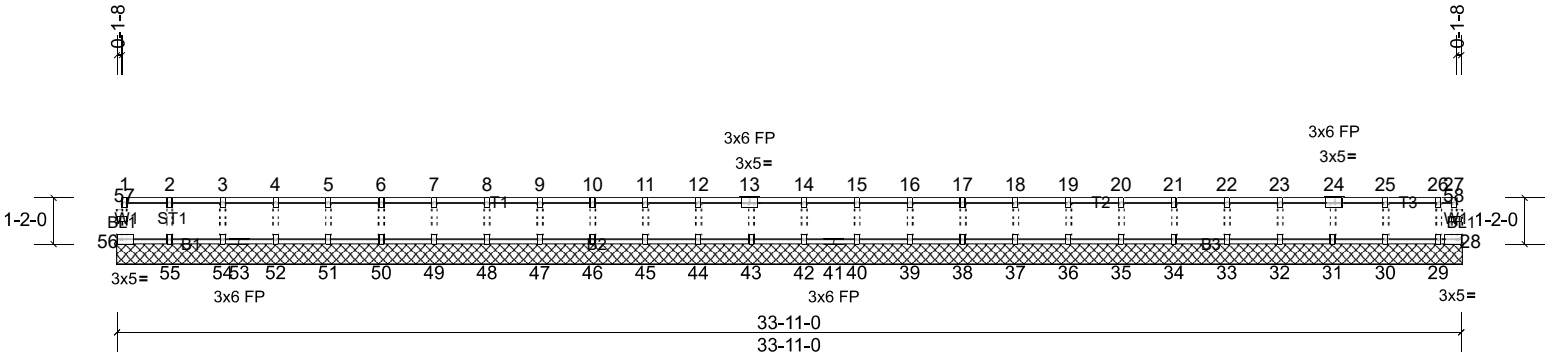
Job	Truss	Truss Type	Qty	Ply	Lincoln A GRH-2nd Floor-Lincoln A GRH
24050001-B	F101	Floor Supported Gable	1	1	Job Reference (optional)



Scale = 1:58.1

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	n/a	-	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 140 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS All bearings 33-11-0.
(lb) - Max Grav All reactions 250 (lb) or less at joint (s) 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 54, 55, 56

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

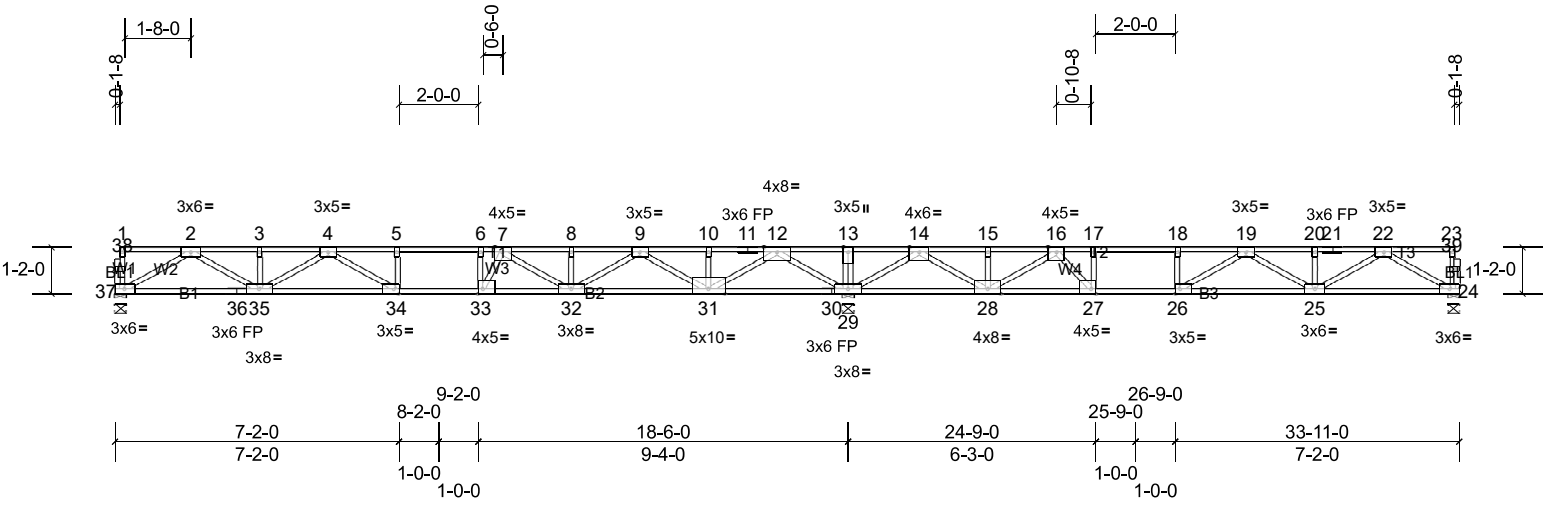
NOTES
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Lincoln A GRH-2nd Floor-Lincoln A GRH
24050001-B	F102	Floor	7	1	Job Reference (optional)

Carter Components, Sanford, NC, user — Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries, Inc. Fri May 17 15:12:13 — Page: 1

ID:aA99j1O?PjI?hSUDbFnR0yzFcva-edSDS5skgthVlgNNkfRABkooejz5Xh3lkCcv2NzFZzm



Scale = 1:58.1

Plate Offsets (X, Y): [26:0-1-8,Edge], [27:0-1-8,Edge], [33:0-1-8,Edge], [34:0-1-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.82	Vert(LL)	-0.26	33-34	>838	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.96	Vert(CT)	-0.34	33-34	>639	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.06	24	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 169 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.1(flat) *Except* T3:2x4 SP No.2 (flat), T2:2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* B3:2x4 SP No.1 (flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-10-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS (lb/size) 24=619/0-3-8, (min. 0-1-8), 29=2247/0-3-8, (min. 0-1-8), 37=825/0-3-8, (min. 0-1-8)
Max Grav 24=730 (LC 4), 29=2247 (LC 1), 37=863 (LC 3)

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

TOP CHORD 2-3=-2308/0, 3-4=-2308/0, 4-5=-3258/0, 5-6=-3258/0, 6-7=-3258/0, 7-8=-2675/0, 8-9=-2675/0, 9-10=-775/471, 10-11=-775/471, 11-12=-775/471, 12-13=0/3083, 13-14=0/3083, 14-15=-1027/1309, 15-16=-1027/1309, 16-17=-2246/459, 17-18=-2246/459, 18-19=-2246/459, 19-20=-1866/0, 20-21=-1866/0, 21-22=-1866/0

