

BUILDER/CONTRACTOR IS RESPONSIBLE TO CHECK ALL DIMENSIONS FOR ACCURACY BETWEEN FLOORS, FOUNDATION, AND ELEVATIONS. ALSO VERIFY ALL BEAM, HEADERS, PAD LOCATIONS, AND COLUMN SIZES.

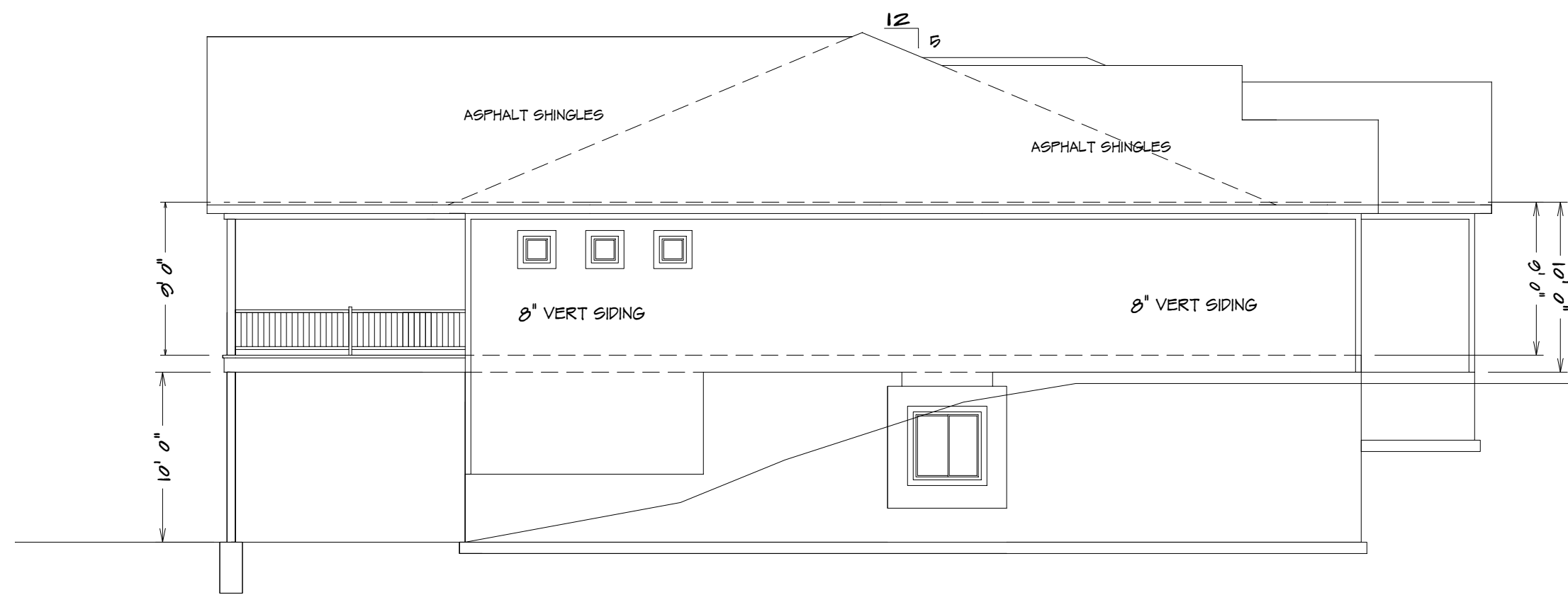
### FRONT ELEVATION

1/4" = 1'0"

NOTE:  
ACTUAL ELEVATIONS MAY VARY FROM ARCHITECTURAL DRAWINGS, DUE TO TERRAIN/BACKFILL PROCESS. FRONT ELEVATION IS ARCHITECTURAL DRAWING AND MAY VARY DUE TO MATERIALS AVAILABILITY.

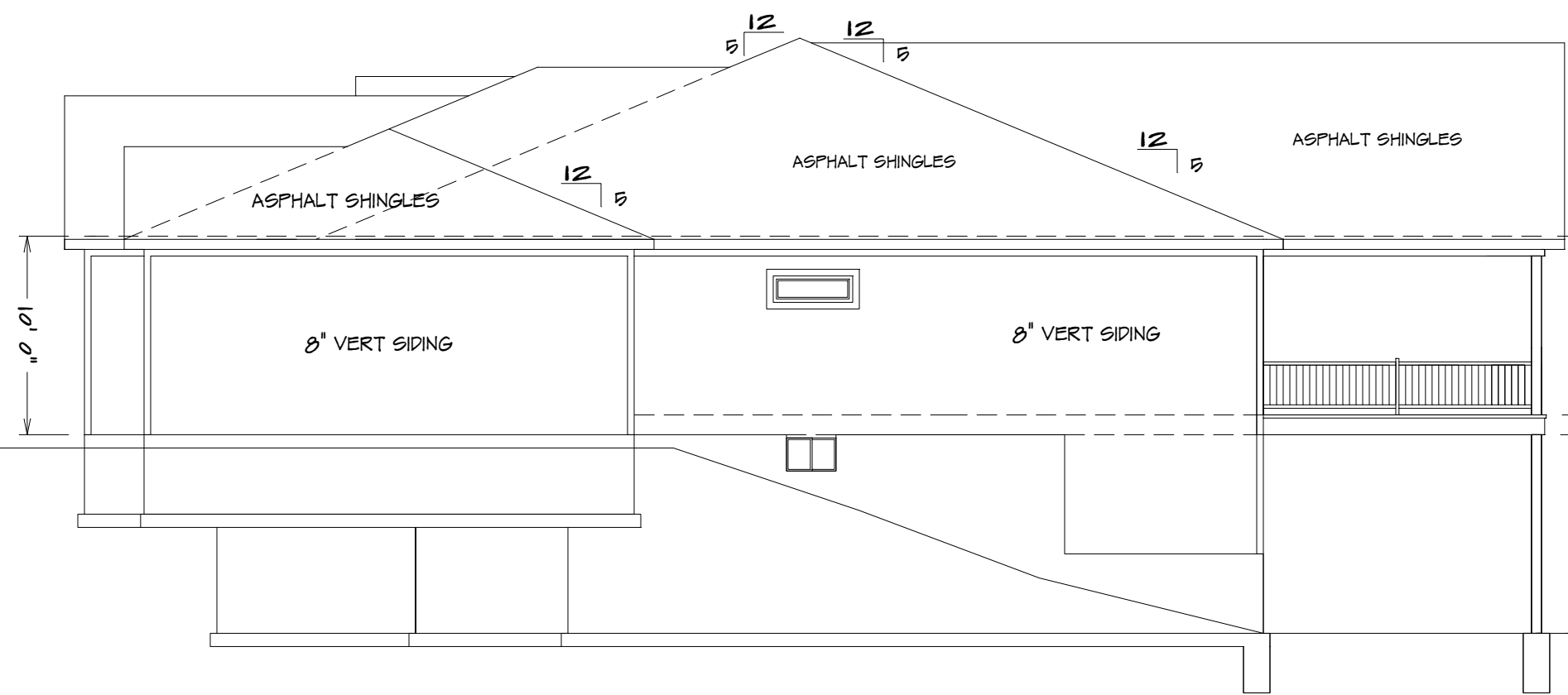
ALL NOTES, SECTIONS, AND DRAWINGS ARE IN ACCORDANCE WITH THE 2018 IRC

ADDRESS:  
2075 NW O'BRIEN RD.  
LOT 178 WOODSIDE RIDGE  
LEE'S SUMMIT, MO



### LEFT ELEVATION

1/8" = 1'0"



### RIGHT ELEVATION

1/8" = 1'0"



### REAR ELEVATION

1/8" = 1'0"

SF-7032 (LOT 178)

RELEASE FOR CONSTRUCTION  
AS NOTED FOR PLAN REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
03/17/2023



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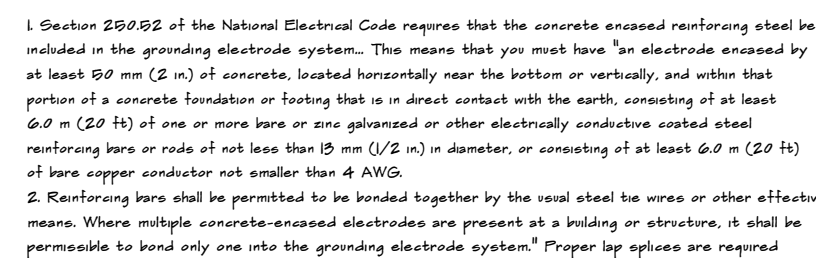
HOME BUYER:  
BUILDER:  
SUE-DIVISION:

PHONE:	DATE DRAWN:	PLAN NO.	SHEET NO.
PHONE:		SF-7032	1
LOT NO.	FILE NAME:	FILE NAME:	APPROX. SQ.FT.
	7032 ELEV		

### SQUARE FOOTAGE

LIVING AREA  
FIRST FLOOR = 1822  
BASEMENT = 1336  
COVERED PATIO = 387  
UNFINISHED AREA  
STORAGE = 312  
GARAGE = 746

