

ENOS RESIDENCE 41 RIVERSIDE DRIVE ONSET, MA

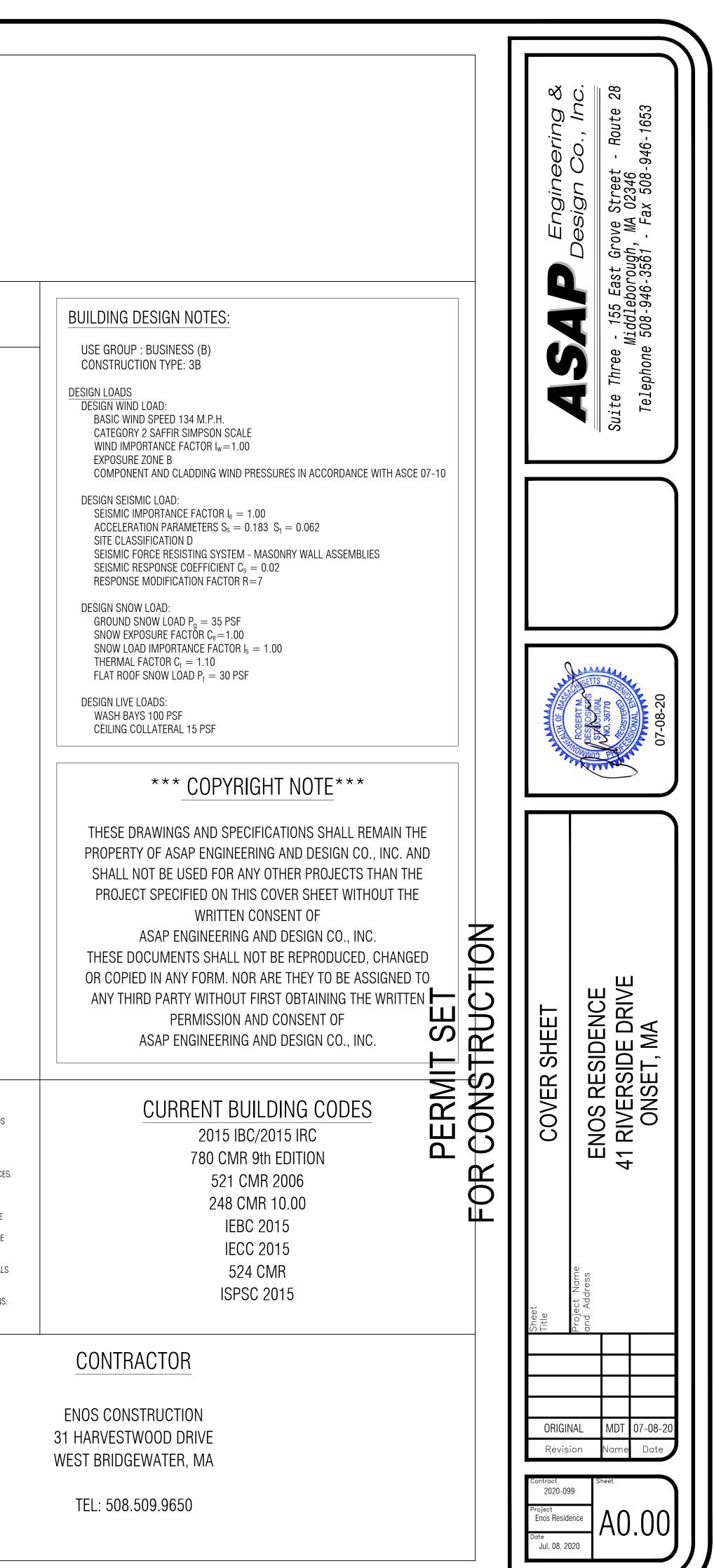
ALL MATERIALS USED IN THE CONSTRUCTION OF THIS SPACE MUST BE ASBESTOS

IT IS THE RESPONSIBILITY OF THE CONTRACTOR(S), WHEN PREPARING FOR AND PROCEEDING WITH CONSTRUCTION IN THE PREMISES, TO COMPLY WITH ALL REQUIREMENTS OF ALL APPLICABLE LAWS CONCERNING HAZARDOUS SUBSTANCES. THE CONTRACTOR(S) SHALL NOT PERMIT THE INSTALLATION OR USE OF ANY HAZARDOUS SUBSTANCES IN ANY COMPONENT OF THE PREMISES.

CONTRACTOR(S) SHALL PROTECT NEW MATERIALS AND FINISHES FROM DAMAGE WHICH MAY OCCUR FROM CONSTRUCTION, DEMOLITION, DUST, WATER, ETC. DAMAGE TO NEW MATERIALS, FINISHES, STRUCTURES AND EQUIPMENT SHALL BE

CONTRACTOR(S) SHALL BE RESPONSIBLE FOR SUPPLYING ONLY THOSE MATERIALS SPECIFICALLY APPROVED BY THE LOCAL AUTHORITY HAVING JURISTICION

INSTALL ALL MATERIALS AND EQUIPMENT PER MANUFACTURER'S SPECIFICATIONS.



FLOOR FRAMING NOTES

-Provide first floor joists as noted on structural drawings.

-Provide $1\frac{1}{4}$ " or $1\frac{1}{8}$ " LSL or LVL, rim joists by same manufacturer as joists.

-Follow all manufacturer's recommended details for installation of ioists

-Provide blocking using same material as joists over all beams except flush beams where there is a wall above, and under all braced wall panels.

-Unless otherwise noted, floor sheathing shall be APA rated sheathing and underlayment, tongue-&-grooved, $\frac{3}{4}$ " thick, minimum 24" o.c. span rating. Glue and nail floor sheathing to floor joists.

-Sills shall be (2) 2x6 pressure treated w/ $\frac{5}{8}$ @x12" long galvanized steel hooked anchor bolts @ 4'-0" max. o.c. and 12" from corners or splices. Garage anchors @ 24" o.c. (U.N.O.). Anchor bolts shall engage both plates and shall be fastened w/ $3^{*}x3^{*}x_{4}^{1}$ plate washers.

-Provide posting at each end of all beams and at other locations as shown on structural plans.

See structural drawings for post sizes and locations. (2-2x min.)

-All posts shall be continuous down from their top point to foundation or carrying (transfer) beams. Posts are typically called out at their top most point. Provide same post size below (U.N.O.). Provide solid blocking through floors beneath all posts.

GARAGE SHEATHING

-The CDX plywood used on the garage door wall shall be installed both on the interior and exterior sides of the wall. The plywood on this wall shall be fastened to the sills, rim joist, and the wall studs on both sides with 8d nails spaced and staggered at no more than 4" apart around the edges, and no more than 12" apart in the field of the sheet.

ATTACHED PORCHES

(post connections to foundation walls/ concrete tubes)

-Pier footings shall consist of "Bigfoot" bell footings or spread footings cast at or below frost depth that support 10" or 12" diameter "Sonotube" piers.

-Deck and porch posts shall be secured to the piers using Simpson ABU post base.

 Deck posts and porch beam assemblies shall be reinforced with Simpson BCS Series column caps (one per post to beam connection), or the beam can be let into the posts and through bolted to the post using two (2) 5/8"Ø through bolts. Corner posts shall be attached to the beam using Simpson ACE post caps.

-Deck and Porch framing shall be attached to the structure w/ galvanized metal hangers and a pressure treated ledger board. The ledger board shall be attached to the rim-joist or into solid framing using 1/2"Ø lag- bolts or ledger-lag screw, two (2) rows spaced and staggered at 8" o.c..

EXTERIOR WALL ASSEMBLIES

-Exterior sheathing shall consist of a minimum of ¹/₂" APA rated CDX plywood with 8d common nails at 4" spacing on the edges

and 12" spacing on the field. -See structural drawings for ledger size on top of sheathing for -Plywood sheets shall be applied horizontally w/ vertical joints. support and connection of rafters at overlay framing. Joints shall be staggered a minimum of 32" between lifts (two (2) stud bays). -Rafters shall be toe nailed to wall plates and face nailed to ceiling joists at supports and shall also be anchored for uplift w/ Simpson H1 rafter tie at each rafter (U.N.O.) on structural drawings.

-Plywood shall span across the bottom and top plates to effectively tie the plates to the stud wall assembly.

-Horizontal blocking for nailing shall be provided within 48" of all outside corners.

-Blocking and connections shall be provided at panel edges perpendicular to roof framing members and shall be located in the first two (2) bays spaced at a maximum of 4 feet o.c..

-Plywood sheets shall be nailed to sills, plates, studs and rim joists w/ 8d common nails; 4" at perimeters and 8" in the field.

-Simpson HDU5 hold downs shall be installed in the outside immediately below the ridge and fasten them to the rafters w/ a minimum of six (6) 10d nails. corners consistent w/ the locations specified on the plans. The hold down assemblies shall extend from the foundation connection to the top floor top plate and roof assembly. This continuous -Roof sheathing shall be APA rated sheathing, exp. 1, $\frac{5}{8}$ " thick, connection can be accomplished by nailing a full height stud with $\frac{32}{16}$ or better span rating (U.N.O). two 16d common nails spaced 10" o.c. to the opposite side of the triple corner stud assembly to which the HDU5 hold downs shall -See structural plans for all exterior wall, window & door header be attached. sizes w/ $\frac{1}{2}$ " plywood spacers (U.N.O.).

-Outside corners shall consist of built-up 2x6 solid corners and all exterior walls shall be framed using 2x6 framing (U.N.O.).

-Bottom plates of the wall assemblies shall be attached to the floor framing members using 16d common nails spaced and staggered 4" o.c..

-Window and door openings larger than 5 feet or closer than 3 feet from an outside corner shall have Simpson H4 hurricane clips installed per (WALL OPENING DETAIL). The H4 clips shall be installed at the top and bottom of the last (king) studs, as well as to the top and bottom of the first (jack) studs. The clips shall be installed to the interior sides of the king and jack studs and any pocketed studs between windows. Jack studs shall be connected to the headers using one (1) Simpson LSTA strap per jack to header.

-Window and door openings larger than 5 feet shall be framed -Install 4" PVC perforated drain pipe in crushed stone at interior perimeter of all foundation walls. Drain to sump or to daylight. using two (2) jack studs and three (3) king studs (U.N.O.). Window -The rafters shall be connected to the framing below using and door openings located 3 feet from an outside corner of the Simpson H1 rafter clips per space (U.N.O.) between the rafters that structure shall all be framed using two (2) jack studs and two (2) -All concrete work shall be preformed in conformance w/ the latest are attached to the structural ridge or ledger board shall be edition of ACI-318, "Building Code Requirements For Reinforced king studs (U.N.O.). attached to the structural ridge or ledger board using adjustable Concrete". rafter hangers.

-The double top plates shall be lap-spliced w/ end-joints a minimum of 6 feet apart and contain forteen(14) 16d common nails per each side of the splice. The top plates shall overlap at corners of the structure and all intersections of interior or exterior load-bearing walls.

ROOF FRAMING NOTES

/ #2 or better (U.N.O.).

-Fasten rafters to non-structural ridge w/ four (4) 16 d toe nails or three (3) 16d face nails each rafter. Fasten rafters to structural ridge with sloped-seat rafter hanger or Simpson LRU hanger or Simpson L90 framing anchor each side (U.N.O.) on structural drawings.

-Fasten rafters at ridge for uplift using either Option A or Option B, as follows:

-See structural drawings for rafter sizes. All rafters shall be SPF #1

Option A: Apply Simpson LSTA strap across the top of the ridge.

Option B: Install 2x6 ridge lock block across the rafters

-All headers in interior 2x4 bearing walls shall be (2) 2x6's w/ $\frac{1}{2}$ " plywood spacers (U.N.O.). Exterior wall headers (up to 6' span) shall be (3) 2x8 (U.N.O.).

-Provide posting at each end of all beams and at other locations as shown on plans. See structural drawings for post sizes and locations. (2-2x min.).

-All posts shall be continuous down from their top point to foundation or carrying (transfer) beams. Posts are typically called out at their top most point. Provide same post size below (U.N.O.). Provide solid blocking through floors beneath all posts.

-The roof shingle system applied to the sheathing must meet the wind velocity specification for the required wind velocity zone for the location of the structure (i.e. 110 MPH zone).

-Sizes given for nails are common wire sizes. Box and pneumatic low carbon nails of equivalent diameter and equal or greater length to the specified common nails may be substituted. All mechanical connectors shall be installed following all manufacturers specifications for proper installation and nailing requirements

FOUNDATIONS

-G.C. shall coordinate all dimensions, openings, and elevations w/ architectural drawings and manufacturer's specifications.

-Excavate to lines and grades required to properly install the foundations on inorganic, undisturbed soil or controlled structural backfill as required by the engineer. No footing shall be placed upon frozen ground or in water.

-Backfill below footings and slabs shall be made w/ approved granular materials placed in 6" layers. Layers shall be compacted to 95% density at optimum moisture content, as defined by ASTM D1557, Method D.

-Exterior footings shall be placed on approved soil at a minimum (C) depth of 4 feet, or as modified by the structural engineer, below the or lowest adjacent ground exposed to freezing. Any adjustments of footing elevations due to field conditions must have the approval of the engineer.

-Soil bearing capacity: footings must be placed on soil w/ a minimum bearing capacity of 3000 pounds per square foot.

-Backfilling against walls or piers may only be done after walls or piers are braced to prevent movement. For wood framed residential construction, no backfilling of walls may take place until the first floor deck has been framed and sheathed, unless written approval is given by the engineer.

