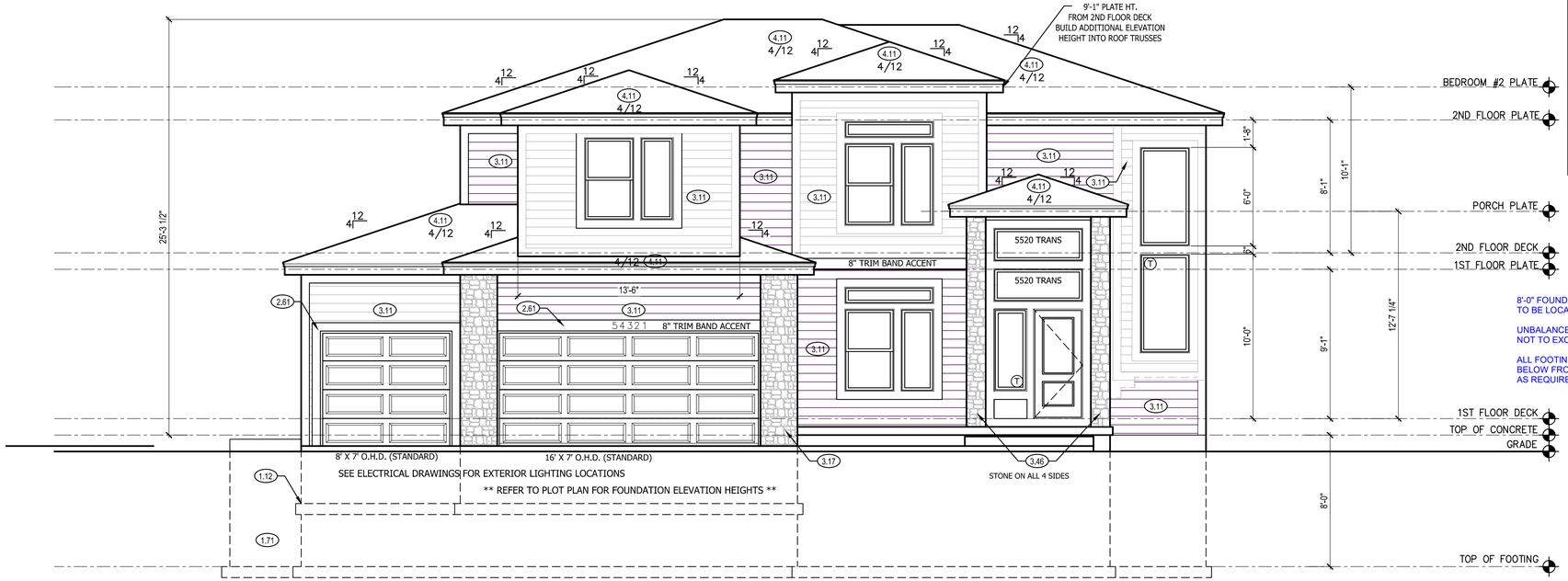
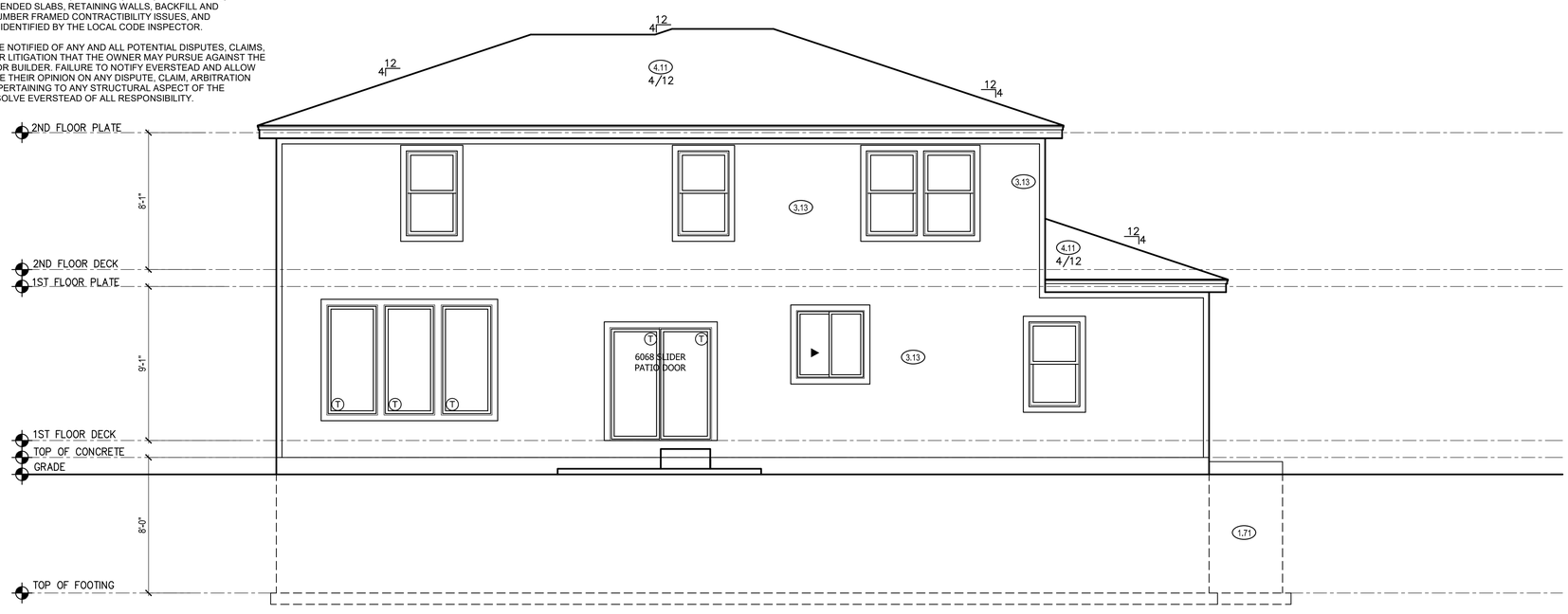


FRONT ELEVATION (2)
SCALE: 1/4" = 1'-0"



REAR ELEVATION (1)
SCALE: 1/4" = 1'-0"

WINDOWS FULL SCHEDULE
LOWER LEVEL
(1) 4040 SLIDER

MAIN LEVEL
(2) 3060 FIX CLR TEMP
(3) 3066 FIX CLR TEMP
(2) 3050 SH CLR
(1) 4040 SLIDER
(1) 2050 FIX CLR TEMP
(1) 2050 FIX CLR
(1) 5510 FIX CLR TRANS
(2) 5520 FIX TRANS
2ø6ø FV. PATIO DOOR 2X6 JAMB
3ø6ø FRONT DOOR 2X6 JAMB

UPPER LEVEL
(6) 3050 SH CLR
(2) 2050 FIX CLR
(2) 3060 FIX CLR
(1) 5510 FIX CLR TRANS

STRUCTURAL DETAIL SHEET INDEX

S000	STRUCTURAL GENERAL NOTES
S501	FOUNDATION DETAILS
S503	GARAGE/SLAB DETAILS
S510	FRAMING STANDARDS
S520	DECK DETAILS
S530	BRACING DETAILS
S550	FASTENING SCHEDULE
S560	EGRESS WINDOW

8'-0" FOUNDATION WALL EXCEPT AT STEP DOWNS TO BE LOCATED IN THE FIELD

UNBALANCED FILL
NOT TO EXCEED 4'-0" AT UNRESTRAINED WALLS

ALL FOOTING TO BE
BELOW FROST LINE (3'-0")
AS REQUIRED PER SITE

FRONT & REAR ELEVATION NOTES

1.12 TOP OF FOOTING DEPTH DETERMINED PER SITE.

1.71 CONCRETE WINDOW WELL FOR EGRESS WITH LADDER. PROVED SLEEVE THROUGH WALL FOR FOUNDATION DRAIN. TOP OF WINDOW WELL TO BE 3" BELOW TOP OF FOUNDATION.

2.61 5/4"X8" LP SMART TRIM.

3.11 LP SMART LAP SIDING WITH 5/4X6 LP SMART TRIM AROUND DOORS, WINDOWS, AND CORNERS UNLESS NOTED OTHERWISE.

3.13 LP SMART PANEL SIDING WITH 3/4X4 LP SMART TRIM AROUND DOORS, WINDOWS, AND CORNERS UNLESS NOTED OTHERWISE. BOTTOM OF SIDING SHALL BE A MINIMUM OF 6" ABOVE GRADE.

3.17 MANUFACTURED STONE VENEER.

3.46 1'-2" X 2'-0" BOX COLUMN WRAPPED IN MANUFACTURER STONE VENEER

4.11 MINIMUM ROOFING COMPOSITION- 30 YR COMPOSITE SHINGLES ON 15# FELT ON 1/2" OSB SHEATHING OR AS REQUIRED BY CODE.

STRUCTURAL NOTES:

1. ALL CONSTRUCTION SHALL CONFORM TO 2018 INTERNATION RESIDENTIAL CODE OR ATTACHED ENGINEER SPECIFICATIONS WHERE APPLICABLE.