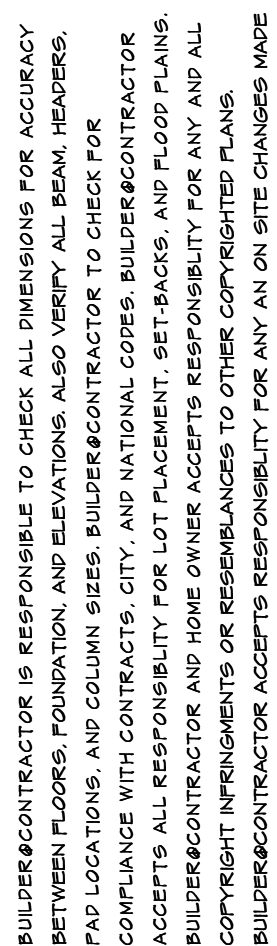
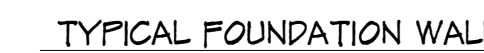




STEEL COLUMNS TO BE  
3" DIAMETER SCHEDULE 40 PIPE MANUFACTURED  
IN ACCORDANCE WITH ASTM A53 GRADE B OR  
APPROVED EQUIVALENT UNLESS NOTED

REQUIRED FOOTING:			
BUILDING HEIGHT	MINIMUM FOOTING	HORIZONTAL REBAR	LOCATION OF REBAR
1 OR 2 STY.	8" $\times$ 16" W	2-#4	5" FROM BTM.
3 STORY	8" $\times$ 24" W	2-#4	5" FROM BTM.
ACC. STR.	8" $\times$ 12" W	2-#4	5" FROM BTM.

FOOTING FOR 12" THICK WALL TO BE DESIGNED BY OTHERS



ADDRESS: 2075 NW O'BRIEN  
RD. LOT 178 WOODSIDE  
LEE'S SUMMIT, MO

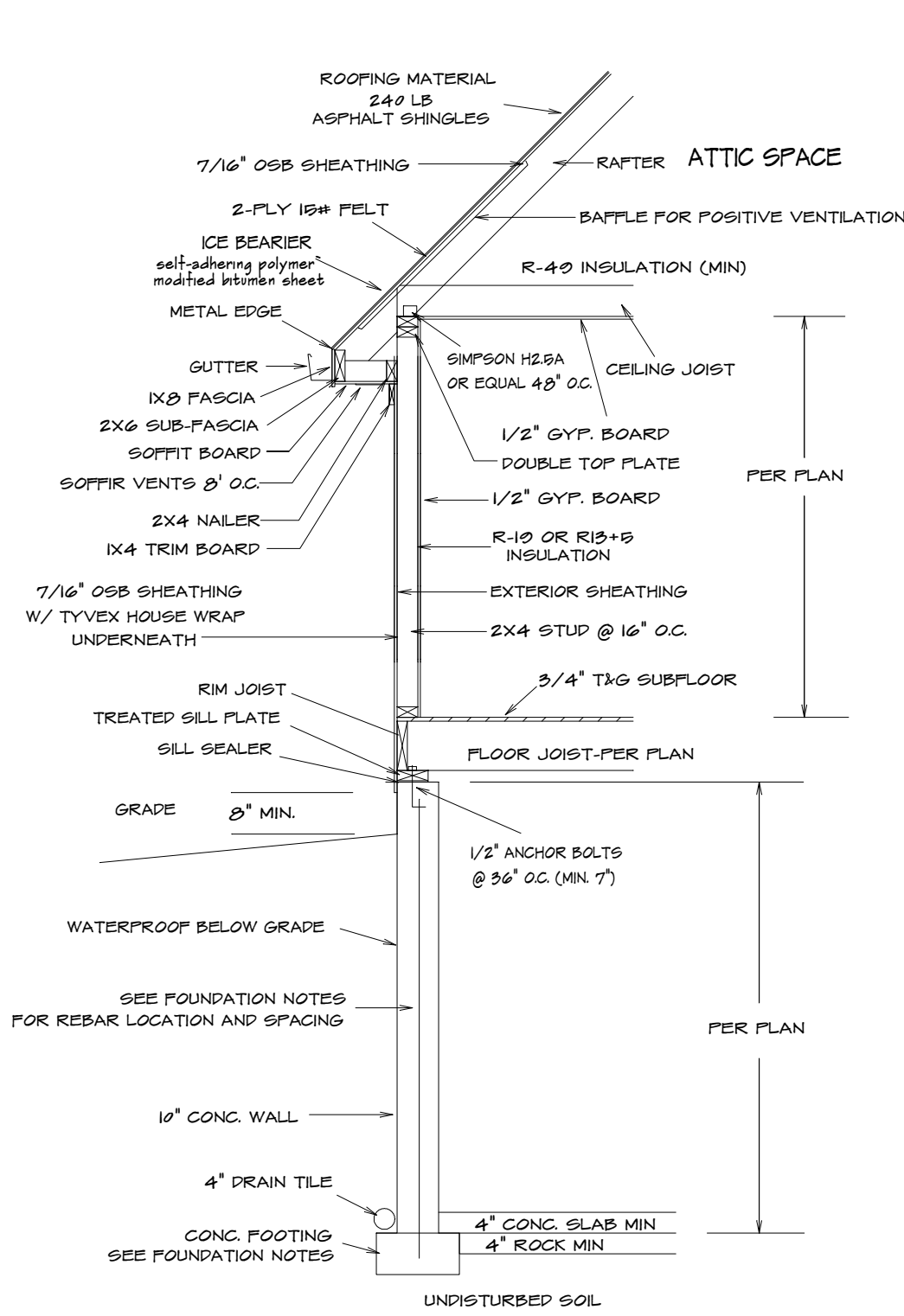
SF-7032 (LOT 178)

## BASEMENT PLAN

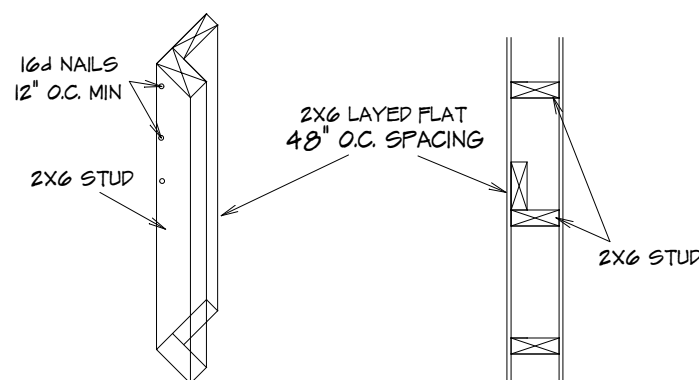


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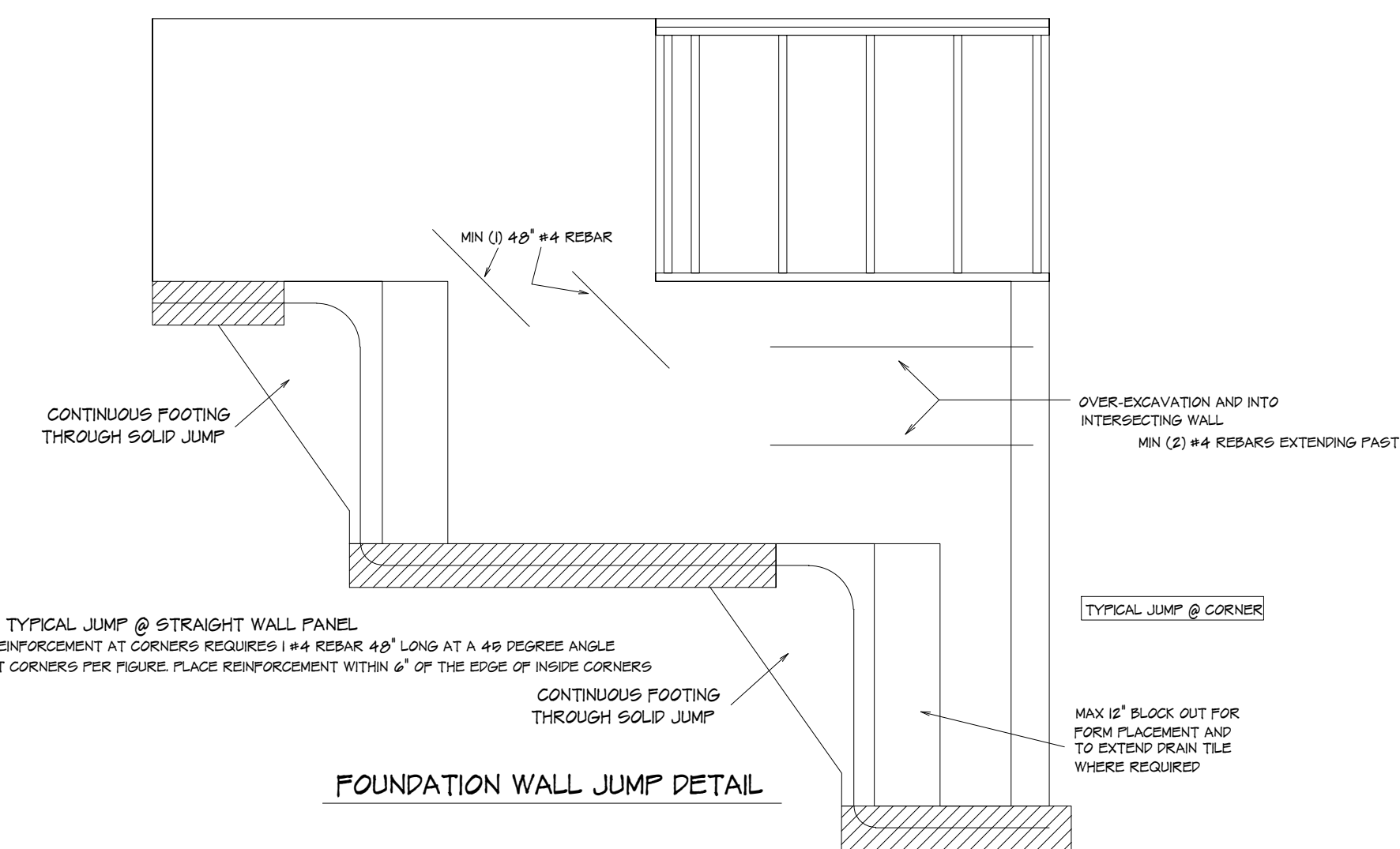


