PROPOSED SINGLE FAMILY
20 MONTMORENCI AVENUE
EAST BOSTON, MASSACHUSETTS

GENERAL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL PERMITS REQUIRED FOR THIS PROJECT.
2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MEANS, METHODS, TECHNIQUES, SEQUENCING, SCHEDULING AND SAFETY FOR THIS PROJECT.
3. ALL WORK SHALL BE PERFORMED IN CONFORMANCE TO THE MASSACHUSETTS STATE BUILDING CODE AND ALL OTHER APPLICABLE CODES AND LAWS.
4. THE CONTRACTOR SHALL VISIT THE SITE AND BE THOROUGHLY ACQUAINTED WITH THE PROJECT PRIOR TO SUBMITTING A PRICE. ADDITIONAL MONEY WILL NOT BE GRANTED FOR WORK NOT CLARIFIED PRIOR TO BIDDING. SPECIFICATIONS OR FIELD CONDITIONS TO THE ARCHITECT IN WRITING.
5. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES BETWEEN DRAWINGS SPECIFICATIONS OR FIELD CONDITIONS TO THE ARCHITECT IN WRITING.
6. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY WORK DAMAGED BY HIS FORCES WHILE PERFORMING THIS CONTRACT.
7. THE CONTRACTOR SHALL WARRANTEE HIS WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL COMPLETION.

FOUNDATION NOTES:

1. ALL FOUNDATION FOOTINGS SHALL BE CARRIED DOWN TO A MINIMUM OF 4'-0" BELOW FINISH GRADE, OR DEEPER, IF NECESSARY, TO OBTAIN A SAFE SOIL BEARING PRESSURE OF 2 TONS PER SQUARE FOOT. FOUNDATION DESIGN IS BASED ON ASSUMED SOIL BEARING CAPACITY OF 2 TONS PER SQUARE FOOT.
2. ALL FOOTINGS SHALL BE PLACED ON UNDISTURBED SOIL; OR, ON ENGINEERED BANK RUN GRAVEL FILL MATERIAL WITH A MINIMUM DRY DENSITY OF 95%.
3. ALL FOOTING SHALL BE POURED IN THE DRY ONLY.
4. NO FOOTING SHALL BE POURED ON FROZEN GROUND.
5. THE MINIMUM REINFORCING FOR ALL FOUNDATION WALLS SHALL BE 2-#6 BARS AT THE TOP AND BOTTOM, CONTINUOUS OR, AS SHOWN ON DRAWINGS.
6. LAP ALL BARS 40 DIAMETERS AND PROVIDE CORNER BARS.
7. ALL REINFORCING MUST MEET ASTM A615-60, NEW BARS.

CONCRETE NOTES:

1. ALL CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI.
2. MAXIMUM SLUMP SHALL NOT EXCEED 5"; AND MAXIMUM COARSE AGGREGATE SIZE SHALL NOT EXCEED 3/4" IN DIAMETER.
3. ALL CONCRETE SLABS SHALL BE POURED IN 900 SQUARE FOOT PANELS, MAXIMUM; OR, PROVIDE CONTROL JOINTS BY SAW CUTTING THE SLAB WHILE THE CONCRETE IS STILL GREEN.

STEEL NOTES:

1. ALL COLUMNS, A36, STEEL PIPE, A46 STEEL TUBE.
2. BOLTS: A325, ANCHOR BOLTS A307.

WOOD LINTEL SCHEDULE:

Lintels over openings in bearing walls shall be as follows or as noted on drawings.

Span of opening:	Size: 2x6 studs	Size: 2x4 studs
less than 4'-0"	3 - 2x4	2 - 2x4
up to 6'-0"	3 - 2x6	2 - 2x6
up to 8'-0"	3 - 2x8	2 - 2x8
up to 10'-0"	3 - 2x10	2 - 2x10

REINFORCING NOTES:

1. ALL REINFORCEMENT, EXCEPT FOR TIES AND STIRRUPS, SHALL CONFORM TO ASTM 615-60.
2. ALL REINFORCEMENT FOR TIES AND STIRRUPS SHALL CONFORM TO ASTM 615-40.
3. ALL WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185-70 SPECIFICATIONS.
4. ALL REINFORCEMENT SHALL BE INSPECTED AND APPROVED BY THE ARCHITECT OR HIS ENGINEER PRIOR TO THE PLACEMENT OF ANY CONCRETE.
5. THE CONTRACTOR SHALL SUBMIT A REPRODUCIBLE SEPIA AND FOUR PRINTS OF SHOP DRAWINGS SHOWING ALL REINFORCING DETAILS, CHAIR BARS, HIGH CHAIRS, SLAB BOLSTERS, ETC. TO THE ARCHITECT FOR HIS APPROVAL. THE CONTRACTOR SHALL RECEIVE WRITTEN APPROVED SHOP DRAWINGS FROM THE ARCHITECT OR HIS ENGINEER PRIOR TO THE FABRICATION OF REINFORCEMENT.
6. CLEARANCES OF MAIN REINFORCING FROM ADJACENT CONCRETE SURFACES SHALL BE AS FOLLOWS:
   - A. FOOTINGS — 3 INCHES
   - B. SIDES OF FOUNDATIONS WALLS, EXPOSED FACES OF FOUNDATIONS, SIDES OF COLUMNS/ PIERS, SLABS ON GRADE FROM TOP SURFACE — 2 INCHES
   - C. INTERIOR FACES OF FOUNDATIONS, TOP REINFORCING IN SLABS EXPOSED TO THE WEATHER — 1 1/ 2 INCHES
   - D. TOP STEEL OF INTERIOR SLABS — 1 INCHES
7. MAXIMUM DEVIATION FROM THESE REQUIREMENTS SHALL BE 1/ 4" OF SECTIONS 10" OR LESS, 1/ 2" FOR SECTIONS GREATER THAN 10".

WOOD NOTES:

1. ALL LUMBER SHALL HAVE A MOISTURE CONTENT OF NOT MORE THAN 19%.
2. ALL FRAMING LUMBER SHALL BE "1 2 HEM-FIR, OR BETTER, HAVING A MINIMUM: FB=1,200 PSI, FV=70 PSI, E=1,500,000 PSI.
3. ALL L.V.L. LUMBER DENOTED ON PLANS SHALL HAVE A MINIMUM: FB=2,600 PSI, FV=285 PSI, E=1,900,000 PSI.
4. ALL JOIST SPANS SHALL HAVE ONE ROW OF 1" X 3" CROSS BRIDGING AT MID SPAN AND NOT MORE THAN 8'-0" O.C.
5. ALL SOLID BEARING WALLS SHALL HAVE ONE ROW OF 2X HORIZONTAL BLOCKING AT 1/ 2 SOLID HEIGHT, AND NOT MORE THAN 6'-0" O.C. MAXIMUM.
6. PROVIDE AND INSTALL ALL NECESSARY LUMBER CONNECTORS WITH ADEQUATE STRENGTH.
7. PROVIDE DOUBLE JOIST BELOW PARTITIONS PARALLEL TO JOIST FRAMING.
8. PROVIDE SOLID BRIDGING BELOW PARTITIONS PERPENDICULAR TO JOIST FRAMING.
9. PROVIDE SOLID BRIDGING BETWEEN JOIST FRAMING MEMBERS WHEN BEARING ON SOLID PARTITIONS OR BEAMS.
10. PROVIDE A CONTINUOUS BAND JOIST AT EXTERIOR SOLID WALLS.
11. PROVIDE DIAGONAL METAL STRAP BRACING AT ALL CORNERS AND WALL INTERSECTIONS, AT THE INSIDE FACE OF STUDS, FROM TOP PLATE TO FLOOR PLATE AT 45°, SIMPSON TAPE "CMST", OR EQUAL.
12. ALL BUILT-UP BEAMS SHALL BE BOLTED WITH 1/ 2" DIAMETER BOLTS, MEETING A307 STANDARDS, OR, AS NOTED ON DRAWINGS.

NOTE: THERE HAS BEEN NO SOIL TESTING PROVIDED TO THIS OFFICE FOR THIS PROJECT. THE SOIL BEARING CAPACITY OF THIS FOUNDATION SYSTEM AS DESIGNED IS BASED ON A 2 TON MINIMUM SOIL BEARING CAPACITY. IF A SUITABLE SOIL THAT CAN NOT MAINTAIN A 2 TON BEARING CAPACITY IS NOT AVAILABLE, THAN THIS OFFICE SHOULD BE CONTACTED BY THE CONTRACTOR OR OWNER FOR A FOUNDATION REDESIGN.

KEY

- SMOKE DETECTOR
- HEAT DETECTOR
- CARBON MONOXIDE DETECTOR
- FAN

CODE SUMMARY

NEW TYPE 5B CONSTRUCTION
2 STORIES
R-3 USE GROUP
IF-4000 (ARTICLE 35)

Location

PROPOSED SINGLE FAMILY
20 MONTMORENCI AVENUE
EAST BOSTON, MA

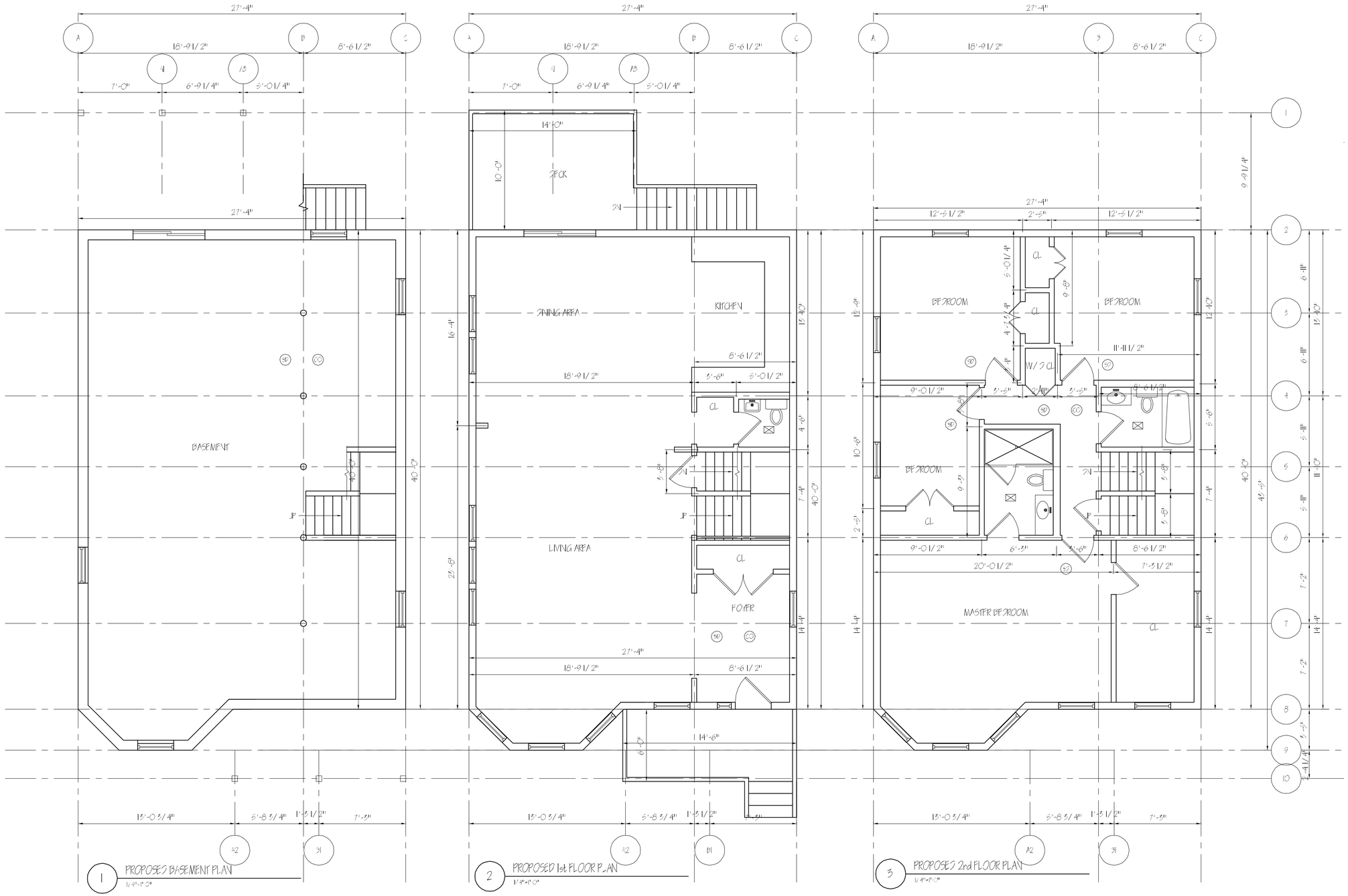
Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

