

The truss modification drawings referenced below have been prepared by me or under my direct supervision based on the modified truss design criteria and requirements ("modified criteria") provided by Quality Line Truss.

Each truss modification drawing relies solely upon information provided by others. We have made no investigation of job site conditions or factors that have necessitated the modifications or may affect the truss. Any variance from the information provided will render the affected truss modification drawing inapplicable.

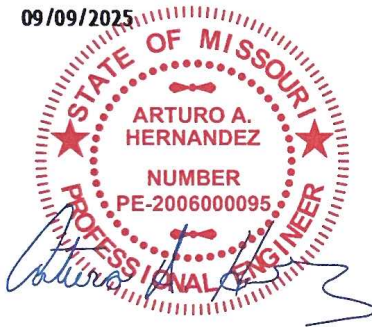
Listed below are the truss designs included in this package and covered by this seal:

Job: QU02697\_RESERVE\_BLDG F1\_REFRESHED\_11252024 - 1246491  
FG02

Any location identification is for file reference only. No determination of the appropriateness of modified criteria for any specific project has been made in preparing the truss modification drawings.

Please refer to (1) individual truss modification drawings for specific modified criteria and (2) the original individual truss design drawings for information not shown on the truss modification drawings.

Original Job: QU02697\_RESERVE\_BLDG F1\_REFRESHED\_11252024



**RELEASED FOR  
CONSTRUCTION**  
As Noted on Plans Review  
Development Services Department  
Lee's Summit, Missouri  
12/03/2025

Arturo A. Hernandez (MO, 2006000095)  
My license expiration date for the state of MO is 12/31/2026.

**IMPORTANT NOTE:** The responsibility of the engineer sealing this package, as a Truss Engineer, is solely for the design of the modification of the individual trusses as individual building components to alter their original design based upon the modified design criteria provided by others and set forth in the modified truss drawings. The modified truss design criteria for the components have not been verified as appropriate for any particular building, project or use. Adequacy and suitability of design criteria and requirements for the truss designs for any specific project are the responsibility of the building designer, not the Truss Engineer, per ANSI/TPI-1, Chapter 2.

## DESIGN NOTES

- The Truss Design Drawing(s) provided with these Design Notes have been prepared under and are subject to ANSI / TPI 1 published by the Truss Plate Institute, [www.tpinst.org](http://www.tpinst.org). Capitalized terms have the meanings provided in ANSI / TPI 1.
- Copies of each Truss Design Drawing shall be furnished to the installation contractor, Building Designer, Owner and all persons fabricating, handling, installing, bracing, or erecting the trusses.

### DESIGN LIMITATIONS

- The Truss Design Drawing is based upon specifications provided by the Building Designer in accordance with ANSI / TPI 1. Neither the Truss Designer, Eagle, nor an engineer who seals this design (if any) assumes any responsibility for the adequacy or accuracy of specifications provided by the Building Designer.
- The Building Designer is solely responsible for the suitability based upon the Truss Design Drawing and shall be responsible for reviewing and verifying that the information shown is in general conformance with the design of the Building.

- Each Truss Design Drawing is for the individual building component (a Truss). A seal on the Truss Design Drawing indicates acceptance of professional engineering responsibility solely for the individual truss.
- Each Truss Design Drawing assumes trusses will be suitably protected from the environment.

### HANDLING, INSTALLING, & BRACING

- Refer to Building Component Safety Information (BCSI) for handling, installing, restraining and bracing trusses. Copies can be obtained from the Structural Building Components Association, [www.sbcindustry.com](http://www.sbcindustry.com).
- Bracing shown on each Truss Design Drawing is for lateral support of individual truss components only to reduce buckling lengths. All temporary and permanent bracing, including lateral load and diagonal or cross bracing, are the responsibility, respectively, of the erector and Building Designer.
- Eagle is not responsible for improper truss fabrication, handling, erection or bracing.
- Compression chords shall be laterally braced by the roof or floor sheathing, directly attached, or have purlins provided at spacing shown, unless noted otherwise.

