

PROJECT CONSULTANTS

ARCHITECT
 THOMAS ALAN GROUP
 23 NORTH GORE AVENUE
 SUITE 302
 WEBSTER GROVES, MO 63119
 PHONE: (314) 301-9975
 CHRIS PIKE: (314) 913-4106
 EMAIL: CPIKE@TAG-STL.COM

GENERAL CONTRACTOR
 DOUGLAS PROPERTIES

STRUCTURAL CONSULTANT
 DREAM RUNNERS, LTD.
 43 CAMROSE GREEN
 MARYVILLE, ILLINOIS 62062
 PHONE: (618) 550-9417
 FAX: (618) 288-3782
 WEB: WWW.DREAMRUNNERS-LTD.COM



CIVIL CONSULTANT
 VOLZ Incorporated
 10849 INDIAN HEAD IND'L. BLVD.
 ST. LOUIS, MO 63132
 PHONE: (314) 426-6212
 FAX: (314) 890-1250
 WEB: WWW.VOLZINC.COM

PROJECT INFORMATION

APPLICABLE BUILDING CODES:
 INTERNATIONAL RESIDENTIAL CODE (2015)
 INTERNATIONAL MECHANICAL CODE (2015)
 UNIFORM PLUMBING CODE (2015)
 NATIONAL ELECTRIC CODE (2014)
 BUILDING REGULATIONS AND ORDINANCES OF THE CITY OF OLIVETTE

CONSTRUCTION TYPE:
 TYPE VB (5B) UNPROTECTED, UNSPRINKLERED

OCCUPANCY:
 SINGLE FAMILY DWELLING

**744 CHERRY TREE LANE
 OLIVETTE, MO 63132**

**THOMAS
 ALAN
 GROUP**

THIS DRAWING AND DETAILS ON IT ARE THE SOLE PROPERTY OF THE ARCHITECT AND MAY BE USED FOR THIS SPECIFIC PROJECT ONLY. IT SHALL NOT BE LOANED, COPIED, OR REPRODUCED, IN WHOLE OR IN PART, OR FOR ANY OTHER PURPOSES OR PROJECT WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT.

COPYRIGHT © 2020 THOMAS ALAN GROUP



CHRISTOPHER THOMAS PIKE
 MO# 2011033866
 EXPIRATION DATE: 12/31/27

THE PROFESSIONAL ARCHITECT'S SEAL APPLIED TO THIS SHEET APPLIES ONLY TO THE MATERIAL AND ITEMS SHOWN ON THIS SHEET. ALL DRAWINGS, EXHIBITS, AND OTHER DOCUMENTS NOT EXHIBITED WITH THIS SHEET SHALL NOT BE CONSIDERED PREPARED BY THE ARCHITECT, AND THE ARCHITECT EXPRESSLY DISCLAIMS ANY AND ALL RESPONSIBILITY FOR SUCH PLANS, DRAWINGS, OR DOCUMENTS NOT EXHIBITED WITH THIS SHEET.

SHEET TITLE INDEX

COVER PAGE

- A1 GENERAL NOTES
- A2 GENERAL NOTES & STAIR SECTION
- A3 FOUNDATION PLAN
- A4 FINISHED LOWER LEVEL
- A5 FIRST FLOOR PLAN
- A6 SECOND FLOOR PLAN
- A7 FRONT ELEVATION & LEFT SIDE ELEVATION
- A8 REAR ELEVATION & RIGHT SIDE ELEVATION
- A9 FINISHED LOWER LEVEL ELECTRIC
- A10 FIRST FLOOR PLAN ELECTRIC
- A11 SECOND FLOOR PLAN ELECTRIC
- A12 SECTIONS AND DETAILS

- S1 STRUCTURAL FOUNDATION PLAN
- S2 STRUCTURAL FIRST FLOOR PLAN
- S3 STRUCTURAL SECOND FLOOR PLAN
- S4 STRUCTURAL SECTIONS AND DETAILS

No.	Description	Permit Set	Date
1			3/11/2026

ABBREVIATIONS

ABV. -ABOVE	DR. -DOOR	IJS -IN JOIST SPACE	SA -SUPPLY AIR
A.F.F. -ABOVE FINISHED FLOOR	D.S. -DOWNSPOUT	INSUL. -INSULATION	STRUCT. -STRUCTURAL
AHU -AIR HANDLING UNIT	DTL. -DETAIL	I.B. -IRONING BOARD	STL. -STEEL
ALUM. -ALUMINUM	DW. -DRYWALL	ITS -IN TRUSS SPACE	S.D. -SMOKE DETECTOR
ALT. -ALTERNATE	DW. OPNG. -DRYWALL OPENING	JST. -JOIST	S.F. -SQUARE FEET
ASPH. -ASPHALT	EA. -EACH	K.S. -KNEE SPACE	SG-I -TYPE I SAFETY GLAZING
BM. -BEAM	E.I.F.S. -EXTERIOR INSULATION FINISH	L.V.L. -LAMINATED VENEER LUMBER	SG-II -TYPE II SAFETY GLAZING
BP. -BEAM POCKET	SYSTEM	LIN. -LINEN	SH. -SHELF/SHELVES
BRG. -BEARING	EJ. -EXPANSION JOINT	LNDRY -LAUNDRY	SHT. -SHEET
BRK. -BRICK	ELEC. -ELECTRIC/ELECTRICAL	LT. -LIGHT	SHWR. -SHOWER
BRKT. -BRACKET	ELEV. -ELEVATION	MAS. -MASONRY	SL. -SLIDING
BRD. -BOARD	EQ. -EQUAL	MATL. -MATERIAL	SPECS. -SPECIFICATIONS
BLK. -BLOCK	EQUIP. -EQUIPMENT	MAX. -MAXIMUM	SW. -SWITCH
BOT. -BOTTOM	ES. -EACH SIDE	MECH. -MECHANICAL	T.J.I. -TRUSS JOIST INCORPORATED
CAB. -CABINET	EXIST. -EXISTING	MIN. -MINIMUM	TOS. -TOP OF SLAB
C.J. -CONTROL JOINT, CEILING JOISTS	EXT. -EXTERIOR	MISC. -MISCELLANEOUS	T&G. -TONGUE AND GROOVE
CLG. -CEILING	EXH. -EXHAUST	M.O. -MASONRY OPENING	TEMP. -TEMPERED
CMU -CONCRETE MASONRY UNIT	FD. -FLOOR DRAIN	MTL. -METAL	T.B.R. -TO BE REMOVED
CSMU -CALCIUM SILICATE MASONRY	F.J. -FLOOR JOISTS	N/A -NOT APPLICABLE	TV. -TELEVISION
UNIT	FLR. -FLOOR	N.I.C. -NOT IN CONTRACT	TYP. -TYPICAL
C.O. -CASED OPENING	FND. -FOUNDATION	N.T.S. -NOT TO SCALE	T.O.C. -TOP OF CONCRETE
CONC. -CONCRETE	F.P. -FIREPLACE	O/ -OVER	T.O.P. -TOP OF PLATE
CONT. -CONTINUOUS	FPHB -FREEZE-PROOF HOSE BIBB	O.C. -ON CENTER	U.C. -UNDER CABINET
CONST. -CONSTRUCTION	FTG. -FOOTING	OPT. -OPTIONAL	UCR -UNDER COUNTER REFRIGERATOR
C.S. -CORNER SET	FURN. -FURNACE	O.H. -OVERHEAD, OVERHANG	U.L. -UNDERWRITER'S LABORATORY
CORR. -CORRIDOR	F.V. -FIELD VERIFY	PFA -POST FROM ABOVE	U.N.O. -UNLESS NOTED OTHERWISE
CPT. -CARPET	GA. -GAGE	IE. -PLATE	W. -WASHER
CT -CERAMIC TILE	GEN. -GENERAL	PKT. -POCKET	W. -WITH
D -DRYER	GFI -GROUND FAULT INTERRUPTOR	PR. -PAIR	W.I.C. -WALK-IN CLOSET
D.B. -DRAWER BASE	GL. -GLASS	PRE-FAB -PREFABRICATED	WD. -WOOD
DBL. -DOUBLE	G&N -GLUE AND NAIL	P&S -POLE AND SHELF	WDW. -WINDOW
DB0 -DESIGNED BY OTHERS	GR. -GRADE	P.S.L. -PARALLEL STRAND LUMBER	W/O -WITHOUT
DEFS. -DIRECT EXTERIOR FINISHING	GRAN. -GRANULAR FILL	P.T. -PRESSURE TREATED	V. -VANITY
SYSTEM	H.C. -HANDICAP ACCESSIBLE	R.R. -ROOF RAFTER	V.B. -VAPOR BARRIER
DIFS. -DECORATIVE INTERIOR FINISHING	HDR. -HEADER	R.H. -RAISED HEEL	WP. -WATERPROOF
SYST. -DIMENSION	HR. -HOUR, HANDRAIL	RA -RETURN AIR	WWF -WELDED WIRE FABRIC
DIM. -DISPOSAL	HRDWD. -HARDWOOD	REF. -REFRIGERATOR	
DN. -DOWN	HT. -HEIGHT	REQ'D. -REQUIRED	
	HWH -HOT WATER HEATER	RV -ROOF VENT	

THOMAS ALAN GROUP
 ARCHITECTURE | DESIGN | INTERIORS

**Douglas
 PROPERTIES**

A New Residence for:
**Douglas
 PROPERTIES**
 744 CHERRY TREE LANE
 OLIVETTE, MO 63132

THOMAS ALAN GROUP
 ARCHITECTURE | DESIGN | INTERIORS
 23 N. Gore Ave., Suite 302
 Webster Groves, MO 63119
 (314) 301-9975
 ThomasAlanGroup.com

Sheet Number:

GENERAL NOTES

DIVISION 1 - GENERAL REQUIREMENTS
 1) THE FOLLOWING DRAWINGS AND NOTES ARE BASED ON THE 2015 INTERNATIONAL RESIDENTIAL CODE. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE TO COMPLETE ALL WORK IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL CODES, ORDINANCES, AND IN ACCORDANCE WITH INDUSTRY STANDARDS. COMPLIANCE WITH THESE NOTES AND DRAWINGS DOES NOT NECESSARILY COVER ALL RESTRICTIONS REQUIRED. BUILDING AND FIRE DISTRICT PERMIT APPROVAL MUST BE OBTAINED BEFORE CONSTRUCTION BEGINS.
 2) PRIOR TO BEGINNING THE WORK, NOTIFY THE ARCHITECT OF ANY DISCREPANCIES OR ERRORS DISCOVERED IN THESE DOCUMENTS. DO NOT SCALE DRAWINGS. FOLLOW WRITTEN DIMENSIONS ONLY. ONLY WRITTEN INTERPRETATIONS OR DOCUMENTED CHANGES FROM THE ARCHITECT ARE BINDING. ARCHITECT WILL NOT BE RESPONSIBLE FOR ORAL INSTRUCTION. CONTRACTOR SHALL VISIT THE SITE AND BE FAMILIAR WITH ALL CONDITIONS AFFECTING THE WORK.
 3) COPYRIGHT: THESE PLANS ARE THE SOLE AND ABSOLUTE PROPERTY OF THOMAS ALAN GROUP, L.L.C. ANY USE, COPYING, OR REPRODUCING OF THESE PLANS WITHOUT THE EXPRESS WRITTEN CONSENT OF THOMAS ALAN GROUP, L.L.C. IS ILLEGAL. THE ARCHITECT TAKES NO RESPONSIBILITY FOR WORK THAT DOES NOT BEAR HIS SEAL AND SIGNATURE.

DIVISION 2 - SITEWORK
 21 FLOOD PLAIN: BASEMENT FLOOR ELEVATION MUST BE ABOVE 100 YEAR FLOOD PLAIN. LOW BILL MUST BE MINIMUM 2 FEET ABOVE FLOOD PLAIN ELEVATION.
 22 SOIL BEARING CAPACITY: GENERAL CONTRACTOR TO CONFIRM AND NOTIFY ARCHITECT IN WRITING IF LESS THAN 2000 PSF. BEFORE PROCEEDING WITH THE WORK.
 23 FINISH GRADES: AT BUILDING TO BE MIN. 8" BELOW TOP OF FOUNDATION AT FRAME OR FRAME WITH MASONRY VENEER AND 6" MIN. BELOW FULL MASONRY WALLS. SLOPE GRADE AWAY FROM FOUNDATION A MINIMUM OF A 6" DRAIN OR 1" TO A SLOPE. INTERVENE SURFACES WITHIN 10' OF THE BUILDING FOUNDATION SHALL BE SLOPED A MINIMUM OF 2% AWAY FROM THE BUILDING.
 24 BUILDING HEIGHT: PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL BE AWARE OF THE LOCAL BUILDING AND FIRE PROTECTION JURISDICTIONS REQUIREMENTS ON BUILDING HEIGHT AND STORIES ABOVE GRADE. DUELLINGS DESIGNED UTILIZING THE 2015 IRC MAY BE CONSTRUCTED TO 3 STORIES ABOVE THE GRADE PLANE.
 NOTE: BASEMENTS ARE CONSIDERED AS A STORY ABOVE GRADE WHERE THE FINISHED SURFACE OF THE FLOOR ABOVE THE BASEMENT IS:
 A) MORE THAN 6'-0" ABOVE THE GRADE PLANE OR
 B) MORE THAN 6'-0" ABOVE THE FINISHED GROUND LEVEL FOR MORE THAN 50% OF THE TOTAL BUILDING PERIMETER OR
 C) MORE THAN 12'-0" ABOVE THE FINISHED GROUND LEVEL AT ANY POINT.
 25 PROVIDE CHEMICAL TERTIUMITE TREATMENT, SOIL TREATMENT AND/OR FIELD APPLIED WOOD TREATMENT SHALL BE INSTALLED IN SUCH A MANNER SO AS TO PREVENT TERMITE INFESTATION. CHEMICAL CONCENTRATION RATE TO BE APPLIED IN STRICT ACCORDANCE WITH THE TERTIUMITE LABEL (MANUFACTURER'S REQUIREMENTS.)

DIVISION 3 - CONCRETE
 31 COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS SHALL BE MINIMUM:
 A) 2500 PSI - BASEMENT SLABS, FOOTINGS, AND PIERS
 B) 3000 PSI - FOUNDATION AND BASEMENT WALLS
 C) 3500 PSI - PORCHES, WALLS, PATIOS, STEPS, GARAGE AND CARPORT FLOOR SLABS, AND DRIVEWAYS.
 ALL CONCRETE SHALL BE AIR-ENTRAINED IN ACCORDANCE WITH TABLE R402.2 (2015 IRC).
 32 CONCRETE FLOOR SLABS: MINIMUM THICKNESS FOR FLOOR SLABS SUPPORTED DIRECTLY ON THE GROUND IS 3". INTERIOR SLABS (INCLUDING GARAGE SLABS LOCATED ABOVE THE OUTSIDE GRADE) SHALL BE PLACED OVER A MINIMUM 4" BASE COURSE OF GRAVEL OR CRUSHED STONE. A 6 MIL POLYETHYLENE BARRIER WITH JOINTS LAPPED NOT LESS THAN 6" SHALL BE PLACED BETWEEN THE CONCRETE FLOOR SLAB AND THE BASE COURSE.
 EXCEPTION: GARAGES AND EXTERIOR FLATWORK NOT LIKELY TO BE ENCLOSED AT A LATER DATE SHALL NOT REQUIRE THE POLYETHYLENE BARRIER.
 33 ADMIXTURES USED MUST CONFORM WITH SECTION R402.2 OF THE 2015 IRC.
 34 FOOTINGS: ALL REINFORCING SHALL EXTEND A MINIMUM OF 2'-6" BELOW FINISHED GRADE AND BEAR ON UNDISTURBED SOIL, OR PREPARED FILL.
 35 CONCRETE FOUNDATION HEIGHT LIMITS:
 MAX. 8' FOUR HT. WITH 8" THICK WALL. (SEE DETAILS).
 MAX. 9 FT FOUR HT. WITH 10" THICK WALL W/ 2'-4 1/2" TOP MID, 4 BOT. W/ 4 1/2" X 13" O.C. VERT.
 OR 12" THICK WALL W/ 2'-4 1/2" TOP AND BOT. (SEE DETAILS).

DIVISION 4 - MASONRY
 41 BRICK/STONE VENEER: 1" MAX. AIR SPACE BETWEEN VENEER AND SHEATHING. PROVIDE CORROSION RESISTANT CORRUGATED SHEET METAL WALL TIES, MINIMUM NO. 22 GA. BY 1/8" DIA. AT 24" VERTICALLY AND HORIZONTALLY AND ONE TIE PER 261 SF. FASTENED WITH 8d COMMON NAILS. IF WATER-RESISTANT SHEATHING IS NOT USED BEHIND VENEER PROVIDE MIN. 1/4" ASPHALT SATURATED BUILDING FELT (OR APPROVED EQUIV.) FULL HEIGHT OVER SHEATHING, BEHIND VENEER. PROVIDE CORROSION RESISTIVE FLASHING AND WEEPS (3/16" AT MAX. 33" OC.
 A) AT THE TOP OF ALL EXTERIOR WINDOW AND DOOR OPENINGS
 B) AT THE INTERSECTION OF MASONRY CONSTRUCTION W/ FRAME OR STUCCO WALLS
 C) UNDER AND AT THE ENDS OF MASONRY, WOOD OR METAL COPINGS AND SILLS.
 D) CONTINUOUSLY AROUND ALL PROJECTING WOOD TRIM.
 E) WHERE EXT. PORCHES, DECKS OR STAIRS ATTACH TO A WALL OR FLOOR ASSEMBLY OF WOOD-FRAME CONSTRUCTION.
 F) AT WALL AND ROOF INTERSECTIONS.
 G) AT BUILT IN GUTTERS.
 FLASHING SHALL BE LOCATED BENEATH THE FIRST COURSE OF MASONRY ABOVE FINISHED GROUND LEVEL ABOVE THE FOUNDATION WALL OR SLAB AND PER SECTION R102.15 AND R102.33 OF THE 2015 IRC.
 42 VENEER TIES AROUND WALL OPENINGS: ADDITIONAL METAL TIES SHALL BE PROVIDED AROUND ALL WALL OPENINGS GREATER THAN 48" IN EITHER DIRECTION. METAL TIES AROUND THE PERIMETER OF OPENINGS SHALL BE SPACED NOT MORE THAN 3 FT. O.C. AND WITHIN 12" OF THE WALL OPENING.
 43 MASONRY FIREPLACES AND CHIMNEYS: SHALL BE INSTALLED PER CHAPTER 9 OF THE 2015 IRC AND DETAILS ON PLANS. FLUE SHALL BE SIZED BY THE MASONRY CONTRACTOR (BASED ON TABLE R1003.14(1) OR R1003.14(2) OF THE 2015 IRC), WHO SHALL WARRANT THAT THE FIREPLACE DRAINS PROPERLY.
 44 MASONRY FIREPLACE WALLS TO BE MINIMUM THICKNESS OF 8" OF CONCRETE OR MASONRY INCLUDING 2" OF FIRE BRICK.
 45 WALLS OF THE THROAT AND SMOKE CHAMBER SHALL BE A MINIMUM OF 8" OF CONCRETE OR SOLID MASONRY OR A TOTAL THICKNESS OF 6" IF LINED WITH 2" OF FIREBRICK OR LINED WITH 3/8" VITRIFIED CLAY.
 46 AIRSPACE CLEARANCES TO COMBUSTIBLES FROM THE EXTERIOR SURFACE OF THE FIREPLACE WALLS SHALL BE MINIMUM 4" FROM THE BACK OF THE FIREPLACE, 2" FROM THE FRONT AND SIDE OF THE MASONRY FIREPLACE, AND 2" MINIMUM FOR THE SMOKE CHAMBER WALLS AND CHIMNEYS.
 EXCEPTIONS:
 A) EXPOSED COMBUSTIBLE TRIM, EDGES OF SHEATHING AND SIDING, AND DRYWALL MAY BE PLACED AGAINST THE MASONRY FIREPLACE SIDE WALL, AND HEARTH EXTENSIONS PROVIDED THE COMBUSTIBLE EDGE IS A MINIMUM 12" FROM THE FIREBOX LINING OR FLUE LINING. ALL WOOD WALL, FLOOR, AND ROOF FRAMING MEMBERS SHALL MAINTAIN THE MINIMUM CLEARANCES.
 B) COMBUSTIBLE TRIM AND MANTELS ATTACHED TO THE FIREPLACE FRONT SHALL BE A MINIMUM OF 6" FROM THE OPENING. COMBUSTIBLE MATERIALS WITHIN 12" OF THE FIREPLACE OPENING SHALL NOT PROJECT MORE THAN 3/8" FOR EACH 1" DISTANCE FROM THE OPENING.
 C) CHIMNEYS LOCATED OUTSIDE THE EXTERIOR WALLS WITH 1" CLEARANCE TO COMBUSTIBLES COMPLETELY AROUND THE PERIMETER OF THE CHIMNEY, MAY HAVE A 1" CLEARANCE TO COMBUSTIBLES WHEN PASSING THROUGH THE ROOF OR CORNER.
 47 MASONRY CHIMNEYS SHALL BE CONSTRUCTED OF 4" MINIMUM SOLID MASONRY AND SHALL BE LINED WITH:
 A) A 3/4" CLAY FLUE LINER MEETING THE REQUIREMENTS OF ASTM C235-07, AN AIR SPACE EQUAL TO THE THICKNESS OF THE FLUE LINER IS REQUIRED BETWEEN THE LINER AND THE FULL MASONRY CHIMNEY.
 B) LISTED CHIMNEY LINING SYSTEMS COMPLYING WITH UL 1171-04
 C) FACTORY-BUILT CHIMNEYS OR CHIMNEY TIES LISTED FOR INSTALLATION WITHIN MASONRY CHIMNEYS.

DIVISION 5 - STRUCTURAL STEEL
 51 STEEL TO BE MINIMUM A36/50 GRADE 60 STEEL. ALL STEEL BEAMS TO HAVE MINIMUM 4" BEARING AND BE GROUDED SOLID INTO BEAM POCKETS WITH NON-SHRINK GROUT. ALL STEEL BEAMS, COLUMNS, AND LINTELS TO BE SHOP PRIMED.
 52 PROVIDE STEEL ANGLE AT ALL MASONRY OPENINGS (UNO.). VERIFY SIZE WITH ARCHITECT IF NOT INDICATED.
DIVISION 6 - FRAMING NOTES
 61 FRAMING TO BE IN ACCORDANCE WITH THE "NATIONAL FOREST PRODUCTS MANUAL FOR WOOD FRAME CONSTRUCTION".
 62 MATERIALS & DESCRIPTIONS: FLOOR JOISTS: TO BE GRADE-HARDED MINIMUM 1000 F# (2X12'S) OR 1050 F# (2X10'S) SINGLE MEMBER USE, UNLESS NOTED OTHERWISE. (SUBSTRUCTURE EXPOSED TO EXTERIOR - PRESSURE TREATED, USE CEDAR OR OTHER EXTERIOR GRADE WOOD FOR FINISH SURFACES).
 63 FLOOR FRAMING SHALL BE DESIGNED TO SUPPORT THE FOLLOWING MINIMUMS:
 FLOOR AREAS OTHER THAN SLEEPING ROOMS: LL, 40 LBS. PER SQ. FT.
 SLEEPING ROOMS: LL, 30 LBS. PER SQ. FT.
 BALCONY (EXTERIOR) LESS THAN 100 SQ. FT. LL, 60 LBS. PER SQ. FT. LL.
 DECK: LL, 40 LBS. PER SQ. FT.
 64 STAIRS SHALL BE DESIGNED FOR A 40 PSF LIVE LOAD OR 300 LB CONCENTRATED LOAD ON 4 SQ. INCHES AT MID SPAN OF A TREAD, WHICHEVER PRODUCES THE GREATER STRESSSES.
 65 ROIS: (2) 2X TO BE INTERPRETED AS (2) 2X CRIPPLES (GLUED AND NAILED) PLUS MINIMUM (1) FULL HEIGHT POSTS.
 66 UNBROKEN STUD: ALL POSTS TO BE BLOCKED SOLID TO TOP OF STRUCTURE BELOW STUDS USED AS POSTS TO BE SPRUCE-PINE-FIR. MINIMUM POST SIZE 2 X 2X WALL THICKNESS TYPICAL UNDER ALL BEAMS AND HEADERS UNO.
 EXCEPTION: POSTS CARRYING ROOF LOADS ONLY AND NOT EXCEEDING 8'-11" IN HEIGHT SUPPORTING HEADERS SPANNING 3'-0" OR LESS MAY CONSIST OF A SINGLE 2X CRIPPLE AND (1) FULL HT. UNBROKEN STUD UNLESS NOTED OTHERWISE.
 67 INTERIOR PARTITIONS: MINIMUM 2X4 STUDS @ 16" O.C. UNO. (ALL FRAMING TO BE 16" O.C. TYPICAL UNO.).
 68 HEADERS: MINIMUM 2 X 10'S UNO., GLUED AND NAIL. ALL MULTIPLE MEMBER BEAMS, TYPICAL AT ALL DOORS AND WINDOWS.
 69 SUBEXPOSURE: APA RATED STUD-1-FLOOR SHEATHING, 48/24 SPAN RATED, 23/32 (3/4" NOM.), TONGUE AND GROOVE.
 70 EXPOSURE: (PLYWOOD ONLY) GLUED AND NAILED (SUGGEST RING SHANKS) TO JOISTS.
 71 FLOORING UNDERLAYMENT: MINIMUM 1/4" OSB OR LUAN OVER SUBFLOOR AT VINYL FLOORING.
 72 EXTERIOR WALL SHEATHING: APA RATED SHEATHING EXPOSURE 1 SPAN RATING 24/16 (3/4" OSB) OR 32/16 (1/2" PLYWOOD) BY NOMINAL. HOUSE AS DETAILED PRESCRIBES TO THE "CONTINUOUS SHEATHING" (R6-0210-04) CODE REQUIREMENT IN ACCORDANCE WITH METHOD C3-USP OF SECTION R602.10(4) ON ALL AREAS OF THE EXTERIOR WALLS. THE HOUSE ALSO USES METHOD C3-FF FOR NARROW WALLS WHERE INDICATED ON PLANS. (SEE DETAIL) OPTIONAL BRACED WALL PANEL CONSTRUCTION METHODS ARE AVAILABLE TO THE CONTRACTOR PER SECTION R602.10(1). THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IF ALTERNATE METHODS ARE DESIRED TO BE EMPLOYED, AS ADDITIONAL CALCULATIONS AND DELINEATION ON THE CONSTRUCTION DOCUMENTS WILL BE REQUIRED. STRUCTURAL ENGINEERING BY OUTSIDE CONSULTANTS MAY BE REQUIRED. CONTRACTOR TO CONFIRM AND NOTIFY THE ARCHITECT IN WRITING OF THE SUBJECT PROPERTIES SEISMIC DESIGN CATEGORY, IF A "D" CATEGORY, BEFORE PROCEEDING WITH THE WORK.