BOT CHORD 36-37=0/1340, 35-36=0/1340, 34-35=0/2928, 33-34=0/3258, 32-33=0/3134, 31-32=-108/1866, 30-31=-1261/0, 29-30=-1261/0, 28-29=-1852/0, 27-28=-860/1785, 26-27=-459/2246, 25-26=-87/2267, 24-25=0/1120

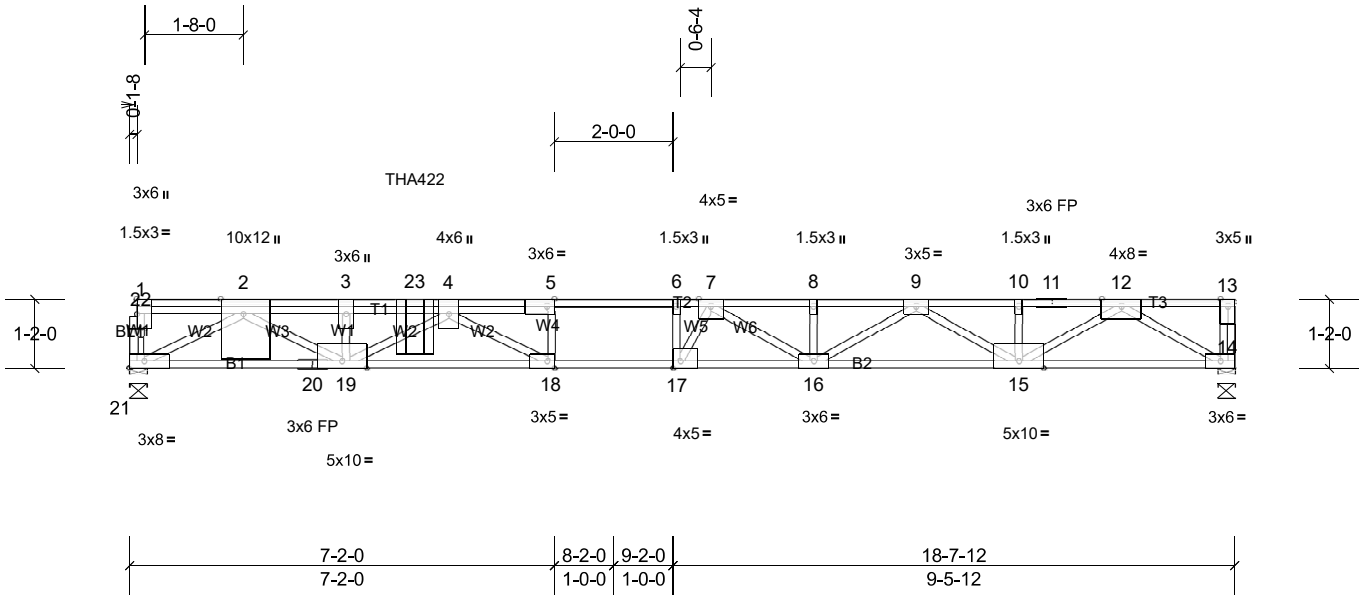
WEBS 6-33=-564/0, 17-27=-686/0, 22-24=-1291/0, 22-25=-18/870, 19-25=-469/156, 19-26=-577/0, 14-29=-1826/0, 14-28=0/1491, 16-28=-1114/0, 16-27=0/1171, 2-37=-1545/0, 2-35=0/1130, 4-35=-724/0, 4-34=-103/515, 12-29=-2107/0, 12-31=0/1743, 9-31=-1344/0, 9-32=0/1018, 7-32=-675/0, 7-33=0/769

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) All plates are 1.5x3 MT20 unless otherwise indicated.
3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Lincoln A GRH-2nd Floor-Lincoln A GRH
24050001-B	F103	Floor Girder	1	1	Job Reference (optional)



Scale = 1:38.9

Plate Offsets (X, Y): [2:0-3-0,Edge], [5:0-1-8,Edge], [17:0-1-8,Edge], [18:0-1-8,Edge], [22:0-1-8,0-0-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.96	Vert(LL)	-0.36	17-18	>617	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.79	Vert(CT)	-0.49	17-18	>450	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.80	Horz(CT)	0.09	14	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 104 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat) *Except* T2:2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* B2:2x4 SP 2400F 2.0E(flat)
WEBS 2x4 SP No.3(flat) *Except* W3:2x4 SP No.2 (flat)
OTHERS 2x4 SP No.3(flat)

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-4-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

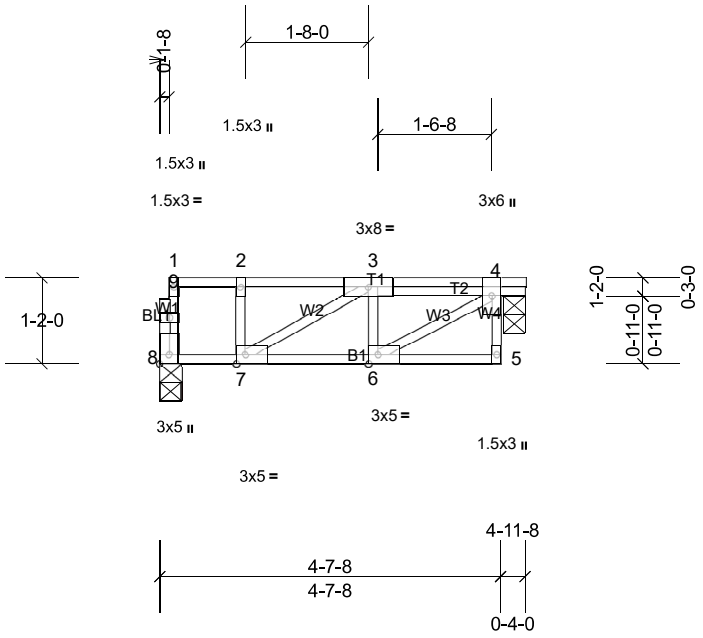
REACTIONS (lb/size) 14=1163/0-3-8, (min. 0-1-8), 21=1447/0-3-8, (min. 0-1-8)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4594/0, 3-23=-4594/0, 4-23=-4594/0, 4-5=-5848/0, 5-6=-5842/0, 6-7=-5842/0, 7-8=-5221/0, 8-9=-5221/0, 9-10=-3289/0, 10-11=-3289/0, 11-12=-3289/0
BOT CHORD 20-21=0/2424, 19-20=0/2424, 18-19=0/5879, 17-18=0/5842, 16-17=0/5704, 15-16=0/4400, 14-15=0/1845
WEBS 5-18=-260/258, 6-17=-649/236, 2-21=-2755/0, 2-19=0/2494, 3-19=-459/0, 4-19=-1476/0, 4-18=-664/737, 12-14=-2134/0, 12-15=0/1686, 9-15=-1296/0, 9-16=0/959, 7-16=-795/0, 7-17=-355/895