ELEVATIONS:

1. GARAGE DOORS SHALL MEET DASMA OR ULTIMATE DESIGN WIND SPEED OF 115 MPH REQUIREMENTS.
2. WALL FRAMING SHALL BE DOUGLAS FIR LARCH #2 OR SOUTHERN YELLOW PINE #1 UNLESS OTHERWISE NOTED.
3. IN BEARING WALLS, STUDS WHICH ARE NOT MORE THAN TEN FEET IN LENGTH SHALL BE SPACED NOT MORE THAN IS SPECIFIED BY IRC TABLE R602.3(5) FOR CORRESPONDING STUD SIZE.
4. WATER-RESISTIVE EXTERIOR WALL BARRIER IN WALL SECTION SHALL COMPLY WITH IRC R703.2.
5. WHEN APPLICABLE, CONTINUOUS STUDS BETWEEN FLOOR AND ROOF/CEILING DIAPHRAGM SHALL COMPLY WITH IRC R602.3.
6. ALL UNMARKED HEADERS SHALL BE A MINIMUM #2 DOUGLAS FIR LARCH OR SOUTHERN YELLOW PINE #1 (2) 2 X 10 ON LOAD BEARING WALLS.
7. SHIPLAP SIDING MUST BE FASTENED AT BOTH UNDERLAP AND OVERLAP.

GENERAL NOTES

DIMENSIONAL LUMBER IS LABELED PER INDUSTRY STANDARDTERMINOLOGY. ACTUAL LUMBER SIZING IS EXPECTED TO VARY PER VENDOR.

WINDOW SIZES ARE WRITTEN IN FEET AND INCHES PER INDUSTRY STANDARDS. EX: 3050 SH = 3'-0" X 5'-0" SINGLE HUNG, 3066 FIX = 3'-0" X 6'-6" FIXED.

SHEET INDEX

FINISHED	
MAIN FLOOR	1337
UPPER LEVEL	1392
FINISHED STAIRS TO LOWER LEVEL	27
TOTAL	2756
UNFINISHED	
LOWER LEVEL - UNFINISHED	1206
PATIO	144
GARAGE	636

ENGINEER	TRUSS	I-JOIST
EVERSTEAD	PREMIER	NA

REVISIONS		
NO.	DATE	DESCRIPTION
1		
2		
3		
4		

Andrea Sessler
Digitally signed by Andrea Sessler
DN: CN=Andrea Sessler, OU=Development, OU=LS Users, DC=COLS, DC=LOC
Date: 2025.08.15 17:21:39-05'00'

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CPG DBA
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A CLAYTON COMPANY
120 SE 30TH ST.
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816-246-6700

ADDRESS:
1039 SW FIORD DR.
LEE'S SUMMIT, MO 64082

CAROLINA
MODERN PRAIRIE
HIGHLAND MEADOWS #196

PROFESSIONAL SEAL:

STATE OF MISSOURI
JAHMIR T. CLARK
NUMBER PE-2025019943
PROFESSIONAL ENGINEER

EVERSTEAD IS RESPONSIBLE FOR STRUCTURAL SPECIFICATIONS ONLY. ARCHITECTURAL PLANS WERE PROVIDED BY OTHERS.

EVERSTEAD
3741 NE TROON DR.
LEES SUMMIT, MO 64064
816-399-4901

VERSION:
5.2

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A1.0

8'-0" FOUNDATION WALL EXCEPT AT STEP DOWNS
TO BE LOCATED IN THE FIELD

UNBALANCED FILL
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ALL FOOTING TO BE
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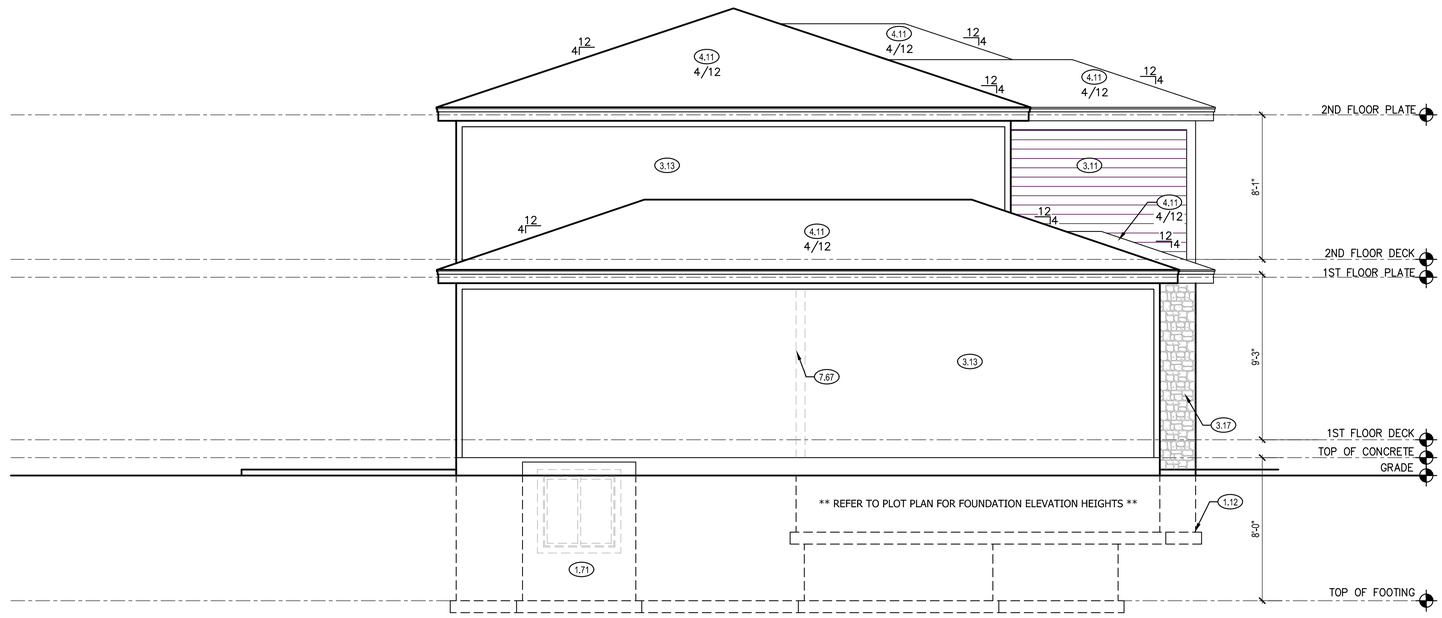
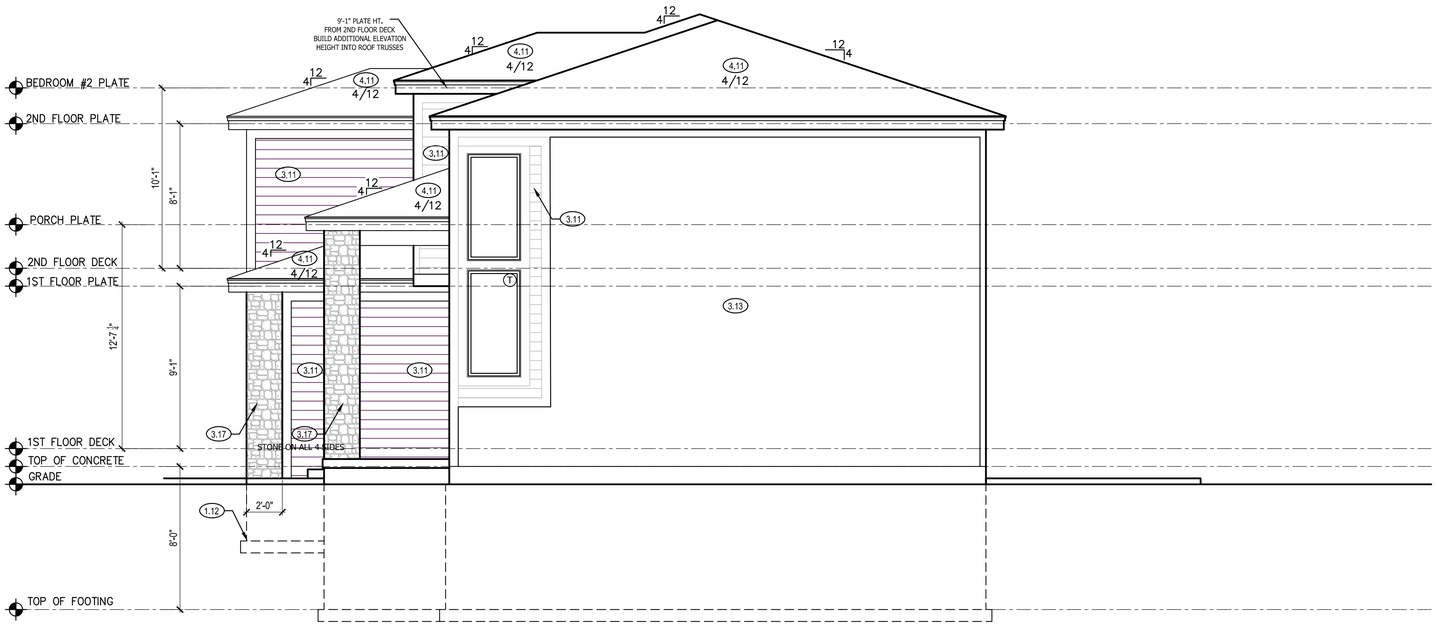


LEFT ELEVATION (2)
SCALE: 1/4" = 1'-0"



RIGHT ELEVATION (1)
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LEFT & RIGHT SIDE ELEVATION NOTES

1.12 TOP OF FOOTING DEPTH DETERMINED PER SITE.

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4.11 MINIMUM ROOFING COMPOSITION- 30 YR COMPOSITE SHINGLES ON 15# FELT ON 1/2" OSB SHEATHING OR AS REQUIRED BY CODE.

