

REFERENCES: DEED: BOOK 53372 PAGE 346 BOOK 51569 PAGE 45 PLANS DEED BOOK 2398 PAGE 249 DEED BOOK 2340 PAGE 97 PLAN AT THE END OF DEED BOOK 5148 LAND COURT PLAN 28403A LAND COURT PLAN 741A CITY OF BOSTON LAYOUT PLAN L-6960 — DS APPROVED DESIGN REVIEW BOSTON REDEVELOPMENT AUTHORITY SIGNATURE M. CANINI 720 N37°18'06"E 3.14' -10.6' 07/20/2022 -10.1' HELD 4 L. 102A MORELAND ST. MORELAND EXISTING 4' CLF 3.02'M⊐ 3.08'LC 28403A 89.33' TO MORELAND ST.



GENERAL NOTES

1. ALL WORK SHALL BE PERFORMED IN CONFORMANCE TO THE LATEST EDITION OF THE MASSACHUSETTS STATE BUILDING CODE AND ALL OTHER APPLICABLE CODES AND LAWS.

2. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL PERMITS **REQUIRED FOR THIS PROJECT**

3. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MEANS, METHODS,

TECHNIQUES, SEQUENCING, SCHEDULING AND SAFETY FOR THIS PROJECT 4. THE CONTRACTOR SHALL VISIT THE SITE AND BE THOROUGHLY AQUATINTED WITH THE PROJECT PRIOR TO SUBMITTING A PRICE. ADDITIONAL MONEY WILL NOT BE FOR WORK NOT CLARIFIED PRIOR TO BIDDING

5. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES BETWEEN DRAWINGS SPECIFICATIONS OR FIELD CONDITIONS TO THE ARCHITECT IMMEDIATELY 6. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY WORK DAMAGED BY HIS

FORCES WHILE PERFORMING THIS CONTRACT 7. THE CONTRACTOR SHALL GIVE A WARRANTY FOR 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. WATER SHALL NOT BE ALLOWED TO FLOW THROUGH THE DEPOSITED CONCRETE.
- 4. NO FOOTING SHALL BE POURED ON FROZEN GROUND. FOUNDATIONS NEED TO BE PROTECTED FROM FREEZING FOR A MIN OF 5 DAYS AFTER THEY WERE POURED.
- 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 REINFORCEMENT: ASTM A615-60, WWF A185.

CONCRETE NOTES:

- 1. ALL CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH
- OF: **3000 PSI** FOR BASEMENT SLABS, FOUNDATION WALL, EXTERIOR WALLS AND OTHER VERTICAL CONCRETE SURFACES EXPOSED TO THE WEATHER FOR DRIVEWAYS, CURBS, WALKS, PATIOS, PORCHES, CARPORT SLAB 3500 PSI STEPS AND OTHER FLATWORK EXPOSED TO WEATHER AND GARAGE FLOOR SLABS
- 2. MAXIMUM SLUMP SHALL NOT EXCEED 3"; AND MAXIMUM; COARSE
- AGGREGATE SIZE SHALL NOT EXCEED 3/4" IN DIAMETER. 3. ALL CONCRETE SLABS ON GRADE SHALL BE POURED IN 900 SQUARE FOOT
- PANELS, MAXIMUM; OR, PROVIDE CONTROL JOINTS BY
- SAW CUTTING THE SLAB WHILE THE CONCRETE IS STILL GREEN.

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 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.

3 INCHES

2 INCHES

- 6. CLEARANCES OF MAIN REINFORCING FROM ADJACENT CONCRETE SURFACES
- SHALL BE AS FOLLOWS:
- A. FOOTINGS **B. SIDES OF FOUNDATIONS WALLS.** EXPOSED FACES OF FOUNDATIONS. SIDES OF COLUMNS/PIERS, SLABS
- ON GRADE FROM TOP SURFACE
- C. INTERIOR FACES OF FOUNDATIONS, TOP REINFORCING IN SLABS EXPOSED
- TO THE WEATHER 1-1/2 INCHES 1 INCHES
- D. TOP STEEL OF INTERIOR SLABS
- 7. MAXIMUM DEVIATION FROM THESE REQUIREMENTS SHALL BE 1/4" OF SECTIONS 10" OR LESS,
- 1/2" FOR SECTIONS GREATER THAN 10".

EPOXY ANCHORS:

- EXPANSION BOLTS USED IN CONCRETE SHALL BE SIMPSON STRONG BOLT 2 OR EQUAL. BOLTS
- NEED TO BE INSTALLED IN ACCORDANCE WITH ICC-REPORT ESR-3037. EPOXY ANCHORS AND DOWELS INSTALLED INTO CONCRETE SHALL BE A THREADED ROD OR REINFORCING BAR DOWEL WITH THE HILTI "RE-500SD" ADHESIVE SYSTEM AND BE INSTALLED
- ACCORDING TO ICC-REPORT ESR-2322. CONTRACTOR MAY SUBSTITUTE EXPANSION BOLTS OR EPOXY ADHESIVES OF EQUAL VALUE IN THE SPECIFIED MATERIAL WITH A CURRENT ICC-REPORT FOR REVIEW. EXPANSION BOLTS SHALL NOT BE USED IN MASONRY.
 - Neighborhood Design Overlay District Approval

Any changes to the exterior and/or site plan (including materials) shall be submitted to the Boston Planning and Development Agency ("BPDA") for review and approval.

07/20/2022

APPROVED

BOSTON REDEVELOPMENT AUTHORITY

SIGNATURE M. CANNIZZO

DESIGN REVIEW

MORE THAN 19%. HAVING A MINIMUM

MINIMUM: - FB=2,650 PSI, FV=285 PSI, E=1,900,000 PSI - FOR STUDS COLUMNS

- FB-3100 PSI, FV=285 PSI, E=2,000,000 PSI - FOR BEAMS 4. ALL JOIST SPANS SHALL HAVE ONE ROW OF 1" X 3: CROSS BRIDGING AT MID SPAN

AND NOT MORE THAN 8'-O" O.C.

HORIZONTAL BLOCKING AT 1/2 STUD HEIGHT, AND NOT MORE THAN 6'-O" O.C. MAXIMUM 6. PROVIDE AND INSTALL ALL NECESSARY TIMBER CONNECTORS WITH ADEQUATE STRENGTH

FRAMING 8. PROVIDE SOLID BRIDGING BELOW PARTITIONS PERPENDICULAR TO JOIST FRAMING 9. PROVIDE SOLID BRIDGING BETWEEN JOIST FRAMING MEMBERS WHEN BEARING ON

STUD PARTITIONS OR BEAMS. 10. PROVIDE A CONTINUOUS BAND JOIST AT EXTERIOR STUD 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 A 45 DEGREE ANGLE WITH A SIMPSON TYPE "RCWB" STRAP, OR EQUAL 12. ALL BUILT-UP BEAMS SHALL BE BOLTED WITH $\frac{1}{2}$ " Ø THRU BOLTS, MEETING A307 STANDARDS, OR, AS NOTED ON DRAWINGS. WOOD LINTEL SCHEDULE:

3 - 2x10

Lintels over oper Span of opening:

less than 4'-0" up to 6'-0" up to 8'-0" up to 10'-0"

WOOD NOTES:

1. ALL LUMBER SHALL HAVE A MOISTURE CONTENT OF NOT

2. ALL FRAMING LUMBER SHALL BE #2 HEM-FIR, OR BETTER,

FB=1,200 PSI, FV=70 PSI, E=1,300,000 PSI. 3. ALL L.V.L. LUMBER DENOTED ON PLANS SHALL HAVE A

5. ALL STUD BEARING WALLS SHALL HAVE ONE ROW OF 2X

7. PROVIDE DOUBLE JOIST BELOW PARTITIONS PARALLEL TO JOIST

nings	in bearing walls shall be as	follows; or as noted on drawings.
	Size: 2x6 studs	Size: 2x4 studs
	3 - 2x4	2 - 2x4
	3 - 2x6	2 - 2x6
	3 - 2x8	2 - 2x8

2 - 2x10

MODIFICATION SUMMARY (3-24-2021)-No changes (only repairs) have been made to the front of the existing building within the 20' front yard thus the existing front yard encroachment remain as existing non conforming as allowed per code. The walls at the first floor entry have been returned to their original location and the stairs from grade to the second floor porch have been reintroduced. -All additions have been made greater than 20' from the front lot line. -All trees over 5' have been removed from the front yard area. -All changes from the previous set are clouded in this design set.

