

LOT 133 WOODSIDE RIDGE

2147 NW Killarney Ln.  
Lees Summit Mo. 64081  
Lot 133  
The Estates at Woodside Ridge

TO STRUCTURE.

SF-7036

RELEASE FOR CONSTRUCTION  
AS NOTED FOR PLAN REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
10/02/2023

STRUCTURAL MEMBER REVIEW AND CERTIFICATION:



**REC ENGINEERING, P.C.**  
CIVIL ENGINEERING CONSULTANTS  
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PH. (816) 382 - 5150 FAX: (816) 884 - 3250 EMAIL: MAIL@RECENGINEERING.COM  
MO. CERTIFICATE OF AUTHORITY #0000002187

AARON D. OBERMILLER, P.E.  
WFO 00000000 / FWS 000000

CERTIFICATION IS PROVIDED HEREON FOR STRUCTURAL ITEMS NOT OTHERWISE ADDRESSED IN THE REQUIREMENTS OF THE 2018 INTERNATIONAL RESIDENTIAL CODE. ALL CONSTRUCTION, MATERIALS, FASTENING NOT SPECIFICALLY DENOTED SHALL COMPLY WITH THE REQUIREMENTS OF THE 2018 IRC AND THEREIN REFERENCED STANDARDS. ANY REQUIRED CLARIFICATIONS OR MODIFICATIONS TO STRUCTURAL ITEMS SHALL BE APPROVED BY THE ENGINEER OF RECORD OR OTHER LICENSED PROFESSIONAL CAPABLE OF CERTIFYING COMPLIANCE WITH THE MINIMUM STANDARDS OF THE APPLICABLE CODE. ENGINEER SHALL NOT BE HELD RESPONSIBLE FOR DRAWING ERRORS AND OMISSIONS IN PLAN OR ELEVATION OF PROVIDED PLANS.

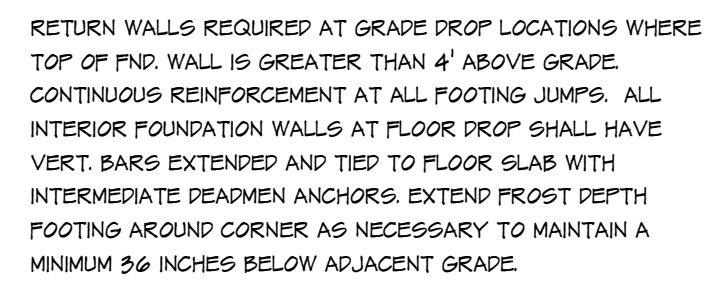
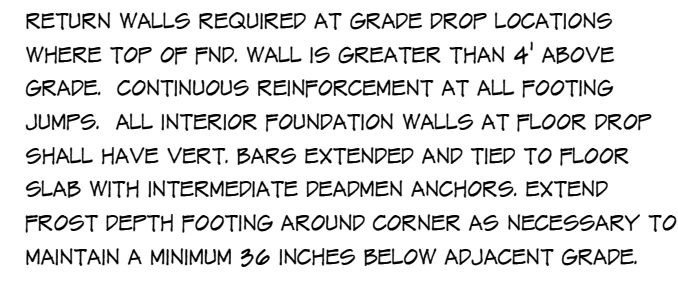
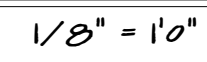
SQUARE FOOTAGE

LIVING AREA

FIRST FLOOR	= 2073
SECOND FLOOR	= 1048
BASEMENT	= 1463
COVERED DECK	= 334

UNFINISHED AREA

MECH ROOM = 265  
FRONT STOOP = 157  
GARAGE = 760  
UNDER STOOP = 134  
STORAGE = 323


$$1/8'' = 1'0''$$

$$1/8'' = 1'0''$$


BUILDER/CONTRACTOR IS RESPONSIBLE TO CHECK ALL DIMENSIONS FOR ACCURACY BETWEEN FLOORS, FOUNDATION, AND ELEVATIONS. ALSO VERIFY ALL BEAM, HEADERS, PIER LOCATIONS, AND COLUMN SIZES. BUILDER/CONTRACTOR TO CHECK FOR COMPLIANCE WITH CONTRACTS, CITY, AND NATIONAL CODES. BUILDER/CONTRACTOR ACCEPTS ALL RESPONSIBILITY FOR LOT PLACEMENT, SET-BACKS, AND FLOOR PLANS. BUILDER/CONTRACTOR IS HOME OWNER ACCEPTS RESPONSIBILITY FOR ANY AND ALL COPYRIGHT INFRINGEMENTS OR INDEMNITIES TO OTHER COPYRIGHTED PLANS. BUILDER/CONTRACTOR ACCEPTS RESPONSIBILITY FOR ANY AND ALL SITE CHANGES MADE TO STRUCTURE.