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
4) CAUTION, Do not erect truss backwards.
5) Use Simpson Strong-Tie THA422 (6-16d Girder, 6-10d Truss) or equivalent at 4-9-12 from the left end to connect truss(es) F114 (1 ply 2x4 SP) to front face of top chord.
6) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 14-21=-10, 1-13=-100
Concentrated Loads (lb)
Vert: 23=-592

Job	Truss	Truss Type	Qty	Ply	Lincoln A GRH-2nd Floor-Lincoln A GRH
24050001-B	F104	Floor	3	1	Job Reference (optional)



Scale = 1:31.3

Plate Offsets (X, Y): [6:0-1-8,Edge], [7:0-1-8,Edge], [8:Edge,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.53	Vert(LL)	-0.06	6-7	>859	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.67	Vert(CT)	-0.09	6-7	>619	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	-0.02	4	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 29 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-11-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

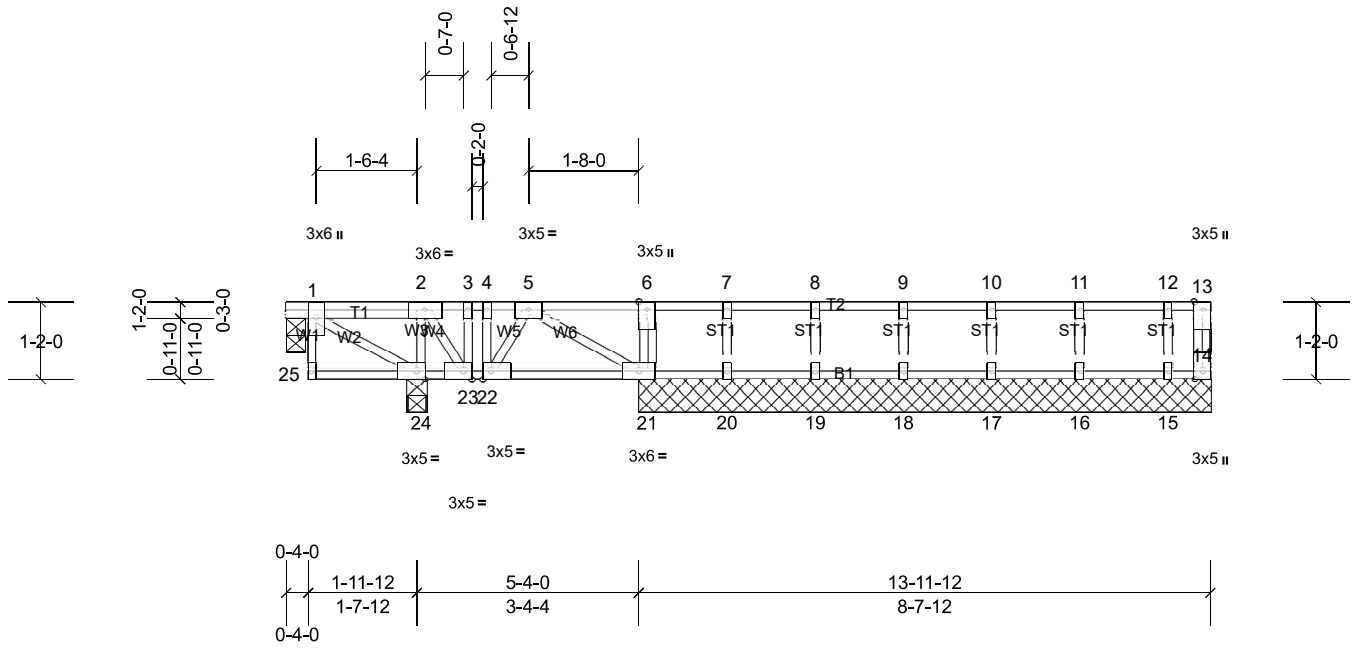
REACTIONS (lb/size) 4=244/0-3-8, (min. 0-1-8), 8=238/0-3-8, (min. 0-1-8)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-336/0
BOT CHORD 6-7=0/335
WEBS 4-6=0/388, 3-7=-377/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
4) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Lincoln A GRH-2nd Floor-Lincoln A GRH
24050001-B	F105	Floor	2	1	Job Reference (optional)



Scale = 1:34.8

Plate Offsets (X, Y): [22:0-1-8,Edge], [23:0-1-8,Edge], [24:0-1-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.12	Vert(LL)	0.00	22	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.07	Vert(CT)	0.00	21-22	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	14	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 71 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 23-24.

REACTIONS All bearings 8-7-12. except 1=0-3-8, 24=0-3-8
(lb) - Max Grav All reactions 250 (lb) or less at joint (s) 1, 14, 15, 16, 17, 18, 19, 20 except 21=272 (LC 1), 24=297 (LC 3)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-24=-282/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 1.5x3 MT20 unless otherwise indicated.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
7) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
8) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Lincoln A GRH-2nd Floor-Lincoln A GRH
24050001-B	F106	Floor	3	1	Job Reference (optional)

Carter Components, Sanford, NC, user — Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries, Inc. Fri May 17 15:12:15 — Page: 1