MODIFICATION SUMMARY (6-01-2021)

-It was determined from an updated site plan that there was a non buildable passageway to the left of the building so the addition was adjusted accordingly to maintain as of right setbacks as well as be moved out of the boundary of the passageway.

ZONING SUMMARY ARTICLE 50 MFR/ SUBDISTRICT **PROPOSED 10 FAMILY**

ANY OTHER DWELLING	MIN. LOT SIZE	MIN. LOT AREA PER ADD. UNIT	TOTAL LOT SIZE	LOT WIDTH FRONTAGE	FAR H	BLDG. IEIGHT	USABLE OPEN SPACE
REQUIRED BY ZONING	4000 S.F. FOR 3 UNITS	1000 S.F.	11000 S.F.	40	1.0	4 STORIES	200/UNIT (
EXISTING	NA EX'G	NA EX'G	11216 S.F.	106.7'	.46	4 STORIES 43.00'	469/UNIT
PROPOSED PROJECT	4000 S.F. FOR 3 UNITS	1031 S.F.	11216 S.F. NO CHANGE	106.7' + NO CHANGE	9414/11216 .84	4 STORIES 43.00' NO CHANGE	458/UNIT 4587/10 UNITS
PARKING REQUIREMENT RESIDENTIAL USE: 1.00 S	PACE PER U	JNIT		KE	Y		
REQUIRED 10 SPACE PROPOSED 10 SPACE 5 Sp 5 Sp	S S aces 8.5' x 20' aces 8' x 18'				SMOR HEAT CARE EMER HORN 1 HOR 2 HOR FAN 45 MI 1-1/2 J	KE DETECTO T DETECTO BON MONO RGENCY LIC N/ STROBE/ V/ STROBE UR WALL(S UR WALL(S N. DOOR HOUR DOO	OR R XIDE DETECTOF GHT PULL STATION EE W.T.1/A-3.1) EE W.T.2/A-3.1)
				FACP (7)	FIRE WIND 1 HOU	ALARM CO DOW TYPE UR CLG. AE	ONTROL PANEL
NOTE: THERE HAS BEEN NO SOIL TEST PROJECT. THE DESIGNING ARCHITECT	ING PROVIDE OR STRUCTU	D TO THIS OFFICE FO	OR THIS CEPTS NO	2	2 HOU	UR CLG. WA	ALL(SEE C.T.2/A·
OF THIS FOUNDATION SYSTEM IS DESI	ONDITIONS. A	ON A 2 TON MINIMU	M SOIL	(FE)	FIRE	EXTINGUIS	SHER
BEARING CAPACITY. IT SHALL BE THE RESPONSIBILITY TO DETERMINE SUITA	CONTRACTO	ORS OR OWNERS' ONDITIONS AND VER	IFY THE		NEW	WALL	
BEARING PRESSURE. IF A SUITABLE SC BEARING CAPACITY IS NOT AVAILABL THE CONTRACTOR OR OWNER FOR A F	OIL THAT CAN E, THIS OFFIC OUNDATION	N WITHSTAND A 2 TO CE SHOULD BE CONT REDESIGN.	N ACTED BY		EX'G	WALL TO F	REMAIN
					WAL	L TO BE RE	MOVED















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	APPROVED DESIGN REVIEW BOSTON REDEVELOPMENT AUTHORITY
XA	SIGNATURE M. CANINIZZO

07/20/2022

NOTE: EXISTING TREES LOCATED ON THE PROPERTY AS WELL AS EXISTING STREET TREES TO BE ASSESSED BY AN ARBORIST PRIOR TO WORK. ANY TREES DEEMED UNHEALTHY AND IN NEED OF REMOVAL SHALL BE REPLACED WITH NEW TREES

07/20/2022

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			Company, Inc.
			One Billings Boad Quincy, MA 02171
			617-786-7727 fax 617-786-7715
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			No. Revision Date
			11-15-2021
			Project No: 2020113
			Scale: AS NOTED
			Pate: 10-15-2020
	REMARKS		Drawn By: SL
H	DOUBLE HUNG WOOD CLAD		Drawing Name
H	DOUBLE HUNG WOOD CLAD	VE FLOOF	
н Н	WOOD CLAD OPERABLE AWNING	VE THE VE THE ALL HA F2090	rkupused
	WOOD REPLACEMENT OF EX'G ELEMENTS	3' ABO DE SH/ ASTM	ELEVATIONS
Н U	FIXED WOOD CLAD W/ 16" OPERABLE AWNING	THAN	
н Н	DOUBLE HUNG WOOD CLAD	LESS COMPLY	
Ή	DOUBLE HUNG WOOD CLAD	4 SILLS THE A THAT	
H	DOUBLE HUNG WOOD CLAD	NS WITH NS WITH FROM EVISES	Sheet No.
Ц	WOOD ENTRY DOOR W/ 11" SIDELICHTS	WINDOV 1 6' UP	
	DOOR IS TO MATCH EX'G 2ND FLOOR ENTRY DOORS	E THAN G CON	M-Z
H	WD PATIO DOOR	**NOTE & MOR OPENIN	
			11

PRE EXISTING COLUMN WRAPS, BRACKETS, & RAILINGS TO BE

-ocation 7 \longrightarrow _ IT T Η \square \mathbf{Z} • ED K \mathbf{v} (T) \bigcirc B Ā \mathbf{n} \mathbf{X} \bigcirc \sim R S **XCompany Inc.** One Billings Road Quincy, MA 02171 617-786-7727 fax 617-786-7715 and a strange Revision Date --2020113 Project No: Scale: AS NOTED Pate: 10-15-2020 Drawn By: Drawing Name PROPOSED ELEVATIONS Sheet No. A-2,2

07/20/2022

PROPOSED RIGHT SIDE ELEVATION 3/16" = 1'-0"