No.	Revision Date

Project No: 29214
Scale: AS NOTED
Date: 10-06-09
Drawn By: SL

Drawing Name: COVER SHEET

Sheet No: A-0



Location

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No.	Revision Date
	10-14-2009

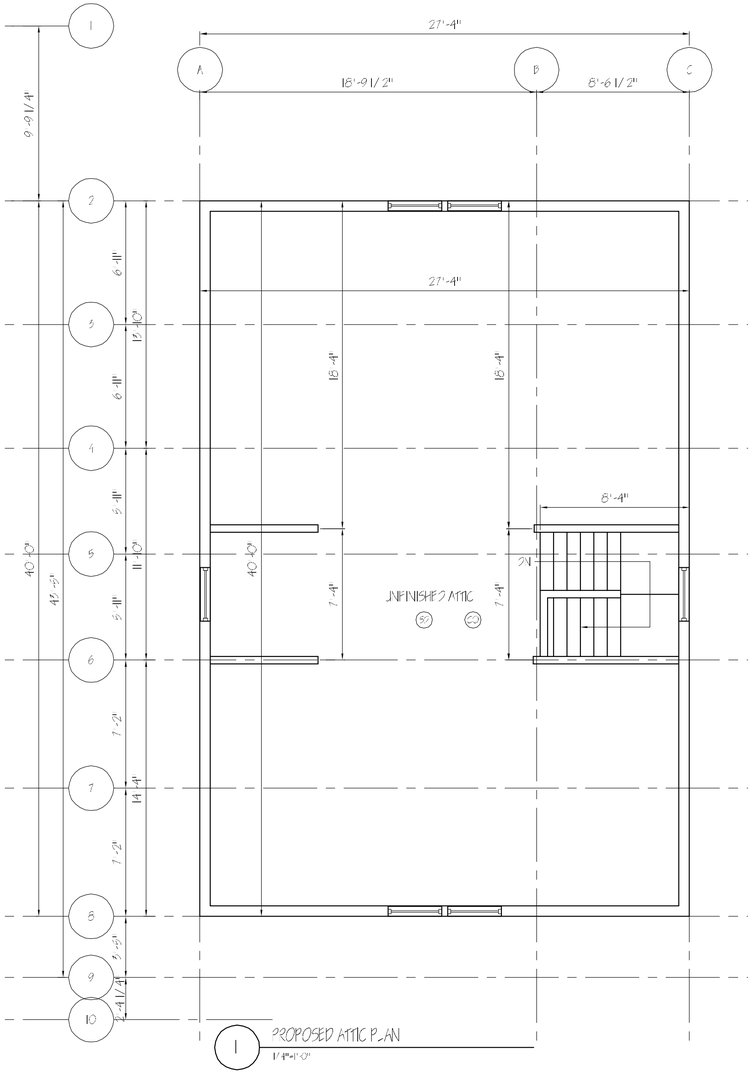
Project No: 2921A
Scale: AS NOTED
Date: 10-06-09
Drawn By: SL

Drawing Name

PROPOSED PLANS

Sheet No.

A-1.1



1 PROPOSED ATTIC PLAN
1/4"=1'-0"

Location

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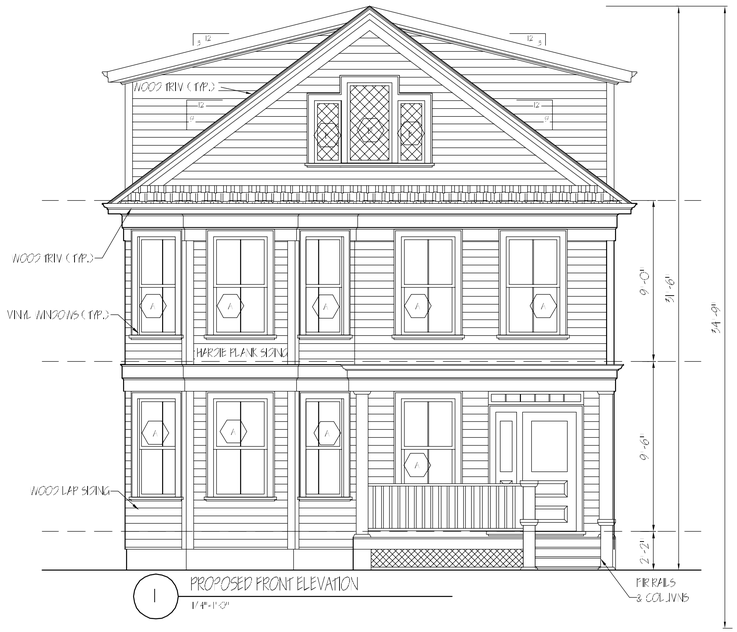
Drawing Name

PROPOSED
PLANS

Sheet No.

A-1.2



1 PROPOSED FRONT ELEVATION
1/4"=1'-0"

2 PROPOSED RIGHT SIDE ELEVATION
1/4"=1'-0"

1 PROPOSED LEFT SIDE ELEVATION
1/4"=1'-0"

2 PROPOSED REAR ELEVATION
1/4"=1'-0"

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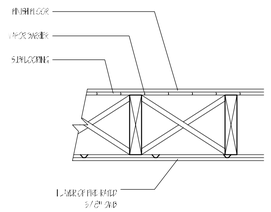
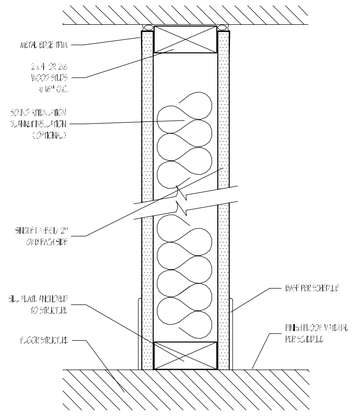
A-2.1

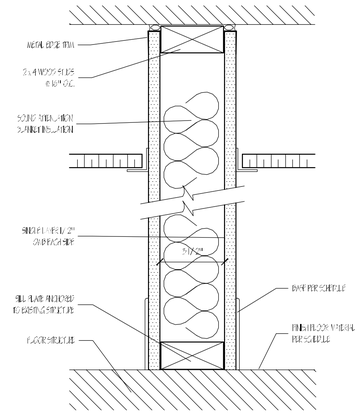
CEILING TYPES (C.T.)



1 — 1 HOUR CLG TYPE (#L555)
SCALE: 1"=1'-0"



0 — TYPICAL PARTITION - WOOD STUD
SCALE: 3"=1'-0"



1 — 1 HOUR PARTITION - WOOD STUD DESIGN # 304 (STC=34)
SCALE: 3"=1'-0"

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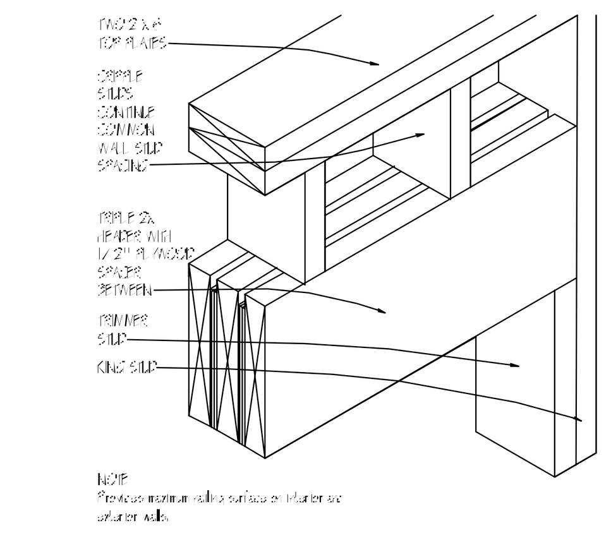
Sheet No.
A-3.1