61 ROOF SHEATHING: APA RATED SHEATHING, EXPOSURE 1, MINIMUM SPAN RATING 32/16 (1/2") NOM. W/ FLY CLIPS AND WITHOUT EDGE SUPPORT OR MINIMUM (24/10) 3/4" THICK PLYWOOD OR 24/16, 3/4" OSB WITH EDGE SUPPORT. EDGE JOISTS SHOULD BE FULL TONGUE AND GROOVE EDGES, PANEL EDGE JOISTS (MIDPOINT OF SPAN BETWEEN EACH SUPPORT), OR 2X BLOCKING.
 62 EXPOSED EXTERIOR MATERIALS TO BE APPROVED EXTERIOR GRADE. FASTENERS FOR PRESSURE PRESERVATIVE AND FIRE-RETARDANT-TREATED WOOD SHALL BE OF HOT-DIPPED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER.
 EXCEPTION: 3/4" DIAMETER OR GREATER STEEL BOLTS.
 63 NAILING TO BE IN ACCORDANCE WITH TABLE R602.3(1) THROUGH R602.3(4). GYPSUM SHEATHING SHALL BE FASTENED IN ACCORDANCE WITH TABLE R602.3(1).
 RAFTER/CEILING JOIST SYSTEMS SHALL BE NAILED TO THE TOP PLATE OF THE WALL IN ACCORDANCE WITH TABLE R602.3(1). TRUSSES SHALL BE NAILED TO THE TOP PLATE OF THE WALL WITH 3-16d NAILS TOE NAILED WITH 6 SPLITTING END OF THE JOIST.
 64 LAMINATED VENEER LUMBER, LVL, USE R2 2600 F51 "MICROLAM" BEAMS AS MANUFACTURED BY TRUSS JOIST CORPORATION OR APPROVED EQUAL.
 65 PARALLEL STRAND LUMBER, PS1, 20E, 10 2300 F51 "PARALLAN" BEAMS AS MANUFACTURED BY TRUSS JOIST CORPORATION OR APPROVED EQUAL.
 66 FIREBLOCKING: TOP AND BOTTOM OF ALL CONVENTIONAL, DOUBLE STUD, AND STAGGERED STUD FRAME WALLS TO BE FIREBLOCKED VERTICALLY AT THE CEILING AND FLOOR LEVELS AND HORIZONTALLY AT INTERVALS NOT EXCEEDING 10'. FIREBLOCKING REQUIRED AT ALL SOFFITS AND DROPPED CEILINGS. FIREBLOCKING REQUIRED BETWEEN STAIRWAY STRINGERS AT THE TOP AND BOTTOM OF THE RUN ENCLOSED ACCESSIBLE SPACES UNDER STAIR SURFACE AND ANY SOFFITS PROTECTED THE ENCLOSED SIDE WITH 1/2" GYPSUM BOARD. PROVIDE FIREBLOCKING PER SECTION R302.1 OF THE 2015 IRC.
 67 DRAFTSTOPPING: CEILINGS SUSPENDED BELOW WOOD JOISTS OR ATTACHED DIRECTLY TO WOOD FLOOR TRUSSES SHALL BE DRAFTSTOPPED AT 1000 SQ. FT. INTERVALS AND PARALLEL TO MAIN FRAMING MEMBERS. CRAWL SPACE ACCESS: ACCESS OPENINGS THROUGH THE FLOOR SHALL BE A MINIMUM OF 18"x24" INCHES. OPENINGS THROUGH A PERIMETER WALL SHALL BE 16"x24". OPENING SIZE SHALL BE MODIFIED PER SECTION R102.14 WHERE MECHANICAL EQUIPMENT IS LOCATED UNDER FLOORS.
 68 ATTIC CLEARANCE: 22"x30" ACCESS OPENING REQUIRED FOR ATTIC AREAS WHICH EXCEED 300 SQ. FT. AND HAVE A CLEAR HEIGHT OF OVER 30". CLEARANCE SHALL BE INSTALLED IN A HALLWAY OR OTHER READY ACCESSIBLE LOCATION 30" MINIMUM HEADROOM IS REQUIRED AT SOME POINT VERTICALLY ABOVE THE ACCESS OPENING. OPENING SIZE SHALL BE MODIFIED PER SECTION R102.13 WHERE MECHANICAL EQUIPMENT IS LOCATED IN ATTICS.
 69 DECK DOORS: SECURELY BARRICADE DOORS UNTIL DECK IS BUILT AND APPROVED, TYPICAL.
 70 DOUBLE FLOOR JOISTS AROUND STAIR OPENINGS, FIREPLACE HEARTHS, AT CORNERS OF CANTILEVERED BAYS AND AT CORNERS OF PARTITIONS (TYPICAL AT ALL OPENINGS, UNO.). BEARING PARTITIONS AND POST SHALL BE UNBROKEN (RUN CONTINUOUS) FROM BEARING TO STRUCTURE BELOW.
 71 CUTTING, NOTCHING, AND/OR BORING HOLES IN WOOD BEAMS, JOISTS, RAFTERS OR STUDS, SHALL NOT EXCEED THE LIMITATIONS NOTED IN SECTIONS R502.8, R602, AND R802.1 OF THE 2015 INTERNATIONAL RESIDENTIAL CODE. REINFORCEMENT OF STUDS SHALL BE DONE IN ACCORDANCE WITH THE 2015 IRC.
 72 INSTALL 1x4 EACH SIDE OF STEEL BEAM NAILED TO FLOOR JOIST, OR RAMJET 2X4 TO TOP OF BEAM AND TOE NAIL JOIST, OR BLOCK SOLID BETWEEN JOIST OVER BEAM.
 73 CABINET SUPPLIER TO FIELD MEASURE AREA OF WORK AFTER ROUGH FRAMING TO ASSURE EXACT FIT OF CABINETS AND FREE OPERATION OF ALL DOORS AND DRAWERS.
 74 HANDRAILS SHALL NOT PROJECT MORE THAN 1/4" INTO REQUIRED STAIRWAY WIDTH HANDRAILS AT STRAIGHT RUN STAIRS TO BE CONTINUOUS. ALLOWABLE DIAMETER OF INTERIOR STAIRCASE HANDRAIL IS 2" MAXIMUM AND 1 1/4" MINIMUM UNLESS OTHERWISE SPECIFIED. HANDRAIL ENDS SHALL RETURN TO THE WALL OR NEUEL POST.
 75 GUARDS: PROVIDE MIN. 36" HEIGHT GUARDS ALONG BALCONIES, AREAWAYS, AND OPEN SIDED WALKING SURFACES WHERE THE DIFFERENCE IN FLOOR LEVEL IS MORE THAN 30".
 76 ROOF OVERFRAMING: MIN 2 X 6'S AT 16" O.C. UNLESS NOTED OTHERWISE ON PLANS. ALL OVERFRAMING TO BEAR AT A 30 DEGREE ANGLE FROM THE PERPENDICULAR AT ALL ROOF FRAMING. (MAX. 10'-0" SPAN).
 78 TRUSS TO BE DESIGNED BY OTHERS IN CONFORMANCE WITH SECTION R802.10(1) OF THE 2015 IRC. ANSI/APA NDS-1000, AND ANSI/T 1-2002. FABRICATOR'S RESPONSIBILITIES INCLUDE BUT ARE NOT LIMITED TO DESIGNING ALL CONNECTIONS AND TRUSS TO TRUSS CONNECTIONS. ALL TRUSSES MUST BE DESIGNED TO RESIST HORIZONTAL THRUST, NO HORIZONTAL THRUST SHALL BE APPLIED TO ANY WALLS. ALL TRUSSES TO BE TWO (2) POINT BEARING UNLESS NOTED OTHERWISE. TRUSSES TO BE DESIGNED TO MINIMIZE TOTAL DEFLECTION. COMPOUND DEFLECTION MUST BE TAKEN INTO ACCOUNT WHEN DESIGNING TRUSS SYSTEM. TOTAL LOAD DEFLECTION OF TRUSS SYSTEM NOT TO EXCEED 1/360. SCISSOR TRUSSES WITH HORIZONTAL MOVEMENT GREATER THAN 1/2" TO BE ANCHORED WITH TC SIMPSON ANCHORS ON ONE END, OR APPROVED EQUAL.
 TRUSS SUPPLIER TO PROVIDE SHOP DRAWINGS, PRODUCT DATA FOR ALL TRUSS COMPONENTS, STRESS DIAGRAMS (WHICH HAVE BEEN SIGNED AND SEALED BY A STRUCTURAL ENGINEER LICENSED TO PRACTICE STRUCTURAL ENGINEERING IN THE STATE THAT THE PROJECT WILL BE CONSTRUCTED) AND A TRUSS LAYOUT PLAN SHOWING ALL TRUSS LOCATIONS, HANGERS, CONNECTORS, SPACING, PITCH, GIRDEBS AND CROSS BRACING. FABRICATOR SHALL COORDINATE HIS WORK WITH THE ARCHITECTURAL PLANS AND NOTIFY THE ARCHITECT OF VARIATIONS PRIOR TO FABRICATION. GENERAL CONTRACTOR IS RESPONSIBLE FOR CHECKING AND COORDINATING TRUSS DRAWINGS. GENERAL CONTRACTOR SHALL SUBMIT TRUSS DRAWINGS TO THE ARCHITECT FOR REVIEW FOR GENERAL CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS. ALL VARIATIONS MUST BE BROUGHT TO THE ATTENTION AND APPROVED BY THE ARCHITECT.

MINIMUM LOADS REQUIREMENTS (TRUSSES, ROOF RAFTERS, 4 CEILING JOISTS):
 20 LB. PER SQ FT. SNOW (LIVE) LOAD
 DEAD LOAD-USE ACTUAL DEAD LOAD (MUST INCLUDE 2 LAYERS OF ROOFING MEMBRANE)
 20 LB. PER SQ. FT. LIVE LOAD WHEN THERE IS A POSSIBILITY OF ATTIC STORAGE. ATTIC STORAGE SHALL BE ADDRESSED WHEN A 47" HIGH, 24" WIDE RECTANGLE CAN BE PLACED PERPENDICULAR TO THE RAFTER/CEILING JOISTS OR TRUSSES.
 100 LB. PER SQ. FT. LIVE LOAD WHERE THERE IS NO ATTIC STORAGE.
 40 LB. PER SQ. FT. LIVE LOAD.
 BOTTOM CHORD OR CEILING JOISTS:
 20 LB. PER SQ. FT. LIVE LOAD.
 BOTTOM CHORD OF ATTIC TRUSSES:
 TRUSS SUPPLIER TO PROVIDE SHOP DRAWINGS, PRODUCT DATA FOR ALL TRUSS COMPONENTS, STRESS DIAGRAMS (WHICH HAVE BEEN SIGNED AND SEALED BY A STRUCTURAL ENGINEER LICENSED TO PRACTICE STRUCTURAL ENGINEERING IN THE STATE THAT THE PROJECT WILL BE CONSTRUCTED) AND A TRUSS LAYOUT PLAN SHOWING ALL TRUSS LOCATIONS, HANGERS, CONNECTORS, SPACING, PITCH, GIRDEBS AND CROSS BRACING. FABRICATOR SHALL COORDINATE HIS WORK WITH THE ARCHITECTURAL PLANS AND NOTIFY THE ARCHITECT OF VARIATIONS PRIOR TO FABRICATION. GENERAL CONTRACTOR IS RESPONSIBLE FOR CHECKING AND COORDINATING TRUSS DRAWINGS. GENERAL CONTRACTOR SHALL SUBMIT TRUSS DRAWINGS TO THE ARCHITECT FOR REVIEW FOR GENERAL CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS. ALL VARIATIONS MUST BE BROUGHT TO THE ATTENTION AND APPROVED BY THE ARCHITECT.
 NOTE: THE LIVE LOAD DESIGN ON THE BOTTOM CHORD OF A TRUSS SHALL NOT BE REDUCED IF ALL THE FOLLOWING CONDITIONS ARE ACHIEVED TO:
 A. ATTICS WITH DRYWALL CEILINGS BELOW THAT ARE ACCESSED ONLY BY A 22" X30" SCUTTLE OPENING WITHOUT A PULL-DOWN STAIRWAY.
 B. WARNING SIGNS ATTACHED TO THE TRUSSES ON EACH SIDE OF THE SCUTTLE OPENING AT LEAST 36" ABOVE THE BOTTOM CHORD AND WITHIN 18" OF THE EDGE OF THE OPENING. THE SIGNS SHALL BE CONSTRUCTED OF METAL OR OTHER APPROVED DURABLE MATERIALS SUITABLE FOR THE LOCATION AND BE A MINIMUM OF 40 SQ. INCHES IN AREA WITH 3/4" MINIMUM HIGH LETTERS ON A CONTRASTING BACKGROUND THAT READS "WARNING TRUSSES NOT DESIGNED FOR ATTIC STORAGE".
 C. ATTIC AREAS OVER GARAGE AREAS WITH DRYWALL CEILINGS SHALL ALSO BE PROVIDED WITH THE SIGN ATTACHED TO THE TRUSSES ON THE LEFT SIDE OF THE SCUTTLE OPENING AT LEAST 24" AND NOT MORE THAN 36" ABOVE THE BOTTOM CHORD. THE RAILING IS INTENDED TO BE AN OBSTRUCTION TO EASY ACCESS FOR STORAGE AND SHALL BE CONSTRUCTED OF EITHER 1x4'S, 2x4'S OR 3/8"x6" PLYWOOD. IT MAY BE SHOP OR FIELD APPLIED.
 23 WHERE APPLICABLE (SEE FOUNDATION PLAN)
 1 JOIST FLOOR SYSTEM: FRI (PERFORMANCE RATED 1-JOIST) W/ APA USG TRADEMARK. SEE DRAWINGS FOR SIZE AND LOCATION. USE 40P LL AND 10P LL WITH L/480 TOTAL LOAD. AT TILE & MARBLE FLOORS USE 2P LL AND L/600. COMPLY WITH MANUFACTURERS DETAILS INCLUDING BUT NOT LIMITED TO BEARING, BLOCKING, RIM BOARDS BRACING AND METAL HANGERS, ETC. GLUED AND NAIL. ALL MULTIPLE MEMBER BEAMS, TYPICAL AT ALL DOORS 12" O.C. AND FEER MANUFACTURERS RECOMMENDATION. USE SKREEN SHANK NAILS. DO NOT USE RING SHANK NAILS. GENERAL CONTRACTOR SHALL PROVIDE SHOP DRAWINGS AT 1/4"=1'-0" FOR ARCHITECTS REVIEW FOR GENERAL CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS BEFORE ORDERING. GENERAL CONTRACTOR IS RESPONSIBLE FOR REVIEWING AND COORDINATING SHOP DRAWINGS. ALL VARIATIONS MUST BE BROUGHT TO THE ATTENTION OF AND APPROVED BY THE ARCHITECT. ARCHITECT DOES NOT TAKE RESPONSIBILITY FOR 1-JOIST SHOP DRAWING.
DIVISION 7 - THERMAL AND MOISTURE
 71 DRAINAGE SYSTEM: AN APPROVED FILTER MEMBRANE SHALL BE PLACED OVER THE TOP OF THE JOINTS/PIE PERFORATIONS. THE TILE/PIE SHALL BE PLACED ON 2" MINIMUM GRAVEL OR CRUSHED STONE AND HAVE 6" MINIMUM DRAIN DISCHARGE SHALL BE BY GRAVITY TO DAYLIGHT OR BE CONNECTED TO A BASEMENT FLOOR SUMP. DAMPROOFING: WALLS SHALL BE DAMPROOFED WITH A BITUMINOUS MATERIAL, 3 LB. PER SQ. YD. OF ACRYLIC MODIFIED CEMENT, 18" COAT OF SURFACE BONDING MORTAR, OR BY ANY OF THE MATERIALS PERMITTED FOR WALL WATERPROOFING.
 72 ISOLATION/RESISTANT: PROVIDE DRAIN TILE INSIDE AND OUTSIDE OF FOUNDATION AND WATERPROOF WITH AN APPROVED WATERPROOFING SYSTEM. JOINTS TO BE LAPPED AND SEALED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. ALL JOINTS IN WALLS AND FLOORS TO BE WATER TIGHT. WATERPROOFING FOUNDATION TO BE WATERPROOFED WITH TWO PLY HOT-MOPPED FELTS, 6 MIL PVC, 40 MIL POLYMER MODIFIED ASPHALT, OR 6 MIL POLYETHYLENE. JOINTS TO BE LAPPED AND SEALED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. WATERPROOFING TO BE APPLIED FROM THE TOP OF THE FOOTING TO THE FINISHED GRADE.
 73 ROOFING: CLASS AB, OR C ROOFING SHALL BE REQUIRED WHERE THE EDGE OF THE ROOF IS LESS THAN 3' TO THE PROPERTY LINE.
 74 ASPHALT SHINGLES SHALL NOT BE INSTALLED ON ROOF SLOPES BELOW 2:12 OR AS STATED PER MANUFACTURER

15 UNDERLAYMENT: TO BE A MINIMUM OF TYPE 1 PER ASTM D226-06 OR TYPE 1 PER ASTM D4863-05e01 (TYPE 1 IS COMMONLY CALLED NO. 15 ASPHALT FELT).
 FOR ASPHALT SHINGLES:
 SLOPES OF 2:12 TO LESS THAN 4:12 SHALL BE PROTECTED WITH TWO LAYERS OF UNDERLAYMENT. APPLY A 19" STRIP OF UNDERLAYMENT PARALLEL WITH AND STARTING AT THE EAVE, FASTENED SUFFICIENTLY TO HOLD INTO PLACE, STARTING AT THE EAVE, APPLY 36" WIDE SHEETS OF UNDERLAYMENT.
 SUCCESSIVE 36" WIDE SHEETS OF UNDERLAYMENT SHALL OVERLAP THE PREVIOUS 36" WIDE SHEET BY 18". ALL UNDERLAYMENT SHALL BE FASTENED SUFFICIENTLY TO HOLD INTO PLACE.
 SLOPES EQUALING OR EXCEEDING 4:12 SHALL BE PROTECTED WITH ONE LAYER OF UNDERLAYMENT.
 UNDERLAYMENT SHALL BE APPLIED SHINGLE FASHION, PARALLEL TO AND STARTING FROM THE EAVE AND LAPPED 2" FASTENED SUFFICIENTLY TO HOLD IN PLACE END LAPS SHALL BE OFFSET BY 6".
 16 FLASHING: PROVIDE CORROSION-RESISTANT METAL FLASHING AT ALL WALL AND ROOF INTERSECTIONS, CHANGES IN ROOF SLOPE OR DIRECTION, AROUND ALL ROOF OPENINGS, INTERSECTIONS WITH CHIMNEYS, INTERSECTION OF EXTERIOR WALLS AND PORCHES AND DECKS, ETC. VALLEY FLASHING SHALL BE INSTALLED PER R605.8.2.
 17 BUILT-UP ROOFS: MINIMUM SLOPE OF 1/4:12 ALLOWED WITH APPROVED LOW-SLOPE ROOF COVERING MATERIALS. COAL-TAR BUILT-UP MEMBRANE MAY BE INSTALLED ON 1/8:12 SLOPE. BUILT-UP ROOF COVERING MATERIAL SHALL COMPLY WITH TABLE R029.9.2 OF THE 2015 IRC.
 18 MINERAL SURFACED ROLL ROOFING SHALL CONFORM TO D3909 OR ASTM D6380, IT SHALL NOT BE INSTALLED ON ROOF SLOPES BELOW 2:12.
 19 ROOF OVERLAP: LOCATED LESS THAN 5' TO THE PROPERTY LINE SHALL BE PROTECTED ON THE UNDERSIDE OF THE PROJECTION WITH 1-HR FIRE RESISTIVE CONSTRUCTION (2 LAYERS OF 5/8" GYPSUM SHEATHING).
 20 GUTTERING SYSTEM: ALL GUTTERS AND DOWNSPOUTS TO BE SIZED AND LOCATED BY OTHERS, AND INSTALLED PER "SMACNA" RECOMMENDATIONS. ANY DOWNSPOUT LOCATIONS INDICATED ON PLANS OR BUILDING ELEVATIONS TAKE PRECEDENCE. DOWNSPOUTS SHALL DISCHARGE TO "SPASH BOARDS" DIRECTED AWAY FROM FOUNDATION OR TO DRAIN TILE, WHICH IS CONNECTED TO STORM SEWER OR DAYLIGHTED".
 21 ENERGY CONSERVATION: PROJECTS CONSTRUCTED UNDER THE 2015 IRC SHALL COMPLY WITH ONE OF THE FOLLOWING:
 1. SECTIONS N1014 THROUGH N1014 (PRESCRIPTIVE REQUIREMENTS)
 2. SECTION N1005 (PERFORMANCE OPTIONS) AND THE PROVISIONS OF SECTIONS N1014 THROUGH N1014 LABELED "MANDATORY".
 3. AN ENERGY RATING INDEX (ERI) APPROACH IN SECTION N1006.
 UNDER ALL OPTIONS, THE BUILDING MUST COMPLY WITH MANDATORY REQUIREMENTS THAT ARE FOUND IN SECTIONS N1013, N1014, N1023, N1031, N10312, N10332, N10333, N10335, N10336, N10337, N10338, N10339, N104.

CERTIFICATE: A MANDATORY PERMANENT CERTIFICATE SHALL BE POSTED IN AN APPROVED LOCATION INSIDE THE BUILDING AND SHALL LIST THE PREDOMINANT R-VALUES OF INSTALLED INSULATION IN CEILING/ROOF ASSEMBLIES, WALLS, FOUNDATIONS, (SLAB, WALLS, CRAWL SPACE WALLS AND OR FLOORS), AND DUCTS OUTSIDE CONDITIONED SPACES, U-FACTORS AND SOLAR HEAT GAIN COEFFICIENT (SHGC) OF FENESTRATION AND THE RESULT FROM ANY REQUIRED DUCT SYSTEM AND BUILDING ENVELOPE AIR LEAKAGE TEST. SEE 2015 IRC SECTION N1014.
 THERMAL REQUIREMENTS: BASED ON CHAPTER 11 OF THE 2015 IRC. MINIMUM "R" VALUES OBTAINED BY INSULATION MATERIAL USED ONLY, NOT THE TOTAL SYSTEM (PROVIDE CERTIFICATE PER 2015 IRC SECTION N1014). CLIMATIC ZONE 4A
 A. ROOF/CEILING: MIN. R-49
 B. FRAME WALL AND BAND JOINTS: MIN. R-20 OR R-13 + R-5: FIRST VALUE IS CAVITY INSULATION AND SECOND VALUE IS CAVITY INSULATION + CONTINUOUS INSULATION.
 C. FLOOR OVER UNHEATED SPACE: MIN. R-19
 D. CONCRETE/MASONRY BASEMENT FOUNDATION (50% OR MORE BELOW GRADE): MIN. R-10 CONTINUOUS INSULATION ON THE EXTERIOR OR INTERIOR OF THE BASEMENT WALL. -OR- R-13 CAVITY INSULATION AT THE INTERIOR OF THE BASEMENT WALL.
 E. ABOVE GRADE CONCRETE OR MASONRY WALLS (MASS WALLS): MIN. R-8 CONTINUOUS INSULATION -OR- R-13 CAVITY INSULATION AT THE INTERIOR OF THE MASS WALL.
 F. CRAWL SPACE WALLS: MIN. R-10 CONTINUOUS INSULATION ON THE EXTERIOR OR INTERIOR OF THE CRAWL SPACE WALL. -OR- R-13 CAVITY INSULATION AT THE INTERIOR OF THE CRAWL SPACE WALL.
 G. SLAB-ON-GRADE FLOORS: MIN. R-10 INSULATION -OR- MIN. R-15 INSULATION IN HEATED SLAB. 24" DEEP OR DEPTH OF FOOTING
 H. MAXIMUM FENESTRATION U-FACTOR: 0.35
 I. MAXIMUM GLAZED FENESTRATION SHGC: 0.40
 J. MAXIMUM SKYLIGHT U-FACTOR: 0.55

12 CAULKING AND SEALANTS: EXTERIOR JOINTS AROUND WINDOWS AND DOOR FRAMES, BETWEEN WALL AND PENETRATIONS FOR UTILITY SERVICE THROUGH WALLS, FLOORS, AND ROOF AND ALL OTHER OPENINGS IN THE EXTERIOR ENVELOPE SHALL BE SEALED IN AN APPROVED MANNER. WEATHER STRIPPING IS REQUIRED ON ALL EXTERIOR WINDOWS AND DOORS. CORROSION RESISTANT FLASHING IS REQUIRED AT THE TOP AND SIDES OF ALL EXTERIOR DOORS AND WINDOWS AND AT THE INTERSECTION OF ALL MASONRY AND FRAME CONSTRUCTION. LIGHT AND VENTILATION.
 13 GLASS AREA IN HABITABLE AND OCCUPIABLE ROOMS SHALL NOT BE LESS THAN 8% OF FLOOR AREA SERVED. ONE-HALF OF THIS AREA MUST BE AVAILABLE FOR UNOBSTRUCTED VENTILATION WITH SCREENS INCLUDED.
 14 UNFINISHED BASEMENTS AND UTILITY ROOMS REQUIRE VENTILATION IN THE AMOUNT OF 05 CFM/SQ.FT. OF AREA. NATURAL VENTILATION (NET OPERABLE AREA) MAY BE SUBSTITUTED AT THE RATIO OF 1% OF THE FLOOR AREA SERVED.
 15 ATTIC VENTILATION (NET FREE) AREA IS TO BE AT LEAST 1/60 OF THE AREAS SERVED. TWO REMOTE VENTS REQUIRED FOR EACH (MINIMUM).
 EXCEPTION: REQUIRED VENTILATION AREA MAY BE REDUCED TO 1/300 WHERE A VAPOR RETARDER HAVING A TRANSMISSION RATE NOT EXCEEDING 1 PERM IS PROVIDED ON THE CONDITIONED SIDE OF THE INSULATION, OR IF THE GABLE OR RIDGE VENTS ARE LOCATED IN THE UPPER 1/3 OF THE ATTIC SPACE AND PROVIDE 50%-80% OF THE REQUIRED VENT AREA WITH THE BALANCE OF THE REQUIRED VENT AREA SUPPLIED BY EAVE OR CORNICE VENTS.
 16 VAPOR RETARDERS IN ALL FRAMED WALLS, FLOORS, AND ROOF/CEILINGS COMPOSING ELEMENTS OF THE BUILDING THERMAL ENVELOPE, A VAPOR RETARDER SHALL BE INSTALLED ON THE WARMER INSIDE OF THE INSULATION.
 EXCEPTION:
 A) VAPOR RETARDER SHALL NOT BE INSTALLED UNDER WATER-RESISTANT GYPSUM BACKER BOARD IN SHOWER OR BATH/TUB COMPARTMENTS.
 17 WEATHER RESISTANT SHEATHING PAPER (ASPHALT SATURATED FELT 1/4" PER SQUARE OTHERWISE KNOWN AS TYPE 1 FELT, TYVEK, TYFAR OR OTHER APPROVED WEATHER RESISTANT MATERIAL) SHALL BE INSTALLED UNDER ALL SIDING AND BRICK/STONE VENEER LISTED IN TABLE R103.4
DIVISION 8 - WINDOWS AND DOORS
 81 WINDOWS: ALL BASEMENTS, HABITABLE ATTICS, AND EACH BEDROOM MUST HAVE ONE WINDOW FOR EMERGENCY ESCAPE MEETING THE FOLLOWING MINIMUMS:
 MINIMUM CLEAR HEIGHT TO BOTTOM OF CLEAR OPENING: 40"
 MINIMUM CLEAR OPENING WIDTH: 20"
 MINIMUM NET CLEAR OPENING HEIGHT: 24"
 MINIMUM NET CLEAR OPENING AREA: 5.7 SQ. FT. (THE NET CLEAR OPENING DIMENSION SHALL BE OBTAINED BY THE NORMAL OPERATION OF THE WINDOW FROM THE INSIDE).
 EXCEPTION: GRADE FLOOR WINDOWS ARE PERMITTED TO HAVE A MINIMUM NET CLEAR OPENING OF 5.0 SQ. FT.
 82 SKYLIGHTS EACH LIGHT OR LAYER SHALL CONSIST OF ANY ONE OF THE FOLLOWING MATERIALS: AND HAVE A MAX. U-FACTOR OF 0.60
 A) LAMINATED GLASS WITH 0.075" POLY(VINYL BUTYRAL) INTERLAYER FOR GLASS PANE 16 SQ. FT. OR LESS IN AREA AND LOCATED SUCH THAT THE HIGHEST POINT OF GLASS IS NOT MORE THAN 12" ABOVE A WALKING SURFACE, OR
 B) LAMINATED GLASS WITH 0.030" POLY(VINYL BUTYRAL) INTERLAYER FOR GLASS PANES GREATER THAN 16 SQ. FT. IN AREA OR FOR SMALLER PANES WHEN LOCATED MORE THAN 12" ABOVE A WALKING SURFACE, OR
 C) WIRED GLASS, OR
 D) APPROVED RIGID PLASTIC, OR
 E) HEAT STRENGTHENED GLASS, OR
 F) FULLY TEMPERED GLASS
 SKYLIGHTS INSTALLED IN ROOFS WITH SLOPES OF LESS THAN 3:12 MUST BE MOUNTED ON CURBS AT LEAST 4" ABOVE THE ROOF SURFACE.
 83 BASEMENT WINDOWS: UNDOORS FOR NATURAL VENTILATION OF UNFINISHED BASEMENTS MAY BE SINGLE-GLAZED.
 84 ALL DOORS, EXCEPT OVERHEAD GARAGE DOORS, SHALL HAVE A MAXIMUM U-FACTOR OF 0.40. THE MAXIMUM U-FACTOR FOR WINDOWS SHALL BE 0.40.

85 SAFETY GLAZING: REQUIRED AT:
 A) GLAZING IN OR ON DOOR HAND OR GUARDRAILS SHOWER/BATH/TUB ENCLOSURES.
 B) GLAZING IN ANY PORTION OF A WALL ENCLOSED BATH/TUBS, SHOWERS, HOT TUBS, whirlpools, SAUNAS, STEAM ROOMS, SPAS, INDOOR OR OUTDOOR POOLS WHICH IS LOCATED 60" OR LESS MEASURED HORIZONTALLY, FROM THE WATER'S EDGE AND LESS THAN 60" VERTICALLY ABOVE A STANDING SURFACE.
 C. ANY GLAZING MATERIAL ADJACENT TO A DOOR IF THE NEAREST VERTICAL EDGE OF THE GLAZING MATERIAL IS WITHIN A 24" ARC OF EITHER VERTICAL EDGE OF A DOOR IN A CLOSED POSITION AND IF THE BOTTOM EDGE OF THE GLAZING MATERIAL IS LESS THAN 60" ABOVE THE FLOOR.
 EXCEPTIONS:
 1) DECORATIVE GLASS
 2) WHERE THERE IS AN INTERVENING WALL OR OTHER PERMANENT BARRIER BETWEEN THE DOOR AND THE GLAZING.
 3) GLAZING IN WALLS ON THE LATCH SIDE OF AND PERPENDICULAR TO THE PLANE OF THE DOOR IN A CLOSED POSITION
 4) GLAZING ADJACENT TO A DOOR SERVING A CLOSET OR STORAGE AREA 3' OR LESS IN DEPTH
 5) GLAZING ADJACENT TO THE FIXED PANEL OF PATIO DOORS.
 D. GLAZING IN FIXED OR OPERABLE PANELS MEETING ALL OF THE FOLLOWING
 1) INDIVIDUAL PANE GREATER THAN 9 SQ. FT.
 2) BOTTOM EDGE LESS THAN 18" ABOVE THE FLOOR
 3) TOP EDGE MORE THAN 36" ABOVE FLOOR
 4) WALKING SURFACE WITHIN 36" HORIZONTALLY.
 E. GLAZING ADJACENT TO STAIRWAYS, LANDINGS, AND RAMPS WITHIN 36" HORIZONTALLY OF THE WALKING SURFACE AND LESS THAN 60" VERTICALLY ABOVE THE PANE OF THE WALKING SURFACE.
 AND
 GLAZING ADJACENT TO STAIRWAYS WITHIN 60" HORIZONTALLY OF THE BOTTOM TREAD IN ANY DIRECTION WHEN THE EXPOSED SURFACE OF THE GLASS IS LESS THAN 60" ABOVE THE TREAD NOSING.
 EXCEPTION: THE GLAZING IS PROTECTED BY A GUARDRAIL OR HANDRAIL, INCLUDING BALUSTERS AND INFILL PANELS COMPLYING WITH THE PROVISIONS OF SECTIONS R3015 AND R312 AND THE GLAZING IS LOCATED MORE THAN 18" HORIZONTALLY FROM THIS GUARD OR HANDRAIL.