- Bottom chord required bracing shall be at 10ft spacing or less, if no structural rated ceiling is installed, unless noted otherwise.
- Strongbacking shall be installed on all parallel chord trusses, including flooring systems, to limit deflection and reduce vibration. Refer to BCSI-B7.
- Never exceed the design loading shown. Never stack building or other materials on inadequately braced truss; refer to BCSI.
- Concentration of construction loads greater than the design loads shall not be applied to the trusses at any time; refer to BCSI.
- Trusses shall be handled with care prior to erection to avoid damage. Refer to BCSI for recommended truss handling and erection.

### MATERIALS & FABRICATION

- Lumber moisture content shall be 19% or less at the time of fabrication unless noted otherwise.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Unless expressly noted, the truss designs are not applicable for use with fire retardant or preservative treated lumber.
- Plates shall be applied on both faces of truss at each joint and embedded fully. Knots and wane at joint locations shall be regulated in accordance with ANSI / TPI 1.
- For a specified plate gauge and grade, the specified size is a minimum.
- Connections not shown are the responsibility of others.
- Adequate support shall be provided to resist gravity, lateral and uplift loads.
- For 4X2 truss orientation, locate plates 0 - 1/16" from outside the edge of the truss.
- Fabrication of truss shall be in accordance with ANSI / TPI 1.

### OTHER NOTES

- Camber is a non-structural consideration and is the responsibility of truss fabricator.
- Do not cut or alter any truss member or plate without prior approval from a professional engineer.
- Lumber design values are in accordance with ANSI / TPI 1; Lumber design values are by others.
- Install specified hangers per manufacturer recommendations.

## SYMBOLS

### PLATE SIZE

- 3X4** - The first dimension is the width perpendicular to slots. Second dimension is the length parallel to slots.

- / 1. Indicates required direction of slots. Reference "Joint Details" for more information.

20 Ga Gr40 connectors required

**3X10-20HS** - 20 Ga Gr60 connectors required

**8X10-18HS** - 18 Ga Gr60 connectors required

### LATERAL BRACING

When this symbol shown, continuous lateral bracing is required on the member of the truss.



### BEARING

Indicates location where bearings (supports) occur.



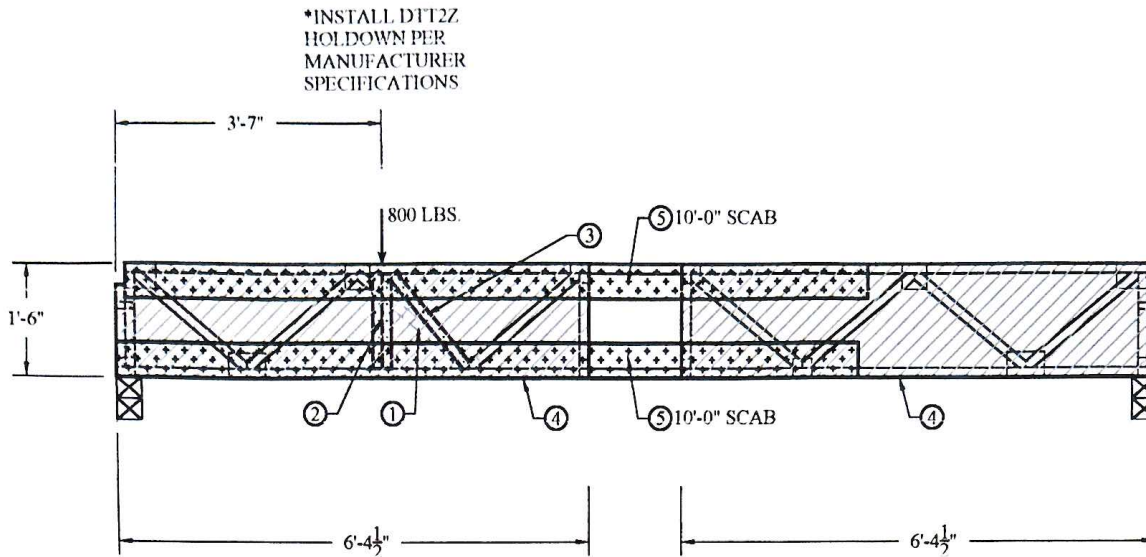
### PLATE LOCATION & ORIENTATION

The plate shall be centered on joint and/or placed in accordance with the design drawing/QC full scale details.