7.67 BACK WALL OF GARAGE.

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GENERAL NOTES

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WINDOW SIZES ARE WRITTEN IN FEET AND INCHES PER INDUSTRY STANDARDS. EX: 3050 SH = 3'-0" X 5'-0" SINGLE HUNG, 3066 FIX = 3'-0" X 6'-6" FIXED.

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CAROLINA
MODERN PRAIRIE
HIGHLAND MEADOWS #196

PROFESSIONAL SEAL:

STATE OF MISSOURI
JAHMIR T. CLARK
NUMBER PE-2025019843
PROFESSIONAL ENGINEER

EVERSTEAD IS RESPONSIBLE FOR STRUCTURAL SPECIFICATIONS ONLY. ARCHITECTURAL PLANS WERE PROVIDED BY OTHERS.

EVERSTEAD
3741 NE TROON DR.
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816-399-4901

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GENERAL PLAN NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO 2018 INTERNATIONAL RESIDENTIAL CODE OR ATTACHED ENGINEER SPECIFICATIONS WHERE APPLICABLE.
2. ALL DIMENSIONS ARE FROM FACE OF STUD U.N.O.
3. MINIMUM DOUBLE JOIST UNDER INTERIOR NON-LOAD BEARING WALLS.
4. CANTILEVERS, OVER BEAMS, AND DOOR JAMBS SHALL BE BLOCKED.
5. CEILING JOISTS SHALL BE 2x6 @ 16" O.C. U.N.O.
6. WALL CONSTRUCTION SHALL BE CAPABLE OF ACCOMMODATING ALL LOADS IMPOSED ACCORDING TO IRC R301.
7. EXTERIOR WALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH IRC 602 & FIGURES R602.3(1) AND R602.3(2).
8. ANY WOOD MEMBERS IN CONTACT WITH CONCRETE OR MASONRY (OR THE FURRING THEY ARE ATTACHED TO) SHALL BE OF DECAY RESISTANT MATERIAL.
9. INTERIOR NON-LOAD BEARING WALLS SHALL BE ISOLATED FROM THE FLOOR FRAMING ABOVE UNLESS THE INTERIOR NON-LOAD BEARING WALL RESTS DIRECTLY ON A FOOTING.
10. SOLID BLOCKING BETWEEN JOISTS AT 48" O.C. AND EXTEND BLOCKING ONE JOIST BAY PAST EACH SIDE OF KITCHEN ISLAND
11. ALL JOIST HANGERS TO BE SIMPSON LUS HANGERS UNO

INTERIOR LOAD BEARING WALL

ISOLATED FOOTINGS AND COLUMN PADS				
SYM	PIER PAD SIZE	DEPTH	MINIMUM REINFORCEMENT GRADE 40 KSI STEEL	SCHEDULE 40 STEEL COLUMN, MIN FY = 35 KSI
A	30"x30"	1'-0"	(5) #4 BAR E.W.	3" DIAMETER
B	36"x36"	1'-0"	(6) #4 BAR E.W.	3" DIAMETER
C	42"x42"	1'-2"	(7) #4 BAR E.W.	3" DIAMETER
D	48"x48"	1'-4"	(8) #4 BAR E.W.	3" DIAMETER
E	54"x54"	1'-4"	(9) #4 BAR E.W.	3.5" DIAMETER
F	60"x60"	1'-6"	(10) #4 BAR E.W.	3.5" DIAMETER

ISOLATED FOOTINGS AND COLUMN PADS		
SYM	PIER DIAMETER	DEPTH
G	12"	3'-0"
H	16"	3'-0"
J	18"	3'-0"
K	24"	3'-0"
L	28"	3'-0"

*DENOTES STEEL COLUMN NOT REQUIRED
COLUMN AND PAD SIZES ARE FOR A MAXIMUM COLUMN HEIGHT OF 10'. COLUMNS GREATER THAN 10' REQUIRE A SEPARATE ENGINEERED DESIGN. FOOTINGS A-F SPACING OF 6" O.C. WITH 3" CLEAR COVER.