86 DOOR LOCKS: WITH TUMB TURN ON INSIDE ARE PERMITTED. ALL MEANS OF EGRESS DOORS SHALL BE READILY OPERABLE FROM THE SIDE WHICH EGRESS IS TO BE MADE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT. INSIDE KEY OPERATION IS PERMITTED PROVIDED THE KEY CANNOT BE REMOVED FROM THE LOCK WHEN LOCKED FROM THE INSIDE.
DIVISION 9 - FINISHES
 91 FINISH INSTALLATION MUST BE IN ACCORDANCE WITH THE GYPSUM ASSOCIATION RECOMMENDED PRACTICES FOR THICKNESS, FASTENING AND TAPING ON CORRECT STUD SPACING. FIRE RATED DRYWALL ASSEMBLIES SHALL BE INSTALLED IN ACCORDANCE WITH APPROVED TEST ASSEMBLIES. DRYWALL TO BE FASTENED IN ACCORDANCE WITH TABLE R102.35. FLOOR WATER RESISTANT GYPSUM BOARD IN BATH TUB AND SHOWER AREAS.
 92 WATER RESISTANT GYPSUM BOARD BACKER BOARD USED AS A BASE FOR TILES OR WALL PANELS IN BATH/TUB AND SHOWER AREAS MUST NOT BE APPLIED OVER A VAPOR BARRIER WATER RESISTANT GYPSUM BACKING BOARD.
 93 BATT INSULATION INCLUDING THE VAPOR RETARDER SHALL NOT BE LEFT EXPOSED IN BASEMENTS UNLESS THE MATERIAL HAS A FLAME SPREAD RATING OF 25 OR LESS AND A SMOKE DEVELOPMENT RATING OF 450 OR LESS. FOAM PLASTIC INSULATION SHALL BE SEPARATED FROM THE INTERIOR OF THE BUILDING BY HALF INCH GYPSUM WALLBOARD.
DIVISION 9 - SPECIALTIES
 91 FIREPLACE INSTALLATION: NOTE THAT FRAMING CARPENTERS AND GENERAL CONTRACTORS SHALL CAREFULLY REVIEW PRE-AB FIREPLACE UNIT INSTALLATION INSTRUCTIONS BEFORE FRAMING ENCLOSURE FOR FIREPLACE, AND BEFORE INSTALLING UNIT. COMPLY CAREFULLY WITH ALL MANUFACTURERS INSTRUCTIONS, LOCAL FIRE DEPARTMENT REQUIREMENTS AND CLEARANCES. FIREBLOCK AROUND ALL CHIMNEYS WITH NON-COMBUSTIBLE FIREBLOCKS AT ALL CEILING AND FLOOR LEVELS. FACTORY BUILT CHIMNEYS AND FIREPLACES SHALL BE FIREBLOCKED IN ACCORDANCE WITH UL 103 AND UL 121. DO NOT ALTER OR MODIFY THE FIREPLACE OR ITS COMPONENTS UNDER ANY CIRCUMSTANCE. ANY MODIFICATION OR ALTERATION OF THE FIREPLACE SYSTEM, INCLUDING, BUT NOT LIMITED TO THE FIREPLACE UNIT, CHIMNEY COMPONENTS AND ACCESSORIES, MAY VOID THE WARRANTY, LISTINGS AND APPROVALS OF THE SYSTEM AND CAN RESULT IN AN UNSAFE AND POTENTIALLY DANGEROUS INSTALLATION. PROVIDE THE UNIT WITH AN EXTERIOR AIR SUPPLY TO ASSURE PROPER FUEL COMBUSTION. EXTERIOR AIR SUPPLY SHALL BE PROVIDED IN ACCORDANCE WITH SECTION G401. GAS FIREPLACES, GAS LOGS AND GAS ROOM HEATERS SHALL BE INSTALLED IN ACCORDANCE WITH CHAPTER 24 OF THE 2015 IRC.
DIVISION 9 - MECHANICAL PLUMBING - (P) PLUMBING
 91 WORK SHALL CONSIST OF ALL SERVICES TYPICALLY KNOWN AS "DESIGN/BUILD" AND SHALL INCLUDE THE FURNISHING OF CONSTRUCTION DOCUMENTS, AS REQUIRED, MATERIALS, LABOR EQUIPMENT AND TOOLS TO INSTALL A COMPLETE AND OPERABLE SYSTEM OF PLUMBING AND SEWERING. INSTALL PER PART VII OF THE 2015 IRC, 2015 UNIFORM PLUMBING CODE AND ALL LOCAL ORDINANCES.
 92 SERVICE LINES SERVING SINGLE FAMILY DUELLINGS SHALL MEET THE FOLLOWING MINIMUM REQUIREMENTS:
 A. 1" SERVICE LINE - UP TO 3 1/2 BATHS
 B. 1 1/4" SERVICE LINE - UP TO 6 BATHS
 C. 1 1/2" SERVICE LINE - MORE THAN 6 BATHS
 THIS COAT INCLUDES: KITCHEN SINK WITH DISHWASHER, 1-CLOTHES WASHER SUPPLY AND LAUNDRY SINK, AND 2 (1/2") EXTERIOR CONTINUOUS USE HOSE BIBBS. ROUGH-IN FIXTURES SHALL BE INCLUDED IN THE COAT.
 THE MINIMUM SIZE OF THE WATER SERVICE PIPING IS 1" UP TO THE FIRST BRANCH. PLASTIC WATER SERVICE PIPING SHALL TERMINATE A MINIMUM OF 10'-0" OUTSIDE THE FOUNDATION WALL AND METALLIC PIPING BROUGHT INTO THE BUILDING UP TO THE OUTLET OF THE HOUSE VALVE OR THE FRY OUTLET, WHICHEVER IS FURTHER FROM THE POINT OF ENTRANCE TO THE BUILDING. MINIMUM WATER MAIN PRESSURE MUST BE CONSIDERED WHEN SIZING THE WATER SERVICE PIPING.
 93 LEAD FREE SOLDER IS REQUIRED ON ALL COPPER WATER SUPPLY PIPING.
 94 A BASEMENT CRAWL SPACE V

GENERAL NOTES (CONT.)

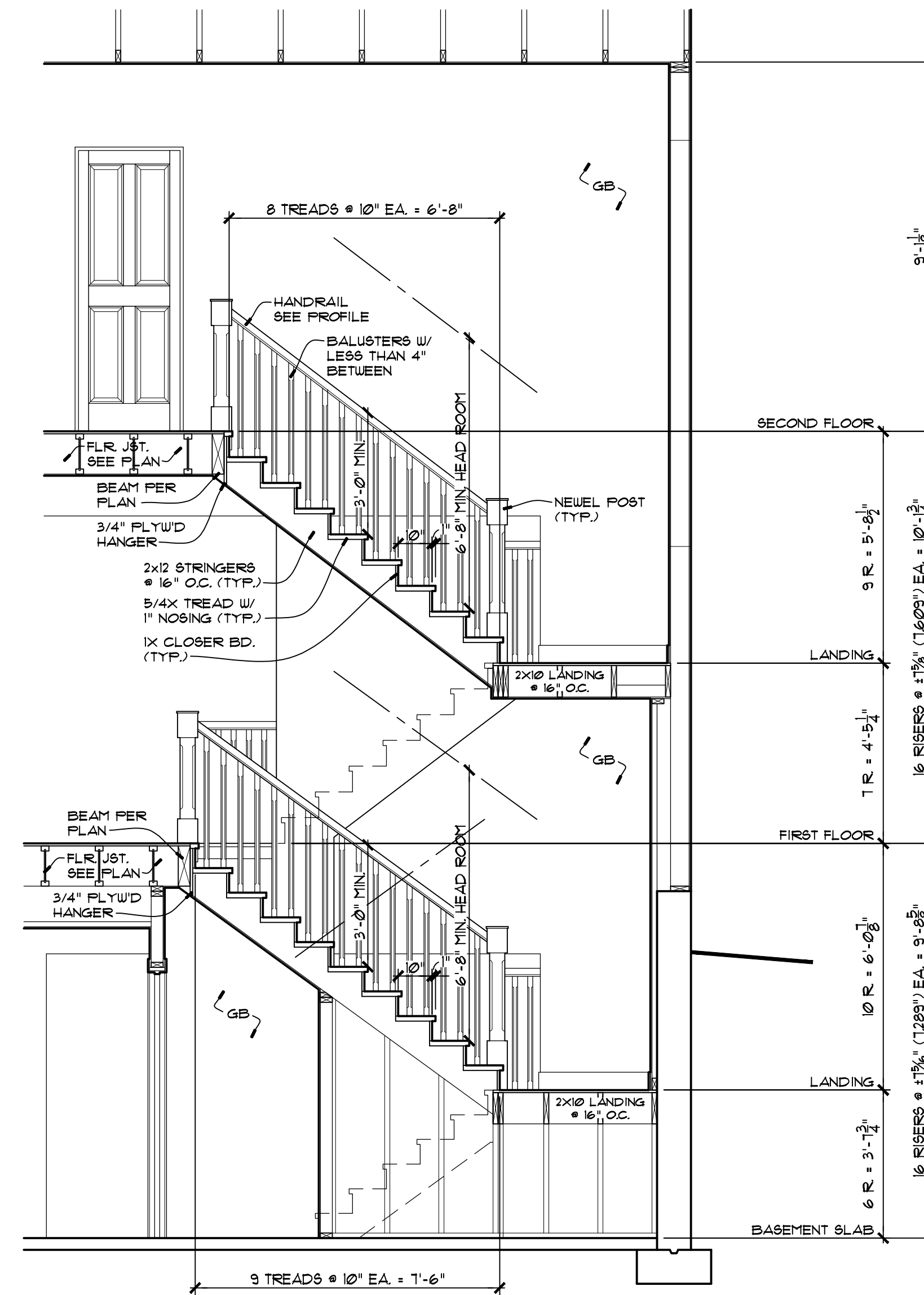
DIVISION B - MECHANICAL HVAC (CONT.)

- M15.6 MECHANICAL: GAS APPLIANCES LOCATED IN SPACES WHERE THE VOLUME IS LESS THAN 50 CUBIC FEET PER 1000 BTU/HR INPUT RATING, SHALL HAVE COMBUSTION AND DILUTION AIR PROVIDED IN ACCORDANCE WITH THE FOLLOWING:
- USING INSIDE AIR: PROVIDE 1 SQ. IN. OF FREE AREA PER 1000 BTU/HR. IN EACH OPENING. OPENINGS SHALL NOT BE LESS THAN 100 SQ. INCHES OF FREE AREA. ONE OPENING SHALL BE PROVIDED WITHIN 12" OF THE CEILING AND ONE WITHIN 12" OF THE FLOOR; NO COMMON DUCTS PERMITTED. COMBUSTION AIR MAY NOT BE OBTAINED FROM BEDROOMS.
 - USING OUTSIDE AIR: ONE OPENING SHALL BE PROVIDED WITHIN 12" OF THE CEILING WITH A NET FREE AREA OF 1 SQ. IN/3000 BTU/HR. TOTAL INPUT RATING OF ALL APPLIANCES LOCATED IN THE ENCLOSURE.
- MECHANICAL CONTRACTOR SHALL CALCULATE, SPECIFY AND COORDINATE WITH GC ALL ADDITIONAL COMBUSTION AIR AS REQUIRED BY THE MECHANICAL CODE AND LOCAL JURISDICTIONS. LOUVERED DOORS SHALL BE PERMITTED BY THE ARCHITECT IF CALLED OUT ON THE PLANS. VERIFY WITH OWNER IF ADDITIONAL COMBUSTION AIR IS REQUIRED MC SHALL PROVIDE THE FOLLOWING:

- M15.7 MINIMUM CLEARANCE FOR COMBUSTIBLES IS 18", UNLESS THE LISTED MANUFACTURER'S INSTALLATION INSTRUCTIONS ALLOW AN ALTERNATE CLEARANCE DIMENSION. 30" OF CLEARANCE IS REQUIRED AT THE FRONT OF THE APPLIANCE FOR SERVICE.
- M15.8 EACH GAS APPLIANCE SHALL HAVE AN ACCESSIBLE SHUTOFF VALVE SEPARATE FROM THE APPLIANCE, IN THE SAME ROOM AND WITHIN 6' OF APPLIANCE, AND SHALL BE INSTALLED UPSTREAM FROM GROUND JOINT UNION. A SEDIMENT TRAP IS REQUIRED AT EACH APPLIANCE OR GROUP OF APPLIANCES. GAS PIPING SHALL BE IDENTIFIED AT INTERVALS OF NO MORE THAN 5 FT EXCEPT ON BLACK STEEL PIPE.
- M15.9 GAS APPLIANCE PROHIBITED LOCATIONS: IN A BEDROOM, BATHROOM OR A STORAGE CLOSET.
- EXCEPTIONS:
 A) THE APPLIANCE IS DIRECT VENT UNIT OBTAINING COMBUSTION AIR FROM THE OUTDOORS.
 B) INSTALLED IN A CLOSET USED SOLELY FOR APPLIANCES, THE CLOSET DOOR IS SOLID SELF-CLOSING AND WEATHERSTRIPPED, AND COMBUSTION AIR IS PROVIDED FROM OUTDOORS.
- M15.10 CLOTHES DRYER EXHAUST SHALL BE INDEPENDENT OF ALL OTHER SYSTEMS, AND EXHAUST TO THE EXTERIOR THROUGH 5" SMOOTH, 4" MIN. DIAMETER DUCT. THE MAXIMUM DEVELOPED LENGTH OF THE DUCT SHALL BE 35' (OBTAINED BY ADDING 5' FOR EACH 90 DEGREE BEND AND 25' FOR EACH 45 DEGREE BEND TO THE LENGTH OF THE STRAIGHT RUNS).
 EXCEPTION: THE MAXIMUM DEVELOPED LENGTH MAY BE EXTENDED TO 55' IF CLEARLY LABELED CLEANOUTS ARE PROVIDED WITHIN 12" OF THE 2ND ELBOW, AT EVERY ELBOW THEREAFTER, AND AT LEAST 15' OF DEVELOPED LENGTH THEREAFTER.
 PERMANENT SIGNAGE MUST IDENTIFY EACH CLEANOUT LOCATION AND BE PROVIDED AT THE DRYER EXHAUST CONNECTION TO INFORM OCCUPANTS OF THE PERIODIC CLEANING AND INSPECTION REQUIREMENTS.
- M15.11 RESIDENTIAL BATHROOMS AND TOILET ROOMS SHALL EXHAUST 50CFM MINIMUM TO THE EXTERIOR. IT IS PERMISSIBLE TO DISCHARGE EXHAUST TO AN ATTIC GABLE VENT OR VENTILATED SOFFIT.
- EXCEPTION:
 HALF-BATHS WITHOUT A TUB OR SHOWER MAY SUBSTITUTE A MINIMUM 3 SQUARE FT. GLAZING AREA WINDOW, ONE-HALF OF WHICH MUST BE OPENABLE.
- M15.12 KITCHEN EXHAUST: KITCHEN RANGES SHALL HAVE A LISTED HOOD OR DOWNDRAFT EXHAUSTED TO THE EXTERIOR WITH A 100CFM FAN (INTERMITTENT USE) OR A 20 CFM FAN (CONTINUOUS USE). ALTERNATELY A LISTED AND LABELED RECIRCULATING DUCTLESS RANGE HOOD INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS (IF EQUIPPED WITH THE FILTRATION SYSTEM FOR GREASE REMOVING AND ODOR CONTROL) IS NOT REQUIRED TO DISCHARGE OUTDOORS.
- M15.13 HOUSEHOLD COOKING APPLIANCES SHALL BE LISTED AND LABELED AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. AN ANTI-TIP DEVICE SHALL BE INSTALLED IF REQUIRED BY THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

DIVISION 16 - ELECTRICAL

- 16.1 WORK SHALL CONSIST OF ALL SERVICES TYPICALLY KNOWN AS "DESIGN/BUILD", AND SHALL INCLUDE THE FURNISHINGS OF CONSTRUCTION DOCUMENTS AS REQUIRED, MATERIALS, LABOR, EQUIPMENT AND TOOLS, TO PROVIDE A COMPLETE AND OPERABLE SYSTEM OF ELECTRIC, POWER AND LIGHTING.
- 16.2 ALL WORK TO BE INSTALLED IN ACCORDANCE WITH THE 2020 NATIONAL ELECTRIC CODE (NEC) AND WITH ALL LOCAL CODES, RULES AND ORDINANCES. ALL MATERIALS TO BE USED SHALL BE APPROVED BY (UL) UNDERWRITERS LABORATORIES.
- 16.3 ALL WIRING FROM PANEL TO HOUSE SHALL BE COPPER.
- 16.4 RECESSED LIGHT FIXTURES TO BE TYPE "IC" AT INSULATED CEILING/ATTIC SPACES PER 2015 IRC N102.4.5
- 16.5 ELECTRIC PANELS TO BE CIRCUIT BREAKER TYPE AND SHALL NOT BE INSTALLED IN BATHROOMS OR CLOTHES CLOSETS. LIGHTING IS REQUIRED IN THE VICINITY OF THE ELECTRICAL PANEL. A MINIMUM OF A 36" DEEP AND 30" WIDE CLEARANCE IS REQUIRED IN FRONT OF THE ELECTRICAL PANELS AND MINIMUM 6'-6" HEADROOM IS REQUIRED. COUNTERS AND CABINETS CAN NOT BE INSTALLED UNDER THE ELECTRICAL PANEL.
- 16.6 GROUNDING: RECEPTACLE OUTLETS FOR RANGES AND CLOTHES DRYERS MUST BE A 3-POLE WITH GROUND TYPE. IF THE UNDERGROUND METAL WATERPIPE IS USED AS THE GROUNDING ELECTRODE, THE CONNECTION MUST BE MADE TO THE PIPE WITHIN 5 FEET OF THE POINT OF ENTRANCE TO THE BUILDING. A SUPPLEMENTAL GROUNDING ELECTRODE SHALL BE PROVIDED AS SPECIFIED IN NEC 250-50 OR 250-53.
- 16.7 SMOKE DETECTORS SHALL BE INTERCONNECTED, AC PRIMARY POWERED, WITH BATTERY BACKUP. INSTALLATION SHALL MEET NFPA-72. LOCATE AS FOLLOWS:
 A) ONE AT EACH LEVEL INCLUDING BASEMENTS BUT NOT INCLUDING CRAWL SPACES AND UNINHABITABLE ATTICS.
 B) IN ALL BEDROOMS.
 C) IN THE VICINITY OF EACH BEDROOM ENTRANCE. LOCATE BEDROOM HALLWAY DETECTOR UPSTREAM FROM OR NEAR RETURN AIR GRILLE.
 D) IN ANY ROOM WITH A VAULTED CEILING WHERE A PERSON WOULD HAVE TO TRAVEL THROUGH THAT ROOM TO EXIT A BEDROOM. ROOMS WITH VAULTED CEILINGS SHALL HAVE SMOKE DETECTORS LOCATED WITHIN 3 FEET MEASURED HORIZONTALLY FROM THE RIDGE. SMOKE DETECTORS LOCATED IN ROOMS WITH COFFERED OR SIMILAR CEILINGS SHALL BE LOCATED AT THE HIGHEST PORTION OF THE CEILING.
- 16.8 A CARBON MONOXIDE ALARM IS REQUIRED OUTSIDE OF SLEEPING AREAS, IN THE IMMEDIATE VICINITY OF THE SLEEPING AREAS, IF THE DWELLING UNIT CONTAINS A FUEL FIRED APPLIANCE OR HAS AN ATTACHED OR BASEMENT GARAGE. THE CARBON MONOXIDE DETECTOR SHALL COMPLY WITH UL2034-2008
- 16.9 AT LEAST ONE LIGHTING DEVICE IS REQUIRED IN EACH ATTIC, CRAWLSPACE, BASEMENT, OR UTILITY ROOM THAT IS USED FOR STORAGE OR CONTAINS HEATING, AIR CONDITIONING, OR OTHER EQUIPMENT REQUIRING SERVICING. LOCATE LIGHT SWITCH AT POINT OF ENTRY.
- 16.10 INTERIOR STAIRWAYS TO BE PROVIDED WITH MINIMUM OF 1 FOOTCANDLE MEASURED AT EVERY TREAD NOSING. INTERIOR STAIRWAYS SHALL HAVE ILLUMINATED LIGHTING CONTROLS AT EACH FLOOR LEVEL.
- 16.11 EXTERIOR STAIRWAYS SHALL BE PROVIDED WITH ARTIFICIAL LIGHT SOURCE LOCATED AT THE TOP LANDING OF THE STAIRWAY. EXTERIOR STAIRS PROVIDING ACCESS TO A BASEMENT FROM THE OUTDOOR GRADE LEVEL SHALL BE PROVIDED WITH ARTIFICIAL LIGHT SOURCE AT THE BOTTOM LANDING OF THE STAIRWAY AND SHALL HAVE LIGHTING CONTROLLED BY ONE OF THE FOLLOWING METHODS:
 1) CONTROLS INSIDE THE DWELLING OR
 2) AUTOMATICALLY, OR
 3) CONTINUOUSLY OPERATED.
- 16.12 GROUND FAULT CIRCUIT INTERRUPTION (GFCI) PROTECTION SHALL BE PROVIDED FOR ALL 125 VOLT, SINGLE PHASE, 15 AND 20 AMPERE RECEPTACLES INSTALLED IN THE FOLLOWING LOCATIONS:
 1) BATHROOMS.
 2) GARAGES, UNFINISHED PORTIONS OF ACCESSORY BUILDING AT OR BELOW GRADE LEVEL.
 EXCEPTION:
 A. CEILING MOUNTED RECEPTACLE FOR GARAGE DOOR OPENER.
 B. A SINGLE OR A DUPLEX RECEPTACLE FOR THE APPLIANCES LOCATED IN A DEDICATED SPACE FOR NORMAL USE.
 3) OUTDOORS (INCLUDING INSIDE SCREEN ENCLOSURES)
 4) UNFINISHED BASEMENT AREAS AND CRAWL SPACES EXCEPT FOR LAUNDRY CIRCUIT AND SINGLE RECEPTACLE DEDICATED TO SUMP PUMPS.
 5) RECEPTACLES INTENDED TO SERVE KITCHEN COUNTER TOPS (SHALL BE SUPPLIED BY AT LEAST TWO DIFFERENT 20 AMP CIRCUITS). RECEPTACLES MAY NOT BE INSTALLED FACE-UP IN COUNTERS.
 6) RECEPTACLES INTENDED TO SERVE WET BAR COUNTER TOP SURFACES LOCATED WITHIN 6'-0" OF THE OUTSIDE EDGE OF THE WET BAR SINK:
 1) BALCONIES, DECKS, AND PORCHES.
 2) LESS THAN 25'-0" FROM AN AIR CONDITIONING CONDENSING UNIT.
- 16.13 LIGHTING IN CLOTHES CLOSETS MUST HAVE ENCLOSED LAMPS AND MAINTAIN 12" MINIMUM CLEARANCE FOR INCANDESCENT FIXTURES AND 6" MINIMUM CLEARANCE AT FLUORESCENT AND RECESSED FIXTURES. PENDANT FIXTURES ARE PROHIBITED IN CLOSETS.
- 16.14 FIXTURES AT BATHTUBS: HANGING FIXTURES, TRACK LIGHTING, AND CEILING FANS SHALL NOT BE INSTALLED WITHIN 3 FEET HORIZONTALLY OF A BATHTUB, MEASURED FROM THE OUTSIDE EDGE OF THE TUB AND 8 FEET VERTICALLY FROM THE TOP OF THE TUB RIM. RECEPTACLES SHALL NOT BE INSTALLED WITHIN A BATHTUB OR SHOWER SPACE.
- 16.15 ARC-FAULT CIRCUIT-INTERRUPTION PROTECTION SHALL BE PROVIDED FOR ALL CIRCUITS SUPPLYING POWER TO 120 VOLT, 15 AND 20 AMPERE RECEPTACLE OUTLETS INSTALLED IN BEDROOMS, SUNROOMS, KITCHENS, FAMILY ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DEN'S, RECREATION ROOMS AND SIMILAR ROOMS. IN CASES WHERE THE BRANCH CIRCUIT/OUTLETS LISTED ABOVE ALSO REQUIRE GFCI PROTECTION, THEY MUST BE PROTECTED BY BOTH GFCI AND ARC FAULT PROTECTION.
- 16.16 INSTALL CARBON MONOXIDE DETECTORS WITHIN 15' OF THE OUTSIDE OF ALL BEDROOM DOORS. CARBON MONOXIDE DETECTORS SHALL COMPLY WITH UL 2034-2008
- 16.17 INSTALL AT LEAST ONE COMMUNICATION OUTLET WITHIN DWELLING AND CABLED TO THE SERVICE PROVIDER DEMARCATION POINT
- 16.18 INTERSYSTEM BONDING TERMINAL SHALL BE PROVIDED FOR GROUNDING COMMUNICATION SYSTEMS (CABLE TV & SATELLITE DISHES)
- 16.19 PROVIDE MINIMUM 1 RECEPTACLE PER CAR SPACE IN A GARAGE.
- 16.20 KITCHEN AND LAUNDRY ROOM RECEPTACLES 125 VOLT, SINGLE PHASE, 15 AND 20 AMPERE RECEPTACLE THAT SERVE COUNTERTOP SURFACES SHALL HAVE GFCI PROTECTION EXCEPT FASTENED IN-PLACE APPLIANCES OR OUTLETS DESIGNATED FOR REFRIGERATORS OR FREEZERS.
- 16.21 GFCI PROTECTION NOW REQUIRED ON ALL 125 VOLT, 15 AND 20 AMPERE RECEPTACLES LOCATED WITHIN 6' HORIZONTALLY OF THE OUTSIDE EDGE OF BATHTUBS OR SHOWER STALLS.



1 STAIR SECTION
3/8" = 1'-0"

STAIR SECTION NOTES

- RISERS MUST BE SOLID OR HAVE A TOE BOARD OR OTHER APPROVED GUARD METHOD WHICH LIMITS THE RISER OPENING TO LESS THAN 4". OPEN RISERS WITHOUT A TOE BOARD OR OTHER APPROVED GUARD ARE PROHIBITED.
 EXCEPTION: THE OPENING BETWEEN ADJACENT TREADS IS NOT LIMITED ON STAIRS WITH A TOTAL RISE OF 30" OR LESS.
 EXCEPTION: OPENINGS ON THE SIDE(S) OF A STAIR SHALL HAVE BALUSTERS SPACED LESS THAN 4 3/8" APART.
- OPEN GUARDS SHALL HAVE INTERMEDIATE VERTICAL BALUSTERS SPACED LESS THAN 4 3/8" APART.
- MAXIMUM VERTICAL RISE BETWEEN LANDINGS SHALL BE NO LARGER THAN 14".



HANDRAIL PROFILE

NOTE: THIS SHAPE OR OTHER APPROVED SHAPES TO HAVE 2 1/4" MAX. HORIZ. WIDTH & MIN. 4 6/16" MAX. GRASPABLE PERIMETER DIMENSION. A GRASPABLE PERIMETER EXCEEDING 6 1/16" SHALL COMPLY WITH SECTION R311.13

THOMAS ALAN GROUP

THIS DRAWING AND DETAILS ON IT ARE THE SOLE PROPERTY OF THE ARCHITECT AND MAY BE USED FOR THE SPECIFIC PROJECT ONLY. IT SHALL NOT BE LOANED, COPIED, REPRODUCED, OR REUSED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT.



CHRISTOPHER THOMAS, P.A.E.
 MO# 2011033866
 EXPIRATION DATE: 12/31/27

THE PROFESSIONAL ARCHITECT'S SEAL APPLIED TO THIS SHEET APPLIES ONLY TO THE MATERIAL AND ITEMS SHOWN ON THIS SHEET. ALL DRAWINGS, DIMENSIONS AND OTHER REQUIREMENTS NOTED HEREIN ARE THE PROPERTY OF THE ARCHITECT AND SHALL REMAIN THE PROPERTY OF THE ARCHITECT. THE ARCHITECT ASSUMES NO RESPONSIBILITY FOR SUCH PLANS, DRAWINGS OR DOCUMENTS NOT EXISTING THIS SEAL.

No.	Description	Permit Set	Date
1			3/11/2026

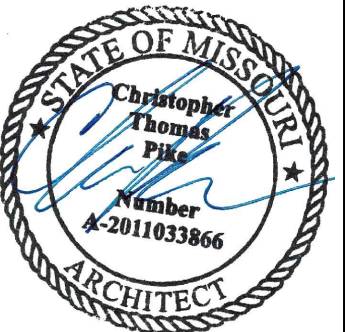
A New Residence for:
Douglas PROPERTIES
 744 CHERRY TREE LANE
 OLIVETTE, MO 63132

THOMAS ALAN GROUP
 ARCHITECTURE | DESIGN | INTERIORS
 23 N. Gore ave., Suite 302
 Webster Groves, MO 63119
 (314) 301-9975
 ThomasAlanGroup.com

CONTINUED GENERAL NOTES AND STAIR SECTION

Sheet Number:

A2
of 17



CHRISTOPHER THOMAS, P.A.
MO# 2011033866
EXPIRATION DATE: 12/31/27

THE PROFESSIONAL ARCHITECT'S SEAL AFFIXED TO THIS SHEET APPLIES ONLY TO THE MATERIAL AND ITEMS SHOWN ON THIS SHEET. ALL DIMENSIONS, DIMENSIONS OR OTHER REQUIREMENTS NOTED HEREIN OR OTHERWISE NOTED HEREIN ARE PREPARED BY THIS ARCHITECT AND THIS ARCHITECT EXPRESSLY DISCLAIMS ANY AND ALL RESPONSIBILITY FOR SUCH PLANS, DRAWINGS OR DOCUMENTS NOT EXISTING THIS SEAL.