## REFERENCES

- ANSI / TPI 1: National Design Standard for Metal Plate Connected Wood Trusses
- BCSI: Building Component & Safety Information - Guide to Good Practice for Handling, Installing, Restraining, & Bracing of Metal Plate Connected Wood Trusses.
- NDS: National Design Specification for Wood Construction
- ESR: 1082 published by the International Code Council, [www.icc-es.org](http://www.icc-es.org)



## FG02

### IMPORTANT NOTE:

THIS REPAIR HAS BEEN ENGINEERED WITH THE ASSUMPTION THAT THE OUTSIDE FACE OF THIS TRUSS IS COMPLETELY SHEATHED.

### PROBLEM:

THE TRUSS WILL BE SECURED TO THE LEVEL ABOVE WITH A SIMPSON DTT2Z HOLDOWN. A 800 LBS. POINT LOAD IS APPLIED AT THE HOLDOWN LOCATION, 3'-7" FROM THE LEFT END. THE TRUSS IS COMPLETELY SHEATHED ON ONE SIDE WITH 1/2" OSB.

### SOLUTION:

1. REMOVE PORTION OF TRUSS AS SHOWN. DO NOT DISTURB PLATES AT JOINT 2 (J2). IF PLATES ARE ALTERED AN ENGINEER MUST BE CONSULTED.
2. INSERT (2) NEW 4 x 2 SYP-#1 MEMBERS (ATTACHED TOGETHER WITH (2) ROWS OF (131 x 3") NAILS, OR EQUIVALENT, AT 6" O.C.) IN PLANE AS SHOWN, CUT AND FIT TIGHTLY.
3. INSERT NEW 4 x 2 SYP-#1 MEMBER IN PLANE AS SHOWN. CUT AND FIT TIGHTLY.
4. ATTACH (1) 2-PLY 1/2" OSB TO TRUSS WITH CONSTRUCTION GRADE WATERPROOF GLUE (PL400 OR BETTER) & (1) ROW [2 ROWS INTO DOUBLE MEMBERS] OF 1/4" x 3" FlatLOK SCREWS AT 4" O.C. TO EVERY CONTACT MEMBER; (2-PLY) ONE SIDE ONLY.
5. ATTACH (2) 2 x 6 x 10'-0" SYP-#1 SCABS TO TRUSS WITH CONSTRUCTION GRADE WATERPROOF GLUE (PL400 OR BETTER) AND (1) ROW OF 1/4" x 6" FlatLOK SCREWS AT 4" O.C. TO EVERY CONTACT MEMBER. ONE SIDE ONLY. ATTACH OSB FILLER BETWEEN THE CHORDS/WEBS OF THE TRUSS AND THE SCAB, IF NEEDED. INSTALL OSB PER STEP 4. **INSTALL AFTER THE OSB GUSSETS ARE APPLIED.** TYP. (2) LOCATIONS

### NOTE:

1. FULLY SUPPORT TRUSS AND FLOOR/ROOF STRUCTURE BEFORE CUTTING AND REMOVING NECESSARY WEBS AND CHORDS AND ADDING NEW MEMBERS IN-PLANE TO ACHIEVE NEW TRUSS CONFIGURATION.
2. ONLY AFTER REPAIR HAS BEEN INSTALLED PROPERLY SHALL TEMPORARY SUPPORTS BE REMOVED.

09/09/2025



SEE ORIGINAL TRUSS DESIGN DRAWING FOR INFORMATION NOT SHOWN