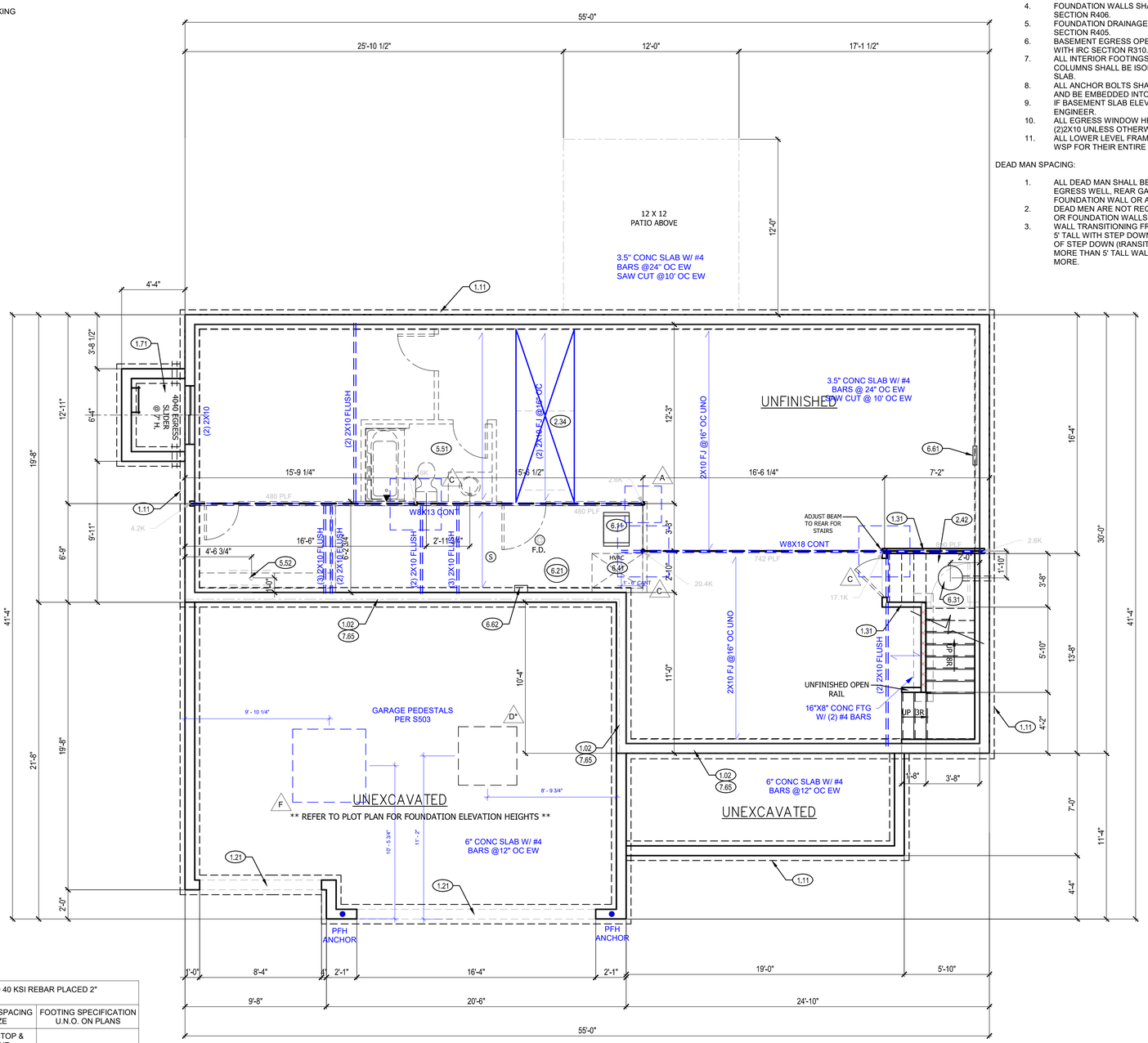
8'-0" FOUNDATION WALL EXCEPT AT STEP DOWNS TO BE LOCATED IN THE FIELD

UNBALANCED FILL
NOT TO EXCEED 4'-0" AT UNRESTRAINED WALLS

ALL FOOTING TO BE BELOW FROST LINE (3'-0") AS REQUIRED PER SITE

ALL NON TREATED LUMBER SIZES ARE DOUGLAS FIR-LARCH #2 OR SOUTHERN YELLOW PINE #1 UNLESS OTHERWISE NOTED

ALL TREATED/ROT RESISTANT LUMBER SIZES ARE #2 TREATED SOUTHERN YELLOW PINE, UNLESS OTHERWISE NOTED



FOUNDATION WALL AND FOOTING TABLE (3000 PSI CONCRETE AND 40 KSI REBAR PLACED 2" FROM INSIDE TENSION FACE)				
WALL TYPE	NOMINAL WALL THICKNESS	VERTICAL SPACING AND SIZE	HORIZONTAL SPACING AND SIZE	FOOTING SPECIFICATION U.N.O. ON PLANS
3'-6" TRENCH FOOTING	16"	#4 BARS @18" O.C.	(2) #4 BARS TOP & BOT. CONT.	16" x 8" CONC. FTG. W/ (2) #4 BARS CONT.
< 6'-0" WALL	8"	#4 BARS @36" O.C.	#4 BARS @ 24" O.C.	
8'-0" WALL		#4 BARS @16" O.C.		
9'-0" WALL		#4 BARS @12" O.C.		
10'-0" WALL		#4 BARS @8" O.C.		

STRUCTURAL NOTES:

1. ALL CONSTRUCTION SHALL CONFORM TO 2018 INTERNATION RESIDENTIAL CODE OR ATTACHED ENGINEER SPECIFICATIONS WHERE APLLICABLE.

FOUNDATION NOTES:

1. ALL FOOTINGS MEET OR EXCEED MINIMUM FROST DEPTH OF 36".
2. SOIL BEARING CAPACITY SHALL BE 1500 PSF.
3. COMPRESSSIVE STRENGTH OF CONCRETE FC COMPRESSIVE STRENGTH SHALL BE DAMPPROOFED. DAMPPROOFING SHALL EXTEND FROM THE EDGE OF THE FOOTING TO THE FINISHED GRADE (R-406.1). METHOD OF DAMPPROOFING OR WATERPROOFING SHALL BE A MINIMUM 6-MIL. THICK MOISTURED BARRIER OVER POROUS GRAVEL BASE UNDER BASEMENT FLOOR SLAB PER R405.2.2. LAP JOINTS SHALL BE MINIMUM 6".
4. FOUNDATION WALLS SHALL BE DAMPPROOFED PER IRC SECTION R406.
5. FOUNDATION DRAINAGE WILL BVE IN ACCORDANCE WITH IRC SECTION R405.
6. BASEMENT EGRESS OPENINGS SHALL BE IN ACCORDANCE WITH IRC SECTION R310.1
7. ALL INTERIOR FOOTINGS OF LOAD BEARINGS WALLS AND COLUMNS SHALL BE ISOLATED FROM THE BASEMENT FLOOR SLAB.
8. ALL ANCHOR BOLTS SHALL NOT BE SPACED MORE THAN 3' O.C. AND BE EMBEDDED INTO THE CONCRETE A MINIMUM OF 7".
9. IF BASEMENT SLAB ELEVATION IS ABOVE GRADE CONSULT ENGINEER.
10. ALL EGRESS WINDOW HEADERS ON LOWER LEVEL TO BE (2)2X10 UNLESS OTHERWISE NOTED.
11. ALL LOWER LEVEL FRAMED WALLS TO BE BRACED USING CS-WSP FOR THEIR ENTIRE LENGTH.

DEAD MAN SPACING:

1. ALL DEAD MAN SHALL BE SPACED NO MORE THAN 16' FROM EGRESS WELL, REAR GARAGE WALL, 24" RETURN ON FOUNDATION WALL OR ANOTHER DEAD MAN.
2. DEAD MEN ARE NOT REQUIRED ON EXTERIOR GARAGE WALLS OR FOUNDATION WALLS THAT ARE 5' OR LESS.
3. WALL TRANSITIONING FROM ELSS THAN 5' TALL TO MORE THAN 5' TALL WITH STEP DOWNS: A DEAD MAN IS REQUIRED WITHIN 8' OF STEP DOWN (IRANSITIONING FROM LESS THAN 5' TALL TO MORE THAN 5' TALL WALL LOCATION) ON WALL 5' TALL OR MORE.

FOUNDATION PLAN NOTES

1.02	HOLD SILL PLATE BACK 2-1/2"
1.11	CONTINUOUS CONCRETE FOOTING
1.21	RECESS TOP OF FOUNDATION WALL
1.31	2X4 STUD WALL WITH TREATED SILL PLATE
1.71	CONCRETE WINDOW WELL FOR EGRESS WITH LADDER. PROVED SLEEVE THROUGH WALL FOR FOUNDATION DRAIN. TOP OF WINDOW WELL TO BE 3" BELOW TOP OF FOUNDATION.
2.34	PROVIDE ADDITIONAL BRACING FOR ISLAND ABOVE.
2.41	CURB STAIR SYSTEM WITH OPEN HANDRAILS
2.42	FIRE RATED SHEETROCK UNDER STAIRS
5.51	DRAIN LINE ONLY FOR FUTURE USE. LOCATION TO BE MARKED WITH REBAR AND CUT FLUSH TO FLOOR FINISH.
5.52	PLUMBING FLANGE ABOVE. HEADER ACROSS JOISTS AS NEEDED.
6.11	DIRECT FURNACE. FUEL BURNING APPLIANCES SHALL BE DIRECT VENTED TO EXTERIOR FOR COMBUSTION AIR.
6.21	WATER HEATER.
6.31	SUMP PIT AND PUMP. PROVIDE ELECTRICAL GFCI PROTECTION. PROVIDE SLEEVE THROUGH FOOTING.
6.41	HVAC CHASE ABOVE
6.61	200 AMP ELECTRICAL PANEL. LOCATION TO BE DETERMINED ON SITE.
6.62	UFER GROUND- VERIFY LOCATION WITH PROJECT MANAGER.
7.65	LINE OF FLOOR ABOVE

GENERAL NOTES

BACK WATER VALVES REQUIRED ON ALL BASEMENT PLUMBING FIXTURES. PROVIDE MEANS OF CONTROLLING PRESSURE CAUSED BY THERMAL EXPANSION.

ALL SILLS & SLEEPERS SUPPORTED ON CONCRETE OR MASONRY SHALL BE OF DECAY-RESISTANT MATERIALS.

DIMENSIONAL LUMBER IS LABELED PER INDUSTRY STANDARD TERMINOLOGY. ACTUAL LUMBER SIZING IS EXPECTED TO VARY PER VENDOR.

ALL INTERIOR NON-LOAD BEARING, NON-BRACED, NON-CABINET WALLS ARE ALLOWED AT 24" O.C.

SMOKE AND CARBON MONOXIDE DETECTORS SHOW ON PLANS ARE TO BE CONSIDERED RECOMMENDATIONS ONLY. FINAL PLACEMENT IS TO BE DETERMINED BY MUNICIPAL REQUIREMENTS.

WINDOW SIZES ARE WRITTEN IN FEET AND INCHES PER INDUSTRY STANDARDS. EX: 3050 SH = 3'-0" X 5'-0" SINGLE HUNG, 3066 FIX = 3'-0" X 6'-6" FIXED.

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PROFESSIONAL SEAL:

STATE OF MISSOURI
JAHMIR T. CLARK
NUMBER PE-2025019843
PROFESSIONAL ENGINEER

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3741 NE TROON DR.
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5. CEILING JOISTS SHALL BE 2x6 @ 16" O.C. U.N.O.
6. WALL CONSTRUCTION SHALL BE CAPABLE OF ACCOMMODATING ALL LOADS IMPOSED ACCORDING TO IRC R301.
7. EXTERIOR WALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH IRC 602 & FIGURES R602.3(1) AND R602.3(2).
8. ANY WOOD MEMBERS IN CONTACT WITH CONCRETE OR MASONRY (OR THE FURRING THEY ARE ATTACHED TO) SHALL BE OF DECAY RESISTANT MATERIAL.
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11. ALL JOIST HANGERS TO BE SIMPSON LUS HANGERS UNO

INTERIOR LOAD BEARING WALL

WALL BRACING NOTES:

1. WALL BRACING IS DESIGNED IN ACCORDANCE WITH IRC R602.10
2. BRACING METHODS SHALL BE PER PLAN AND SHALL BE CONSTRUCTED IN CONFORMANCE WITH 2018 IRC R602.10.4 AND R602.10.5
3. FOR METHOD CS-WSP STRUCTURAL PANEL SHEATHING SHALL BE INSTALLED ON ALL SHEATHABLE SURFACES ON ONE SIDE OF THE BRACED WALL LINE INCLUDING AREAS ABOVE AND BELOW OPENINGS AND GABLE END WALLS. END CONDITIONS SHALL MEET THE REQUIREMENTS OF R602.10.7 AND DETAIL 9-S400.
4. ALL HORIZONTAL PANEL JOINTS SHALL OCCUR OVER AND BE NAILED TO COMMON FRAMING OR BLOCKING WITH AN APPROPRIATE PANEL EDGE-NAILING SCHEDULE IN ACCORDANCE WITH IRC R602.10.4.4
5. INTERIOR FINISH OF EXTERIOR WALLS SHALL BE MINIMUM 1/2" GYPSUM BOARD INSTALLED ON THE INTERIOR SIDE.

