

# CITY OF NAPOLEON GENERAL PERMIT APPLICATION

THIS APPLICATION IS FOR RESIDENTAL CONSTRUCTION INCLUDING BUILDING, ELECTRICAL,  
PLUMBING, MECHANICAL & REMODELING

KH 13-0414  
Bldg.

DATE 11-5-13 JOB LOCATION 626 2<sup>nd</sup> STREET 966 1016  
 OWNER NATHAN MINECK TELEPHONE # 419-579-0511  
 OWNER ADDRESS 408 W MAUMEE  
 CONTRACTOR Holgate Lumber CELL PHONE # 599-1575-1557  
 DESCRIPTION OF WORK TO BE PERFORMED NEW POLE BARN 40x60x12

ESTIMATED COMPLETION DATE 11-1-13 ESTIMATED COST \$19,500

Affected Floor Area (AFA): In existing structures, it is the area affected by the improvement, i.e. a new wall dividing a room (the AFA would be only the room and not all the rooms).

| DESCRIPTION                                                                        | FEE       | TOTAL COST          |
|------------------------------------------------------------------------------------|-----------|---------------------|
| <b>BUILDING:</b>                                                                   |           |                     |
| <i>Decks</i>                                                                       | \$25.00   | \$                  |
| <i>Addition &amp; Alterations</i> Square foot in (AFA) _____ x \$0.05 = \$ _____ + | \$25.00 = | \$                  |
| <b>Garage and Shed over 200 SF (Detached)</b>                                      | \$25.00   | \$ <u>25.00</u>     |
| <i>Siding and/or Roofing</i>                                                       | \$25.00   | \$                  |
| <i>Windows/Doors</i>                                                               | \$25.00   | \$                  |
| <b>ELECTRICAL:</b>                                                                 |           |                     |
| <i>Electrical</i> Circuits in (AFA) _____ x \$3.00/Circuit = \$ _____ +            | \$25.00 = | \$                  |
| <b>Electrical Service Upgrade</b>                                                  | \$25.00   | \$                  |
| <b>MECHANICAL:</b>                                                                 |           |                     |
| <b>Water Heater</b>                                                                | \$25.00   | \$                  |
| <b>Furnace and/or AC Replacement</b>                                               | \$25.00   | \$                  |
| <b>PLUMBING:</b>                                                                   |           |                     |
| <i>Plumbing</i> Traps in (AFA) _____ x \$3.00/Trap = \$ _____ +                    | \$25.00 = | \$                  |
| <b>TOTAL plus Ohio Board of Building Standards Fee 1%</b>                          |           | <b>\$ <u>25</u></b> |

**TOTAL FEE: \$ 25.25**

I FULLY UNDERSTAND THAT NO EXCAVATION, CONSTRUCTION OR STRUCTURAL ALTERATION, ELECTRICAL OR MECHANICAL INSTALLATION OR ALTERATION OF ANY BUILDING STRUCTURE, SIGN, OR PART THEREOF AND NO USE OF THE ABOVE SHALL BE UNDERTAKEN OR PERFORMED UNTIL THE PERMIT APPLIED FOR HEREIN HAS BEEN APPROVED AND ISSUED BY THE CITY OF NAPOLEON BUILDING/ZONING DEPARTMENT.

*I hereby certify that I am the Owner of the named property, or that the proposed work is authorized by the Owner of record and that I have been authorized by the Owner to make this application as his/her authorized agent and I agree to conform to all applicable laws of the jurisdiction. In addition, if a permit for Work described in this application is issued, I certify that the code official or the code official's authorized representative shall have the authority to enter areas covered by such permit at any reasonable hour to enforce the provisions of the code(s) applicable to such permit.*

I HEREBY ACKNOWLEDGE THAT I HAVE READ AND FULLY UNDERSTAND THE ABOVE LISTED INSTRUCTIONS.