-Provide foundation drainage, waterproofing/ damp-proofing, and foundation wall insulation as indicated on the architectural drawings and shall be no less than requirements of the state building code.

Provide metal or PVC sleeves in the foundation walls for sewer, gas, electric, and water lines, as required.

-Any site conditions requiring a deviation from these plans shall be brought to the attention of the engineer immediately.

CONCRETE

Footings shall be poured on undisturbed soil and shall be formed and have a 2x4 key way.

-Slab on grade shall be poured over a 10 mil polyethylene vapor barrier. Precaution shall be taken to prevent puncturing the vapor barrier during pouring operations.

-Concrete shall achieve a minimum 28 day design strength as follows: footings, walls, interior slab-on-grade, and other concrete not otherwise specified - 3000 PSI. Exterior slabs exposed to weather - 4000 PSI.

-Reinforcing steel: typical - ASTM A615, Grade 60. Field bent -ASTM A615, Grade 40. All steel reinforcing bars shall be free of mill scale and rust. All reinforcing bars below base flood elevation shall be epoxy coated or galvanized.

-Welding to conform w/ AWS D1.1, using only certified welders and fabricators.

-Structural steel shop drawings shall be prepared and submitted to the engineer for approval prior to fabrication. These drawings shall show complete and accurate member layout, sizes, grade, dimensions, connections, openings, accessories and all other information necessary for complete and accurate fabrication and assembly of the members. Provide templates or locations drawings for installation of anchor bolts.

-No cutting of or openings through steel will be permitted without the written approval of the engineer

-All wire mesh for slabs shall be ASTM A185 fabric set at the mid-depth of the slab. All reinforcing wire mesh below base flood elevation shall be epoxy coated or galvanized.

-Concrete cover provided for reinforcing bars shall be as follows: Minimum
cover, inches.
(a) Concrete cast against and
permanently exposed to earth
(b) Concrete exposed to earth or weather:
No.6 through No. 18 bars 2
No.5 bar, W31 or
D31 wire, and smaller1 $\frac{1}{2}$
(c) Concrete not exposed to weather
or in contact with ground:
Slabs, walls, joists:
No. 14 and No. 18 bars $1\frac{1}{2}$
No. 11 bar and smaller $\frac{3\sqrt{4}}{4}$
Reams columns.

Beams, columns:	
Primary reinforcement, ties,	
stirrups, sprials	1½

STRUCTURAL STEEL

-Structural steel work shall conform to the American Institute of Steel Construction: "Specification for Structural Steel for Buildings", latest edition. Steel beams shall conform to ASTM A992, w/ a minimum yield strength of 50 KSI.

- The Contractor shall measure, verify and coordinate all dimensions in the field.

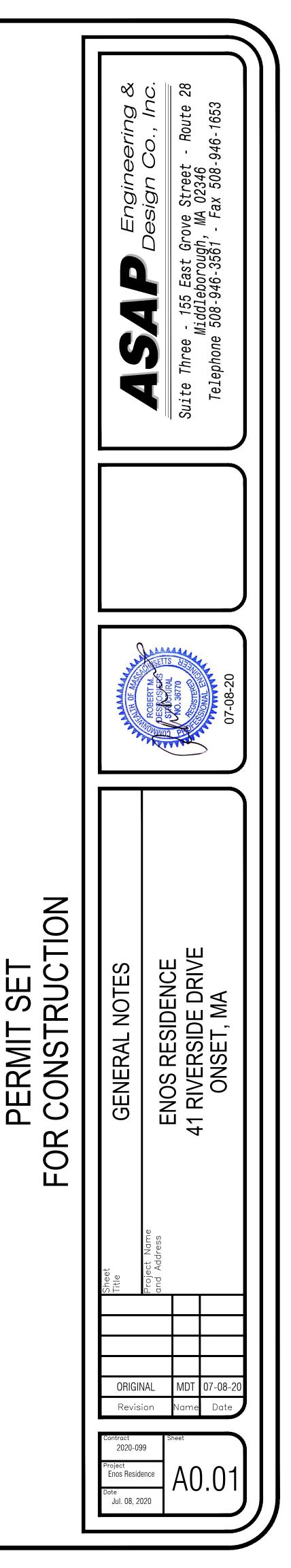
-Plate, angles, channels, and misc. fabricated hardware shall conform to ASTM A36, w/ a minimum yield strength of 36 KSI, rectangular steel tubing shall conform to ASTM A500, Grade B, with a minimum yield strength of 46 KSI.

-All steel to steel field connections shall be made by high strength bolting with ASTM A325 bolts or welding with E70-XX electrodes (U.N.O.).

-Provide bearing plates for beams seated on concrete, wood or masonry.

-Steel shall be shop-painted w/ a modified alkyd primer (U.N.O.).

-All structural steel exposed to the weather shall be galvanized (U.N.O.).



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	VSULATION COMPONENT MAXIMUM REQUI	
CI	LIMATE ZONE 5 (COMMERCIAL PROVISIONS	b)
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	ROOFS (ALL OTHER)	ROOFS (GROUP R)
ISULATION ENTIRELY ABOVE ROOF DECK	R-30ci	R-30ci
METAL BUILDINGS ^b	R-19 + R-11 LS	R-19 + R-11 LS
ATTIC AND OTHER	R-38	R-49
	WALLS, ABOVE GRADE (ALL OTHER)	WALLS, ABOVE GRADE (GROUP R)
MASS	R-11.4 ci	R-13.3 ci
METAL BUILDING	R-13 + R-13 ci	R-13 + R-13 ci
METAL FRAMED	R-13 + R-7.5 ci	R-13 + R7.5 ci
WOOD FRAMED AND OTHER	R-13 + R-3.8 ci /or/ R-20	R-13 R7.5 ci /or/ R-20 + R-3.8 ci
	WALLS, BELOW GRADE (ALL OTHER)	WALLS, BELOW GRADE (GROUP R)
BELOW-GRADE WALL ^d	R-7.5 ci	R-7.5 ci
	FLOORS (ALL OTHER)	FLOORS (GROUP R)
MASS ^e	R-10 ci	R-12.5 ci
JOIST / FRAMING	R-30	R-30
	SLAB-ON-GRADE FLOORS (ALL OTHER)	SLAB-ON-GRADE FLOORS (GROUP R
UNHEATED SLABS	R-10 FOR 24" BELOW	R-10 FOR 24" BELOW
HEATED SLABS	R-15 FOR 36" BELOW	R-15 FOR 36" BELOW
	OPAQUE DOORS (ALL OTHER)	OPAQUE DOORS (GROUP R)
NONSWING	R-4.75	R-4.75
	hare foot = 4.88 kg/m ² , 1 pound per cubic fo	

a. ASSEMBLY DESCRIPTIONS CAN BE FOUND IN ANSI/ASHRAE/IESNA APPENDIX A.

b. WHERE USING R-VALUE COMPLIANCE METHOD, A THERMAL SPACER BLOCK SHALL BE PROVIDED, OTHERWISE USE THE U-FACTOR COMPLIANCE METHOD IN TABLE C402.1.4. c. R-5.7 ci IS ALLOWED TO BE SUBSTITURED WITH CONCRETE BLOCK WALLS COMPLYING WITH ASTM C 90, UNGROUTED OR PARTIALLY GROUTED AT 32 INCHES OR LESS ON CENTER VERTICALLY AND 48 INCHES OR LESS ON CENTER HORIZONTALLY, WITH UNGROUTED CORES FILLED WITH MATERIALS HAVING A MAXIMUM THERMAL CONDUCTIVITY OF 0.44 Btu-in/h-f² °F. d. WHERE HEATED SLABS ARE BELOW GRADE, BELOW-GRADE WALLS SHALL COMPLY WITH THE EXTERIOR INSULATION REQUIREMENTS FOR HEATED SLABS.

e. "MASS FLOORS" SHALL INCLUDE FLOORS WEIGHING NOT LESS THAN: 1. 35 POUNDS PER SQUARE FOOT OF FLOOR SURFACE AREA; OR

2. 25 POUNDS PER SQUARE FOOT OF FLOOR SURFACE AREA WHERE THE MATERIAL WEIGHT IS NOT MORE THAN 120 POUNDS PER CUBIC FOOT. f. STEEL FLOOR JOIST SYSTEMS SHALL BE INSULATED TO R-38.

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OF EQUIVALENT DIAMETER AND EQU	VEN FOR NAILS ARE COMMON WIRE SIZE JAL OR GREATER LENGTH TO THE SPECIF STITUTED UNLESS OTHERWISE NOTED.		S
JOINT DESCRIPTION	NUMBER OF COMMON NAILS	NUMBER OF BOX NAILS	NAIL SPACING
ROOF FRAMING			
BLOCKING TO RAFTER (TOE-NAILED)	(2) 8d	(2) 10d	EACH END
RIM BOARD TO RAFTER (END-NAILED)	(2) 16d	(3) 16d	EACH END
WALL FRAMING	(
TOP PLATES AT INTERSECTIONS (FACE-NAILED)	(4) 16d	(5) 16d	AT JOINTS
STUD TO STUD (FACE-NAILED)	(2) 16d	(2) 16d	24" o/c
HEADER TO HEADER (FACE-NAILED)	16d	16d	16" o/c ALONG EDGE
FLOOR FRAMING			
JOIST TO SILL, TOP PLATE OR GIRDER (TOE-NAILED)	(4) 8d	(4) 10d	PER JOIST
BLOCKING TO JOIST (TOE-NAILED)	(2) 8d	(2) 10d	EACH END
BLOCKING TO SILL OR TOP PLATE (TOE-NAILED)	(3) 16d	(4) 16d	EACH BLOCK
LEDGER STRIP TO BEAM OR GIRDER (FACE-NAILED)	(3) 16d	(4) 16d	EACH JOIST
JOIST ON LEDGER TO BEAM (TOE-NAILED)	(3) 8d	(3) 10d	PER JOIST
BAND JOIST TO JOIST (END-NAILED)	(3) 16d	(4) 16d	PER JOIST
BAND JOIST TO SILL OR TOP PLATE (TOE-NAILED)	(2) 16d	(3) 16d	PER FOOT
ROOF SHEATHING (WOOD STRUCTURA	L PANELS)		
RAFTERS OR TRUSSES SPACED UP TO 16" o/c	8d	10d	6" EDGE / 6" FIELD
RAFTERS OR TRUSSES SPACED OVER 16" o/c	8d	10d	4" EDGE / 4" FIELD
GABLE ENDWALL RAKE OR RAKE TRUSS WITHOUT GABLE OVERHANG	8d	10d	6" EDGE / 6" FIELD
GABLE ENDWALL RAKE OR RAKE TRUSS WITH STRUCTRUAL OUTLOOKERS	8d	10d	6" EDGE / 6" FIELD
GABLE ENDWALL RAKE OR RAKE TRUSS w/LOOKOUT B	LOCKS 8d	10d	4" EDGE / 4" FIELD
CEILING SHEATHING			
GYPSUM WALLBOARD	5d COOLERS		7" EDGE / 10" FIELD
WALL SHEATHING]		
WOOD STUCTURAL PANELS - STUDS SPACED UP TO 24	4" 0/C 8d	10d	4" EDGE / 12" FIELD
$\frac{1}{2}$ " AND $\frac{23}{32}$ " FIBERBOARD PANELS	8d ¹		3" EDGE / 6" FIELD
¹ / ₂ " GYPSUM WALLBOARD	5d COOLERS		7" EDGE / 10" FIELD
FLOOR SHEATHING (WOOD STRUCTUR	AL PANELS)		
1" OR LESS	8d	10d	6" EDGE / 12" FIELD
GREATER THAN 1"	10d	16d	6" EDGE / 6" FIELD

OPAQUE THERMAL ENVEL	OPE ASSEMBLY MAXIMUM REQUIREMENT	S, U-FACTOR METHOD ^{a,b}
C	LIMATE ZONE 5 (COMMERCIAL PROVISIONS	5)
	ROOFS (ALL OTHER)	ROOFS (GROUP R)
SULATION ENTIRELY ABOVE ROOF DECK	U-0.032	U-0.032
METAL BUILDINGS	U-0.035	U-0.035
ATTIC AND OTHER	U-0.027	U-0.021
	WALLS, ABOVE GRADE (ALL OTHER)	WALLS, ABOVE GRADE (GROUP R)
MASS	U-0.090	U-0.080
METAL BUILDING	U-0.052	U-0.052
METAL FRAMED	U-0.064	U-0.064
WOOD FRAMED AND OTHER ^c	U-0.064	U-0.064
	WALLS, BELOW GRADE (ALL OTHER)	WALLS, BELOW GRADE (GROUP R
BELOW-GRADE WALL $^{\circ}$	C-0.119	C-0.119
	FLOORS (ALL OTHER)	FLOORS (GROUP R)
MASS ^d	U-0.074	U-0.074
JOIST / FRAMING	U-0.033	U-0.033
	SLAB-ON-GRADE FLOORS (ALL OTHER)	SLAB-ON-GRADE FLOORS (GROUP
UNHEATED SLABS	F-0.54	F-0.54
HEATED SLABS ^f	F-0.65	F-0.65
	OPAQUE DOORS (ALL OTHER)	OPAQUE DOORS (GROUP R)
NONSWING	U-0.37	U-0.37