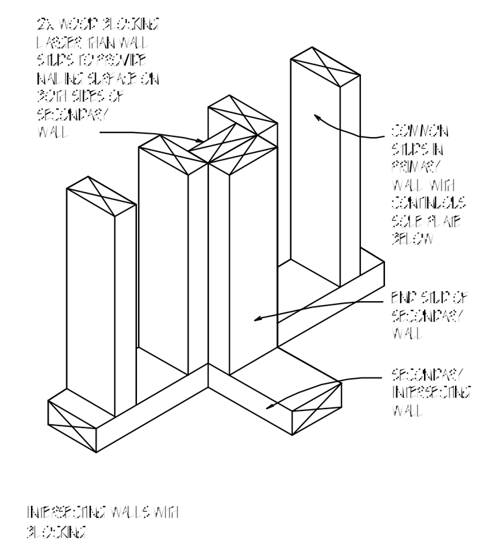
RECOMENDED FASTENING SCHEDULE

BUILDING ELEMENT	NAIL SIZE AND TYPE	NUMBER AND LOCATION
STUD TO SOLE PLATE	8D COMMON 16D COMMON	4 TOE-NAIL OR 2 DIRECT-NAIL
STUD TO CAP PLATE	16D COMMON	2 TOE-NAIL OR 2 DIRECT-NAIL
DOUBLE STUDS	10D COMMON	12" O.C. DIRECT
CORNER STUDS	16D COMMON	24" O.C. DIRECT
SOLE PLATE TO JOIST OR BLOCKING	16D COMMON	16" O.C.
DOUBLE CAP PLATE	10D COMMON	16" O.C. DIRECT
CAP PLATE LAPS	10D COMMON	2 DIRECT-NAIL
RIBBON STRIP, 6" OR LESS	10D COMMON	2 EACH DIRECT BEARING
RIBBON STRIP, 6" OR MORE	10D COMMON	3 EACH DIRECT BEARING
ROOF RAFTER TO PLATE	8D COMMON	3 TOE-NAIL
JACK RAFTER TO RIDGE	16D COMMON	2 TOE-NAIL OR DIRECT-NAIL
JACK RAFTER TO HIP	10D COMMON 16D COMMON	3 TOE-NAIL OR 2 DIRECT-NAIL
FLOOR JOISTS TO STUDS (NO CEILING JOISTS)	10D COMMON 10D COMMON	5 DIRECT OR 3 DIRECT
FLOOR JOISTS TO STUDS (WITH CEILING JOISTS)	10D COMMON	2 DIRECT
FLOOR JOISTS TO SILL OR GIRDER	3D COMMON	3 TOE-NAIL
LEDGER STRIP	16D COMMON	3 EACH DIRECT
CEILING JOISTS TO PLATE	16D COMMON	3 TOE-NAIL
CEILING JOISTS (LAPS OVER PARTITION)	10D COMMON	3 DIRECT-NAIL
CEILING JOISTS (PARALLEL TO RAFTER)	10D COMMON	3 DIRECT
COLLAR BEAM	10D COMMON	3 DIRECT
BRIDGING TO JOISTS	8D COMMON	2 EACH DIRECT END
DIAGONAL BRACE (TO STUD AND PLATE)	8D COMMON	2 EACH DIRECT BEARING
TAIL BEAMS TO HEADERS (WHEN NAILING PERMITTED)	20D COMMON	1 EACH END 4 SQ. FT. FLOOR AREA
HEADER BEAMS TO TRIMMERS	20D COMMON	1 EACH END 8 SQ. FT. FLOOR AREA
1" ROOF DECKING (OVER 6" IN WIDTH)	8D COMMON 8D COMMON	2 EACH DIRECT RAFTER 3 EACH DIRECT RAFTER
1" SUBFLOORING (6" OR LESS)	8D COMMON	2 EACH DIRECT JOIST
1" SUBFLOORING (8" OR MORE)	8D COMMON	3 EACH DIRECT JOIST
2" SUBFLOORING	16D COMMON	2 EACH DIRECT JOIST
1" WALL SHEATHING (8" OR LESS IN WIDTH)	8D COMMON	2 EACH DIRECT STUD
1" WALL SHEATHING (OVER 8" IN WIDTH)	8D COMMON	3 EACH DIRECT STUD
PLYWOOD ROOF & WALL SHEATHING (1/2" OR LESS) (5/8" OR GREATER) (5/16", 3/8", OR 1/2") (OVER 6" IN WIDTH)	6D COMMON 8D COMMON 16 GAUGE GALVANIZED WIRE STAPLES, 3/8" MINIMUM CROWN; LENGTH OF 1" PLUS PLYWOOD THICKNESS SAME AS IMMEDIATELY ABOVE	6" O.C. DIRECT EDGES & 12" O.C. INTERMEDIATE 6" O.C. DIRECT EDGES & 12" O.C. INTERMEDIATE 4" O.C. EDGES & 8" O.C. INTERMEDIATE 2 1/2" O.C. EDGES & 5" O.C. INTERMEDIATE
PLYWOOD SUBFLOORING (1/2") (3/8", 3/4") (1", 1 1/8") (1/2") (3/8")	6D COMMON OR 6D ANNULAR OR SPIRAL THREAD 8D COMMON OR 8D ANNULAR OR SPIRAL THREAD 10D COMMON OR 8D RING SHANK OR 8D ANNULAR OR SPIRAL THREAD 16D GALVANIZED WIRE STAPLES 3/8" MINIMUM CROWN; 1 3/8" LENGTH	6" O.C. DIRECT EDGES & 10" O.C. INTERMEDIATE 6" O.C. DIRECT EDGES & 10" O.C. INTERMEDIATE 6" O.C. DIRECT EDGES & 6" O.C. INTERMEDIATE 4" O.C. EDGES & 7" O.C. INTERMEDIATE 2 1/2" O.C. EDGES & 4" O.C. INTERMEDIATE
BUILT-UP GIRDERS AND BEAMS	20D COMMON	32" O.C. DIRECT
CONTINUOUS HEADER TO STUD	8D COMMON	4 TOE-NAIL
CONTINUOUS HEADER, TWO PIECES	16D COMMON	16" O.C. DIRECT
1/2" FIBER BOARD SHEATHING	1 1/2" GALVANIZED ROOFING NAIL OR 16 GAUGE STAPLE, 1 1/2" LONG WITH MIN. CROWN OF 7/16"	3" O.C. EXTERIOR EDGE 6" O.C. INTERMEDIATE
25/32" FIBER BOARD SHEATHING	1 3/4" GALVANIZED ROOFING NAIL OR 8D COMMON NAIL OR 16 GAUGE STAPLE, 1 1/2" LONG WITH MIN. CROWN OF 7/16"	3" O.C. EXTERIOR EDGE 6" O.C. INTERMEDIATE
GYPSUM SHEATHING	12 GAUGE 1 3/4" LARGE HEAD CORROSION-RESISTANT	4" O.C. EDGE 8" O.C. INTERMEDIATE
PARTICLE BOARD UNDERLAYMENT (1/4"-3/4")	6D ANNULAR THREADED	6" O.C. DIRECT EDGES 10" O.C. INTERMEDIATE
PARTICLE BOARD ROOF AND WALL SHEATHING 1/2" OR LESS	6D COMMON	6" O.C. DIRECT EDGES 12" O.C. INTERMEDIATE
5/8" OR GREATER	8D COMMON	6" O.C. DIRECT EDGES 12" O.C. INTERMEDIATE
PARTICLE BOARD SUBFLOORING (5/8" OR GREATER)	8D COMMON	6" O.C. DIRECT EDGES 12" O.C. INTERMEDIATE
SHINGLES, WOOD*	NO. 14 B&S GAGE CORROSION RESISTIVE	2 EACH BEARING
WEATHER BOARDING	8D CORROSION	2 EACH BEARING

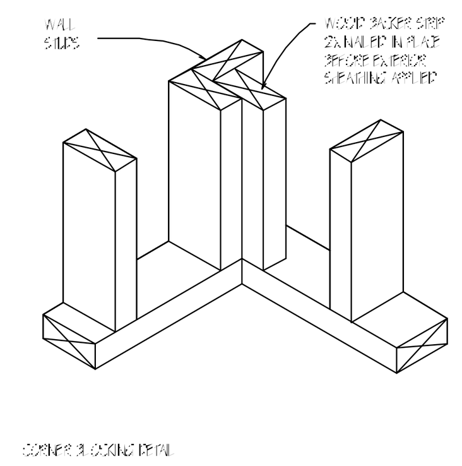
NOTE *: SHINGLE NAILS SHALL PENETRATE NOT LESS THAN 3/4" INTO NAILING STRIPS, SHEATHING OR SUPPORTING CONSTRUCTION EXCEPT AS OTHERWISE PROVIDED IN 780 CMR 1225.4.4.