SIGNATURE OF APPLICANT: Brian D. Tilse DATE: 11-5-13

PRINT NAME: BRIAN D TILSE

PERMIT # \_\_\_\_\_ BATCH # \_\_\_\_\_ CHECK # Cash DATE 11-5-13

Earl Caldwell - Concrete

*NEW*

*DIMENSIONS*

*P.O. Box 174  
Napoleon, Ohio 43545  
Phone & Fax  
419/599-8339*

*Ron Sonnenberg  
Drafting & Design  
Construction, &  
Planning Assistance*

December 27, 2013

Attn: Mr. Tom Zimmerman  
Napoleon City Building Inspection  
255 W. Riverview Avenue  
P.O. Box 151  
Napoleon, Ohio 43545

Ref: Nathan Minnick, 40'x60' Accessory  
(42'x62' w/overhangs) – storage bldg.  
Residential occupancy.  
600 block of Second Street  
Napoleon, Ohio 43545  
Builder: Holgate Lumber Co.

Dear Mr. Zimmerman,

It is my understanding that there was some confusion regarding the permit approval process for the referenced building with the Builder initially believing that the Owner had secured all of the required zoning and building permits & plan approvals through your office. Then, assuming the permits and plans (as given to the owner) had been approved by your office; the Builder proceeded with construction in compliance with those plans (copies attached). When notified by your office that the building, as constructed, did not comply with some items of the prescriptive code requirements for this type of building (ref: Sec. 324 of the Ohio Residential Code) Holgate Lumber contacted us to request a review of the building.

This letter is in response to your, and Holgate Lumber Company's, request for an engineer's review of the construction methods and materials utilized for construction of the above referenced structure.

Our review of the subject structure indicates that the building appears to meet all but one (1) of the eight (8) requirements noted in Section 324.1 O.R.C. in order to be eligible for approval under the Building Code's Sec. #324 prescriptive requirements.

Specifically that item is no. five (5) which limits the buildings' maximum width (including roof overhangs) to thirty-six (36) feet. Since the building, as constructed per plan, is forty-two (42) feet in width, that requirement has been exceeded.

Accordingly, we have reviewed the building's wall section design in order to assess its compliance with the general requirements of Section 324 for structural integrity since the width requirement has been exceeded by six (6) feet.

While the code's maximum width requirement has been exceeded; it should be noted that the building's wall section, as constructed, surpasses several other minimum code requirements directly related to the building's structural integrity; specifically:

- 1) The min. wall column size per code is 3 ply 4"x6" nominal  
~ actual is 3 ply 6"x6" nominal.
- 2) The maximum wall height per code is 16'  
~ actual is +/-13'.
- 3) The min. wall girt requirement per code is 2"x4" @ 24"o/c, max.  
~ actual is 2"x6" @ 30"o/c. max
- 4) The min. wall skirt board per code appears to be 2"x6" P.T.  
~ actual is 2"x8" P.T.

One code requirement not included in the actual building section is knee bracing as required by sec. 324.6. It is our opinion that the 2"x6"x45deg knee bracing (if not now in place) should be provided at all possible column/truss locations as per the requirements of Tables 324.6 and 324.7 of the code.

It is therefore my opinion that the building, as constructed, and when provided with the required column/truss knee bracing, would be in substantial compliance with the minimum structural requirements for this type of construction as per Sec. 324 of the Ohio Residential Code.

I trust this information sufficiently addresses your questions and concerns and that final approval of this construction can be given by your office once the addition of the required knee bracing has been verified. Should you have any other questions or concerns please call or fax me at the number noted above.



Respectfully,

A handwritten signature in black ink that reads "Richard F. Bertz".

