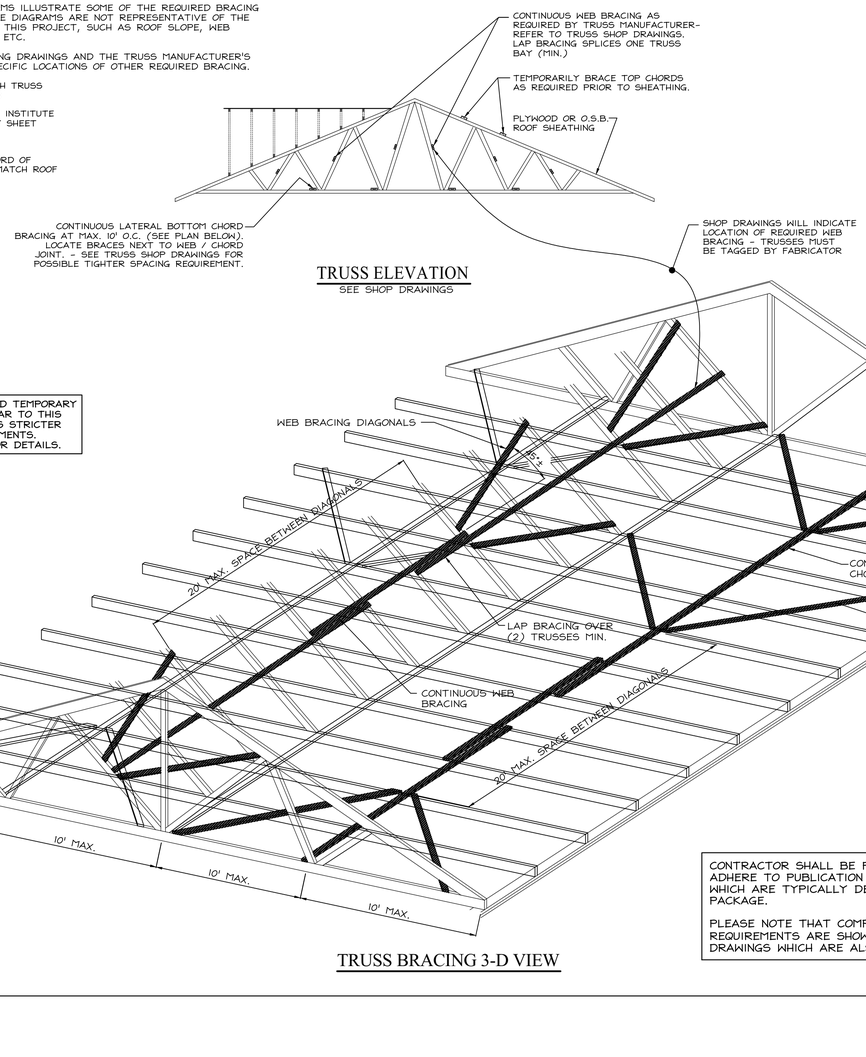
TYPICAL WOOD TRUSS BRACING DIAGRAMS

- THE FOLLOWING DIAGRAMS ILLUSTRATE SOME OF THE REQUIRED BRACING FOR ROOF TRUSSES. THE DIAGRAMS ARE NOT REPRESENTATIVE OF THE PARTICULAR DETAILS OF THIS PROJECT, SUCH AS ROOF SLOPE, WEB LOCATIONS, OVERHANGS, ETC.
- REFER TO ROOF FRAMING DRAWINGS AND THE TRUSS MANUFACTURER'S SHOP DRAWINGS FOR SPECIFIC LOCATIONS OF OTHER REQUIRED BRACING.
- FASTEN BRACES TO EACH TRUSS WITH (2) 16d NAILS (MIN.)
- REFER TO TRUSS PLATE INSTITUTE (TPI) BCSI 2008 SUMMARY SHEET FOR ERECTION BRACING REQUIREMENTS.
- BEVEL CUT BOTTOM CHORD OF OVERBUILD TRUSSES TO MATCH ROOF SLOPE.



TRUSS ELEVATION

SEE SHOP DRAWINGS

NOTE: TOP CHORD TEMPORARY BRACING IS SIMILAR TO THIS DIAGRAM BUT HAS STRICTER BRACING REQUIREMENTS. SEE BCSI 2008 FOR DETAILS.

TRUSS BRACING 3-D VIEW

CONTRACTOR SHALL BE FAMILIAR WITH AND STRICTLY ADHERE TO PUBLICATION BCSI 2008 SUMMARY SHEETS WHICH ARE TYPICALLY DELIVERED WITH TRUSS PACKAGE.

PLEASE NOTE THAT COMPRESSION WEB BRACING REQUIREMENTS ARE SHOWN ONLY ON THE TRUSS "SHOP" DRAWINGS WHICH ARE ALSO DELIVERED WITH TRUSSES.