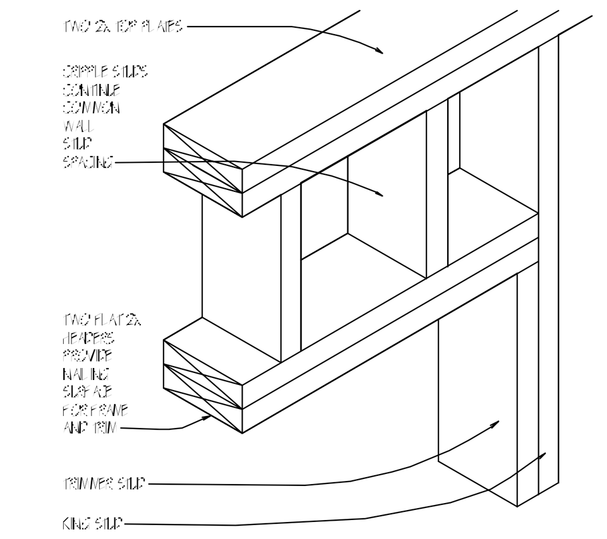
2X6 BEARING WALL HEADER DETAIL
NTS



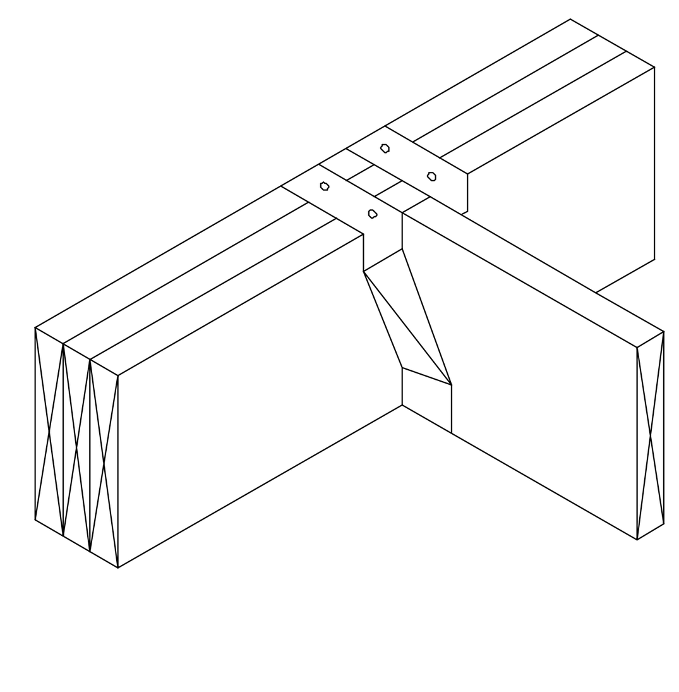
INSULATED WALL DETAILS



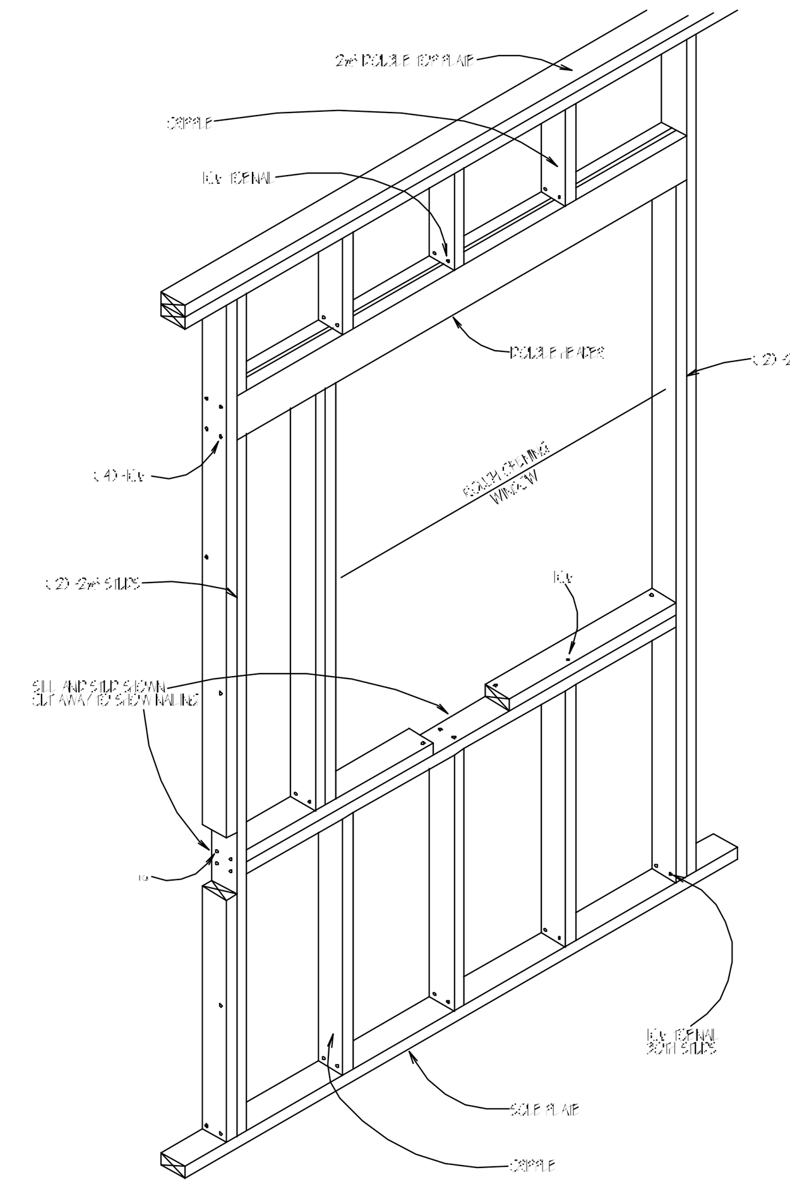
INSULATED WALL DETAILS



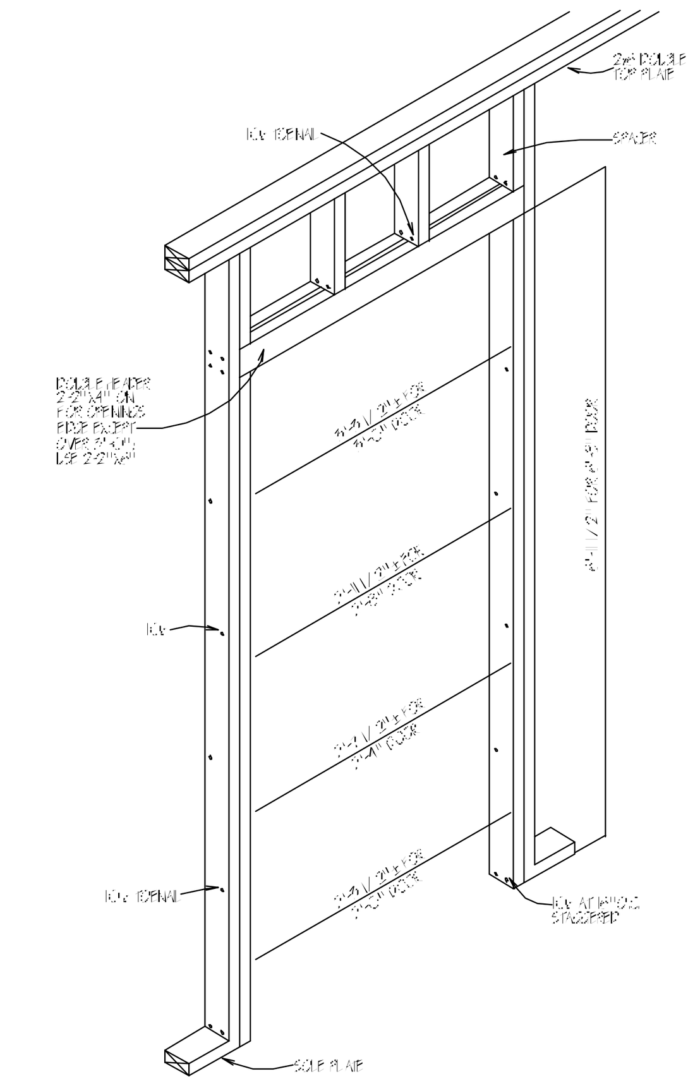
2X_ PARTITION WALL HEADER DETAIL
NTS



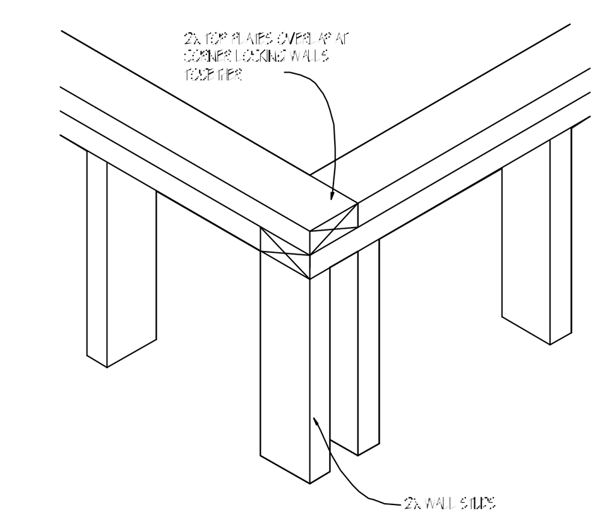
WOOD JOISTS SUPPORTED ON WOOD GIRDERS



WINDOW OPENING DETAIL



DOOR OPENING DETAIL



TOP PLATE FRAMING DETAIL
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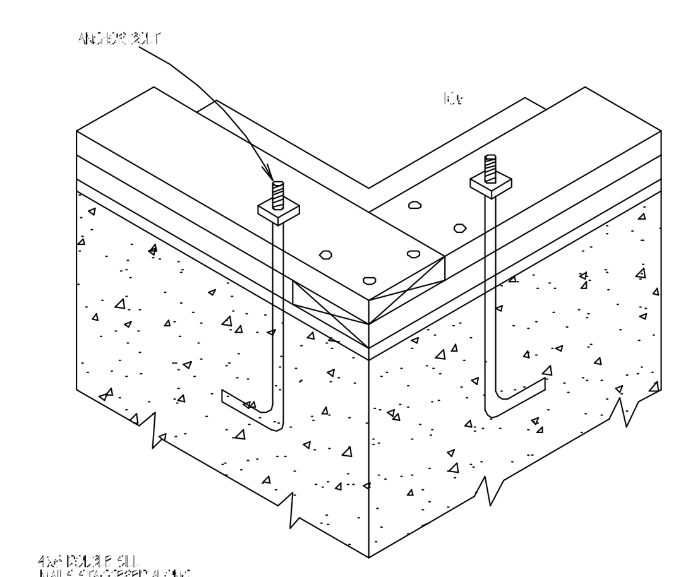
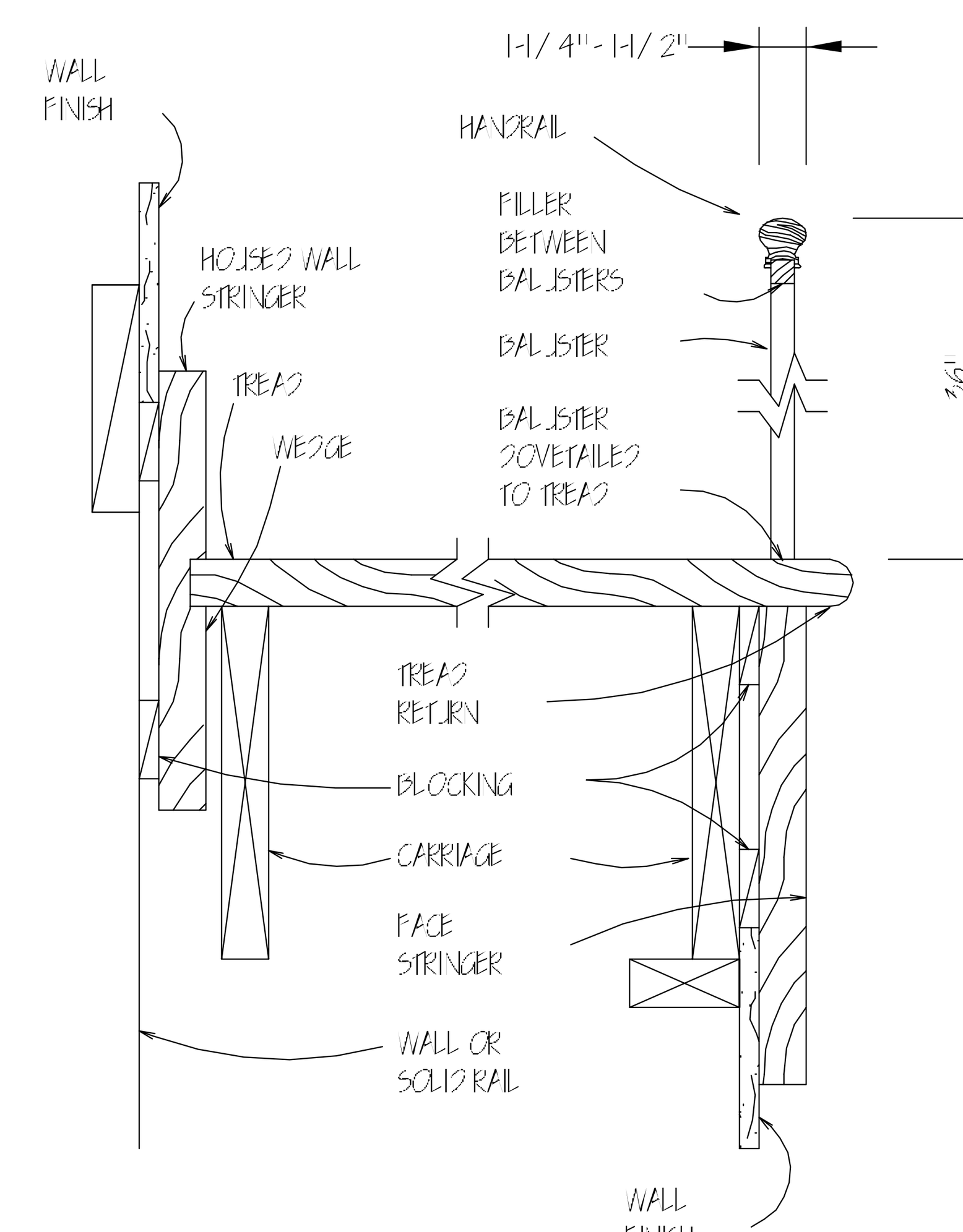
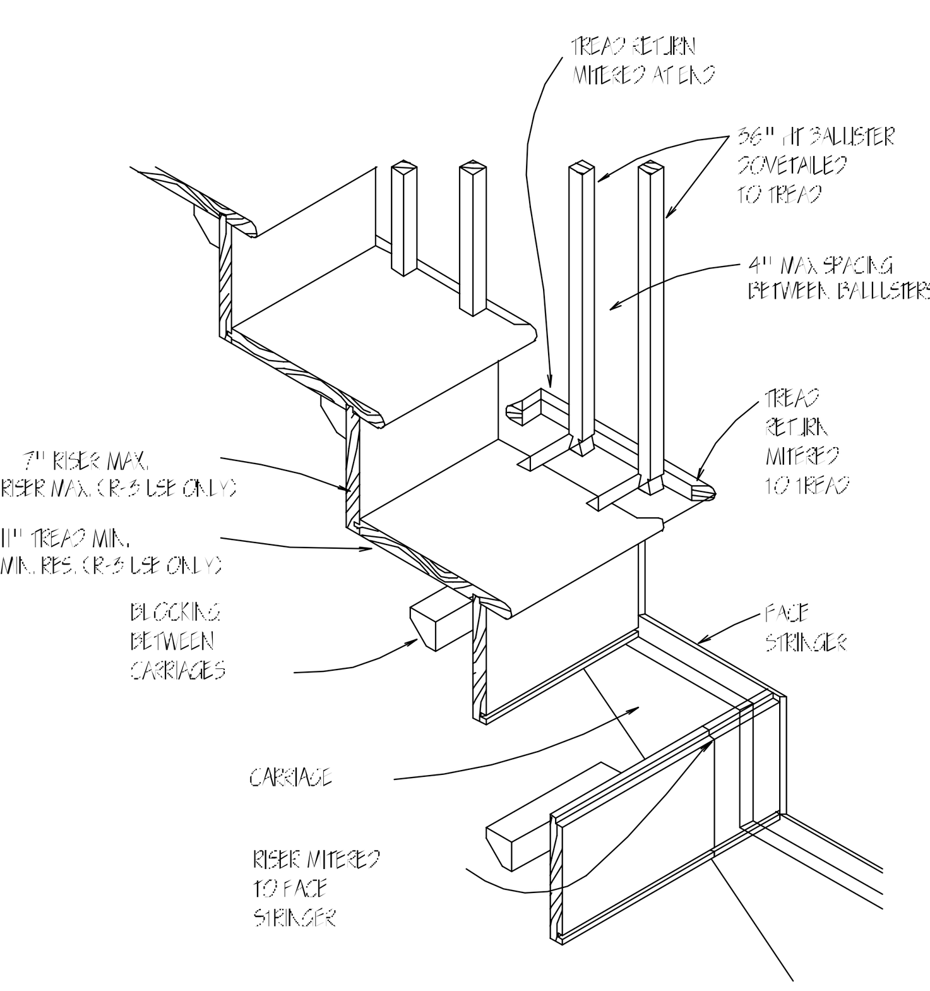