Richard F. Bertz, P.E., P.S.  
Ohio Reg. Engineer #E-48039

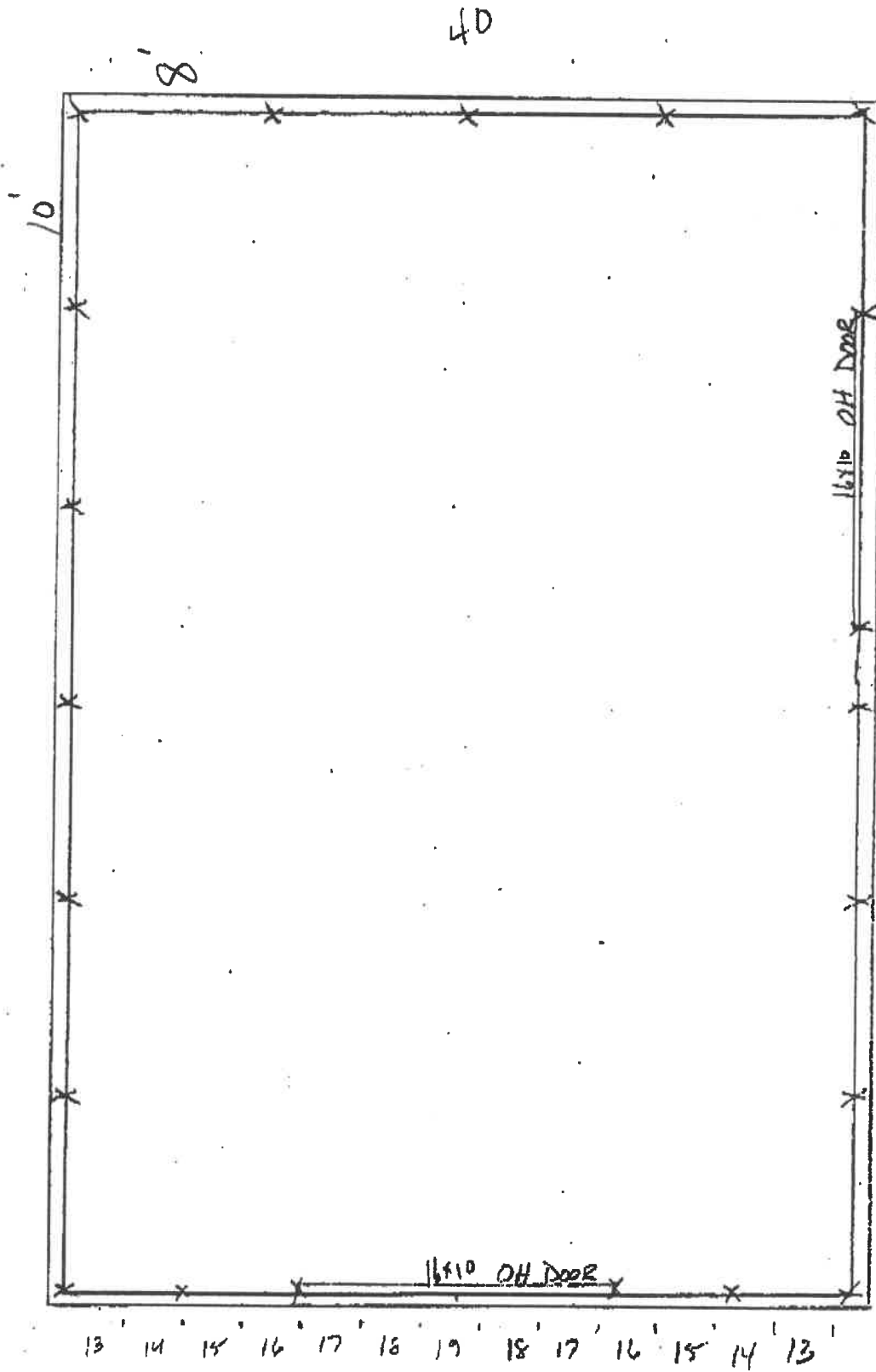
Attachments: Holgate Lumber plan & section  
Certified roof truss specification

cc: Holgate Lumber Co.

RFB/rds

NATHAN MINICK  
2ND STREET  
NAPOLCON, OH 43545

60



# Detail

2x4 on Edge 20" o.c.  
29 ga METAL Roof

Truss Fastened to Post  
w/ bearing block under Truss

Soffit Panel  
F+S Trim

Metal Wall Panel  
29 ga

12'3"

6x6  
3-ply laminated

2x6 Girts 30" oc

3.5x6 21"  
9.5x5 27.5

2x8 Treated Skirt  
Rat Guard

Gravel Floor

NATHAN Minick

2nd St.

