GENERAL

G1. WORK SHALL CONFORM TO THE REQUIREMENTS OF THE 6TH EDITION OF COMMONWEALTH OF MASSACHUSETTS STATE BUILDING CODE.

G2. CONTRACTOR IS TO EXAMINE ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR VERIFICATION OF LOCATION AND DIMENSIONS OF OTHER PROJECT REQUIREMENTS NOT SHOWN ON THE FRAMING PLANS.

G3. CONTRACTOR SHALL VERIFY & COORDINATE ALL DIMENSIONS ON THE JOB.

TEMPORARY SHORING AND BRACING

B1. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL MEANS AND METHODS OF CONSTRUCTION EMPLOYED ON THIS PROJECT, AND FOR ALL TEMPORARY BRACING, SUPPORT, AND PROTECTION OF THE EXISTING STRUCTURE. PROVIDE AND INSTALL SHORING DESIGNED TO SUPPORT THE TEMPORARY STRUCTURAL LOADS OF THE SUPPORTED ITEMS. SUBMIT SHORING PRODUCTS, CONFIGURATION, PROCEDURE, TO THE ARCHITECT FOR HIS REVIEW PRIOR TO SHORING AND BRACING.

B2. SHORING SHALL BE OF ANY MATERIAL THAT IS SUITABLE FOR THE APPLICATION. TIMBER SHORING SHALL BE FULLY DRIED AND ALL END GRAIN SHALL BE SEALED TO PREVENT ABSORPTION OF WATER AND ASSOCIATED SWELLING. SHORING SHALL BE MADE STABLE, STIFF, AND SNUG FITTING SO AS NOT TO DEFLECT UNDER LOAD. PRE LOAD SUPPORTED ELEMENTS FOR SNUG FIT ONLY. SHORING SHALL DEFLECT NO MORE THAN THE GIVEN SPAN LENGTH DIVIDED BY 600.

B3. BEARING SURFACES OF SHORING SHALL BE REVIEWED WITH ARCHITECT IN FIELD AND SHALL PROVIDE FOR PROPER TRANSFER OF LOADS TO SUPPORTING AND SUPPORTED ELEMENTS.

FOUNDATIONS

F1. FOUNDATIONS ARE TO BE CARRIED DOWN TO UNDISTURBED NATURAL SOILS HAVING A MINIMUM BEARING CAPACITY OF 2.0 TONS PER SQUARE FOOT. EXISTING FRONT, REAR AND INTERIOR FOUNDATIONS SHALL BE REMOVED AND REPLACED AT OR BELOW THE FORMER FOOTING ELEVATIONS. ALL PARTY WALL FOOTINGS SHALL BE PROTECTED AND REINFORCED PER THE DETAILS.

F2. FOOTING DEPTHS SHOWN ON THE DRAWINGS REPRESENT ESTIMATED DEPTHS AND ARE NOT TO BE CONSTRUED AS LIMITING THE AMOUNT OF EXCAVATION REQUIRED TO REACH GOOD BEARING MATERIAL.

F3. EXTERIOR CONSTRUCTION IS TO BE CARRIED DOWN BELOW FINISHED EXTERIOR GRADE TO A MINIMUM DEPTH OF 4 FEET UNLESS NOTED OTHERWISE OR REQUIRED OTHERWISE BY LOCAL BUILDING CODE. IF LEDGE IS DISCOVERED IN EXCAVATING FOR NEW FOOTINGS, CONSULT ARCHITECT FOR INSTRUCTION ON PINNING NEW FOUNDATION CONSTRUCTION TO LEDGE.

F4. FOOTING EXCAVATIONS ARE TO BE FINISHED BY HAND.

F5. MAKE NO EXCAVATIONS TO THE FULL DEPTH INDICATED WHEN FREEZING TEMPERATURES MAY BE EXPECTED UNLESS THE FOUNDATIONS OR SLABS CAN BE PLACED IMMEDIATELY AFTER THE EXCAVATION HAS BEEN COMPLETED. PROTECT THE BOTTOM OF FOOTING SO EXCAVATED FROM FROST IF PLACING OF CONCRETE IS DELAYED. SHOULD PROTECTION FAIL, REMOVE FROZEN MATERIALS AND REPLACE WITH CONCRETE OR GRAVEL FILL, AS DIRECTED, AT NO COST TO THE OWNER.

