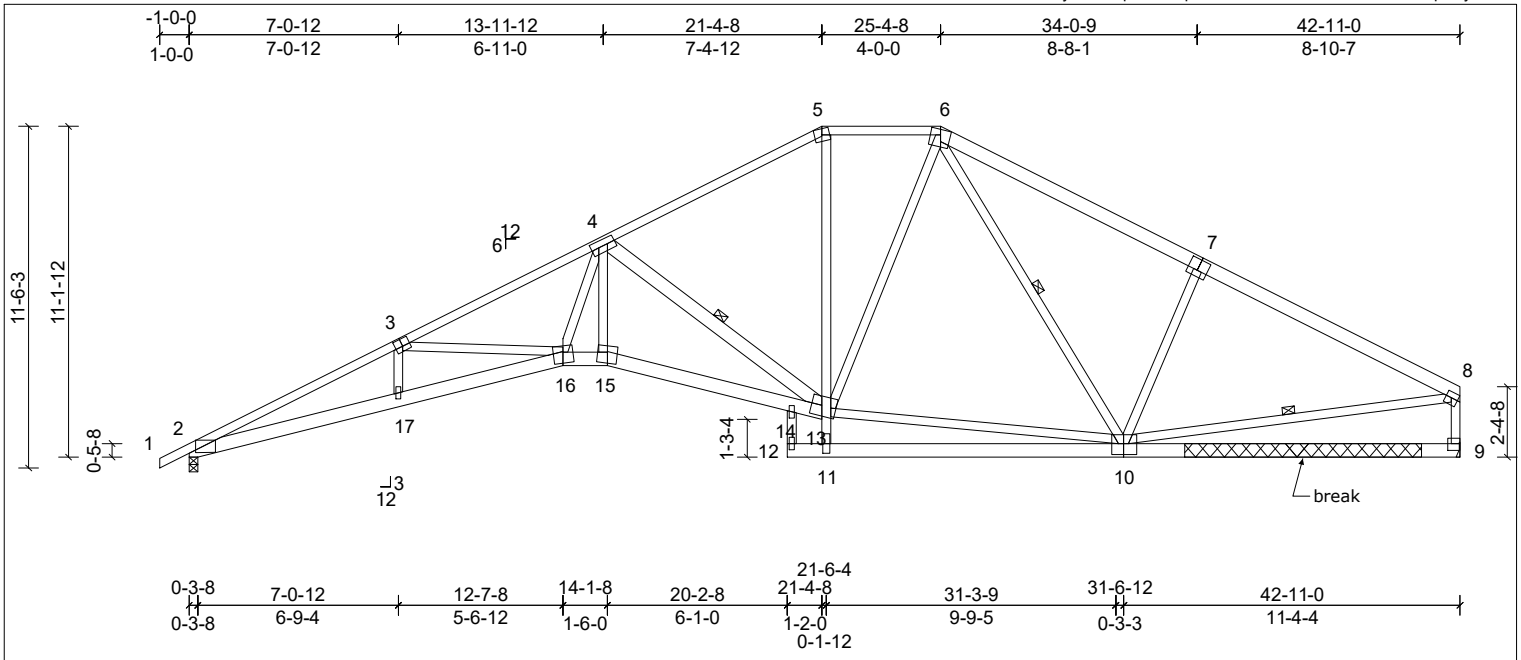
Job	Truss	Truss Type	Qty	Ply	LGI - ALEXANDER RF
72282541REP1	A1	Truss	5	1	Job Reference (optional)



Repair for a break in the bottom chord where indicated.

Attach 2x6 x 8' SP or SPF No.2 scab to each face of truss centered at the break with 2 rows of 10d (.131" x 3") nails spaced 4" oc

Plate Offsets (X, Y): [2:0-2-11,Edge], [3:0-3-0,0-3-0], [7:0-4-0,0-4-8], [8:Edge,0-2-4], [9:Edge,0-3-8], [10:0-4-12,0-4-8], [13:0-4-4,0-4-4], [15:0-4-0,0-4-8], [16:0-4-0,0-4-8]

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	0.83	Vert(LL)	-0.37	16	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.74	16-17	>696	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.38	9	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 329 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP No.2 *Except* T2:2x4 SP SS, T3:2x4 SP No.2, T1:2x4 SP No.1
BOT CHORD	2x6 SP No.2 *Except* B1:2x6 SP No.1, B4:2x4 SP No.3
WEBS	2x4 SP No.3 *Except* W5:2x6 SP No.2

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-1-10 oc purlins, except end verticals, and 2-0-0 oc purlins (4-0-9 max.): 5-6.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 6-10, 4-13, 8-10

REACTIONS (lb/size) 2=1772/0-3-8, (min. 0-2-0), 9=1710/ Mechanical, (min. 0-1-8)
Max Horiz 2=210 (LC 14)
Max Uplift 2=-256 (LC 10), 9=-198 (LC 11)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	2-3=-5912/1467, 3-4=-5250/1299, 4-5=-2287/708, 5-6=-1942/690, 6-7=-2238/764, 7-8=-2426/684, 8-9=-1603/488
BOT CHORD	2-17=-1273/5368, 16-17=-1282/5391, 15-16=-829/4117, 14-15=-869/4296, 13-14=-831/4216
WEBS	3-16=-629/296, 6-10=-184/329, 7-10=-559/411, 4-13=-2809/761, 6-13=-111/586, 11-13=0/453, 5-13=-143/656, 8-10=-456/1970, 10-13=-207/1642, 4-15=-153/1102, 4-16=-338/1570

NOTES (10)

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 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
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 256 lb uplift at joint 2 and 198 lb uplift at joint 9.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) This repair has been prepared based on information and use conditions supplied by client. Designer has made a good faith effort to outline damage and repair conditions as reported by client. When actual field conditions do not approximate those indicated on this drawing, client shall immediately inform the engineer and refrain from applying the repair.