BRACING METHODS

BRACING CS-WSP PER IRC R602.10

BRACING LIB PER IRC R602.10
MINIMUM LIB LENGTH PER 2018 IRC TABLE R602.10.5:
- 55" - 8' TALL WALL HEIGHT
- 62" - 9' TALL WALL HEIGHT
- 69" - 10' TALL WALL HEIGHT

BRACING PFH PER IRC R602.10.6.2

BRACING CS-PF PER IRC R602.10.6.4

BRACING WSP PER IRC R602.10 (4' MIN PANEL LENGTH, UNO) (PARTIAL PANELS PER IRC R602.10.5.2, NOTED ON PLANS W/ LENGTH)

ENGINEERED BRACED WALL PANEL: 3/8" THICK WOOD STRUCTURAL PANEL SHEATHING, FASTEN W/ 8d COMMON NAILS SPACED 6" OC @ PANEL EDGES AND 12" OC IN FIELD

ALL NON TREATED LUMBER SIZES ARE DOUGLAS FIR-LARCH #2 OR SOUTHERN YELLOW PINE #1 UNLESS OTHERWISE NOTED

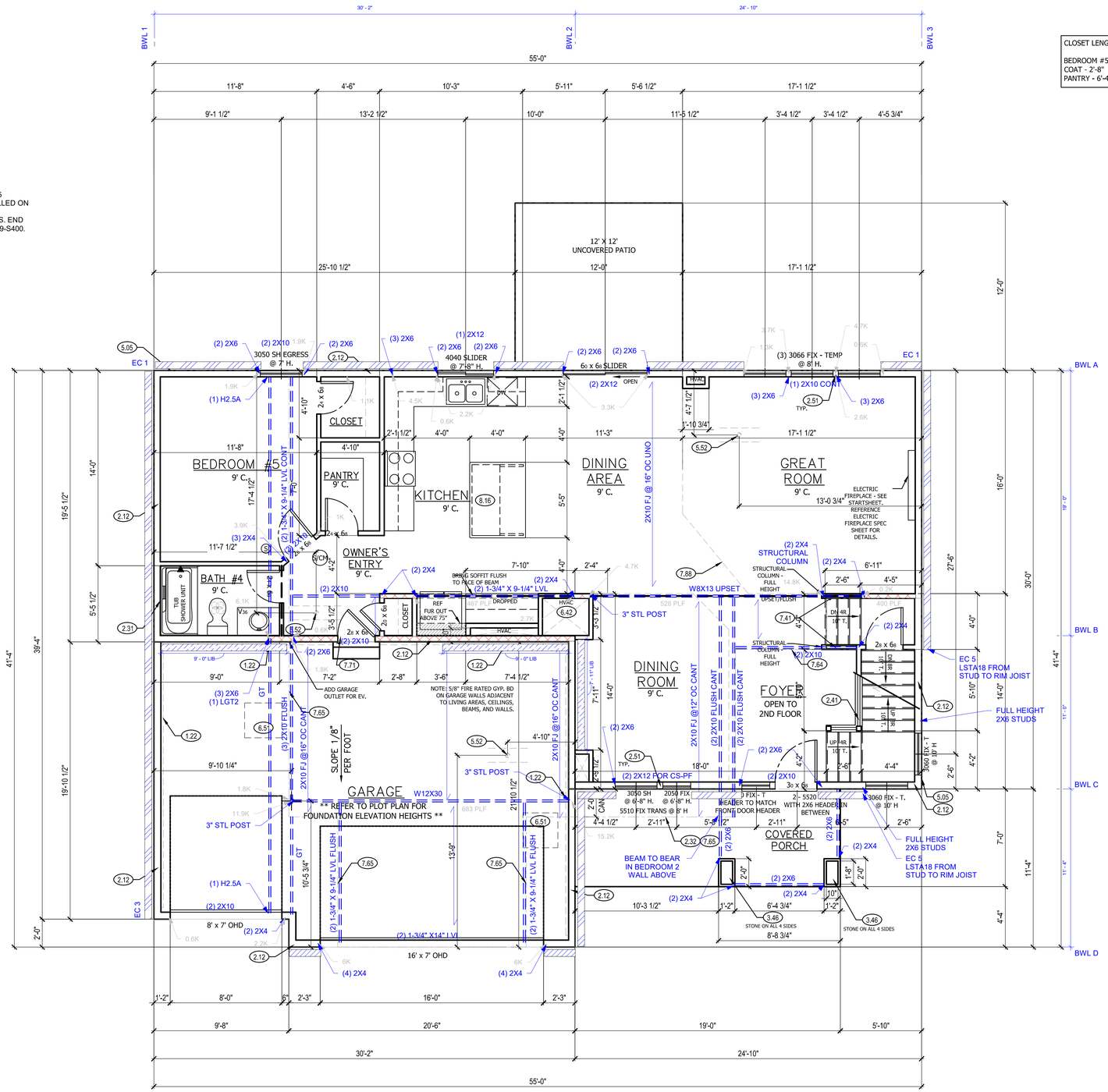
ALL TREATED/ROT RESISTANT LUMBER SIZES ARE #2 TREATED SOUTHERN YELLOW PINE, UNLESS OTHERWISE NOTED

IRC TABLE N1102.1.2 (R402.1.2) INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT (PARTIAL) AND ENERGY CONSERVATION CODE COMPLIANCE

CLIMATE ZONE	FENESTRATION U-FACTOR	SKYLIGHT U-FACTOR	GLAZED FENESTRATION SHGC	CEILING AND ATTICS R-VALUE	VAULTS R-VALUE	WOOD FRAME WALL R-VALUE	FLOOR R-VALUE	BASEMENT WALL R-VALUE	SLAB R-VALUE & DEPTH	CRAWL SPACE WALL R-VALUE	DUCTWORK R-VALUE
4 EXCEPT MARINE	.32	.55	.40	49	49	20 OR 13+5H	19	10/13	10, 2 FT	10/13	8

CLOSET LENGTHS

BEDROOM #5 - 4'-4 1/2"
COAT - 2'-8"
PANTRY - 6'-4 1/2", 4'-2 1/2"



MAIN FLOOR PLAN 1
SCALE: 1/4" = 1'-0"

MAIN FLOOR PLAN NOTES

1.22 EXPOSED TOP OF FOUNDATION WALL.
2.12 2X6 STUD WALL
2.31 SIX SIDED TUB ASSEMBLY INCLUDING THERMAL BARRRIER ON EXTERIOR WALL TO 2" ABOVE TOP OF TUB DECK OR TUB/SHOWER UNIT
2.32 INSULATE CANTILEVER AS REQUIRED PRIOR TO BLOCKING
2.41 CURB STAIR SYSTEM
2.51 3 STUDS BETWEEN WINDOW UNITS
3.46 1'-2" X 2'-2" BOX COLUMN WRAPPED IN MANUFACTURER STONE VENEER
5.05 HOSE BIBB
5.52 PLUMBING FLANGE ABOVE. HEADER ACROSS JOISTS AS NEEDED.
6.42 HVAC FLOOR OPENING. HEADER OFF FLOOR JOISTS AS REQUIRED. BUMP TRUSSES AS NECESSARY FOR HVAC ACCESS.
6.51 1'-10"X3'-0" MINIMUM ATTIC ACCESS WITH 3/4" BACKER BOARD AND 2 LATCHES. BUMP TRUSSES FOR ATTIC ACCESS. BACK WITH R-38 BATT AND SEAL WITH GASKET AT PERIMETER.
7.41 OPEN HANDRAILS
7.64 LINE OF BALCONY ABOVE
7.65 LINE OF FLOOR ABOVE
7.71 20 MINUTE FIRE RATED SOLID CORE WITH SELF-CLOSING HINGES
7.88 CHANGE IN FLOORING MATERIAL
8.16 CUSTOM ISLAND WITH LEGS - SEE PLAN FOR DETAILS

GENERAL NOTES

WINDOWS TO COMPLY WITH IRC R312.2 FOR FALL PROTECTION.

ALL EXTERIOR WALLS, INTERIOR BEARING WALLS, AND INTERIOR BRACED WALLS ARE AT 16" O.C. UNLESS NOTED OTHERWISE.

ALL INTERIOR NON-LOAD BEARING, NON-BRACED, NON-CABINET WALLS ARE ALLOWED AT 24" O.C.

ROOF AND CEILING FRAMING ARE PRE-ENGINEERED WOOD TRUSSES UNLESS NOTED OTHERWISE.