No.	Description	Permit Set	Date
1			3/11/2026

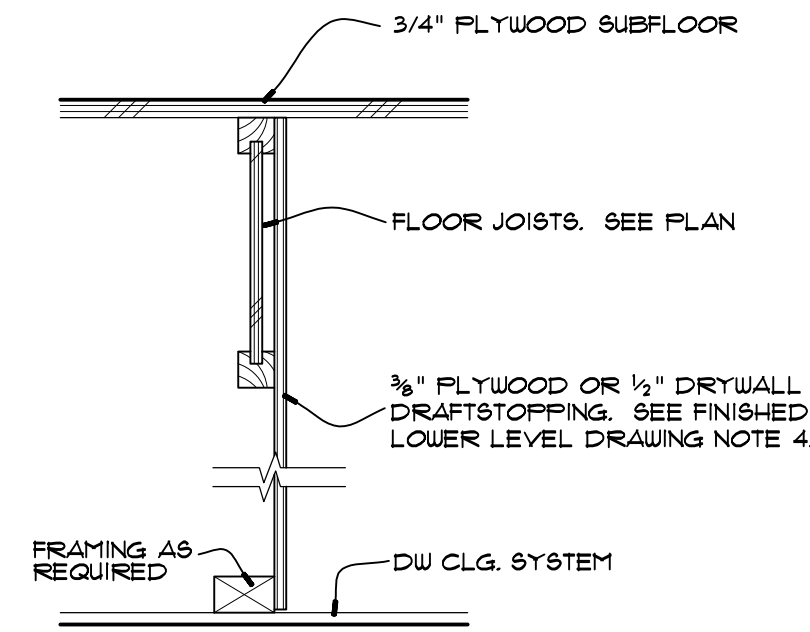
A New Residence for:
Douglas PROPERTIES
744 CHERRY TREE LANE
OLIVETTE, MO 63132

THOMAS ALAN GROUP
ARCHITECTURE | DESIGN | INTERIORS
23 N. Gore Ave., Suite 302
Webster Groves, MO 63119
(314) 301-9975
ThomasAlanGroup.com

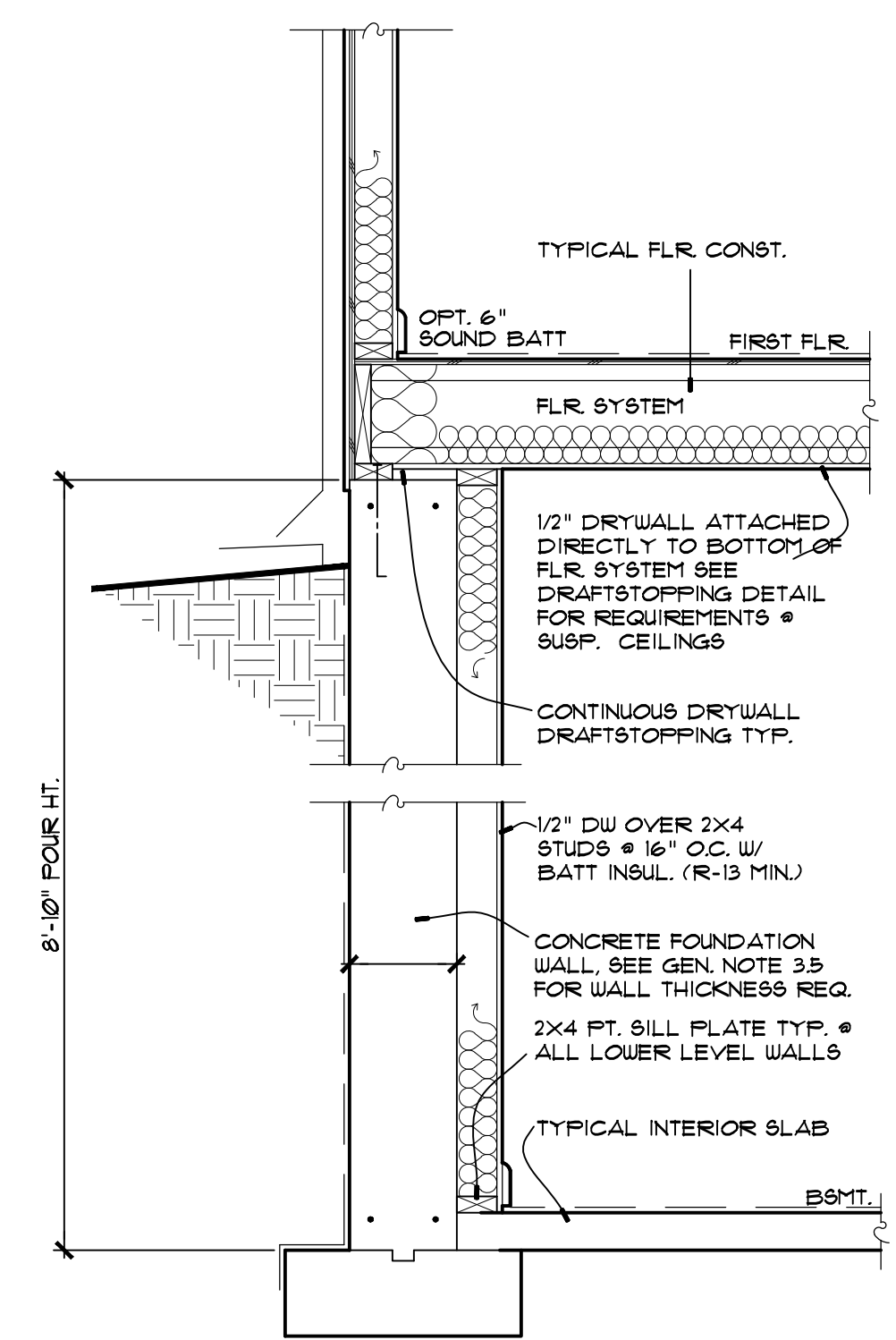
FINISHED LOWER LEVEL

Sheet Number:

A4
of 17



2 DRAFTSTOPPING DTL.
1/2" = 1'-0"



1 BSMT. WALL SECTION
3/4" = 1'-0" SEE TYP. WALL SECTIONS FOR ADDITIONAL INFORMATION

- FINISHED LOWER LEVEL DRAWING NOTES**
- ALL INTERIOR WALLS TO BE 3/2" (2X4 STUDS), UNLESS NOTED OTHERWISE (UNO).
 - SEE FOUNDATION PLAN FOR ADDITIONAL INFORMATION.
 - WINDOW DESIGNATIONS ARE THOSE OF 'GENERIC'.
 - DRAFTSTOPPING: CEILING'S SUSPENDED BELOW WOOD JOISTS OR ATTACHED DIRECTLY TO WOOD FLOOR TRUSSES SHALL BE DRAFT STOPPED AT MAXIMUM 1000 S.F. INTERVALS PARALLEL TO MAIN FRAMING MEMBERS. SEE DETAIL THIS SHEET.
 - CEILING HEIGHTS TO BE DETERMINED BY EXTENT OF DUCTWORK, STEEL BEAMS, ETC. (7'-0" MIN. CEILING HEIGHT)
EXCEPTIONS:
A. BEAMS AND GIRDERS (DECORATIVE OR STRUCTURAL) SPACED NOT LESS THAN 4 FEET ON CENTER MAY PROJECT A MAXIMUM OF 6" BELOW THE 7'-0" REQUIRED CEILING HEIGHT.
B. CEILING'S IN BASEMENTS WITHOUT HABITABLE SPACES MAY PROJECT TO WITHIN 6'-8" OF THE FINISHED FLOOR, AND BEAMS, GIRDERS, DUCTS OR OTHER OBSTRUCTIONS MAY PROJECT WITHIN 6'-4" OF THE FINISHED FLOOR.
 - FIREBLOCKING REQUIRED AROUND VENT, PIPE AND DUCT PENETRATIONS OF CEILING AND FLOORS AND AT HORIZONTAL INTERVALS (NOT EXCEEDING 10'-0") WHEN A FRAMED WALL IS SET AWAY FROM THE FOUNDATION WALL.
1. PROVIDE ACCESS PANELS TO UTILITIES IN FINISHED AREAS.
2. ADJUST LOCATIONS OF RECESSED LIGHT FIXTURES IF REQUIRED FOR FRAMING MEMBERS, DUCTWORK, ETC. REVIEW ALTERNATE LOCATIONS WITH OWNER/BUILDER.

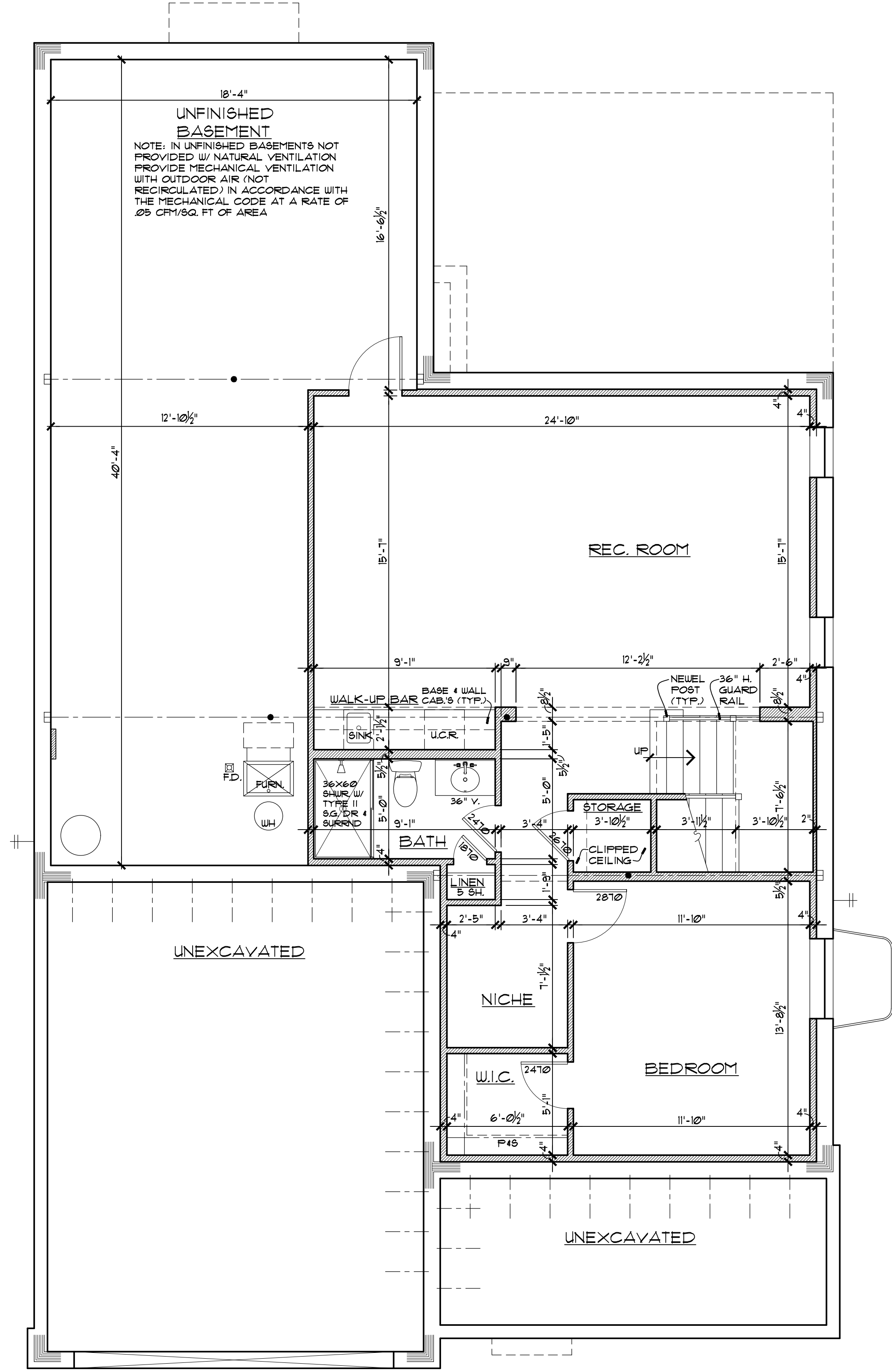
ENERGY CONSERVATION CERTIFICATE PER CODE SECTION N1019 SHALL BE PERMANENTLY PLACED ADJACENT TO THE ELECTRICAL PANEL AND SHALL IDENTIFY ALL PREDOMINANT R VALUES AND DESIGN CRITERIA AS WELL AS THE EFFICIENCY RATING FOR ALL INITIALLY INSTALLED EQUIPMENT

SEE FOUNDATION PLAN FOR ADDITIONAL INFORMATION

SYMBOLS LEGEND

	WD. STUDS/ MASONRY
	PLANT LEDGE
	MTL. STUDS
	SOUND BATT INSULATION

- FIRE BLOCKING NOTES**
- FILL ANY FLOOR JOIST CAVITY THAT IS DIRECTLY ABOVE ANY WALL THAT SEPARATES A FINISHED AREA FROM AN UNFINISHED AREA A SOLID WITH MINERAL WOOL OR INSTALL DRYWALL TO CLOSE THAT OPENING. IF MINERAL WOOL IS USED, IT SHALL BE INSTALLED AS TO BE SECURELY RETAINED IN PLACE. APPROVED METHODS INCLUDE A VERY TIGHT COMPRESSION FIT AND POSITIVE ATTACHMENT WITH FURRING STRIPS OR INSULATION STAY WIRES. IF USING THE COMPRESSION METHOD, THE INSULATION SHALL BE CUT TWICE THE SIZE OF THE OPENING. THE INSTALLATION SHALL BE FIELD TESTED BY THE INSPECTOR.
 - INSTALL VERTICAL FIREBLOCKING (FLOOR TO CEILING) FOR EVERY TEN FEET OF CONCEALED WALL SPACE.
 - FIREBLOCK THE ENDS OF ANY BEAM OR DUCT ENCLOSURE TO SEPARATE IT FROM THE VERTICAL CONCEALED SPACES.
 - FIREBLOCK THE TOP PLATES TO BEHIND THE TOP PLATES TO SEPARATE THE VERTICAL CONCEALED SPACE FROM THE HORIZONTAL CONCEALED SPACE.



FINISHED LOWER LEVEL
1/4" = 1'-0" 825 SQ. FT.



CHRISTOPHER THOMAS PIKE
MO# 2011033866
EXPIRATION DATE: 12/31/27

THE PROFESSIONAL ARCHITECT'S SEAL AFFIXED TO THIS SHEET APPLIES ONLY TO THE MATERIAL AND ITEMS SHOWN ON THIS SHEET. ALL DRAWINGS, EXHIBITS, AND/OR OTHER DOCUMENTS AND/OR INFORMATION PREPARED BY THIS ARCHITECT AND THIS ARCHITECT'S FIRM SHALL BE THE PROPERTY OF THIS ARCHITECT AND THIS ARCHITECT'S FIRM. THE ARCHITECT AND THIS ARCHITECT'S FIRM SHALL NOT BE RESPONSIBLE FOR SUCH PLANS, DRAWINGS OR DOCUMENTS NOT EXISTING THIS SEAL.

No.	Description	Date
1	Permit Set	3/11/2026

Douglas
PROPERTIES

A New Residence for:

744 CHERRY TREE LANE
OLIVETTE, MO 63132

THOMAS ALAN GROUP
ARCHITECTURE | DESIGN | INTERIORS

23 N. Gore ave., Suite 302
Webster Groves, MO 63119
(314) 301-9975
ThomasAlanGroup.com

FIRST FLOOR
PLAN

Sheet Number:

A5
of 17

FIRE BLOCKING NOTES

- FILL ANY FLOOR JOIST CAVITY THAT IS DIRECTLY ABOVE ANY WALL THAT SEPARATES A FINISHED AREA FROM AN UNFINISHED AREA WITH MINERAL WOOL OR SOLID DRYWALL TO CLOSE THAT OPENING. IF MINERAL WOOL IS USED, IT SHALL BE INSTALLED AS TO BE SECURELY RETAINED IN PLACE. APPROVED METHODS INCLUDE A VERY TIGHT COMPRESSION FIT AND POSITIVE ATTACHMENT WITH FURRING STRIPS OR INSULATION STAY WIRES. IF USING THE COMPRESSION METHOD, THE INSULATION SHALL BE CUT TWICE THE SIZE OF THE OPENING. THE INSTALLATION SHALL BE FIELD TESTED BY THE INSPECTOR.
- INSTALL VERTICAL FIREBLOCKING (FLOOR TO CEILING) FOR EVERY TEN FEET OF CONCEALED WALL SPACE.
- FIREBLOCK THE ENDS OF ANY BEAM OR DUCT ENCLOSURE TO SEPARATE IT FROM THE VERTICAL CONCEALED SPACES.
- FIREBLOCK THE TOP PLATES AND BEHIND THE TOP PLATES TO SEPARATE THE VERTICAL CONCEALED SPACE FROM THE HORIZONTAL CONCEALED SPACE.

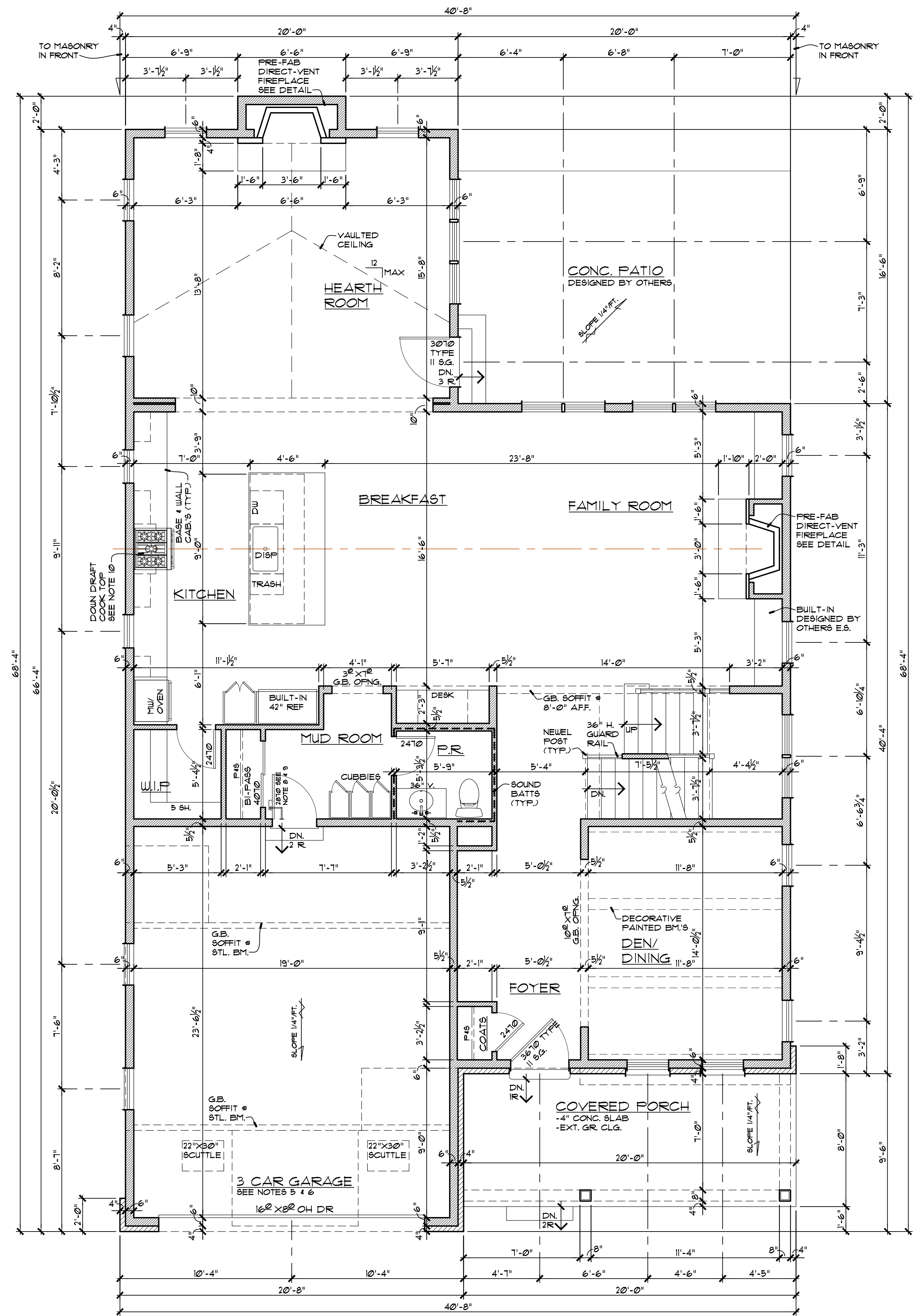
ENERGY CONSERVATION CERTIFICATE PER CODE SECTION N1013 SHALL BE PERMANENTLY PLACED ADJACENT TO THE ELECTRICAL PANEL AND SHALL IDENTIFY ALL PREDOMINANT R VALUES AND DESIGN CRITERIA AS WELL AS THE EFFICIENCY RATING FOR ALL INITIALLY INSTALLED EQUIPMENT

SYMBOLS LEGEND

	UD STUDS/MASONRY
	PLANT LEDGE
	MTL STUDS
	SOUND BATT INSULATION

FIRST FLOOR DRAWING NOTES

- ALL INTERIOR WALLS TO BE 3/4" (2X4 STUDS), UNLESS NOTED OTHERWISE (UNO).
- SEE OTHER PLANS/ELEVATIONS, DETAIL SHEET, AND GENERAL NOTES FOR ADDITIONAL INFORMATION.
- PREFAB ZERO CLEARANCE FIREPLACE; MODEL: CD4236. MANUF: HEATILATOR OR APPROVED EQUAL. PROVIDE OUTSIDE AIR KIT.
- PROVIDE 2" MINIMUM CLEARANCE TO COMBUSTIBLES AT ALL GAS FLUES, TYPICAL.
- GARAGE/HOUSE SEPARATION WALL TO BE INSULATED MINIMUM R-13.
- GARAGE WITH STORY ABOVE: GARAGE/HOUSE SEPARATION WALLS SHALL BE FACED WITH NOT LESS THAN 1/2" GYPSUM BRD. AFFIRED TO THE GARAGE SIDE (USE 5/8" TYPE 'X' GYPSUM BRD. IN OTTAWA, MO). GARAGES BENEATH HABITABLE ROOMS SHALL BE SEPARATED FROM ALL HABITABLE ROOMS ABOVE BY NOT LESS THAN 5/8" TYPE 'X' GYPSUM BOARD OR EQUIVALENT. WHERE THE SEPARATION IS A FLOOR-CEILING ASSEMBLY, THE STRUCTURE SUPPORTING THE SEPARATION SHALL ALSO BE PROTECTED BY NOT LESS THAN 1/2" INCH GYPSUM BOARD OR EQUIVALENT.
- GARAGE-STORY ABOVE WITH EXTERIOR BEARING WALLS CARRYING 1 HOUR RATED FLOOR/CEILING ASSEMBLYS REQUIRE 5/8" TYPE 'X' FIRE RESISTANT RATED DRYWALL ON INSIDE FACE WITH 1/8" PL WOOD OR OSB SHEATHING ON EXTERIOR FACE. (1 HOUR EXTERIOR BEARING WALL UL DESIGN NO. U356). RATED DRYWALL SHALL RUN CONTINUOUS UNDER GARAGE DOOR HEADER.
- GARAGE/RESIDENCE SEPARATION DOOR SHALL NOT BE LESS THAN 1 3/8" THICK SOLID WOOD, 1 3/8" SOLID OR HONEYCOMB CORE STEEL DOOR, OR 20-MINUTE FIRE RATED DOOR WITH A SELF-CLOSING DEVICE
- PRIOR TO CONSTRUCTION CONTRACTOR TO VERIFY WITH LOCAL FIRE DEPT. DISTRICT IF THEY HAVE MORE RESTRICTIVE SEPARATION REQUIREMENTS THAN THOSE LISTED IN NOTES 6, 7, 8 ABOVE.
- 30" RANGE W/ OVEN & EXHAUST HOOD. MECH. CONTRACTOR TO VERIFY CFM FOR ADEQUATE AIR INTAKE. ALSO SEE GENERAL NOTES.



FIRST FLOOR PLAN

1/4" = 1'-0" 1,667 SQ. FT.



CHRISTOPHER THOMAS PIKE
MO# 2011033866
EXPIRATION DATE: 12/31/27

THE PROFESSIONAL ARCHITECT'S SEAL, AFFIXED TO THIS SHEET, APPLIES ONLY TO THE MATERIAL AND INSTRUMENTS OR OTHER DOCUMENTS ACCORDING TO THE STATE'S REQUIREMENTS. IT SHALL NOT BE PREPARED BY THIS ARCHITECT, AND THIS ARCHITECT EXPRESSLY DISCLAIMS ANY AND ALL RESPONSIBILITY FOR SUCH PLANS, DRAWINGS OR DOCUMENTS NOT ENDORSING THIS SEAL.

No.	Description	Date
1	Permit Set	3/11/2026

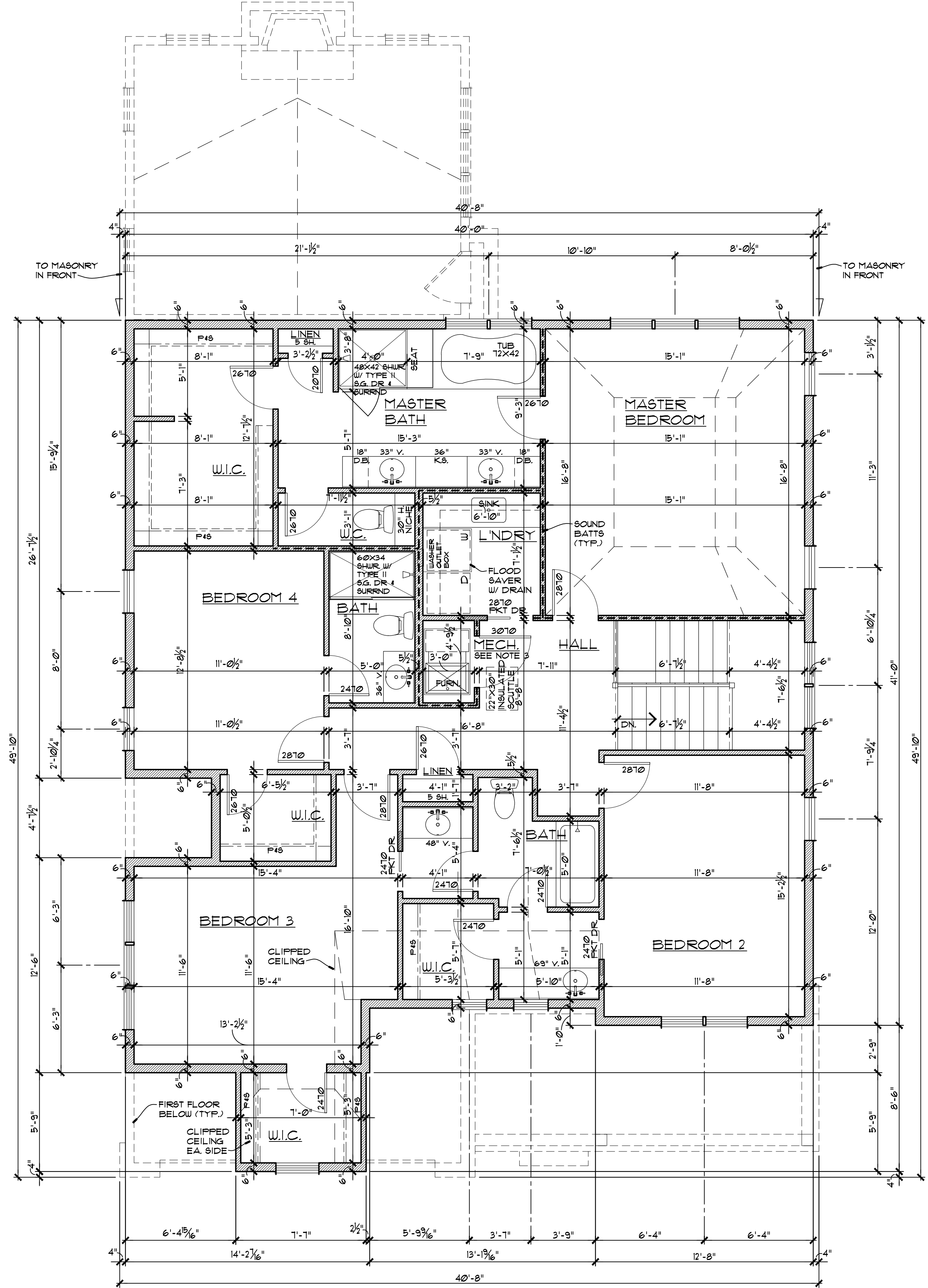
A New Residence for:
Douglas PROPERTIES
744 CHERRY TREE LANE
OLIVETTE, MO 63132

THOMAS ALAN GROUP
ARCHITECTURE | DESIGN | INTERIORS
23 N. Gore ave., Suite 302
Webster Groves, MO 63119
(314) 301-9975
ThomasAlanGroup.com

SECOND FLOOR PLAN

Sheet Number:

A6
of 17



ENERGY CONSERVATION CERTIFICATE PER CODE SECTION N1013 SHALL BE PERMANENTLY PLACED ADJACENT TO THE ELECTRICAL PANEL AND SHALL IDENTIFY ALL PREDOMINANT R VALUES AND DESIGN CRITERIA AS WELL AS THE EFFICIENCY RATING FOR ALL INITIALLY INSTALLED EQUIPMENT

FIRE BLOCKING NOTES

- FILL ANY FLOOR JOIST CAVITY THAT IS DIRECTLY ABOVE ANY WALL THAT SEPARATES A FINISHED AREA FROM AN UNFINISHED AREA WITH MINERAL WOOL OR INSTALL DRYWALL TO CLOSE THAT OPENING. IF MINERAL WOOL IS USED, IT SHALL BE INSTALLED AS TO BE SECURELY RETAINED IN PLACE. APPROVED METHODS INCLUDE A VERY TIGHT COMPRESSION FIT AND POSITIVE ATTACHMENT WITH FURRING STRIPS OR INSULATION STAY WIRES. IF USING THE COMPRESSION METHOD, THE INSULATION SHALL BE CUT TWICE THE SIZE OF THE OPENING. THE INSTALLATION SHALL BE FIELD TESTED BY THE INSPECTOR.
- INSTALL VERTICAL FIREBLOCKING (FLOOR TO CEILING) FOR EVERY TEN FEET OF CONCEALED WALL SPACE.
- FIREBLOCK THE ENDS OF ANY BEAM OR DUCT ENCLOSURE TO SEPARATE IT FROM THE VERTICAL CONCEALED SPACES.
- FIREBLOCK THE TOP PLATES AND BEHIND THE TOP PLATES TO SEPARATE THE VERTICAL CONCEALED SPACE FROM THE HORIZONTAL CONCEALED SPACE.

SYMBOLS & LEGEND

- UD, STUDS/ MASONRY
- PLANT LEDGE
- MTL. STUDS
- SOUND BATT INSULATION

SECOND FLOOR DRAWING NOTES

- ALL INTERIOR WALLS TO BE 3/4" (2X4 STUDS), UNLESS NOTED OTHERWISE (UNO).
- SEE OTHER PLANS/ELEVATIONS, DETAIL SHEET, AND GENERAL NOTES FOR ADDITIONAL INFORMATION.
- SECOND FLR. FURNACE SHALL BE SET IN OVERFLOW DRAIN PAN. PROVIDE SOUND BATTS AROUND MECH RM. INSTALL 1/2" HOMIGOTE SOUND BRD. UNDER DII AND WEATHER STRIP DR FOR SOUND CONTROL. MECH. CONTR. TO SUPPLY COMBUSTION AIR (NO LOUVER)
- PROVIDE 2" MINIMUM CLEARANCE TO COMBUSTIBLES AT ALL GAS FLUES, TYPICAL.
- PROVIDE 1/2" CEMENT BACKER BOARDS BEHIND SHOWER ENCLOSURES WHEN TILE IS USED.

SECOND FLOOR PLAN

1/4" = 1'-0"
1,602 SQ. FT.