F6. BACKFILL UNDER NEW STRUCTURES IS TO BE COMPACTED TO 95 PERCENT IN 6" LIFTS.

F7. UNLESS NOTED OTHERWISE, FOOTINGS ARE TO BE CENTERED UNDER SUPPORTED MEMBERS.

F8. PROVIDE 6" OF CRUSHED STONE UNDER ALL NEW SLABS ON GRADE AS WELL AS 6 MIL (MINIMUM) POLY VAPOR BARRIER.

CONCRETE AND REINFORCEMENT

C1. CONCRETE WORK IS TO CONFORM TO BUILDING CODE REQUIREMENTS FOR REINFORCED AND PLAIN CONCRETE (ACI 318–05) AND SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS (ACI 301), LATEST EDITION.

C2. CONCRETE SHALL BE CONTROLLED CONCRETE, PROPORTIONED, AND MIXED UNDER THE SUPERVISION OF AN APPROVED CONCRETE TESTING AGENCY.

C3. WHEN CONCRETE IS PLACED AT OR BELOW AMBIENT TEMPERATURES OF 40 DEGREES F, OR WHENEVER LOWER TEMPERATURES ARE LIKELY TO OCCUR WITHIN 48 HOURS AFTER PLACEMENT OF CONCRETE, COLD WEATHER CONCRETING PROCEDURES, IN ACCORDANCE TO ACI 306 SHALL BE FOLLOWED. COLD WEATHER PROTECTION SHALL ALSO APPLY TO REINFORCED BRICK AND CMU MASONRY CONSTRUCTION WHENEVER THE TEMPERATURE FALLS BELOW 40 DEGREES.

C4. CONCRETE IS TO HAVE 4000 PSI (NORMALWEIGHT) COMPRESSIVE STRENGTH AT 28 DAYS.

C5. CONCRETE TO BE EXPOSED TO THE WEATHER IN THE FINISHED PROJECT IS TO BE AIR–ENTRAINED.

C6. CONCRETE IS TO BE PLACED WITHOUT HORIZONTAL CONSTRUCTION JOINTS.

C7. STRUCTURAL STEEL BELOW GRADE IS TO BE ENCASED IN CONCRETE FOR RUST PROTECTION OR IS TO BE COATED WITH EPOXY PER STEEL GENERAL NOTES. CONCRETE COVER SHALL BE 3 INCH MINIMUM.

C8. DETAILING, FABRICATION, AND ERECTION OF REINFORCEMENT, UNLESS OTHERWISE NOTED, SHALL CONFORM TO THE LATEST EDITIONS OF ACI "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318)" AND ACI "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES (ACI 315)".

C9. STEEL REINFORCEMENT UNLESS OTHERWISE SHOWN IS TO CONFORM TO ASTM 615 GRADE 60 (YIELD STRESS = 60,000 PSI).

C10. WELDED WIRE FABRIC REINFORCEMENT SHALL BE ASTM A185 WWF 6x6 W2.1xW2.1 IN ALL NEW 4" SLABS ON GRADE.

C11. REINFORCEMENT IS TO BE CONTINUOUS THROUGH ALL CONSTRUCTION JOINTS UNLESS OTHERWISE INDICATED ON THE DRAWINGS.

C12. WELDED WIRE FABRIC IS TO LAP 6 INCHES OR ONE SPACE PLUS 2 INCHES, WHICHEVER IS LARGER, AND IS TO BE WIRED TOGETHER.

C13. REINFORCING SHALL HAVE THE FOLLOWING MINIMUM CONCRETE COVER:
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"
CONCRETE EXPOSED TO WEATHER OR EARTH:
2" (No. 6 THRU No. 18)
1½" (No. 5 & SMALLER)
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:
1½" (No. 14 & No. 18)
¾" (No. 11 & SMALLER)

STRUCTURAL STEEL

S1. STRUCTURAL STEEL WORK SHALL CONFORM TO "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" (AISC ASD 1989), OR LOAD AND RESISTANCE FACTOR DESIGN (LRFD), LATEST EDITION; "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES"; AND STRUCTURAL WELDING CODE – STEEL (AWS D1.1), LATEST EDITION.