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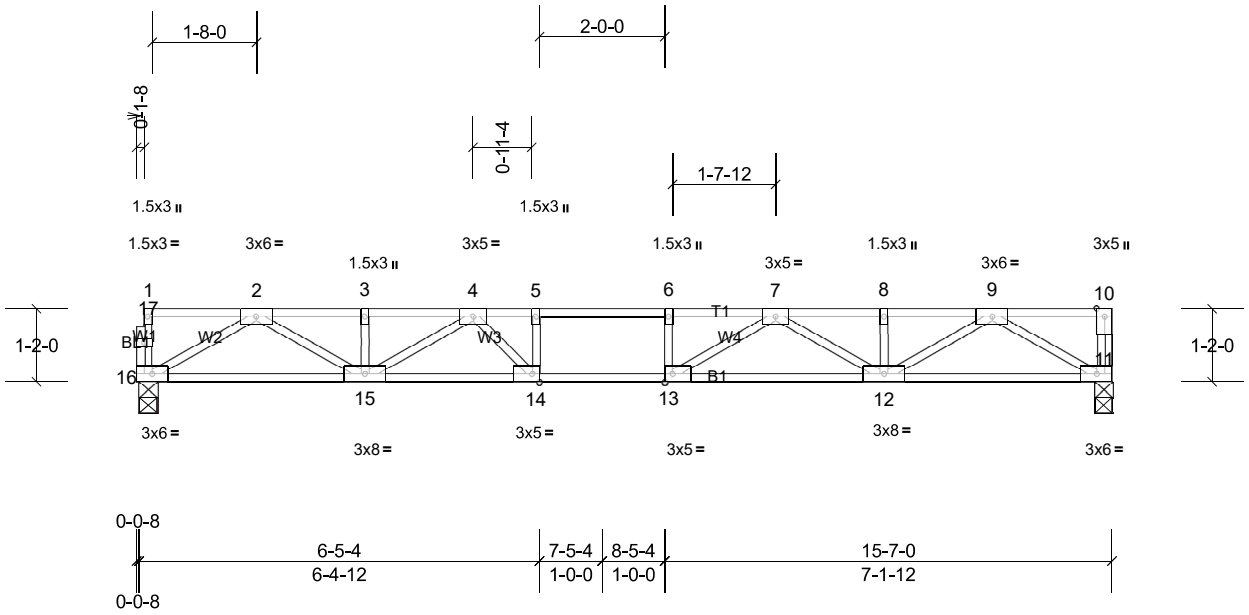


Scale = 1:36.8

Plate Offsets (X, Y): [13:0-1-8,Edge], [14:0-1-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.77	Vert(LL)	-0.23	12-13	>811	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.98	Vert(CT)	-0.31	12-13	>594	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.05	11	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 79 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD	2x4 SP No.2(flat)
BOT CHORD	2x4 SP No.2(flat)
WEBS	2x4 SP No.3(flat)
OTHERS	2x4 SP No.3(flat)

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS (lb/size) 11=843/0-3-4, (min. 0-1-8), 16=837/0-3-8, (min. 0-1-8)

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

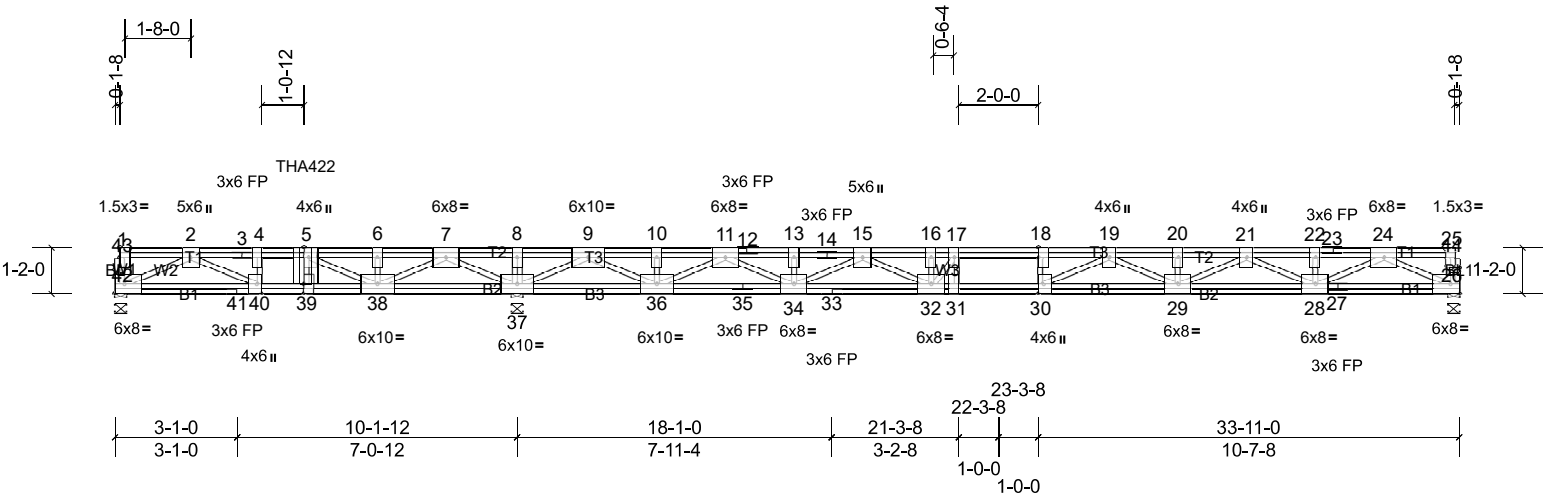
TOP CHORD	2-3=-2217/0, 3-4=-2217/0, 4-5=-3059/0, 5-6=-3059/0, 6-7=-3059/0, 7-8=-2221/0, 8-9=-2221/0
BOT CHORD	15-16=0/1292, 14-15=0/2796, 13-14=0/3059, 12-13=0/2799, 11-12=0/1299
WEBS	5-14=-355/0, 9-11=-1503/0, 9-12=0/1075, 7-12=-675/0, 7-13=-6/580, 2-16=-1489/0, 2-15=0/1081, 4-15=-676/0, 4-14=0/631

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
4) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Lincoln A GRH-2nd Floor-Lincoln A GRH
24050001-B	F107	Floor Girder	1	1	Job Reference (optional)



Scale = 1:58.1

Plate Offsets (X, Y): [5:0-3-0,Edge], [18:0-3-0,Edge], [30:0-3-0,Edge], [39:0-3-0,Edge], [40:0-3-0,Edge], [43:0-1-8,0-0-8], [44:0-1-8,0-0-8]

Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.94	Vert(LL)	-0.36	30	>782	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.84	Vert(CT)	-0.49	29-30	>579	240		
BCLL	0.0	Rep Stress Incr	NO	WB	1.00	Horz(CT)	0.03	26	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 263 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