TYPICAL WALL SECTION

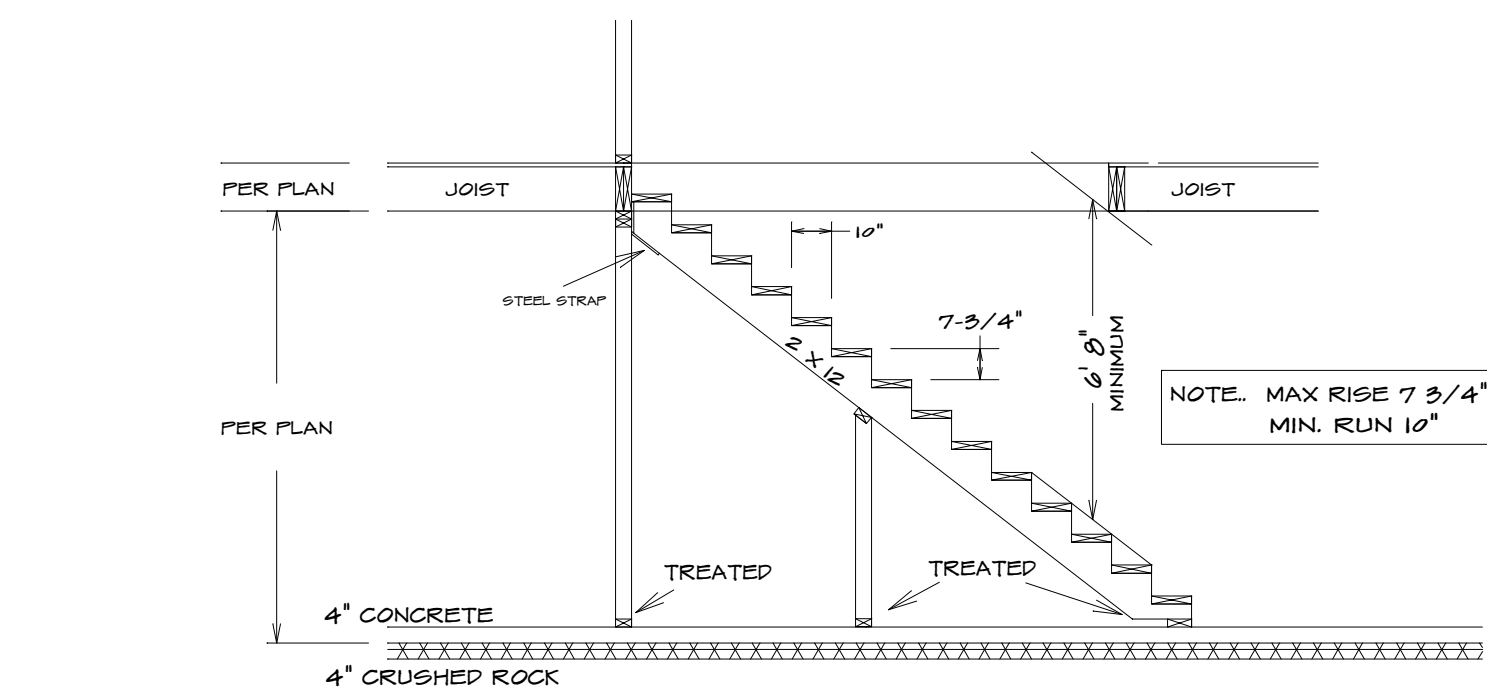


EXTERIOR TALL WALL SECTION

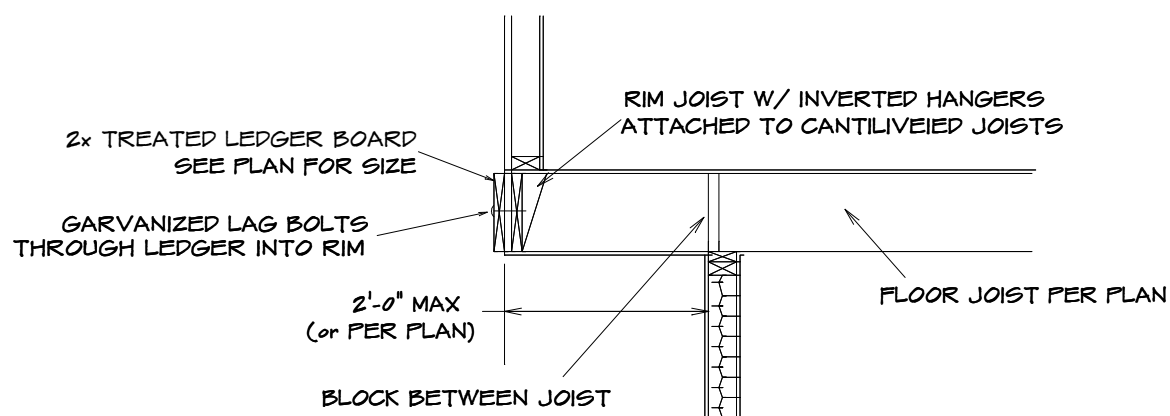
10' TRU 10" TALL WALLS UNINTERRUPTED TO BE CONSTRUCTED WITH 2X6 STUDS 16" O.C. WITH STIFF BACK EVERY 48" O.C.



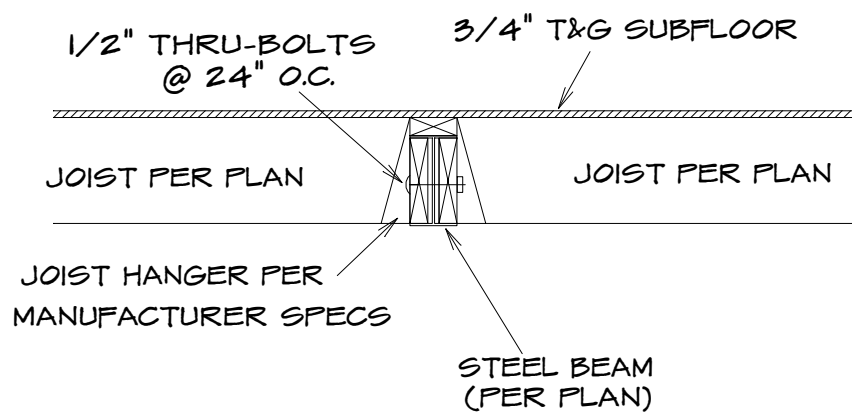
FOUNDATION WALL JUMP DETAIL



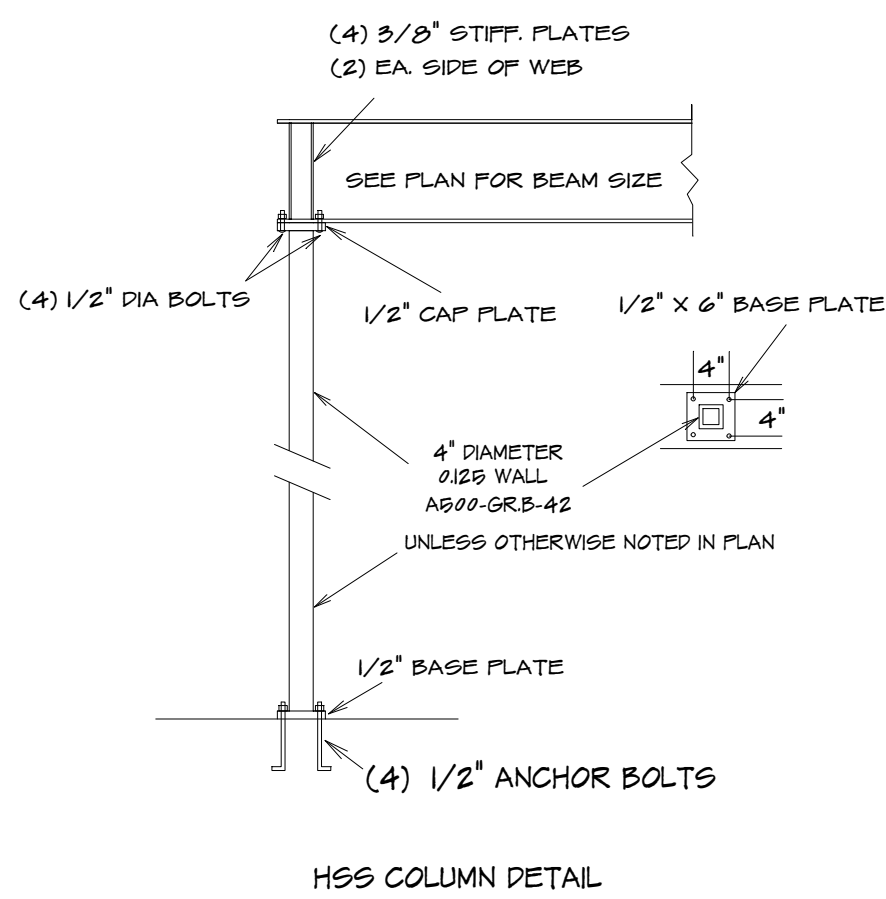
STAIR SECTION (TYP)