S2. STRUCTURAL STEEL SHALL BE NEW STEEL CONFORMING TO THE FOLLOWING:

ROLLED STEEL SHAPES:	A992 GRADE 50
PLATES	ASTM A36
STRUCTURAL PIPES:	ASTM A53, GRADE B
STRUCTURAL TUBES:	ASTM A500, GRADE B
ANCHOR BOLTS:	ASTM A307
HIGH STRENGTH BOLTS:	ASTM A325
WELDING ELECTRODES:	AWS E70–XX

S3. WELDING SHALL BE DONE BY APPROVED CERTIFIED WELDERS, AND SHALL CONFORM TO THE AMERICAN WELDING SOCIETY CODE. SEE SPECIFICATIONS. ALL FILLET WELDS SHALL BE MADE WITH A RETURN LEG ON THE WELD END. THE MINIMUM SIZE OF FILLET WELDS SHALL BE DETERMINED IN ACCORDANCE WITH PARAGRAPH J2.2B. OF THE AISC SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS.

S4. ELECTRODES FOR ALL FIELD AND SHOP WELDING SHALL CONFORM TO A–233 (CLASS 70)

S5. ANCHOR BOLTS, LEVELING PLATES, OR BEARING PLATES SHALL BE LOCATED AND BUILT INTO CONNECTING WORK, PRESENT BY TEMPLATES OR SIMILAR METHODS. PLATES SHALL BE SET IN FULL BEDS OF NON–SHRINK GROUT.

S6. ALL STEEL EXPOSED TO WEATHER SHALL BE HOT–DIPPED GALVANIZED.

S7. ALL STEEL BELOW THE SLAB & 12" ABOVE SLAB MUST BE COATED WITH TWO HEAVY APPLICATIONS OF COAL–TAR EPOXY OR WET/DRY 700 SOLVENT–FREE EPOXY WHEN AMBIENT AIR TEMPERATURE IS AT OR ABOVE 55 DEGREES FAHRENHEIT. IF THE WORK IS DONE WHEN AMBIENT AIR TEMPERATURE IS ABOVE 40 AND LESS THAN 55 DEGREES FAHRENHEIT, PROVIDE CORRO–COAT 2100 LT (LOW TEMPERATURE) SOLVENT–FREE EPOXY COATING.

S8. STRUCTURAL STEEL FRAMING SHALL BE TRUE AND PLUMB BEFORE CONNECTIONS ARE FINALLY BOLTED OR WELDED.

S9. TEMPORARY ERECTION BRACING AND SUPPORTS SHALL BE PROVIDED TO HOLD NEW STRUCTURAL STEEL FRAMING SECURELY IN POSITION. SUCH TEMPORARY BRACING AND SUPPORTS SHALL NOT BE REMOVED UNTIL PERMANENT BRACING HAS BEEN INSTALLED.

S10. MINIMUM CONNECTION PLATE THICKNESS SHALL BE ⅜".

S11. SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION. STEEL SHALL BE FABRICATED FROM APPROVED SHOP DRAWINGS ONLY.

STRUCTURAL WOOD

W1. TIMBER CONSTRUCTION IS TO CONFORM TO PART II "DESIGN SPECIFICATIONS" AS PUBLISHED IN THE "TIMBER CONSTRUCTION MANUAL" (AITC) AND TO "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION", LATEST EDITIONS.

W2. NEW TIMBER FOR STRUCTURAL USE IS TO BE SURFACE DRIED AND HAVE A MOISTURE CONTENT OF NOT MORE THAN 15 PERCENT.

W3. STRUCTURAL TIMBER IS TO BE IDENTIFIED BY THE GRADE MARK OF, OR CERTIFICATE OF INSPECTION ISSUED BY, A GRADING OR INSPECTION BUREAU OR AGENCY RECOGNIZED AS BEING COMPETENT.

W4. STRUCTURAL TIMBER IS TO BE VISUALLY STRESS–GRADED LUMBER IN ACCORDANCE WITH THE PROVISIONS OF ASTM DESIGNATION D245–74, "METHODS FOR ESTABLISHING STRUCTURAL GRADES AND RELATED ALLOWABLE PROPERTIES FOR VISUALLY GRADED LUMBER."

W5. TIMBER IS TO BE HANDLED AND COVERED TO PREVENT DAMAGE AND MOISTURE ABSORPTION FROM SNOW OR RAIN.