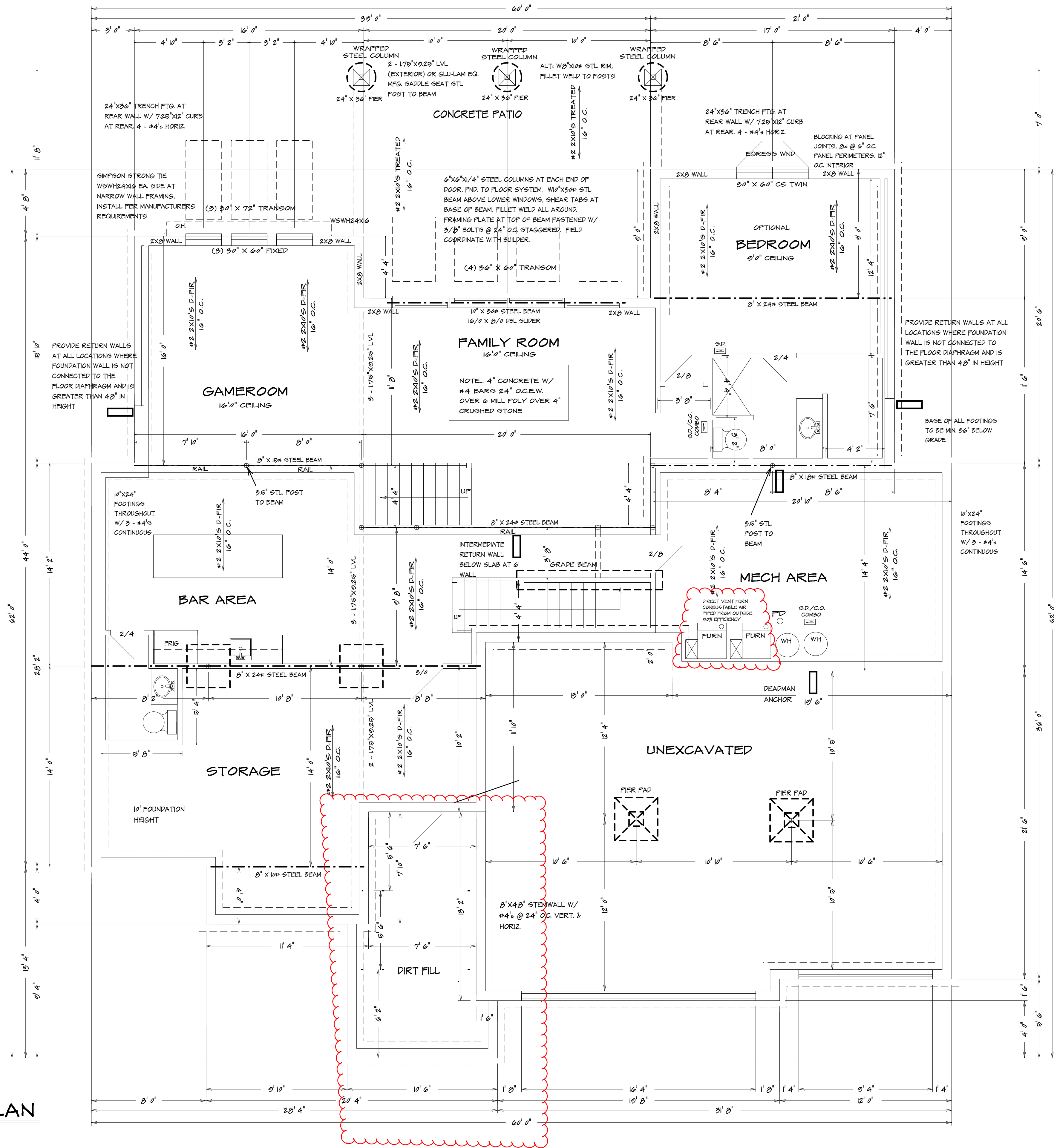
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LEE'S SUMMIT, MISSOURI  
10/02/2023



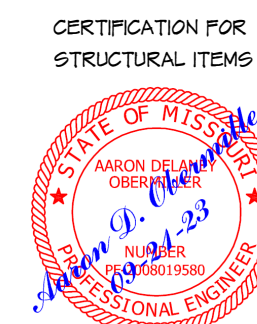
2147 NW Killarney Ln.  
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The Estates at Woodside Ridge

BASEMENT PLAN  
1/4" = 1'0"

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

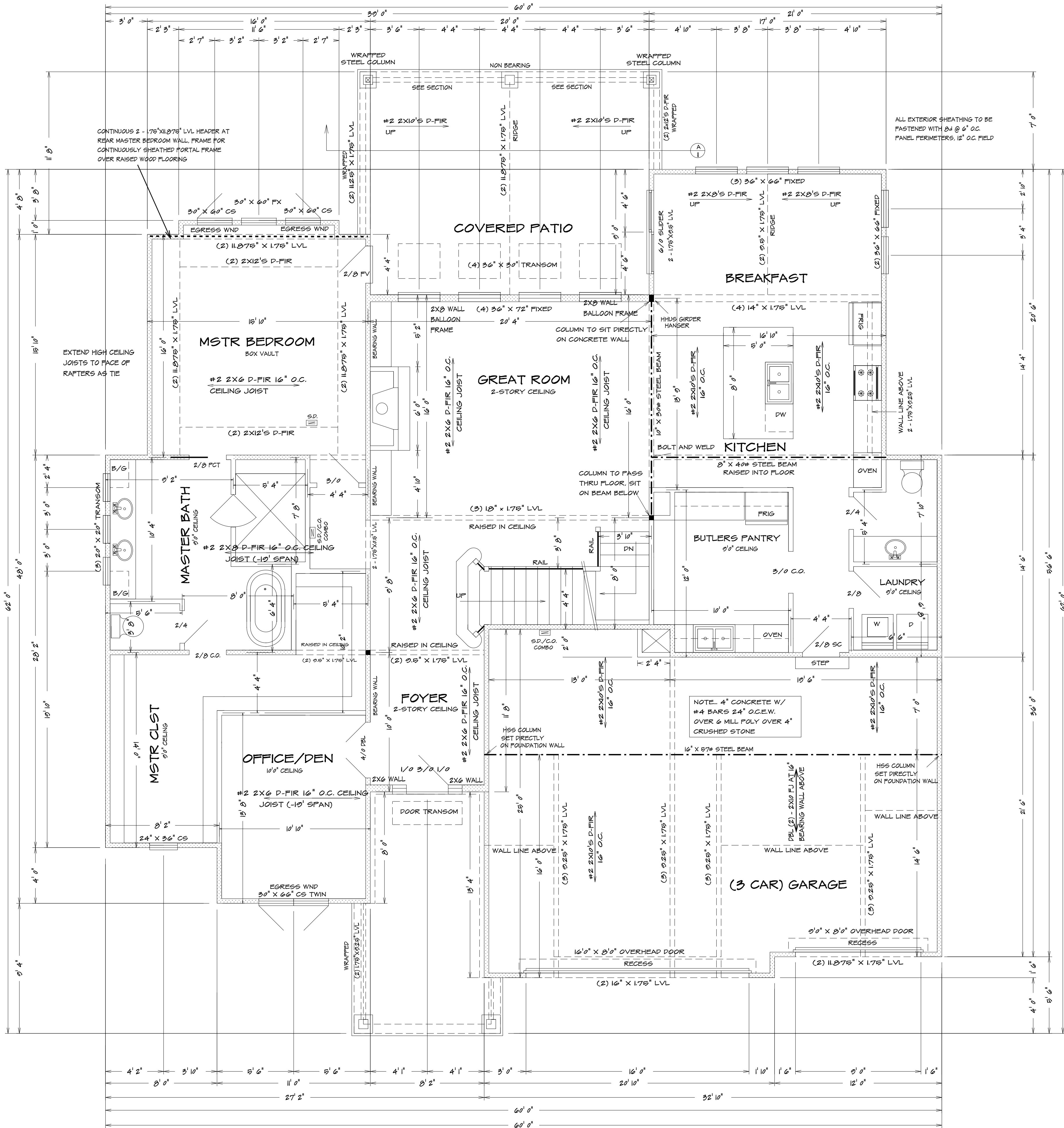
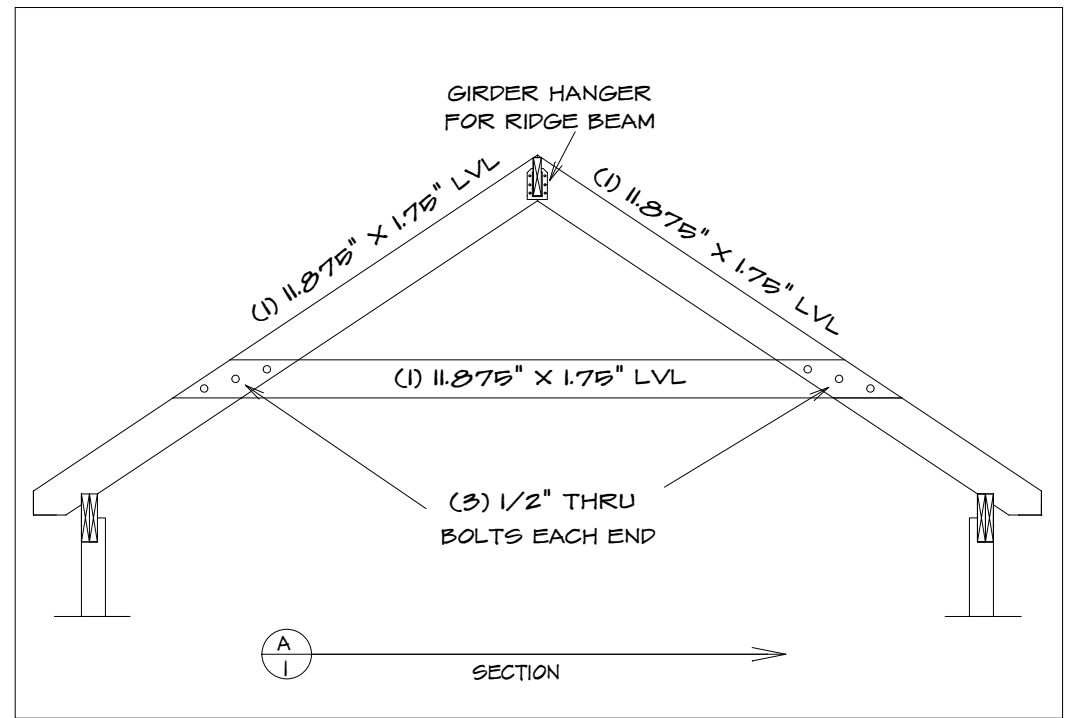


