

February 23, 2021

Dennis Chart, Building Official  
370 East 500 South Suite 200  
Salt Lake City, UT 84111

**RE: Thomas and Sons Warehouse –Structural Peer Review BP# 21-017**

Dear Dennis,

Forsgren has finished the initial structural peer review for the general plan set submitted for the Thomas and Sons Warehouse project to be located 2321 South 1250 West in Woods Cross, Utah. This project consists of single-story masonry buildings with open web steel joist roof framing and cast-in-place concrete foundations. The interior mezzanine floor framing is supported by wood framed walls.

The plan review focused on the main structural systems for lateral and vertical loading and general conformance to structural requirements of the 2018 International Building Code and referenced standards; and does not include a detailed review of all components. The comments are separated into section by calculation and drawing; however, some items address differences between the calculations and drawings and thereby incorporate both documents. Our comments on the initial structural review are presented herein.

The design team should address the comments indicated herein and re-submit the plans and calculations for verification. Revised design documents may be emailed to [kdana@forsgren.com](mailto:kdana@forsgren.com) for verification purposes. I may be contacted at (435) 227-0333 by the structural engineer of record to discuss any of the comments found herein.

Respectfully,



Kyle R. Dana, S.E.

### Calculation Comments:

1. Pages 3, 11- The City of Woods Cross has not accepted the 2018 Utah Ground Snow Load Study. The minimum ground snow load is 43 psf as posted in the Building Services Design Data on the City Internet site with roof snow load as determined by ASCE 7-16. Update calculations as required.
2. Page 9- The minimum wind speed is 115 mph as posted in the Building Services Design Data on the City Internet site with wind load as determined by ASCE 7-16. Update calculations as required.
3. Provide calculations for open web joists.
4. Provide calculations for open web joist anchorage bearing plates. If the walls impose an axial load on the joists, this should be noted for the joist design.
5. Provide footing calculations for the masonry and wood framed bearing walls.
6. Provide calculations for interior shear walls for the mezzanine.
7. Provide calculations for 20 gauge decking and attachment to framing to verify callouts on the plans and that decking connections meets the calculated diaphragm shear forces.
8. Provide calculations for the wood ledger supporting the second floor including vertical and lateral loading.

## Plan Comments:

SE-001

1. Revise roof snow load and wind speed values to meet Woods Cross City requirements.

SE-121

1. Indicate axial load in steel open web joints due to lateral loading.
2. Update snow drift loads in schedule.