TYPICAL CANTILEVER FRAMING W/ DECK ATTACHMENT



UPSET STEEL BEAM/JOIST CONNECTION

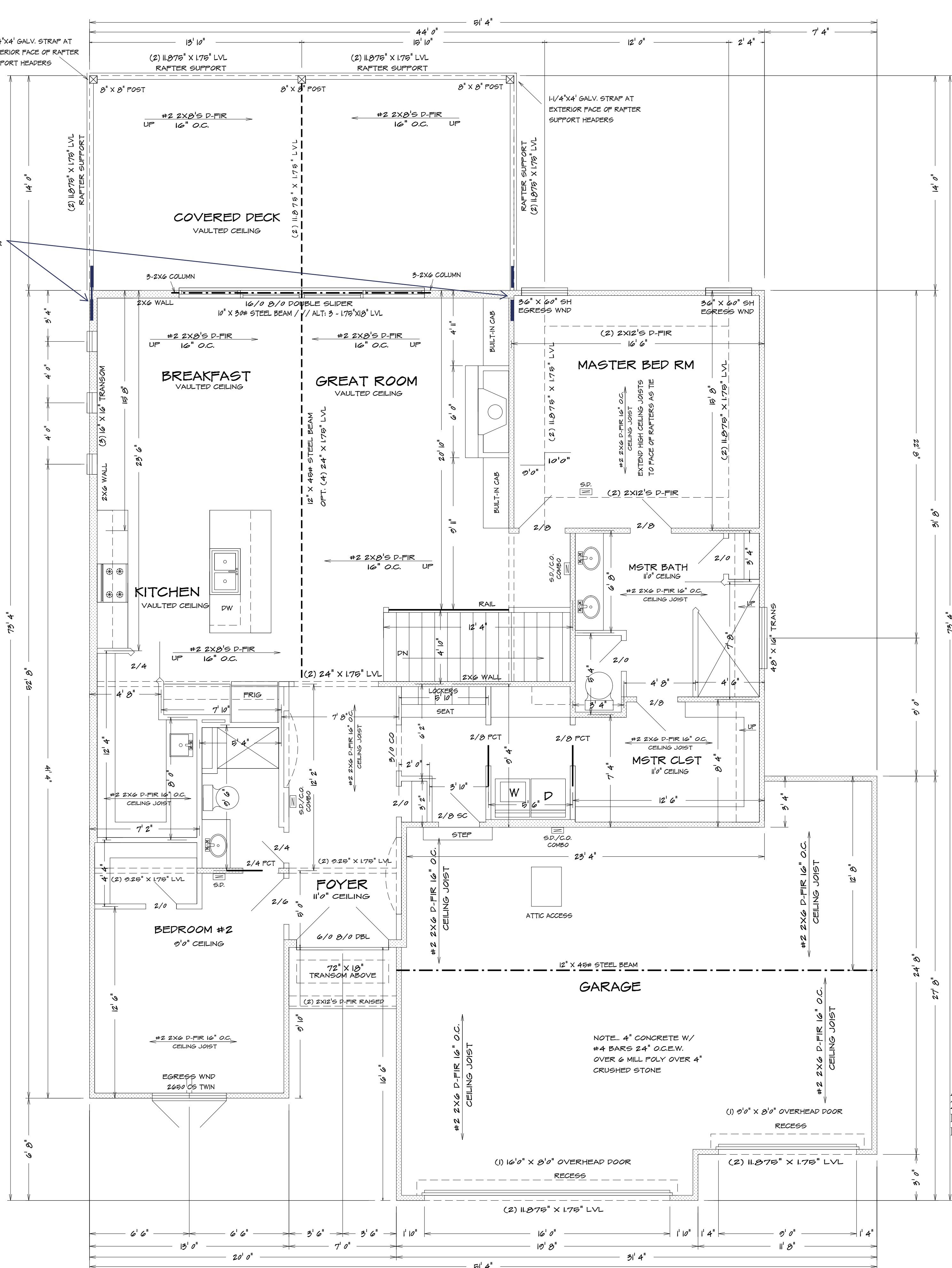


FIRST FLOOR PLAN

1/4" = 1'0"

BEARING WALL LINES

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BUILDER:	PHONE:		SF-7032	3
SUE-DIVISION:	LOT NO.		FILE NAME:	APPROX. SQ.FT.
			7032 FLR1	

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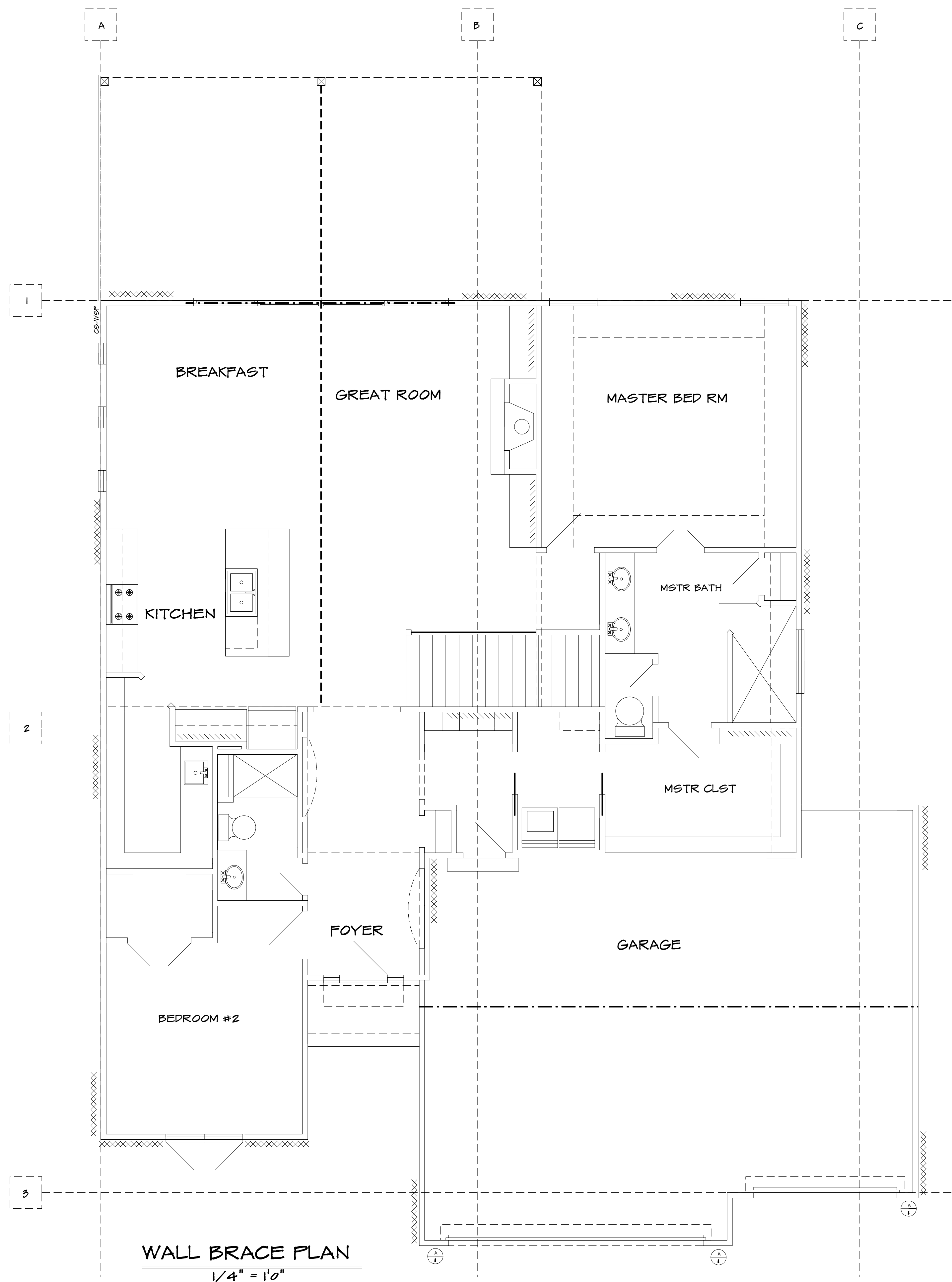
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LOT 178 WOODSIDE RIDGE  
LEE'S SUMMIT, MO











**BRACED WALLS:**

HEAVY WOP OR LEAD WICK  
W/ 1/2" DOTTED LINE BRACED WITH 2#  
WALLS 6" & 8" AND 1"