FLOOR ASSEMBLIES	
System Description Engineered Joist Hardwood Floor System Ecore 5mm ECO silence underlayment 1" gypsum underlayment 9-1/2" min. wood "I" joist max 24" o.c. MINERAL WOOL Blow In RC-1 resilient channel or equivalent 2 LAYERS 1/2" FIRECODE X Core Gypsum Plaster Base 1/16" veneer plaster	FLOO
System Performance 1 HR Fire UL# L544 (STC-55-59) 55-59 STC Sound 50 IIC Sound	
1 HR FLOOR ASSEMBLY - +50 STC	
NOTES: 1. ALL PENETRATIONS TO BE SEALED WITH FIRE STOP SYSTEM SEALANTS, TAPES AND COMPONENTS AS REQUIRED TO MAINTAIN HOURLY RATING. PROVIDE USG FIRE STOP SYSTEM OR EQUAL.	
	2 2 SCALE
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RECOMENDED FASTENING SCHEDULE			
BUILDING ELEMENT	NAIL SIZE AND TYPE	NUMBER AND LOCATION	
STUD TO SOLE PLATE	8P COMMON	4 TOE-NAIL OR 2 DIRECT-NAIL	
STILD TO CAP PLATE		2 TOE-NAIL OR 2 DIRECT-NAIL	
DOUBLE STUDS		1211 OC DIPECT	
CODNER STURS			
CONNER JULY			
DOLE FLATE TO JUDIT OK PLOCNING			
URIBONI STOLD ALL OD LESS			
		3 EACH DIDECT READING	
RUOF RAFIER TO PLATE			
JACK RAFTER TO KIDUE		2 TOE-NAIL OR DIRECT-NAIL 3 TOE-NAIL OR 2 DIPECT-NAIL	
	IGD COMMON		
FLOOR JOISTS TO STUPS (NO CEILING JOISTS)	IOP COMMON IOP COMMON	5 DIRECT OR 3 DIRECT	
FLOOR JOISTS TO STUPS	IOD COMMON	2 DIRECT	
FLOOR JOISTS TO SILL OR GIRDER	3D COMMON	3 TOE-NAIL	
LEDGER STRIP	IGD COMMON	3 EACH DIRECT	
CEILING JOISTS TO PLATE	1617 COMMON	3 TOE-NAIL	
CEILING JOISTS (LAPS OVER PARTITION)	IOP COMMON	3 DIRECT-NAIL	
CEILING JOISTS (PARALLEL TO RAFTER)	IOP COMMON	3 DIRECT	
COLLAR BEAM	IOP COMMON	3 DIRECT	
BRIDGING TO JOISTS	BP COMMON	2 EACH DIRECT END	
DIAGONAL BRACE (TO STUD AND PLATE)	BP COMMON	2 EACH DIRECT BEARING	
TAIL BEAMS TO HEADERS (WHEN NAILING PERMITTED)	200 COMMON	I EACH END 4 5Q, FT, FLOOR AREA	
HEADER BEAMS TO TRIMMERS	20D COMMON	I EACH END 8 5Q, FT, FLOOR AREA	
I'' ROOF DECKING	80 COMMON	2 EACH DIRECT RAFTER	
(OVER 6" IN WIDTH)	80 COMMON	3 EACH DIRECT RAFTER	
I'' SUBFLOORING (6'' OR LESS)	80 COMMON	2 EACH DIRECT JOIST	
I'' SUBFLOORING (8'' OR MORE)	80 COMMON	3 EACH DIRECT JOIST	
2" SUBFLOORING	IGD COMMON	2 EACH DIRECT JOIST	
I'' WALL SHEATHING (8''' OR LESS IN WIDTH)	8D COMMON	2 EACH DIRECT STUD	
I'' 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")	6P COMMON 8P COMMON 16 GALIGE GALVANIZED WIRE STAPLES, 3/8'' MINIMUM CROWN; LENGTH OF I'' PLUS PL WYOOD THICKNESS	6" O.C. DIRECT EDGES & 12" O.C. INTERMEDIATE 6" O.C. DIRECT EDGES & 12" O.C. INTERMEDIATE	
(OVER 6" IN WIDTH)	SAME AS IMMEDIATELY ABOVE	2 1/2" O.C. EDGES & 5" O.C. INTERMEDIATE	
PLYWOOD SUBFLOORING (1/2") (3/8",3/4") (1",11/8")	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	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	
(1/2") (3/8")	16D GALVANIZED WIRE STAPLES 3/8'' MINIMUM CROWN: 13/8' LENGTH	4" O.C. EDGES & 7" O.C. INTERMEDIATE 2 1/2" O.C. EDGES & 4" O.C. INTERMEDIATE	
BUILT-UP GIRDERS AND BEAMS	200 COMMON	32" O.C. DIRECT	
CONTINUOUS HEADER TO STUD	BP COMMON	4 TOE-NAIL	
CONTINUOUS HEADER, TWO PIECES	16D COMMON	1611 O.C. DIRECT	
1/211 FIBER BOARD SHEATHING	1 1/2" GALVANIZED ROOFING NAIL OR 16 GALGE	311 O.C. EXTERIOR EDGE 611 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"	311 O.C. EXTERIOR EDGE 611 O.C. INTERMEDIATE	
GYPSUM SHEATHING	12 GAUGE I 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 IO" O.C. INTERMEDIATE	
PARTICLE BOARD ROOF AND WALL SHEATHING	6P COMMON	6" O.C. DIRECT EDGES 12" O.C. INTERMEDIATE	
1/211 OR LESS			
5/8" OR GREATER	BP COMMON	6" O.C. DIRECT EDGES 12" O.C. INTERMEDIATE	
PARTICLE BUARD SUBFLOORING (5/8" OR GREATER)	87 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	

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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.

WOOD JOISTS SUPPORTED ON WOOD GIRDERS

42.00: GROUP 1 BATHROOMS

- 42.4 **DOORS** -Shall be capable of complying with 521 CMR 26.5, Width through 521 CMR 26.11, Door Hardware. - 42.4.1 Operation: Doors may swing into the *bathroom* if the swing of the door does not impede *clear floor* space. If the door impedes the *clear floor space*, the doors shall be capable of being adapted to swing out, fold or slide.
- 42.5 WATER CLOSETS -
- Shall comply with the following: -
- 42.5.1 *Clear Floor Space*: As defined in **521 CMR 42.2**, **Clear Floor Space**, shall be provided or shall be capable of being provided without structural change in at least one of two specific locations at the water closet. One shall be beside the water closet with its short edge parallel to the wall behind the water closet. The other shall be in front of the water closet with its long edge parallel to the wall behind the water closet. 42.5.2 Location: -
- a. When a water closet is located between a wall and a fixture, its centerline shall be 18 inches (18" = 457 mm)from the wall. If the *clear floor space* is provided in front of the water closet, the centerline of the water closet shall be a minimum of 15 inches (15'' = 381 mm) from the closest edge of the fixture. See Fig. 42c.
- b. When a water closet is located between two fixtures, its centerline shall be 18 inches (18'' = 457 mm) from a bathing fixture and a minimum of 15 inches (15'' = 381 mm) from other types of fixtures. See Fig. 42c. 521 CMR: ARCHITECTURAL ACCESS BOARD 1/27/06 521 CMR - 179 521 CMR: ARCHITECTURAL ACCESS BOARD 1/27/06 521 CMR - 180

42.00: GROUP 1 BATHROOMS

- 42.5.3 Wall reinforcement: Walls adjacent to and behind the water closet shall be capable of structurally supporting the future installation of grab bars from 32 to 38 inches (32'' to 38'' = 813mm to 965mm) above the floor. The back wall shall have reinforcement from the interior corner to a distance of six inches (6'' =152mm) beyond the widest part of the water closet. The side wall shall have reinforcement from the interior corner to a distance of six inches (6'' = 152 mm) beyond the front edge of the water closet, unless interrupted by a door or other fixture, then the reinforcement shall be installed as far as possible.
- When the water closet is located between two fixtures, the wall reinforcement behind the water closet shall be extend at least six inches (6'' = 152mm) beyond the widest part of the water closet. 42.6 **SINKS**
- -- At least one sink in a *bathroom* must meet the following:
- 42.6.1 Vanity Cabinets: If a cabinet is provided under a sink, it shall be capable of being removed without structural change.
- 42.6.2 Knee *Space* Width: The sink shall have or be capable of having a knee *space* of 30 inches (30" = 762mm) in width.
- 42.6.3 Knee *Space* Depth: The front edge of the sink fixture, or the countertop in which a sink is located, shall be a minimum of 19 inches (19'' = 482 mm) from the back wall or shall be capable of being relocated to create a *space* of that depth under the sink.
- 42.6.4 Height: The sink shall be capable of being relocated without structural change. -42.6.5 *Clear Floor Space*: Shall be provided at the sink, as defined in **521 CMR 42.2**, **Clear Floor Space** and shall be perpendicular to the face of the sink and may extend under the sink. See Fig. 42d. 521 CMR: ARCHITECTURAL ACCESS BOARD 1/27/06 521 CMR - 181
- 42.00: GROUP 1 BATHROOMS
- 42.7 BATHING FIXTURES -
- If more than one bathing fixture is provided in a *bathroom*, at least one must meet the requirements of 521 CMR 42.
- 42.7.1 Bathtubs shall comply with the following:
- a. Size: Bathtubs shall be at least a nominal 60 inches $(60" = 1524 \text{mm}) \log 1000$ -
- b. *Clear Floor Space*: At the bathtub, as defined in **521 CMR 42.2**, **Clear Floor Space** shall be parallel to the face of the tub.
- c. Wall Reinforcement: All tub walls shall be capable of structurally supporting the future installation of grab bars from six inches (6'' = 152mm) above the tub rim to a height of 48 inches (48'' = 1219mm) above the tub bottom and shall extend the length and width of the tub.
- d. Door Enclosure: Tracks for sliding doors or enclosures mounted on the rim of a bathtub must be capable of removal to provide a smooth tub rim for transfer.
- 42.7.2 Showers shall comply with the following: -
- a. Size: Shower stalls shall be a minimum, nominal dimension of 36 inches by 36 inches (36" x 36" = 914mm x 914mm).
- b. Minimum *Clear Floor Space*: At the shower, as defined in **521 CMR 42.2**, **Clear Floor Space** shall be located parallel to and centered on the shower stall opening.
- c. Wall Reinforcement: All shower walls shall be capable of structurally supporting the future installation of grab bars, seats, etc., from a height of six inches (6'' = 152mm) to 48 inches (48'' = 1219mm) above the floor and shall extend the full width and length of the shower stall. Grab bars shall not be located behind the seat.
- d. Door: The opening of the shower stall must be 32 inches (32'' = 813mm) wide. If a shower door is provided, it shall be capable of swinging open 180 degrees or capable of being removed. - e. Seat: If a wall mounted seat is provided, it shall be located on a wall adjacent to the opening. The seat shall
- be mounted with the edge as close as possible to the door opening to allow a safe transfer. - f. Hardware Location: Mixing valves shall be mounted on the wall opposite the seat. The centerline of the
- shower controls shall be located between 38 inches and 48 inches (38" to 48" = 965mm to 1219mm). -
- g. Where curbs are provided, they shall not exceed four inches (4'' = 102 mm) in height. 42.7.3 Soap Tray shall not have a hand hold feature unless it can support 250 lbs for five minutes. Soap
- dispensers, holders, etc., shall be located within the zone of reach from the seat. - 42.7.4 Prefabricated Units: In prefabricated showers and tubs, structural reinforcement for grab bars must be in full contact with the surface of walls of the unit on which grab bars may be mounted as described in 521 CMR 42.7.1 (c) and 521 CMR 42.7.2 (c). 521 CMR: ARCHITECTURAL ACCESS BOARD 1/27/06 521 CMR - 182
- 42.00: GROUP 1 BATHROOMS -
- 42.8 OUTLETS AND CONTROLS -
- Shall comply with 521 CMR 39.00: CONTROLS. 42.9 ALARMS
- Shall comply with **521 CMR 40.00: ALARMS**.