IEBC 20	15 TABLE				STRATION F		IENTS BY (COMPONE	ENT ^a
ENESTRATION U-FACTOR ^b	SKYLIGHT U-FACTOR ^b	GLAZED FENESTRATION SHGC ^{b,c}	CEILING R-VALUE	WOOD FRAME WAI R-VALUE		L FLOOR	BASEMENT WALL R-VALUE ^c	SLAB R-VALUE & DEPTH ^d	CRAWL SPACE WALL R-VALUE
0.32	0.55	NR	49	20 or 13+5	^h 13 / 17	30 ^g	15/19	10, 2 ft	15/19
EXCLUDED FROM EXCEED 0.30. c. "15/19" MEANS I BASEMENT WAL INSULATION ON R-13 CAVITY INS d. R-5 SHALL BE A WHICHEVER IS L e. THE ARE NO SH(f. BASEMENT WAL g. OR INSULATION h. THE FIRST VALU CONTINUOUS IN	A GLAZED FENES R-15 CONTINUOL L. "15/19" SHALL THE INTERIOR OF SULATION AT THE DDED TO THE RE LESS IN CLIMATE GC REQUIREMEN L INSULATION IS SUFFICIENT TO F E IS CAVITY INSL SULATION.	OLUMN EXCLUDES TRATION SHGC REC JS INSULATION ON T BE PERMITTED TO R EXTERIOR OF THE UNTERIOR OF THE B QUIRED SLAB EDGE ZONES 1 THROUGH TS IN THE MARINE Z NOT REQUIRED IN V ILL THE FRAMING C JLATION. THE SECON	UIREMENTS 'HE INTERIOF BE MET WITH HOME. "10/1: ASEMENT W. R-VALUES FI 3 FOR HEAT ONE. VARM-HUMIG AVITY, R-19 I ID VALUE IS HALF THE INS	IN CLIMATE ZONI R OR EXTERIOR OF H R-13 CAVITY IN: 3" MEANS R-10 C ALL. OR HEATED SLAE ED SLABS. D LOCATIONS AS MINIMUM. CONTINUOUS IN: SULATION IS ON 1	ES 1 THROUGH 3 V THE HOME OR R- SULATION ON THE CONTINUOUS INSU S. INSULATION DE DEFINED BY FIGUE SULATION, SO "13- HE INTERIOR OF T	VHERE THE SHO 19 CAVITY INS INTERIOR OF TI LATION ON THE PTH SHALL BE RE R301.1 AND + 5" MEANS R- HE MASS WALL	GC FOR SUCH SI ULATION AT THE HE BASEMENT V INTERIOR OR EL THE DEPTH OF TABLE R301.1. 13 CAVITY INSUL	Kylights doe: Interior of 1 Vall plus R-5 Xteriorof the The footing C	s not The Continuou E home or Ir 2 feet,
					QUIVALENT		RS ^a		
	1	CL	IMATE ZO	INE 5 (RESIDE	NTIAL PROVIS	IONS)	1		
FENESTRATION U-FACTOR	SKYLIGHT U-FACTOF				/IASS WALL J-FACTOR ^b	FLOOR U-FACTOF	BASEN WA U-FAC	LL SP	CRAWL ACE WALL -FACTOR
0.32	0.55	0.026	(0.060	0.082	0.033	0.0	50	0.055
b. WHEN MORE 0.17 IN CLIM 0.065 IN CLII	THAN HALF ATE ZONE 1, MATE ZONE 5	CTORS SHALL E THE INSULATIO 0.14 IN CLIMAT AND MARINE 4 OR OF 0.360 IN	N IS ON TH E ZONE 2, , AND 0.0	he Interior, , 0.12 in Clin 57 in Climat	THE MASS WA IATE ZONE 3, 0 E ZONES 6 TH	ALL U-FACT 0.087 IN CLI ROUGH 8.	ORS SHALL E MATE ZONE	3e a mazim 4 except n	um of Iarine,

c. WHERE HEATED SLABS ARE BELOW GRADE, BELOW-GRADE WALLS SHALL COMPLY WITH THE F-FACTOR REQUIREMENTS FOR HEATED SLABS. d. "MASS FLOORS" SHALL INCLUDE FLOORS WEIGHING NOT LESS THAN: 1. 35 POUNDS PER SQUARE FOOT OF FLOOR SURFACE AREA; OR

INSULATION SHALL BE PERMITTED TO BE ADDED TO OR SUBTRACTED FROM THE ORIGINAL TESTED DESIGN.

APPENDIX A.

2. 25 POUNDS PER SQUARE FOOT OF FLOOR SURFACE AREA WHERE THE MATERIAL WEIGHT IS NOT MORE THAN 120 POUNDS PER CUBIC FOOT.

e. THESE C-,F-, AND U- FACTORS ARE BASED ON ASSEMBLIES THAT ARE NOT REQUIRED TO CONTAIN INSULATION. f. EVIDENCE OF COMPLIANCE WITH THE F-FACTORS INDICATED IN THE TABLE FOR HEATED SLABS SHALL BE DEMONSTRATED BY THE APPLICATION OF THE UNHEATED SLAB F-FACTORS AND R-VALUES DERIVED FROM ASHRAE 90.1 APPENDIX A.

a. USE OF OPAQUE ASSEMBLY U-FACTORS, C-FACTORS, AND F-FACTORS FROM ANSI/ASHRAE/IESNA 90.1 APPENDIX A SHALL BE PERMITTED, PROVIDED FOR

b. OPAQUE ASSEMBLY U-FACTORS BASED ON DESIGNS TESTED IN ACCORDANCE WITH ASTM C1363 SHALL BE PERMITTED. THE R-VALUE OF CONTINUOUS

CONSTRUCTION, EXCLUDING THE CLADDING SYSTEM ON WALLS, COMPLIES WITH THE APPROPRIATE CONSTRUCTION DETAILS FROM ANSI/ASHRAE/ISNEA 90.1

WALL OPENING FRAMING SCHEDULE – U.O.N.						
HEADER SPAN	LOADBEARING WALL MINIMUM HEADER SIZE	NON-LOADBEARING WALL MINIMUM HEADER SIZE	OPENING LOCATION	NO. OF KING STUDS	NO. OF JACK STUDS	
2 _{FT}	2 - 2x4	1 - 2x4 (FLAT)	≤ 3'-0" FROM OUTSIDE CORNER	2	2	
3FT	2 - 2x4	1 - 2x4 (FLAT)		Z	2	
4 _{FT}	2 - 2x4	1 - 2x4 (FLAT)	> 3'-0" FROM OUTSIDE CORNER	2	1	
5ғт	2 - 2x4	1 - 2x4 (FLAT)		3		
6FT	2 - 2x6	2 - 2x4	1			
7 _{FT}	2 - 2x8	2 - 2x4	ALL LOCATIONS		2	
8FT	2 - 2x12	2 - 2x4				
9 _{FT}	3 - 2x10	2 - 2x6				
10ft	3 - 2x12	2 - 2x6				
11ft	4 - 2x10	2 - 2x6	ALL LOCATIONS	4	2	
12ft	MUST BE ENGINEERED	2 - 2x6	ALL LOCATIONS	5	2	

WALL OPENING FRAMING SCHEDULE

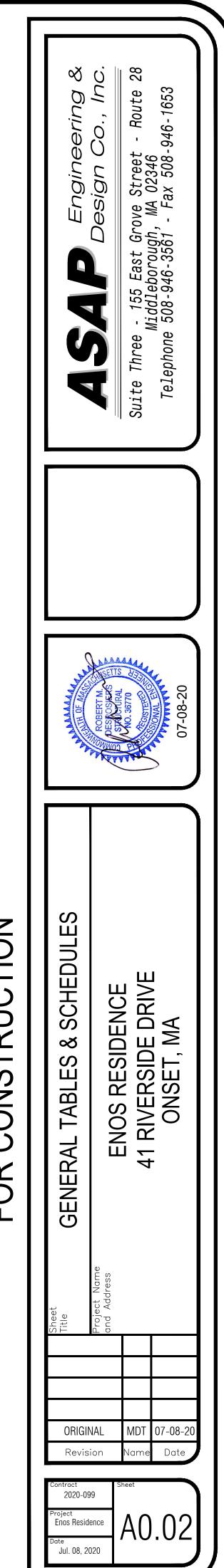
WINDOW SIZE	WINDOW LOCATION	NO. OF KING STUDS	NO. OF JAC STUDS
≥ 5'-0"	≤ 3'-0" FROM OUTSIDE CORNER	3	2
< 5'-0"	≤ 3'-0" FROM OUTSIDE CORNER	2	2
< 5'-0"	> 3'-0" FROM OUTSIDE CORNER	2	1

NATIVE LUMBER NOTES:

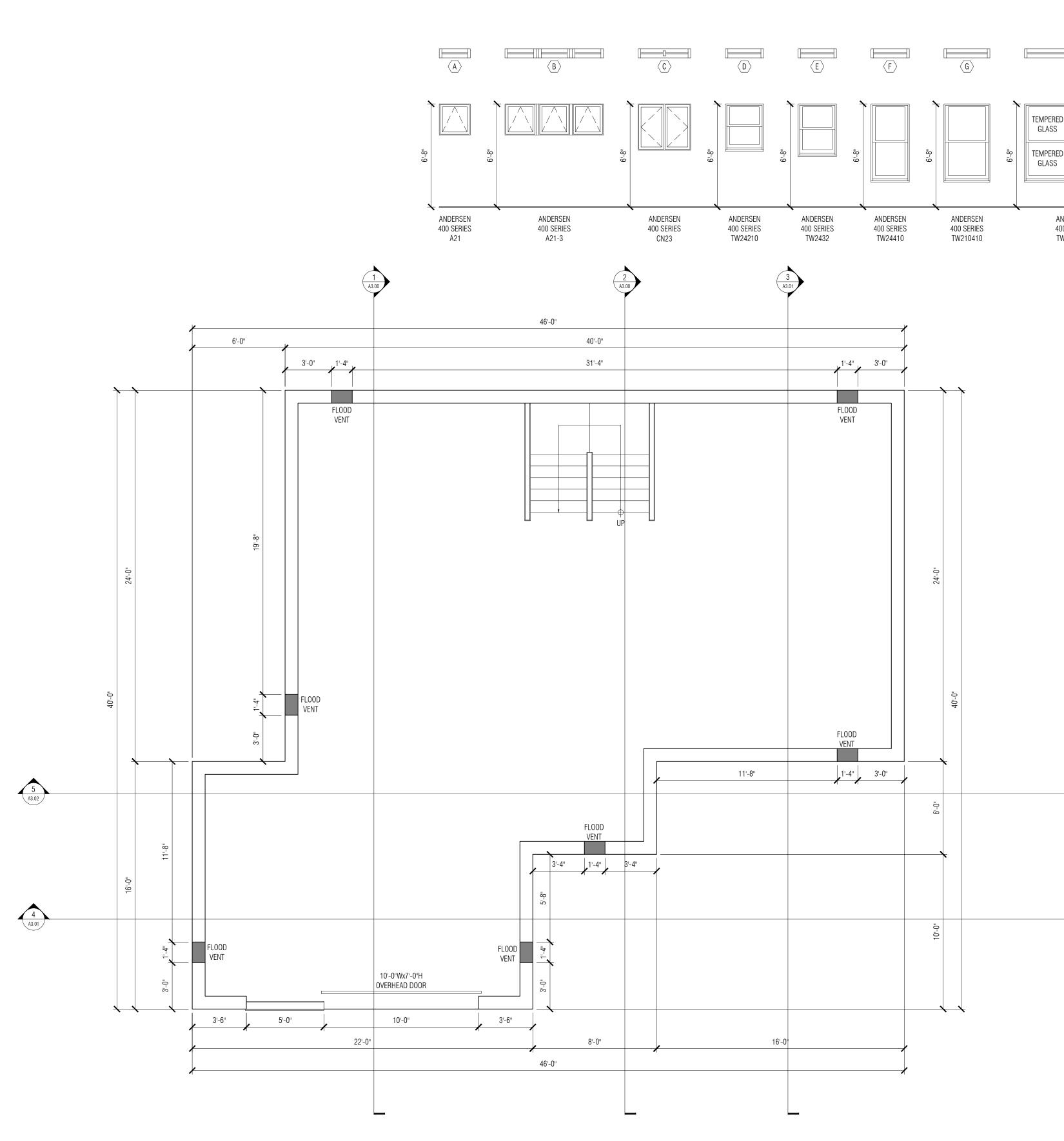
All 2x (actual) framing lumber to be native eastern white pine. Lumber is designed in accordance with 780 CMR 110.R4 and Chapter 23 of the International Building Code 2009 w/ Massachusetts Amendments.

-All framing lumber be produced by a registered Massachusetts Native Lumber producer and shall be stamped with the name and registration number of the producer in accordance with 780 CMR 110.R4 and bear an approved mark indentifying the species of wood.