NAPOLEON, OH

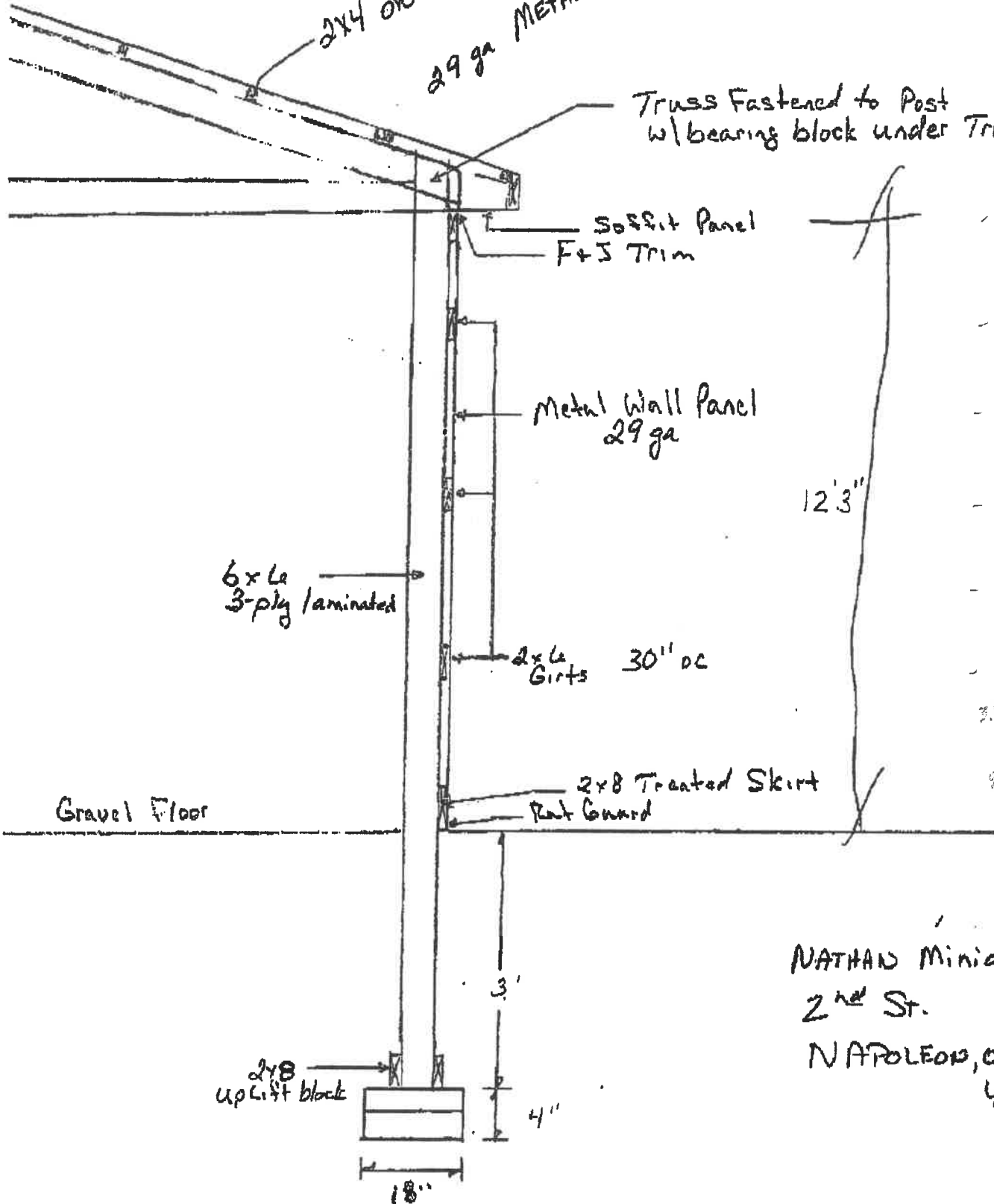
43545

2x8  
uplift block

3'

4"

18"



DE  
DANSCO ENGINEERING, LLC

P.O. Box 3400  
Apollo Beach, FL 33572  
Telephone (813) 645-0166  
Facsimile (813) 645-9698

The truss drawing(s) listed below have been prepared by **Stark Truss Inc.** under my direct supervision based on the parameters provided by the truss designers.