- **43.1 GENERAL**
- Shall be measured at the face of the base cabinets or appliances, (excluding cabinet hardware and appliance hardware) and shall be provided at the time of first occupancy as follows:
- 43.2.1 L-shaped kitchens shall have a minimum *clear floor space* of 48 inches by 48 inches (48" x 48" = 1219mm x 1219mm). See Fig. 43a.
- 43.2.2 U-shaped kitchens shall provide a minimum *clear floor space* of 48 inches (48" = 1219mm) between opposing base cabinets or appliances. See Fig. 43b.
- 43.2.3 Galley kitchens shall provide a minimum *clear floor space* of 40 inches (40" = 1016 mm) between opposing base cabinets or appliances. See Fig. 43c. 521 CMR: ARCHITECTURAL ACCESS BOARD 1/27/06 521 CMR - 183
- 43.00: GROUP 1 KITCHENS **43.3 SINKS**
- Shall comply with the following:
- 43.3.1 Sink Cabinet: The base cabinet under the sink shall be capable of being removed to provide a kneespace of 30 inches (30'' = 762 mm) in width.
- 43.3.2 Sink Depth: The sink bowl shall not exceed $6\frac{1}{2}$ inches ($6\frac{1}{2}$ " = 165mm) in depth. Where more than one bowl is provided, only one bowl must meet this requirement. **43.4 COOKING UNITS**
- person in a wheelchair.
- 43.4.1 In-Counter cooktops: If a cooktop is provided, its base cabinet shall be capable of being removed to provide future kneespace the width of the cooktop but not less than 30 inches (30'' = 762 mm) wide. Cooktops shall have controls located at the front or side of the unit.
- 43.4.2 Wall Ovens: If a wall oven is provided, the floor of the wall oven shall be located 30 inches (30" =762mm) above the floor.
- **43.5 WALL CABINETS**
- Walls shall be capable of structurally supporting wall cabinets at any location from 42 inches to 54 inches (42" to 54" = 1067mm to 1372mm) from the floor to the bottom of the inside of the cabinet.
- **43.6 BASE CABINETS**
- Each base cabinet shall be capable of being removed to provide kneespace for persons using wheelchairs. 521 CMR: ARCHITECTURAL ACCESS BOARD 1/27/06 521 CMR - 184
- 43.00: GROUP 1 KITCHENS
- **43.7 REFRIGERATORS**
- *Space* shall be provided so that the refrigerator can be located so that its doors can be opened to 180 degrees. If doors cannot be opened to 180 degrees, a minimum of 30 inches (30"= 762mm) of counter space next to the refrigerator shall be provided.
- **Refrigerators** shall not apply.
- Shall comply with 521 CMR 39.00: CONTROLS. - 43.9 ALARMS

- **46.1 BEDROOMS IN GROUP 1 UNITS** Group 1 units shall provide or be capable of providing, wheelchair turning space as defined in 521 CMR 6.3, Wheelchair Turning Space, *clear* of the door swing, at one side of the bed in the primary bedroom (based on a full size bed). Where more than one bedroom is provided, an additional bedroom shall also provide or be capable or providing wheelchair turning space (based on one twin size bed).

- **46.2 DOORS:**
- Doors to all bedrooms required to comply under 521 CMR 46.1, shall comply with 521 CMR 26.00: **DOORS AND DOORWAYS**.
- 46.3 CLOSETS All closets in bedrooms required to be *accessible* shall comply with **521** CMR **9.5.8**, Closets. 46.4 ELECTRICAL OUTLETS AND CONTROLS Shall comply with **521 CMR 39.00: CONTROLS**.

- 46.5 ALARMS

521 CMR 43.00: GROUP 1 KITCHENS

In all *Group 1* Dwelling units, kitchens shall be designed so that when a unit is adapted a person in a wheelchair has access to the sink, cooking surface, refrigerator, and a food preparation surface and can turn around without having to leave the kitchen.

- 43.2 CLEAR FLOOR SPACE:

- Shall comply with the following to ensure that both burners and ovens can be made functional and safe for a

- 43.7.1 Where refrigerators are provided with less than nine cubic feet of capacity, **521 CMR 43.7**,

43.8 OUTLETS AND CONTROLS

Shall comply with **521 CMR 40.00: ALARMS**.

521 CMR 46.00: GROUP 1 BEDROOMS

- Shall comply with **521 CMR 40.00: ALARMS**.