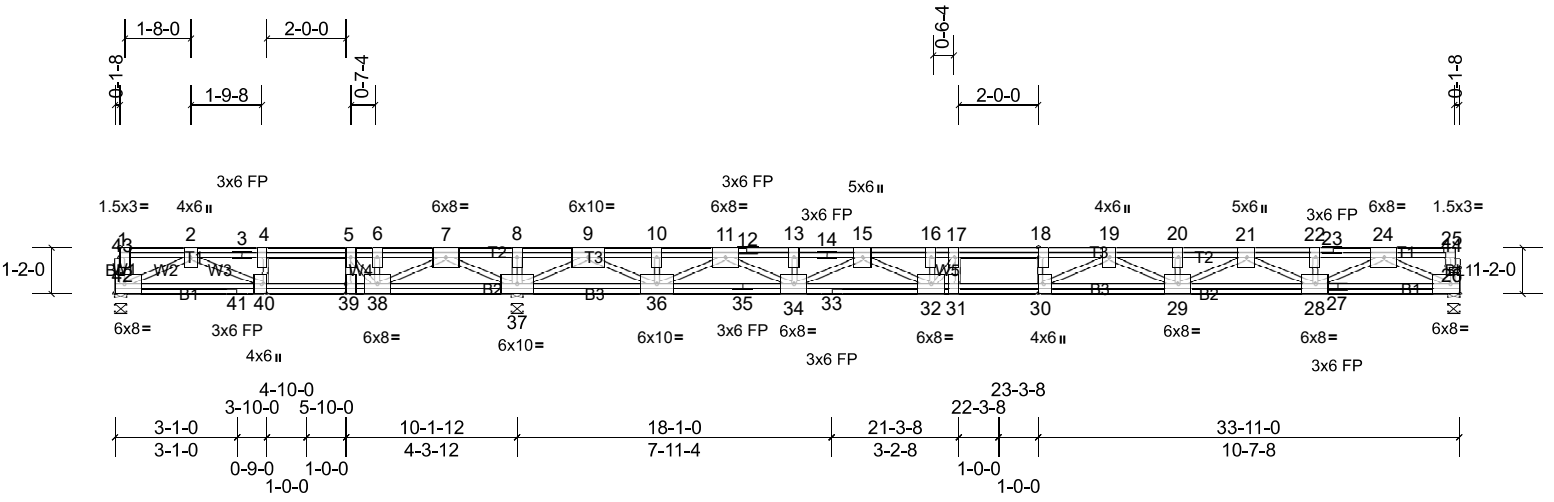
REACTIONS (lb/size) 26=846/0-3-8, (min. 0-1-8), 37=2380/0-3-8, (min. 0-1-8), 42=284/0-3-8, (min. 0-1-8)
Max Uplift 42=-207 (LC 4)
Max Grav 26=868 (LC 4), 37=2380 (LC 1), 42=563 (LC 3)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1645/1104, 3-4=-1645/1104, 4-5=-1645/1104, 5-6=-906/2271, 6-7=-906/2271, 7-8=0/4693, 8-9=0/4693, 9-10=0/1064, 10-11=0/1064, 11-12=-2476/0, 12-13=-2476/0, 13-14=-2476/0, 14-15=-2476/0, 15-16=-4083/0, 16-17=-4083/0, 17-18=-4480/0, 18-19=-4480/0, 19-20=-4218/0, 20-21=-4218/0, 21-22=-2676/0, 22-23=-2676/0, 23-24=-2676/0
BOT CHORD 41-42=-436/926, 40-41=-436/926, 39-40=-1104/1645, 38-39=-1104/1645, 37-38=-3218/0, 36-37=-2635/0, 35-36=-205/1218, 34-35=-205/1218, 33-34=0/3428, 32-33=0/3428, 31-32=0/4480, 30-31=0/4480, 29-30=0/4537, 28-29=0/3585, 27-28=0/1484, 26-27=0/1484
WEBS 8-37=-275/0, 17-31=-29/364, 7-37=-2142/0, 2-42=-1048/494, 7-38=0/1936, 2-40=-755/815, 4-40=-260/232, 5-38=-1846/0, 9-37=-2324/0, 9-36=0/2101, 11-36=-1767/0, 11-34=0/1472, 15-34=-1122/0, 15-32=0/805, 16-32=-76/321, 17-32=-1131/0, 24-26=-1680/0, 24-28=0/1350, 21-28=-1029/0, 21-29=0/716, 19-29=-362/0, 19-30=-465/345

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x6 MT20 unless otherwise indicated.
3) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 42. This connection is for uplift only and does not consider lateral forces.
4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
5) Required 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.
7) Use Simpson Strong-Tie THA422 (6-16d Girder, 6-10d Truss) or equivalent at 4-9-12 from the left end to connect truss(es) F114 (1 ply 2x4 SP) to back face of top chord.
8) Fill all nail holes where hanger is in contact with lumber.
9) Due to span to depth ratio of this truss, the floor may exhibit objectionable vibration and/or deflection. Building designer to consider providing means to dampen possible floor vibration.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 26-42=-8, 1-25=-80
Concentrated Loads (lb)
Vert: 5=-560

Job	Truss	Truss Type	Qty	Ply	Lincoln A GRH-2nd Floor-Lincoln A GRH
24050001-B	F108	Floor	7	1	Job Reference (optional)



Scale = 1:58.1

Plate Offsets (X, Y): [18:0-3-0,Edge], [30:0-3-0,Edge], [39:0-3-0,Edge], [40:0-3-0,Edge], [43:0-1-8,Edge], [44:0-1-8,Edge]

Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.79	Vert(LL)	-0.37	30	>759	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.77	Vert(CT)	-0.51	29-30	>556	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.04	26	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 262 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (lb/size) 26=873/0-3-8, (min. 0-1-8), 37=2027/0-3-8, (min. 0-1-8), 42=49/0-3-8, (min. 0-1-8)
Max Uplift 42=-247 (LC 4)
Max Grav 26=882 (LC 4), 37=2027 (LC 1), 42=310 (LC 3)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-522/1443, 3-4=-522/1443, 4-5=-522/1443, 5-6=-175/2283, 6-7=-175/2283, 7-8=0/4013, 8-9=0/4013, 9-10=-34/534, 10-11=-34/534, 11-12=-2742/0, 12-13=-2742/0, 13-14=-2742/0, 14-15=-2742/0, 15-16=-4295/0, 16-17=-4295/0, 17-18=-4660/0, 18-19=-4660/0, 19-20=-4328/0, 20-21=-4328/0, 21-22=-2732/0, 22-23=-2732/0, 23-24=-2732/0
BOT CHORD 41-42=-520/444, 40-41=-520/444, 39-40=-1443/522, 38-39=-1443/522, 37-38=-3036/0, 36-37=-1987/0, 35-36=0/1511, 34-35=0/1511, 33-34=0/3665, 32-33=0/3665, 31-32=0/4660, 30-31=0/4660, 29-30=0/4676, 28-29=0/3667, 27-28=0/1512, 26-27=0/1512
WEBS 4-40=-67/295, 5-39=0/533, 17-31=-65/330, 24-26=-1711/0, 24-28=0/1381, 21-28=-1059/0, 21-29=0/747, 19-29=-417/0, 19-30=-387/428, 9-37=-2288/0, 9-36=0/2040, 11-36=-1710/0, 11-34=0/1413, 15-34=-1065/0, 15-32=0/756, 16-32=-105/294, 17-32=-1041/0, 7-37=-1461/0, 7-38=0/1190, 6-38=0/418, 5-38=-1629/0, 2-42=-502/588, 2-40=-1030/87