W6. ALL STRUCTURAL WOOD IS TO HAVE THE FOLLOWING MINIMUM DESIGN STRENGTHS AND IS TO HAVE MATERIAL CERTIFICATES AND GRADE STAMPS ATTESTING THEREOF (UNITS IN PSI UNLESS OTHERWISE NOTED):

LOCATION OF USE	FB	FT	FV	FC PARALL.	FC PERP.	E(KSI)
CONVENTIONAL WOOD JOISTS/RAFTERS	875		70			1400
WOOD POSTS (NO. 1) (SOLID TIMBERS)	850		65	700	425	1300
BEARING WALL STUDS	675	325	70	675	425	1200
MICRO–LAMINATED WOOD	2600	1850	285	2700	750	1900

W7. WOOD JOISTS:

1. SPLICES ARE TO OCCUR ONLY OVER BEARING POINTS.
2. JOISTS SHALL BE TOE NAILED TO WOOD SUPPORT WITH TWO 10D NAILS.
3. MINIMUM BEARING FOR JOISTS = 1¾ INCH AT ENDS, AND 3½ INCHES WHERE JOISTS ARE CONTINUOUS.
4. USE METAL JOIST HANGERS AT ALL FLUSH FRAME CONDITIONS.
5. JOISTS ARE TO BE DOUBLED UNDER PARALLEL PARTITIONS.
6. BRIDGING WILL BE SOLID USING 2"x JOIST DEPTH INSTALLED IN OFFSET FASHION. MAXIMUM SPACING = 8 FEET.
7. NO JOIST IS TO BE NOTCHED OR DRILLED WITH HOLES WITHOUT PROPER REINFORCEMENT
8. JOIST SUPPORT SOLELY BY NAILING IS NOT ALLOWED BY CODE.

W9. FABRICATED WOOD JOISTS

1. FABRICATED WOOD JOISTS ARE TO BE TRUSJOIST WEYERHAUSER TJI OR BOISE CASCADE (BCI).
2. INSTALLATION OF FABRICATED JOIST SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S TYPICAL DETAILS FOR THE CONDITIONS SHOWN.
3. FABRICATED WOOD JOISTS SHALL BE GLUE AND NAIL CONSTRUCTION.
4. RIMS FOR FABRICATED WOOD JOISTS SHALL BE 1¾" TRUSJOIST LAMINATED STRAND LUMBER (LSL).
5. BLOCKING BETWEEN JOIST ENDS SHALL BE WITH FULL DEPTH TJI OR BCI BLOCKING PANELS.
6. PROVIDE 2x6 VERTICAL WEB STIFFENERS ON BOTH SIDES OF THE JOIST WEB AT POST LOCATIONS ABOVE (BLOCK SOLIDLY).

W10. EXPOSED ENGINEERED LUMBER:

1. EXPOSED ENGINEERED LUMBER SHALL BE WOLMANIZED TRUSJOIST PARALLEL STRAND LUMBER (PSL),

W11. BEARING WALLS:

1. EXTERIOR BEARING WALLS WILL BE 2x6 AT 16" O.C. MINIMUM. INTERIOR WALLS VARY, SEE S–6
2. STUDS ARE TO BE NAILED TO THE SOLE PLATE WITH THREE 10d OR FOUR 8D TOE NAILS.
3. WHERE STRUCTURAL SHEATHING OVERLAPS SOLE PLATE, NAIL SHEATHING TO SOLE PLATE AT 6 INCHES MAXIMUM CENTER.
4. USE 2x BRIDGING AT MID–HEIGHT OF REGULAR HEIGHT WALLS.

W12. BEARING WALL OPENINGS:

1. BEARING WALL OPENINGS ARE TO BE FRAMED TO PROVIDE A RIGID ENCLOSURE. JAMB STUD IS TO EXTEND IN ONE PIECE FROM HEADER TO SOLE PLATE. PROVIDE SPECIFIED NUMBER OF JACK STUDS SHOWN IN PLAN.
2. A MINIMUM OF TRIPLE STUDS ARE TO BE USED AT ALL WALL OPENINGS.