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HOME BUYER:	PHONE:	DATE DRAWN:	PLAN NO.	SHEET NO.
BUILDER:	PHONE:	DATE REVISED:	5F-7036	3
SUE-DIVISION:	LOT NO.	DESIGNER:	FILE NAME: 7036 B5MT	APPROX. SQ.FT. 9





2147 NW Killarney Ln.  
Lees Summit Mo. 64081  
Lot 133  
The Estates at Woodside Ridge

BEARING WALL LINES  
**FIRST FLOOR PLAN**  
1/4" = 1'0"

ALL NOTES, SECTIONS, AND DRAWINGS  
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SF-7036

HOME BUYER:	PHONE:	DATE DRAWN:	PLAN NO.	SHEET NO.
	PHONE:	DATE REVISED:	SF-7036	4
	SUE-DIVISION:	DESIGNER:	FILE NAME:	APPROX. SQ.FT.
			7036 FLR1	7036

BUILDER: SUE-DIVISION

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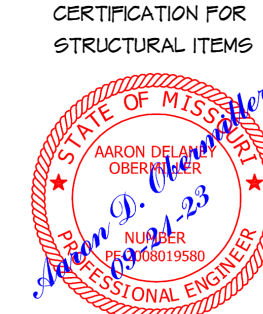
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The Estates at Woodside Ridge

BEARING WALL LINES  
SECOND FLOOR PLAN  
1/4" = 1'0"