No.	Description	Permit Set	Date
1			3/11/2026

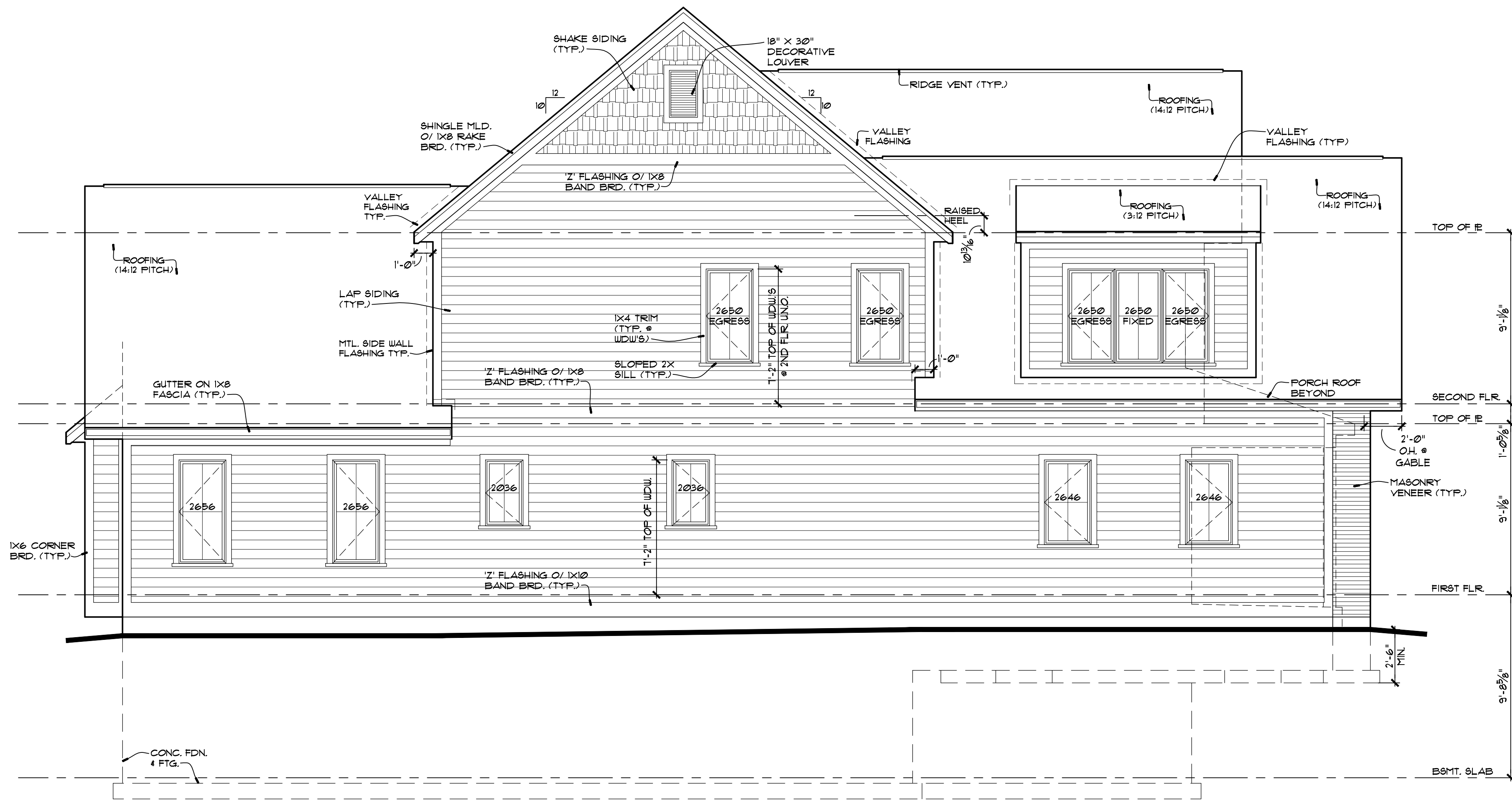
A New Residence for:
Douglas PROPERTIES
744 CHERRY TREE LANE
OLIVETTE, MO 63132

THOMAS ALAN GROUP
ARCHITECTURE | DESIGN | INTERIORS
23 N. Gore ave., Suite 302
Webster Groves, MO 63119
(314) 301-9975
ThomasAlanGroup.com

FRONT ELEVATION AND LEFT SIDE ELEVATION

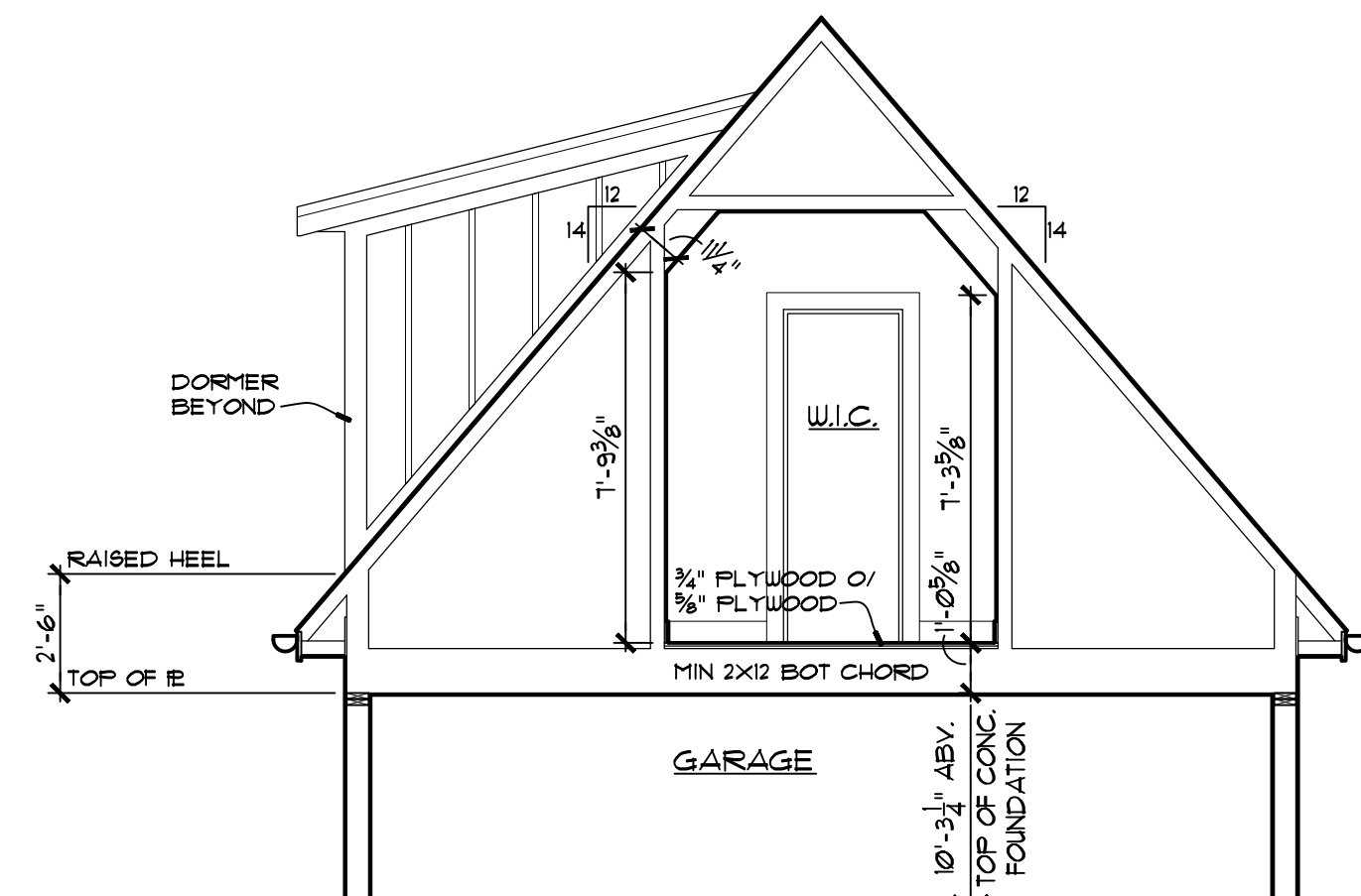
Sheet Number:

A7
of 17



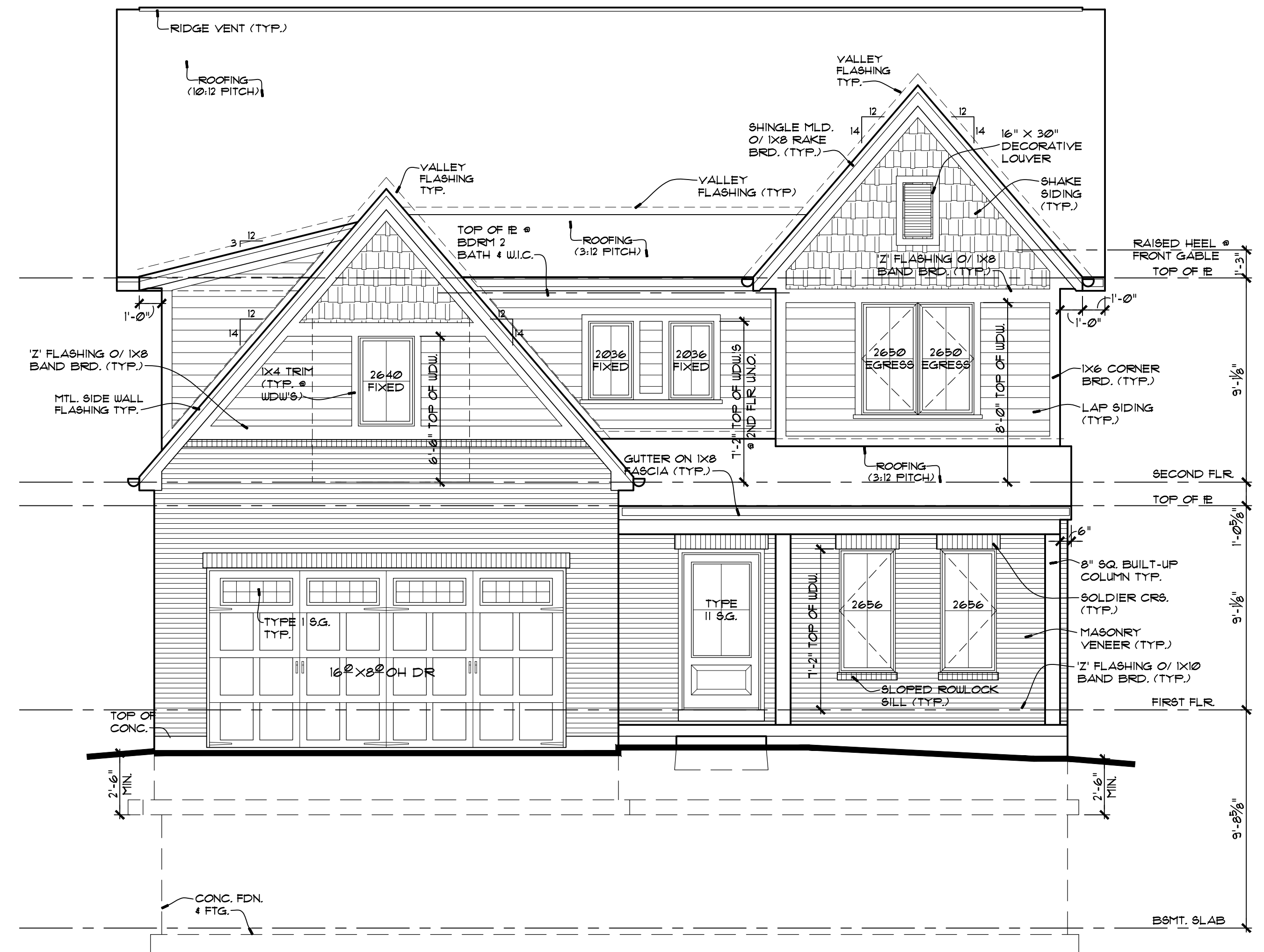
LEFT SIDE ELEVATION

1/4" = 1'-0"



1 ATTIC TRUSS PROFILE

1/4" = 1'-0"

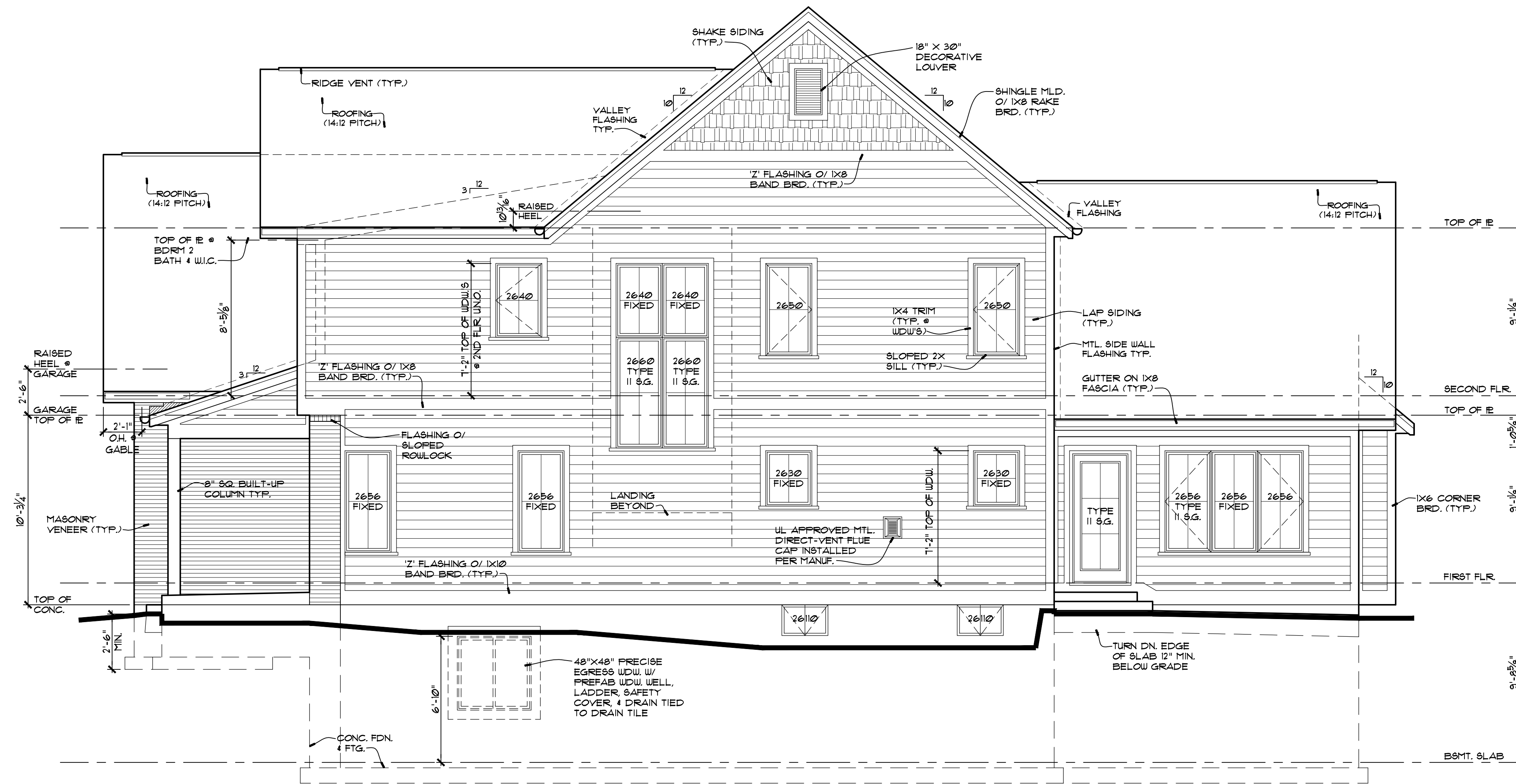


FRONT ELEVATION

1/4" = 1'-0"

ELEVATION DRAWING NOTES

- NOT USED.
- SEE PLANS, DETAIL SHEET, AND GENERAL NOTES FOR ADDITIONAL INFORMATION.
- GRADE: SLOPE AWAY FROM FOUNDATION A MINIMUM OF 6" DROP WITHIN THE FIRST 10' OR TO A SWALE.
- FOOTINGS & PIERS: SHALL EXTEND A MINIMUM OF 2'-6" BELOW FINISHED GRADE AND BEAR ON UNDISTURBED SOIL OR PREPARED FILL.
- MASONRY VENEER: ALL SOLDIER AND ROWLOCK HEADERS, SILLS AND TRIM TO PROJECT 3/4", UNLESS NOTED OTHERWISE.
- CHIMNEY HEIGHT: SHALL EXTEND ABOVE ROOF MIN. 3'-0" AT POINT OF PENETRATION AND 2'-0" HIGHER THAN ANY PORTION OF THE BUILDING WITHIN 10' HORIZONTALLY.
- DECK DOORS: PROVIDE GUARDRAIL ASSEMBLY OUTSIDE (2X4 TOP & BOTTOM RAIL W/ 2X2 BALUSTERS SPACED LESS THAN 4" APART; 36" MIN. HEIGHT ABV. FINISH FLR.) UNTIL DECK IS BUILT AND APPROVED.
- ROOF FLASHING: PROVIDE CORROSION-RESISTANT METAL FLASHING AT ALL ROOF VALLEYS, WALL AND CHIMNEY INTERSECTIONS, PORCHES, DECKS, ETC.
- OPEN VALLEYS: LINING TO BE CORROSION RESISTANT METAL FLASHING A MIN. OF 24" WIDE.
CLOSED VALLEYS: MIN. ONE PLY OF SMOOTH ROLL ROOFING (TYPE II OR III) A MINIMUM OF 36" WIDE.
- CANTILEVERS: PROVIDE EXTERIOR GRADE SOFFIT (SEAL ALL JOINTS) INSULATION BETWEEN FLOOR JOIST TO MINIMUM R-19 AND VENT JOIST CAVITIES. BASEMENT HAVING CONC. FOUNDATION WALLS WITH MORE THAN 20% EXPOSURE ABOVE FINISHED GRADE SHALL BE INSULATED. SEE GENERAL NOTES.
- GENERAL CONTRACTOR SHALL CONFIRM USE OF ALL TRIM ACCESSORIES AND MODEL NUMBERS WITH SUPPLIER BEFORE ORDERING.
- WINDOW DESIGNATIONS ARE THOSE OF: "GENERIC".
- WINDOWSILLS: WHERE THE LOWEST PART OF THE CLEAR OPENING OF THE WINDOW IS LESS THAN 24" ABOVE THE FINISHED FLOOR AND WHERE THE WINDOW IS LOCATED MORE THAN 12" ABOVE THE FINISHED GRADE OR OUTSIDE SURFACE BELOW. THE WINDOW SHOULD BE PROVIDED WITH A WINDOW OPENING CONTROL DEVICE PER SECTION R612.4.2 OF THE 2015 IRC.
- ADDRESS NUMBERS: PROVIDE APPROVED ADDRESS NUMBERS, BUILDING NUMBERS, OR APPROVED BUILDING IDENTIFICATION PLACED IN A POSITION THAT IS PLAINLY LEGIBLE AND VISIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY PER SECTION R319.

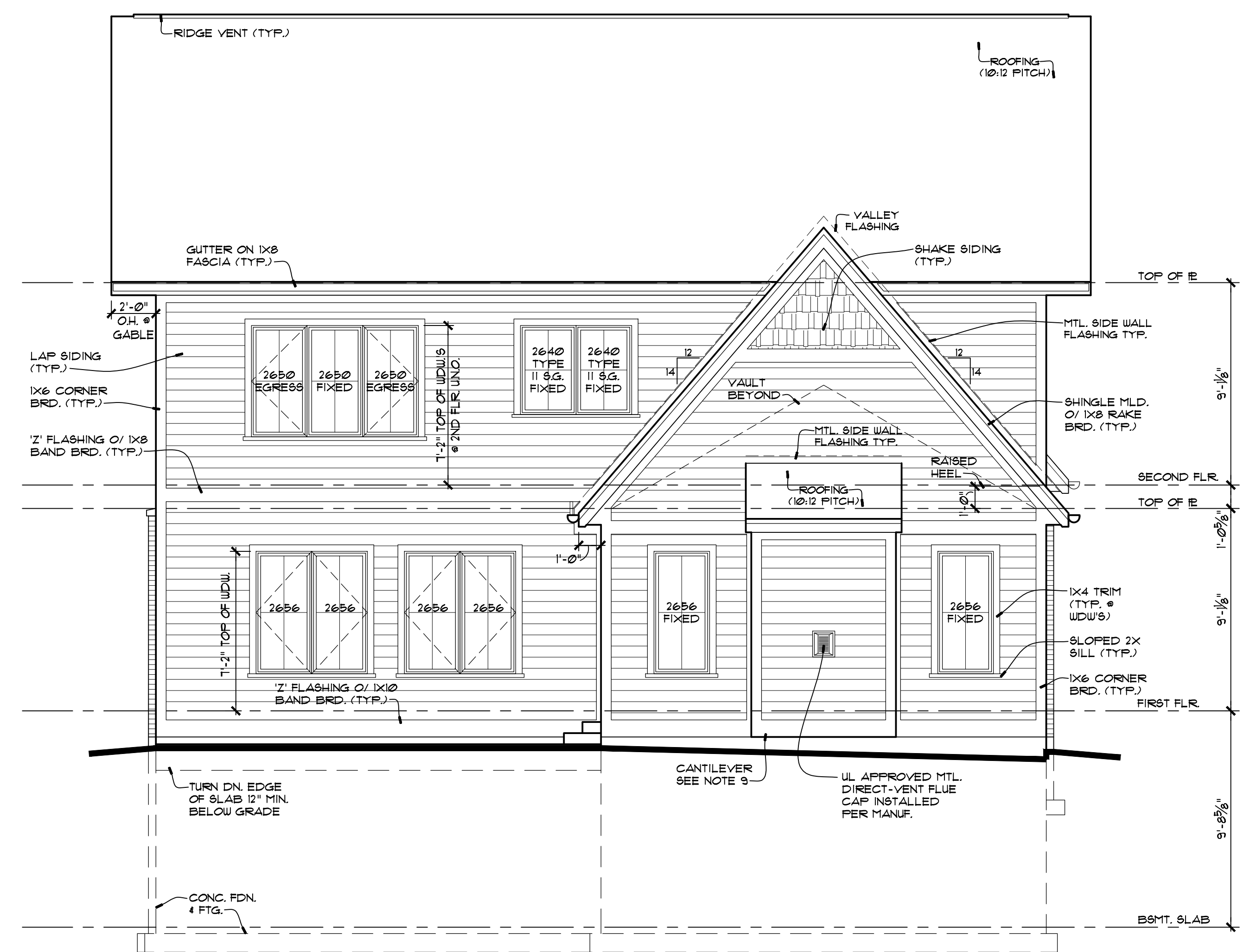


RIGHT SIDE ELEVATION

1/4" = 1'-0"

ELEVATION DRAWING NOTES

- NOT USED.
- SEE PLANS, DETAIL SHEET, AND GENERAL NOTES FOR ADDITIONAL INFORMATION.
- GRADE, SLOPE AWAY FROM FOUNDATION A MINIMUM OF 6" DROP WITHIN THE FIRST 10' OR TO A SWALE.
- FOOTINGS & PIERS: SHALL EXTEND A MINIMUM OF 2'-6" BELOW FINISHED GRADE AND BEAR ON UNDISTURBED SOIL OR PREPARED FILL.
- MASONRY VENEER: ALL SOLDIER AND ROWLOCK HEADERS, SILLS AND TRIM TO PROJECT 3/4", UNLESS NOTED OTHERWISE.
- CHIMNEY HEIGHT: SHALL EXTEND ABOVE ROOF MIN. 3'-0" AT POINT OF PENETRATION AND 2'-0" HIGHER THAN ANY PORTION OF THE BUILDING WITHIN 10' HORIZONTALLY.
- DECK DOORS: PROVIDE GUARDRAIL ASSEMBLY OUTSIDE (2X4 TOP & BOTTOM RAIL W/ 2X2 BALUSTERS SPACED LESS THAN 4" APART; 36" MIN. HEIGHT ABV. FINISH FLR.) UNTIL DECK IS BUILT AND APPROVED.
- ROOF FLASHING: PROVIDE CORROSION-RESISTANT METAL FLASHING AT ALL ROOF VALLEYS, WALL AND CHIMNEY INTERSECTIONS, PORCHES, DECKS, ETC. OPEN VALLEYS: LINING TO BE CORROSION RESISTANT METAL FLASHING A MIN. OF 24" WIDE. CLOSED VALLEYS: MIN. ONE PLY OF SMOOTH ROLL ROOFING (TYPE II OR III) A MINIMUM OF 36" WIDE.
- CANTILEVERS: PROVIDE EXTERIOR GRADE SOFFIT (SEAL ALL JOINTS) INSULATION BETWEEN FLOOR JOIST TO MINIMUM R-19 AND VENT JOIST CAVITIES.
- BASEMENT HAVING CONC. FOUNDATION WALLS WITH MORE THAN 20% EXPOSURE ABOVE FINISHED GRADE SHALL BE INSULATED. SEE GENERAL NOTES.
- GENERAL CONTRACTOR SHALL CONFIRM USE OF ALL TRIM ACCESSORIES AND MODEL NUMBERS WITH SUPPLIER BEFORE ORDERING.
- WINDOW DESIGNATIONS ARE THOSE OF: "GENERIC"
- WINDOWILLS: WHERE THE LOWEST PART OF THE CLEAR OPENING OF THE WINDOW IS LESS THAN 24" ABOVE THE FINISHED FLOOR AND WHERE THE WINDOW IS LOCATED MORE THAN 12" ABOVE THE FINISHED GRADE OR OUTSIDE SURFACE BELOW. THE WINDOW SHOULD BE PROVIDED WITH A WINDOW OPENING CONTROL DEVICE PER SECTION R612.4.2 OF THE 2015 IRC
- ADDRESS NUMBERS: PROVIDE APPROVED ADDRESS NUMBERS, BUILDING NUMBERS, OR APPROVED BUILDING IDENTIFICATION PLACED IN A POSITION THAT IS PLAINLY LEGIBLE AND VISIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY PER SECTION R91.1



REAR ELEVATION

1/4" = 1'-0"

No.	Description	Permit Set	Date
1			3/11/2026

A New Residence for:
Douglas PROPERTIES
744 CHERRY TREE LANE
OLIVETTE, MO 63132

THOMAS ALAN GROUP
ARCHITECTURE | DESIGN | INTERIORS
23 N. Gore ave., Suite 302
Webster Groves, MO 63119
(314) 301-9975
ThomasAlanGroup.com

REAR ELEVATION AND RIGHT ELEVATION

Sheet Number:

A8

of 17

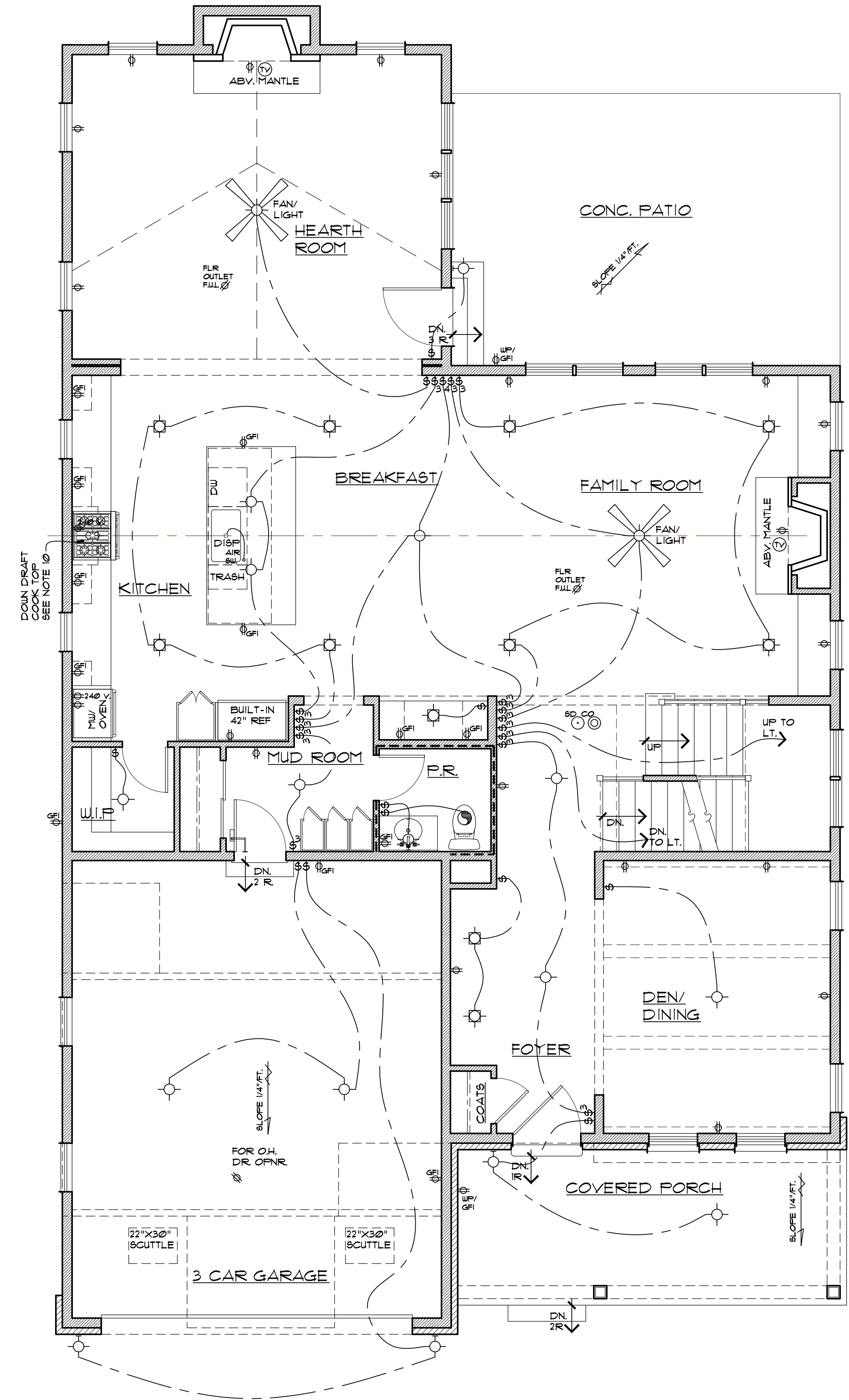
No.	Description	Date
1	Permit Set	3/11/2026

A New Residence for:
Douglas PROPERTIES
744 CHERRY TREE LANE
OLIVETTE, MO 63132

THOMAS ALAN GROUP
ARCHITECTURE | DESIGN | INTERIORS
23 N. Gore ave., Suite 302
Webster Groves, MO 63119
(314) 301-8975
ThomasAlanGroup.com

**FIRST FLOOR
PLAN
ELECTRICAL**

Sheet Number:
A10
of 17



FIRST FLOOR PLAN ELECTRIC

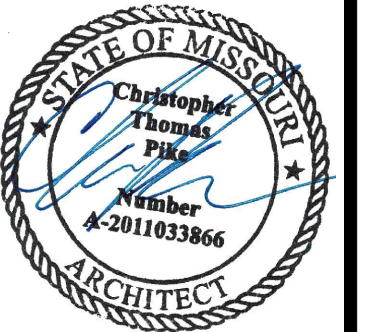
1/4" = 1'-0"

ELECTRICAL NOTES

1. ELECTRICAL PANEL: (200 AMP. MINIMUM) TO BE SIZED AND LOCATED BY ELECTRICAL CONTRACTOR.
2. TELEPHONE, INTERCOM SYSTEMS, DOORBELLS, SATELLITE, DATA PORTS, CABLEING, AND ETC. TO BE LOCATED AND SPECIFIED BY OWNER.
3. ADJUST LOCATIONS OF RECESSED LIGHT FIXTURES IF REQUIRED FOR FRAMING MEMBERS, DUCTWORK, ETC. REVIEW ALTERNATE LOCATIONS WITH OWNER/BUILDER.