W13. NAILING:

1. DOUBLE FRAMED OPENINGS, NAIL INNER STUD TO OUTER STUD WITH 16d NAILS, 24" O.C. TOE NAIL INNER STUD TO WALL PLATE WITH TWO 8d NAILS OR END NAIL WITH 16d NAILS. NAIL OUTER STUD TO HEADER WITH FOUR 16d NAILS AND TO TOP PLATE WITH TWO 8d TOE NAILS.
2. ALL STUDS TO BE CONTINUOUS FROM FLOOR TO FLOOR OR ROOF TO FLOOR

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DECEMBER 20, 2007

Structural General Notes

No Scale

S-0

W14. PLATES (BEARING OR NON–BEARING):

1. SOLE PLATES ARE TO BE NAILED TO SUBFLOOR AND JOISTS WITH 16d NAILS AT EACH JOIST.

2. TOP PLATES FOR BEARING PARTITIONS ARE TO BE TWO 2x6s, A CONTINUOUS HEADER, OR AS INDICATED ON SECTIONS. PLATE MEMBERS OF PRINCIPAL PARTITIONS ARE TO BE LAPPED OR ANCHORED TO EXTERIOR WALL FRAMING. SPLICES ARE TO OCCUR OVER STUDS. NAIL PLATES TO STUDS WITH TWO 16d NAILS AT 24" O.C.

3. TOP PLATES FOR NON–BEARING INTERIOR PARTITIONS MAY BE SINGLE. NAIL PLATE TO STUD WITH TWO 16D NAILS. WHEN TOP PLATE IS PARALLEL TO CEILING OR FLOOR FRAMING, INSTALL 2x6 CROSS BLOCKING NOT MORE THAN 4'–0" O.C.

4. WHEN TOP PLATES ARE CUT FOR PIPING OR DUCT WORK, REINFORCE WITH STEEL STRAPS.

W15. BEAMS AND GIRDERS:

1. GIRDERS WILL NOT REST LESS THAN 4" ON SUPPORTS.

2. WHERE BEAMS AND GIRDERS OF NOMINAL 2" MEMBERS ARE SHOWN NAIL WITH TWO ROWS OF 16d NAILS SPACED NOT MORE THAN 24" O.C., LOCATE END JOISTS IN MEMBERS OVER SUPPORTS.

3. ALL BEAMS MUST SPLICED ONLY OVER SUPPORTS UNLESS SPECIFICALLY INSTRUCTED OTHERWISE BY THE ARCHITECT.

4. ALL BUILT–UP WOOD BEAMS WIDER THAN 6" AND NAILERS ATTACHED TO STEEL BEAMS ARE TO BE BOLTED WITH ⅝" DIAMETER THROUGH–BOLTS AT 2'–0" O.C. STAGGERED SPACING, UNLESS OTHERWISE NOTED.

W16. PLYWOOD FLOOR

1. PLYWOOD FLOOR IS TO BE ¾ INCH THICK GLUE AND NAILED INSTALLED WITH OUTER PLIES AT RIGHT ANGLE TO JOISTS AND STAGGERED IN ADJACENT PANELS. PROVIDE 1/16 INCH JOINT SPACING AT ALL PANEL EDGES.

W17. PLYWOOD ROOF:

1. PLYWOOD WILL BE ⅝" THICK MINIMUM INSTALLED WITH GRAIN OF OUTER PLIES AT RIGHT ANGLES TO JOISTS AND BE STAGGERED SO THAT END JOISTS IN ADJACENT PANELS OCCUR OVER DIFFERENT JOISTS. PROVIDE AT LEAST 1/16" JOINT SPACE AT PANEL EDGES.

2. PLYWOOD IS TO BE NAILED WITH 8d COMMON OR 6D THREADED NAILS. NAILS ARE TO BE 6 INCHES O.C. AT ALL EDGES AND 12" O.C. AT INTERIOR LINES OF SUPPORT.

W18. PLYWOOD NAILED TO BEARING PARTITIONS:

1. PLYWOOD IS TO BE ½–INCH THICK MINIMUM.

2. NAIL SHEATHING TO STUDS, PLATES, AND BLOCKING WITH 6d NAILS SPACED 4" O.C. ALONG ALL EDGES OF PLYWOOD SHEETS AND 12" ON CENTERS ALONG INTERMEDIATE MEMBERS.

3. NAILING SHOULD COMPLY WITH THE RECOMMENDATIONS OF THE AMERICAN PLYWOOD ASSOCIATION.

W18. CONNECTIONS:

1. ALL WOOD POST BASES ON WOOD TO BE SIMPSON TYPE BC.

2. ALL WOOD BEAMS ON COLUMNS TO HAVE SIMPSON TYPE PC OR EPC CONNECTIONS.

3. ALL FLUSH FRAMED CONVENTIONAL WOOD JOIST CONNECTIONS TO BE SIMPSON TYPE LU OR EQUAL. PROVIDE FIELD SLOPED ADJUSTABLE FLUSH FRAMED CONNECTORS AT RAFTERS CONNECTION TO RIDGE BEAM, TYPE LSU – SEE SIMPSON CATALOG.