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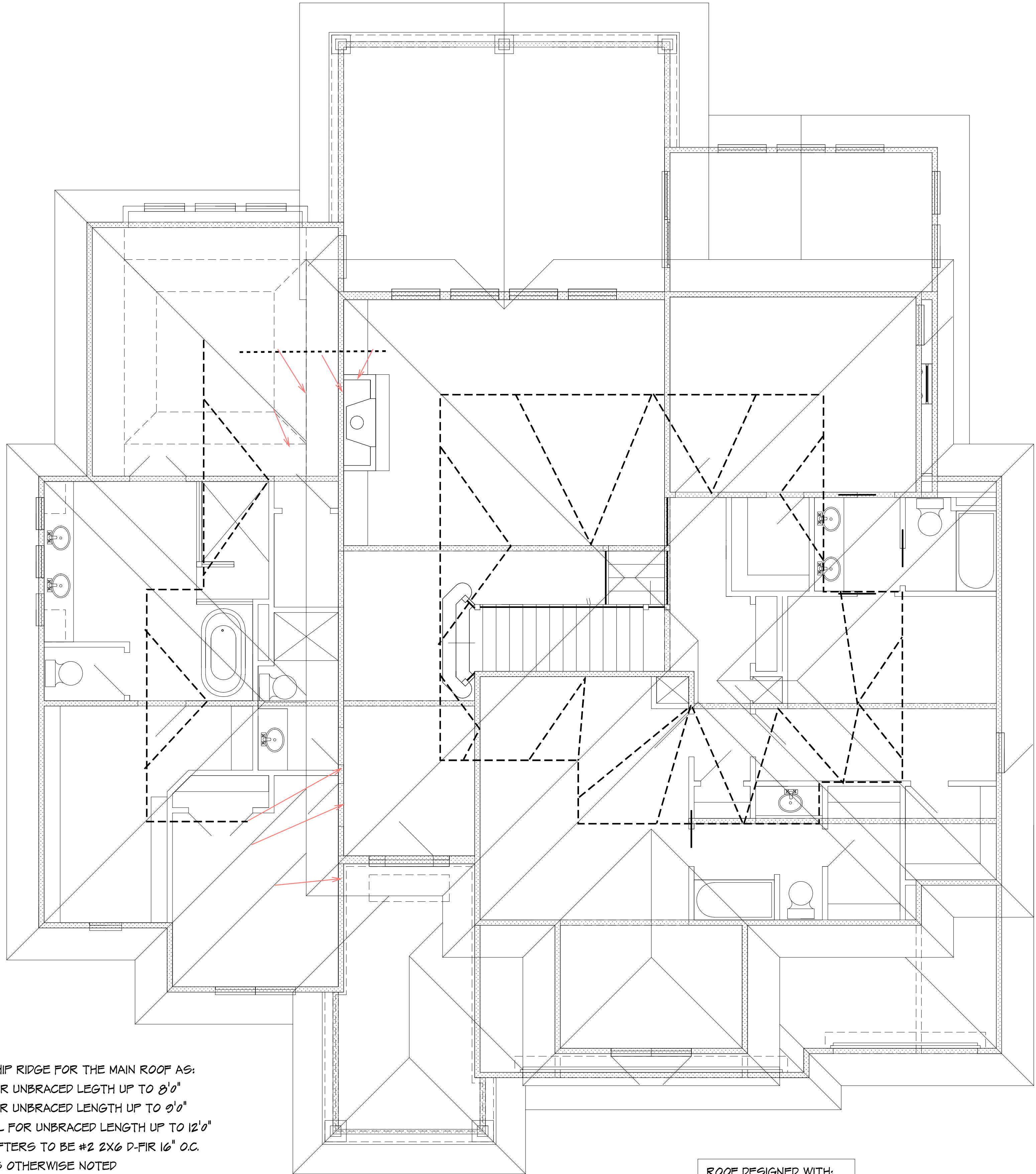


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BUILDER:	PHONE:	DATE REVISED:	SF-7036	5
SUE-DIVISION:	LOT NO.	DESIGNER:	FILE NAME: 7036 FLR2	APPROX. SQ.FT. 7036



2147 NW Killarney Ln.  
Lees Summit Mo. 64081  
Lot 133  
The Estates at Woodside Ridge

NOTE: HIP RIDGE FOR THE MAIN ROOF AS:  
2X8 FOR UNBRACED LENGTH UP TO 9'0"  
2X10 FOR UNBRACED LENGTH UP TO 9'0"  
2.5" LVL FOR UNBRACED LENGTH UP TO 12'0"  
ALL RAFTERS TO BE #2 2X6 D-FIR 16" O.C.  
UNLESS OTHERWISE NOTED  
PURLING RAFTERS TO BEARING WALL LINES  
CONNECT RAFTERS TO CEILING JOIST W/ 4-16d  
GALV. NAILS  
CONNECT RAFTERS TO RIDGE, VALLEY, AND  
HIP W/ 4-16d GALV.NAILS  
VERT. RIDGE AND RAFTER SUPPORTS TO BE  
EQUAL TO OR GREATER THAN THE DEPTH OF  
RAFTERS



ROOF DESIGNED WITH:  
LIVE LOAD = 20 PSF  
DEAD LOAD = 10 PSF

ROOF ELEVATION  
1/4" = 1'0"

BEARING WALL LINES

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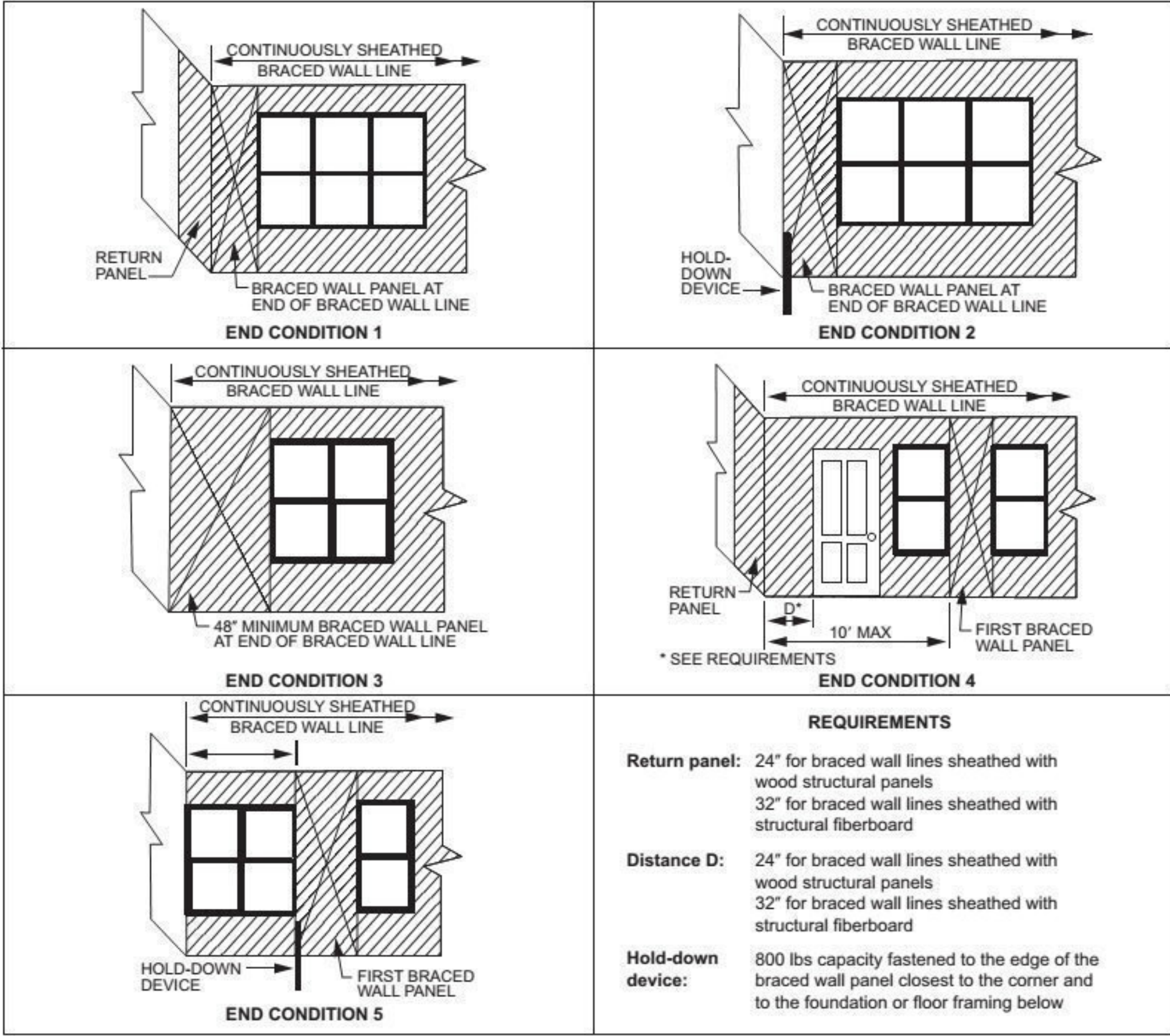
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HOME BUYER:	PHONE:	DATE DRAWN:	PLAN NO.	SHEET NO.
BUILDER:	PHONE:	DATE REVISED:	SF-7036	6
SUE-DIVISION:	LOT NO.	DESIGNER:	FILE NAME: 7036 ROOF	APPROX. SQ.FT. 6

