Job	Truss	Truss Type	Qty	Ply	PBS\SMITHFIELD FC GR ROOF
72314617REP1	A1	Truss	4	1	Job Reference (optional)

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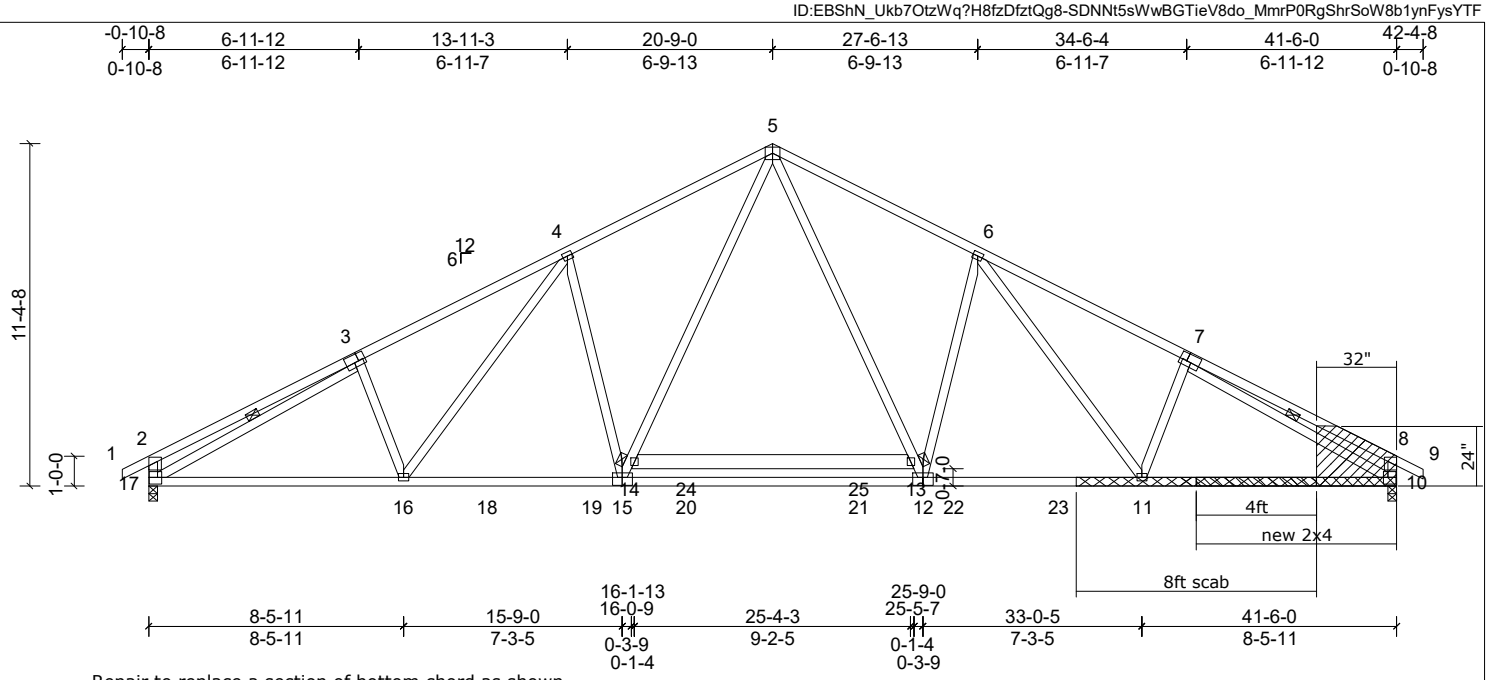

Repair to replace a section of bottom chord as shown

Cut and fit tight a new 2x4 SP or SPF No.2
Attach 1/2" Plywood or 7/16" OSB (APA Rated Sheathing Exposure 1) gusset
to both sides of truss as shown with two rows of 10d (.131" x 3") nails
spaced 4" oc in all members from each face, driven through both sheets of plywood.
Attach 2x4 x 8' SP or SPF No.2 scab to each face of truss
centered on new splice with 2 rows of 10d (.131" x 3") nails spaced 4" oc

Plate Offsets (X, Y): [2:0-2-8,0-1-12], [3:0-2-12,0-3-0], [7:0-2-12,0-3-0], [8:0-2-8,0-1-12], [10:0-1-12,0-2-12], [12:0-4-0,0-3-4], [15:0-4-0,0-3-4], [17:0-1-12,0-2-12]

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	0.89	Vert(LL)	-0.37	12-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.71	12-15	>697	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.14	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 278 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.1 *Except* B3:2x6 SP No.2
WEBS	2x4 SP No.3