DIMENSIONAL LUMBER IS LABELED PER INDUSTRY STANDARD TERMINOLOGY. ACTUAL LUMBER SIZING IS EXPECTED TO VARY PER VENDOR.

PROVIDE BLOCKING AT ALL CEILING JUMPS FOR INSULATION.

2X6 EXTERIOR WALL OVER 12' SHALL BE DOUGLAS FIR #2.

SMOKE AND CARBON MONOXIDE DETECTORS SHOW ON PLANS ARE TO BE CONSIDERED RECOMMENDATIONS ONLY. FINAL PLACEMENT IS TO BE DETERMINED BY MUNICIPAL REQUIREMENTS.

WINDOW SIZES ARE WRITTEN IN FEET AND INCHES PER INDUSTRY STANDARDS. EX: 3050 SH = 3'-0" X 5'-0" SINGLE HUNG, 3066 FIX = 3'-0" X 6'-6" FIXED.

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CAROLINA
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HIGHLAND MEADOWS #196

PROFESSIONAL SEAL:

STATE OF MISSOURI
JAHMIR T. CLARK
NUMBER PE-2025019843
PROFESSIONAL ENGINEER

EVERSTEAD IS RESPONSIBLE FOR STRUCTURAL SPECIFICATIONS ONLY. ARCHITECTURAL PLANS WERE PROVIDED BY OTHERS.

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RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/15/2025 5:21:21

GENERAL PLAN NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO 2018 INTERNATIONAL RESIDENTIAL CODE OR ATTACHED ENGINEER SPECIFICATIONS WHERE APPLICABLE.
2. ALL DIMENSIONS ARE FROM FACE OF STUD U.N.O.
3. MINIMUM DOUBLE JOIST UNDER INTERIOR NON-LOAD BEARING WALLS.
4. CANTILEVERS, OVER BEAMS, AND DOOR JAMBS SHALL BE BLOCKED.
5. CEILING JOISTS SHALL BE 2x6 @ 16" O.C. U.N.O.
6. WALL CONSTRUCTION SHALL BE CAPABLE OF ACCOMMODATING ALL LOADS IMPOSED ACCORDING TO IRC R301.
7. EXTERIOR WALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH IRC 602 & FIGURES R602.3(1) AND R602.3(2).
8. ANY WOOD MEMBERS IN CONTACT WITH CONCRETE OR MASONRY (OR THE FURRING THEY ARE ATTACHED TO) SHALL BE OF DECAY RESISTANT MATERIAL.
9. INTERIOR NON-LOAD BEARING WALLS SHALL BE ISOLATED FROM THE FLOOR FRAMING ABOVE UNLESS THE INTERIOR NON-LOAD BEARING WALL RESTS DIRECTLY ON A FOOTING.
10. SOLID BLOCKING BETWEEN JOISTS AT 48" O.C. AND EXTEND BLOCKING ONE JOIST BAY PAST EACH SIDE OF KITCHEN ISLAND
11. ALL JOIST HANGERS TO BE SIMPSON LUS HANGERS UNO

INTERIOR LOAD BEARING WALL

WALL BRACING NOTES:

1. WALL BRACING IS DESIGNED IN ACCORDANCE WITH IRC R602.10
2. BRACING METHODS SHALL BE PER PLAN AND SHALL BE CONSTRUCTED IN CONFORMANCE WITH 2018 IRC R602.10.4 AND R602.10.5
3. FOR METHOD CS-WSP STRUCTURAL PANEL SHEATHING SHALL BE INSTALLED ON ALL SHEATHABLE SURFACES ON ONE SIDE OF THE BRACED WALL LINE INCLUDING AREAS ABOVE AND BELOW OPENINGS AND GABLE END WALLS. END CONDITIONS SHALL MEET THE REQUIREMENTS OF R602.10.7 AND DETAIL 9-S400.
4. ALL HORIZONTAL PANEL JOINTS SHALL OCCUR OVER AND BE NAILED TO COMMON FRAMING OR BLOCKING WITH AN APPROPRIATE PANEL EDGE-NAILING SCHEDULE IN ACCORDANCE WITH IRC R602.10.4.4
5. INTERIOR FINISH OF EXTERIOR WALLS SHALL BE MINIMUM 1/2" GYPSUM BOARD INSTALLED ON THE INTERIOR SIDE.

BRACING METHODS

BRACING CS-WSP PER IRC R602.10

BRACING LIB PER IRC R602.10
MINIMUM LIB LENGTH PER 2018 IRC TABLE R602.10.5:
- 55" - 8' TALL WALL HEIGHT
- 62" - 9' TALL WALL HEIGHT
- 69" - 10' TALL WALL HEIGHT

BRACING PFH PER IRC R602.10.6.2

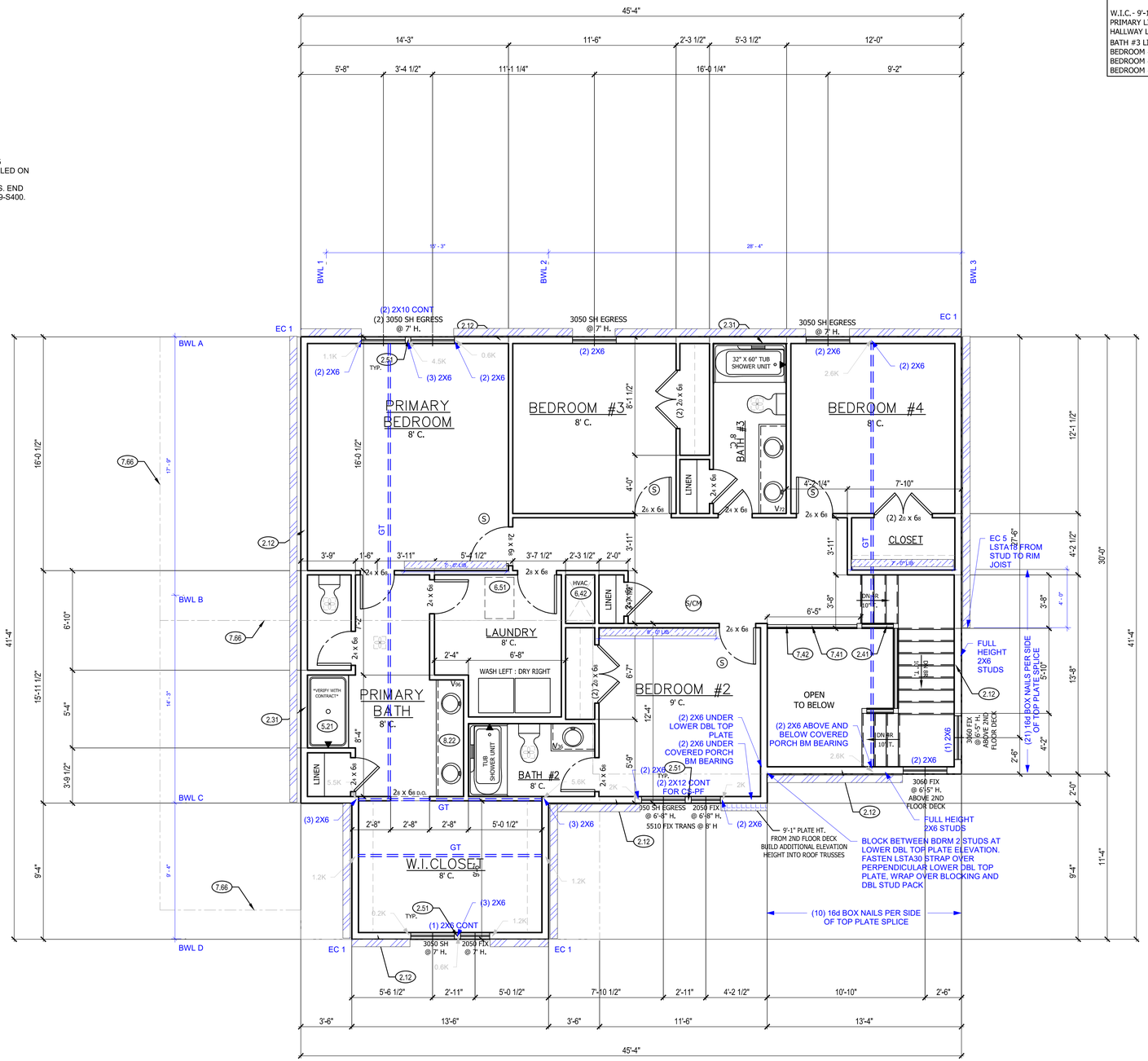
BRACING CS-PF PER IRC R602.10.6.4

BRACING WSP PER IRC R602.10 (4' MIN PANEL LENGTH, UNO) (PARTIAL PANELS PER IRC R602.10.5.2, NOTED ON PLANS W/ LENGTH)

ENGINEERED BRACED WALL PANEL: 3/8" THICK WOOD STRUCTURAL PANEL SHEATHING, FASTEN W/ 8d COMMON NAILS SPACED 6" OC @ PANEL EDGES AND 12" OC IN FIELD