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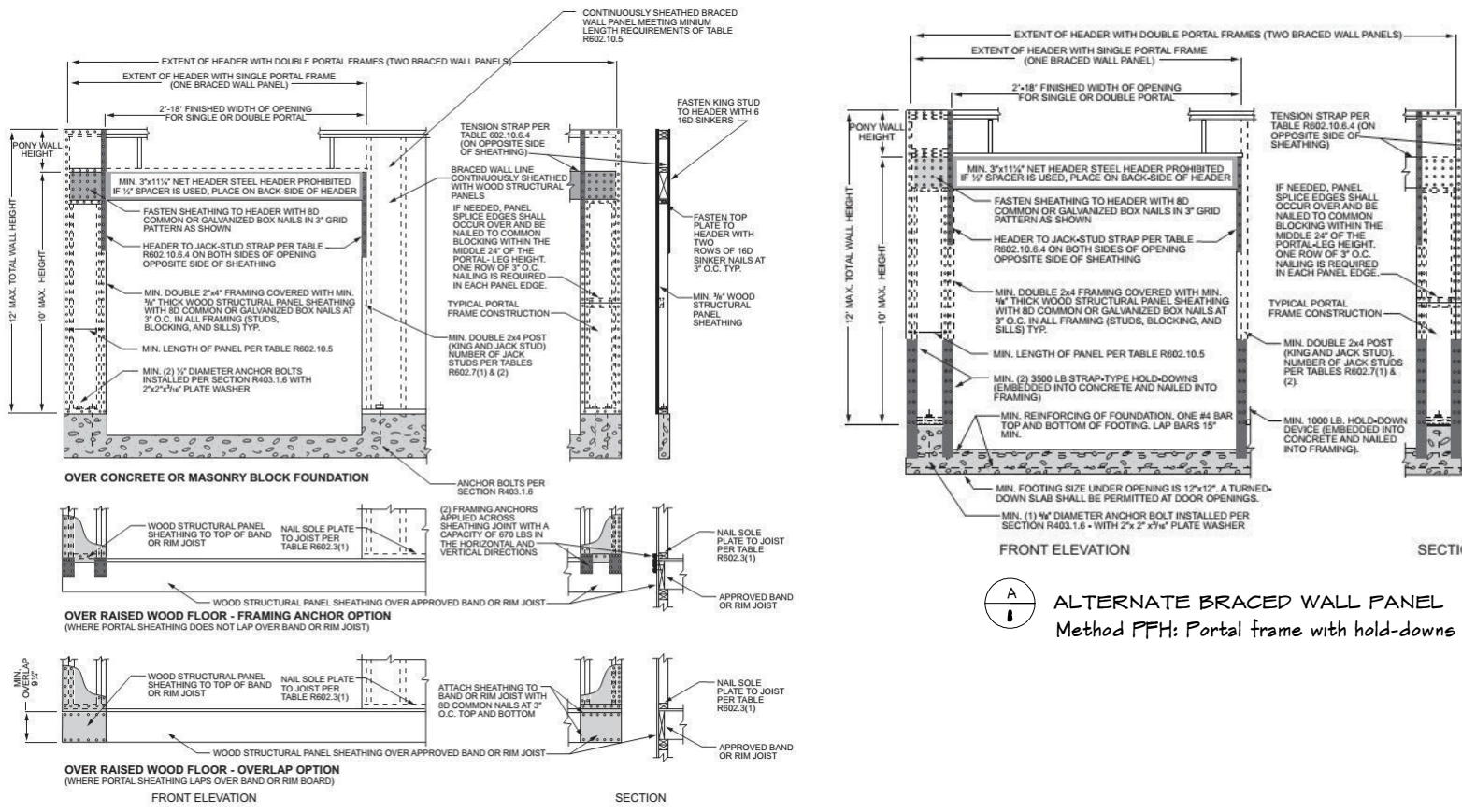


**REQUIREMENTS**

**Return panel:** 24" for braced wall lines sheathed with wood structural panels  
32" for braced wall lines sheathed with structural fiberboard

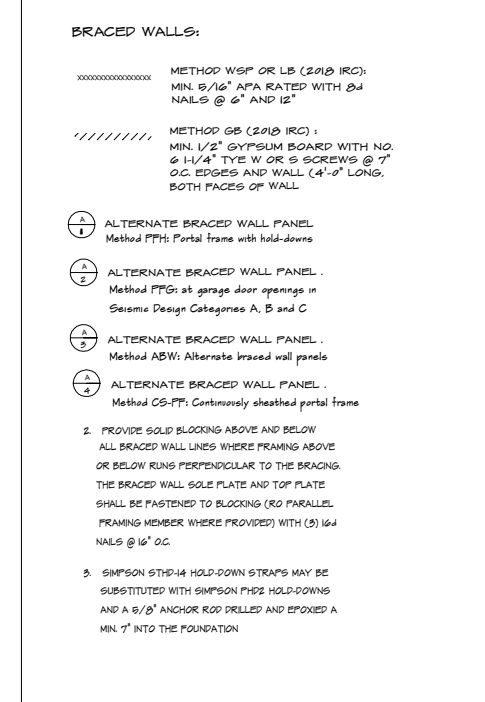
**Distance D:** 24" for braced wall lines sheathed with wood structural panels  
32" for braced wall lines sheathed with structural fiberboard