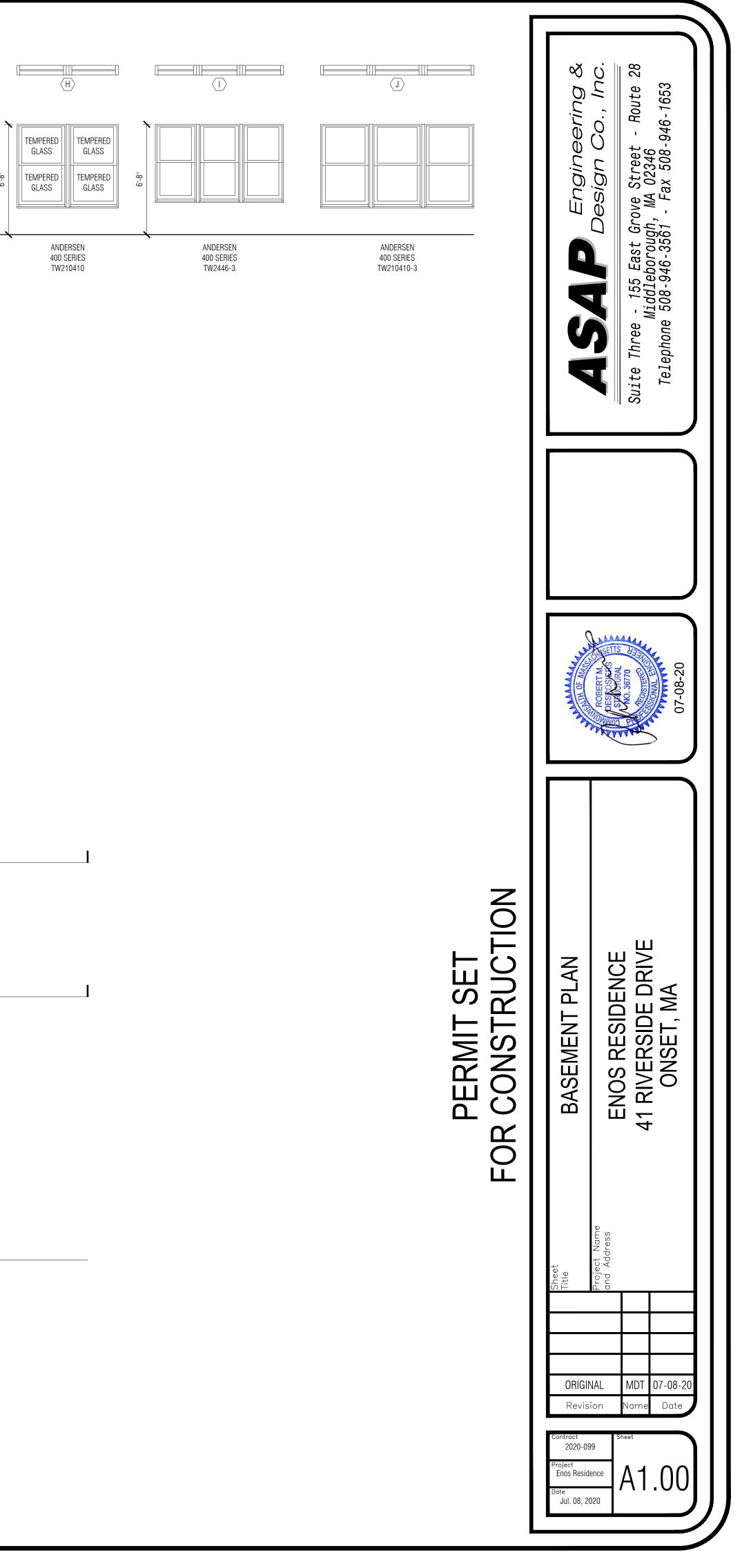
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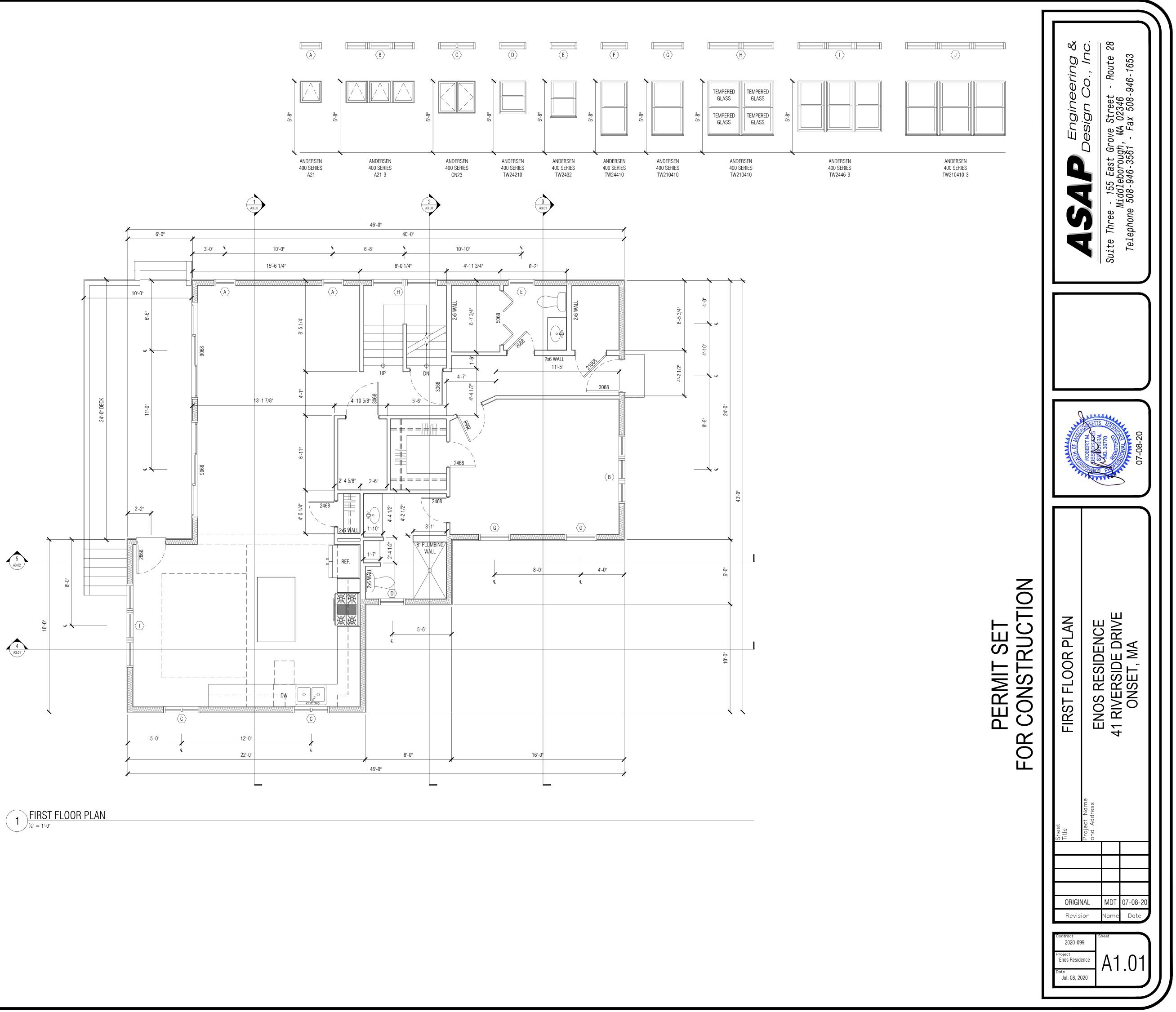


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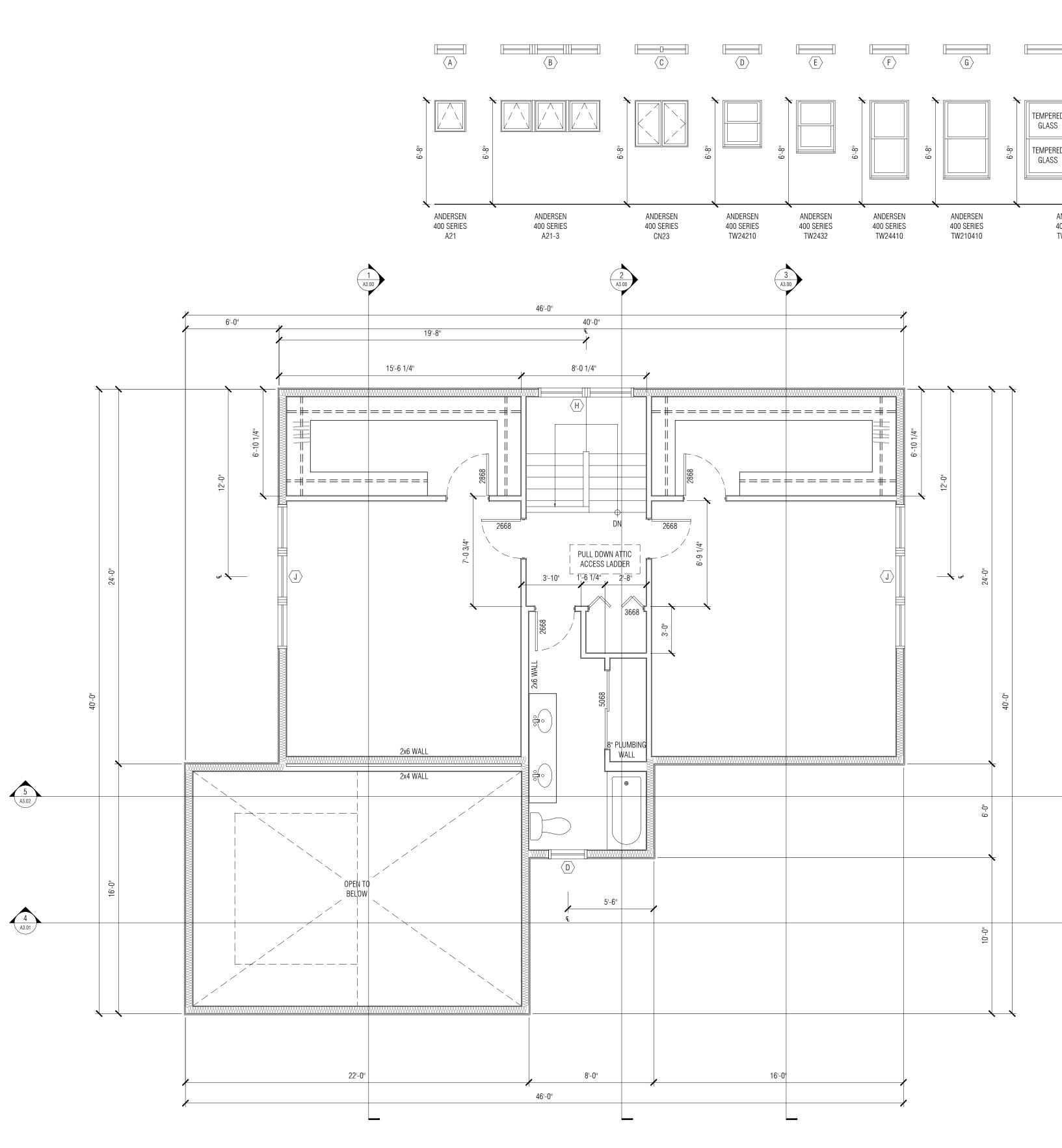