SILL FOR PLATFORM FRAMING DETAIL



STAIR DETAIL
NTS



STAIR DETAIL
NTS

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LATERAL SUPPORT

- BCI JOISTS MUST BE LATERALLY SUPPORTED AT THE ENDS WITH HANGERS, BCI RIM JOISTS, RIM BOARDS, BCI BLOCKING PANELS OR X-BRACING. BCI BLOCKING PANELS OR X-BRACING ARE REQUIRED AT CANTILEVER SUPPORTS.
- BLOCKING MAY BE REQUIRED AT INTERMEDIATE BEARINGS FOR FLOOR DIAPHRAGM PER IRC IN HIGH SEISMIC AREAS, CONSULT LOCAL BUILDING OFFICIAL.

MINIMUM BEARING LENGTH FOR BCI JOISTS

- 1-3/ 4" INCHES IS REQUIRED AT END SUPPORTS. 3-1/ 2" INCHES IS REQUIRED AT CANTILEVER AND INTERMEDIATE SUPPORTS.
- LONGER BEARING LENGTHS ALLOW HIGHER REACTION VALUES. REFER TO THE BUILDING CODE EVALUATION REPORT OR THE BC CALC SOFTWARE.

NAILING REQUIREMENTS

- BCI RIM JOIST, RIM BOARD OR CLOSURE PANEL TO BCI JOIST:
  - RIMS OR CLOSURE PANEL 1-3/ 4" INCHES THICK AND LESS: 2-8d NAILS, ONE EACH ON THE TOP AND BOTTOM FLANGE
  - BCI 5000S RIM JOIST: 2-10d BOX NAILS, ONE EACH IN THE TOP AND BOTTOM FLANGE.
  - BCI 6000S, 60S RIM JOIST: 2-16d BOX NAILS, ONE EACH IN THE TOP AND BOTTOM FLANGE.
  - BCI 6500S, 90S RIM JOIST: TOE-NAIL TOP FLANGE TO RIM JOIST WITH 24OD BOX NAILS, ONE EACH SIDE OF THE FLANGE.
- BCI RIM JOIST, RIM BOARD OR BCI BLOCKING PANEL TO SUPPORT:
  - 8d NAILS AT 6 INCHES ON CENTER.
  - WHEN USED FOR SHEAR TRANSFER, FOLLOW THE BUILDING DESIGNER'S SPECIFICATION.
- BCI JOIST TO SUPPORT:
  - 2-8d NAILS, ONE ON EACH SIDE OF THE WEB, PLACED 1-1/ 2" INCHES MINIMUM FROM THE END OF THE BCI JOIST TO LIMIT SPLITTING.
- SHEATHING TO BCI JOIST:
  - SEE CLOSEST ALLOWABLE NAIL SPACING CHART (ON THIS SHEET)
  - BCI 6000S, 6500S, 60S, 90S JOIST: MAXIMUM NAIL SPACING IS 24 INCHES ON CENTER.
  - 14 GAUGE STAPLES MAY BE SUBSTITUTED FOR 8d NAILS IF THE STAPLES PENETRATE AT LEAST 1 INCH INTO THE JOIST.
  - WOOD SCREWS MAY BE ACCEPTABLE, CONTACT LOCAL BUILDING OFFICIAL AND/ OR BOISE EWP ENGINEERING FOR FURTHER INFORMATION.

PROTECT BCI JOISTS FROM THE WEATHER

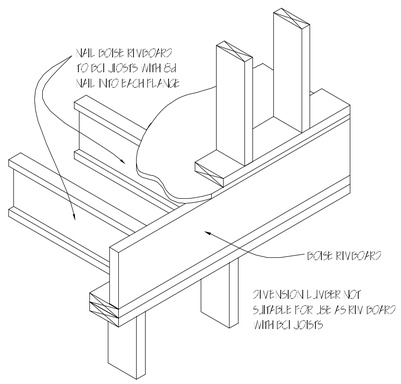
- BCI JOISTS ARE INTENDED ONLY FOR APPLICATIONS THAT PROVIDE PERMANENT PROTECTION FROM THE WEATHER. BUNDLES OF BCI JOISTS SHOULD BE COVERED AND STORED OFF THE GROUND ON STICKERS.

WEB STIFFENER REQUIREMENTS

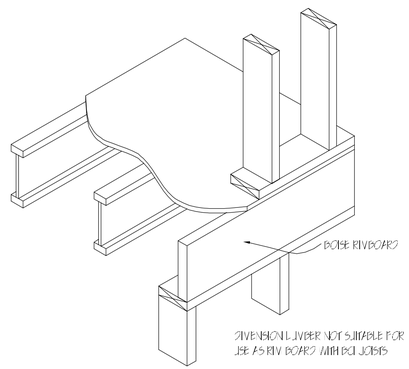
- WEB STIFFENERS ARE OPTIONAL EXCEPT AS NOTED BELOW.
- WEB STIFFENERS ARE ALWAYS REQUIRED IN HANGERS THAT DO NOT EXTEND UP TO SUPPORT THE FLANGE OF THE BCI JOIST. WEB STIFFENERS MAY BE REQUIRED WITH CERTAIN SLOPED OR SKEWED HANGERS OR TO ACHIEVE UPLIFT VALUES, REFER TO THE HANGER MANUFACTURER'S INSTALLATION REQUIREMENTS
- WEB STIFFENERS ARE ALWAYS REQUIRED IN CERTAIN ROOF APPLICATIONS (SEE ROOF FRAMING DETAILS)
- WEB STIFFENERS ARE ALWAYS REQUIRED UNDER CONCENTRATED LOADS THAT EXCEED 1,000 POUNDS. INSTALL THE WEB STIFFENERS SNUG TO THE TOP FLANGE IN THIS SITUATION. FOLLOW THE NAILING SCHEDULE FOR INTERMEDIATE BEARINGS.
- WEB STIFFENERS MAY BE USED TO INCREASE ALLOWABLE REACTION VALUES.

BACKER AND FILLER BLOCK DIMENSIONS		
SERIES	BACKER BLOCK THICKNESS	FILLER BLOCK THICKNESS
5000s 1.8	3/ 4" OR 7/ 8" WOOD PANELS	TWO 3/ 4" WOOD PANELS OR 2x__
6000s 1.8	1 1/ 8" OR TWO 1/ 2" WOOD PANELS	2x__ + 5/ 8" OR 3/ 4" WOOD PANEL
6500s 1.8	1-1/ 8" OR TWO 1/ 2" WOOD PANELS	2x__ + 5/ 8" OR 3/ 4" WOOD PANEL
60s 2.0	1-1/ 8" OR TWO 1/ 2" WOOD PANELS	2x__ + 5/ 8" OR 3/ 4" WOOD PANEL
90s 2.0	2x__ LUMBER	DOUBLE 2x__ LUMBER
CUT BACKER AND FILLER BLOCKS TO A MAXIMUM DEPTH EQUAL TO THE WEB DEPTH MINUS 1/ 4" TO AVOID A FORCED FIT		

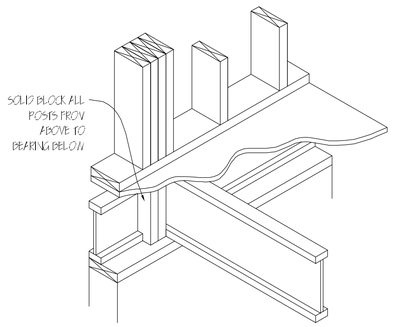
CLOSEST ALLOWABLE NAIL SPACING				
NAIL SIZE	ALL BCI JOISTS			
	NAILING PERPENDICULAR TO SIDE LINE (WIDE FACE)		NAILING PARALLEL TO SIDE LINE (NARROW FACE)	
	O.C. SPACING	DISTANCE FROM JOIST END	O.C. SPACING	DISTANCE FROM JOIST END
8d BOX	2"	1-1/ 2"	4"	1-1/ 2"
8d COMMON	2"	1-1/ 2"	4"	3"
10d & 12d BOX	2"	1-1/ 2"	4"	3"
16d BOX	2"	1-1/ 2"	4"	3"
10d & 12d COMMON	3"	2"	6"	4"
16d SINKER	3"	2"	6"	4"
16 COMMON	3"	2"	6"	4"



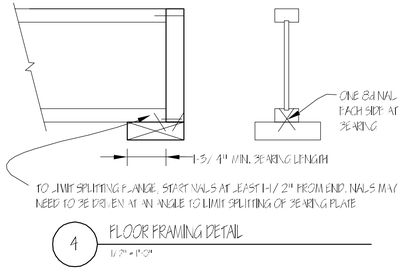
1 FLOOR FRAMING DETAIL
1" = 1'-0"