WOP OR LEAD WICK  
W/ 1/2" DOTTED LINE BRACED WITH 1#  
WALLS 6" & 8" AND 1"

WOP OR LEAD WICK  
W/ 1/2" DOTTED LINE BRACED WITH 1#  
WALLS 6" & 8" AND 1"

① ALTERNATE BRACED WALL PANEL.  
Marked (1) Panel Face with lead-down

② ALTERNATE BRACED WALL PANEL.  
Marked (2) to group four spaces in  
Between Outer Columns A, B & C

③ ALTERNATE BRACED WALL PANEL.  
Marked (3) Alternate lead and panel

④ ALTERNATE BRACED WALL  
Marked (4) Columnally offset panel face

⑤ PROVIDE 3/4" SLOPE ABOVE AND BELOW  
WALL PANEL AND VERTICAL BRACING  
BEFORE WALLS ARE PERPENDICULAR TO THE  
BRACE WALL. USE PLATE FOR THE PLATE  
SHALL BE RESTRICTED TO BRACING IN  
BRACING WHERE BRACING MEETS W/ 1/2"  
WALL

⑥ IMPROVE FORM OF HOLD-DOWN STRAP MAY BE  
SUBSTITUTED WITH BRAMPON PAGES HOLD-DOWN  
AND 1/2" WOODEN ROD HELD BY 2" NUTS  
AND 1/2" OF THE BRACED WALL

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GENERAL NOTES

WINDOW SIZES SHOWN ARE APPROXIMATE. THE BUILDER SHALL SELECT WINDOWS TO MEET BUILDING CODE REQUIREMENTS AND TO FIT IN THE AVAILABLE SPACE. OVERALL ROUGH OPENINGS FOR MULLED UNITS WILL VARY BY WINDOW/ DOOR MANUFACTURER.

EXTERIOR WALLS ARE 2x4 STUDS AT 16" O.C. UNLESS OTHERWISE NOTED.

GARAGE THE GARAGE FLOOR SHALL BE SLOPED TOWARD GARAGE DOORS DOORS BETWEEN GARAGE AND DWELLING - MIN 1/8" SOLID CORE OR HONEY COMBED STEEL DOOR OR 20 MIN. RATED. GARAGE TO HAVE 5/8" TYPE X GYPSUM THROUGHOUT THE H-FRAM SHALL CONSIST OF 2x6 FRAMING

GLAZING GLAZING IN HAZARDOUS LOCATIONS AS IDENTIFIED IN 2x10 IRC SHALL BE APPROVED SAFETY GLAZING MATERIALS; GLASS IN STORM DOORS, INDIVIDUAL FIXED OR OPENABLE PANELS ADJACENT TO A DOOR WHERE THE NEAREST VERTICAL EDGE IS WITHIN A 24" ARCH OF THE DOOR IN CLOSED POSITION AND WHOSE BOTTOM EDGE IS WITHIN 60" OF THE FLOOR; WALLS ENCLOSED STAIRWAYS AND LANDINGS WHERE THE GLAZING IS WITHIN 60" OF THE TOP OR BOTTOM OF THE STAIR ENCLOSURES FOR SPAS, TUBS, SHOWERS, AND WHIRLPOOLS; GLAZING IN FIXED OR OPENABLE PANELS EXCEEDING 9' SQ. FT. AND WHOSE BOTTOM EDGE IS LESS THAN 18" ABOVE THE FLOOR OR WALKING SURFACE WITH IN 3x6'

EGRESS PROVIDE ONE WINDOW FROM EACH BEDROOM THAT HAS A MIN. OPENABLE AREA OF 5.7 SQ. FT. WITH A MIN. OPENABLE HEIGHT OF 24" AND WIDTH OF 21"

ELECTRICAL OUTLETS ALL OUTLETS TO BE ARC FAULT CIRCUIT-INTERRUPTER OR GROUND FAULT CIRCUIT-INTERRUPTER PROTECTED EXCEPT. REFRIGERATOR, SINGLE OUTLET FOR SUMP PUMP AND SINGLE OUTLET IN GARAGE FOR A FREEZER ALL OUTLETS TO BE TAMPER RESISTANT

CARBON MONOXIDE ALARMS CARBON MONOXIDE ALARMS FOR NEW CONSTRUCTION. AN APPROVED CARBON MONOXIDE ALARM SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS IN DWELLING UNITS WITHIN WHICH FUEL-FIRED APPLIANCES ARE INSTALLED AND IN DWELLING UNITS THAT HAVE ATTACHED GARAGE.

CARBON MONOXIDE DETECTION SYSTEMS CARBON MONOXIDE DETECTION SYSTEMS THAT INCLUDE CARBON MONOXIDE DETECTORS AND AUDIBLE NOTIFICATION APPLIANCES, INSTALLED AND MAINTAINED IN ACCORDANCE WITH THIS SECTION FOR CARBON MONOXIDE ALARMS AND NFPA 720, SHALL BE PERMITTED. THE CARBON MONOXIDE DETECTORS SHALL BE LISTED AS COMPLYING WITH UL 2070, WHERE A HOUSEHOLD CARBON MONOXIDE DETECTION SYSTEM IS INSTALLED, IT SHALL BECOME A PERMANENT FEATURE OF THE OCCUPANCY, OWNED BY THE HOMEOWNER AND SHALL BE MONITORED BY AN APPROVED SUPERVISING STATION.

GUARD OPENING LIMITATIONS REQUIRED GUARDS ON OPEN SIDES OF STAIRWAYS, RAISED FLOOR AREA, BALCONIES, AND PORCHES SHALL HAVE INTERMEDIATE RAILS OR ORNAMENTAL CLOSURES THAT DO NOT ALLOW PASSAGE OF A SPHERE 4" OR MORE IN DIAMETER

OPENING PROTECTION OPENING FROM A PRIVATE GARAGE DIRECTLY INTO A ROOM USED FOR SLEEPING PURPOSES SHALL NOT BE PERMITTED. OTHER OPENINGS BETWEEN THE GARAGE AND RESIDENCE SHALL BE EQUIPPED WITH SOLID WOOD DOORS NOT LESS THAN 1 3/8" IN THICKNESS, SOLID OR HONEYCOMB-CORE STEEL DOOR NOT LESS THAN 1 3/8" THICK, OR 20 MINUTE FIRE-RATED DOORS, EQUIPPED WITH A SELF-CLOSING DEVICE.

SMOKE ALARMS PROVIDE SMOKE ALARMS IN EACH SLEEPING ROOM, OUTSIDE OF EACH SLEEPING ROOM AND ON EACH FLOOR, INCLUDING BASEMENT. ALARMS SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE DWELLING.

FRAMING NOTE

ALL HEADERS TO BE MIN (2) #2 D-FIR-LARCH (IE 3000 IS A 3'0"x6'0" WINDOW) BLOCK CANTILEVERS, DOOR JAMBS, AND OVER BEAMS ALL HEADRS TO BEAR ON MIN OF (2) 2x4 STUDS JOIST UNDER BEARING PARTITIONS SHALL BE DOUBLED AND COMPLY WITH 2x10 IRC WATER-RESISTIVE BARRIER SHALL BE PROVIDED OVER ALL EXTERIOR WALLS PER 2x10 IRC ROOF PLAN NOTES ALL ROOF RAFTERS NOT CALLED OUT ARE TO BE 2x6 SPT #1/#2 @ 16". ALL CEILING JOISTS NOT CALLED OUT ARE TO BE 2x6 SPT #1/#2 @ 16". ALL VAULTS TO BE FURRED DOWN w/2x MATERIAL TO PROVIDE FOR R-30 INSULATION ALL EXTERIOR AND LOAD BEARING WINDOW AND DOOR HEADERS TO BE (2) 2x10 DFR #2 UNLESS NOTED OTHERWISE ON PLANS ALL RIDGES, HPs, AND VALLEYS NOT MARKED SHALL BE (1) NOMINAL SIZE LARGER THAN THE INTERSECTING RAFTERS CEILING JOISTS AND RAFTERS SHALL BE NAILED TO EACH OTHER WITH (3) 16d COM (3 1/2"x16d) NAILS AND THE RAFTER SHALL BE NAILED TO THE TOP WALL PLATE WITH (3) 8d COM (2 1/2"x16d) NAILS. CEILING JOISTS SHALL BE CONTINUOUS OR SECURELY JOINED WITH (3) 16d COM (3 1/2"x16d) NAILS WHERE THEY MEET OVER INTERIOR PARTITIONS AND ARE NAILED TO ADJACENT RAFTERS TO PROVIDE A CONTINUOUS THE ACROSS THE BUILDING WHEN SUCH JOISTS ARE PARALLEL TO THE RAFTERS. WHERE CEILING JOISTS ARE NOT CONNECTED TO THE RAFTERS AT THE TOP WALL PLATE (w/ AT LOCATIONS WHERE C.J. ARE PERPENDICULAR TO RAFTERS). INSTALL 2x4 RAFTER TIES, IN THE LOWER 1/3 OF ATTIC SPACE @ 16" WITH (3) 16d COM (3 1/2"x16d) NAILS EA END. COLLAR TIES SHALL BE PROVIDED IN THE ATTIC SPACE IN THE UPPER 1/3 OF ATTIC RAFTER CONNECTIONS DESIGNED TO RESIST UPLIFT FORCES PER 2x10 IRC TABLE D02.1. ROOF HEADERS DO NOT HAVE NOTABLE UPLIFT TO REQUIRE HOLD DOWNS. PROVIDE METAL FLASHING AT ALL ROOF VALLEYS. ROOF AND SOFFIT VENTS PER LOCAL CODES. WHERE POSSIBLE, PROVIDE ROOF VENTING ON BACK SIDE OF ROOF. EXACT GUTTER AND DOWNSPOUT LOCATION BY GUTTER INSTALLER. ROOF IS DESIGNED FOR 20 P.S.F. ROOF SNOW LOAD (MIN) MIN 20 YR. ASPHALT SHINGLES RAFTER TIES SHALL NOT BE REQUIRED WHEN A STRUCTURAL RIDGE HAS BEEN PROVIDED AND ADEQUATELY DESIGNED (AS IN A FULLY VAULTED ROOM) SUCH SHALL BE NOTED AS 'STRUCTURAL' ON THE PLAN. PER 2x10 IRC