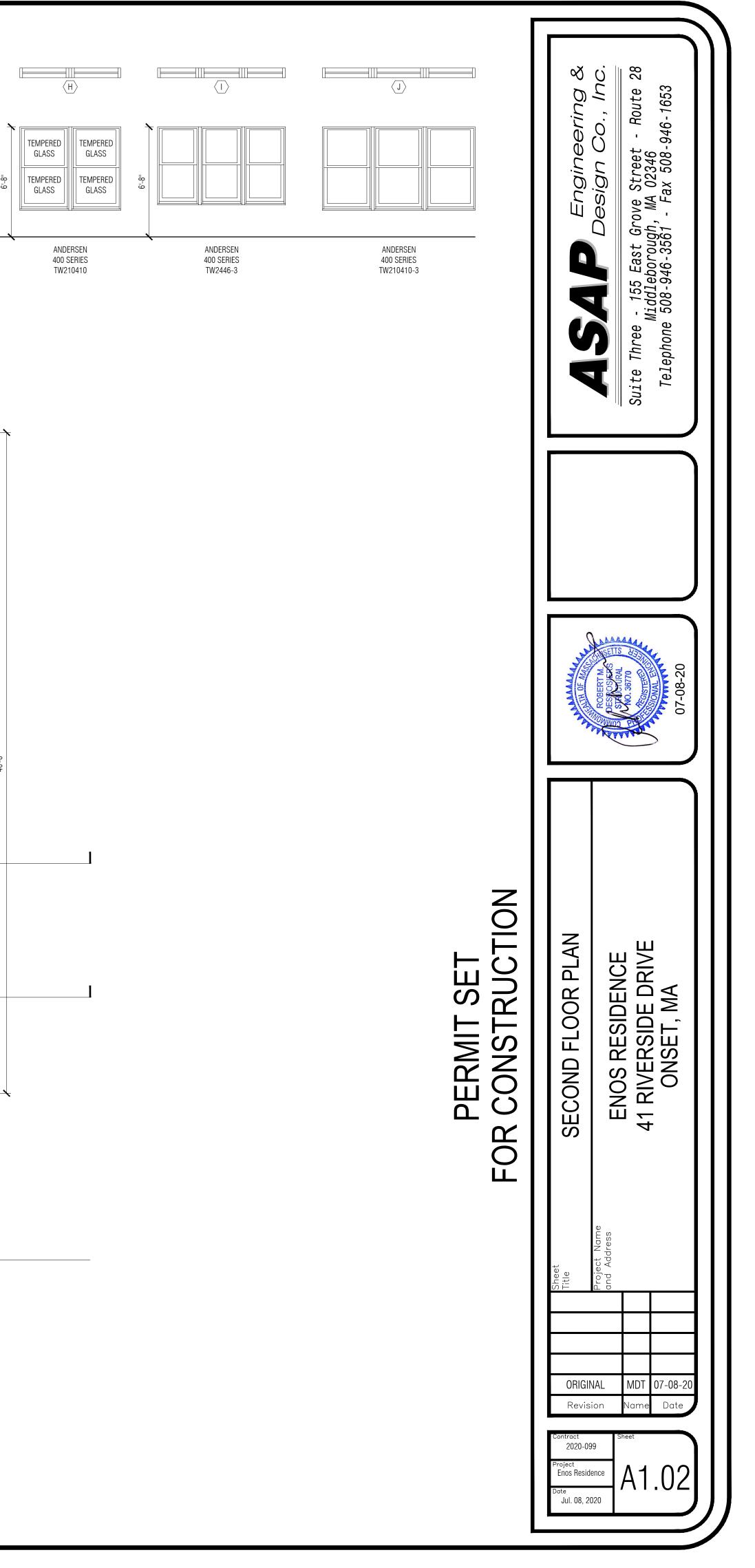


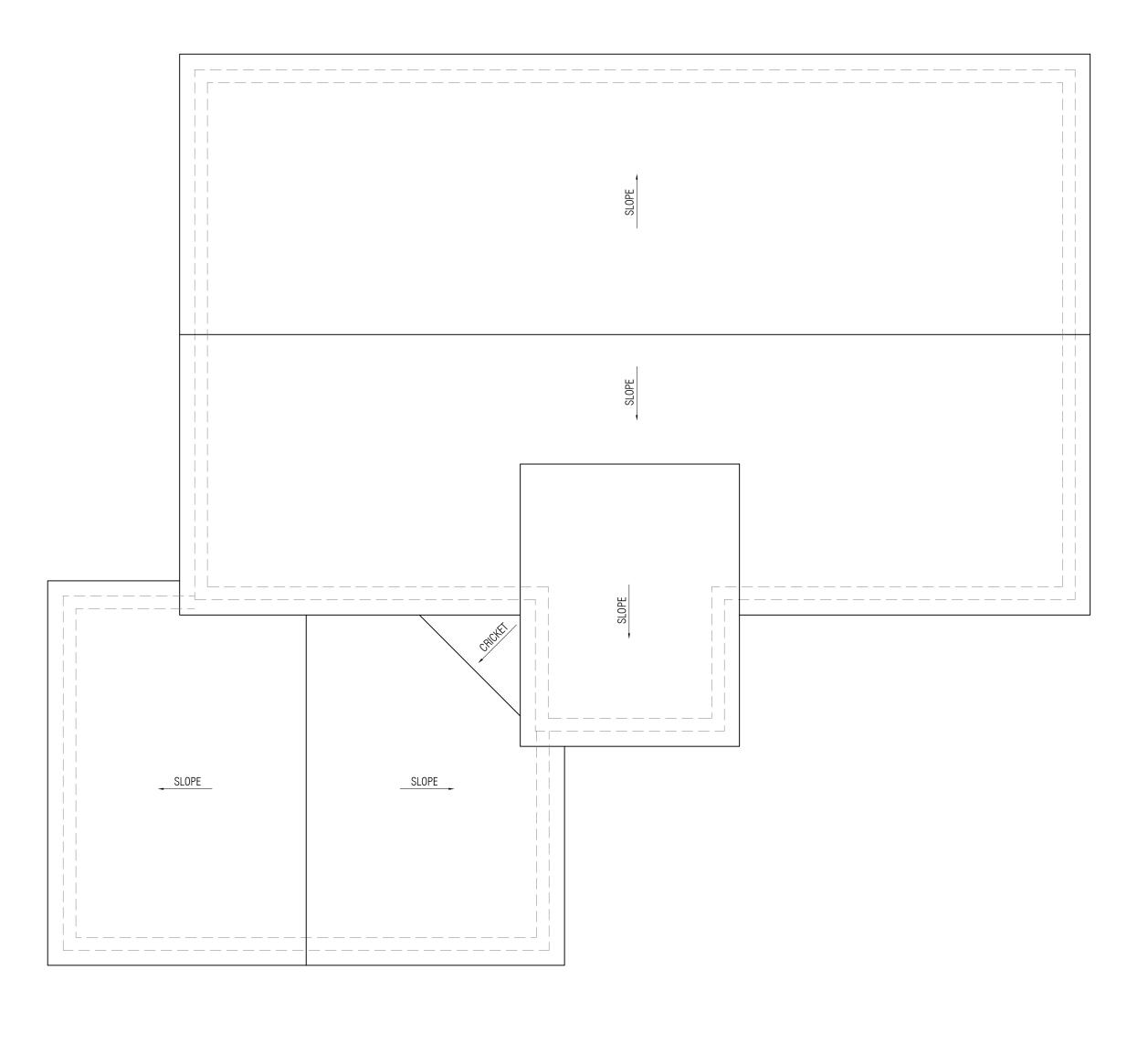


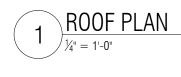


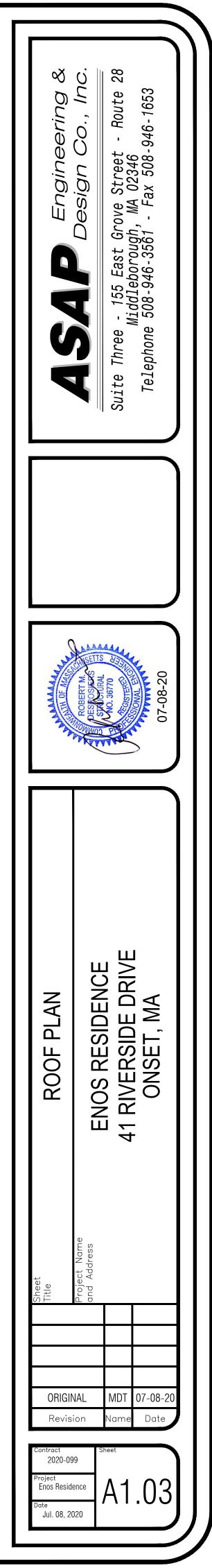






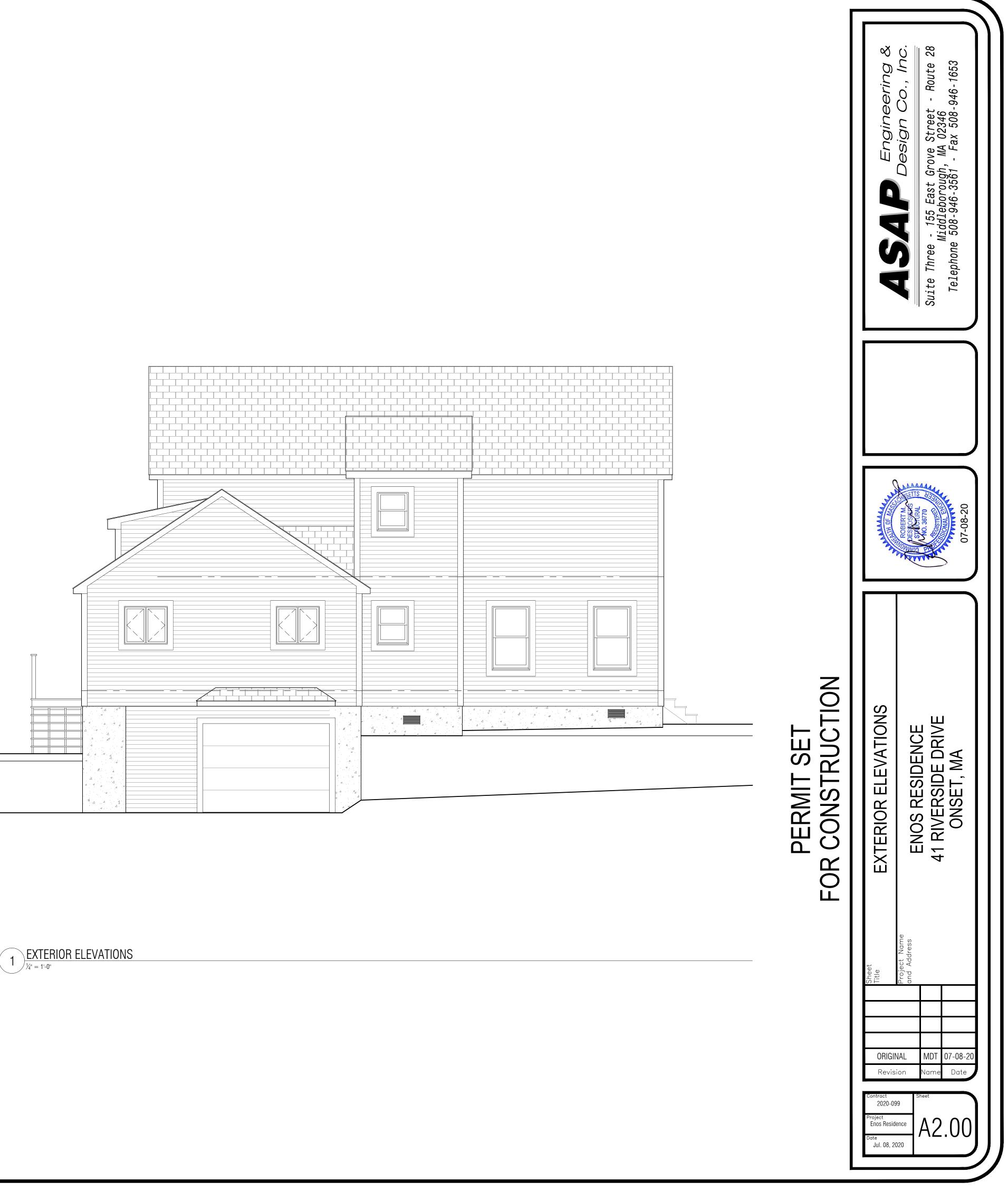