Job: 1307057-05T

1 truss design(s)

31857-W1



**12/19/13**

**Samuel A. Greenberg, P.E.**  
**Ohio Reg. #59715**  
**COA 02356**

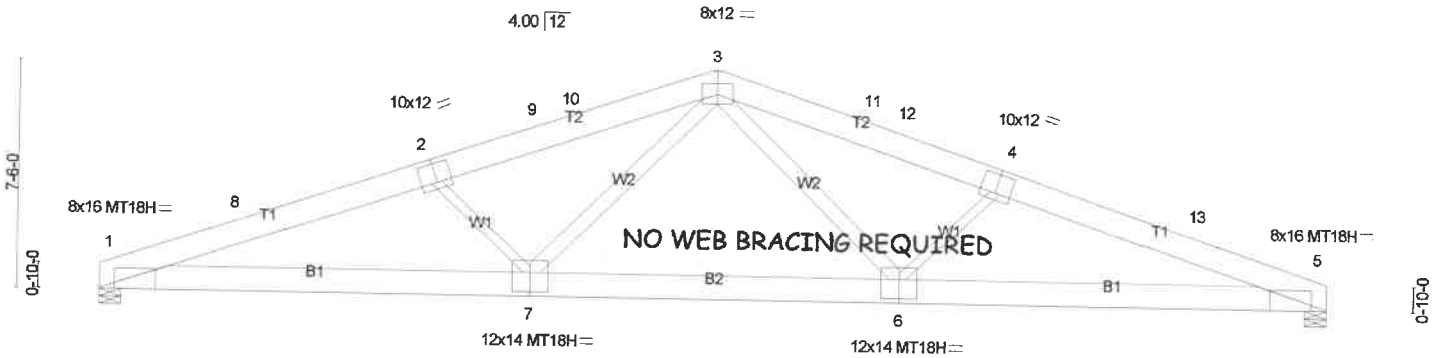
**Note: Gable end frames with stud lengths exceeding 4' require permanent bracing. On structural gables, where studs may be made from two or more boards as they cross diagonals, the 4' length is the distance from the top chord to bottom chord.**

**The seal on these drawings indicate acceptance of professional engineering responsibility solely for the truss components shown. The suitability and use of this component for any particular building is the responsibility of the building designer, per ANSI/TPI 1-2007 Chapter 2. Further, the attached truss designs comply with the letter and intent of the 2013 Ohio Residential Building Code (ORBC).**

**Warning !—Verify design parameters and read notes before use.**

These designs are based only upon parameters shown, and are for individual building components to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 *National Design Standard for Metal Plate Connected Wood Truss Construction* and BCSI 1-03 *Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses* from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719

|                                                                                                                                                                                            |            |                    |          |          |                                                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------------|----------|----------|-----------------------------------------------------|
| Job<br>1307057-05T                                                                                                                                                                         | Truss<br>A | Truss Type<br>FINK | Qty<br>7 | Ply<br>1 | HOLGATE 1307057-05T (KDM)                           |
| Stark Truss Inc., Canton, OH                                                                                                                                                               |            |                    |          |          | Job Reference (optional)<br><b>DE Job #31857-W1</b> |
| Run: 7.690 s 42 May 10 2013 Print: 7.420 s May 10 2013 MiTek Industries, Inc. Mon Sep 09 08:12:57 2013 Page 1<br>ID:NN8vJf?LOCCU4LH?7DbHPHz12rv-KEsnVWfiebSM5VeUJeyEjeOggW1MfC9bTPLInyfrEq |            |                    |          |          |                                                     |



|                       |                                                                                                                     |
|-----------------------|---------------------------------------------------------------------------------------------------------------------|
| Plate Offsets (X, Y): | [1:0-6-0,Edge], [2:0-6-0,0-7-8], [3:0-6-0,0-4-4], [4:0-6-0,0-7-8], [5:0-6-0,Edge], [6:0-7-0,0-7-8], [7:0-7-0,0-7-8] |
|-----------------------|---------------------------------------------------------------------------------------------------------------------|