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x6 MT20 unless otherwise indicated.
3) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 42. This connection is for uplift only and does not consider lateral forces.
4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
5) Required 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.
7) Due to span to depth ratio of this truss, the floor may exhibit objectionable vibration and/or deflection. Building designer to consider providing means to dampen possible floor vibration.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Lincoln A GRH-2nd Floor-Lincoln A GRH
24050001-B	F109	Floor	1	1	Job Reference (optional)

Carter Components, Sanford, NC, user — Run: 8.73 S Apr 25 2024 Print: 8.730 S Apr 25 2024 MiTek Industries, Inc. Fri May 17 15:12:16 — Page: 1

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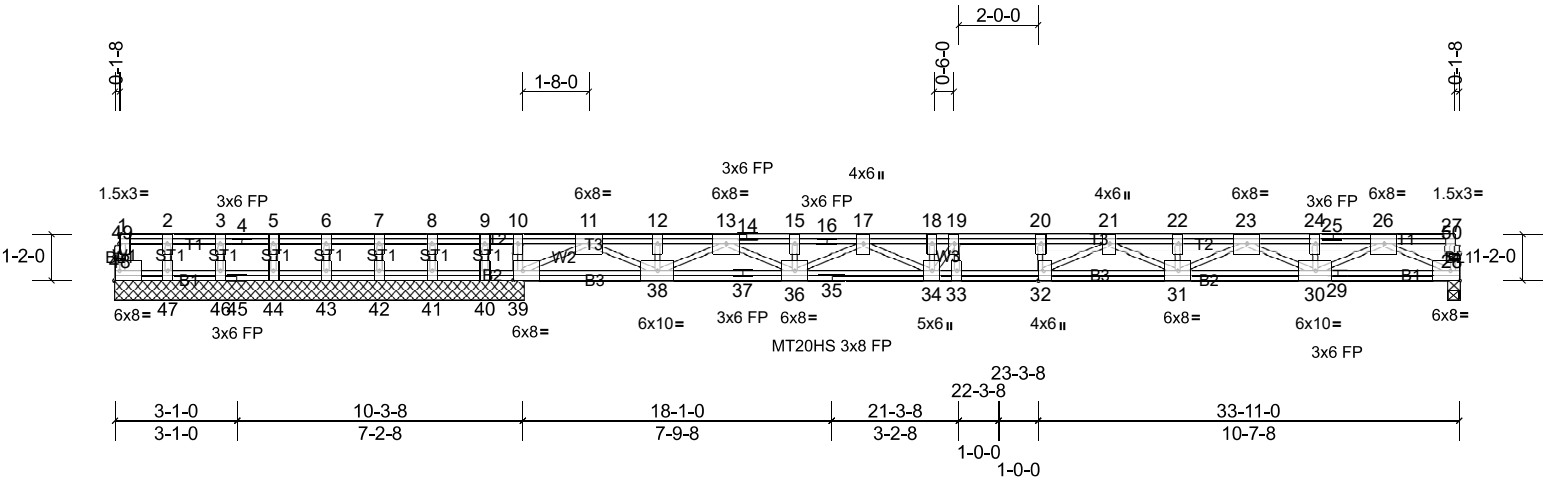


Scale = 1:58.1

Plate Offsets (X, Y): [32:0-3-0,Edge], [39:0-3-0,Edge], [49:0-1-8,0-0-8], [50:0-1-8,0-0-8]

Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.85	Vert(LL)	-0.50	32-33	>568	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.90	Vert(CT)	-0.68	32-33	>413	240	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.08	28	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 254 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS All bearings 10-3-8. except 28=0-3-8

(lb) - Max Uplift All uplift 100 (lb) or less at joint(s) 42, 48 except 40=-1102 (LC 4)
Max Grav All reactions 250 (lb) or less at joint (s) 40, 42, 43, 44, 46, 47, 48 except 28=1006 (LC 1), 39=2104 (LC 1), 41=269 (LC 1)

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

TOP CHORD 11-12=-2658/0, 12-13=-2658/0, 13-14=-4972/0, 14-15=-4972/0, 15-16=-4972/0, 16-17=-4972/0, 17-18=-6047/0, 18-19=-6047/0, 19-20=-6156/0, 20-21=-6156/0, 21-22=-5238/0, 22-23=-5238/0, 23-24=-3194/0, 24-25=-3194/0, 25-26=-3194/0

BOT CHORD 38-39=0/1144, 37-38=0/3929, 36-37=0/3929, 35-36=0/5651, 34-35=0/5651, 33-34=0/6156, 32-33=0/6156, 31-32=0/5825, 30-31=0/4350, 29-30=0/1743, 28-29=0/1743

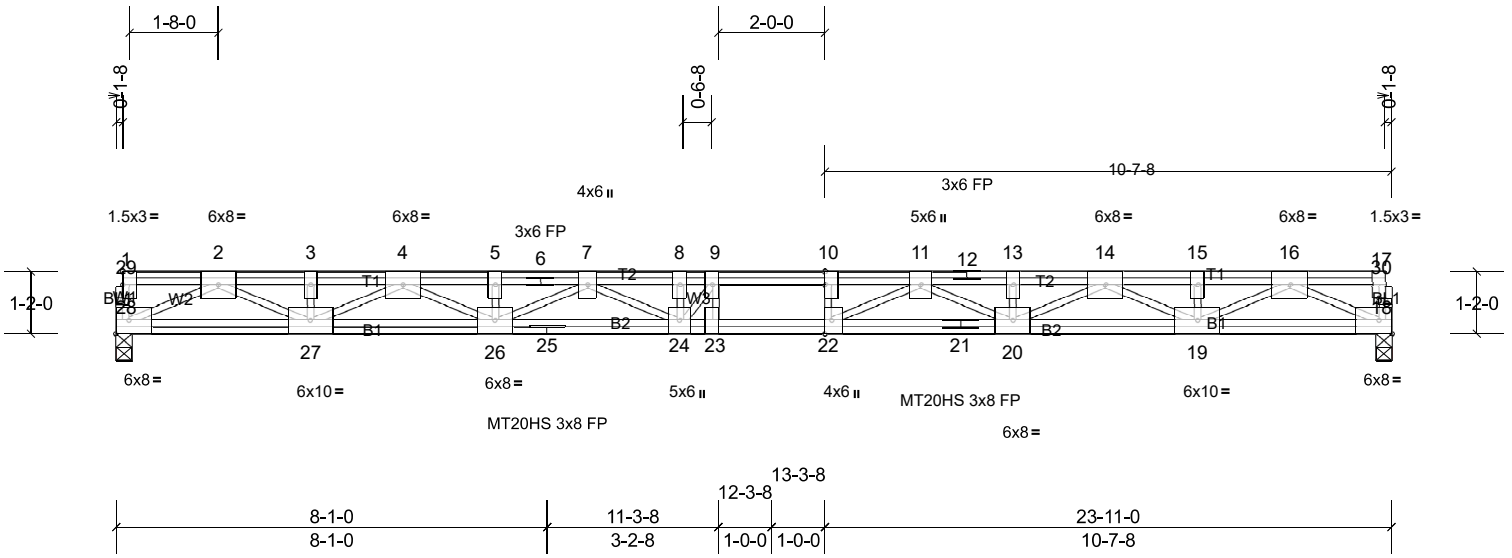
WEBS 10-39=-997/0, 26-28=-1972/0, 26-30=0/1643, 23-30=-1309/0, 23-31=0/1004, 21-31=-665/0, 21-32=0/374, 11-39=-1286/0, 11-38=0/1714, 13-38=-1438/0, 13-36=0/1181, 17-36=-769/0, 17-34=0/448, 9-40=0/653