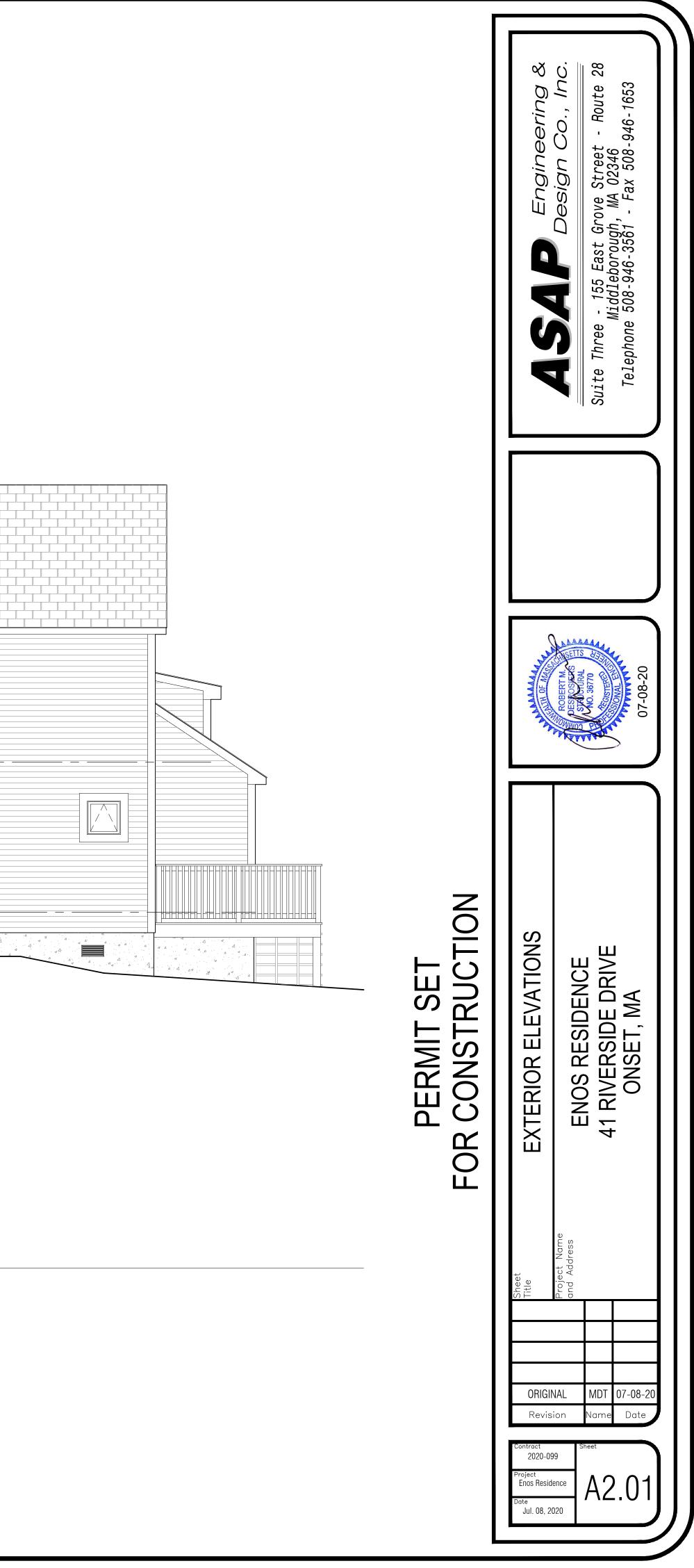




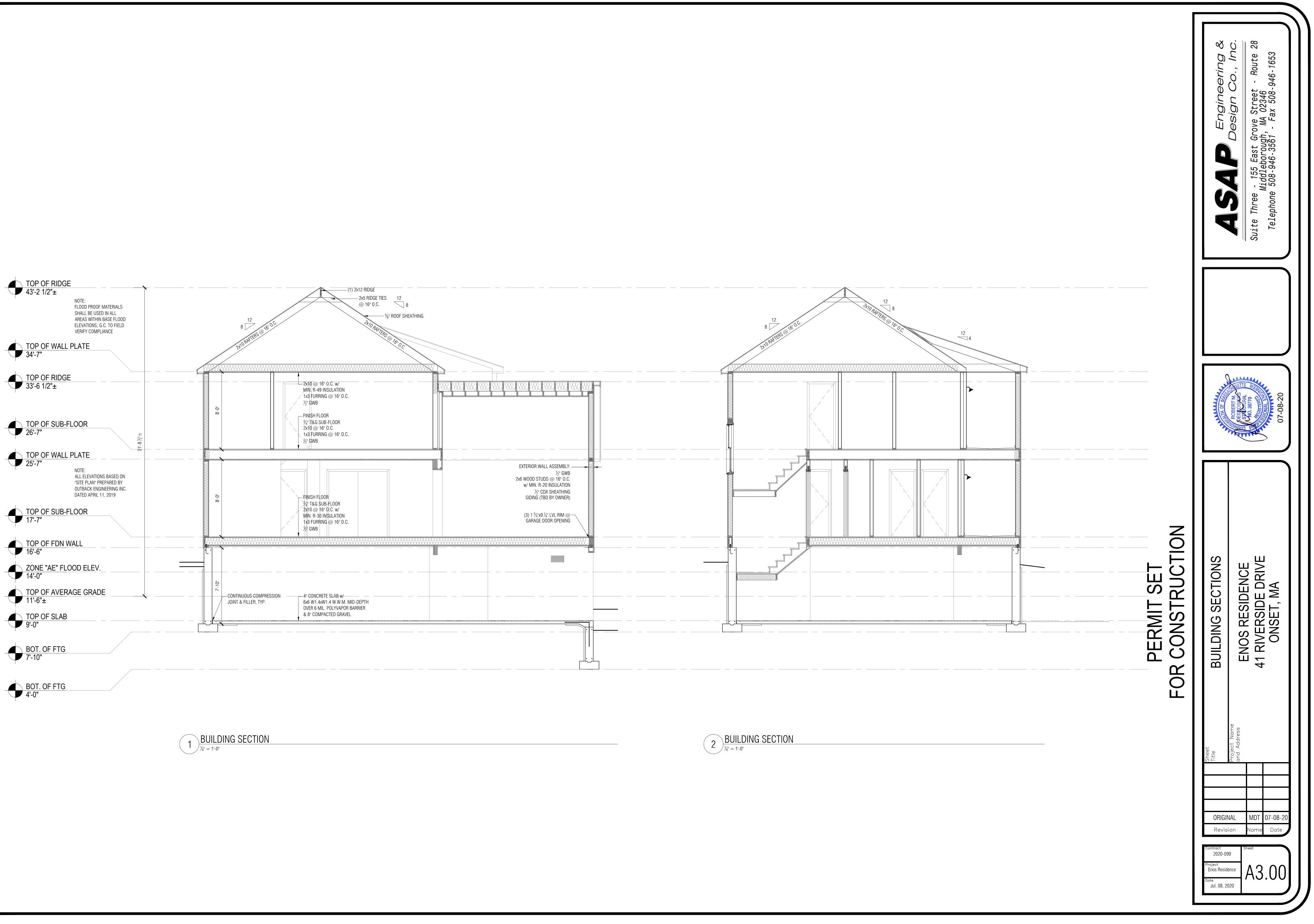






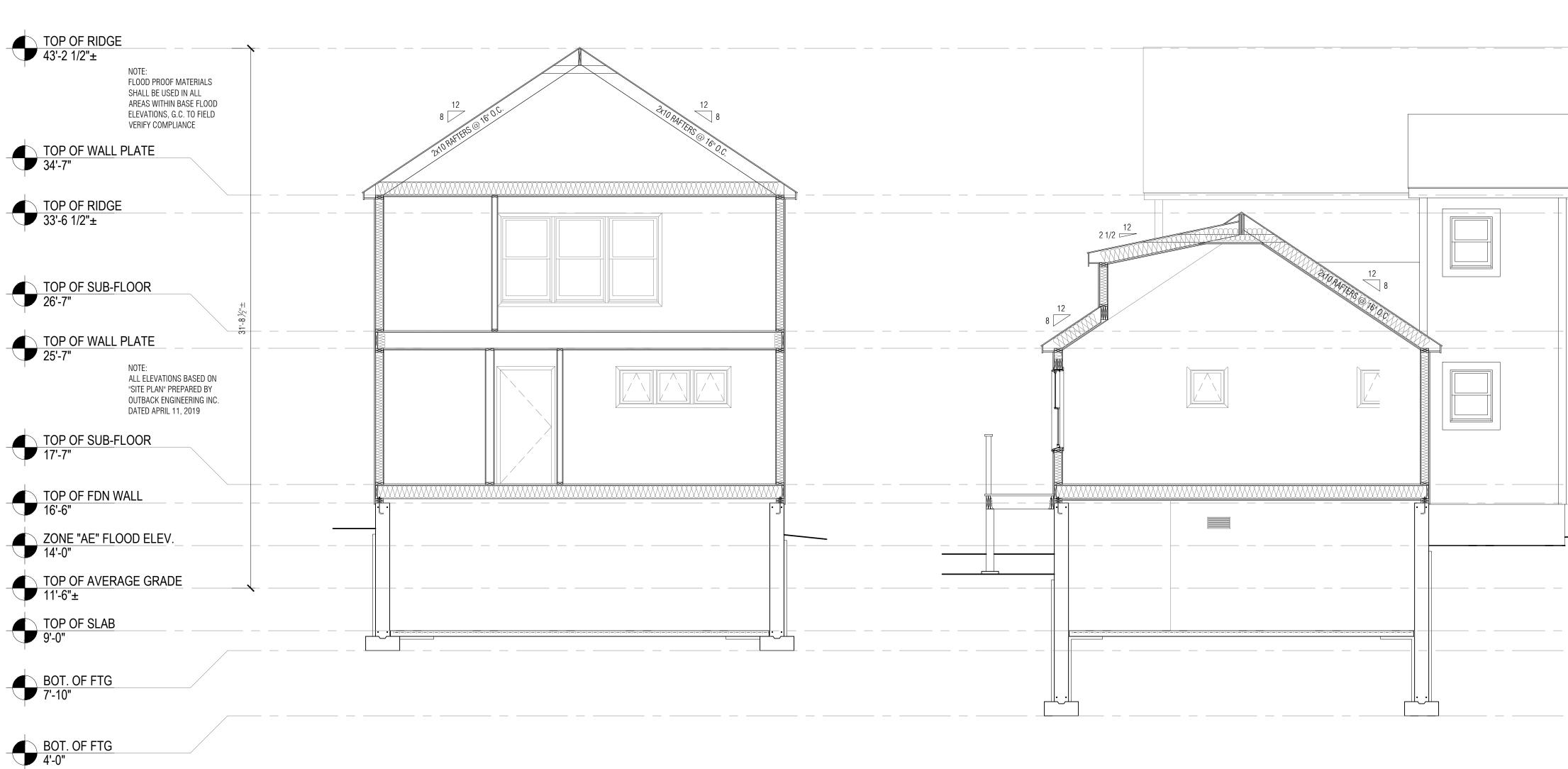




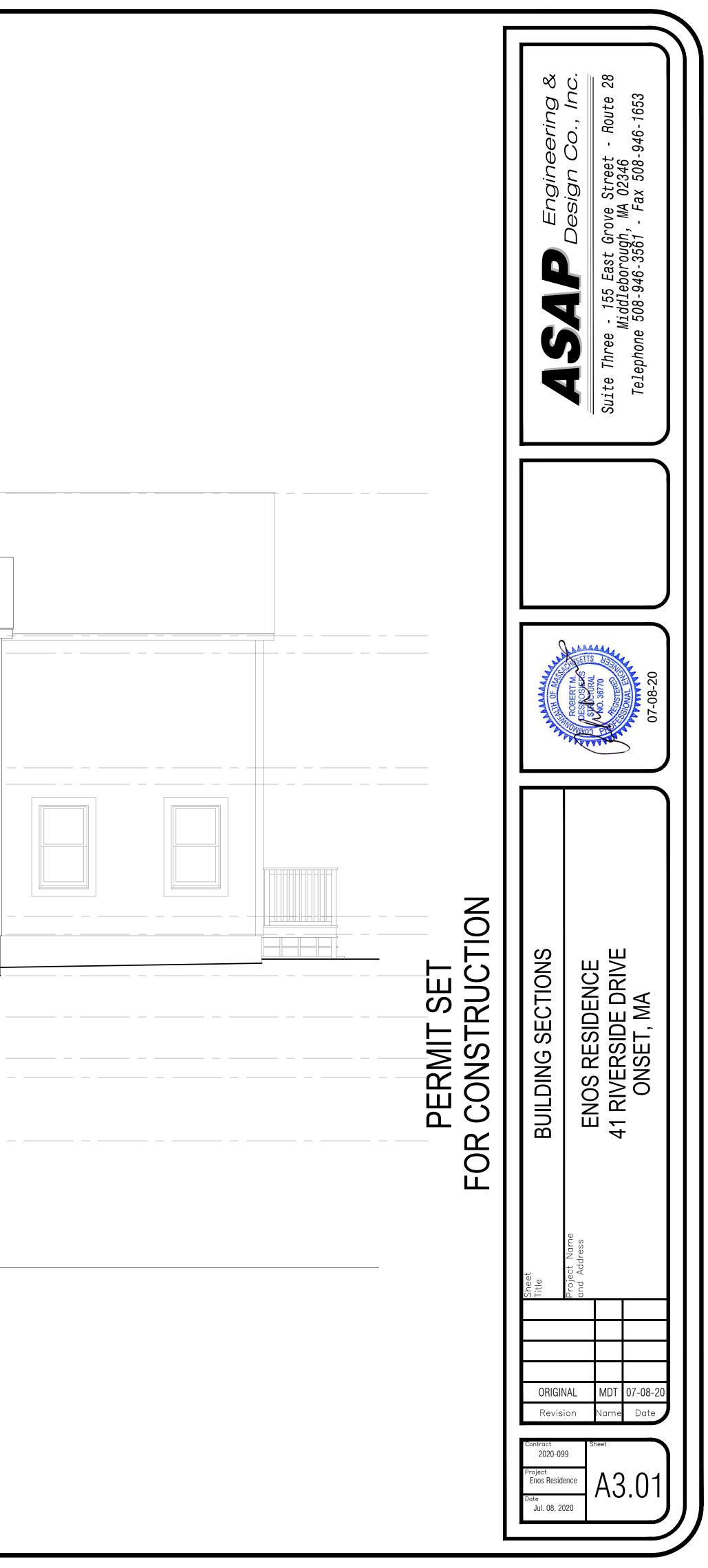








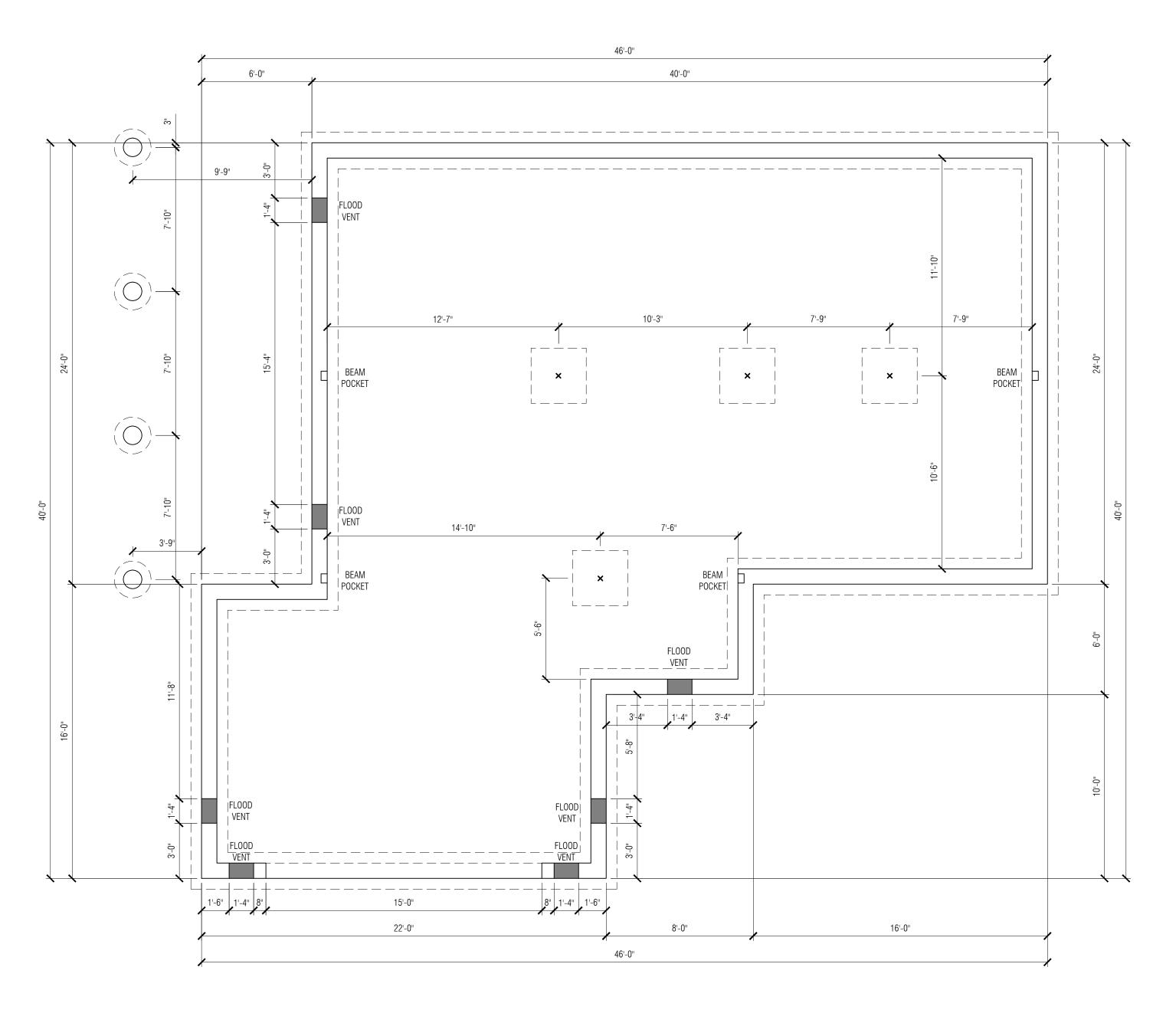




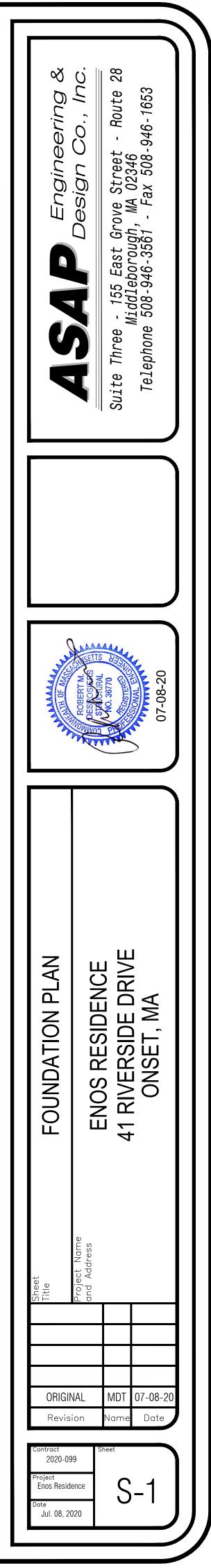


