ATLANTIC

October 1, 2019

Engineering Letter

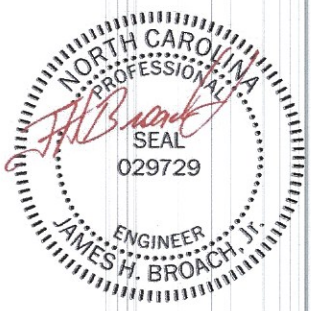
Mr. Craig Dunham
Wynn Construction
2550 Capital Drive
Creedmoor, NC 27522

Reference: 106 Wildlife Court
Spring Lake, NC 283990

To Whom It May Concern:

Please be advised the (2) 1-3/4" X 9-1/4" LVL beam at the juncture of the Family Room and the Stairwell and the (2) 2X12 beam at the opening between the Breakfast Room and the Foyer have been replaced with engineered open web floor truss girders. These floor truss girders have been specifically designed to support the loads imposed by the floor trusses spanning the Family Room in the instance of the (2) 1-3/4" X 9-1/4" LVL beam at the stairwell opening and the floor trusses spanning the Breakfast Room and the Foyer in the instance of the (2) 2X12 beam at the opening between the Breakfast Room and the Foyer.

Respecfully,



James H. Broach, Jr., P.E.

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Fax (843) 565-3193

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SPARTA, NC OFFICE
3255 US Hwy 21 South
Sparta, NC 28675
(336) 372-2226
Fax (336) 372-8420

Job	Truss	Truss Type	Qty	Ply	LOT 121 ANDERSON CREEK | SPRING LAKE,	
19-1364-F02	F2-010	FLOOR GIRDER	1	1		E13592362
Atlantic Building Components, Moncks Corner, South Carolina					Job Reference (optional)	

8.240 s Jul 14 2019 MiTek Industries, Inc. Wed Oct 2 15:18:43 2019 Page 1
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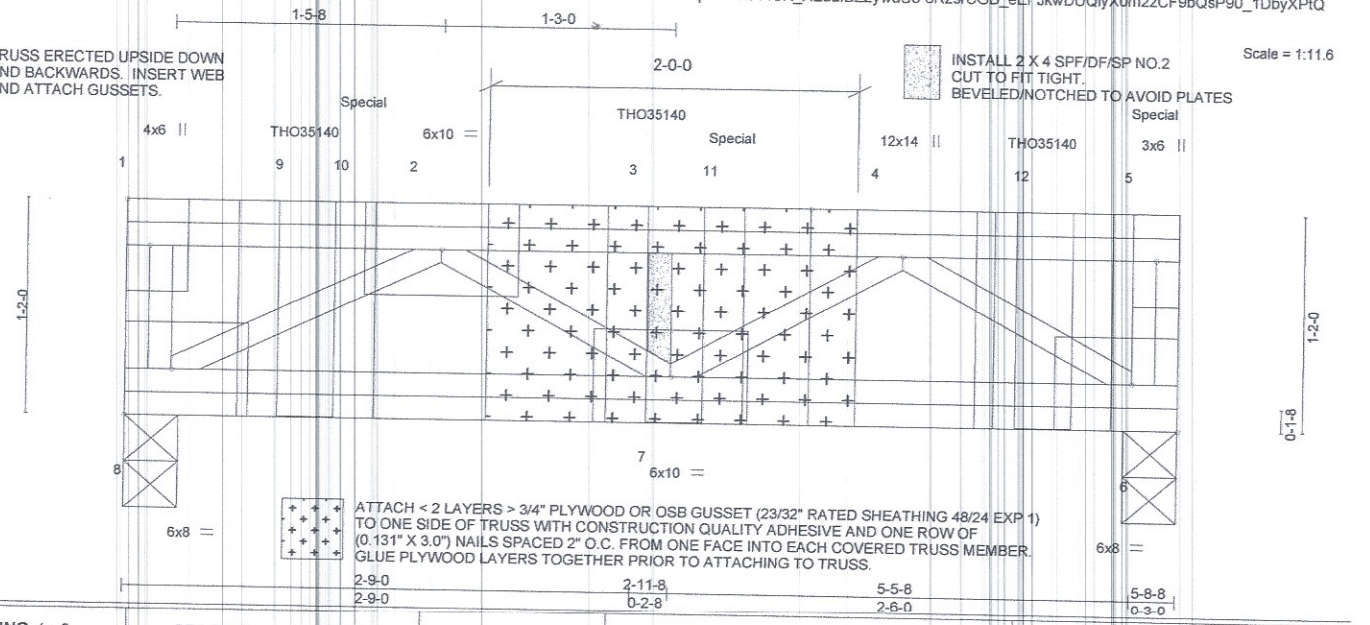


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.78	Vert(LL)	-0.03	7	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.25	Vert(CT)	-0.04	7	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.50	Horz(CT)	0.01	6	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 48 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP SS(flat)
WEBS 2x4 SP No.2(flat) *Except*
1-8,5-6: 2x4 SP No.3(flat)

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

REACTIONS. (lb/size) 8=2229/0-3-8 (min. 0-1-8), 6=2854/0-3-8 (min. 0-1-8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-8=-461/0, 5-6=-1220/0, 2-3=-3390/0, 3-11=-3322/0, 4-11=-3322/0
BOT CHORD 7-8=0/2988, 6-7=0/2394
WEBS 2-8=-3453/0, 2-7=0/498, 4-7=0/1151, 4-6=-2877/0, 3-7=-999/0