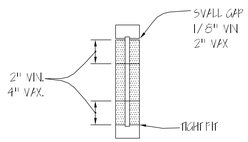
2 FLOOR FRAMING DETAIL
1" = 1'-0"



3 FLOOR FRAMING DETAIL
1" = 1'-0"

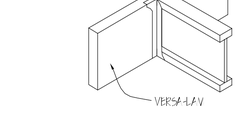


4 FLOOR FRAMING DETAIL
1/ 2" = 1'-0"

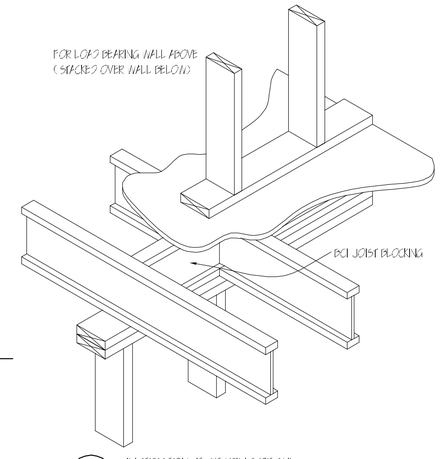


5 WEB STIFFENER DETAIL
3" = 1'-0"

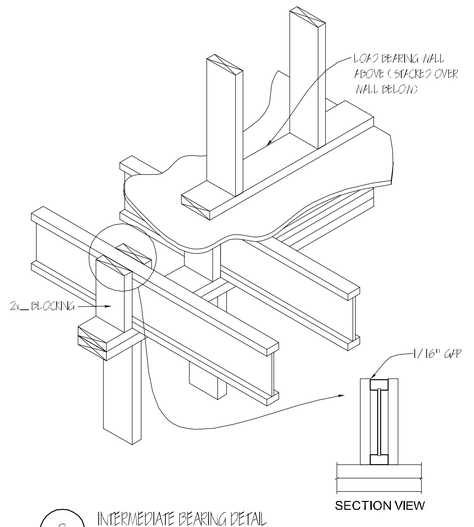
WEB STIFFENER NAILING SCHEDULE			
BCI JOIST SERIES	JOIST DEPTH	BEARING LOCATION	
		END	INTERMEDIATE
5000s 1.8	9 1/ 2"	2-8d	2-8d
	11 7/ 8"	2-8d	3-8d
	14"	2-8d	5-8d
6000s 1.8	9 1/ 2"	2-8d	2-8d
	11 7/ 8"	2-8d	3-8d
	14"	2-8d	5-8d
	16"	2-8d	6-8d
6500s 1.8	9 1/ 2"	2-8d	2-8d
	11 7/ 8"	2-8d	3-8d
	14"	2-8d	5-8d
	16"	2-8d	6-8d
60s 2.0	11 7/ 8"	2-8d	3-8d
	14"	2-8d	5-8d
	16"	2-8d	6-8d
90s 2.0	11 7/ 8"	3-16d	3-16d
	14"	5-16d	5-16d
	16"	6-16d	6-16d



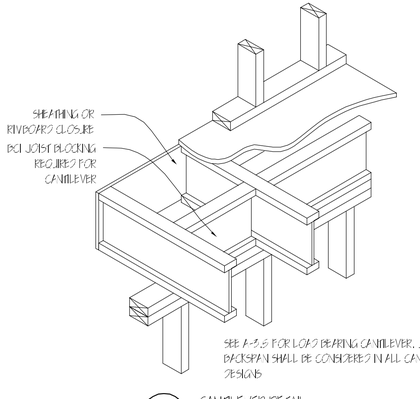
6 FLOOR FRAMING DETAIL
1" = 1'-0"



7 INTERMEDIATE BEARING DETAIL
1" = 1'-0"



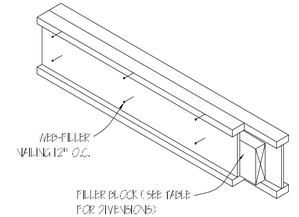
8 INTERMEDIATE BEARING DETAIL
1" = 1'-0"



SEE A-3.5 FOR LOAD BEARING CANTILEVER. UPLIFT ON BACKSPAN SHALL BE CONSIDERED IN ALL CANTILEVER DESIGNS

9 CANTILEVER DETAIL
1" = 1'-0"

BCI RIM JOISTS AND BCI BLOCKING (ALL SERIES)	
DEPTH (IN.)	VERTICAL LOAD CAPACITY (PLF)
9 1/ 2"	2800
11 7/ 8"	2775
14"	2750
16"	2450



CONNECTION VALID FOR ALL APPLICATIONS, CONTACT BOISE EWP ENGINEERING FOR SPECIFIC CONDITIONS

10 DOUBLE BCI JOIST CONNECTION
1" = 1'-0"

Location

PROPOSED SINGLE FAMILY
20 MONTMORENCI AVENUE
EAST BOSTON, MA

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

No.	Revision Date
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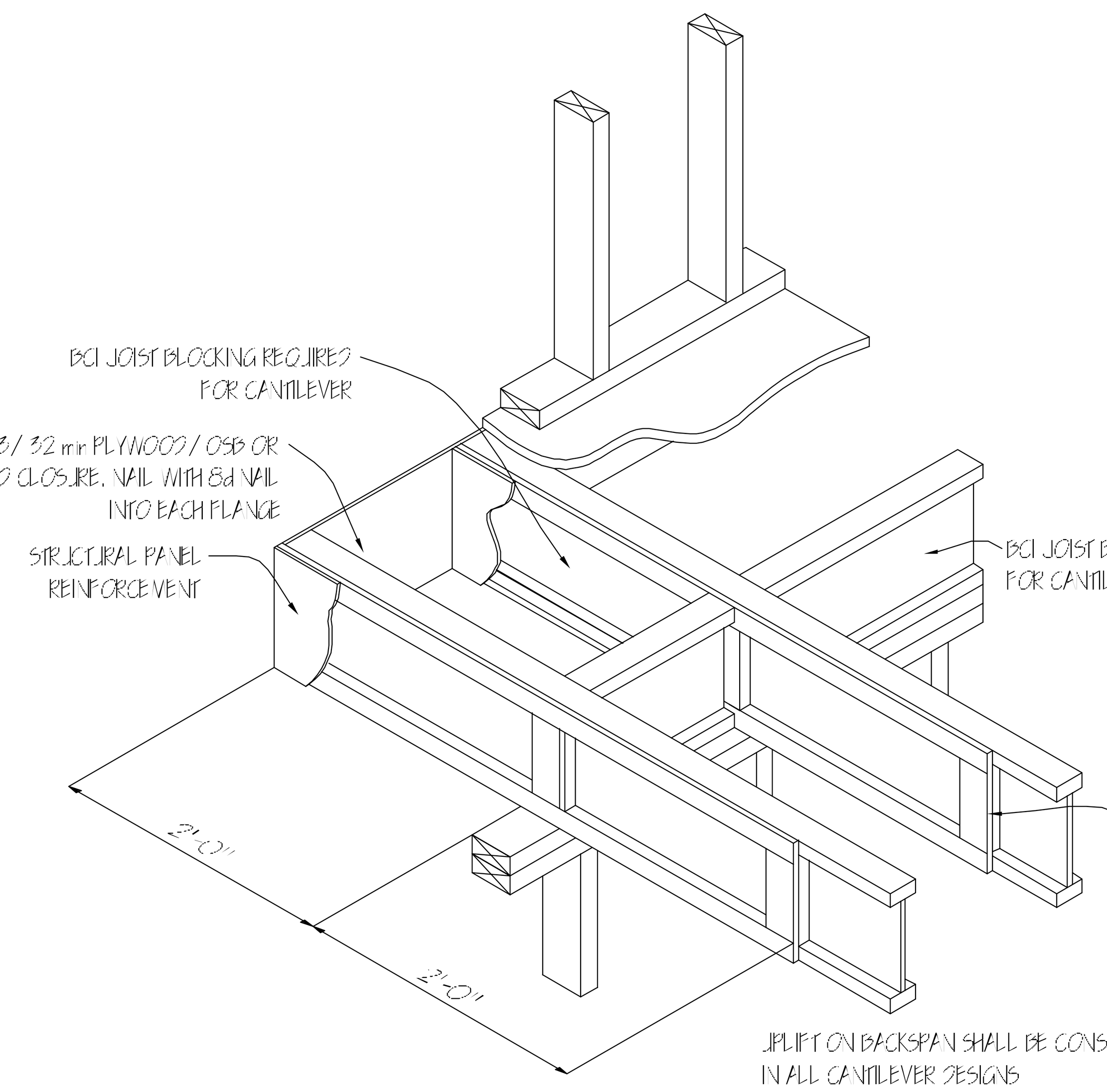
PROPOSED PLANS

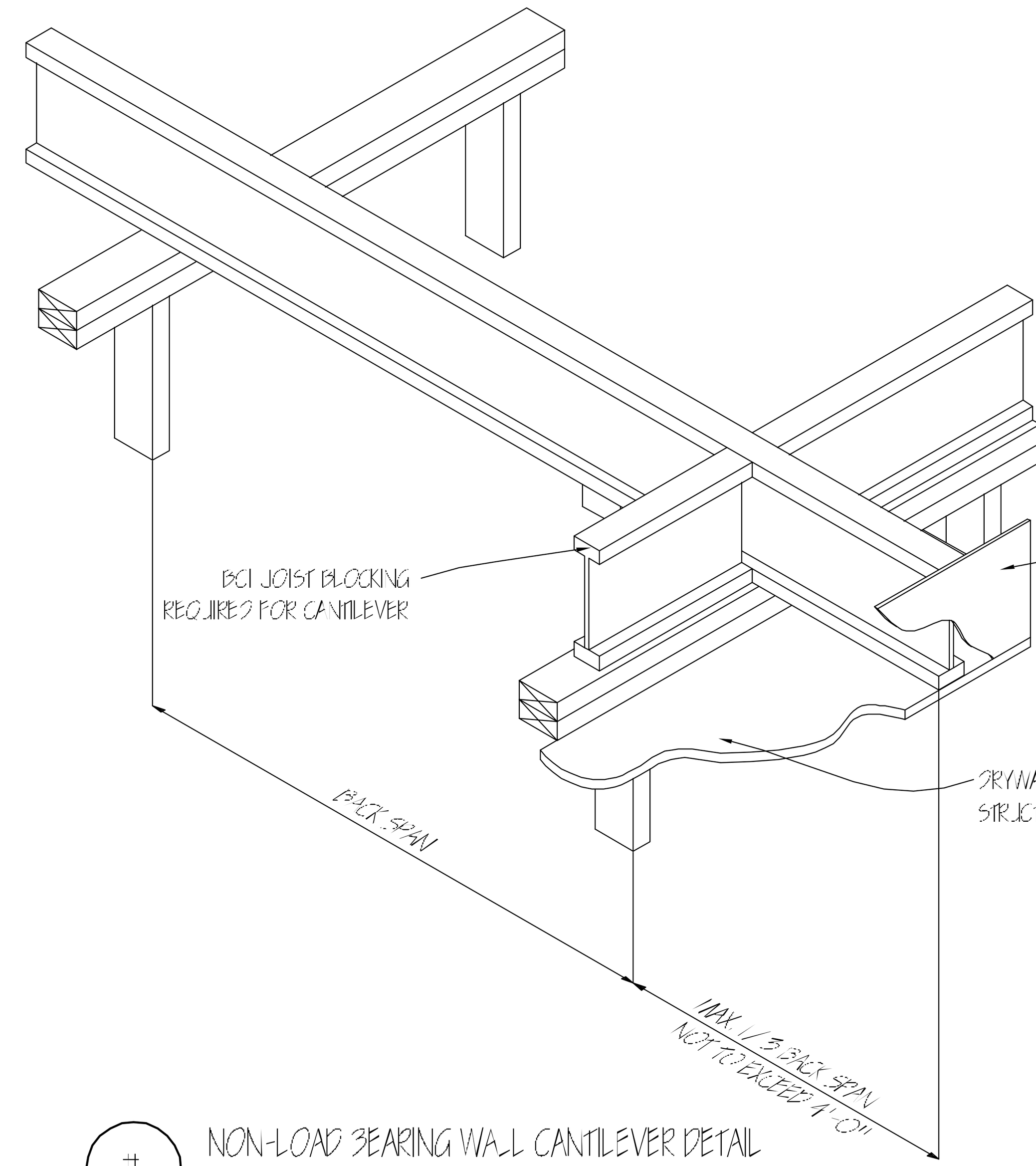
Sheet No.