4. COMPLY WITH MANUFACTURER SPECIFICATIONS INSTALLATIONS FOR ALL OF THE ABOVE.

5. ALL WOOD POST BASES ON CONCRETE TO BE SIMPSON TYPE ABU OR EQUAL.

6. ANCHOR BOLTS AND BOLTS FOR STRUCTURAL TIMBER ARE TO BE ASTM A307. STANDARD CUT WASHERS ARE TO BE PROVIDED BETWEEN THE WOOD AND BOLT NUT, UNLESS STEEL PLATES OR PLATE WASHERS ARE USED, AS INDICATED ON STRUCTURAL DRAWINGS. BOLT HOLES IN STRUCTURAL TIMBER ARE TO BE 1/16 INCH LARGER THAN THE NOMINAL BOLT DIAMETER INDICATED.

7. ALL EXTERIOR CONNECTION HARDWARE INCLUDING NAILS, BOLTS, AND FABRICATED CONNECTORS IS TO BE STAINLESS STEEL OR GALVANIZED. ELECTROGALVANIZED STOCK SHALL HAVE A CLASS RATING OF 4d OR HIGHER, AND HOT–DIPPED GALVANIZED STOCK SHALL BE G–185.

W19. ENGINEERED WOOD TIMBER

1. SCHEDULE ON SHOP DRAWINGS AND PROVIDE LOAD RATED PRE–MANUFACTURED WOOD CONNECTORS FOR POSTS TO BEAM AND ALL FLUSH–FRAMED MEMBERS. PROVIDE FASTENERS IN ACCORDANCE WITH MANUFACTURER SCHEDULE FOR EACH TYPE.

2. WHERE NO MANUFACTURED WOOD CONNECTOR EXISTS, FABRICATE FROM ¼ INCH WELDED STEEL PLATE TO CONFORM TO THE MOST SIMILAR SIMPSON CONNECTOR.

3. CONNECTION SHALL BE DESIGNED FOR MAXIMUM CAPACITY OF THE CONNECTED MEMBERS FOR THE SPANS INDICATED.

4. END BEARING OF LVL BEAMS SHALL BE 2¾ INCHES MINIMUM AND ACROSS THE FULL WIDTH OF THE BEAM.

5. MINIMUM BEARING LENGTHS ARE GOVERNED BY Fc PERPENDICULAR OF THE WALL PLATE = 425–PSI, OR BY 750–PSI BEARING STRENGTH OF THE VENEER LUMBER WHEN PLACED ON STEEL SUPPORTING CONNECTOR.

6. ALL LVL BEAMS REQUIRE LATERAL SUPPORT OR BLOCKING AT BEARING POINTS.

7. BUILT UP LVL BEAMS SHALL BE NAILED OR BOLTED TOGETHER IN ACCORDANCE WITH THE SCHEDULE ON PAGE 17 OF THE MANUFACTURER'S LITERATURE, BUT NOT LESS THAN 3 ROWS OF 16d NAILS AT 12 INCHES O.C. THROUGH ALL PLIES.

8. ADHESIVES SHALL BE PROVIDED AT ALL PLYWOOD FLOOR TO WOOD JOIST AND BEAM FASTENINGS. ADHESIVES SHALL CONFORM TO TRUSS JOIST MANUFACTURER'S STANDARDS AND MEET THE REQUIREMENTS OF ASTM D2559.

RENOVATION AND RESTORATION

L1. WORK SHALL CONFORM TO THE REQUIREMENTS OF THE 6TH EDITION OF THE COMMONWEALTH OF MASSACHUSETTS STATE BUILDING CODE.

L2. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT WHEN, IN THE COURSE OF CONSTRUCTION OR DEMOLITION, CONDITIONS ARE UNCOVERED THAT ARE UNANTICIPATED OR OTHERWISE APPEAR TO PRESENT A DANGEROUS CONDITION.

L3. INFORMATION REGARDING EXISTING CONSTRUCTION OR CONDITIONS IS BASED ON AVAILABLE RECORD DRAWINGS WHICH MAY OR MAY NOT TRULY REFLECT EXISTING CONDITIONS. SUCH INFORMATION IS INCLUDED ON THE ASSUMPTION THAT IT MAY BE OF INTEREST TO THE CONTRACTOR BUT THE ARCHITECT ASSUMES NO RESPONSIBILITY FOR ITS ACCURACY OR COMPLETENESS.