**Hold-down device:** 800 lbs capacity fastened to the edge of the braced wall panel closest to the corner and to the foundation or floor framing below

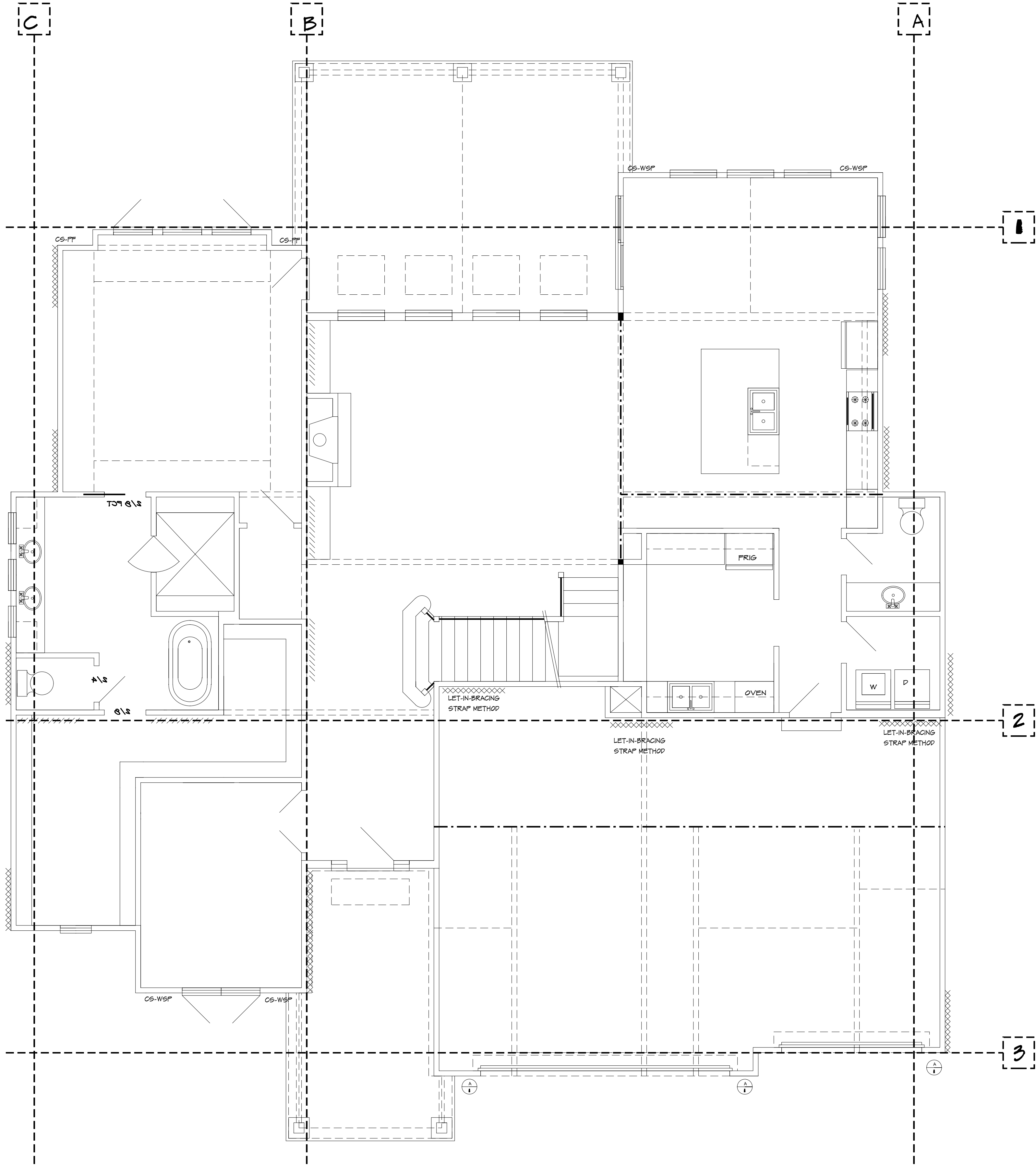


**ALTERNATE BRACED WALL PANEL**  
Method CS-PP: Continuously sheathed portal frame

BRACED WALL LINES				
WALL	SPACING	TYPE	REQ'D	PROVIDED
1	17' 0"	CS-PP/WSP	6' 6"	16' 0"
2	24' 6"	LB/GB	9' 6"	16' 0"
3	7' 6"	WSP/PTH	3' 6"	10' 0"
A	17' 0"	WSP	6' 6"	16' 0"
B	23' 0"	WSP/GB	9' 6"	24' 0"
C	11' 0"	WSP	3' 6"	16' 0"



**ALTERNATE BRACED WALL PANEL**  
Method PTH: Portal frame with hold-downs



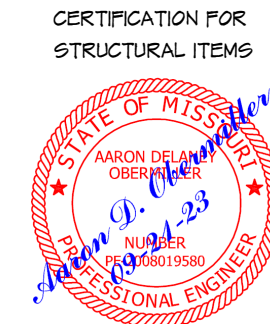
FIRST FLOOR  
**WALL BRACE PLAN**  
1/4" = 1' 0"

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HOME BUYER:	DATE DRAWN:	PLAN NO.	SHEET NO.
	DATE REVISED:	SF-7036	7
	DESIGNER:	FILE NAME:	APPROX. SQ.FT.
BUILDER:		70% WBSI	
SUB-DIVISION:			

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









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-FRAME 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" ARC 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' SO. FT. AND WHOSE BOTTOM EDGE IS LESS THAN 18" ABOVE THE FLOOR OR WALKING SURFACE WITH IN 3x6'