ROOF BRACING ROOF FURLING TO BE PLACED APPROXIMATELY WHERE SHOWN ON ROOF FURLING. USE 2x6 STUD GRADE FURLIN PLACED PERPENDICULAR TO RAFTERS (UNLESS NOTED OTHERWISE ON PLANS) RIDGE, HP, VALLEY, AND FURLIN BRACE STRUTS TO BE PLACED AS SHOWN ON PLANS. STRUTS TO BE 2x4 STUD GRADE w/ MAXIMUM UNBRACED LENGTH OF 8'-0" AND AT A 48" ANGLE w/ HORIZONTAL OR GREATER (VERTICAL WHERE POSSIBLE) BRACES LONGER THAN 8'-0" SHALL BE 2x4 STRONG BACK BRACES

EXCEPTIONS: WINDOWS WHOSE OPENING WILL NOT ALLOW A 4" DIAMETER SPHERE TO PASS THROUGH THE OPENING WHEN THE OPENING IS IN ITS LARGEST OPENED POSITION OPENINGS THAT ARE PROVIDED WITH WINDOW FALL PREVENTION DEVICES, WHICH COMPLY WITH ASTM F 2000. WINDOWS THAT ARE PROVIDED WITH WINDOW OPENING CONTROL DEVICES THAT COMPLY WITH SECTION R312.2.2.

EXHAUST AIR BATHROOMS, WATER CLOSET COMPARTMENTS AND OTHER SIMILAR ROOMS SHALL BE PROVIDED WITH AGGREGATE GLAZING AREA IN WINDOWS OF NOT LESS THAN 3 SQUARE FEET, ONE-HALF OF WHICH MUST BE OPERABLE EXCEPTION: THE GLAZED AREAS SHALL NOT BE REQUIRED WHERE ARTIFICIAL LIGHT AND A LOCAL EXHAUST SYSTEM ARE PROVIDED; THE MINIMUM LOCAL EXHAUST RATE SHALL BE DETERMINED IN ACCORDANCE WITH SECTION M1007; EXHAUST AIR FROM THE SPACE SHALL BE EXHAUSTED DIRECTLY TO THE OUTDOORS

BRIDGING JOISTS EXCEEDING A NOMINAL 2" X 12" SHALL BE SUPPORTED LATEROALLY BY SOLID BLOCKING, DIAGONAL BRIDGING (WOOD OR METAL), OR A CONTINUOUS 1" X 3" STRIP NAILED ACROSS THE BOTTOM OF THE JOIST PERPENDICULAR TO JOIST AT INTERVALS NOT EXCEEDING 8 FEET

WINDOW AND DOOR NOTES

1. ALL WINDOWS ARE SHOWN IN FEET (IE 3000 IS A 3'0"x6'0" WINDOW) ALL DOORS SHOWN IN FEET AND INCHES (IE 2060 DOOR IS A 2'-0"x6'-0" DOOR) CONTRACTOR/INSTALLER TO VERIFY R.O. DIMENSIONS WITH BUILDER SUPPLIED CUT SHEET PRIOR TO FRAMING. 2. ALL WINDOWS TO BE LOW-E GLAZING TO MEET ALL LOCAL ENERGY CODE REQUIREMENTS. 3. PROVIDE EGRESS WINDOW IN ALL SLEEPING ROOMS. WINDOWS SHALL COMPLY WITH THE FOLLOWING: A. MINIMUM OPEN AREA 5.7 SQ.FT. B. MINIMUM OPENING HEIGHT 24 INCHES C. MINIMUM OPENING WIDTH 20 INCHES D. SILL HEIGHT 44" MAX ABOVE FLOOR 4. ALL WINDOW SILLS ARE TO BE 24" MIN ABOVE FINISH FLOOR, OR SHALL BE FIXED/INOPERABLE 5. ALL WINDOWS AND GLAZED DOORS SHALL COMPLY WITH IRC SECTION R308.4; GLAZING IN HAZARDOUS LOCATIONS SHALL BE OF APPROVED SAFETY GLAZING MATERIALS. GLASS IN STORM DOORS, INDIVIDUAL FIXED OR OPERABLE PANELS ADJACENT TO A DOOR WHERE THE NEAREST VERTICAL EDGE IS WITHIN A 24" ARC OF THE DOOR IN A CLOSED POSITION AND WHOSE BOTTOM EDGE IS WITHIN 60" OF THE FLOOR. WALLS ENCLOSED STAIRWAYS AND LANDINGS WHERE THE GLAZING IS WITHIN 60" OF THE TOP OR BOTTOM OF STAIR ENCLOSURES FOR TUBS, SHOWERS AND WHIRLPOOLS, GLAZING IN FIXED OR OPERABLE PANELS EXCEEDING 9 SF AND WHOSE BOTTOM EDGE IS LESS THAN 18" ABOVE THE FLOOR OR WALKING SURFACE WITHIN 36". 6. ALL OPERABLE WINDOWS SHALL HAVE FALL PROTECTION PER IRC R612.2. 7. ALL GLAZING IN WINDOWS AND DOORS SHALL COMPLY WITH THE TEST CRITERIA FOR CATEGORY I IN ACCORDANCE WITH CPSC 16 CFR 1201. 8. WINDOW MANUFACTURER TO CONFIRM EXACT SAFETY AND EGRESS WINDOW LOCATIONS PER LOCAL CODES.

GENERAL PLAN REQUIREMENTS

1. ALL STUD WALL FRAMING SHALL BE CONTINUOUS FROM THE FLOOR TO ROOF OR CEILING DIAPHRAGM UNLO. ALL WALLS OVER 10'-0" ARE TO BE 2x6 @ 16" UNO. 2. PROVIDE WATER-RESISTANT EXTERIOR WALL COVERING ON ALL FRAMED WALLS TO COMPLY WITH IRC SECTION D02.3. 3. PROVIDE GFCI ELECTRICAL OUTLETS ON EXTERIOR, IN UNFINISHED BASEMENT, IN BATHROOMS, ABOVE KITCHEN COUNTERS, IN GARAGE, AND WITHIN 6'-0" OF ANY SINK. 4. ALL EXTERIOR DOORS SERVED BY LANDING. 5. INSTALL CARBON MONOXIDE DETECTORS PER IRC SECTION 516 OUTSIDE OF EACH SLEEPING AREA. 6. INSTALL SMOKE DETECTORS IN EACH SLEEPING ROOM, OUTSIDE OF EACH SLEEPING AREA, WITH A MINIMUM OF ONE ON EACH FLOOR PER IRC SECTION 314. 7. PROVIDE A "UPER" GROUND PER IRC 360.0.1. 8. REFER TO WALL BRACE SHEET FOR ALL WALL BRACING DETAILS AND/OR CALCULATIONS. 9. INSTALL BLOCKING FOR TP HOLDERS, TOWEL BARS, AND TRIM BEAMS. 10. GARAGE DOOR H-FRAME: THE H-FRAME FOR ATTACHMENT OF THE GARAGE DOOR TRACK AND COUNTER BALANCE SHALL CONSIST OF THE FOLLOWING: 2x6 VERTICAL JAMBS RUNNING FROM FLOOR TO CEILING ATTACHED WITH 3 1/4"x12d NAILS @ 12" STAGGERED WITH (7) 3 1/4"x12d NAILS THRU JAMB INTO HEADER. MINIMUM 2x8 HEADER FOR ATTACHMENT OF COUNTER BALANCE SYSTEM II. OVERHEAD GARAGE DOORS TO MEET 90 MPH WIND LOAD RESISTANCE REQUIREMENTS OF PASMA 10-B-9 AND ASTM E 550-02 PER IRC SECTION R 612.4. 12. MAXIMUM RISER HEIGHT OF STAIRWAYS SHALL NOT EXCEED 7 5/4" MAXIMUM RISER HEIGHT OF STAIRWAYS SHALL NOT EXCEED 7 5/4" MAXIMUM RISER HEIGHT OF STAIRWAYS SHALL NOT EXCEED 7 5/4" AND THE TREADS SHALL PROVIDE A MINIMUM TREAD DEPTH OF 10". 13. ALL EXTERIOR AND LOAD BEARING WINDOW AND DOOR HEADERS TO BE (2) 2x10 D-FIR #2 UNLESS NOTED OTHERWISE ON PLANS 14. ALL HEADER BEARINGS (OTHER THAN WINDOWS) TO BE (2) 2x4 STUDS UNLESS NOTED OTHERWISE WINDOW HEADER BEARING TO BE (1) 2x4 EA END UNLESS NOTED OTHERWISE.