WOOD TRUSSES

1. ALL WOOD FLOOR AND/OR ROOF TRUSSES SHALL BE DESIGNED AND MANUFACTURED BY BOISE STRUCTURAL SOLUTIONS, INC. OF BIDDEFORD, MAINE; RELIABLE TRUSS AND COMPONENTS, INC. OF NEW BEDFORD, MA; OR APPROVED EQUAL. ALL ASSOCIATED CONNECTION HARDWARE FOR TRUSSES SHALL ALSO BE DESIGNED AND SUPPLIED BY TRUSS MANUFACTURER. TRUSS DESIGNS ARE TO BE STAMPED BY A REGISTERED PROFESSIONAL ENGINEER RETAINED BY MANUFACTURER. CALCULATIONS AND SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO START OF PRODUCTION.
2. ALL WOOD TRUSSES SHALL BE BRACED IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS AND IN ACCORDANCE WITH TRUSS PLATE INSTITUTE (TPI) PUBLICATION BCSI 2008 FOR BRACING WOOD TRUSSES. PROPER BRACING OF WOOD TRUSSES DURING ERECTION IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
3. MINIMUM GRADE FOR ANY TRUSS MEMBER SHALL BE #2.
4. WOOD TRUSS MANUFACTURER SHALL CLEARLY LABEL ALL COMPRESSION WEBS WHICH REQUIRE LATERAL BRACING WITH RED TAGS OR PAINT. FAILURE TO LABEL WILL REQUIRE IN-PLACE LABELING BY TRUSS MANUFACTURER.
5. WOOD TRUSS MANUFACTURER SHALL MAINTAIN A MAXIMUM PANEL POINT SPACING OF 10 FT. UNLESS WRITTEN APPROVAL FOR A MODIFICATION IS RECEIVED FROM ENGINEER.
6. ROOF TRUSSES SHALL BE DESIGNED FOR:
   TOP CHORD SNOW LOAD - 50 PSF BALANCED#
   TOP CHORD DEAD LOAD - 13 PSF (INCLUDES TRUSS WEIGHT)
   BOTTOM CHORD LIVE LOAD - 10 PSF
   BOTTOM CHORD DEAD LOAD - 7 PSF

   # CONSIDER UNBALANCED LOADING PER ASCE 7-05
7. FLOOR TRUSSES SHALL BE DESIGNED FOR:

	2ND	TOWNHOUSE(2ND)	3RD /4TH
TOP CHORD LIVE LOAD -	40	40	40
TOP CHORD DEAD LOAD -	25/35	14/23	21/32
BOTTOM CHORD LIVE LOAD -	10	10	10
BOTTOM CHORD DEAD LOAD -	6	6	6

   HARDWOOD AREAS/TILE AREAS. TCDL INCLUDES TRUSS WEIGHT.
8. WOOD TRUSS LAYOUT DRAWINGS SHALL BE PREPARED ON 24"X36" SHEETS AND CLEARLY LABEL ALL TRUSSES AND CONNECTORS. SHOP DRAWINGS MUST INCLUDE THE FOLLOWING INFORMATION: MEMBER SPECIES AND GRADE; MEMBER FORCES; MEMBER CSI RATIOS; ACTUAL DL AND LL DEFLECTIONS; REACTIONS; CONNECTOR PLATE REQUIREMENTS AND SIZES.
9. OVERBUILD TRUSSES SHALL HAVE BOTTOM CHORDS BEVEL CUT TO MATCH THE SLOPE OF THE SUPPORTING ROOF.
10. ROOF AND FLOOR TRUSSES SHALL BE DESIGNED FOR A MAXIMUM LIVE LOAD DEFLECTION CRITERIA OF L/480.
11. THE "MINIMUM" MEMBER SIZE USED IN ANY ROOF TRUSS SHALL BE A 2X4. FLOOR TRUSSES SHALL ALSO USE A MINIMUM MEMBER SIZE OF 2X4 UNLESS APPROVED BY ENGINEER PRIOR TO BIDDING. THE MINIMUM "PLATE" SIZE USED ON ANY ROOF TRUSS CONNECTION SHALL BE 3"X4", REGARDLESS OF DESIGN REQUIREMENT.
12. TRUSS MANUFACTURER SHALL BE ACCEPTABLE TO THE ENGINEER. CONTRACTOR SHALL QUALIFY MANUFACTURERS WITH ENGINEER PRIOR TO BIDDING.
13. ERECTION BRACING OF WOOD TRUSSES IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. THIS IS MEANS AND METHODS. FOLLOW THE LATEST EDITION OF THE TPI PUBLICATION BCSI STRICTLY IN ADDITION TO WEB BRACING REQUIREMENTS SHOWN ON TRUSS SHOP DRAWINGS. CONSULT TRUSS MANUFACTURER OR INDEPENDENT ENGINEER IF FURTHER DESIGN ASSISTANCE IS NEEDED.
14. ALL LATERAL BRACING INSTALLED ON COMPRESSION WEBS OF TRUSSES, AS DIRECTED BY MANUFACTURER, MUST HAVE CROSS BRACING INSTALLED ON SAME WEB PLANE AT INTERVALS SHOWN ON THESE DRAWINGS AND BCSI-B3 FIGURE B3-11. NOTE THAT CROSS BRACING IS REQUIRED FOR PERMANENT BRACING TO PREVENT WEBS FROM BUCKLING AS A GROUP. WHERE DIAGONAL BRACES CROSS, INTERRUPT ONE BRACE AND ADD A 4-FT. LONG 2X4 SPLICE OVER THE INTERRUPTED BRACE AND USE (8) 10d NAILS ON EACH SIDE. AS AN ALTERNATE, VEE OR CHEVRON BRACING CAN BE INSTALLED USING THE SAME QUANTITY OF DIAGONAL MEMBERS, WHICH ELIMINATES THE NEED FOR THE SPLICE. IN THE EVENT THAT TEE-BRACING OR STRONGBACKS ARE USED INSTEAD OF CONTINUOUS LATERAL BRACING, THE CROSS BRACING IS THEN ONLY A TEMPORARY ERECTION STABILITY REQUIREMENT. CONTINUOUS LATERAL BRACING MUST, HOWEVER, BE LOCATED ON TOP AND BOTTOM CHORDS ABOVE AND BELOW CROSS BRACING FOR TEMPORARY CROSS BRACING TO BE EFFECTIVE.
15. TRUSS MANUFACTURER SHALL ATTEMPT TO ALIGN ADJACENT TRUSS WEBS TO ALLOW INSTALLATION OF LATERAL BRACING. A MINIMUM OF 6 ADJACENT WEBS MUST ALIGN, OTHERWISE MANUFACTURER SHALL SPECIFY AND PROVIDE A DETAIL FOR TEE-BRACING.