ELECTRICAL SYMBOLS

DUPLEX OUTLET		UNDER CAB. INCANDESCENT	
WATER PROOF (WP)		CLICK STRIP	
GROUND FAULT INTERRUPTER (GFI)		BRACKET MOUNT	
FOURFLEX		CEILING MOUNT	
SPECIALTY OUTLET		1" RATED RECESSED CAN LIGHT	
PHONE		1" RATED RECESSED AIMABLE CAN LIGHT	
SWITCH		FLUORESCENT LIGHT	
DIMMER (D)		FLOOD LIGHT	
CABLE TV OUTLET		FULL CHAIN LIGHT	
EXHAUST FAN/MOTOR		SMOKE DETECTOR	
COMPUTER NETWORK PORT/INTERNET ACCESS LINE		CARBON MONOXIDE DETECTOR (CO)	
CEILING FAN W/ LIGHT			



CHRISTOPHER THOMAS PIKE
MO# 2011033866
EXPIRATION DATE: 12/31/27

THE PROFESSIONAL ARCHITECT'S SEAL, AFFIXED TO THIS SHEET APPLIES ONLY TO THE MATERIAL AND INSTRUMENTS OR OTHER DOCUMENTS PREPARED BY THIS ARCHITECT, AND THIS ARCHITECT EXPRESSLY DISCLAIMS ANY AND ALL RESPONSIBILITY FOR SUCH PLANS, DRAWINGS OR DOCUMENTS NOT BEARING THIS SEAL.

No.	Description	Date
1	Permit Set	3/11/2026

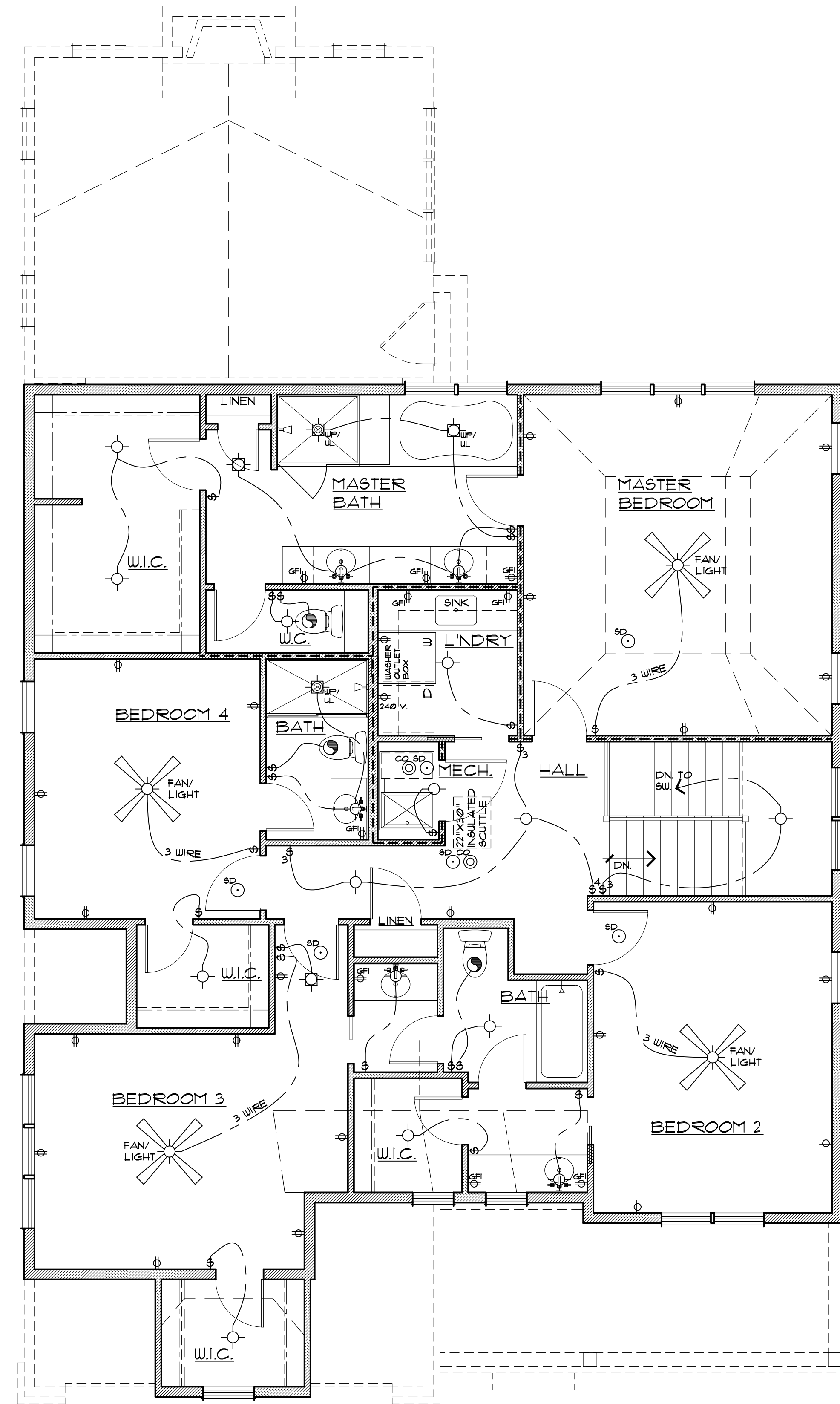
A New Residence for:
Douglas PROPERTIES
744 CHERRY TREE LANE
OLIVETTE, MO 63132

THOMAS ALAN GROUP
ARCHITECTURE | DESIGN | INTERIORS
23 N. Gore ave., Suite 302
Webster Groves, MO 63119
(314) 301-9975
ThomasAlanGroup.com

SECOND FLOOR PLAN ELECTRICAL

Sheet Number:

A11
of 17



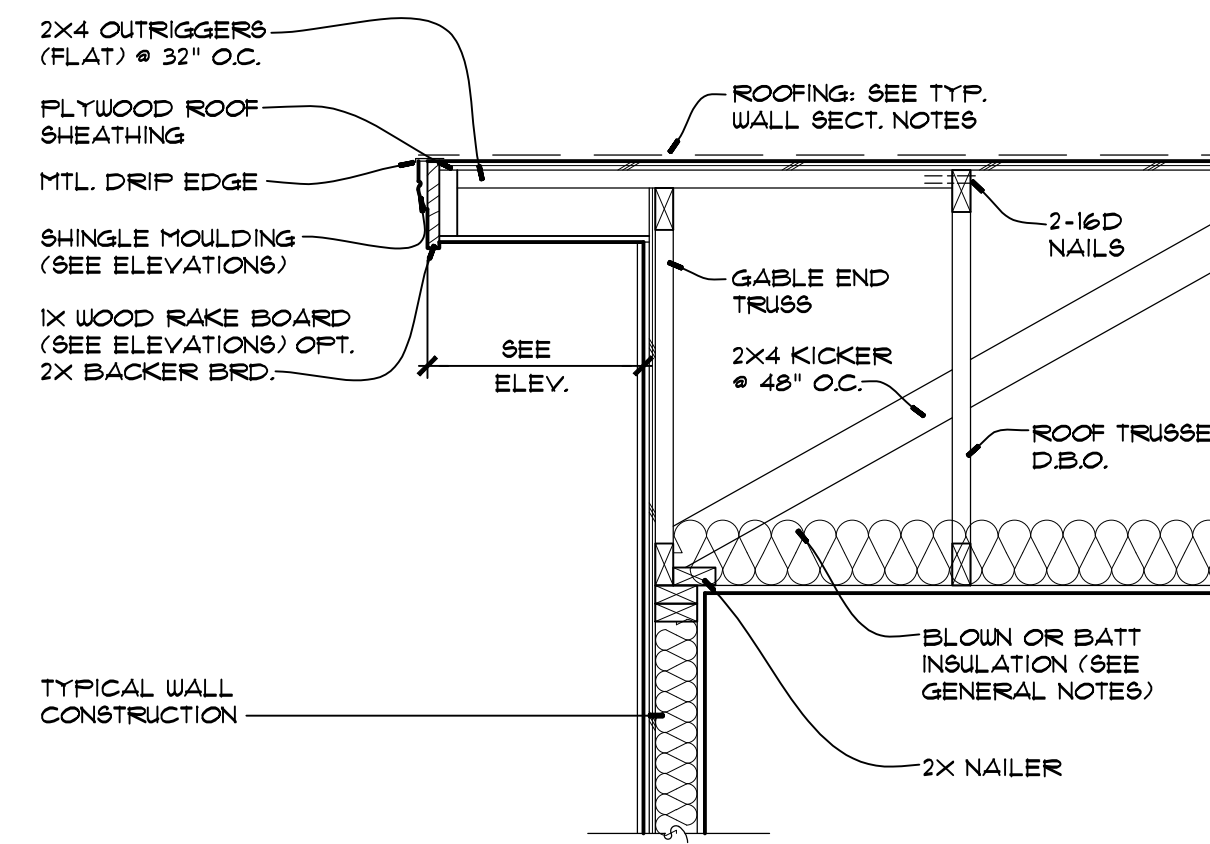
SECOND FLOOR PLAN ELECTRICAL

1/4" = 1'-0"

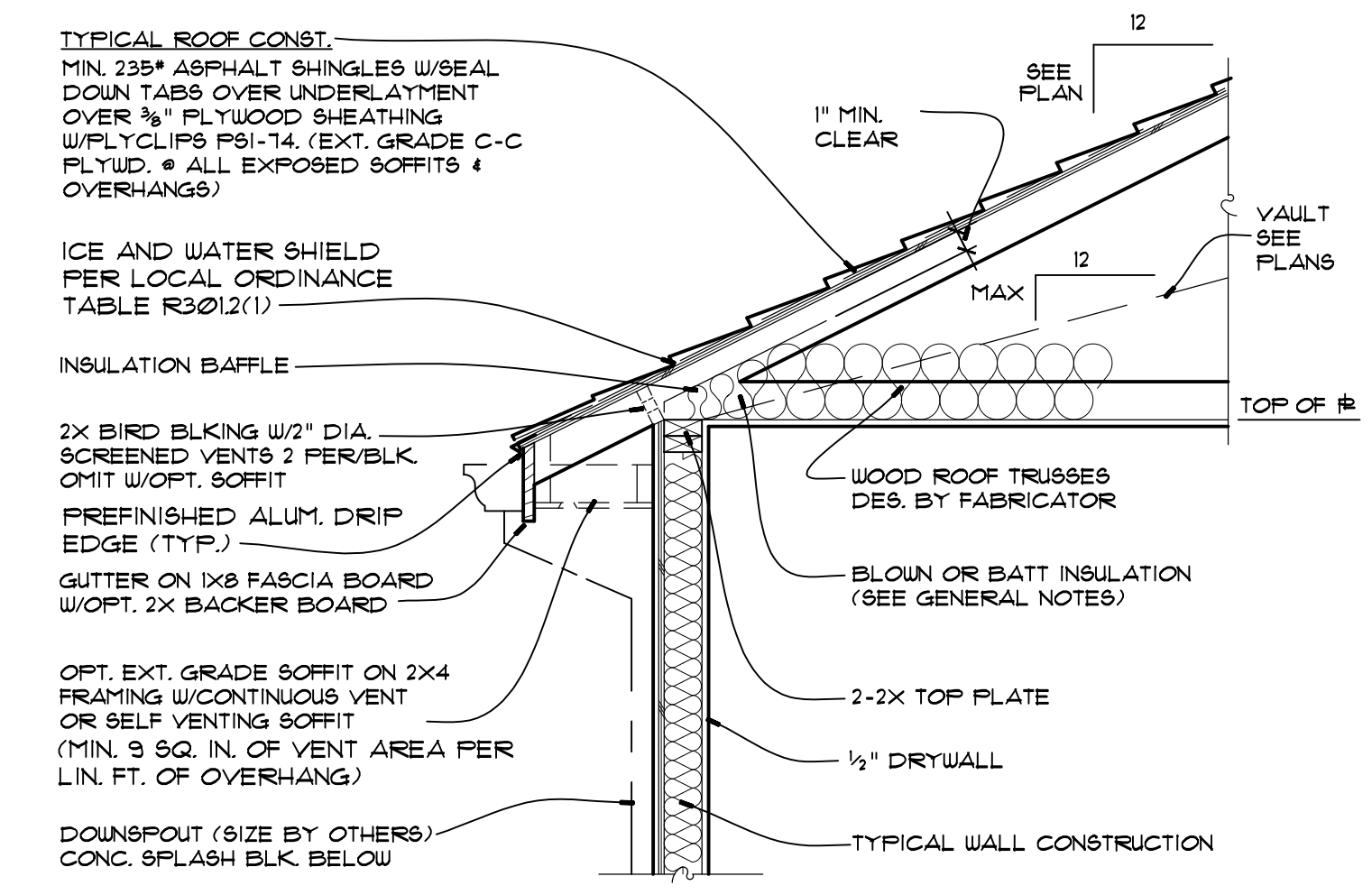
ELECTRICAL NOTES

1. ELECTRICAL PANEL: (200 AMP. MINIMUM) TO BE SIZED AND LOCATED BY ELECTRICAL CONTRACTOR.
2. TELEPHONE, INTERCOM SYSTEMS, DOORBELLS, SATELLITE, DATA PORTS, CABLING, AND ETC. TO BE LOCATED AND SPECIFIED BY OWNER.
3. ADJUST LOCATIONS OF RECESSED LIGHT FIXTURES IF REQUIRED FOR FRAMING MEMBERS, DUCTWORK, ETC. REVIEW ALTERNATE LOCATIONS WITH OWNER/BUILDER.

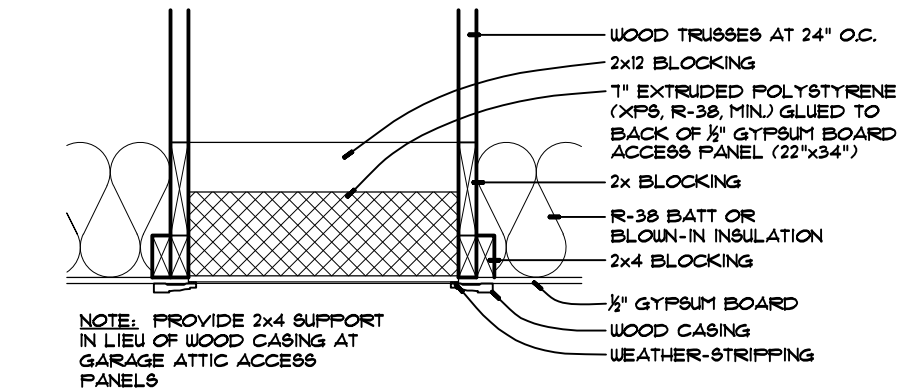
ELECTRICAL SYMBOLS			
DUPLEX OUTLET		UNDER CAB. INCANDESCENT	
WATER PROOF (WP) GROUND FAULT INTERRUPTER (GFI)		CLICK STRIP	
FOURPLEX		BRACKET MOUNT	
SPECIALTY OUTLET		CEILING MOUNT	
PHONE		"1C" RATED RECESSED CAN LIGHT	
SWITCH DIMMER (D)		"1C" RATED RECESSED AIMABLE CAN LIGHT	
CABLE TV OUTLET		FLUORESCENT LIGHT	
EXHAUST FAN/MOTOR		FLOOD LIGHT	
COMPUTER NETWORK PORT/ INTERNET ACCESS LINE		FULL CHAIN LIGHT	
CEILING FAN W/ LIGHT		SMOKE DETECTOR	
		CARBON MONOXIDE DETECTOR (CO)	



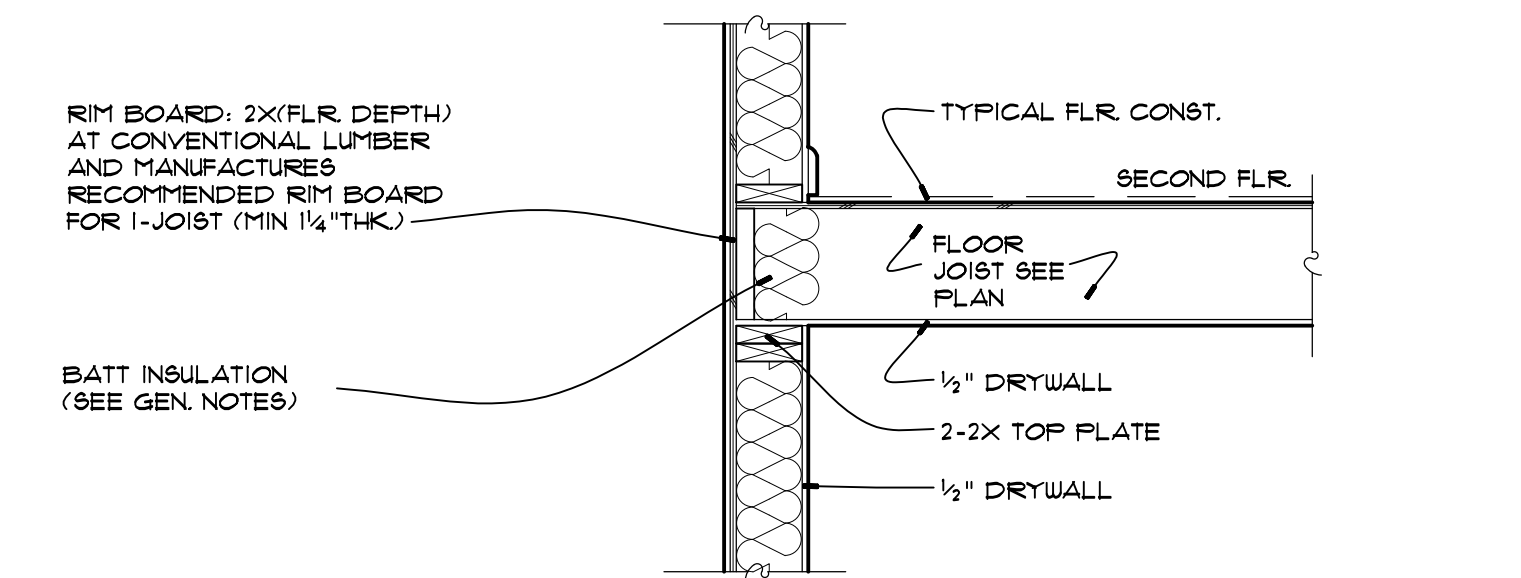
8 SECTION @ GABLE END
SCALE 3/4" = 1'-0"



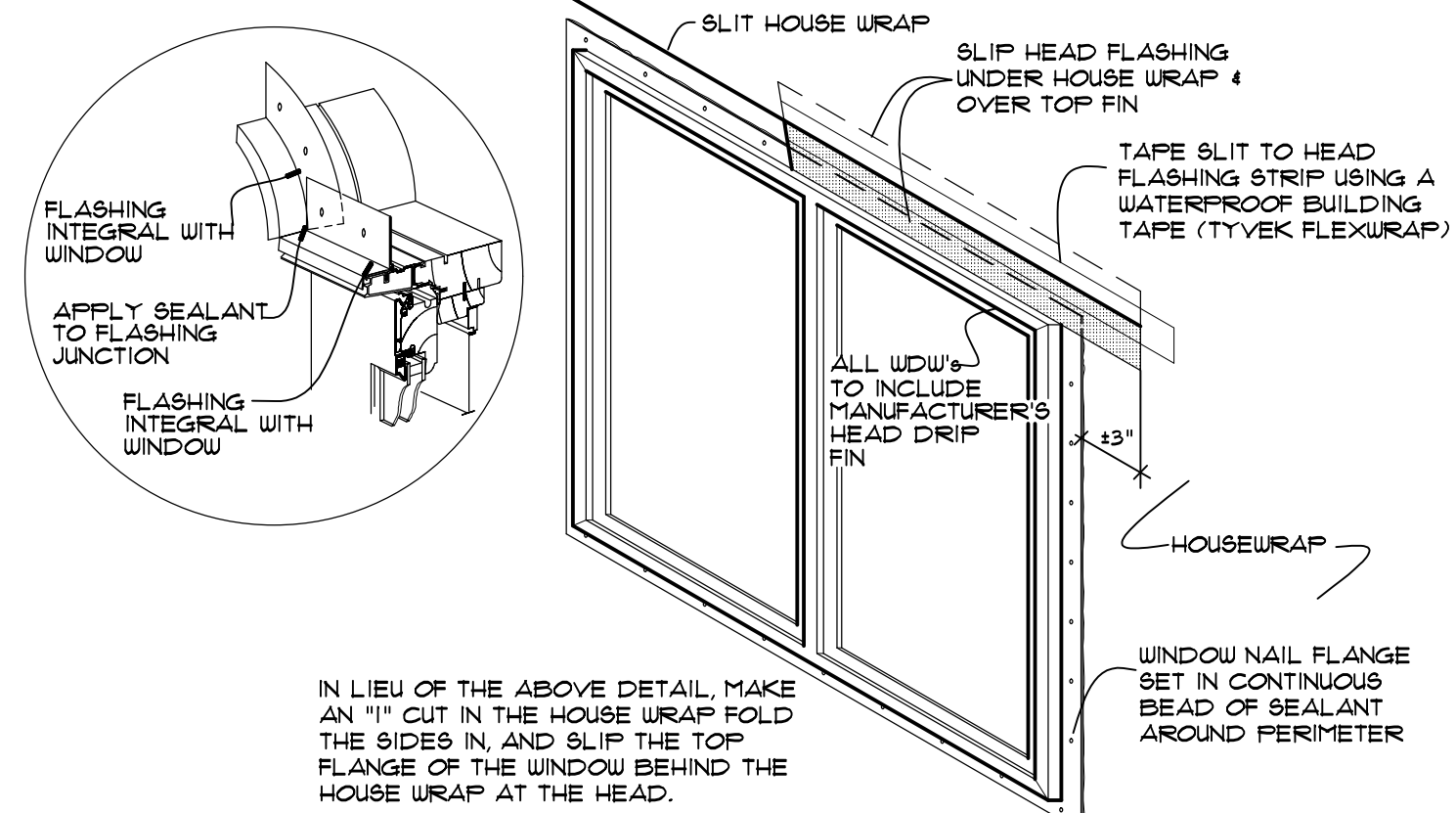
4 TYPICAL SECTION @ ROOF
3/4" = 1'-0" AT SIDING



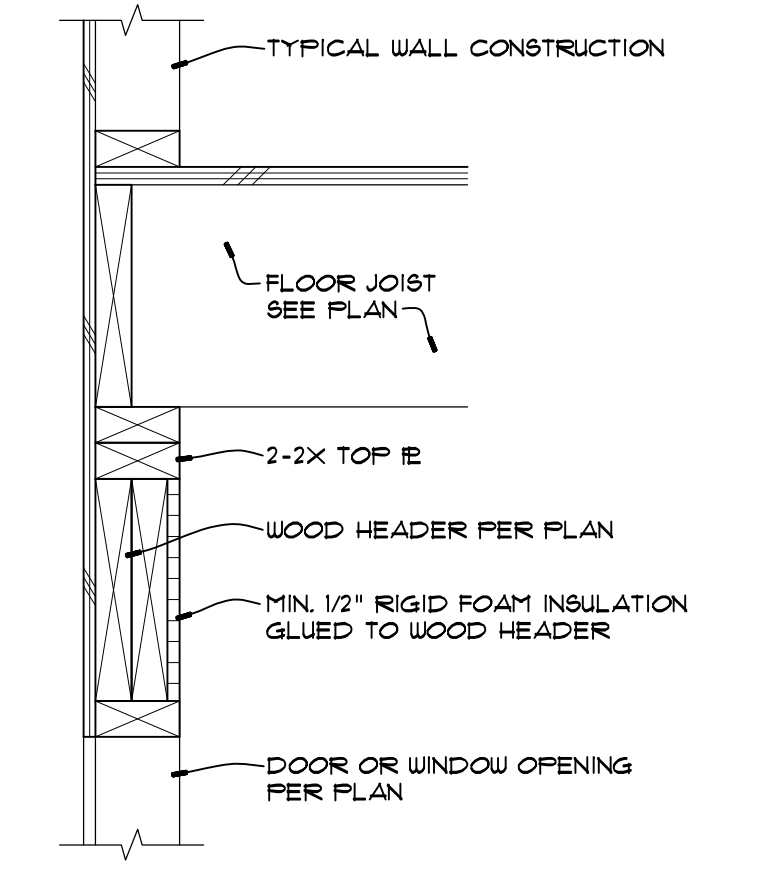
7 ATTIC ACCESS PANEL
N.T.S.



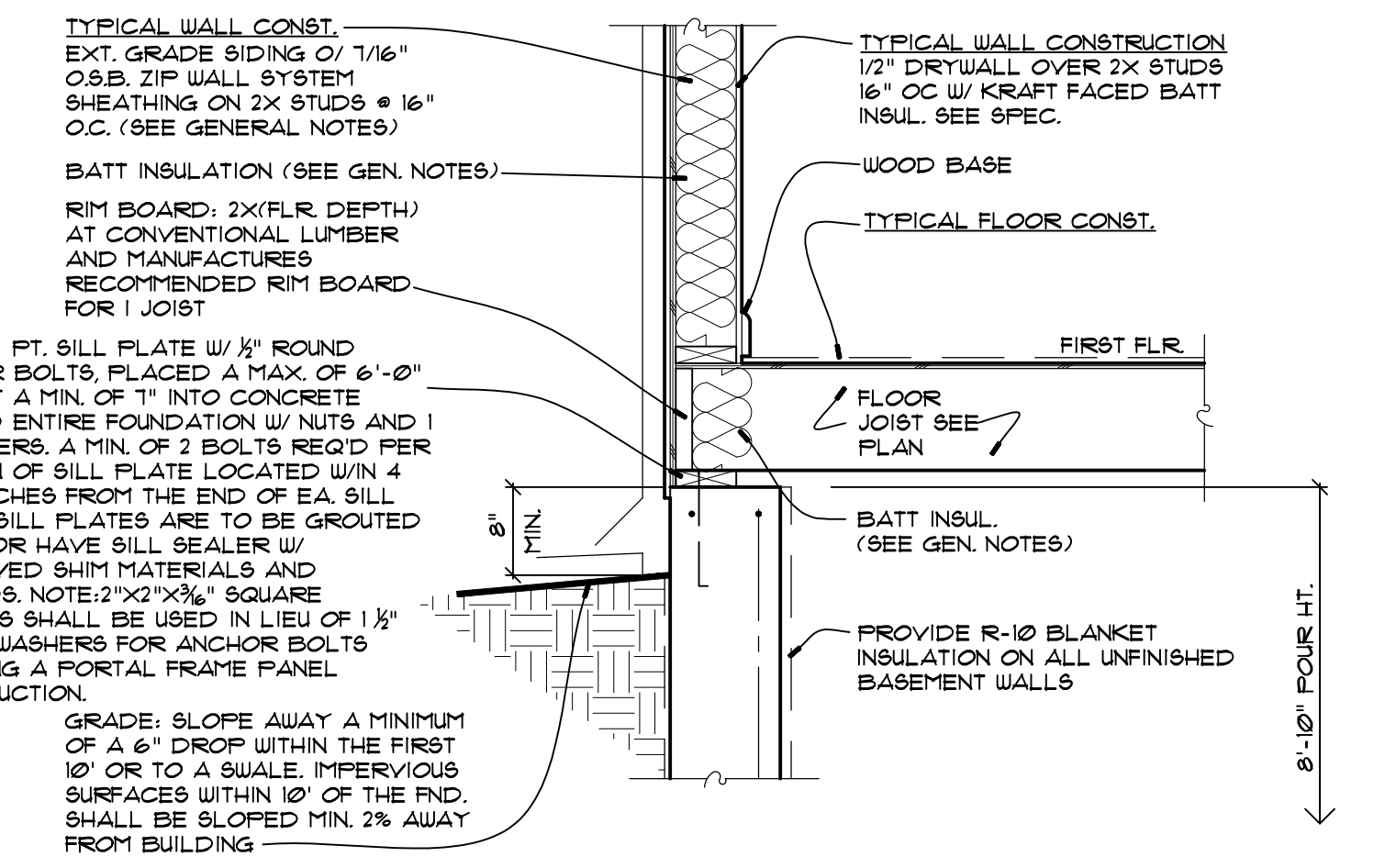
3 TYP. SECTION @ FLR. TO FLR. - FRAME
SCALE 3/4" = 1'-0"



