Terms or WJE's performance or non-performance of services hereunder.

**15. Laboratory or Material Testing Services.** Material samples not consumed in WJE's work will be discarded 60 days after completion of the project unless the Client requests other disposition in writing. WJE cannot be responsible for material after 60 days and Client shall inform WJE in writing how to dispose of the samples. WJE will exercise reasonable care in safeguarding materials, records, or equipment, but disclaims any liability for loss or damage. Rates for sample storage will vary by sample size but in no event will sample charges be less than $270 per year accruing upon the 61st day of storage and annually thereafter. Failure to pay for underlying services or storage constitutes permission to dispose of all samples held by WJE.

Any testing done on materials or products shall not prevent WJE from any services involving Client's materials or products in the built world. WJE shall have no liability to third parties for any products or materials developed from WJE's services. WJE's reports, trademarks or other property shall not be used to indicate endorsement of any material or product.

**16. Entire Agreement.** These Terms together with any written proposal shall constitute the entire understanding of the parties concerning the Project and supersede all prior negotiations and written agreements between them, and any amendment or modification to either WJE's proposal or these Terms may be made only by a written instrument expressly stated to be an amendment and signed by WJE.

**17. Severability**. If any provisions of these Terms, or portions thereof, are determined to be unenforceable, the remainder shall not be affected thereby and each remaining provision or portion thereof shall continue to be valid and effective and shall be enforceable to the fullest extent permitted by law.