- 9.5 DWELLING UNIT INTERIORS
- The interiors of all Group 1 and 2 dwelling units, except as exempted by 521 CMR 9.2.1, shall comply with the following requirements: 521 CMR: ARCHITECTURAL ACCESS BOARD 1/27/06 521 CMR - 46 9.00: MULTIPLE DWELLINGS
- 9.5.1 Doorways: All doorways and all openings that allow passage in a Group 2 unit must comply with 521 CMR 26.2, Double Leaf Doorways, through 521 CMR 26.11, Door Hardware. All doorways and all openings that allow passage in Group 1 units shall be capable of complying, without structural change, with 521 CMR 26.2, Double Leaf Doorways, through 521 CMR 26.11, Door Hardware. For door types such as bifold, pocket, and accordion doors, the clear opening is measured when the door is in its most fully open position. See Fig. 26b and 26c. For Group 1 units, only the common area and apartment entrance door hardware are required to comply with 521 CMR 26.11, Door Hardware.
- 9.5.2 Every entry door to each *dwelling unit* shall have a means by which the resident can visually identify a visitor before opening the door. This may be achieved by any of the following means:
- a. In Group 1 and 2A units, a peephole mounted 60 inches (60'' = 1524mm) above the floor, a vision panel in the door with its bottom edge no higher than 60 inches (60'' = 1524mm) above the floor, or a sidelight with its bottom edge no higher than 60 inches (60" = 1524 mm) above the floor, shall be provided.
- b. In *Group 2B* units, an additional peephole mounted at 42 inches (42'' = 1067mm) above the floor; a vision panel in the door with its bottom edge no higher than 42 inches (42'' = 1067mm) above the floor; or a sidelight with its bottom edge no higher than 42 inches (42'' = 1067mm) above the floor. See Fig. 9a.
- 9.5.3 Buzzers/bells and intercoms: All buzzers/bells and intercom systems shall comply with 521 CMR 6.5, Forward Reach or 521 CMR 6.6, Side Reach. 521 CMR: ARCHITECTURAL ACCESS BOARD 1/27/06 521 CMR - 47
- 9.00: MULTIPLE DWELLINGS
- 9.5.4 Accessible routes: An accessible route at least 36 inches (36" = 914mm) wide shall be provided to all rooms and spaces in the *dwelling unit* including exterior decks, patios, balconies, attached garages, and storage closets. An accessible route shall be provided to mechanical spaces, only if the resident is expected to service, adjust or maintain the equipment therein.
- a. Patios, Terraces, and Balconies: Where it is necessary to use a door threshold or a change in level between the interior and exterior, greater than $\frac{1}{2}$ inch ($\frac{1}{2}$ " = 13mm) to protect the integrity of the unit from water or snow damage, equivalent facilitation such as raised decking or a ramp shall be provided or capable of being provided.
- In Group 2B Units, the exterior deck, patio, balcony surfaces shall be either permanently installed at no more than $\frac{1}{2}$ inch ($\frac{1}{2}$ " = 13mm) below the floor level of the interior of the *dwelling unit* or a temporary raised surface, such as duckboards, that is no more than $\frac{1}{2}$ inch ($\frac{1}{2}$ " = 13mm) below the interior floor *level* shall be available upon request.
- 9.5.5 Laundry Facilities: If a washer or dryer is provided in a *Group 1* or *Group 2A* unit, it shall be front loading or capable of being replaced with a front loading appliance. If a washer or dryer is provided in a Group 2B dwelling unit, it shall be front loading. Operating controls for washers and dryers shall be located within the zone of reach. If residents are expected to operate shut-off valves for the washer, the shut-off valves shall be located within the *zone of reach*. For common area laundry facilities, *see* **521** CMR 10.8, Laundry Facilities.
- 9.5.6 Outlets: Electrical outlets, telephone outlets, cable TV jacks, and other wall outlets shall be located between 15 inches (15'' = 381 mm) and 48 inches (48'' = 1219 mm) above the floor, measured at the centerline of the lowest receptacle. All outlets shall be located no less than 18 inches (18" = 457 mm) from interior corners. When outlets are located on walls above counters or other fixtures that are 22 inches (22" = 559mm) or greater in depth, they shall be no higher than 44 inches (44'' = 1118mm). In *Group 1* and 2 units, at least one electrical outlet must be provided on the same wall as the telephone outlet and the door chime. Wherever exterior decks, patios, and balconies are provided, an exterior electrical outlet shall also be provided.
- In *Group 2B* units, all telephone outlets must have an electrical outlet located within 12 inches (12" = 305mm) for installation of a *TTY*.
- 9.5.7 Controls and alarms: In Group 2A and 2B units, the operable portions of all controls and alarms, including but not limited to: intercoms, and heat and air controls, shall be located between 36 and 48 inches (36" to 48" = 914mm to 1219mm) above the floor, measured at the centerline of the operable portion in its highest position. Operable portions shall be located at least 24 inches (24" = 610mm) from interior corners. Controls and alarms in *Group 1* units may be located at other locations so long as sufficient wiring is provided to permit future location from 36 inches to 48 inches (36" to 48" = 914mm to 1219mm) above the floor. 521 CMR: ARCHITECTURAL ACCESS BOARD 1/27/06 521 CMR - 48 9.00: MULTIPLE DWELLINGS
- 9.5.8 Closets/pantries and linen closets: Shall comply with the following: - a. Closet shelves/poles: Closet walls shall be structurally capable of supporting the installation of shelves and
- poles which are relocatable from 42 inches to 72 inches (42" to 72" = 1067mm to 1829mm) to the top of shelf or pole whichever is higher. - b. Closet depth: Where the interior depth of the closet exceeds 24 inches (24'' = 610 mm), the doorway must
- comply with **521 CMR 26.5**, Width so that a disabled person can enter the closet. The bottom track of the closet door must also be recessed with no more than $\frac{1}{4}$ of an inch ($\frac{1}{4}$ " = 6mm) change in finish material For *Group 2 units*, when the interior depth of the closet is 24 inches (24'' = 610 mm) or less, it shall be open to the room to permit a person with a disability to reach all parts of the closet. See Fig. 9b. 521 CMR: ARCHITECTURAL ACCESS BOARD 1/27/06 521 CMR - 49
- 9.00: MULTIPLE DWELLINGS
- 9.6 TOWNHOUSES GROUP 1 UNITS ONLY: RESERVED until further notice. In the interim, they are exempt
- 9.7 SLEEPING ACCOMMODATIONS FOR PERSONS WHO ARE DEAF OR HARD OF **HEARING**
- In addition to those units required to be *accessible* by **521 CMR 9.4, Group 2 Dwelling Units**, 2% of the total number of *dwelling units* in the complex or project, but not less than one shall comply with the following:
- 9.7.1 *Sleeping accommodations* for persons who are deaf or hard of hearing required by **521 CMR 9.7** shall comply with the following requirements for smoke/fire/safety alarms, visual signal devices, telephones, televisions, alarm clocks and climate controls.
- 9.7.2 Auxiliary Visual Alarms: *Sleeping accommodations* shall be equipped with auxiliary visual alarms which comply with 521 CMR 40.4:
- a. a visual alarm connected to the *building* emergency alarm system; or
- b. a standard 110-volt electrical receptacle into which such an alarm can be connected and a means by which a signal from the *building* emergency alarm system can trigger such an auxiliary alarm. Such receptacle shall be connected to the emergency or standby power, (if provided in the *building*).
- The visual alarm signal shall be visible in all areas of the unit or room. Instructions for use of the auxiliary alarm or receptacle shall be provided.
- 9.7.3 Visual Notification Devices shall be provided in *sleeping accommodations* to alert room occupants of incoming telephone calls and a door knock or doorbell. Visual notification devices shall not be connected to auxiliary visual alarm signal appliances.
- 9.7.4 Equivalent Facilitation: For rooms required under **521** CMR 9.7, the operator of a *facility* may either permanently install the equipment required under 521 CMR 9.7 or may elect to install electrical outlets (including outlets connected to a *facility*'s central alarm system) and telephone wiring in sleeping rooms and suites to enable persons with hearing impairments to utilize portable visual alarms and communication devices. For purposes of equivalent facilitation, such devices shall be provided by the operator of the *facility* during the tenancy of a person with a hearing impairment.

SKYPAVER ROOFING ASSEMBLY SECTION SCALE: NTS

ADHESIVE. (SEE NOTE #5)

C FIRESTONE BUILDING PRODUCTS

USE APPROPRIATE TERMINATION -

WALL

CONTINUOUS BEAD OF

FIRESTONE AP SEALANT OR

WALL

RUBBERGARD EPDM MEMBRANE

USE APPROPRIATE

(STEP #1)

2

3

SCALE: NTS

(STEP #3)

USE APPROPRIATE

TERMINATION

TERMINATION

TYPICAL VERTICAL (A6) MULLION DETAIL SCALE: 3"=1'-0"

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DESIGN CRITERIA:

1.	this The	STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH MASSACHUSETTS BUILDING CODE 9TH EDITION AND ALL REFERENCED CODES
	roo Live	F: LOAD: BASE_SNOW_LOAD_(Pg)= 45 PSF + DRIFT
		WHERE APPLICABLE. FLAT ROOF SNOW LOAD (PF)= 32 PSF
		DEAD LOADS FOR NEW CONSTRUCTION: INSULATION 3.0 PSF METAL DEC 2.0 PSF FRAMI 3.0 PSF MECH.; LIGHTS; MIS 7.0 PSF TOTAL DEAD L 15.0 PSF
WI	IND L MEA BASI	_OAD 105 MPH N ROOF HEIGHT 70 FT IC VELOCITY PRESSURE Pv 23 PSF
DE	EFLEC	CTION LIMITS: ROOF L/240 LIVE LOAD ONLY
		L/180 DEAD LOAD + LIVE LOAD
		LINTELS L/600 DEAD LOAD + LIVE LOAD
	G	ENERAL NOTES:
	1.	THE INTENT OF THE STRUCTURAL DRAWINGS IS TO SHOW THE MAIN STRUCTURAL FEATURES AND DESIGN FOR THE COMPLETED PROJECT. ARCHITECTURAL DETAILS AND OTHER COMPONENTS THAT MAY BE NECESSARY TO CONSTRUCT THE PROJECT ARE SHOWN INCIDENTALLY ONLY, AND NOT COMPLETELY. THEREFORE ALL CONTRACT DRAWINGS AND SPECIFICATIONS MUST BE USED IN CONJUNCTION WITH THE STRUCTURAL DRAWINGS DURING ALL PHASES OF CONSTRUCTION. DISCREPANCIES BETWEEN STRUCTURAL DRAWINGS AND ARCHITECTURAL DRAWINGS, IF NOT CLARIFIED IN THE ADDENDA AT THE REQUEST OF THE CONTRACTOR, SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT DURING CONSTRUCTION FOR CLARIFICATIONS. THE CONTRACTOR SHALL TAKE THIS INTO CONSIDERATION IN HIS BID.
	2.	THE CONTRACTOR SHALL INFORM THE ARCHITECT OF ALL DISCREPANCIES BETWEEN DRAWINGS OF DIFFERENT TRADES, PRIOR TO INITIATION OF ANY WORK.
	3.	THE CONTRACTOR SHALL BE COMPLETELY RESPONSIBLE FOR THE SAFETY OF ADJACENT STRUCTURES, PROPERTY AND THE PUBLIC.
	4.	REFER TO ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR VERIFICATION OF LOCATIONS AND DIMENSIONS OF ALL CHASES, SLOTS, INSERTS, CURBS, OPENINGS, SLEEVES, ANCHOR BOLTS, FLOOR PITCHES, ANGLE FRAMES AND ALL OTHER PROJECT REQUIREMENTS NOT SHOWN ON STRUCTURAL DRAWINGS.
	5.	WORK NOT INDICATED ON A PART OF THE DRAWINGS BUT REASONABLY IMPLIED TO BE SIMILAR TO THAT SHOWN AT CORRESPONDING LOCATION, SHALL BE INCLUDED.
	6.	DETAILS SHOWN AS TYPICAL ARE APPLICABLE TO ALL SIMILAR CONDITIONS.
	7. ,	ALL CONTRACTORS ARE REQUIRED TO EXAMINE THE DRAWINGS AND SPECIFICATIONS CAREFULLY, VISIT THE SITE AND FULLY INFORM THEMSELVES AS TO ALL EXISTING CONDITIONS AND LIMITATIONS, PRIOR TO SUBMITTING THE PROPOSAL. FAILURE TO VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH THE EXISTING CONDITIONS AND LIMITATIONS WILL IN NO WAY RELIEVE THE SUCCESSFUL BIDDER FROM FURNISHING ANY MATERIALS OR PERFORMING ANY WORK IN ACCORDANCE WITH DRAWINGS AND SPECIFICATIONS WITHOUT ADDITIONAL COST TO THE OWNER.

8. CONTRACTOR SHALL FIELD MEASURE ALL EXISTING CONDITIONS AND COORDINATE THEIR FINDINGS WITH THE NEW WORK.

BEING SUBMITTED TO THE ARCHITECT FOR APPROVAL.

. THESE DRAWINGS SHALL BE CHECKED AND COORDINATED WITH OTHER MATERIALS AND CONTRACTS BY THE GENERAL CONTRACTOR AND SHOP AND SUBMITTALSHAL BEAR THE CONTRACTOR'S REVIEW STAMP WITH THE CHECKER'S INITIALS BEFORE

 WHEN THE FABRICATOR HAS BEEN AUTHORIZED TO USE THE ARCHITECTS AND ENGINEERS DRAWINGS AS ERECTION DRAWINGS, THE FABRICATOR MUST REMOVE ALL TITLE BLOCKS, PROFESSIONAL SEALS AND ANY OTHER REFERENCES TO THE ARCHITECT AND ENGINEER FROM THAT ERECTION DRAWINGS.

3. WHERE DIMENSIONS AND ELEVATIONS OF EXISTING CONSTRUCTION COULD EFFECT THE NEW CONSTRUCTION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAKE FIELD

MEASUREMENTS IN TIME FOR THEIR INCORPORATION IN THE SHOP DRAWINNGS

SHOP DRAWINGS AND SUBMITTALS

<u>REINFORCED CONCRETE NOTES:</u> 1. ALL CONCRETE WORK SHALL CONFORM TO THE LATEST EDITION OF THE ACI BUILDING CODE AND TO THE INTERNATIONAL BUILDING CODE 2009. IN CASE OF CONFLICT, THE INTERNATIONAL BUILDING CODE 2009 SHALL GOVERN.

- IN CASE OF CONFLICT, THE INTERNATIONAL BUILDING CODE 2009 SHALL GOVERN.2. ALL CONCRETE SHALL BE CONTROLLED, MIXED AND PLACED UNDER THE SUPERVISION OF AN APPROVED CONCRETE TESTING AGENCY.
- 3. ALL CONCRETE EXPOSED TO THE WEATHER SHALL CONTAIN AN AIR ENTRAINMENT ADMIXTURE.
- 4. UNLESS OTHERWISE NOTED ON PLANS, ALL CONCRETE SHALL BE NORMAL WEIGHT AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 POUNDS PER SQUARE INCH AT THE END OF 28 DAYS. CONCRETE SLABS ON GRADE SHALL BE NORMAL WEIGHT AND HAVE MINIMUM COMPRESSIVE STRENGTH OF 4,000 P.S.I.
- 5. CONCRETE QUALITY IN ACCORDANCE WITH THE REQUIREMENTS OF THESE DRAWINGS AND SPECIFICATIONS IS ESSENTIAL TO THE STRUCTURAL PERFORMANCE OF THIS BUILDING. CONCRETE THAT IS NOT IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS WILL NOT BE ACCEPTED.
- 6. CONCRETE MUST REACH THE FOLLOWING PERCENTAGES OF ITS 28 DAY COMPRESSIVE STRENGTH (f'c) BEFORE FORMS OR SHORES MAY BE REMOVED: WALLS 40%
- CONSTRUCTION JOINT LOCATIONS OTHER THAN SHOWN ON THE DRAWINGS ARE PERMITTED SUBJECT TO PRIOR APPROVAL OF THE ENGINEER. EXPANSION JOINT AND CONTROL JOINT LOCATIONS ARE MANDATORY, AS SHOWN.
- REINFORCING BARS SHALL CONFORM TO ASTM A615 WITH 60,000 PSI YEILD STRENGTH, AS INDICATED AND SHALL HAVE THE FOLLOWING CONCRETE COVER, UNLESS NOTED OTHERWISE ON THE DRAWINGS:
 A. SURFACES PLACED IN CONTACT