ALL NON TREATED LUMBER SIZES ARE DOUGLAS FIR-LARCH #2 OR SOUTHERN YELLOW PINE #1 UNLESS OTHERWISE NOTED

ALL TREATED/ROT RESISTANT LUMBER SIZES ARE #2 TREATED SOUTHERN YELLOW PINE, UNLESS OTHERWISE NOTED



UPPER LEVEL PLAN 1
SCALE: 1/4" = 1'-0"

CLOSET LENGTHS

W.I.C. - 9'-1/2" X 2
PRIMARY LINEN - 3'-0"
HALLWAY LINEN - 3'-4"
BATH #3 LINEN - 3'-8 1/2"
BEDROOM #2 - 6'-3 1/2"
BEDROOM #3 - 7'-8"
BEDROOM #4 - 7'-1"

UPPER FLOOR PLAN NOTES

2.12 2X6 STUD WALL
2.31 SIX SIDED TUB ASSEMBLY INCLUDING THERMOPLY ON EXTERIOR WALL TO 2" ABOVE TOP OF TUB DECK OR TUB/SHOWER UNIT
2.41 CURB STAIR SYSTEM
2.51 3 STUDS BETWEEN WINDOW UNITS
5.21 FIBERGLASS BASE WITH TILE WALLS.
6.42 HVAC FLOOR OPENING. HEADER OFF FLOOR JOISTS AS REQUIRED. BUMP TRUSSES AS NECESSARY FOR HVAC ACCESS.
6.51 1'-10"X3'-0" MINIMUM ATTIC ACCESS WITH 3/4" BACKER BOARD AND 2 LATCHES. BUMP TRUSSES FOR ATTIC ACCESS. BACK WITH R-38 BATT AND SEAL WITH GASKET AT PERIMETER.
7.41 OPEN HANDRAILS
7.42 PROVIDE ADDITIONAL BLOCKING UNDER SUBFLOOR @ 6'-0" O.C. FOR OPEN HANDRAIL.
7.66 LINE OF FLOOR BELOW
8.22 CONTINUOUS FLAT VANITY

IRC TABLE N1102.1.2 (R402.1.2) INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT (PARTIAL) AND ENERGY CONSERVATION CODE COMPLIANCE											
CLIMATE ZONE	FENESTRATION U-FACTOR	SKYLIGHT U-FACTOR	GLAZED FENESTRATION SHGC	CEILING AND ATTICS R-VALUE	VAULTS R-VALUE	WOOD FRAME WALL R-VALUE	FLOOR R-VALUE	BASEMENT WALL R-VALUE	SLAB R-VALUE & DEPTH	CRAWL SPACE WALL R-VALUE	DUCTWORK R-VALUE
4 EXCEPT MARINE	.32	.55	.40	49	49	20 OR 13+5H	19	10/13	10, 2 FT	10/13	8

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GENERAL NOTES

WINDOWS TO COMPLY WITH IRC R312.2 FOR FALL PROTECTION.

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DIMENSIONAL LUMBER IS LABELED PER INDUSTRY STANDARD TERMINOLOGY. ACTUAL LUMBER SIZING IS EXPECTED TO VARY PER VENDOR.

PROVIDE BLOCKING AT ALL CEILING JUMPS FOR INSULATION.

2X6 EXTERIOR WALL OVER 12' SHALL BE DOUGLAS FIR #2.

SMOKE AND CARBON MONOXIDE DETECTORS SHOW ON PLANS ARE TO BE CONSIDERED RECOMMENDATIONS ONLY. FINAL PLACEMENT IS TO BE DETERMINED BY MUNICIPAL REQUIREMENTS.

WINDOW SIZES ARE WRITTEN IN FEET AND INCHES PER INDUSTRY STANDARDS. EX: 3050 SH = 3'-0" X 5'-0" SINGLE HUNG, 3066 FIX = 3'-0" X 6'-6" FIXED.

TRUSS FRAMED ROOF NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO 2018 INTERNATIONAL RESIDENTIAL CODE OR ATTACHED ENGINEER SPECIFICATIONS WHERE APPLICABLE.
2. DESIGNED FOR LIGHT ROOF COVERING, UNO. SEE G000 FOR MINIMUM LOADING.
3. ALL EXTERIOR AND/OR LOAD BEARING WALL HEADERS SHALL BE MIN. (2) #2 2X10 UNO.
4. CONSULT ENGINEER IF TRUSSES BEAR ON INTERIOR WALLS SHOWN AS NON-LOAD BEARING ON APPROVED POINTS.
5. PROVIDE 2X SOLID BLOCKING SUPPORT BELOW ALL POINT LOADS CONTINUOUS TO BEARING STRUCTURE AND/OR FOUNDATION BELOW.
6. WOOD TRUSSES SHALL BE IN ACCORDANCE WITH IRC 802.10.
7. CONSULT ENGINEER IF TRUSSES BEAR ON INTERIOR WALLS SHOWN AS NON-LOAD BEARING ON APPROVED PRINTS.
8. GIRDER TRUSSES MUST HAVE LOAD CARRIED DOWN TO THE FOUNDATION OR LOAD SUPPORTING MEMBER. STUD PACK / COLUMN SHOWN ON PLANS.
9. ROOF COVERING SHALL BE ASPHALT SHINGLES AND SHALL COMPLY WITH IRC 2018 SECT. R905.2
10. MINIMUM ROOF SLOPE FOR ASPHALT SHINGLES SHALL BE 2:12.
11. ROOF SLOPES IN BETWEEN 4:12 AND 2:12 SHALL REQUIRE DOUBLE UNDERLAYMENT IN ACCORDANCE WITH IRC 2018 TABLE R905.1.1(2).
12. EVERSTEAD STRUCTURAL SCOPE ENDS AT TOP PLATE FOR ROOF TRUSSES.