|                      |                       |            |                             |                |             |
|----------------------|-----------------------|------------|-----------------------------|----------------|-------------|
| <b>LOADING (psf)</b> | <b>SPACING</b> 10-0-0 | <b>CSI</b> | <b>DEFL</b>                 | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL 25.0            | Plates Increase 1.15  | TC 0.93    | in (loc) l/def L/d          | MT20           | 197/144     |
| TCDL 4.0             | Lumber Increase 1.15  | BC 0.77    | Vert(LL) -0.56 6-7 >841 360 | MT18H          | 197/144     |
| BCLL 0.0             | Rep Stress Incr NO    | WB 0.87    | Vert(TL) -0.88 6-7 >536 240 |                |             |
| BCDL 5.0             | Code IBC2009/TPI2007  | (Matrix)   | Horz(TL) 0.25 5 n/a n/a     |                |             |
|                      |                       |            |                             | Weight: 368 lb | FT = 20%    |

|                                 |                                                                |
|---------------------------------|----------------------------------------------------------------|
| <b>LUMBER</b>                   | <b>BRACING</b>                                                 |
| TOP CHORD 2x10 SP 2400F 2.0E    | TOP CHORD 2-0-0 oc purlins (2-2-5 max.).                       |
| BOT CHORD 2x10 SP 2400F 2.0E    | BOT CHORD Rigid ceiling directly applied or 5-6-15 oc bracing. |
| WEBS 2x4 SP 2400F 2.0E *Except* |                                                                |
| W2: 2x6 SPF 1650F 1.5E          |                                                                |

|                            |                                                      |
|----------------------------|------------------------------------------------------|
| <b>REACTIONS (lb/size)</b> | 1=3853/0-8-8 (min. 0-5-9), 5=3853/0-8-8 (min. 0-5-9) |
|                            | Max Horz 1=-386(LC 11)                               |
|                            | Max Uplift 1=-2396(LC 12), 5=-2396(LC 13)            |
|                            | Max Grav 1=6687(LC 2), 5=6687(LC 2)                  |

|                                                                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.</b>                                                                                                 |
| TOP CHORD 1-8=-15714/5417, 2-8=-15239/5464, 2-9=-13665/4813, 9-10=-13257/4821, 3-10=-13233/4855, 3-11=-13233/4858, 11-12=-13257/4824, 4-12=-13665/4816, 4-13=-15239/5468, 5-13=-15714/5421 |
| BOT CHORD 1-7=-5168/14393, 6-7=-2994/10062, 5-6=-4803/14393                                                                                                                                |
| WEBS 2-7=-3004/1772, 3-7=-1510/4032, 3-6=-1513/4032, 4-6=-3004/1774                                                                                                                        |

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05; 90mph; TCDL=2.4psf; BCDL=2.0psf; h=25ft; Cat. I; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) 0-4-0 to 4-10-0, Interior(1) 4-10-0 to 20-0-0, Exterior(2) 20-0-0 to 24-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 snow; Lumber DOL=1.15 Plate DOL=1.15; Category I; Exp C; Partially Exp.; Ct=1.1; Unobstructed slippery surface
  - TCLL: ASCE 7-05; Pr=25.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (ground snow); Ps=10.6 psf (roof snow); Lumber DOL=1.15 Plate DOL=1.15; Category I; Exp C; Partially Exp.; Ct=1.1; Unobstructed slippery surface
  - Roof design snow load has been reduced to account for slope.
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
  - Dead loads shown include weight of truss. Top chord dead load of 5.0 psf (or less) is not adequate for a shingle roof. Architect to verify adequacy of top chord dead load.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2396 lb uplift at joint 1 and 2396 lb uplift at joint 5.
  - This truss is designed in accordance with the 2009 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



Dansco Engineering, LLC  
COA 02356  
12/19/13

**WARNING - VERIFY DESIGN PARAMETERS AND READ NOTES BEFORE FABRICATION AND INSTALLATION!!!**  
This truss design is adequate for the design parameters shown. Review and approval of design parameters is the responsibility of the building designer, not the truss designer or truss engineer. Permanent bracing requirements against out-of-plane buckling are noted/shown for individual truss members (and for the truss as a whole) subjected to gravity and wind loads. Additional permanent bracing design shall be the responsibility of the design professional of record. Temporary and erection bracing shall be the responsibility of the contractor. Reference ANSI/TPI-1, "National Design Standard for Metal Plate Connected Wood Truss Construction" and TPI/WTCA BCSI-06, "Building Component Safety Information Guide to Good Practice for Handling, Installing, Restraining and Bracing of Metal Plate Connected Wood Trusses" for additional information.