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) All plates are 3x6 MT20 unless otherwise indicated.
4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
5) Gable studs spaced at 1-4-0 oc.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) except (jt=lb) 40=1101.
7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 48 and 42. This connection is for uplift only and does not consider lateral forces.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss has large uplift reaction(s) from gravity load case(s). Proper connection is required to secure truss against upward movement at the bearings. Building designer must provide for uplift reactions indicated.
10) Required 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
11) CAUTION, Do not erect truss backwards.
12) Due to span to depth ratio of this truss, the floor may exhibit objectionable vibration and/or deflection. Building designer to consider providing means to dampen possible floor vibration.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Lincoln A GRH-2nd Floor-Lincoln A GRH
24050001-B	F110	Floor	3	1	Job Reference (optional)



Scale = 1:43.2

Plate Offsets (X, Y): [10:0-3-0,Edge], [22:0-3-0,Edge], [29:0-1-8,0-0-8], [30:0-1-8,0-0-8]

Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.33	Vert(LL)	-0.53	22-23	>529	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.98	Vert(CT)	-0.73	22-23	>384	240	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.08	18	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 186 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 23-24,22-23.

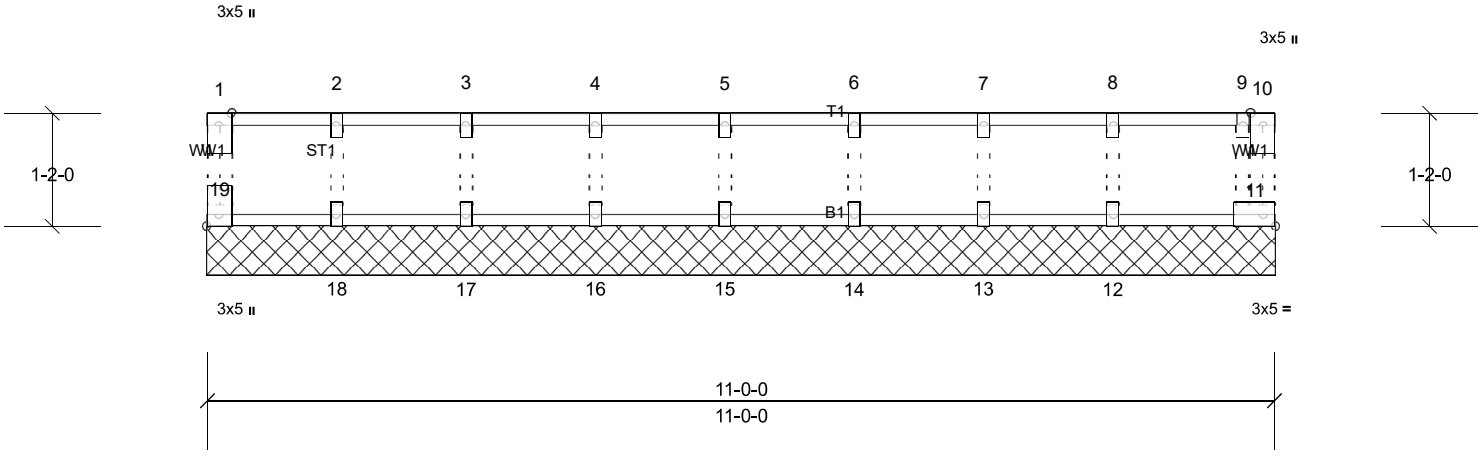
REACTIONS (lb/size) 18=1035/0-3-8, (min. 0-1-8),
28=1035/0-3-8, (min. 0-1-8)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3303/0, 3-4=-3303/0, 4-5=-5455/0, 5-6=-5455/0, 6-7=-5455/0, 7-8=-6465/0, 8-9=-6465/0, 9-10=-6511/0, 10-11=-6511/0, 11-12=-5454/0, 12-13=-5454/0, 13-14=-5454/0, 14-15=-3304/0, 15-16=-3304/0
BOT CHORD 27-28=0/1797, 26-27=0/4514, 25-26=0/6101, 24-25=0/6101, 23-24=0/6511, 22-23=0/6511, 21-22=0/6098, 20-21=0/6098, 19-20=0/4512, 18-19=0/1797
WEBS 10-22=-264/0, 16-18=-2034/0, 16-19=0/1705, 14-19=-1368/0, 14-20=0/1066, 11-20=-729/0, 11-22=-59/831, 2-28=-2034/0, 2-27=0/1704, 4-27=-1371/0, 4-26=0/1065, 7-26=-732/0, 7-24=0/549, 9-24=-659/454

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) All plates are 3x6 MT20 unless otherwise indicated.
4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
5) Required 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Lincoln A GRH-2nd Floor-Lincoln A GRH
24050001-B	F111	Floor Supported Gable	1	1	Job Reference (optional)



Scale = 1:23.8

Plate Offsets (X, Y): [19:Edge,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.03	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	NO	WB	0.03	Horiz(TL)	n/a	-	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 49 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