STEEL STAIRS

1. STEEL STAIRS TO BE DESIGNED BY STEEL STAIR FABRICATOR TO CONFORM TO STRUCTURAL AND DIMENSIONAL REQUIREMENTS OF CONTRACT DRAWINGS AND ALL APPLICABLE CODE REQUIREMENTS.
2. STEEL STAIR FABRICATOR SHALL PROVIDE SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO START OF FABRICATION.

MASONRY LOOSE LINTEL SCHEDULE

1. 1. UNLESS OTHERWISE INDICATED ON THE DRAWINGS PROVIDE AN ANGLE, PLACED WITH LONG LEG VERTICAL, FOR EACH 4" OF MASONRY THICKNESS FOR ALL MASONRY OPENINGS IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:

MAXIMUM OPENING	LINTEL
UP TO 3'-5"	L3-1/2 X 3-1/2 X 3/8"
3'-6" TO 4'-6"	L4 X 3-1/2 X 3/8"
4'-7" TO 6'-0"	L5 X 3-1/2 X 3/8"
6'-1" TO 8'-0"	L6 X 3-1/2 X 3/8"
8'-1" TO 11'-0"	L7 X 4 X 3/8"

2. ALL LINTELS SHALL BE HOT DIP GALVANIZED.
3. LINTELS SHALL BE 16" LONGER THAN MASONRY OPENING AND SHALL HAVE A MINIMUM OF 8" BEARING ON MASONRY AT EACH END. WHERE LINTEL ABUTS A COLUMN PROVIDE A STRUCTURAL CLIP ANGLE CONNECTION.
4. LINTELS SHOWN ARE FOR 4" VENEER THICKNESS ONLY.

CONSTRUCTION ADMINISTRATION

1. IT IS RECOMMENDED THAT THE GENERAL CONTRACTOR OR OWNER RETAIN JSN ASSOCIATES, INC. FOR PERIODIC OBSERVATION OF THE STRUCTURE DURING CONSTRUCTION. IF JSN IS NOT RETAINED THE OWNER OR GENERAL CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR VERIFYING THAT THE STRUCTURE IS BUILT IN COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS. JSN WILL NOT BE HELD LIABLE FOR DEFICIENCIES AS A RESULT OF NON-COMPLIANT CONSTRUCTION.

JSN Associates, Inc.
Consulting Structural Engineers
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Portsmouth, NH 03801
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Reviewed for Code Compliance Inspection Division Approved Date: 10/20/14

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STATE OF MAINE
JEFFREY S. NAWROCKI
No. 6044
LICENSED
PROFESSIONAL ENGINEER
6/11/14

Date:	06/11/14
Scale:	As Noted
Design By:	MJA
Approved By:	JSN

Revisions

Notes and Diagrams

SN.1

Project No: 130816.1