L4. VERIFY ALL DIMENSIONS AND CONDITIONS ON THE JOB. DISCREPANCIES SHALL BE BROUGHT IMMEDIATELY TO THE ATTENTION OF THE ARCHITECT BEFORE PROCEEDING WITH THAT PART OF THE WORK.

L5. WHERE NEW WORK WILL BE ADJACENT TO OR FRAMING EXISTING CONSTRUCTION, VERIFY DIMENSIONS OF EXISTING CONSTRUCTION, PRIOR TO FABRICATION OF NEW MEMBERS.

L6. PROVIDE ALL LABOR AND MATERIAL FOR ANY FRAMING REQUIRE REMOVE EXISTING CONSTRUCTION IN ORDER TO CONSTRUCT NEW WORK, THE AFFECTED AREA SHALL BE PATCHED AND REBUILT TO MATCH EXISTING ADJACENT WORK TO SATISFACTION OF THE ARCHITECT.

L7. DETAILS SHOWN ON ANY DRAWING SHALL BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS.

L8. NOTIFY ENGINEER OF ANY CONTEMPLATED STRUCTURAL ALTERATION NOT SHOWN ON THE DRAWINGS IN REASONABLE TIME TO RENDER AND DOCUMENT HIS DECISION.

L9. STRUCTURAL MATERIALS AND COMPONENTS SHALL HAVE PRIOR APPROVAL OF THE ENGINEER.

L10. STRUCTURAL WORK ON THIS PROJECT SHALL BE PERFORMED UNDER THE SUPERVISION OF AN ENGINEER APPROVED BY THE ARCHITECT. ALTERATIONS OR MODIFICATIONS NOT INDICATED ON THE DRAWINGS SHALL BE APPROVED BY THE ENGINEER IN WRITING BEFORE SUCH WORK IS INITIATED. THE ENGINEER SHALL INSPECT ALL STRUCTURAL ELEMENTS TO ASSURE COMPLIANCE WITH THE CONTRACT DOCUMENTS AND THE STRUCTURAL INTEGRITY OF THE BUILDING BEFORE SUCH ELEMENTS ARE ENCLOSED. EXISTING STRUCTURAL DEFICIENCIES NOT INDICATED ON THE DRAWINGS OR EXPOSED DURING CONSTRUCTION SHALL BE CORRECTED AS DIRECTED BY THE ENGINEER.

L11. STRUCTURAL ALTERATION SHALL BE PRECEDED BY ADEQUATE SHORING AND BRACING.

L12. SCREW–TYPE SHORING POSTS SHALL BE PROVIDED FOR EXISTING WORK DURING THE REMOVAL OF EXISTING BEARING WALLS AND STRUCTURAL MEMBERS AND THE INSTALLATION OF NEW STRUCTURAL WORK.

L13. TEMPORARY SHORES SHALL BE PLACED AS CLOSE AS PRACTICABLE TO THE EXISTING STRUCTURAL WORK BEING REMOVED.

L14. HEADERS SHALL BE PLACED ACROSS TOP OF SHORING POSTS AND SHALL BE SNUG TIGHT AGAINST UNDERSIDE OF STRUCTURE ABOVE.

L15. SHORING SHALL BEAR ON SLEEPERS TO PREVENT DAMAGE TO THE STRUCTURE BELOW.

L16. TEMPORARY SHORES SHALL BE INDIVIDUALLY DESIGNED, ERECTED, SUPPORTED, BRACED AND MAINTAINED BY THE CONTRACTOR TO SAFELY SUPPORT ALL DEAD LOADS PRESENTLY CARRIED BY THE EXISTING STRUCTURAL WORK BEING REMOVED AND ANY CONSTRUCTION LIVE LOADS.

L17. STRUCTURAL STEEL SHALL BE COMPLETELY INSTALLED BEFORE REMOVING ANY SHORES.