BRACING

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 9-8-9 oc bracing. Except:
	6-0-0 oc bracing: 13-14
WEBS	1 Row at midpt 3-17, 7-10

REACTIONS (lb/size)

	10=1805/0-3-8, (min. 0-2-3), 17=1805/0-3-8, (min. 0-2-3)
Max Horiz	17=-167 (LC 8)
Max Uplift	10=-188 (LC 11), 17=-188 (LC 10)
Max Grav	10=1865 (LC 2), 17=1865 (LC 2)

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

TOP CHORD	2-3=-611/270, 3-4=-2953/698, 4-5=-2660/682, 5-6=-2660/682, 6-7=-2953/698, 7-8=-611/270, 2-17=-505/281, 8-10=-505/281
BOT CHORD	16-17=-403/2602, 16-18=-229/2414, 18-19=-229/2414, 15-19=-229/2414, 15-20=-50/1974, 20-21=-50/1974, 12-21=-50/1974, 12-22=-229/2414, 22-23=-229/2414, 11-23=-229/2414, 10-11=-403/2600
WEBS	5-13=-217/1118, 12-13=-271/904, 6-12=-605/370, 6-11=-156/389, 14-15=-271/904, 5-14=-217/1118, 4-15=-605/370, 4-16=-156/389, 3-17=-2535/367, 7-10=-2535/367

NOTES (7)

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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * 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, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 188 lb uplift at joint 17 and 188 lb uplift at joint 10.
6) 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.
7) 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.

Job	Truss	Truss Type	Qty	Ply	PBS\SMITHFIELD FC GR ROOF
72314617REP1	G1	Truss	7	1	Job Reference (optional)

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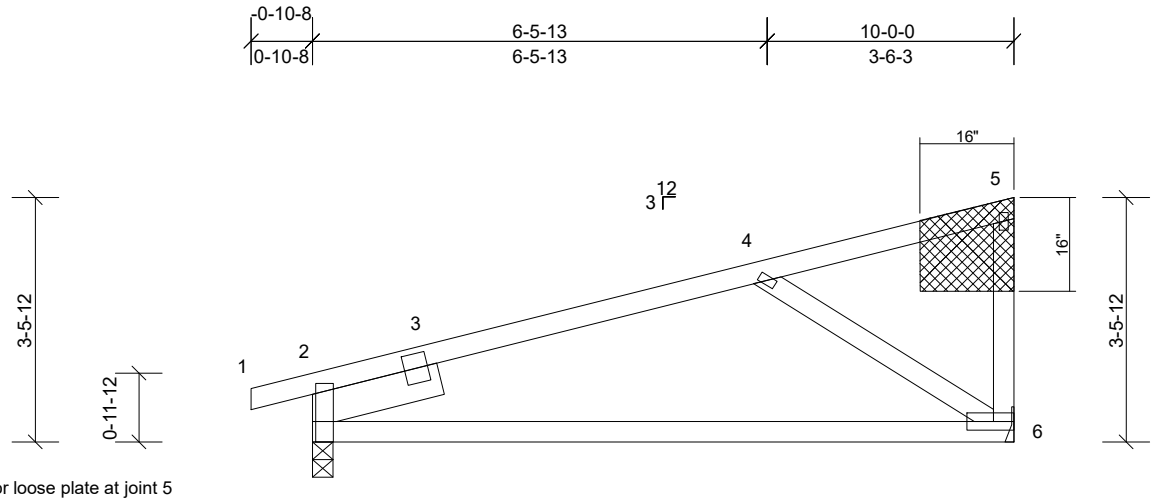

Repair for loose plate at joint 5

Attach 1/2" Plywood or 7/16" OSB (APA Rated Sheathing Exposure 1) gusset to both sides of truss as shown with two rows of 10d (.131" x 3") nails spaced 4" oc in all members from each face, driven through both sheets of plywood.

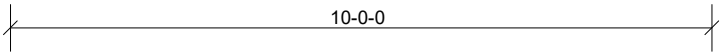

Plate Offsets (X, Y): [2:0-8-2,Edge]

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	0.60	Vert(LL)	-0.22	6-9	>550	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.44	6-9	>270	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.04	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 46 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
SLIDER	Left 2x6 SP No.2 -- 1-11-0

BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-8-1 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=449/0-3-8, (min. 0-1-8), 6=392/ Mechanical, (min. 0-1-8)
Max Horiz 2=128 (LC 9)
Max Uplift 2=-110 (LC 6), 6=-90 (LC 10)

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

TOP CHORD	2-3=-756/0, 3-4=-435/218
BOT CHORD	2-6=-209/422
WEBS	4-6=-468/273

NOTES (6)

1) 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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 110 lb uplift at joint 2 and 90 lb uplift at joint 6.
5) 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.
6) 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.