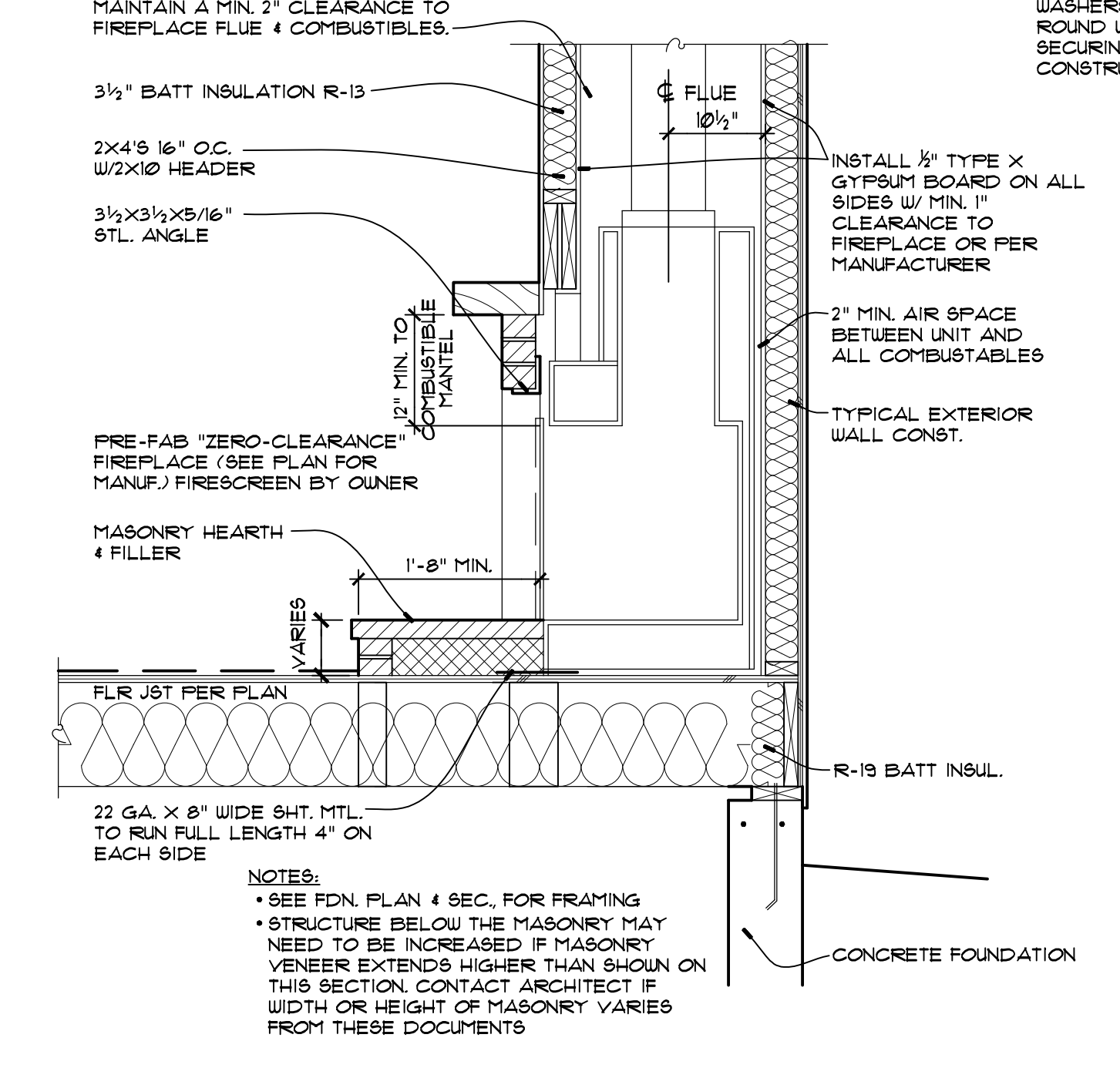
6 TYP. WDW. HEAD FLASHING
NOT TO SCALE



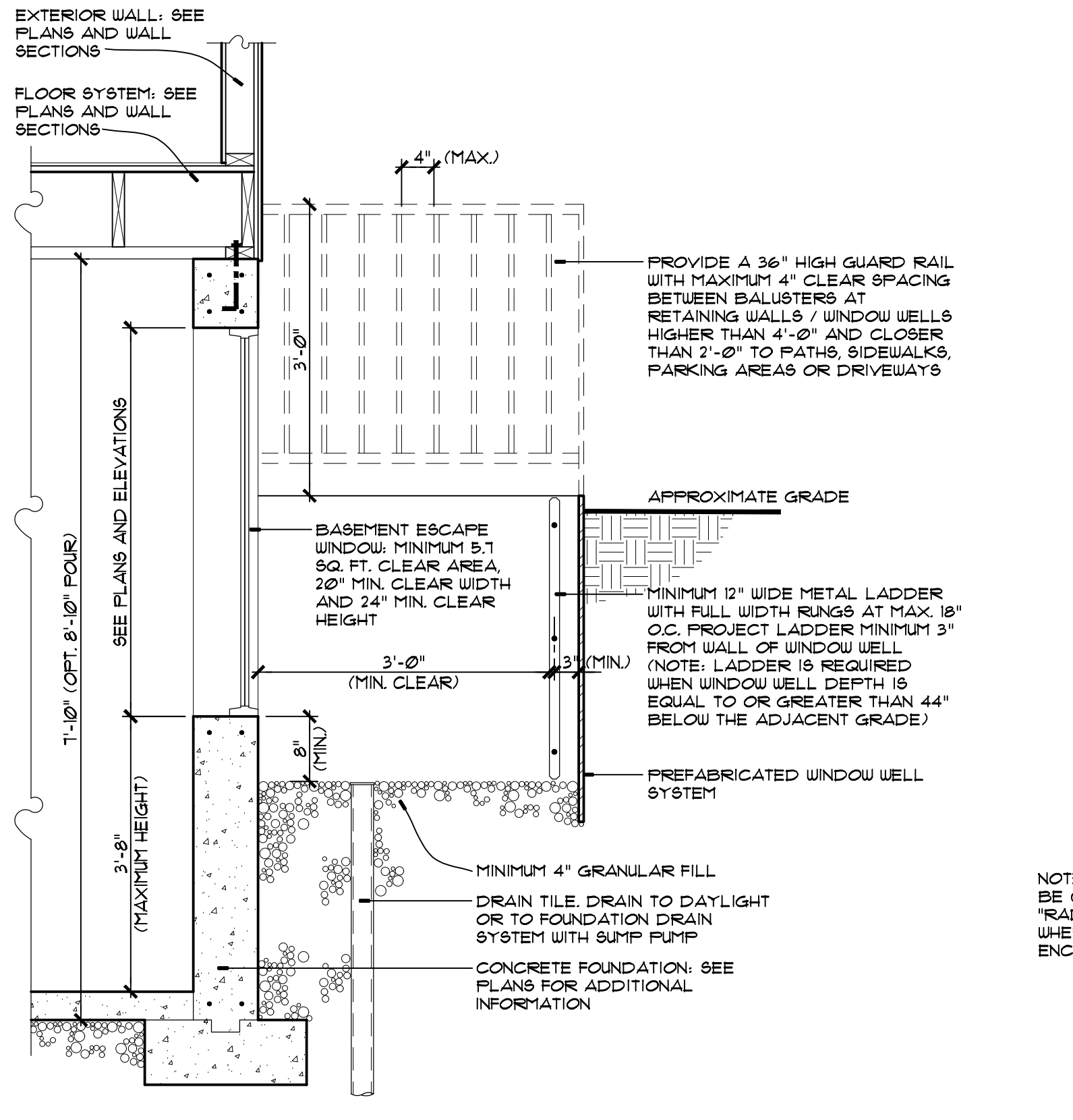
11 TYPICAL SECTION AT HEADERS
SCALE 3/4" = 1'-0"



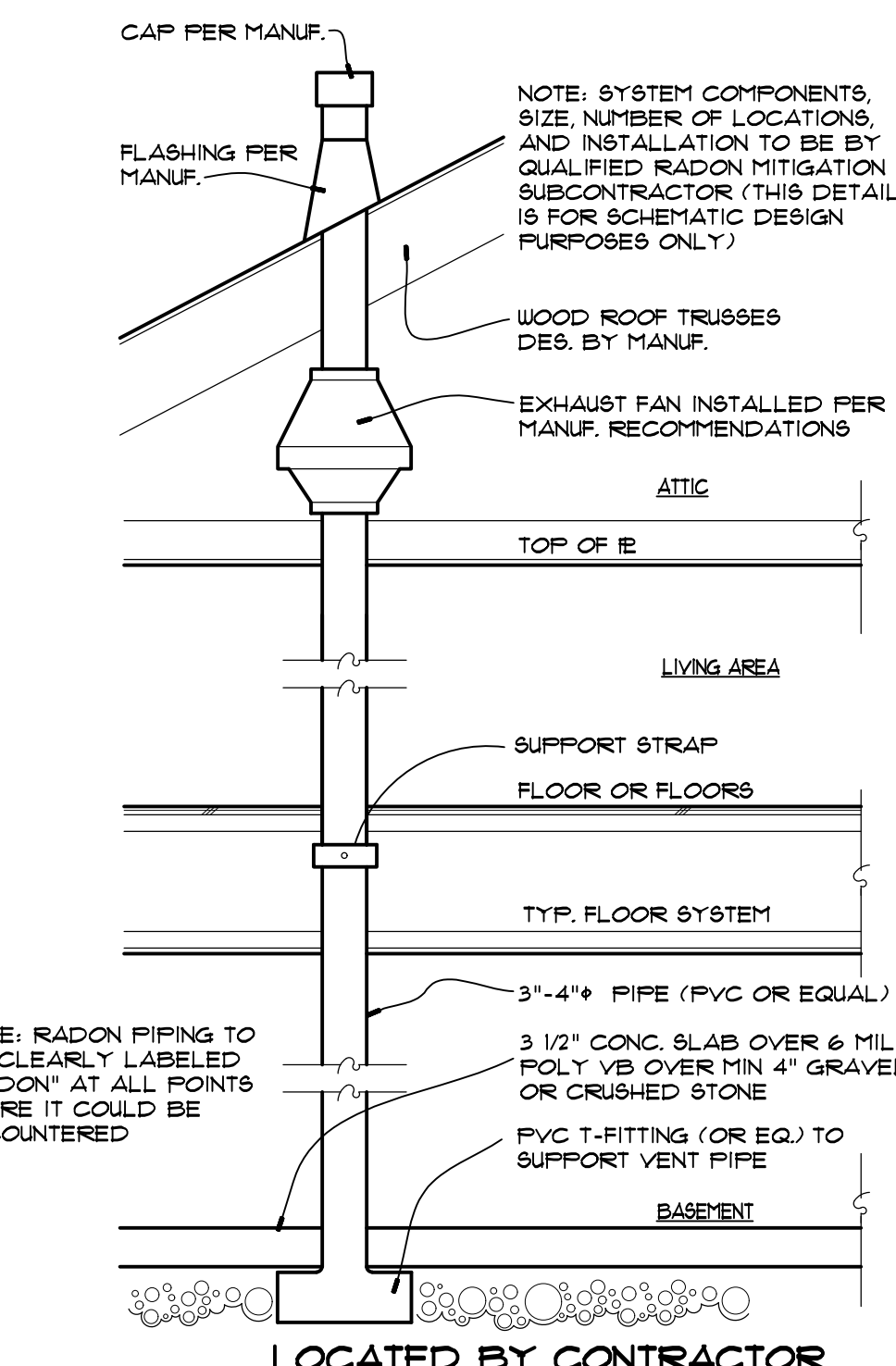
2 TYP. SECTION @ FIRST FLR. - FRAME
SCALE 3/4" = 1'-0"



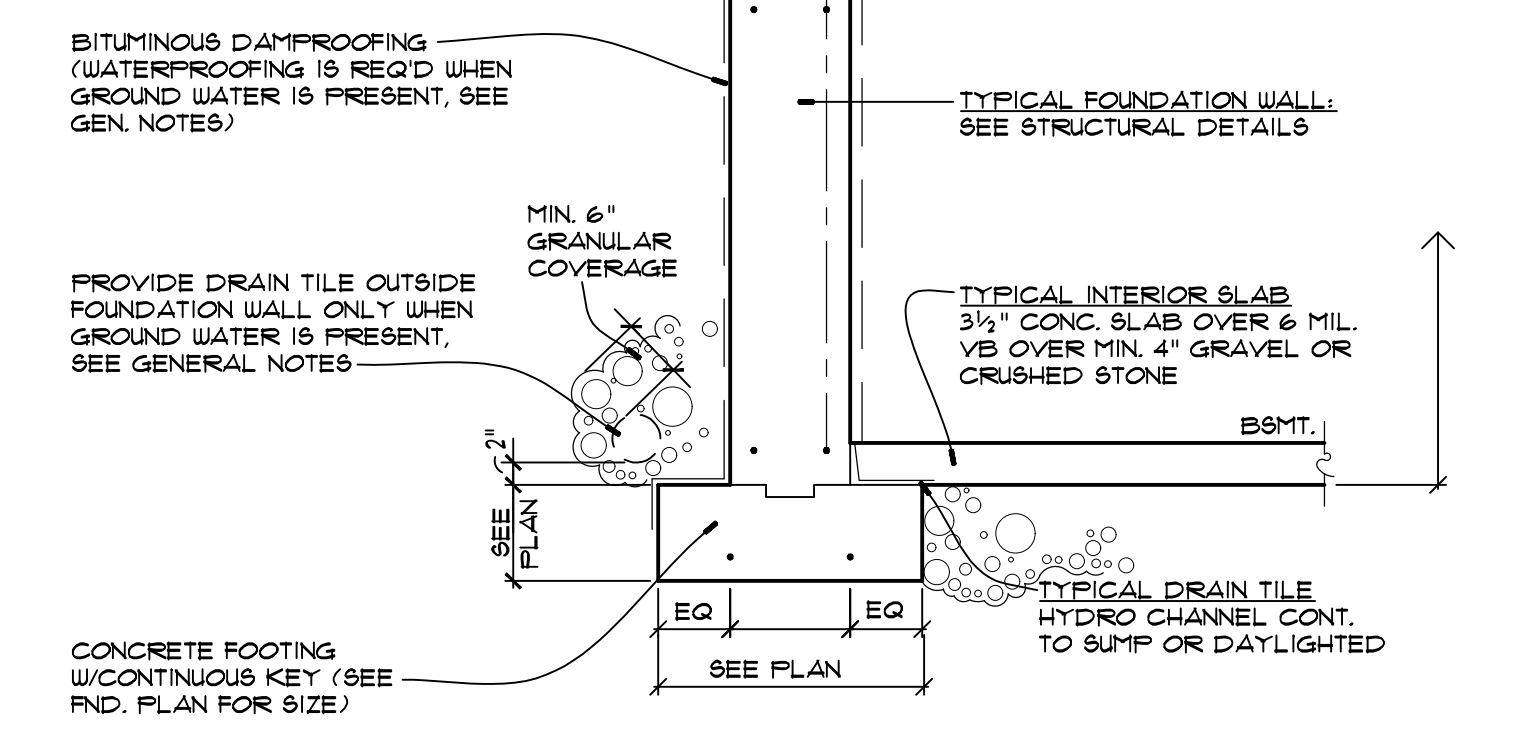
10 PRE-FAB FIREPLACE SECTION
SCALE 3/4" = 1'-0"



12 BSMT ESCAPE WDW SECTION
3/4" = 1'-0"



10 LOCATED BY CONTRACTOR RADON VENT PIPE
SCALE 3/4" = 1'-0"



1 TYP. SECTION @ BSMT. FOUNDATION
SCALE 3/4" = 1'-0"

THOMAS ALAN GROUP

CHRISTOPHER THOMAS PIKE
MO# 2011033866
EXPIRATION DATE: 12/31/27

3/11/2026
9/17/21

Douglas PROPERTIES

A New Residence for:
**744 CHERRY TREE LANE
OLIVETTE, MO 63132**

THOMAS ALAN GROUP
ARCHITECTURE | DESIGN | INTERIORS
23 N. Gore Ave., Suite 302
Webster Groves, MO 63119
(314) 301-9975
ThomasAlanGroup.com

SECTIONS AND DETAILS

Sheet Number:
A12
of 17



No.	1
Description	Permit Set
Date	3/11/2026

A New Residence for:
Douglas PROPERTIES
 744 CHERRY TREE LANE
 OLIVETTE, MO 63132

STRUCTURAL FOUNDATION PLAN

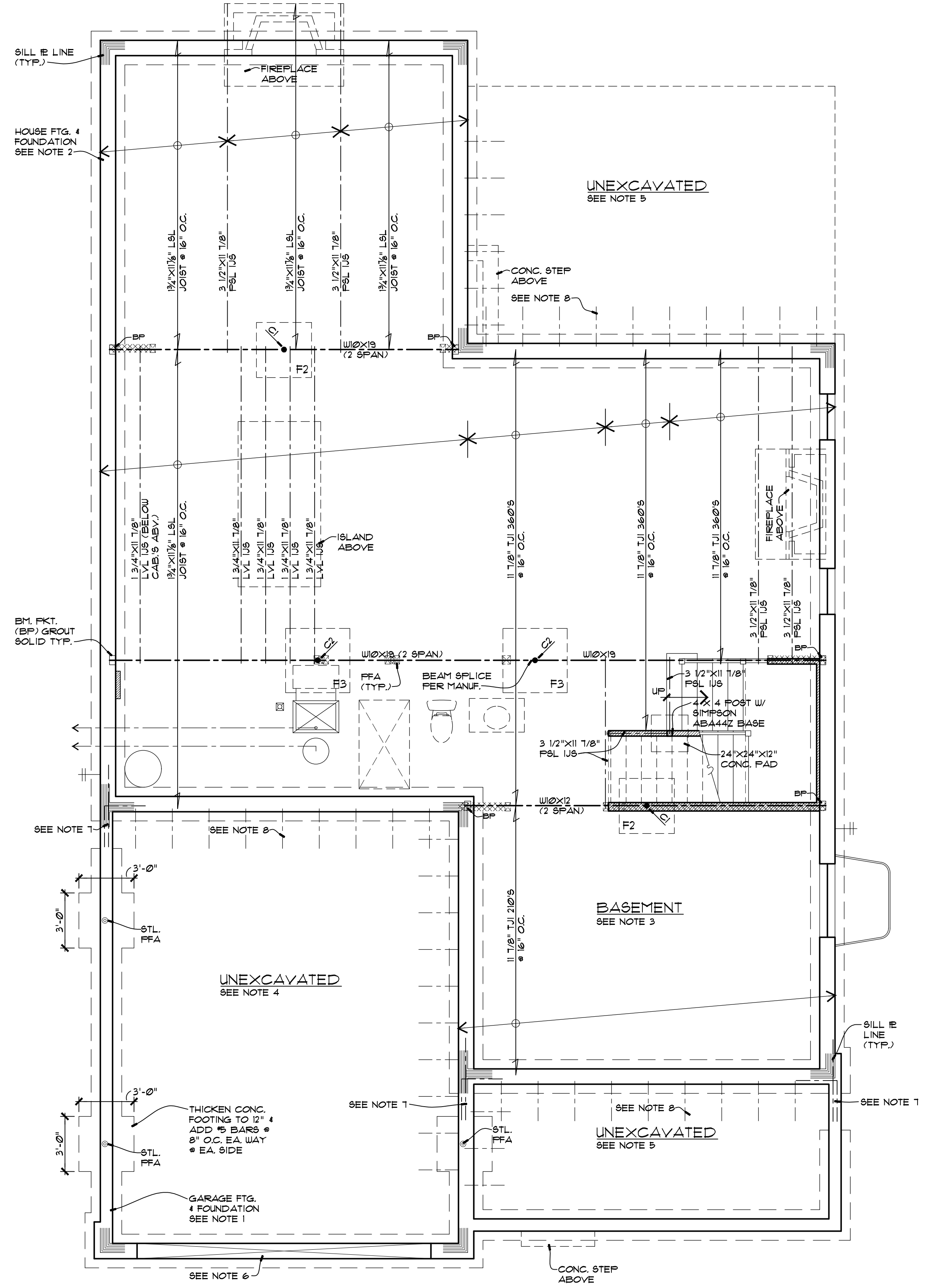
SIZE	REINFORCING
F1 30"X30"X12"D	#5 BARS @ 8" O.C. EA. WAY
F2 36"X36"X12"D	#5 BARS @ 8" O.C. EA. WAY
F3 42"X42"X12"D	#5 BARS @ 8" O.C. EA. WAY
F4 48"X48"X12"D	#5 BARS @ 8" O.C. EA. WAY
F5 54"X54"X12"D	#5 BARS @ 8" O.C. EA. WAY
F6 60"X60"X12"D	#5 BARS @ 8" O.C. EA. WAY

SIZE & TYPE	CAP IR	BASE IR
C1 3.5"X1.58"FT. ADJ. PIPE	INTEGRAL	INTEGRAL
C2 4"X3"INVT. ADJ. PIPE	1/2"	3/8"X3/4"
C3 H86 5X5X1/4	3/4"	12"X12"X3/4"

--- BEAM OR HEADER	--- BRACED WALL SEGMENT
□ POST	□ PORTAL FRAME (SEE PLAN FOR TYPE)
▨ BEARING WALL	▨ SHEAR WALL
--- METAL HANGER	--- SIMPSON STEEL STRONG-WALL
□ POST FROM ABOVE (FFA)	▲ HOLD DOWN DEVICE
▨ BEARING WALL ABOVE	□ MOMENT FRAME
▨ METAL STUD WALL	▨ SIMPSON STRONG-FRAME

STRUCTURAL FOUNDATION NOTES

- GARAGE FOUNDATION: 8" THICK CONCRETE FOUNDATION WALL AND 18" X 8" CONCRETE FOOTING. TYPICAL, UNLESS NOTED OTHERWISE.
- HOUSE FOUNDATION: 10" THICK CONCRETE FOUNDATION WALL AND 24" X 10" CONCRETE FOOTING. TYPICAL, UNLESS NOTED OTHERWISE.
- BASEMENT SLAB: 3 1/2" CONCRETE SLAB OVER 6 MIL POLYETHYLENE BARRIER (LAP JOINTS MIN. 6") OVER MIN. 4" GRAVEL OR CRUSHED STONE. (SLOPE TO FLOOR DRAIN).
- GARAGE SLAB: 4" CONCRETE SLAB WITH 6"X6" W/4XW/4 WUF OVER 6 MIL POLYETHYLENE BARRIER (LAP JOINTS MIN. 6") OVER MIN. 4" GRAVEL OR CRUSHED STONE. (SLOPE TO GARAGE DOOR MINIMUM 4" UNO.)
- EXTERIOR PORCH SLABS: 4" CONCRETE SLAB OVER MIN. 4" GRAVEL OR CRUSHED STONE. SLOPE AWAY FROM FOUNDATION WITH EDGES TURNED DOWN BELOW GRADE MINIMUM 12" OR TO TOP OF FOUNDATION WALL.
- HOLD DOWN TOP OF FOUNDATION WALL @ DOOR TO RECEIVE CONCRETE SLAB. (2) #4 BARS TOP, MID, AND BOTTOM, 24" EW. TYPICAL AT ALL INTERSECTING WALLS.
- #4 BARS @ 24" O.C. DOUPEL INTO FOUNDATION WALL AND 24" INTO CONCRETE SLAB. TYPICAL AT EXTERIOR PORCH SLABS AND GARAGE SLAB (ADJACENT TO BASEMENT FOUNDATION WALL).
- FOOTINGS & PIERS: SHALL EXTEND A MINIMUM OF 2'-6" BELOW FINISHED GRADE AND BEAR ON UNDISTURBED SOIL OR PREPARED FILL.
- DOUBLE FLOOR JOISTS AROUND STAIR OPENINGS, FIREPLACE HEARTH, AT CORNERS OF CANTILEVERED BAYS AND UNDER PARALLEL PARTITIONS UNO. IF THE PARTITION RUNS FOR LESS THAN 1/2 THE SPAN OF THE JOIST, DOUBLE JOISTS ARE NOT REQUIRED UNLESS NOTED ON PLAN (TYPICAL).
- STEEL COLUMNS (FIXED AND ADJUSTABLE) SHALL BE SCHEDULE-40 SIZED PER PLAN. ALL COLUMNS SHALL HAVE A CAP AND BASE.
- FRAME WALL WALKOUT AT BASEMENT: USE 2X6 STUDS @ 16" O.C. TYPICAL ON 1/2 & 2 STORY HOUSES (2 FLOORS & ROOF LOAD). USE 2X4 STUDS @ 16" O.C. TYPICAL ON 1 STORY HOUSES (1 FLOOR & ROOF LOAD). MAINTAIN CONTINUITY OF ALL POSTS FROM ABOVE CONTINUOUS TO CONCRETE FOUNDATION BELOW. COORDINATE OTHER SPECIAL CONDITIONS WITH ARCHITECT BEFORE PROCEEDING.
- MINIMUM OF (2)-#5 REINFORCING BARS AROUND ALL WINDOW AND DOOR OPENINGS IN PLAIN CONCRETE FOUNDATION AND BASEMENT WALLS. BARS SHALL EXTEND A MINIMUM OF 24" BEYOND THE CORNERS OF THE OPENINGS.
- BASEMENT WINDOWS (HOPPER TYPE) HOLD TO TOP OF FND, UNLESS A CANTILEVER OCCURS ABV. IN WHICH CASE THE WDW. IS TO BE DROPPED 8" FROM T.O.C. & ADD 4-#4 BARS ACROSS TOP. BARS SHALL EXTEND A MINIMUM OF 24" BEYOND THE CORNERS OF THE OPENINGS OR TURN DOWN FOUNDATION WALL.
- "PRECISE FORMS INC." EMERGENCY ESCAPE WINDOW PROVIDE 2-#5 REBARS AROUND WINDOW EXTENDING 24" MIN. PAST WINDOW OPENING INSTALL PER MFRG'S SPECS. (SEE GENERAL CONTRACTOR FOR WINDOW WELL DRAINAGE INFORMATION) PRECISE FORMS INC. (1-800-537-0106) DELETE WINDOW WITH AT WALKOUT BASEMENT WITH SLIDING GLASS PATIO DOOR.
- CONTRACTOR SHALL NOT BACKFILL UNTIL CONCRETE FOUNDATION HAS CURED FOR A MINIMUM OF 7 DAYS.
- I-JOIST FLOOR SYSTEM DESIGNATIONS ARE THOSE OF: TJI TRUSS JOIST, COMPLY WITH MANUFACTURER'S DETAILS INCLUDING BUT NOT LIMITED TO BEARING, BLOCKING, RIM BOARDS, BRACING AND METAL HANGERS ETC. INCLUDING BLOCKING BETWEEN JOIST AT BEARING WALLS OVER STEEL BEAMS PER MANUFACTURE.



STRUCTURAL FOUNDATION PLAN

1/4" = 1'-0"

PRIOR TO BACKFILLING, THE FOUNDATION WALL SHALL BE PROPERLY BRACED PER R402.1.1. IF BACKFILLING THE FOUNDATION IS PLANNED BEFORE THE FLOOR IS INSTALLED, A TEMPORARY BRACING SYSTEM SHALL BE REQUIRED TO BE DESIGNED BY A MISSOURI REGISTERED STRUCTURAL ENGINEER. IN LIEU OF PROVIDING AN ENGINEERED SYSTEM, THE FOUNDATION SHALL ONLY BE BACKFILLED TO A HEIGHT OF 4' (FEET) AFTER THE CONCRETE HAS CURED FOR A MINIMUM OF 7 DAYS. THE CONCRETE CURING AND BACKFILL HEIGHT SHALL BE VERIFIED BY AN APPROVED INSPECTOR OR ENGINEER AND DOCUMENTED. PROVIDE DOCUMENTATION TO THE CITY OF COEUR.

NOTE:
 ON IN-FILL LOTS WHERE PROPOSED FOOTING OR CONC. PAD'S ARE BEARING ON FILL, ENGINEERED FILL SHALL BE DESIGNED TO MIN. 2000#/FT. BEARING CAPACITY AND BE CERTIFIED IN WRITING BY REGISTERED AND LICENSED GEOTECHNICAL ENGINEERING PROFESSIONAL TO OWNER AND ARCHITECT. OR CONTRACTOR CAN EXTEND FOOTING DEPTH TO VIRGIN SOIL.

STRUCTURAL FIRST FLOOR PLAN NOTES

- ALL INTERIOR WALLS TO BE 3/2" (2X4 STUDS), UNLESS NOTED OTHERWISE (UNO). POST INDICATED SHALL BE MINIMUM 2-2X WALL THICKNESS, GLUED AND NAILED UNLESS NOTED OTHERWISE. MINIMUM HEADER SIZE 2-2X10'S GLUED AND NAILED. EXCEPTIONS:
 - POSTS CARRYING ROOF LOADS ONLY AND NOT EXCEEDING 8'-11" IN HEIGHT AND SUPPORTING HEADERS SPANNING 3'-0" OR LESS MAY CONSIST OF A SINGLE 2X CRIPPLE AND (1) FULL HT. UNBROKEN STUD UNLESS NOTED OTHERWISE.
 - WOOD POSTS SUPPORTING BEAMS ARE TO MATCH THE WIDTH OF THE FLANGE BEING SUPPORTED UNLESS NOTED OTHERWISE.
- DOUBLE FLOOR JOISTS AROUND STAIR OPENINGS, FIREPLACE HEARTH, AT CORNERS OF CANTILEVERED BAYS AND UNDER PARALLEL PARTITIONS UNO. IF THE PARTITION RUNS FOR LESS THAN 1/2 THE SPAN OF THE JOIST, DOUBLE JOISTS ARE NOT REQUIRED UNLESS NOTED ON PLAN (TYPICAL).
- INSTALL METAL POST ANCHOR SET INTO TOP OF CONCRETE W/ NON-SHRINK GROUT AT ALL CONCRETE PORCH POST, TYP.

BRACED WALL PANEL NOTES

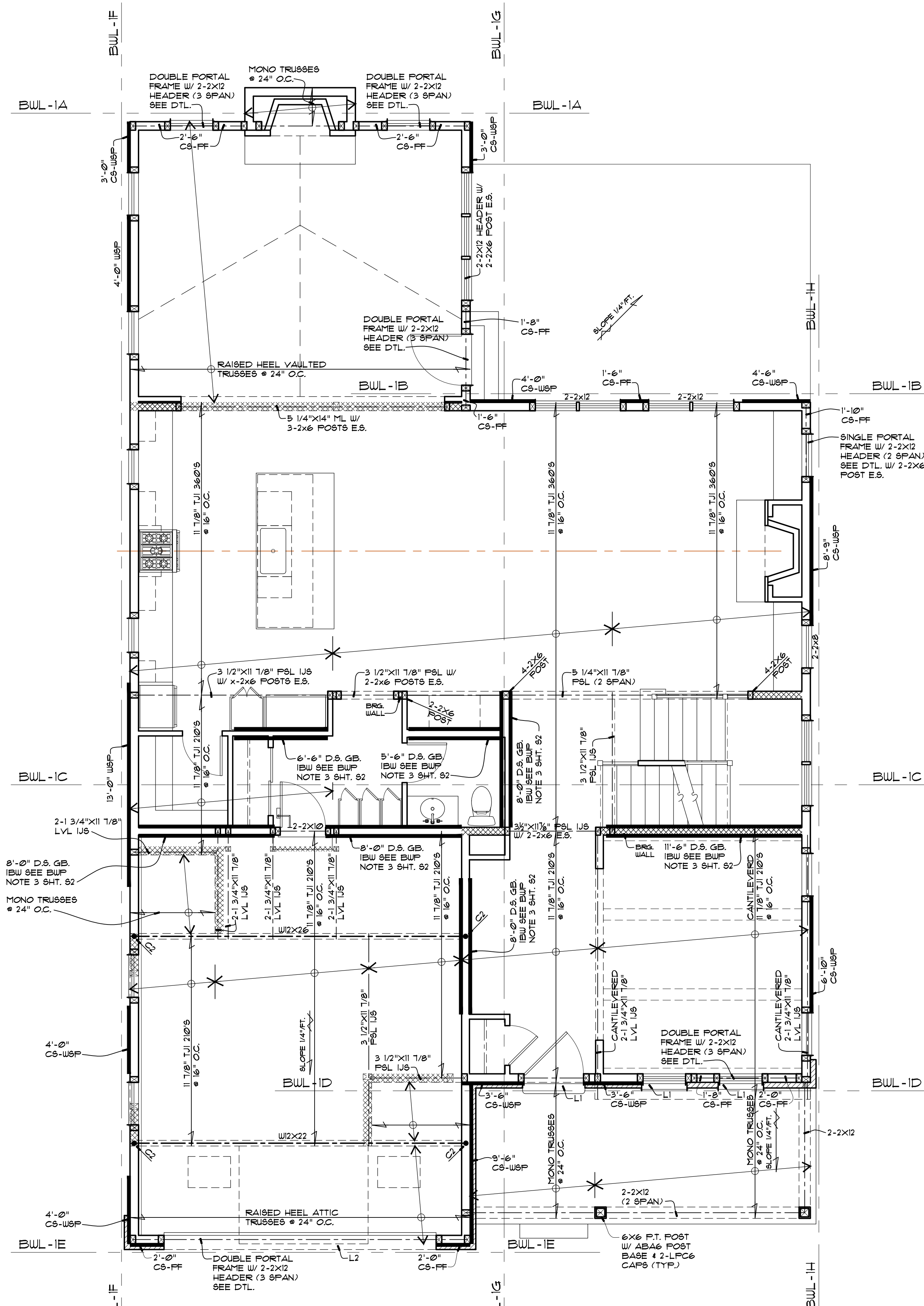
- EXTERIOR WALL SHEATHING: APA RATED SHEATHING EXPOSURE 1, 8 PAN RATING 24/16, (1/2" OSB) OR 32/16, (5/8" PLYWOOD) 1/2" NOMINAL. HOUSE AS DETAILED PRESCRIBES TO THE "CONTINUOUS SHEATHING" (R602.10.4) CODE REQUIREMENT IN ACCORDANCE WITH METHOD C8-WSP OF SECTION R602.10.4.1 ON ALL AREAS OF THE EXTERIOR WALLS. THE HOUSE ALSO USES METHOD C8-FF FOR NARROW WALLS WHERE INDICATED ON PLANS. (SEE DETAIL) OPTIONAL BRACED WALL PANEL CONSTRUCTION METHODS ARE AVAILABLE TO THE CONTRACTOR PER SECTION R602.10.11. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IF ALTERNATE METHODS ARE DESIRED TO BE EMPLOYED, AS ADDITIONAL CALCULATIONS AND DELINEATION ON THE CONSTRUCTION DOCUMENTS WILL BE REQUIRED. STRUCTURAL ENGINEERING BY OUTSIDE CONSULTANTS MAY BE REQUIRED. CONTRACTOR TO CONFIRM AND NOTIFY THE ARCHITECT IN WRITING OF THE SUBJECT PROPERTIES SEISMIC DESIGN CATEGORY, IF A 'D' CATEGORY, BEFORE PROCEEDING WITH THE WORK.