GENERAL FOUNDATION REQUIREMENTS

1. ALL FOOTINGS ARE TO BE EXTENDED TO MIN 36" BELOW FINISHED GRADE. 2. ALL INTERIOR FOOTINGS FOR LOAD BEARING WALLS AND COLUMNS SHALL BE ISOLATED FROM THE BASEMENT FLOOR SLAB. 3. FOR ALL CONC WALL OPENINGS, FOOTING & WALL STEPS, PROVIDE ONE #4 BAR, 48" LONG DIAGONALLY AS CLOSE AS PRACTICAL TO CORNER. 4. ALL REINFORCEMENT SHALL BE LAPPED A MIN OF 24" AT ENDS SPLICES AND AROUND CORNERS. 5. ANCHOR BOLTS ARE TO BE SPACED @ 36" WITH 7" MIN EMBED. A BOLT SHALL BE PLACED WITHIN 12" OF THE END OF EACH PLATE SECTION. 6. FASTEN JOISTS TO SILL PLATES WITH (3) 8d COM NAILS. 7. WHERE JOIST IS PARALLEL TO FOUNDATION, PROVIDE SOLID BLOCCING @ 36" FOR (3) JOIST SPACES. FASTEN TO SILL PLATE PER NOTE 6. 8. VAPOR BARRIER: 6 MIL PE VAPOR RETARDER WITH JOINTS LAPPED A MIN OF 6" BETWEEN SLAB & BASE. 9. DAMP PROOFING: ONE COAT (MIN) OF DAMP PROOFING OR EQUIVALENT FOUNDATION MEMBRANE SHALL BE APPLIED TO EXTERIOR WALL SURFACES BELOW GRADE. SEAL Tie HOLES, VOIDS BEFORE APPLICATION. 10. FOUNDATION DRAIN: INSTALL CONT 4" - PERFORATED PVC DRAIN TILE. DRAIN TILE TO BE EXTENDED TO SQUARE SUMP FIT WHICH EXTENDS A MIN 24" BELOW BASEMENT FLOOR. 11. ALL FRAMING MEMBERS IN CONTACT WITH CONCRETE SHALL BE ACQ TREATED LUMBER. 12. ALL STEEL FASTENERS (INCLUDING FOUND. ANCHOR BOLTS) ON ACQ TO BE (DOUBLE HOT-DIPPED) GALVANIZED. 13. PROVIDE A "UPER" GROUND PER IRC 360.01 PROVIDE A "UPER" GROUND PER IRC 360.01 4. EGRESS WELL REQUIREMENTS: A. IF THE VERTICAL DISTANCE FROM THE WINDOW SILL TO ADJACENT GRADE IS GREATER THAN 44", PROVIDE A LADDER. B. ADD DRAIN TO DAYLIGHT OR SUMP PUMP.

ENERGY REQUIREMENTS

CONTRACTOR TO PROVIDE ENERGY AUDIT USING THE HERS ENERGY RATING SYSTEM. IN LIEU OF AN ENERGY AUDIT, THE FOLLOWING PRESCRIPTIVE REQUIREMENTS MAY BE FOLLOWED: A. ALL DUCTS, AIR HANDLERS, FILTER BOXES, AND BUILDING ALL DUCTS, AIR HANDLERS, FILTER BOXES, AND BUILDING CAVITIES TO BE SEALED PER IRC SECTION N102.2. B. THE BUILDING THERMAL ENVELOPE IS REQUIRED TO BE SEALED PER IRC SECTION N102.4. C. CONTRACTOR TO SUBMIT "MANUAL J" AND "MANUAL D" CALCULATIONS FOR THE HVAC SYSTEM. D. INSULATION TO COMPLY WITH IECC AS FOLLOWS: INSULATION TO COMPLY WITH IECC AS FOLLOWS:

WALLS	R-10
CEILING (FLAT)	R-40
CEILING (VAULTED)	R-50
	(NOTE: VAULTED AREA NOT TO 800+ H OR 20' OF ROOF AREA, WHICHEVER IS LESS)
FLOORS OVER UNCONDITIONED SPACE	R-10
CRAWL SPACE WALLS	R-10 (w/ R-10 CONTINUOUS)
BASEMENT WALLS	R-10 (w/ R-10 CONTINUOUS)
SLABS	N/A
DUCTWORK	R-8
U-FACTOR	U 0.05 (MAX)
SHGC	0.40 (MAX)
SKYLIGHTS	U 0.05 (MAX)
SHGC	0.40 (MAX)

TABLE R602.2(1) FASTENER SCHEDULE FOR STRUCTURAL MEMBERS			
ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENERS N x "	SPACING OF FASTENERS
Roof			
1	Blocking between joist or rafter to top plate, toe nail	3-8d (2 1/2" x 0.1337)	---
2	Ceiling joists to plate, toe nail	3-8d (2 1/2" x 0.1337)	---
3	Ceiling joists not attached to parallel rafter, face over partition, face nail	3-10d	---
4	Collar tie to rafter, face nail or 3/4" x 20 edge nips edge	3-10d (3" x 0.1387)	---
5	Rafter or roof truss to plate, toe nail	3-16d box nails (3 1/2" x 0.1387) or 3-10d common nails (3" x 0.1483)	2 toe nails on one side and 1 toe nail on opposite side of each rafter or truss
6	Roof rafters to ridge, valley or hip rafters: toe nail face nail	4-16d (3 1/2" x 0.1387) 3-16d (3 1/2" x 0.1387)	---
Wall			
7	Built-up studs-face nail	15d (3" x 0.1289)	24" o.c.
8	Abutting studs at intersecting wall corners, face nail	16d (3 1/2" x 0.1387)	12" o.c.
9	Build-up header, two pieces with 1/2" spacer	16d (3 1/2" x 0.1387)	16" o.c. along each edge
10	Continued header, two pieces	16d (3 1/2" x 0.1387)	16" o.c. along each edge
11	Continuous header to stud, toe nail	4-8d (2 1/2" x 0.1337)	---
12	Double studs, face nail	15d (3" x 0.1289)	24" o.c.
13	Double top plates, face nail	15d (3" x 0.1289)	24" o.c.
14	Double top plates, minimum 24-inch offset of end joints, face nail in lapped area	8-16d (3 1/2" x 0.1387)	---
15	Side plate to joint or blocking, face nail	4-8d (3 1/2" x 0.1387)	16" o.c.
16	Side plate to joint or blocking at braced wall panels	3-16d (3 1/2" x 0.1387) 4-13d (3 1/2" x 0.1387)	16" o.c.
17	Stud to sole plate, toe nail	3-8d (2 1/2" x 0.1337) or 2-16d (3 1/2" x 0.1387)	---
18	Top or sole plate to stud, end nail	2-16d (3 1/2" x 0.1387)	---
19	Top plates, laps at corners and intersections, face nail	2-10d (3" x 0.1337)	---
20	1" brace to each stud and plate, face nail	2-8d (2 1/2" x 0.1337) 2 staples 1 1/2" x 1/4"	---
21	1" x 6" sheathing to each bearing, face nail	2-8d (2 1/2" x 0.1337) 2 staples 1 1/2" x 1/4"	---
22	1" x 8" sheathing to each bearing, face nail	2-8d (2 1/2" x 0.1337) 3 staples 1 1/2" x 1/4"	---
23	Wider than 1" x 8" sheathing to each bearing, face nail	3-8d (2 1/2" x 0.1337) 4 staples 1 1/2" x 1/4"	---
Floor			
24	Joist to sill or girder, toe nail	3-8d (2 1/2" x 0.1337)	---
25	Rim joist to top plate, toe nail (roof applications also)	8d (2 1/2" x 0.1337)	6" o.c.
26	Rim joist or blocking to sill plate, toe nail	8d (2 1/2" x 0.1337)	6" o.c.
27	1" x 6" subfloor or less to each joist, face nail	2-8d (2 1/2" x 0.1337) 2 staples 1 1/2" x 1/4"	---
28	2" subfloor to joist or girder, blind and face nail	2-16d (3 1/2" x 0.1387)	---
29	2" planks (plank & beam - floor & roof)	2-16d (3 1/2" x 0.1387)	at each bearing
30	Build-up girders and beams, 2-inch lumber layers	15d (3" x 0.1289)	at each layer as follows: 32" o.c. at top and bottom and staggered. Then nails at ends and at each splice.
31	Ledger strip supporting joists or rafter	3-16d (3 1/2" x 0.1387)	At each joist or rafter