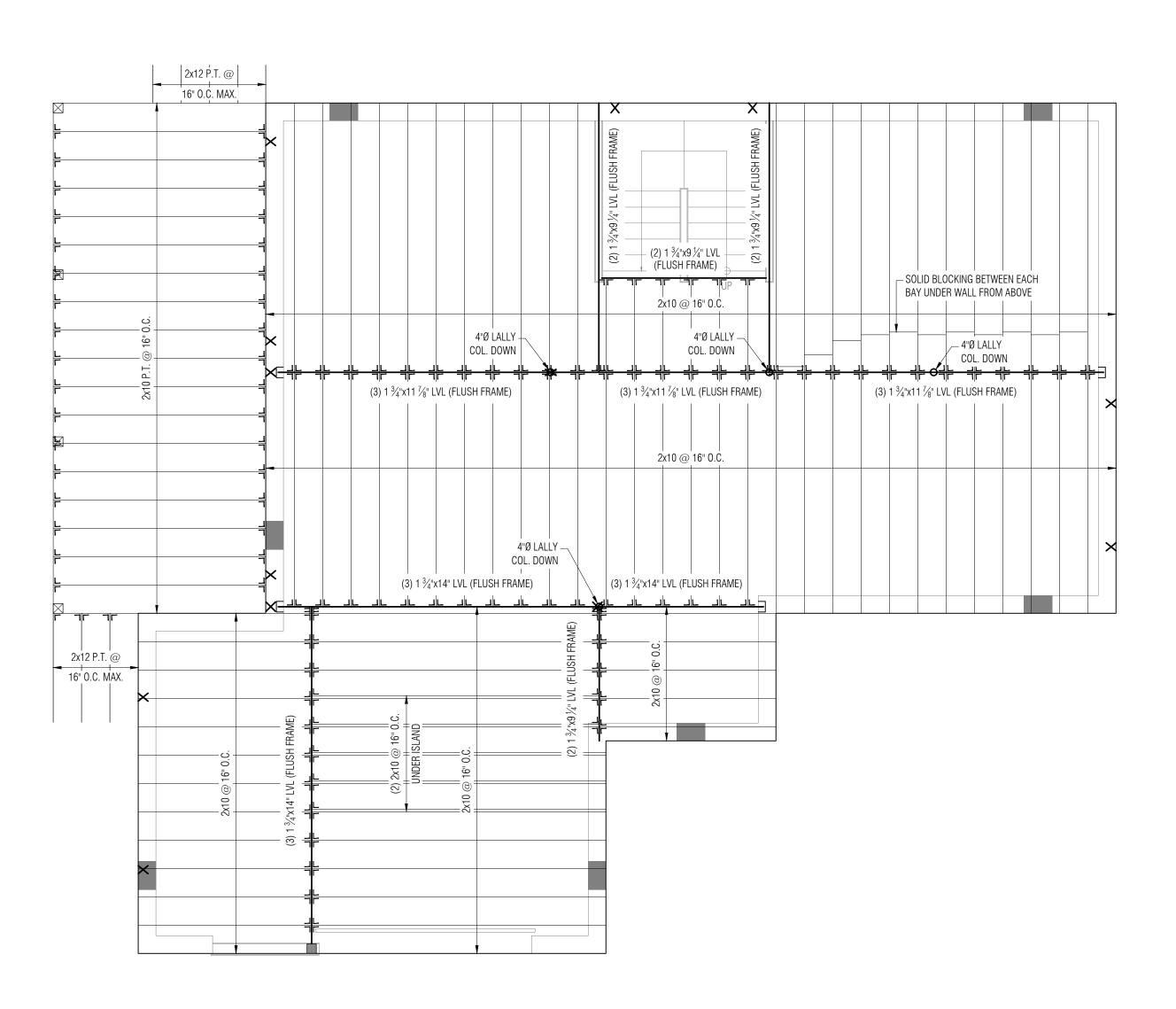


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FOR CONSTRUCTION	BUILDING SECTIONS	ENOS RESIDENCE 41 RIVERSIDE DRIVE ONSET, MA
	Contract 2020-0 Project Enos Resid Date Jul. 08, 2	sion Name Date