 - B. FORMED SURFACE EXPOSED TO GROUND....2"
 - C. INSIDE FACE OF FORMED WALL......1 1/2"D. WALL PIER TIES......1 1/2"
- WELDED WIRE FABRIC WILL CONFORM TO ASTM A185; LAP TWO SQUARES AT ALL SPLICES AND TIE AT 3 FOOT CENTERS.
- 10. PROVIDE CLASS B SPLICE FOR ALL CONTINUOUS REINFORCEMENT, UNLESS OTHERWISE INDICATED.
- PROVIDE BAR SUPPORTS, SPACERS AND ACCESSORIES RECOMMENDED IN THE LATEST ADDITION OF THE ACI DETAILING MANUAL, PUBLICATION SP-66. ALL REINFORCEMENT DETAILING, LAP SPLICES AND EMBEDMENT WILL CONFORM TO THIS MANUAL. ALL ACCESSORIES, SUCH AS SLAB BOLSTERS AND BEAM AND SLAB CHAIRS IN CONTACT WITH EXPOSED SURFACES SHALL BE ZINC COATED OR PLASTIC TYPE.
- 12. PIPES OR CONDUITS PLACED IN SLABS ON GRADE SHALL NOT BE PLACED CLOSER THAN 3 DIAMETER ON CENTER AND SHALL HAVE AN OUTSIDE DIAMETER LESS THAN 1/3 OF THE SLAB THICKNESS. ALUMINUM CONDUITS SHALL NOT BE PLACED IN CONCRETE.
- 13. DETAILING OF REINFORCEMENT SHALL BE ACCORDING TO THE LATEST EDITION OF ACI 315 "MANUAL OF STANDARD PRACTICE FOR DETAILING
- REINFORCED CONRETE STRUCTURES". 14. SET AND TIE ALL REINFORCEMENT BEFORE PLACING CONCRETE. SETTING
- DOWELS AND REINFORCEMENT INTO WET CONCRETE IS PROHIBITED. 15. EXPOSED EDGES OF CONCRETE ELEMENTS, SUCH AS PILASTERS, CURBS AND EQUIPMENT PADS WILL HAVE 1 INCH CHAMFER.
- EQUIPMENT PADS WILL HAVE 1 INCH CHAMFER. 16. NOT ALL OPENINGS THROUGH CONCRETE SLABS AND WALLS ARE SHOWN ON STRUCTURAL DRAWINGS. OPENINGS INDICATED, OR ANY ADDITIONAL OPENINGS OR INSERTS REQUIRED, SHALL BE VERIFIED WITH RESPECTIVE TRADES BEFORE POURING OF CONCRETE.
- 17. USE NON-SHRINK, NON-METALLIC GROUT, WHERE INDICATED. SEE SECTION 03300, CAST-IN-PLACE CONCRETE OF THE SPECIFICATIONS FOR ALL THE REQUIREMENTS.
- 18. FLOOR SLOPES WILL BE AN INTEGRAL PART OF STRUCTURAL SLABS. SEPERATE CONCRETE FILL IS NOT PERMITTED UNLESS SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS. CONCRETE CAST ON SLOPED SURFACES SHALL BEGIN AT THE LOWEST ELEVATION AND CONTINUE MONOLITHICALLY TOWARD THE HIGHER ELEVATIONS UNTIL THE INTENDED POUR IS COMPLETED.
- 19. SEE ARCHITECTURAL DRAWINGS FOR FINISHES, DEPRESSIONS, REGLETS, NOTCHES AND OTHER ARCHITECTURAL FEATURES.
- 20. SET ANCHOR BOLTS AND EMBEDDED PLATES REQUIRED FOR CONNECTION OF WORK BY OTHERS.
- 21. PROVIDE CONCRETE PADS FOR MECHANICAL EQUIPMENT ACCORDING TO THE REQUIREMENTS OF THE MANUFACTURER AND IN ACCORDANCE WITH THE TYPICAL DETAILS. ALWAYS PROVIDE MINIMUM REINFORCEMENT FOR PADS, UNLESS NOTED OTHERWISE. COORDINATE LOCATIONS WITH MECHANICAL DRAWINGS.
- 22. NO CONCRETE SHALL BE CAST BEFORE REVIEW AND APPROVAL OF THE REINFORCING AND EMBEDDED ITEMS HAVE BEEN OBTAINED FROM THE ARCHITECT.

CONVENTIONAL WOOD FRAMING

- 1. ALL SAWN LUMBER FRAMING MEMBERS SHALL BE SPRUCE-PINE-FIR WITH THE
- FOLLOWING MINIMUM GRADES: A. JOISTS, RAFTERS, SOLID AND BUILT-UP BEAMS, WALL STUDS AND LINTELS; NO. 1 GRADE. B. SILLS AND PLATES; STUD GRADE. C. SOLID WOOD POSTS; NO. 1 GRADE.
- D. BRIDGING, BLOCKING AND NAILERS; STUD GRADE.
- 2. ALL "MICRO LAM' (ML) MEMBERS SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:
- A. E = 2,000,000 PSI B. Fb = 2800 PSI
- C. Ft = 1850 PSI

F. Fv = 285 PSI

D. Fc (perpendicular) = 500 PSI E. Fc (parallel) = 2700 PSI

3. UNLESS OTHERWISE NOTED, ALL NAILING AND FASTENING SHALL BE IN ACCORDANCE WITH SECTION 2305.2 FASTENING SCHEDULE, MASSACHUSETTS BUILDING CODE.

 WOOD SILLS BENEATH ALL INTERIOR BEARING WALLS AND ALL MEMBERS EXPOSED TO WEATHER OR MOISTURE SHALL BE PRESERVATIVE TREATED IN ACCORDANCE WITH THE "AMERICAN WOOD PRESERVERS ASSOCIATION, STANDARD C1". U.O.N. ON DRAWING
 ALL STUD WALLS, BEARING AND NON-BEARING, SHALL HAVE ONE ROW OF CONTINUOUS 2X SOLID BLOCKING BETWEEN STUDS AT MID-HEIGHT. BLOCKING SIZE TO MATCH STUD SIZE.

6. FRAMING MEMBERS SHALL NOT BE NOTCHED, CUT OR ALTERED IN THE FIELD WITHOUT THE SPECIFIC APPROVAL OF THE ENGINEER.

7. ALL METAL CONNECTORS FOR WOOD CONSTRUCTION SHALL BE HOT-DIPPED GALVANIZED METAL SHAPES AS MANUFACTURED BY "SIMPSON STRONG-TIE COMPANY, INC." AND BE ATTACHED BY THE GENERAL CONTRACTOR AS PER THE "SIMPSON STRONG-TIE" SPECIFICATION.

8. ALL ROOF SHEATHING SHALL BE 5/8 INCH APA RATED PLYWOOD SHEATHING 32/16. USE EXPOSURE 1, STRUCTURAL 1, C-D, PANELS, EXCEPT USE EXTERIOR PANELS FOR STARTER STRIPS ALONG EAVES AND WHEN LONG CONSTRUCTION DELAYS ARE ANTICIPATED. APPLY PANELS WITH THE FACE GRAIN PERPENDICULAR TO THE RAFTERS OR TRUSSES AND CONTINUOUS OVER TWO OR MORE SPANS. INSTALL 2x6 BLOCKING ALONG PANEL ENDS BETWEEN EACH RAFTER OR TRUSS. ATTACH PANELS WITH GLUE AND 10d COMMON NAILS AT 6 INCHES ON CENTER AT PANEL EDGES AND 10 INCHES ON CENTER AT INTERMEDIATE SUPPORTS.

9. ALL FLOOR SHEATHING SHALL BE 3/4" APA RATED 'STUR-I-FLOOR", 24 OC, TONGUE AND GROOVE. USE EXPOSURE 1 PANELS, APPLY PANELS WITH THE FACE GRAIN PERPENDICULAR TO THE JOISTS OR TRUSSES AND CONTINUOUS OVER TWO OR MORE SPANS. ATTACH PANELS BY GLUE-NAILING AS FOLLOWS:

- A. SPREAD GLUE IN ACCORDANCE WITH RECOMMENDATIONS OF GLUE MANUFACTURER AND INDUSTRY PRACTICE.
- B. STAGGER END JOINTS IN EACH SUCCEEDING ROW, LEAVING 1/8 INCH SPACE BETWEEN ALL END AND END JOINTS, INCLUDING TONGUE AND GROOVE EDGES.

C. COMPLETE ALL NAILING OF EACH PANEL BEFORE GLUE SETS WITH 6d RING OR SCREW SHANK NAILS AT 6 INCHES ON CENTER AT PANEL EDGES AND 12 INCHES AT INTERMEDIATE SUPPORTS.
10. ALL EXTERIOR WALL SHEATHING SHALL BE 1/2 INCH APA RATED, EXPOSURE 1, STRUCTURAL 1, DIMMOND OF DEPENDENT OF A TABLE SHEATHING SHALL BE 1/2 INCH APA RATED, EXPOSURE 1, STRUCTURAL 1, DIMMOND OF DEPENDENT.