A-3.3



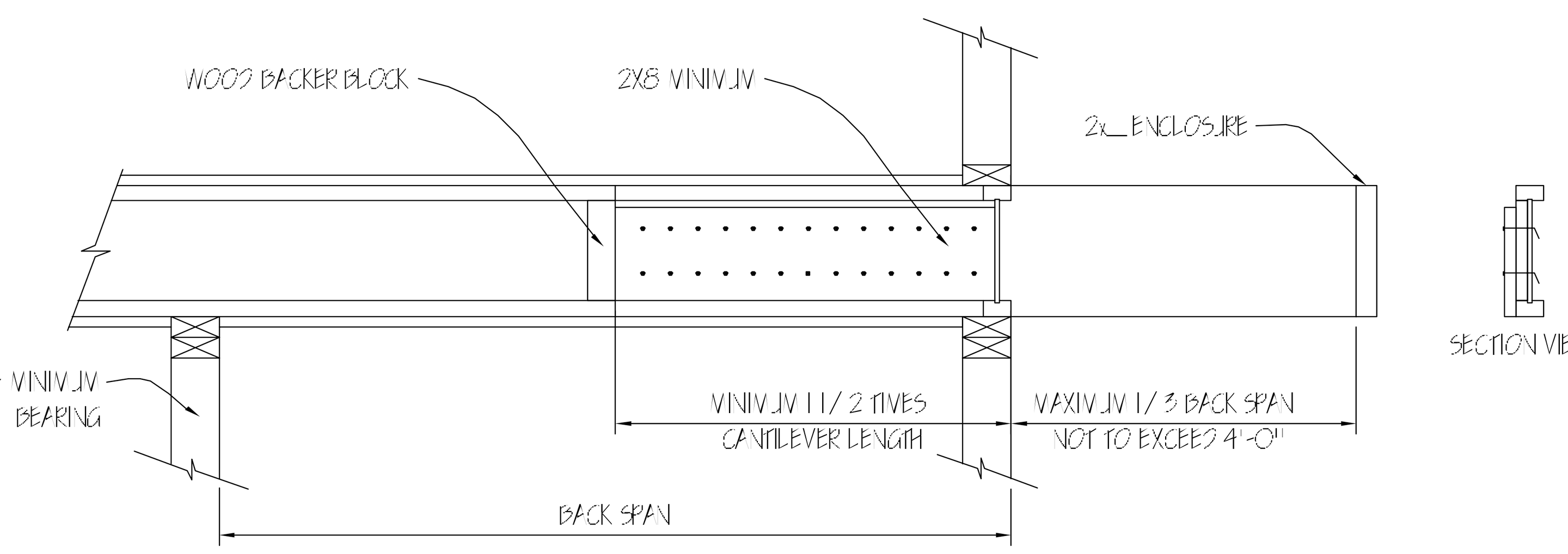
REINFORCED LOAD BEARING CANTILEVER DETAIL

1" = 1'-0"



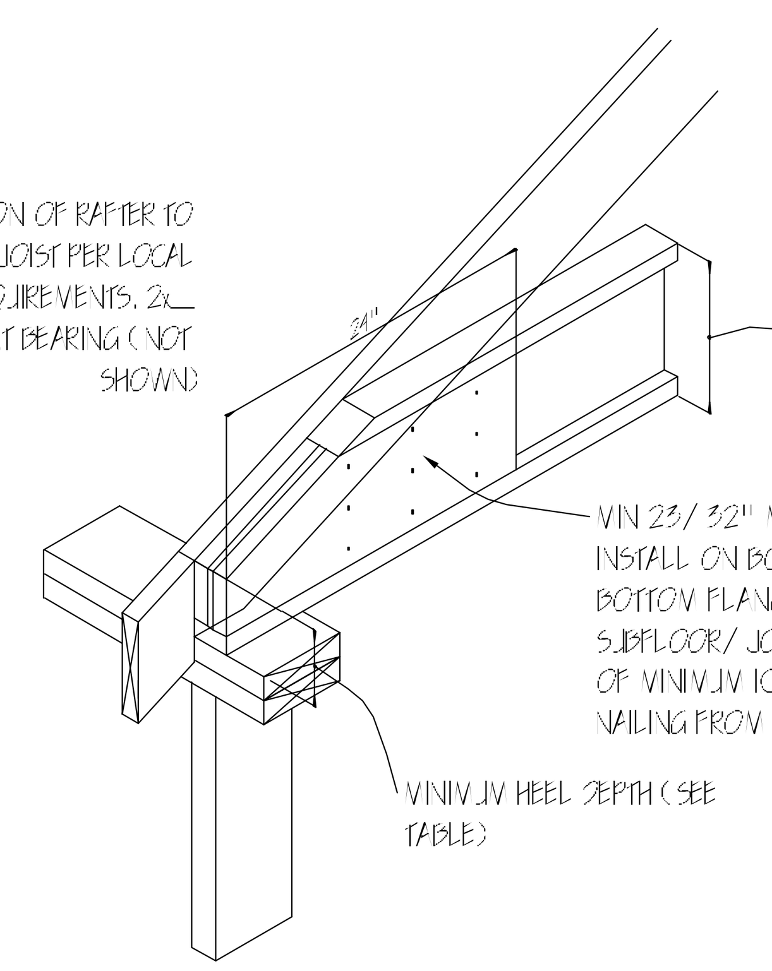
NON-LOAD BEARING WALL CANTILEVER DETAIL

1" = 1'-0"



NON-LOAD BEARING WALL CANTILEVER DETAIL

1" = 1'-0"



SLOPE-CUT JOIST REINFORCEMENT

1" = 1'-0"

MINIMUM HEEL DEPTH

END WALL BEARING	ROOF PITCH 6/12	7/12	8/12	9/12	10/12	12/12
2 x 4	4-3/8"	4-5/16"	4-1/4"	4-1/4"	4-1/4"	4-1/4"
2 x 6	3-3/8"	3-3/16"	2-5/16"	2-3/4"	2-9/16"	2-1/4"

SIDE-LOADED APPLICATIONS

MAXIMUM UNIFORM SIDE LOAD (PLF)

NUMBER OF MEMBERS	NAILED: 2 ROWS 16d SINKERS @ 12" O.C.	NAILED: 3 ROWS 16d SINKERS @ 12" O.C.	1/2" DIA. THROUGH BOLT (1): 2 ROWS @ 24" O.C. STAGGERED	1/2" DIA. THROUGH BOLT (1): 2 ROWS @ 12" O.C. STAGGERED	1/2" DIA. THROUGH BOLT (1): 2 ROWS @ 6" O.C. STAGGERED	5/8" DIA. THROUGH BOLT (1): 2 ROWS @ 24" O.C. STAGGERED	5/8" DIA. THROUGH BOLT (1): 2 ROWS @ 12" O.C. STAGGERED	5/8" DIA. THROUGH BOLT (1): 2 ROWS @ 6" O.C. STAGGERED
1-3/4" VERSA-LAM (DEPTHS OF 18" AND LESS)								
2	470	705	505	1010	2020	560	1120	2020
3 (2)	350	525	375	755	1515	420	840	1685
4 (3)	USE BOLT SCHEDULE		335	670	1345	370	745	1495
3-1/3" VERSA-LAM								
2 (3)	USE BOLT SCHEDULE		855	1715	N/A	1125	2250	N/A
1-3/4" VERSA-LAM (DEPTHS OF 24")								
NUMBER OF MEMBERS	NAILED: 3 ROWS 16d SINKERS @ 12" O.C.	NAILED: 4 ROWS 16d SINKERS @ 12" O.C.	1/2" DIA. THROUGH BOLT (1): 3 ROWS @ 24" O.C. 8" STAGGERED	1/2" DIA. THROUGH BOLT (1): 3 ROWS @ 18" O.C. 6" STAGGERED	1/2" DIA. THROUGH BOLT (1): 3 ROWS @ 12" O.C. 4" STAGGERED	5/8" DIA. THROUGH BOLT (1): 3 ROWS @ 24" O.C. 8" STAGGERED	5/8" DIA. THROUGH BOLT (1): 3 ROWS @ 18" O.C. 6" STAGGERED	5/8" DIA. THROUGH BOLT (1): 3 ROWS @ 12" O.C. 4" STAGGERED
2	705	940	755	1010	1515	840	1120	1685
3 (2)	525	705	565	755	1135	630	840	1260
4 (3)	USE BOLT SCHEDULE		505	670	1010	560	745	1120

1. DESIGN VALUES APPLY TO COMMON BOLTS THAT CONFIRM TO ANSI/ASME STANDARD B18.2.1-1981 (ASTM A307 GRADES A&B SAE J429 GRADES 1 OR 2, OR HIGHER). A WASHER NOT LESS THAN A STANDARD CUT WASHER SHALL BE BETWEEN THE WOOD AND THE BOLT HEAD AND BETWEEN THE WOOD AND THE NUT. THE DISTANCE FROM THE EDGE OF THE BEAM TO THE BOLT HOLES MUST BE AT LEAST 2" FOR 1/2" BOLTS AND 2-1/2" FOR 5/8" BOLTS. BOLT HOLES SHALL BE THE SAME DIAMETER AS THE BOLT.
2. THE NAIL SCHEDULES SHOWN APPLY TO BOTH SIDES OF A 3-MEMBER BEAM.
3. 7" WIDE BEAMS MUST BE TOP-LOADED OR LOADED FROM BOTH SIDES (LESSER SIDE SHALL BE NO LESS THAN 25% OF OPPOSITE SIDE).