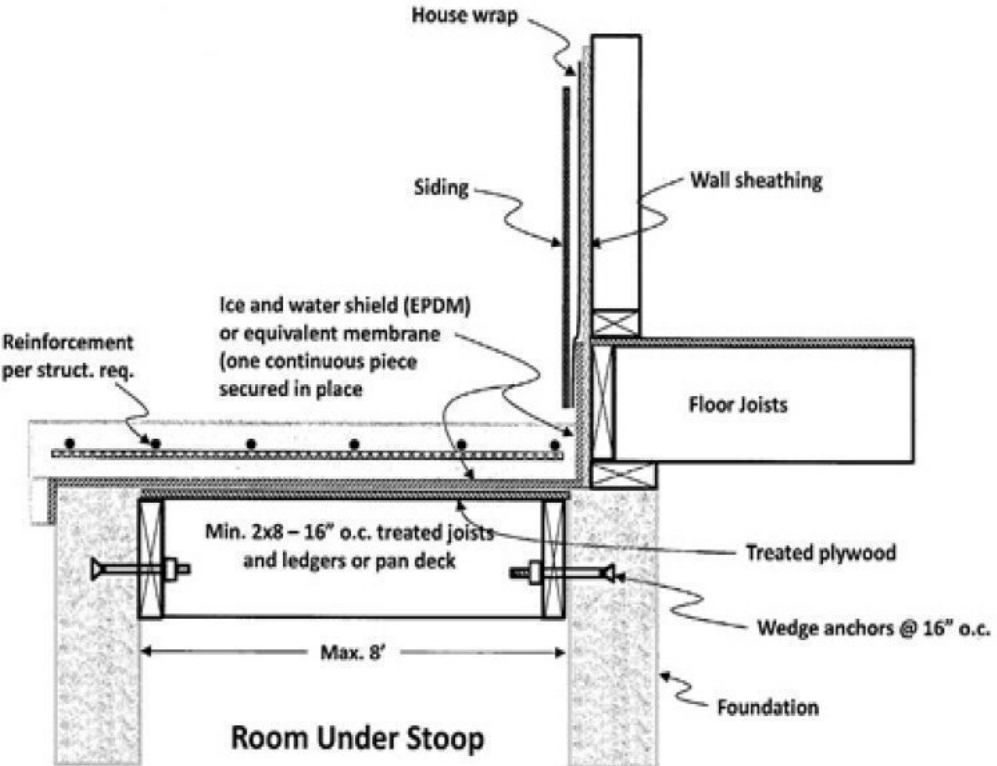
TABLE R602.2(1)-continued FASTENER SCHEDULE FOR STRUCTURAL MEMBERS				
ITEM	DESCRIPTION OF BUILDING MATERIALS	DESCRIPTION OF FASTENER	Edges (inches) <sup>a</sup>	Intermediate supports <sup>a</sup> (inches)
Wood structural panels, subfloor, roof and interior wall sheathing to framing and particleboard wall sheathing to framing				
32	3/8" - 1/2"	8d common (2" x 0.1337) nail (nail-on wall) 8d common (2 1/2" x 0.1337) nail (nail-on roof)	6	12"
33	1/2" - 1"	8d common nail (2 1/2" x 0.1337)	6	12"
34	1 1/8" - 1 1/2"	10d common (3" x 0.1483) 8d (2 1/2" x 0.1337)	6	12"
Other wall sheathing <sup>b</sup>				
35	1/2" structural cellulose fiberboard sheathing	1 1/2" galvanized roofing nail, 7/16" crown or 1" crown ansle 14 ga., 1 1/2" long	3	6
36	5/8" structural cellulose fiberboard sheathing	1 1/2" galvanized roofing nail, 7/16" crown or 1" crown ansle 14 ga., 1 1/2" long	3	6
37	1/2" gypsum sheathing <sup>c</sup>	1 1/2" galvanized roofing nail, shade galvanized, 1 1/2" long, 1 1/2" crown, 1 1/2" long	7	7
38	5/8" gypsum sheathing <sup>c</sup>	1 1/2" galvanized roofing nail, shade galvanized, 1 1/2" long, 1 1/2" crown, 1 1/2" long	7	7
Wood structural panels, combination subfloor and underlayment to framing				
39	3/4" and less	8d deformed (2" x 0.1207) 8d common (2 1/2" x 0.1337)	6	12"
40	7/8" - 1"	8d common (2 1/2" x 0.1337) nail or 8-1007 nail	6	12"
41	1 1/8" - 1 1/4"	10d common (3" x 0.1483) nail or 8d deformed (2 1/2" x 0.1337) nail	6	12"

For S1: 1 inch = 25.4 mm; 1 foot = 304.8 mm; 1 mile per hour = 0.447 m/s; 1 psi = 6.895 kPa.

Foundation Wall Reinforcement Schedule - Table 2

Vertical reinforcement spacing 60 psf soil									
Concrete strength/Grade		8 inch thick wall			10 inch thick wall				
Reinforcement #4 bar		8"	9"	10"	8"	9"	10"	8"	9"
3,000 psi / Grade 40		16	12	NP	24	16	12		
3,500 psi / Grade 40		16	12	NP	24	24	12		
3,000 psi / Grade 60		24	16	NP	24	20	16		
3,500 psi / Grade 60		24	16	NP	24	24	16		
Horizontal reinforcement - Minimum Grade 40 steel #4 bar									
One bar 12" from top of wall, maximum spacing 24" o.c.		4-#4	5-#4	6-#4	4-#4	5-#4	6-#4		

Footnotes:  
1) Wall height is measured from the top of the wall to the top of the floor slab.  
2) Vertical reinforcement for concrete walls that are not full height and for reinforcement spaced 24 inch on center may be placed in the middle of the wall. Other walls shall have vertical reinforcement placed as follows:  
a) 8-inch wall - Minimum 5 inches from the outside face.  
b) 10-inch wall - Minimum 5.75 inches from the outside face.  
c) Extend bars to within 8 inches of the top of the wall.  
3) Reinforcement clearances:  
a) Concrete exposed to earth - minimum 1-1/2 inches.  
b) Not exposed to weather (interior side of walls) - minimum 3/4 inch.  
c) Concrete exposed to weather (top clearance in garage and driveway slabs)- 1-1/2 inches.  
4) Horizontal reinforcement:  
a) One bar shall be placed within 12 inches of the top of the wall.  
b) Other bars shall be equally spaced with spacing not to exceed 24 inches on center.  
c) Horizontal bars should be as close to the tension face as possible (interior) and behind the vertical reinforcement (i.e. 2" towards the inside).  
d) Supplemental reinforcement at corners - Place 1 #4 bar 48 inches long at 45 degree angle at corners of openings per Figure 4a. Place reinforcement within 6" of the edge of inside corners.  
5) Reinforcement shall be lapped a minimum 24 inches at ends, splices, and around corners.  
6) At masonry ledges the minimum wall thickness shall be 3-1/2 inches. Ledges shall not exceed a depth of more than 24 inches below the top of the wall. For wall thicknesses less than 4 inches provide #4 bars at maximum 24 inches on center to within 8 inches of the top of the wall.  
7) Straight walls more than 5 feet tall and more than 16 feet long shall be provided with exterior braced return walls. Wall length shall be measured using inside the shortest dimension between intersecting walls (See T-52).



GENERAL REQUIREMENTS:

FLASHING OR ANOTHER APPROVED WEATHER RESISTIVE BARRIER SHALL BE PLACED BETWEEN THE CONCRETE PORCH STOOP AND THE DWELLING (IRC R309). THE WEATHER RESISTIVE BARRIER SHALL EXTEND UNDER THE WALL COVERING AND DOWN OVER THE EDGE OF THE FOUNDATION WALL TO FORM A CONTINUOUS BARRIER TO PREVENT WATER INTRUSION INTO THE BUILDING (IRC R703.0). PENETRATIONS, SEAMS, AND JOINTS SHALL BE EFFECTIVELY SEALER. THE FLASHING AND SEALANTS SHALL FORM A PHYSICAL BARRIER TO RESTRICT TERMITE ACCESS (IRC R320.0)

SUSPENDED PORCH STOOP DETAIL

SEE ELEVATION FOR WALL HEIGHTS

NOTE.. ELECTRICAL SERVICE TO BE 200 AMP.

NOTE.. DOUBLE JOIST UNDER ALL PARALLEL WALLS ABOVE UNLESS NOTED

S.D. = SMOKE DETECTOR

GENERAL HEADER SPECIFICATIONS:

REQUIRED AREAS NEEDING HEADERS:	HEADER DESCRIPTIONS:
WINDOWS/DOORS UP TO 38" R.O.	(2) #2 D-FIR 2X10'S
WINDOWS/DOORS 38" UP TO 72" R.O.	(2) #2 D-FIR 2X10'S W/1/2" GLUE PLY
WINDOWS/DOORS 72" UP TO 96" R.O.	(2) 9 1/2" L.V.L.
80" GARAGE DOORS W/CEILING & ROOF LOAD	(2) 9 1/2" L.V.L.
90" GARAGE DOORS W/CEILING & ROOF LOAD	(2) 9 1/2" L.V.L.
80" GARAGE DOORS W/SECOND FLOOR	(2) 9 1/2" L.V.L.
90" GARAGE DOORS W/SECOND FLOOR	(2) 11 7/8" L.V.L.
160" GARAGE DOOR WINDO SECOND FLOOR	(2) 11 7/8" L.V.L.
160" GARAGE DOORS W/SECOND FLOOR	(2) 14" L.V.L.

USE HEADERS FOR OPENINGS ABOVE UNLESS SPECIFIED OTHERWISE.

SF-7032 (LOT 178)

ADDRESS:  
2075 NW O'BRIEN RD.  
LOT 178 WOODSIDE RIDGE  
LEE'S SUMMIT, MO