PLYWOOD C-D PANELS. ATTACH PANELS WITH 8d COMMON NAILS @ 4" OC AT PANEL EDGES AND 12" OC AT INTERMEDIATE SUPPORTS. ALL PLYWOOD WALL SHEATHING SHALL BE BLOCKED AT PANEL EDGES BELOW TRUSS PLYWOOD SHEATHING SHALL BE 1/2 INCH APA RATED, EXPOSURE 1, TONGUE AND

GROOVE PLYWOOD A-C PANELS. ATTACH PANELS WITH 10d COMMON NAILS @ 6" ON CENTER AT PANEL EDGES AND 10" OC AT INTERMEDIATE SUPPORTS, ALL BELOW TRUSS SHEATHING SHALL BE BLOCKED AT PANEL EDGES.

12. "BCI/XX" REFERS TO A WOODII - JOIST MANUFACTURED BY BOISE CASCADE BOISE, IDAHO OR APPROVED EQUAL. REFER TO MANUFACTURERS RECOMMENDATIONS REGARDING ATTACHMENTS, BRACING, WEB STIFFENERS, BLOCKING, ETC.

13. "TIMBERSTRAND RIM BOARD" REFERS TO A MANUFACTURED WOOD EDGE BEAM, CONTINUOUS BLOCKING OR LINTEL AS MANUFACTURED BY TRUSS JOIST MACMILLAN, BOISE, IDAHO OR APPROVED EQUAL WITH THE FOLLOWING MINIMUM PROPERTIES.

A. E = 1,300,000 PSI. B. Fb = 1,700 PSI.

C. Fv = 400 PSI.

D. Fc⊥ = 680 PSI.

E. VERTICAL LOAD TRANSFER CAPACITY = 3450 PLF ($\frac{1}{4}$ " THICK).

Location

PROPOSED 2ND FLOOR FRAMING PLAN 3/16" = 1'-0"

 $-11\frac{7}{8}$ " BCI 90S-2.0 @16" O.C.

FOR JOIST TO BEAM CONNECTION

INDICATES JOIST BRIDGING

PROPOSED 3RD FLOOR FRAMING PLAN 3/16'' = 1'-0''

3/4" = |'-0"

HEADER SCHEDULE (U.N.U.)					
	BEARING WALLS				
OPNG. WIDTH	HDR. DEPTH	KING STUDS	TRIMMER		
3'-6" OR LESS	6"	2-2x6	1-2x6		
3'-6" TO 6'-6"	6"	3-2x6	1-2x6		
6'-6" TO 8'-6"	SEE PLAN	5-2x6	2-2x6		
8'-6" TO 16'-0"	SEE PLAN	7-2x6	3-2x6		
NON-BEARING WALLS					
OPNG. WIDTH	HDR. DEPTH	KING STUDS	TRIMMER		
4'-0" OR LESS	6"	2-2x6	1-2x6		
4'-0" TO 7'-6"	6"	3-2x6	1-2x6		
7'-6" TO 10'-0"	10"	5-2x6	2-2x6		
10' 0" TO 14' 0"	12"	6 2v6	3 2v6		

	DED FASTENING	SCHEDULE	
	8D COMMON	4 TOE-NAIL OR 2 DIRECT-NAIL	
	16D COMMON		
	16D COMMON	2 TOE-NAIL OR 2 DIRECT-NAIL	
		24" O.C. DIRECT	
BLOCKING	16D COMMON	16" O.C.	
	10D COMMON	16" O.C. DIRECT	
	10D COMMON	2 DIRECT-NAIL	
	10D COMMON	2 EACH DIRECT BEARING	
3	10D COMMON	3 EACH DIRECT BEARING	
	8D COMMON	2 TOE-NAIL	
	10D COMMON	3 TOE-NAIL OR 2 DIRECT-NAIL	
	16D COMMON	S DIRECT OR 2 DIRECT	
	10D COMMON 10D COMMON	5 DIRECT OR 3 DIRECT	
	10D COMMON	2 DIRECT	
GIRDER	3D COMMON	3 TOE-NAIL	
	16D COMMON	3 EACH DIRECT	
	16D COMMON	3 TOE-NAIL	
R PARTITIO	N) 10D COMMON	3 DIRECT-NAIL	
L TO RAFTE	R) 10D COMMON	3 DIRECT	
	8D COMMON	3 DIRECT	
JD AND PLA	TE) 8D COMMON	2 EACH DIRECT BEARING	
	20D COMMON	1 EACH END 4 SQ. FT. FLOOR AREA	
TED) /ERS		1 EACH END 8 SO ET ELOOP AREA	
ILKS	8D COMMON	2 EACH DIRECT RAFTER	-
	8D COMMON	3 EACH DIRECT RAFTER	
ESS)	8D COMMON	2 EACH DIRECT JOIST	
JKE)	16D COMMON	2 EACH DIRECT JOIST	
R LESS IN W	DTH) 8D COMMON	2 EACH DIRECT STUD	hoo
R 8" IN WID	H) 8D COMMON	3 EACH DIRECT STUD	Company Inc
SHEATHING	6D COMMON 8D COMMON	6" O.C. DIRECT EDGES & 12" O.C. INTERMEDIATE	
	16 GAUGE GALVANIZED WIRE STAPLES,	6" O.C. DIRECT EDGES & 12" O.C. INTERMEDIATE	
	3/8" MINIMUM CROWN; LENGTH OF 1" PLUS PLYWOOD THICKNESS SAME	4" O.C. EDGES & 8" O.C. INTERMEDIATE	One Billings Road Quincy, MA 02171 617-786-7727 fax 617-786-7715
	AS IMMEDIATELY ABOVE	2 1/2" O.C. EDGES & 5" O.C. INTERMEDIATE	
	6D COMMON OR 6D ANNULAR OR SPIRAL THREAD	6" O.C. DIRECT EDGES & 10" O.C. INTERMEDIATE	- Notesta
	8D COMMON OR 8D ANNULAR OR SPIRAL THREAD	6" O.C. DIRECT EDGES & 10" O.C. INTERMEDIATE 6" O.C. DIRECT EDGES & 10" O.C. INTERMEDIATE	MENTH OF MAL
	10D COMMON OR 8D RING SHANK OR 8D ANNULAR OR SPIRAL THREAD	6° O.C. DIRECT EDGES & 6° O.C. INTERMEDIATE	DOV KIRSZTAN
	16D GALVANIZED WIRE STAPLES 3/8" MINIMUM CROWN: 1 3/8' LENGTH	4" O.C. EDGES & 7" O.C. INTERMEDIATE 2 1/2" O.C. EDGES & 4" O.C. INTERMEDIATE	STRUCTURAL STRUCTURAL
EAMS	20D COMMON	32" O.C. DIRECT	
STUD	8D COMMON	4 TOE-NAIL	AND TAL ENGLAND
O PIECES	16D COMMON I 1/2" GALVANIZED ROOFING NAIL OR	16" O.C. DIRECT	
ING	16 GAUGE STAPLE, 1 1/2" LONG WITH MIN. CROWN OF 7/16"	5 U.C. EXTERIOR EDGE 0 U.C. INTERMEDIATE	No. Revision Date
ΓHING	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	
	12 GAUGE 1 3/4" LARGE HEAD CORROSION - RESISTANT	4" O.C. EDGE 8" O.C. INTERMEDIATE	
	6D ANNULAR THREADED	6" O.C. DIRECT EDGES 10" O.C. INTERMEDIATE	
	6D COMMON	6" O.C. DIRECT EDGES 12" O.C. INTERMEDIATE	
	8D COMMON	6" O.C. DIRECT EDGES 12" O.C. INTERMEDIATE	
ORING	8D COMMON	6" O.C. DIRECT EDGES 12" O.C. INTERMEDIATE	
	NO. 14 B&S GAGE CORROSION RESISTIVE	2 EACH BEARING	Project No. 2020112
IALL DENET	8D CORROSION	2 EACH BEARING	
AS OTHERWI	SE PROVIDED IN 780 CMR 1225.4.4.	TRIFS, SHEATHING OK SUFFORTING	Scale: AS NOTED
			Date: 10-15-2020
			Drawa Buy SI
			Drawing Name
			PROPOSED
			DETAILS

Sheet No.