NOTES- (7-8)
1) 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.
2) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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.
3) Use USP THO35140 (With 16d x 2-1/2 nails into Girder & 2-10d x 1-1/2 nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-11-12 from the left end to 4-11-12 to connect truss(es) F2-016 (1 ply 2x4 SP) to front face of top chord.
4) Fill all nail holes where hanger is in contact with lumber.
5) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 849 lb down at 1-3-8, and 849 lb down at 3-3-8, and 899 lb down at 5-7-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.
6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
7) Graphical web bracing representation does not depict the size, type or the orientation of the brace on the web. Symbol only indicates that the member must be braced.
8) 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.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 6-8=-10, 1-5=-100
Concentrated Loads (lb)
Vert: 5=-899(B) 3=-620(F) 9=-627(F) 10=-849(B) 11=-849(B) 12=-639(F)

October 3,2019

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

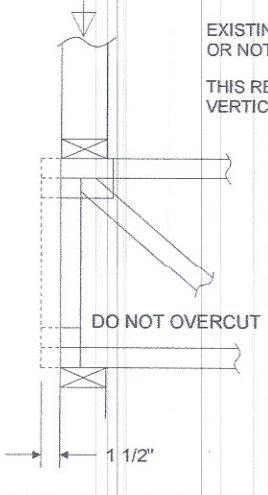
MARCH 12, 2007	STANDARD REPAIR TO TRIM OR REMOVE END VERTICAL	ED-REP05

Trenco, Edenton, North Carolina

ENGINEERED BY TRENCO
A MiTek Affiliate

1. THIS IS A SPECIFIC REPAIR DETAIL TO BE USED ONLY FOR ITS ORIGINAL INTENTION. THIS REPAIR DOES NOT IMPLY THAT THE REMAINING PORTION OF THE TRUSS IS UNDAMAGED. THE ENTIRE TRUSS SHALL BE INSPECTED TO VERIFY THAT NO FURTHER REPAIRS ARE REQUIRED.
2. ALL MEMBERS MUST BE RETURNED TO THEIR ORIGINAL POSITIONS BEFORE APPLYING REPAIR AND HELD IN PLACE DURING APPLICATION OF REPAIR.
3. THE END DISTANCE, EDGE DISTANCE, AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID SPLITTING OF THE WOOD.
4. LUMBER MUST BE CUT CLEANLY AND ACCURATELY AND THE REMAINING WOOD MUST BE UNDAMAGED.
5. THIS REPAIR SHALL BE USED FOR SINGLE PLY TRUSSES IN THE 4X2 ORIENTATION ONLY.
6. CONNECTOR PLATES MUST BE FULLY IMBEDDED AND UNDISTURBED.

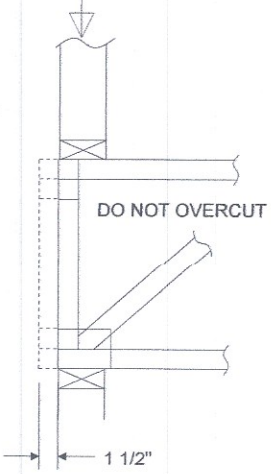
500# MAXIMUM WALL LOAD FROM ABOVE



EXISTING END VERTICAL MAY BE FULL DEPTH OR NOTCHED FOR RIBBON BOARD.

THIS REPAIR MAY REMOVE ENTIRE END VERTICAL OR NOTCH IT FOR A RIBBON BOARD.

500# MAXIMUM WALL LOAD FROM ABOVE



REFER TO INDIVIDUAL TRUSS DESIGN FOR PLATE SIZES AND LUMBER GRADES

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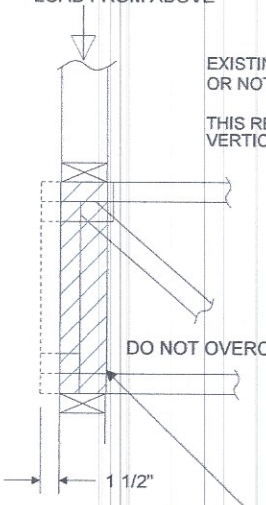

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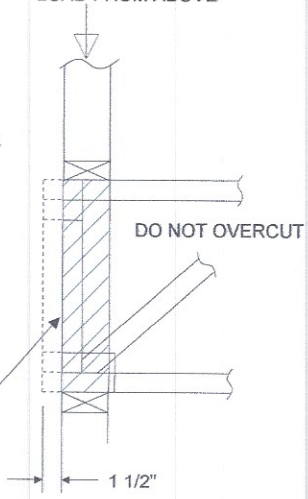

REFER TO INDIVIDUAL TRUSS DESIGN FOR PLATE SIZES AND LUMBER GRADES

ATTACH 2x4 SQUASH BLOCK (CUT TO FIT TIGHTLY) TO BOTH SIDES OF THE TRUSS AS SHOWN WITH 10d NAILS (.131" DIA. X 3") SPACED 3" O.C.

August 30,2011

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A MiTek Affiliate
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