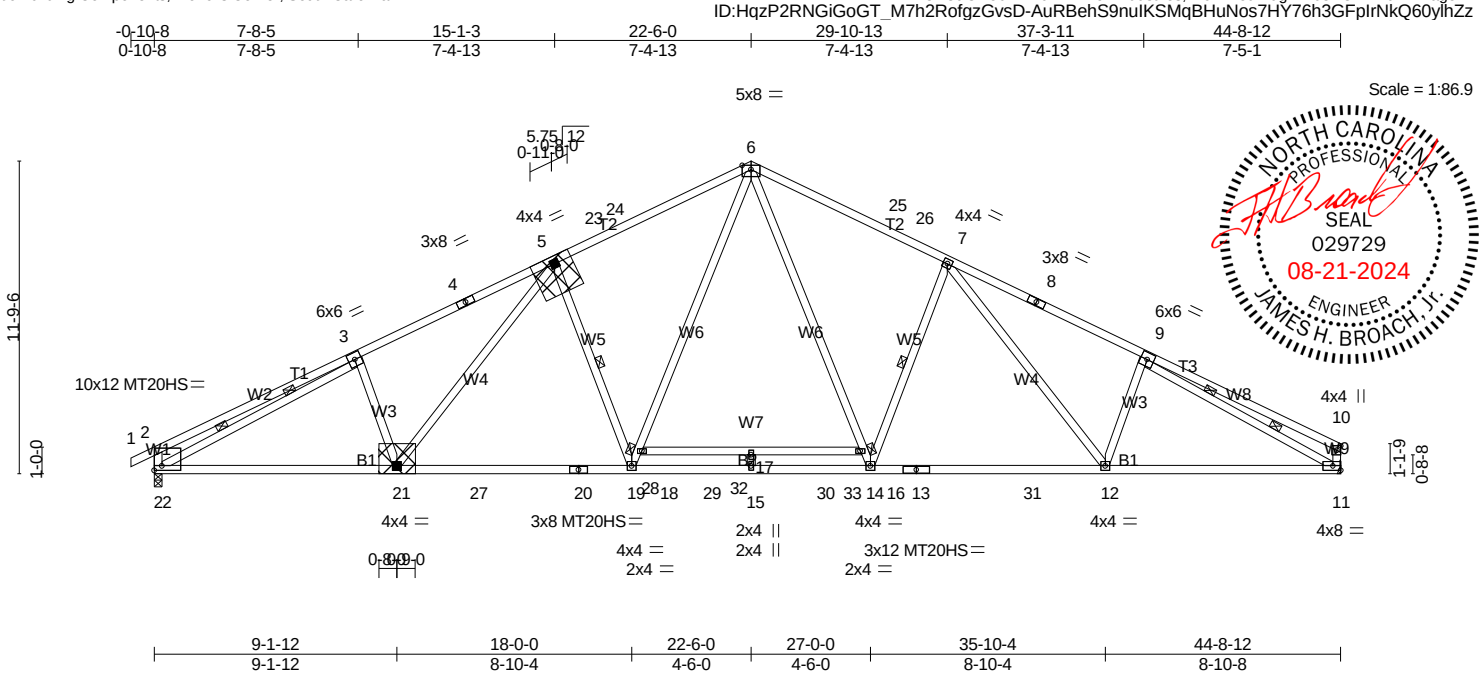
Job	Truss	Truss Type	Qty	Ply	LOT 0.0092 BLAKE POND | 122 WHIMBREL COURT LILLINGTON, NC
24-1221-R01	R04RP2	Common	7	1	Job Reference (optional)

Atlantic Building Components, Moncks Corner, South Carolina — 8.430 s Feb 12 2021 MiTek Industries, Inc. Wed Aug 21 08:43:44 2024 Page 1
ID:HqzP2RNGiGoGT_M7h2RofgzGvsD-AuRBehS9nuIKSMqBHuNos7HY76h3GFpIrNkQ60ylhZz



REPAIR(S) REQUIRED

Plate Offsets (X,Y)-- [2:Edge,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.92	Vert(LL)	-0.49	17	>999	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.83	17	>645	180	MT20HS	187/143
TCDL	10.0	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.18	11	n/a	n/a		
BCLL	0.0 *	Code IRC2021/TPI2014		Matrix-SH							Weight: 283 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP SS *Except*
T1,T3: 2x4 SP No.2
BOT CHORD 2x4 SP No.1 *Except*
B2: 2x4 SP SS, B3: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
W1,W2,W8: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
6-0-0 oc bracing: 16-18
WEBS 1 Row at midpt 5-19, 7-14
2 Rows at 1/3 pts 3-22, 9-11

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. (lb/size) 22=1924/0-3-8 (min. 0-2-8), 11=1863/Mechanical
Max Horz 22=156(LC 14)
Max Uplift22=-116(LC 14), 11=-97(LC 15)
Max Grav 22=2124(LC 3), 11=2075(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-714/179, 3-4=-3556/208, 4-5=-3411/237, 5-23=-3119/231, 23-24=-3062/239, 6-24=-3031/259, 6-25=-3012/259, 25-26=-3044/238, 7-26=-3100/230, 7-8=-3340/236, 8-9=-3485/207, 9-10=-449/103, 2-22=-566/161, 10-11=-364/103
BOT CHORD 21-22=-228/3161, 21-27=-103/2917, 20-27=-103/2917, 20-28=-103/2917, 19-28=-103/2917, 19-29=0/2371, 15-29=0/2371, 15-30=0/2371, 14-30=0/2371, 13-14=-57/2888, 13-31=-57/2888, 12-31=-57/2888, 11-12=-114/3079
WEBS 5-21=-107/471, 5-19=-719/249, 18-19=-137/1168, 6-18=-108/1312, 6-16=-106/1273, 14-16=-135/1129, 7-14=-698/248, 7-12=-106/424, 3-22=-3060/66, 9-11=-3247/115

NOTES- (15-18)
1) Repair Condition: Missing diagonal web 5-21 with damaged plate(s) on both side(s) of truss at joint(s) 21,5.
2) Attach 14"H X 17"W X 7/16" OSB (APA Rated Sheathing 24/16 Exposure 1) gusset to both sides of truss at joint 21 with 10d (0.131"x3") nails from each face, driven through both sheets of plywood and clinched. Connected together as follows: 2x4 - 2 rows 0-6-0 o.c. Minimum 0-3-0 end distance.
3) Attach 18"H X 19"W X 7/16" OSB (APA Rated Sheathing 24/16 Exposure 1) gusset to both sides of truss at joint 5 with 10d (0.131"x3") nails from each face, driven through both sheets of plywood and clinched. Connected together as follows: 2x4 - 2 rows 0-6-0 o.c. Minimum 0-3-0 end distance.
4) Remove any remaining fragments of missing diagonal 5-21 and repalce with same size and grade material cut to fit tight.
5) Unbalanced roof live loads have been considered for this design.
6) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=23ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-11-2, Interior(1) 3-11-2 to 17-8-6, Exterior(2R) 17-8-6 to 27-3-10, Interior(1) 27-3-10 to 39-9-6, Exterior(2E) 39-9-6 to 44-7-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

Continued on page 2

NOTES- (15-18)

7) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
8) Unbalanced snow loads have been considered for this design.
9) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
10) All plates are MT20 plates unless otherwise indicated.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
13) Refer to girder(s) for truss to truss connections.
14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 116 lb uplift at joint 22 and 97 lb uplift at joint 11.
15) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
16) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
17) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
18) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

LOAD CASE(S) Standard