ABBREVIATIONS

ABBREVIATION	WORD
ADDL	ADDITIONAL
ALT	ALTERNATE
ACI	AMERICAN CONCRETE INSTITUTE
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AISI	AMERICAN IRON AND STEEL INSTITUTE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
ARCHT	ARCHITECT or ARCHITECTURAL
AWS	AMERICAN WELDING SOCIETY
AB	ANCHOR BOLT
BM	BEAM
BRG	BEARING
BETW	BETWEEN
B	BOTTOM
BEW	BOTTOM EACH WAY
BOCA	BUILDING OFFICIALS & CODE ADMINISTRATORS INT'L
C	CAMBER
CIP	CAST–IN–PLACE
CTRD	CENTERED
℄	CENTER LINE
CO	CLEAN OUT
CL	CLEAR
COL	COLUMN
CONC	CONCRETE
CMU	CONCRETE MASONRY UNIT
CONN	CONNECTION
CONST	CONST CONSTRUCTION
CONST	CONST CONSTRUCTION JOINT
CONT	CONTINUOUS
CJ	CONTROL JOINTS
COORD	COORDINATE
DEPR	DEPRESSION
DET	DETAIL
ø	DIAMETER
DO	DITTO
DWG	DWG DRAWING
EA	EACH
EE	EACH END
EF	EACH FACE
ES	EACH SIDE
EW	EACH WAY
ELECT	ELECTRICAL
EL	ELEVATION
ELEV	ELEVATOR
EQ	EQUAL
EQUIP	EQUIPMENT
EXP BOLT	EXPANSION BOLT
EXP JT	EXPANSION JOINT
EXT	EXTERIOR
FT	FEET or FOOT
FIN	FINISH
FIN FL	FINISHED FLOOR
FL	FLOOR
FTG	FOOTING
FDN	FOUNDATION
GALV	GALVANIZED
GA	GAUGE or GAGE
GEN	GENERAL
GR	GRADE
GB	GRADE BEAM
HDG	HOT–DIPPED GALVANIZED
HVAC	HEATING, VENTILATING AND AIR CONDITIONING
HP	HIGH POINT
HS	HIGH STRENGTH
HORIZ	HORIZONTAL
HEF	HORIZONTAL EACH FACE
INV	INVERT
JT	JOINT
K	KIP (1000 POUNDS)
LG	LONG
LWC	LIGHTWEIGHT CONCRETE
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LP	LOW POINT
MANUF	MANUFACTURER
MAS	MASONRY
MAX	MAXIMUM
MECH	MECHANICAL
MID	MIDDLE
MIN	MINIMUM
MISC	MISCELLANEOUS
NF	NEAR FACE
NTS	NOT TO SCALE
NWC	NORMAL WEIGHT CONCRETE
NO	NUMBER
OC	ON CENTER
OPNG	OPENING
PL	PLATE
PCB	PRECAST BEAM
PVC	POLYVINYL CHLORIDE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
P/C	P/PRECAST CONCRETE
P/S	P/PRESTRESSED
PCI	PRESTRESSED CONCRETE INSTITUTE
REF	REFERENCE
REINF	REINFORCE or REINFORCEMENT
REM	REMAINDER
REQD	REQUIRED
SCHED	SCHEDULE
SECT	SECTION
SC	SHEAR CONNECTOR
SIM	SIMILAR
SOG	SLAB ON GRADE
SPECS	SPECIFICATIONS
STD	STANDARD
STL	STEEL
SF	STEP FOOTING
STIFF	STIFFENER
STR	STRUCTURAL
TEMP	TEMPERATURE
TFE	TETRAFLUORETHYLENE
T	TOP
TOC	TOP OF CONCRETE
TOS	TOP OF STEEL
TOW	TOP OF WALL
TYP	TYPICAL
UBC	UNIFORM BUILDING CODE
UNO	UNLESS NOTED OTHERWISE
V or VERT	VERTICAL
VEF	VERTICAL EACH FACE
VIF	VERTICAL INSIDE FACE
VOF	VERTICAL OUTSIDE FACE
WWF	WELDED WIRE FABRIC
W/	WITH
WP	WORKING POINT

DESIGN LOADS

DL1 FLOOR LIVE LOADS:
LIVING AREAS: 40 PSF
DECKS: 60 PSF

DL2 ROOF LIVE LOAD:
98–PSF (4" DRY SOIL + 60–PSF DECK LOAD)
88–PSF (4" SATURATED SOIL + 30–PSF CODE SNOW

WIND LOAD
14–PSF, EXPOSURE A, ZONE 3

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5 & 6 BRIGHAM STREET

EAST BOSTON, MA

DECEMBER 20, 2007

Structural General Notes

No Scale

S-0A