- NAILING TO BE IN ACCORDANCE WITH TABLE R602.3(1) THROUGH R602.3(4). GYPSUM SHEATHING SHALL BE FASTENED IN ACCORDANCE WITH TABLE R602.3(1). RAFTER/CEILING JOIST SYSTEMS SHALL BE NAILED TO THE TOP PLATE OF THE WALL IN ACCORDANCE WITH TABLE R602.3(1). TRUSSES SHALL BE NAILED TO THE TOP PLATE OF THE WALL WITH 3-16d NAILS TOE NAILED WITHOUT SPLITTING THE END OF THE TRUSS.

- INTERIOR BRACED WALLS: A CLG. OR FLR. JST./TRUSS LOCATED DIRECTLY ABV. AN INTERIOR BRACED WALL LINE SHALL BE ATTACHED WITH 8d NAILS AT 6" O.C. TOE NAILED, WHERE THE CLG. OR FLR. JST./TRUSS IS NOT LOCATED DIRECTLY ABV. THE INTERIOR BRACED WALL LINE OR THE FLR./ROOF FRAMING ABV. THE INTERIOR BRACED WALL LINE IS PERPENDICULAR TO THE WALL, ADD 2X4 BLOCKING AT 16" O.C. BETWEEN THE FLR./ROOF FRAMING. THE BLOCKING SHALL BE ATTACHED TO THE FLR./ROOF FRAMING W/ 3-8d NAILS TOE NAILED AT EA. END OF THE BLOCK. EA. BLOCK SHALL BE TOE NAILED TO THE INTERIOR BRACED WALL PANEL W/ 3-8d NAILS TOE NAILED. PROVIDE 2X HORIZONTAL BLOCKING AT ALL HORIZONTAL JOINTS IN BRACED WALL PANELS ONLY (ENTIRE WALL LINE NOT REQUIRED TO BE BLOCKED).

SOLE PLATES OF INTERIOR BRACED WALLS SHALL BE ATTACHED TO A FLR. JST./TRUSS LOCATED DIRECTLY BELOW THE WALL WITH 3-16d NAILS AT 6" O.C. WHERE THE CLG. OR FLR. JST./TRUSS IS NOT LOCATED DIRECTLY BELOW THE INTERIOR BRACED WALL LINE OR THE FLR. FRAMING BELOW THE INTERIOR BRACED WALL PANEL IS PERPENDICULAR TO THE WALL, ADD 2X4 BLOCKING AT 16" O.C. BETWEEN THE FLR. FRAMING. THE BLOCKING SHALL BE ATTACHED TO THE FLOOR FRAMING W/ 3-8d NAILS TOE NAILED AT EA. END OF THE BLOCK.

- CRIPPLE STUD WALL FRAMING ABV. PORTAL FRAMES (CONSISTING OF A SINGLE BOTTOM PLATE AND DOUBLE TOP PLATE) MAY BE ADDED AS LONG AS THE COMBINED HEIGHT DOES NOT EXCEED 12' AND THE TWO WALLS ARE STRAPPED TOGETHER ON THE INTERIOR SIDE W/ A VERTICAL 16 GAUGE METAL 1/2" WIDEX21" LONG STRAP. A MIN. OF 10' OF THE STRAP SHALL BE CONNECTED TO EA. WALL OR GABLE TRUSS W/ 9-16d NAILS FOR A TOTAL OF 18-16d NAILS IN THE ENTIRE STRAP. STRAPS TO BE LOCATED AT EA. END OF THE CONNECTED WALLS OR WALL AND GABLE TRUSS WHERE SPACE ALLOWS FOR THE 10' LENGTH OF STRAP. 4' MAX. ON CENTER STRAP SPACING. THE STRAPS SHALL NOT BE BENT HORIZONTALLY TO ACCOMMODATE WOOD FRAMING. IF APPLICABLE NAILERS SHOULD BE ADDED TO ONE OF THE WALLS OR GABLE END USING A MINIMUM OF 9-16d NAILS TO CREATE THE VERTICAL PLANE NEEDED TO MOUNT THE STRAP.



STRUCTURAL FIRST FLOOR PLAN

1/4" = 1'-0"

STEEL LINTEL SCHEDULE

L1	L4"x4"x5/16"	6" MIN. BEARING
L2	L8"x4"x3/8"	8" MIN. BEARING

NOTE: ROOF TRUSSES TO BE BRACED IN ACCORDANCE WITH BC91 1-03. WEB BRACING 4 LATERAL PER TRUSS MANUFACTURE. STRUCTURAL ROOF SHEATHING ON TOP CHORD PLANE OF TRUSSES AND GYPSUM BOARD ATTACHED TO BOTTOM CHORD PLANE TO FORM PERMANENT TRUSS BRACING IN ACCORDANCE WITH R502.11.2

STRUCTURAL GRAPHICS LEGEND

	BEAM OR HEADER		BRACED WALL SEGMENT
	POST		PORTAL FRAME (SEE PLAN FOR TYPE)
	BEARING WALL		SHEAR WALL
	METAL HANGER		SIMPSON STEEL STRONG-WALL
	POST FROM ABOVE (FFA)		HOLD DOWN DEVICE
	BEARING WALL ABOVE		MOMENT FRAME
	METAL STUD WALL		SIMPSON STRONG-FRAME



No.	Description	Permit Set	Date
1			3/11/2026

A New Residence for:
Douglas PROPERTIES
 744 CHERRY TREE LANE
 OLIVETTE, MO 63132

STRUCTURAL FIRST FLOOR PLAN
 Sheet Number:
S2
 of 17

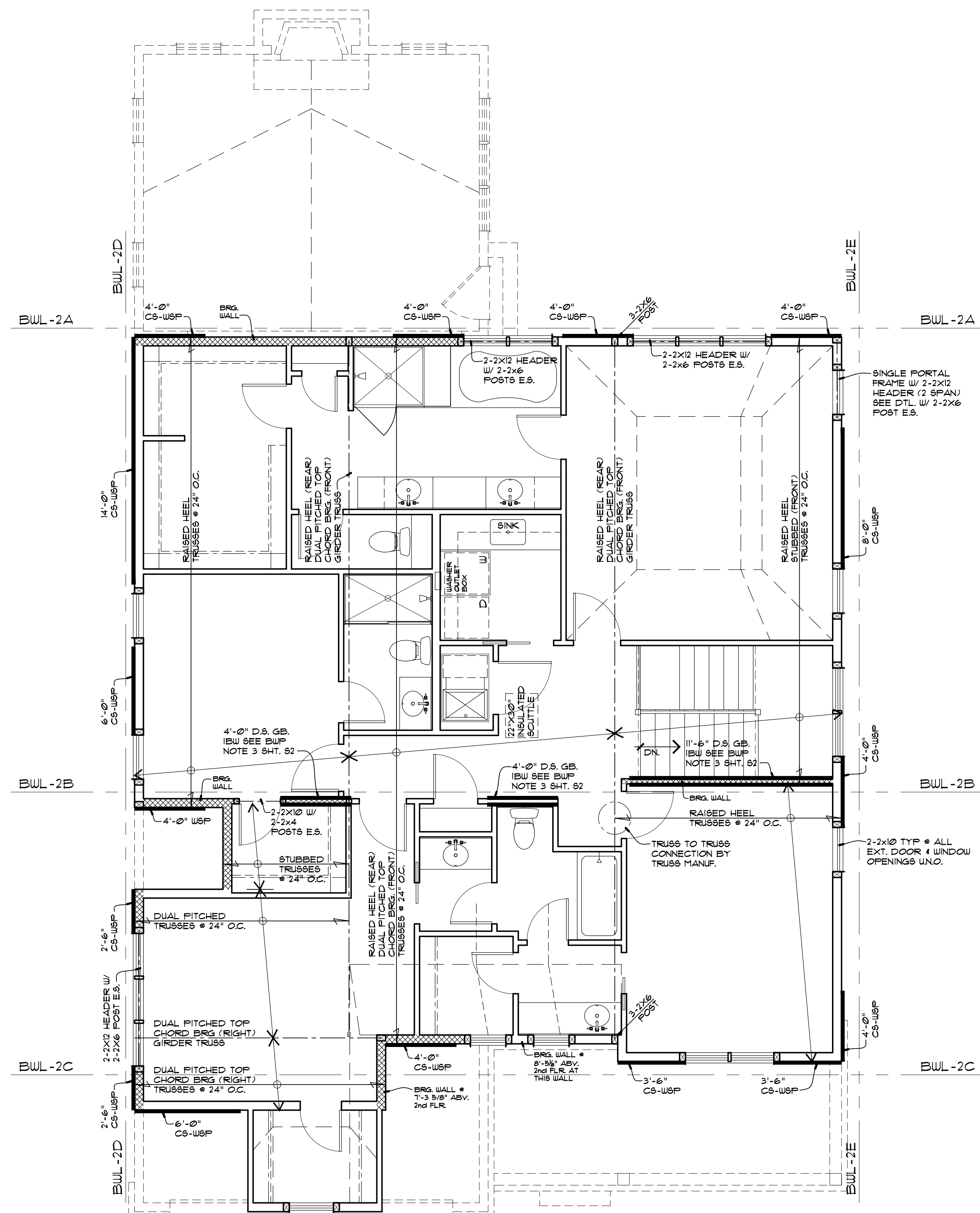


No.	Description	Date
1	Permit Set	3/11/2026

A New Residence for:
Douglas PROPERTIES
 744 CHERRY TREE LANE
 OLIVETTE, MO 63132

STRUCTURAL SECOND FLOOR PLAN

Sheet Number:
S3
 of 17



BRACED WALL PANEL NOTES

- EXTERIOR WALL SHEATHING:** AFA RATED SHEATHING EXPOSURE 1, 8' PAN RATING 24/16, (1/8" OSB) OR 32/16, (1/2" PLYWOOD) 1/2" NOMINAL HOUSE AS DETAILED PRESCRIBES TO THE "CONTINUOUS SHEATHING" (R602.10.4) CODE REQUIREMENT IN ACCORDANCE WITH METHOD CS-UWP OF SECTION R602.10.4.1 ON ALL AREAS OF THE EXTERIOR WALLS. THE HOUSE ALSO USES METHOD CS-PF FOR NARROW WALLS WHERE INDICATED ON PLANS. (SEE DETAIL) OPTIONAL BRACED WALL PANEL CONSTRUCTION METHODS ARE AVAILABLE TO THE CONTRACTOR (SEE SECTION R602.10.1). THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IF ALTERNATE METHODS ARE DESIRED TO BE EMPLOYED, AS ADDITIONAL CALCULATIONS AND DELINEATION ON THE CONSTRUCTION DOCUMENTS WILL BE REQUIRED. STRUCTURAL ENGINEERING BY OUTSIDE CONSULTANTS MAY BE REQUIRED. CONTRACTOR TO CONFIRM AND NOTIFY THE ARCHITECT IN WRITING OF THE SUBJECT PROPERTIES SEISMIC DESIGN CATEGORY, IF A 'D' CATEGORY, BEFORE PROCEEDING WITH THE WORK.
- NAILING TO BE IN ACCORDANCE WITH TABLE R602.3(1) THROUGH R602.3(4).** GYPSUM SHEATHING SHALL BE FASTENED IN ACCORDANCE WITH TABLE R602.3(1). RAFTER/CEILING JOIST SYSTEMS SHALL BE NAILED TO THE TOP PLATE OF THE WALL IN ACCORDANCE WITH TABLE R602.3(1). TRUSSES SHALL BE NAILED TO THE TOP PLATE OF THE WALL WITH 3-16d NAILS TOE NAILED WITHOUT SPLITTING THE END OF THE TRUSS.
- INTERIOR BRACED WALLS:** A CLG. OR FLR. JST/TRUSS LOCATED DIRECTLY ABV. AN INTERIOR BRACED WALL LINE SHALL BE ATTACHED WITH 8d NAILS AT 6" O.C. TOE NAILED, WHERE THE CLG. OR FLR. JST/TRUSS IS NOT LOCATED DIRECTLY ABV. THE INTERIOR BRACED WALL LINE OR THE FLR./ROOF FRAMING ABV. THE INTERIOR BRACED WALL LINE IS PERPENDICULAR TO THE WALL, ADD 2X4 BLOCKING AT 16" O.C. BETWEEN THE FLR./ROOF FRAMING. THE BLOCKING SHALL BE ATTACHED TO THE FLR./ROOF FRAMING W/ 3-8d NAILS TOE NAILED AT EA. END OF THE BLOCK. EA. BLOCK SHALL BE TOE NAILED TO THE INTERIOR BRACED WALL PANEL W/ 3-8d NAILS TOE NAILED. PROVIDE 2X HORIZONTAL BLOCKING AT ALL HORIZONTAL DRYWALL JOINTS IN BRACED WALL PANELS ONLY (ENTIRE WALL LINE NOT REQUIRED TO BE BLOCKED).

SOLE PLATES OF INTERIOR BRACED WALLS SHALL BE ATTACHED TO A FLR. JST/TRUSS LOCATED DIRECTLY BELOW THE WALL WITH 3-16d NAILS AT 6" O.C. WHERE THE CLG. OR FLR. JST/TRUSS IS NOT LOCATED DIRECTLY BELOW THE INTERIOR BRACED WALL LINE OR THE FLR. FRAMING BELOW THE INTERIOR BRACED WALL PANEL IS PERPENDICULAR TO THE WALL, ADD 2X4 BLOCKING AT 16" O.C. BETWEEN THE FLR. FRAMING. THE BLOCKING SHALL BE ATTACHED TO THE FLOOR FRAMING W/ 3-8d NAILS TOE NAILED AT EA. END OF THE BLOCK.
- CRIPPLE STUD WALL FRAMING ABV. PORTAL FRAMES** (CONSISTING OF A SINGLE BOTTOM PLATE AND DOUBLE TOP PLATE) MAY BE ADDED AS LONG AS THE COMBINED HEIGHT DOES NOT EXCEED 12' AND THE TWO WALLS ARE STRAPPED TOGETHER ON THE INTERIOR SIDE W/ A VERTICAL 16 GAUGE METAL 1/2" WIDEX21" LONG STRAP. A MIN. OF 10" OF THE STRAP SHALL BE CONNECTED TO EA. WALL OR GABLE TRUSS W/ 3-16d NAILS FOR A TOTAL OF 18-16d NAILS IN THE ENTIRE STRAP. STRAPS TO BE LOCATED AT EA. END OF THE CONNECTED WALLS OR WALL AND GABLE TRUSS WHERE SPACE ALLOWS FOR THE 10" LENGTH OF STRAP. 4" MAX. ON CENTER STRAP SPACING. THE STRAPS SHALL NOT BE BENT HORIZONTALLY TO ACCOMMODATE WOOD FRAMING. IF APPLICABLE NAILERS SHOULD BE ADDED TO ONE OF THE WALLS OR GABLE END USING A MINIMUM OF 3-16d NAILS TO CREATE THE VERTICAL PLANE NEEDED TO MOUNT THE STRAP.

STRUCTURAL SECOND FLOOR PLAN NOTES

- ALL INTERIOR WALLS TO BE 3 1/2" (2X4 STUDS), UNLESS NOTED OTHERWISE (UNO).
 - POST INDICATED SHALL BE MINIMUM 2-2X WALL THICKNESS, GLUED AND NAILED UNLESS NOTED OTHERWISE. MINIMUM HEADER SIZE 2-2X10'S GLUED AND NAILED.
- EXCEPTIONS:**
- POSTS CARRYING ROOF LOADS ONLY, AND NOT EXCEEDING 8'-11" IN HEIGHT AND SUPPORTING HEADERS SPANNING 3'-0" OR LESS MAY CONSIST OF A SINGLE 2X CRIPPLE AND (1) FULL HT. UNBROKEN STUD UNLESS NOTED OTHERWISE.
 - WOOD POSTS SUPPORTING BEAMS ARE TO MATCH THE WIDTH OF THE FLANGE BEING SUPPORTED UNLESS NOTED OTHERWISE.

STRUCTURAL SECOND FLOOR PLAN

1/4" = 1'-0"

NOTE: ROOF TRUSSES TO BE BRACED IN ACCORDANCE WITH BC91-1-03. WEB BRACING & LATERAL FER TRUSS MANUFACTURE. STRUCTURAL ROOF SHEATHING ON TOP CHORD PLANE OF TRUSSES AND GYPSUM BOARD ATTACHED TO BOTTOM CHORD PLANE TO FORM PERMANENT TRUSS BRACING IN ACCORDANCE WITH R602.11.2

STRUCTURAL GRAPHICS LEGEND

--- BEAM OR HEADER	BRACED WALL SEGMENT
□ POST	PORTAL FRAME (SEE PLAN FOR TYPE)
▨ BEARING WALL	SHEAR WALL
┆ METAL HANGER	SIMPSON STEEL STRONG-WALL
□ POST FROM ABOVE (PFA)	HOLD DOWN DEVICE
▨ BEARING WALL ABOVE	MOMENT FRAME
▨ METAL STUD WALL	SIMPSON STRONG-FRAME

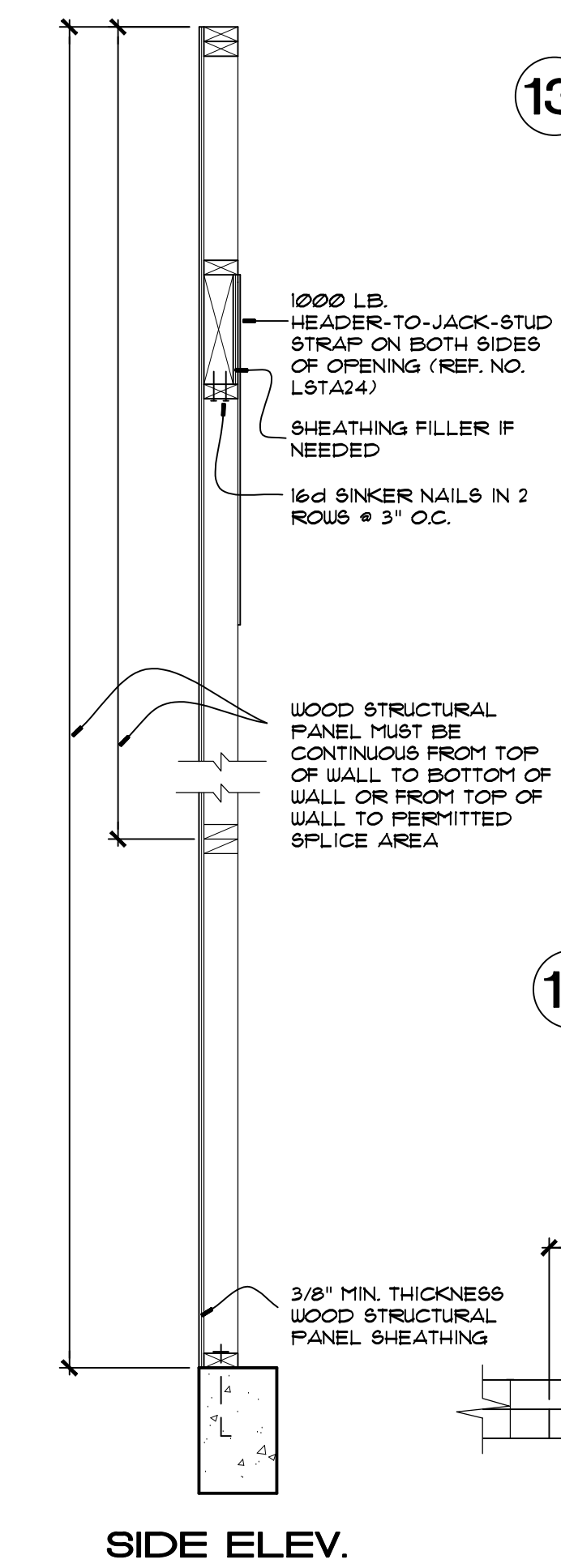
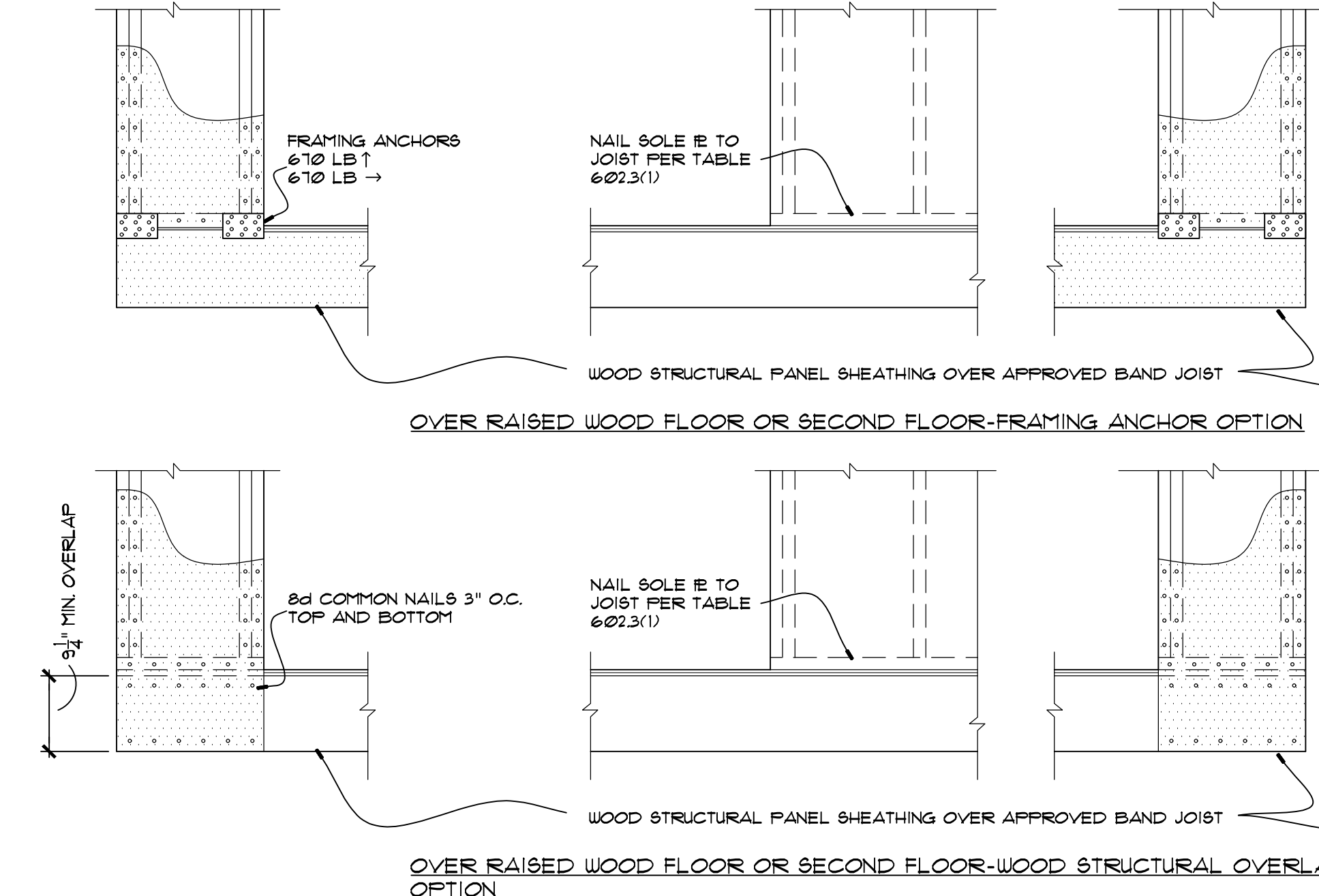
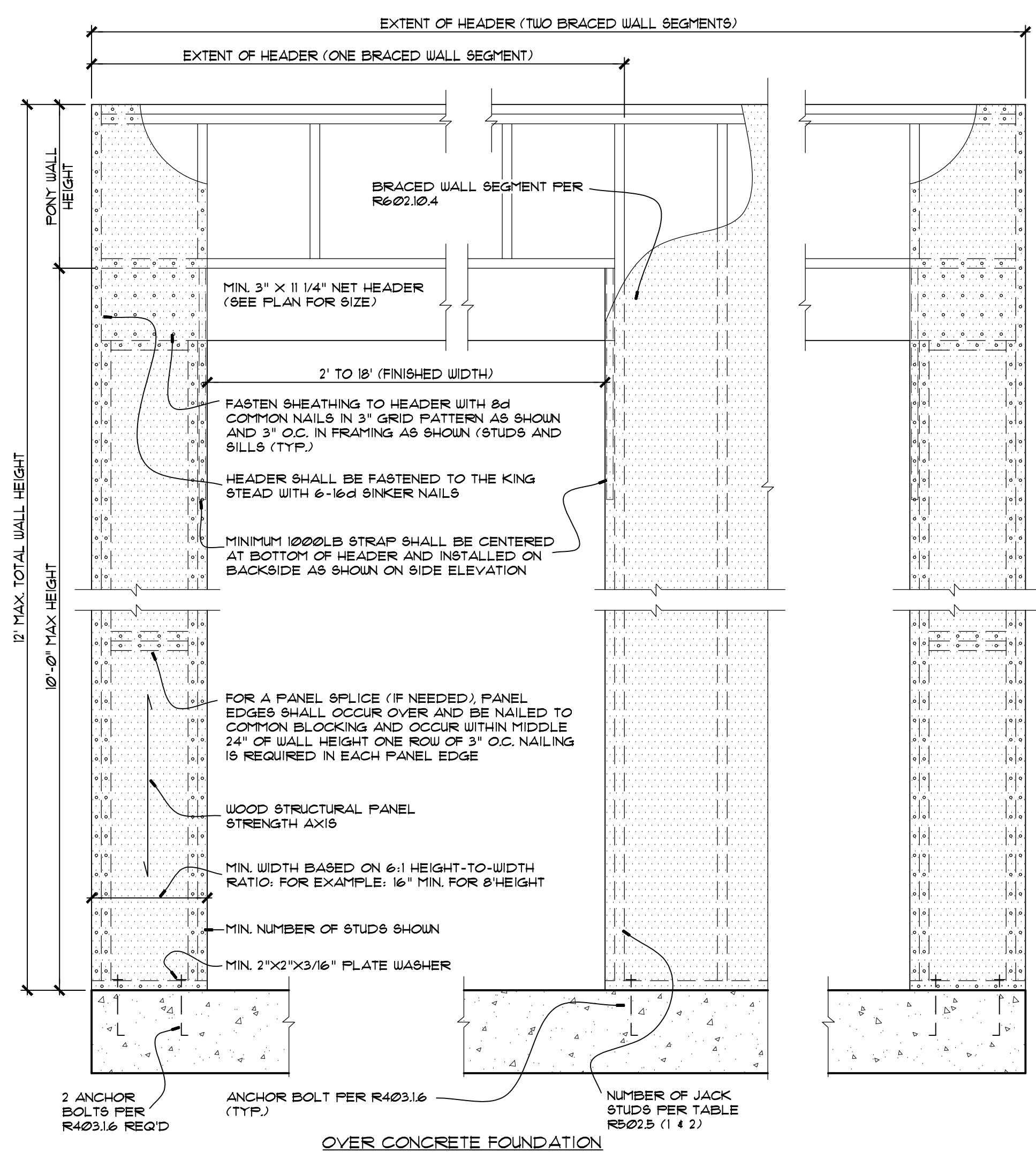


Date	Description	Permit Set
3/11/2026		

Douglas PROPERTIES
A New Residence for:
**744 CHERRY TREE LANE
OLIVETTE, MO 63132**

STRUCTURAL DETAILS

Sheet Number:
S4
of 17



COLUMN SIZE	NAILS	ROWS (EA. SIDE)	SPACING	EDGE DISTANCE	END DISTANCE
(2) 2x4	10d	1	6"	1"	2 1/2"
(3) 2x4	30d	1	6"	1"	3 1/2"
(4) 2x4	60d	1	6"	1 1/4"	4 1/2"
(2) 2x6	10d	2	6"	1 1/2"	2 1/2"
(3) 2x6	30d	2	6"	1 1/2"	3 1/2"
(4) 2x6	60d	2	6"	1 1/2"	4 1/2"
(2) 2x8	10d	2	6"	2"	2 1/2"
(3) 2x8	30d	2	6"	2"	3 1/2"
(4) 2x8	60d	2	6"	2"	4 1/2"