BCI JOIST SERIES

FOR TOP-LOADED BEAMS AND BEAM WITH SIDE LOADS WITH LES THAN THOSE SHOWN:

PILES	DEPTH	NAILING	MAX. UNIFORM LOAD FROM ONE SIDE
(2) 1-3/4" PLIES	DEPTHS 11-7/8" & LESS	2 ROWS 16d BOX/SINKER NAILS @ 12" O.C.	400 PLF
	DEPTHS 14" - 18"	3 ROWS 16d BOX/SINKER NAILS @ 12" O.C.	600 PLF
	DEPTH = 24"	4 ROWS 16d BOX/SINKER NAILS @ 12" O.C.	800 PLF
(3) 1-3/4" PLIES	DEPTHS 11-7/8" & LESS	2 ROWS 16d BOX/SINKER NAILS @ 12" O.C.	300 PLF
	DEPTHS 14" - 18"	3 ROWS 16d BOX/SINKER NAILS @ 12" O.C.	450 PLF
	DEPTH = 24"	4 ROWS 16d BOX/SINKER NAILS @ 12" O.C.	600 PLF
(4) 1-3/4" PILES	DEPTHS 18" & LESS	2 ROWS 1/2" BOLTS @ 24" O.C. STAGGERED	335 PLF
	DEPTHS = 24"	2 ROWS 1/2" BOLTS @ 24" O.C. STAGGERED EVERY 8"	505 PLF
(2) 1-3/4" PILES	DEPTHS 18" & LESS	2 ROWS 1/2" BOLTS @ 24" O.C. STAGGERED	835 PLF
	DEPTHS 20 - 24"	2 ROWS 1/2" BOLTS @ 24" O.C. STAGGERED EVERY 8"	1285 PLF

1. BEAMS WIDER THAT 7" MUST BE DESIGNED BY THE ENGINEER OF RECORD.
2. ALL VALUES IN THESE TABLES MAY BE INCREASED BY 15% FOR SNOW-LOAD ROOFS AND BY 25% FOR NON-SNOW LOAD ROOFS WHERE THE BUILDING CODE ALLOWS.
3. USE ALLOWABLE LOAD TABLES OR BC CALC SOFTWARE TO SIZE BEAMS.
4. AN EQUIVALENT SPECIFIC GAVITY OF .5 MAY BE USED WHEN DESIGNING SPECIFIC CONNECTIONS WITH VERSA-LAM.
5. CONNECTION VALUES ARE BASED UPON THE 2001 NDS.
6. FASTENMASTER TRUSSLOK, SIMPSON STRONG-TIE SDS, AND USP WS SCREWS MAY ALSO BE USED TO CONNECT MULTIPLE MEMBER VERSA-LAM BEAMS. CONTACT BOISE EWP ENGINEERING FOR FURTHER INFORMATION.

Location

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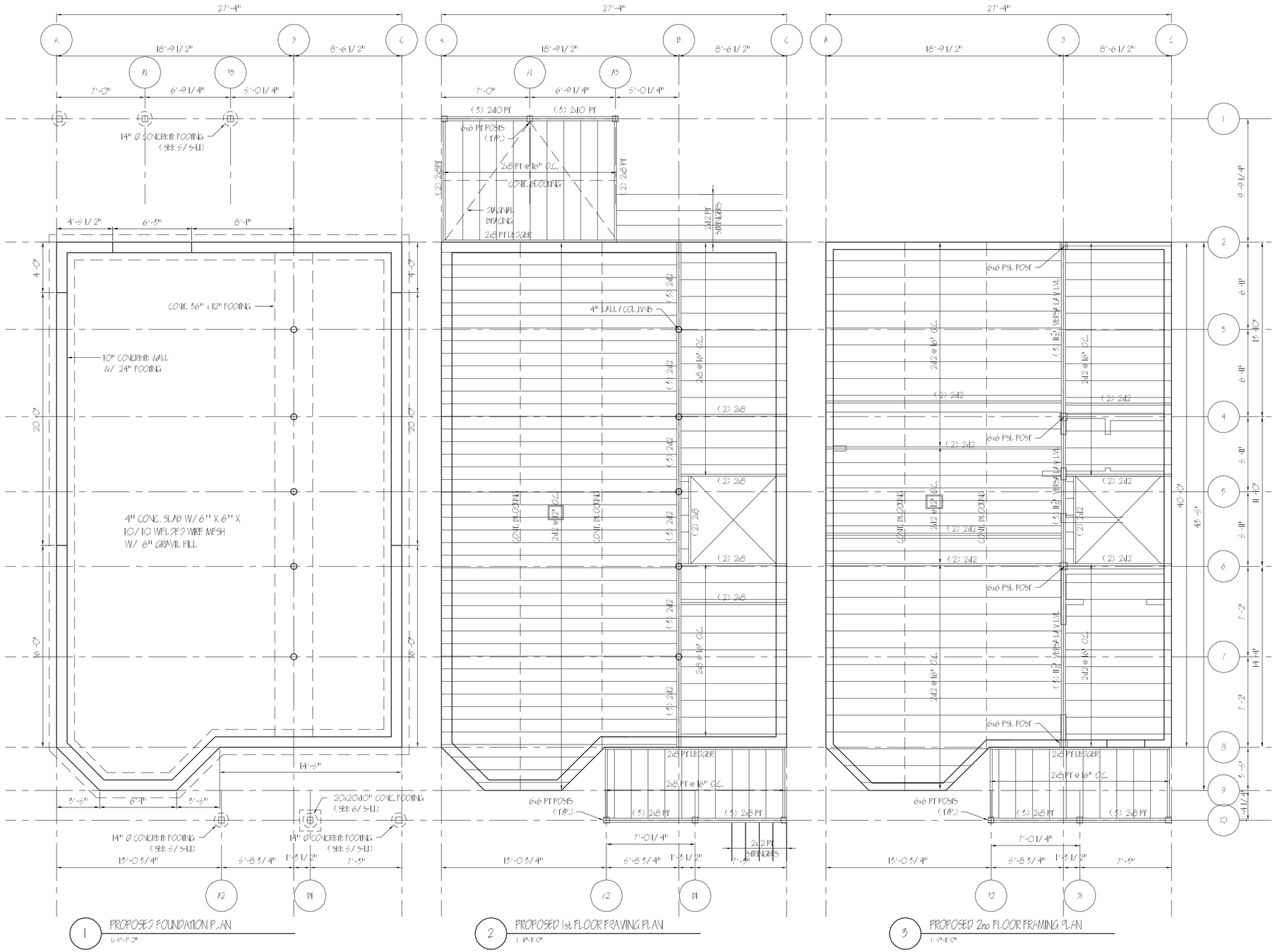
Sheet No. A-3.4



1 PROPOSED FOUNDATION PLAN
1/4"=1'-0"

2 PROPOSED 1st FLOOR FRAMING PLAN
1/4"=1'-0"

3 PROPOSED 2nd FLOOR FRAMING PLAN
1/4"=1'-0"

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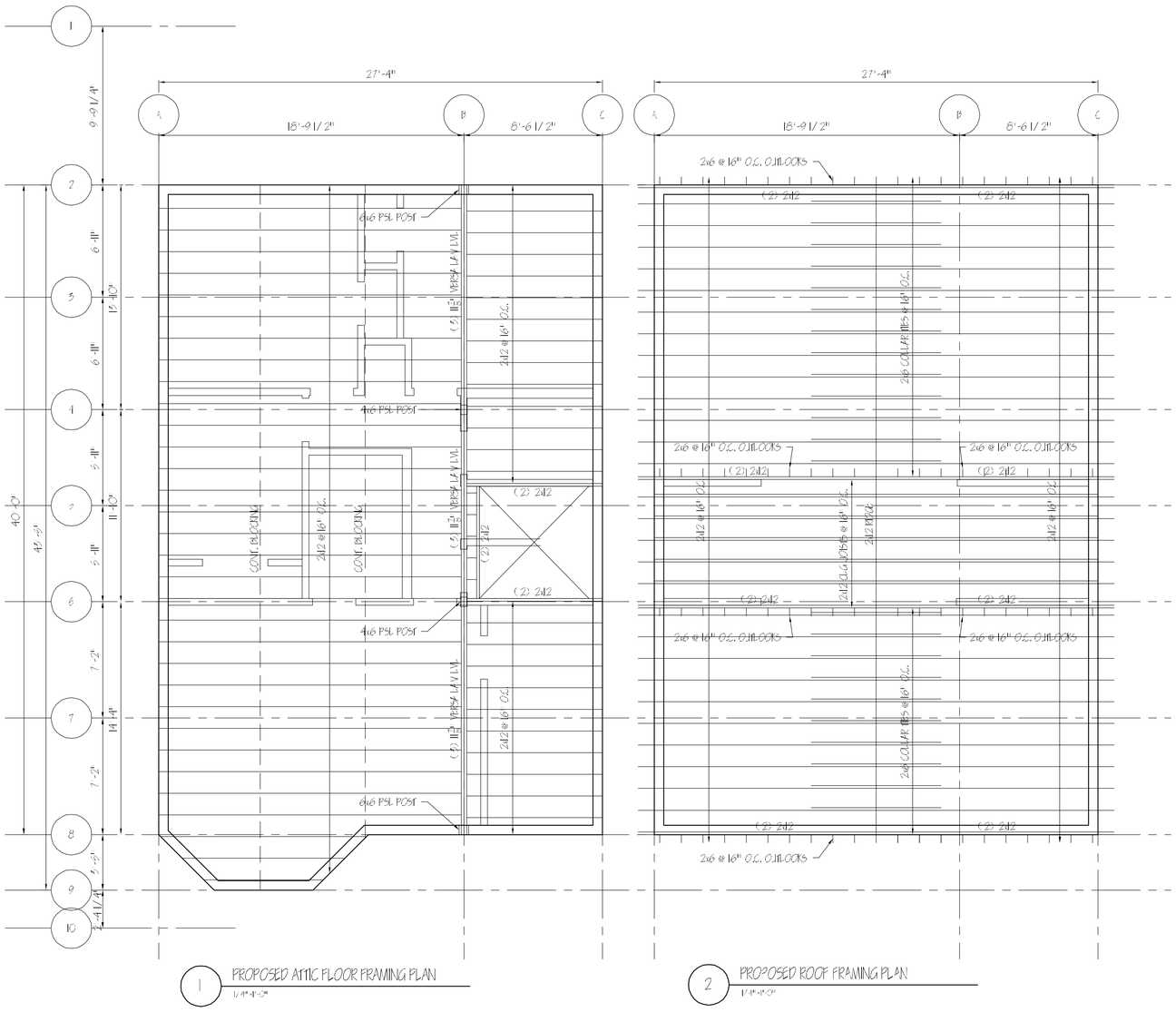
Sheet No.

S-1.1



1 PROPOSED ATTIC FLOOR FRAMING PLAN
1/4"=1'-0"

2 PROPOSED ROOF FRAMING PLAN
1/4"=1'-0"

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PROPOSED
PLANS

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S-1.2