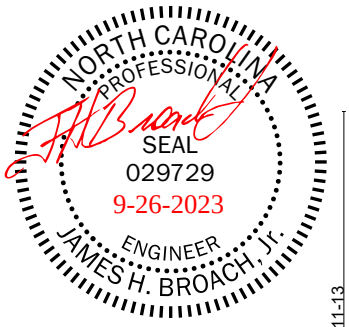
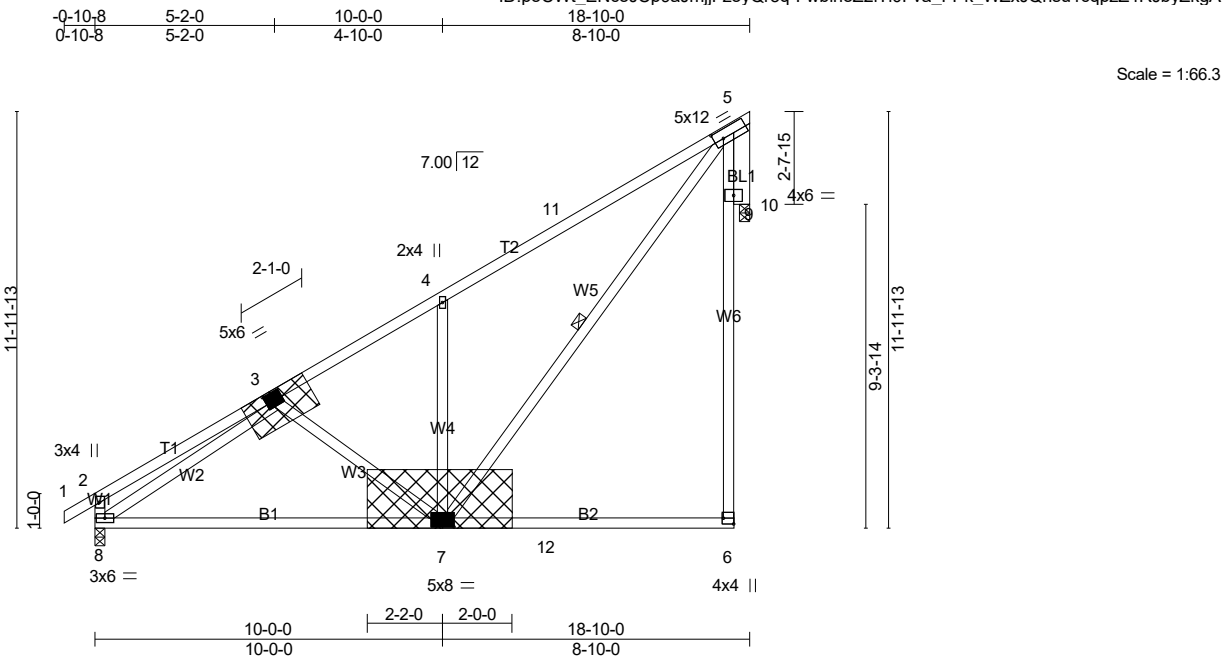
Job	Truss	Truss Type	Qty	Ply	LOT 19 PROVIDENCE CREEK | TBD COTTON SEED LANE FUQUAY-VARIN
23-4836-R01	R18RP1	MONOPITCH	24	1	Job Reference (optional)

Atlantic Building Components, Moncks Corner, South Carolina 8.430 s Feb 12 2021 MiTek Industries, Inc. Tue Sep 26 15:01:07 2023 Page 1
ID:poCWt_ENcoJCp9aJmjjFzoyQr3q-FwbihoZ2ITi0Fva_FPk_WZxJQnsu1cqpzZ4RJbyZkgA





REPAIR(S) REQUIRED

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

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)	-0.31	6-7	>728	240	MT20	244/190
Snow (Pf)	20.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.39	6-7	>572	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.44	10	n/a	n/a		
BCLL	0.0 *	Code	IRC2021/TPI2014	Matrix-SH							Weight: 131 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SP SS *Except*
T1: 2x4 SP No.2
BOT CHORD 2x4 SP SS
WEBS 2x4 SP No.3 *Except*
W6: 2x4 SP No.1
OTHERS 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-2-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-7

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

REACTIONS. (lb/size) 8=804/0-3-8 (min. 0-1-8), 10=704/0-3-8 (min. 0-1-8)
Max Horz 8=338(LC 14)
Max Uplift8=-9(LC 14), 10=-198(LC 14)
Max Grav 8=830(LC 21), 10=925(LC 5)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-405/87, 3-4=-789/0, 4-11=-928/113, 5-11=-781/133, 6-9=0/279, 5-9=0/279, 2-8=-393/107
BOT CHORD 7-8=-267/803
WEBS 4-7=-572/248, 5-7=-262/1084, 3-8=-606/0, 5-10=-957/207

NOTES- (13-16)
1) Repair Condition: Missing diagonal web 3-7 with damaged plate(s) on both side(s) of truss at joint(s) 7,3.
2) Attach 21"H X 50"W X 3/4" Plywood or OSB (23/32" APA Rated Sheathing 48/24 Exposure 1) gusset to both sides of truss at joint 7 with 10d (0.131"x3") nails from each face, driven through both sheets of plywood. Connected together as follows: 2x4 - 2 rows 0-4-0 o.c. Minimum 0-3-0 end distance.
3) Attach 13"H X 25"W X 7/16" OSB (APA Rated Sheathing 24/16 Exposure 1) gusset to both sides of truss at joint 3 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 misisng web 3-7 and replace mising with same size and grade material cut to fit tight.
5) 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 18-2-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
6) 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
7) Unbalanced snow loads have been considered for this design.
8) 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.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * 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.

Continued on page 2

NOTES- (13-16)

11) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 9 lb uplift at joint 8 and 198 lb uplift at joint 10.
13) 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.
14) 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.
15) 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.
16) 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