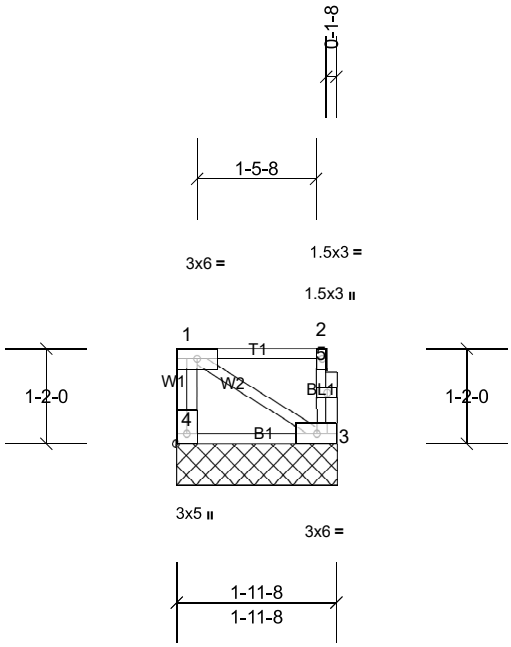
REACTIONS All bearings 11-0-0.
(lb) - Max Grav All reactions 250 (lb) or less at joint (s) 11, 12, 13, 14, 15, 16, 17, 18, 19

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

NOTES
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Lincoln A GRH-2nd Floor-Lincoln A GRH
24050001-B	F112	Floor Supported Gable	1	1	Job Reference (optional)



Scale = 1:28.3

Plate Offsets (X, Y): [4:Edge,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	n/a	-	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 13 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING
TOP CHORD Structural wood sheathing directly applied or 1-11-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

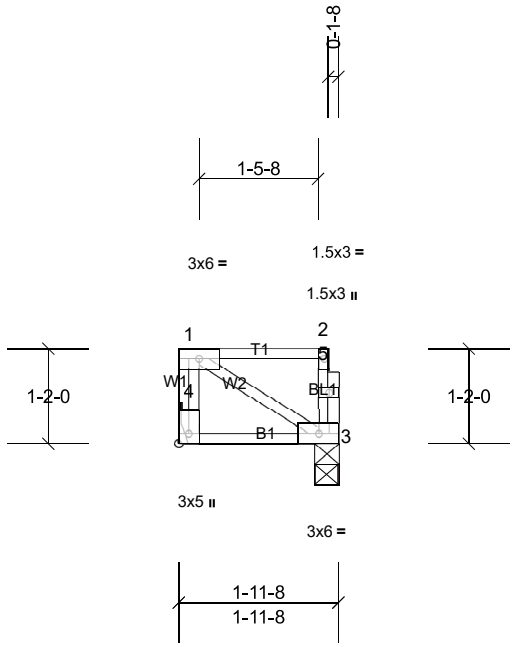
REACTIONS (lb/size) 3=88/1-11-8, (min. 0-1-8), 4=94/1-11-8, (min. 0-1-8)

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

NOTES
1) Gable requires continuous bottom chord bearing.
2) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
3) Gable studs spaced at 1-4-0 oc.
4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Lincoln A GRH-2nd Floor-Lincoln A GRH
24050001-B	F113	Floor	1	1	Job Reference (optional)



Scale = 1:28.3

Plate Offsets (X, Y): [4:Edge,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(CT)	0.00	3-4	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	n/a	-	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 13 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING
TOP CHORD Structural wood sheathing directly applied or 1-11-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

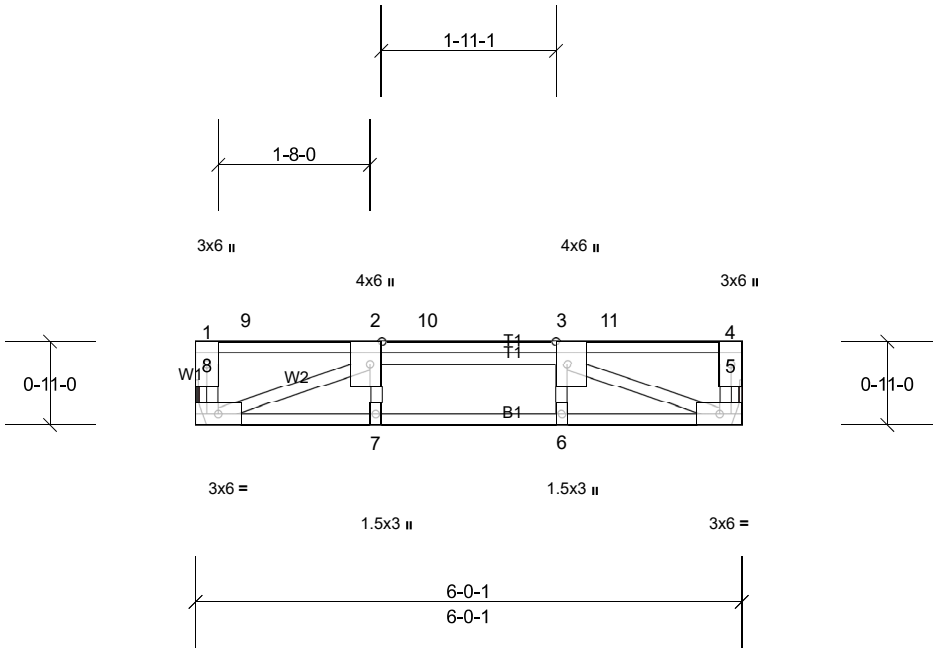
REACTIONS (lb/size) 3=88/0-3-8, (min. 0-1-8), 4=94/ Mechanical, (min. 0-1-8)

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

NOTES
1) Refer to girder(s) for truss to truss connections.
2) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
4) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Lincoln A GRH-2nd Floor-Lincoln A GRH
24050001-B	F114	Floor Girder	1	1	Job Reference (optional)



Scale = 1:25.3

Plate Offsets (X, Y): [2:0-3-0,Edge], [3:0-3-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.29	Vert(LL)	-0.03	7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.44	Vert(CT)	-0.04	7	>999	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.26	Horz(CT)	0.01	5	n/a	n/a		
BCDL	5.0	Code	IRC2018/TPI2014	Matrix-MSH							Weight: 37 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 5=528/ Mechanical, (min. 0-1-8), 8=594/ Mechanical, (min. 0-1-8)
Max Grav 5=640 (LC 4), 8=692 (LC 3)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-8=-283/0, 2-10=-1016/0, 3-10=-1016/0
BOT CHORD 7-8=0/1016, 6-7=0/1016, 5-6=0/1016
WEBS 3-5=-1091/0, 2-8=-1091/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Refer to girder(s) for truss to truss connections.
3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 5-8=-10, 1-4=-100
Concentrated Loads (lb)
Vert: 4=-27, 2=-2, 9=-173, 10=-144, 11=-144