EMERGENCY 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 AREAS 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 2678, 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 LUMBER SIZES ARE FOR #2 D-FIR-LARCH ALL HEADERS TO BE MIN. (2) #2 D-FIR 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 SPP H/16" @ 16" ALL CEILING JOISTS NOT CALLED OUT ARE TO BE 2x6 SPP H/16" @ 16" ALL VAULTS TO BE FURRED DOWN w/2x4 MATERIAL TO PROVIDE FOR R-9.9 INSULATION ALL EXTERIOR AND LOAD BEARING WINDOW AND DOOR HEADERS TO BE (2) 2x10 D-FIR #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"x16d2") NAILS AND THE RAFTER SHALL BE NAILED TO THE TOP WALL PLATE WITH (3) 8d COM (2 1/2"x16d2") NAILS. CEILING JOISTS SHALL BE CONTINUOUS OR SECURELY JOINED WITH (3) 16d COM (3 1/2"x16d2") NAILS WHERE THEY MEET OVER INTERIOR PARTITIONS AND ARE NAILED TO ADJACENT RAFTERS TO PROVIDE A CONTINUOUS TIE 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"x16d2") NAILS EX. 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. IRC IS DESIGNED FOR 20 P.S.F. ROOF SNOW LOAD (MIN) MIN 20 YR. ASPHALT SHINGLES

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EXCEPTIONS:  
WINDOWS WHOSE OPENINGS 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 2090. 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 M1607. 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 3'0" IS A 3'0"x6'0" WINDOW). ALL DOORS SHOWN IN FEET AND INCHES (IE 2'06" DOOR IS A 2'-8"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 GLASS 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/NONOPERABLE  
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 THE 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 1241.  
8. WINDOW MANUFACTURER TO CONFIRM EXACT SAFTEY AND EGRESS WINDOW LOCATIONS PER LOCAL CODES.

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. IRC IS DESIGNED FOR 20 P.S.F. ROOF SNOW LOAD (MIN) MIN 20 YR. ASPHALT SHINGLES

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 6/0 ELECTRICAL OUTLETS ON EXTERIOR, IN UNFINISHED BASEMENT, IN BATHROOMS, ABOVE KITCHEN COUNTERS, IN GARAGE, AND WITHIN 6" OF ANY SINK. 4. ALL EXTERIOR DOORS SERVED BY LANDING. 5. INSTALL CARBON MONOXIDE DETECTORS PER IRC SECTION 916 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 914. 7. PROVIDE A "UPER" GROUND PER IRC 360.8.1. 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"x16d2 NAILS @ 7" STAGGERED WITH (7) 3 1/4"x16d2 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 3/4" MAXIMUM RISER HEIGHT OF STAIRWAYS SHALL NOT EXCEED 7 3/4" MAXIMUM RISER HEIGHT OF STAIRWAYS SHALL NOT EXCEED 7 3/4" 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 BEARINGS TO BE (1) 2x4 EA END UNLESS NOTED OTHERWISE.

EXCEPTIONS:  
WINDOWS WHOSE OPENINGS 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 2090. WINDOWS THAT ARE PROVIDED WITH WINDOW OPENING CONTROL DEVICES THAT COMPLY WITH SECTION R312.2.2.

EXHAUST AIR  
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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 M1607. 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

GENERAL FOUNDATION REQUIRMENTS

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 BLOCKING @ 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 360.8.1. EGRESS WELL REQUIREMENTS:  
A. IF THE VERTICAL DISTANCE FROM TP HOLDER TO SQUARE SUMP FIT WHICH EXTENDS A MIN 24" BELOW BASEMENT FLOOR. B. ADD DRAIN TO DAYLIGHT OR SUMP PUMP.

ENERGY REQUIRMENTS

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 M1602.2. B. THE BUILDING THERMAL ENVELOPE IS REQUIRED TO BE SEALED THE BUILDING THERMAL ENVELOPE IS REQUIRED TO BE SEALED PER IRC SECTION M1602.4. 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-15  
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-15 (w/ R-10 CONTINUOUS)  
BASEMENT WALLS R-15 (w/ R-10 CONTINUOUS)  
SLABS N/R  
DUCTWORK R-8  
WINDOWS U 0.55 (MAX)  
SHGC 0.40 (MAX)  
SKYLIGHTS U 0.55 (MAX)  
SHGC 0.40 (MAX)

TABLE R602.4(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	3-6d (2 1/2" x 0.1137")	---
2	Ceiling joist to plate, toe nail	3-6d (2 1/2" x 0.1137")	---
3	Ceiling joist not attached to parallel rafter, fast over partition, face nail	3-10d	---
4	Collar tie to rafter, face nail or 1 1/4" x .25 edge ridge strap	3-10d (3" x 0.1637")	---
5	Rafter or roof truss to plate, toe nail	3-16d box nails (3 1/2" x 0.1387") or 3-16d 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 stud at intersecting wall corners, face nail	16d (3 1/2" x 0.1387")	12" o.c.
9	Built-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	4-6d (2 1/2" x 0.1137")	---
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	Sole plate to joist or blocking, face nail	16d (3 1/2" x 0.1387")	16" o.c.
16	Sole plate to joist or blocking at braced wall panels	3-16d (3 1/2" x 0.1387")	16" o.c.
17	Stud to sole plate, toe nail	3-6d (2 1/2" x 0.1137") or 3-16d (3 1/2" x 0.1387")	---
18	Top or sole plate to stud, and nail	2-16d (3 1/2" x 0.1387")	---
19	Top plates, laps at corners and intersections, face nail	2-10d (3" x 0.1237")	---
20	1" brace to each stud and plate, face nail	2-6d (2 1/2" x 0.1137") 2 staples 1 1/2" x "	---
21	2" x 6" sheathing to each bearing, face nail	2-6d (2 1/2" x 0.1137") 2 staples 1 1/2" x "	---
22	2" x 8" sheathing to each bearing, face nail	2-6d (2 1/2" x 0.1137") 3 staples 1 1/2" x "	---
23	Wider than 2" x 3" sheathing to each bearing, face nail	3-6d (2 1/2" x 0.1137") 4 staples 1 1/2" x "	---
Floor			
24	Joist to sill or girder, toe nail	3-6d (2 1/2" x 0.1137")	---
25	Rim joist to top plate, toe nail (roof applications also)	8d (2 1/2" x 0.1137")	6" o.c.
26	Rim joist or blocking to sill plate, toe nail	8d (2 1/2" x 0.1137")	6" o.c.
27	1" x 6" subfloor or less to each joist, face nail	2-6d (2 1/2" x 0.1137") 2 staples 1 1/2" x "	---
28	2" subfloor to joist or girder, blind and face nail	2-16d (3 1/2" x 0.1387")	---
29	2" plank (blank & beam - floor & roof)	2-16d (3 1/2" x 0.1387")	at each bearing
30	Built-up girders and beams, 2-inch lumber layers	15d (3" x 0.1289")	Nail each layer as follows: 32" o.c. at top and bottom and staggered. Two nails at ends and at each splice.
31	Jugder strip supporting joist or rafter	3-16d (3 1/2" x 0.1387")	At each joist or rafter