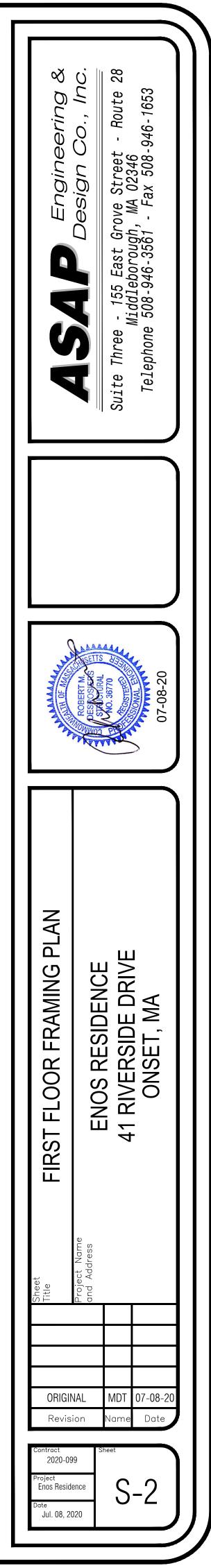




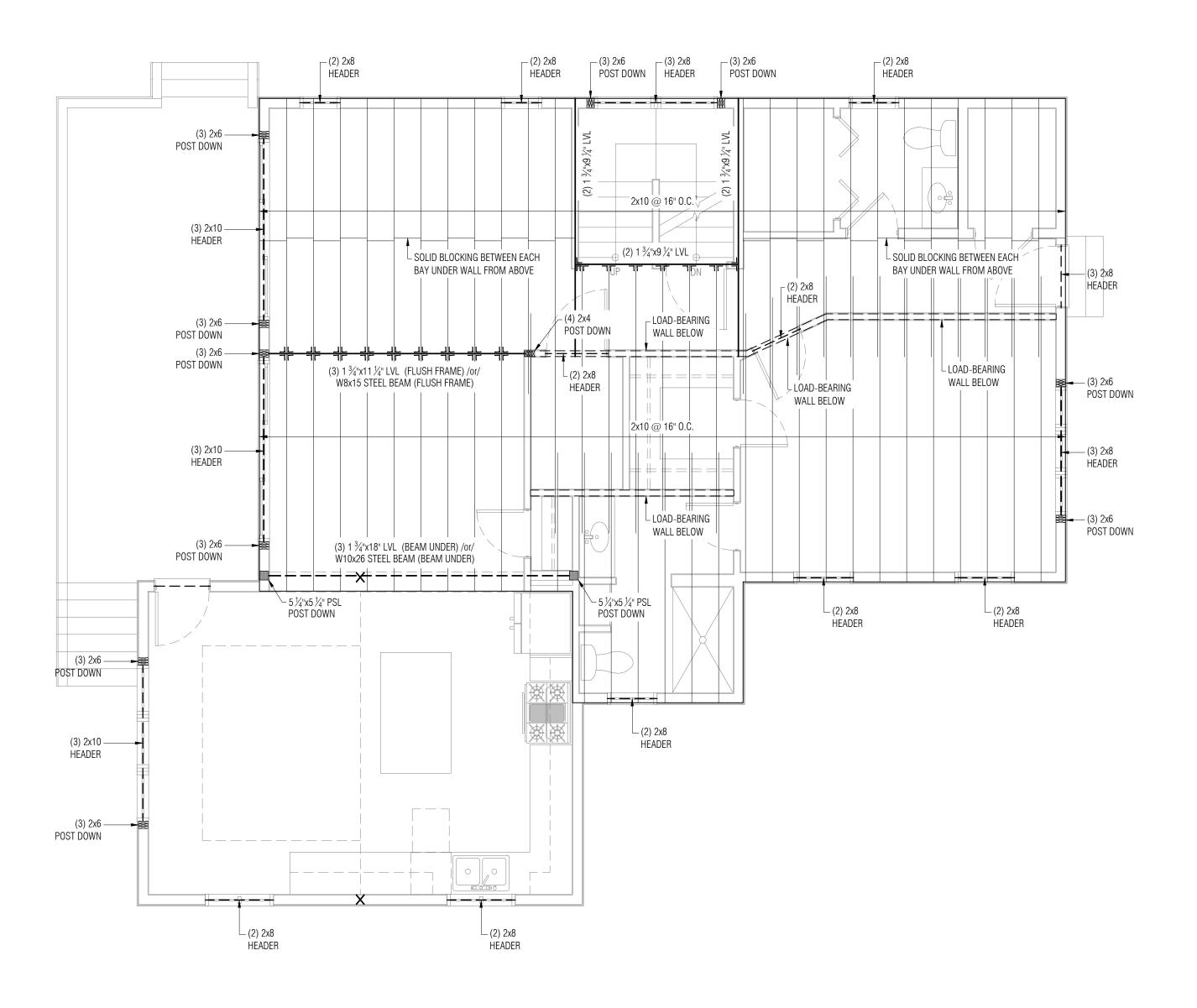




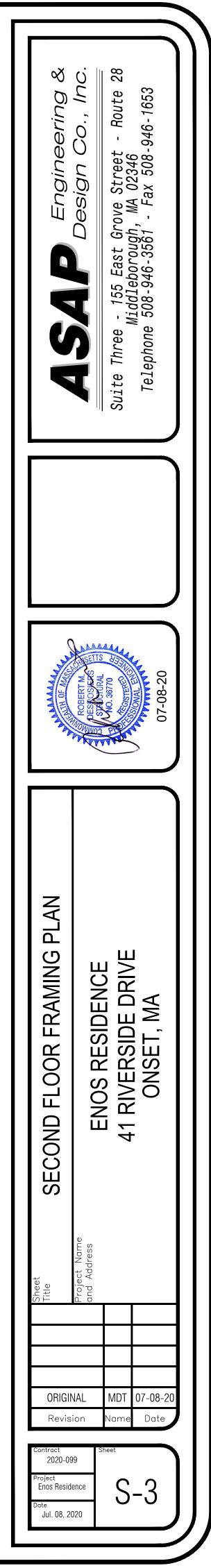


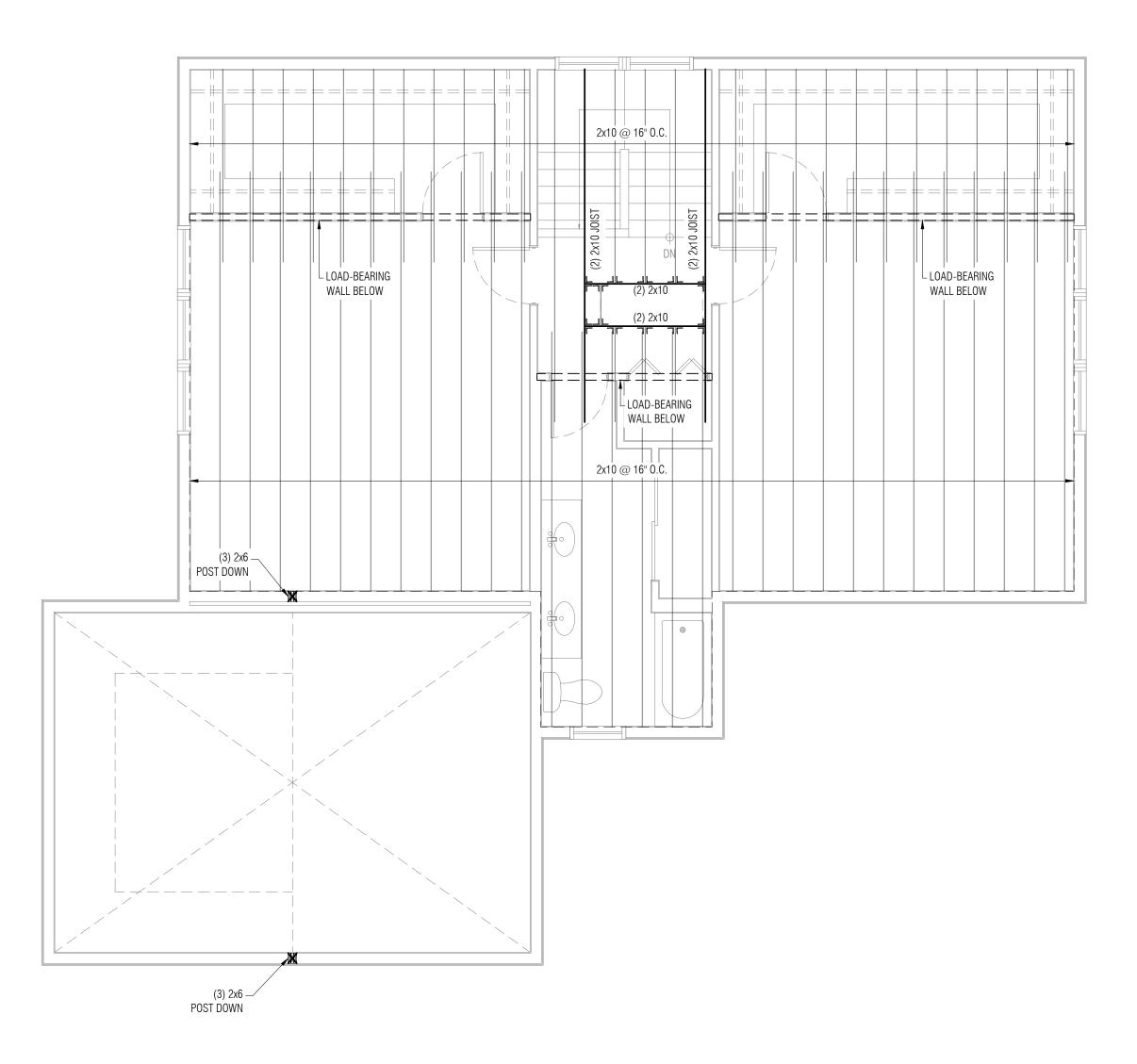


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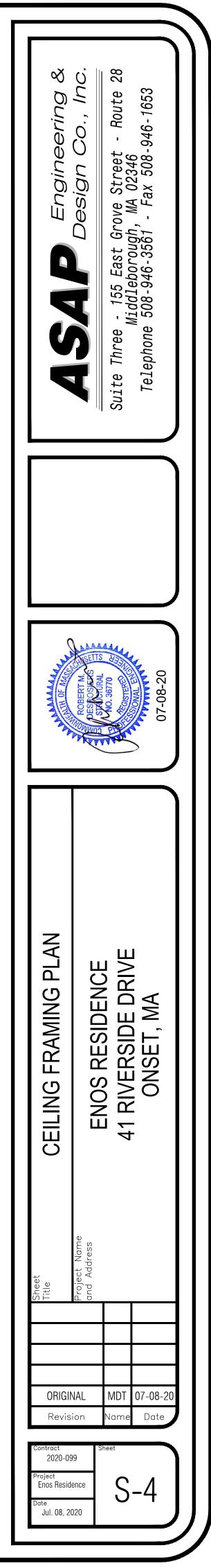




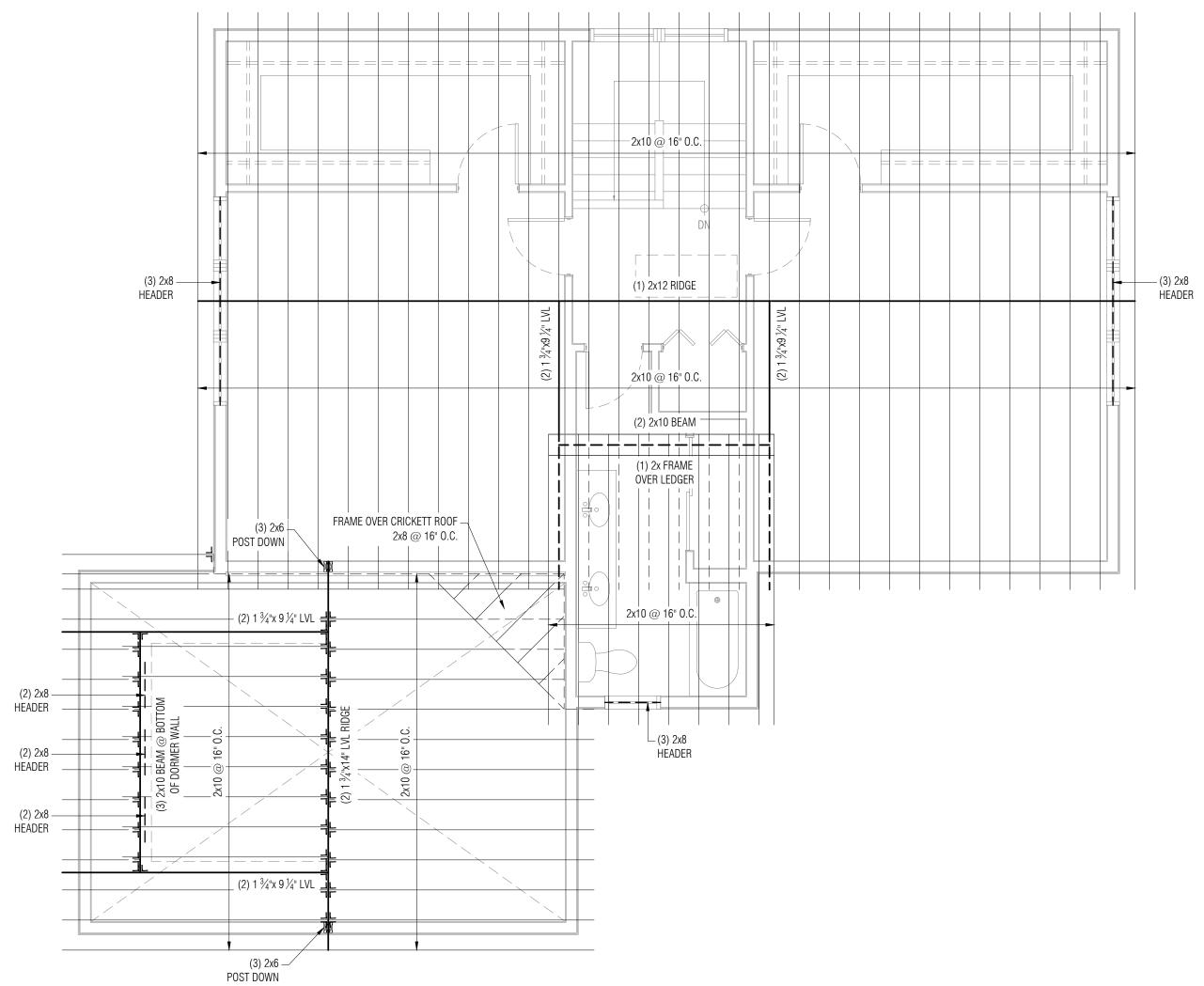




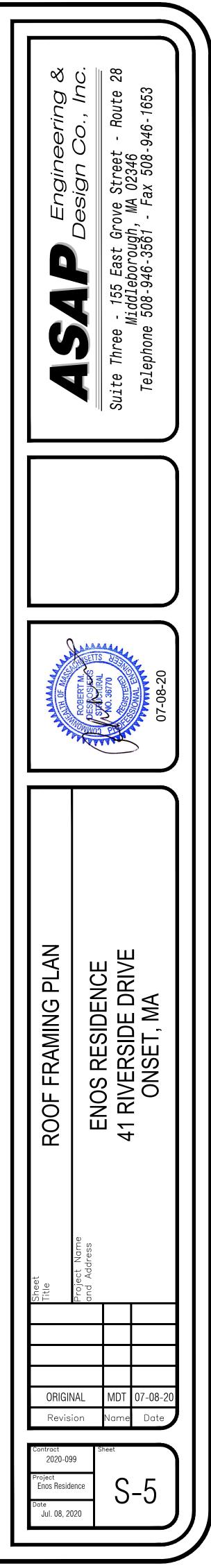


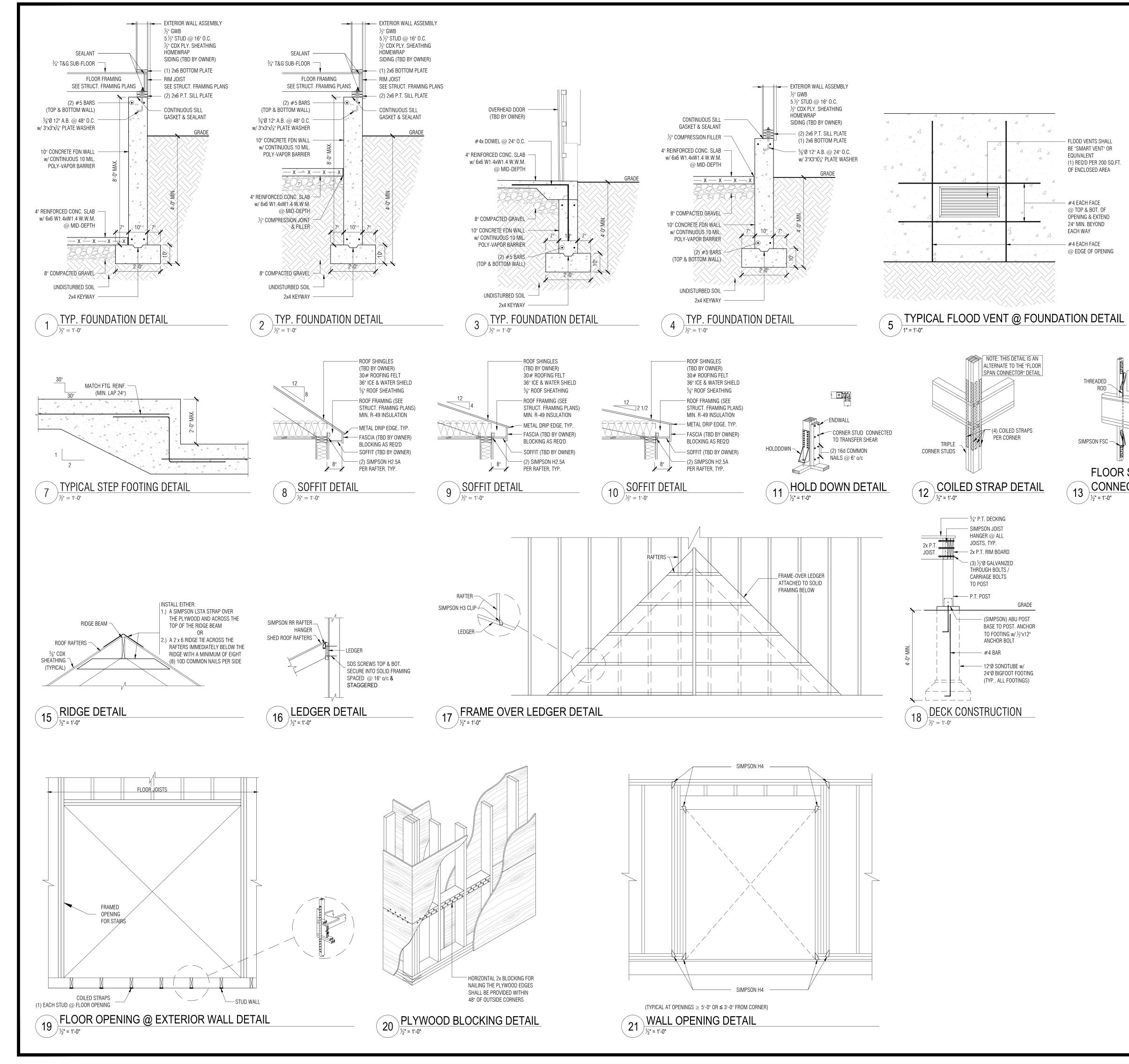


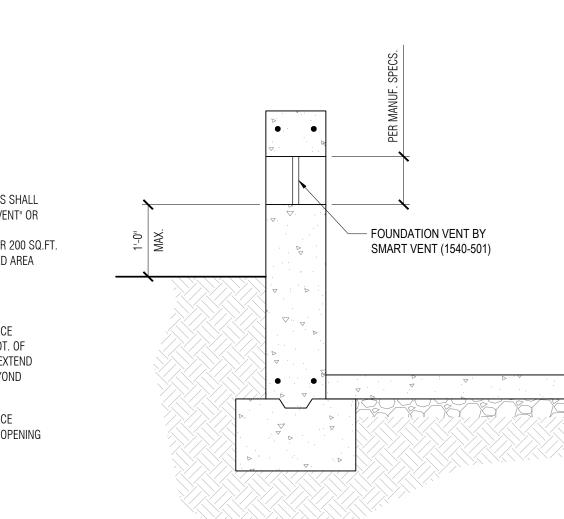






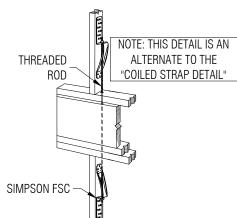




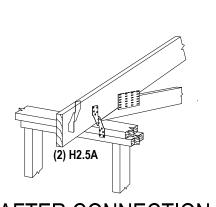




6 TYPICAL FLOOD VENT SECTION DETAIL



FLOOR SPAN / 1⁄2" = 1'-0"



14 RAFTER CONNECTION DETAIL ¹/₂" = 1'-0"

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