TABLE R602.4(1)—Combined Fastener Schedule for Structural Members				
ITEM	DESCRIPTION OF BUILDING MATERIALS	DESCRIPTION OF FASTENERS N x "	SPACING OF FASTENERS	
			Edges (inches)	Intermediate supports* (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 0.1137") nail (nail only) 8d common (2 1/2" x 0.1317") nail (nail only)	6	12
33	1/2" - 1"	8d common nail (2 1/2" x 0.1317")	6	12
34	1 1/8" - 1 1/2"	16d common (3" x 0.1487") nail 8d (2 1/2" x 0.1317") deformed nail	6	12
Other wall sheathing*				
35	1/2" structural cellular fiberboard sheathing	1 1/2" galvanized roofing nail, 7/16" crown or 1" crown anvil 14 ga, 1 1/2" long	3	6
36	5/8" structural cellular fiberboard sheathing	1 1/2" galvanized roofing nail, 7/16" crown or 1" crown anvil 14 ga, 1 1/2" long	3	6
37	1/2" gypsum sheathing	1 1/2" galvanized roofing nail, shade galvanized, 1 1/2" long, 1 1/2" crown, 1 1/2" x 16"	7	7
38	5/8" gypsum sheathing	1 1/2" galvanized roofing nail, shade galvanized, 1 1/2" long, 1 1/2" crown, 1 1/2" x 16"	7	7
Wood structural panels, combination subfloor underlayment to framing				
39	3/4" and less	8d deformed (2" x 0.1207") nail 8d common (2 1/2" x 0.1317")	6	12
40	7/8" - 1"	8d common (2 1/2" x 0.1317") nail 8d deformed (2 1/2" x 0.1207") nail 16d common (3" x 0.1487") nail	6	12
41	1 1/8" - 1 1/4"	16d common (3" x 0.1487") nail 8d deformed (2 1/2" x 0.1207") 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.

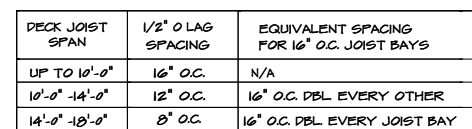
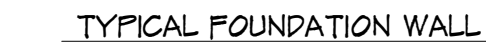
Foundation Wall Reinforcement Schedule - Table 2									
Vertical reinforcement spacing 60 psf soil									
Concrete strength/Grade Reinforcement #4 bar		8 inch thick wall			10 inch thick wall				
3,000 psi / Grade 40		16	12	NP	24	16	12		
3,500 psi / Grade 40		16	12	NP	24	24	12		
3,000 psi / Grade 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 5-12 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 FIG. 2).

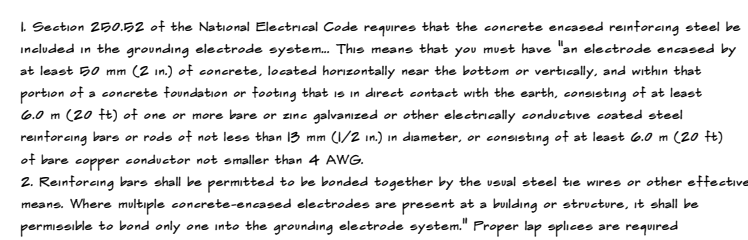
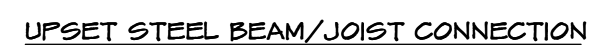
SEE ELEVATION FOR WALL HEIGHTS  
  
NOTE.. ELECTRICAL SERVICE TO BE 200 AMP.  
  
NOTE.. DOUBLE JOIST UNDER ALL PARALLEL WALLS ABOVE UNLESS NOTED  
  
S.D. = SMOKE DETECTOR

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 W/NO 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.	

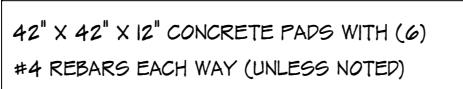




TYPICAL CANTILEVER FRAMING W/ DECK ATTACHMENT



UFER GROUNDING SECTION



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

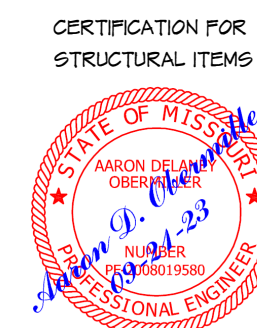
FOOTING FOR 12" THICK WALL TO BE DESIGNED BY OTHERS



NOTE..SEE SPECS FOR SPECIFIC APPLICATIONS.

BUILDER/CONTRACTOR IS RESPONSIBLE TO CHECK ALL DIMENSIONS FOR ACCURACY THROUGHOUT FLOORS, FOUNDATION AND ELEVATIONS ALSO VERIFY ALL BEAM, HEADERS, TRUS LOCATIONS, AND COLUMN SIZES. BUILDER/CONTRACTOR TO CHECK FOR COMPLIANCE WITH CONTRACTS, CITY, AND NATIONAL CODES. BUILDER/CONTRACTOR ACCEPTS ALL RESPONSIBILITY FOR LOT PLACEMENT, SET BACKS, AND FLOOD PLANS. BUILDER/CONTRACTOR AND HOME OWNER ACCEPTS RESPONSIBILITY FOR ANY AND ALL COPYRIGHT INFRINGEMENTS OR RESSEMBLANCES TO OTHER COPYRIGHTED PLANS. BUILDER/CONTRACTOR ACCEPTS RESPONSIBILITY FOR ANY ON SITE CHANGES MADE TO THE ORIGINAL PLANS.

2147 NW Killarney Ln.  
Lees Summit Mo. 64081  
Lot 133  
The Estates at Woodside Ridge



RELEASE FOR CONSTRUCTION  
AS NOTED FOR PLAN REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
10/02/2023