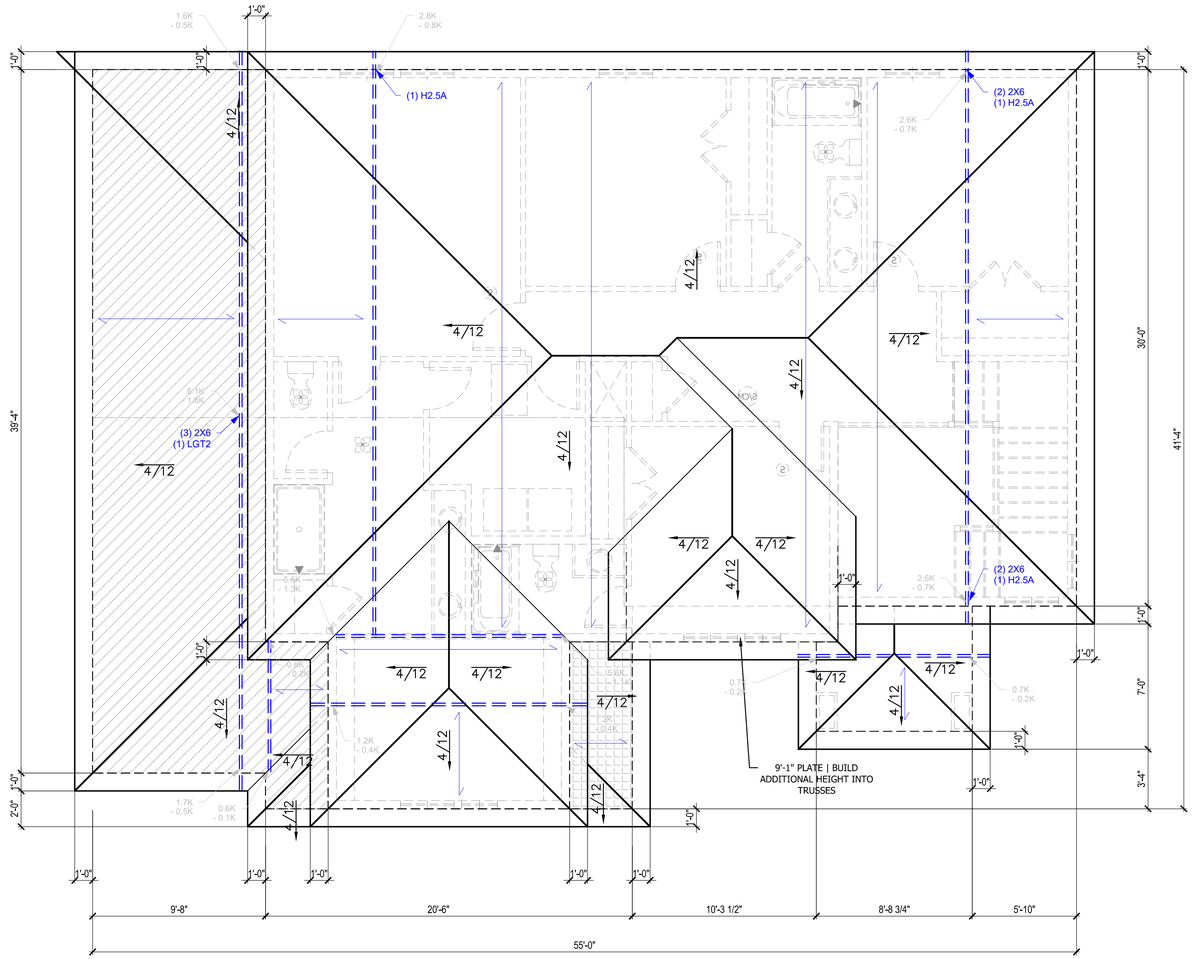
TRUSS DIRECTION

GIRDER TRUSS LOCATION

INTERIOR LOAD BEARING WALL

TRUSS SCREWS

1. TRUSS SCREWS MAY BE USED INSTEAD OF THE FASTENING NOTED IN TABLE R602.3(1)
2. TRUSS SCREWS MUST BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS.
3. BASIS OF DESIGN SHOWN ON PLANS:
   - A. SIMPSON STRONG DRIVE SDWC TRUSS SCREW
   - B. LENGTH: 6"
   - C. FASTENED THROUGH THE BOTTOM SIDE OF A # 2 DOUGLAS FIR - LARCH OR SOUTHERN YELLOW PINE #1 DOUBLE TOP PLATE INTO THE BEARING END OF A TRUSS
     - a. (1) 6" SCREW - MIN 835 LBS UPLIFT WHEN INSTALLED IN THE CENTER OF THE TOP PLATE ON A MAX 20 DEG. ANGLE FROM VERTICAL (INSTALLATION TYPE 1)
     - b. (2) 6" SCREWS - MIN 1195 LBS UPLIFT WHEN BOTH SCREWS ARE INSTALLED VERTIALLY INTO TRUSS. (INSTALLATION CONF. B)
4. TRUSS BEARING WITH UPLIFT THAT EXCEEDS THE TRUSS SCREW CAPACITY LISTED ABOVE MUST HAVE ADDITIONAL FASTENING, AS SHOWN ON PLAN.



ROOF PLAN 1
SCALE: 1/4" = 1'-0"

ROOF PLAN NOTES

4.11 MINIMUM ROOFING COMPOSITION– 30 YR COMPOSITE SHINGLES ON 15# FELT ON 1/2" OSB SHEATHING OR AS REQUIRED BY CODE.

4.31 BUILD CRICKET VALLEY AWAY FROM INTERSECTION FOR POSITIVE DRAINAGE.

VENTILATION AREA		
UPPER ROOF		1550
ROOF AREA 2		446
ROOF AREA 3		446

GENERAL NOTES

ROOF AND CEILING FRAMING ARE PRE-ENGINEERED ROOF TRUSSES.

ASPHALT SHINGLES MIN 2/12. FLASH ALL PENETRATIONS AND INTERSECTIONS.

VENTILATION:
ENCLOSED ATTICS SHALL HAVE CROSS VENTILATION FOR EACH SEPARATE SPACE BY VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN OR SNOW. VENTILATING OPENINGS SHALL BE PROVIDED WITH CORROSION-RESISTANT WIRE MESH, WITH 1/8" TO 1/4" OPENINGS. THE TOTAL FREE VENTILATING AREA SHALL NOT BE LESS THAN 1/150 OF THE AREA OF SPACE VENTILATED, EXCEPT WHERE THE VENTILATORS AREA LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED THE REQUIRED AREA MAY BE REDUCED TO 1/300.

BUILD CRICKET VALLEY AWAY FROM INTERSECTION FOR POSITIVE DRAINAGE. SEE FRAMING SPECIFICATIONS FOR DETAILS.

DIMENSIONAL LUMBER IS LABELED PER INDUSTRY STANDARD TERMINOLOGY. ACTUAL LUMBER SIZING IS EXPECTED TO VARY PER VENDOR.

PROVIDE BLOCKING AT ALL CEILING JUMPS FOR INSULATION.

PROVIDE FOAM INSULATION AT EXTERIOR WHERE MAIN LEVEL ROOF LINE MEETS UPPER LEVEL WALLS.

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A. GENERAL NOTES IRC 2018

A.1 PLANS SHALL COMPLY WITH 2018 INTERNATIONAL RESIDENTIAL CODE (IRC) WITH AMENDMENTS AS ADOPTED BY THE APPROPRIATE GOVERNING JURISDICTION. THE CONTRACTOR SHALL NOTIFY THE EVERSTEAD IF ANY CHANGES OR DEVIATIONS FROM THE PLAN ARE MADE DURING CONSTRUCTION. EVERSTEAD MAY REQUIRE REVISED DRAWING OR CALCULATIONS AT ITS DISCRETION. IF DISCREPANCIES ARE IDENTIFIED THE MOST CONSERVATIVE SPECIFICATION SHALL APPLY.

A.2 LOADING ASSUMPTIONS

DEAD

ROOF	10 PSF UNO
ROOF + CEILING (NO STORAGE)	15 PSF
ROOF + CEILING (STORAGE)	20 PSF
CEILING JOISTS (STORAGE)	10 PSF
EXTERIOR BALCONY / DECK	10 PSF
INTERIOR FLOOR (MAIN FLOOR)	15 PSF
INTERIOR FLOOR (UPPER FLOORS)	10 PSF
8” THICK MASONRY WALL	96 PSF
6” THICK MASONRY WALL	72 PSF
EXTERIOR LIGHT FRAMED WOOD WALLS	15 PSF
INTERIOR LIGHT FRAMED WOOD WALLS	10 PSF

(INTERIOR WALLS INCLUDED IN 15 PSF DEAD LOAD)

LIVE

ROOF LIVE LOAD	20 PSF
FLOOR LIVE LOAD	40 PSF (HABITABLE)
GARAGE	50 PSF WITH 2000 LB POINT LOAD
STORAGE	20 PSF (UNINHABITABLE)
GUARDRAIL:	
CONTINUOUS LINEAR	50 PLF
MAXIMUM POINT	200 LBS

SNOW

GROUND SNOW LOAD	20 PSF

WIND

VELOCITY	115 MPH
EXPOSURE CATEGORY	B

B. SOIL AND SITE ASSUMPTIONS

B.1 FOUNDATION DESIGN ASSUMES MINIMUM SOIL BEARING FOR THE SITE OF 1,500 PSF (2,000 PSF FOR KANSAS CITY, MO) UNLESS OTHERWISE NOTED. CONTRACTOR TO VISUALLY INSPECT THE SITE OR PROVIDE GEOTECHNICAL INVESTIGATION TO VERIFY MINIMUM ACCEPTABLE SOIL CONDITIONS FOR CL (SILTY CLAY) AS DEFINED BY 2018 IRC. THE CONTRACTOR IS RESPONSIBLE FOR ANY SOIL CONDITION THAT DOES NOT MEET THE MINIMUM REQUIREMENTS AND FOR CONTACTING EVERSTEAD.

B.2 ACCESSORY STRUCTURES WITH AN EAVE HEIGHT LESS THAN 10'-0" AND AN AREA LESS THAN 600 FT MAT PROVIDE A MINIMUM SOIL COVER OF 12 INCHES MEASURED FROM THE BOTTOM OF CONCRETE.

B.3 LATERAL SOIL PRESSURES UNLESS OTHERWISE NOTED

ACTIVE	60 PSF
AT REST	100 PSF

B.4 SITE GRADING SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM THE STRUCTURE AT A MINIMUM OF O.5% (6" IN THE FIRST 10'-0"). ALTERNATE APPROACHES MAY BE APPROVED IF THE ALTERNATE DESIGN IS EQUIVALENT IN EFFECTIVENESS AND PERFORMANCE, AND PROVIDES FOR POSITIVE SITE DRAINAGE.

C. FOUNDATION NOTES

C.1 FOUNDATION ANCHORAGE (IRC R403.1.6)

- SILL PLATES SHALL BE BOLTED TO THE FOUNDATION WALL WITH A MINIMUM ½” DIAMETER ANCHOR BOLTS EMBEDDED AT LEAST 7” INTO THE CONCRETE.
- BOLTS SHALL BE SPACED NO GREATER THAN 6’-0” O.C.
- THERE SHALL BE A MINIMUM OF TWO BOLTS PER PLATE SECTION, WITH A BOLT PLACED WITHIN 12” AND NOT CLOSER THAN 7 BOLT DIAMETERS OF THE END OF EACH PLATE SECTION.
- A PROPERLY SIZED NUT AND WASHER SHALL BE TIGHTENED ON EACH BOLT TO THE PLATE, (NOTE: 7” EMBEDMENT + 1-1/2” SILL PLATE + 3/4” FOR NUT AND WASHER EQUALS A 9-1/4” LONG BOLT).
- WALL BRACING METHODS (IRC R602) MAY REQUIRE ADDITIONAL ANCHORAGE.

C.2 CONCRETE SLABS

- CONCRETE SLABS PLACED ON FILL MATERIAL WHICH SHALL BE COMPARED TO ENSURE UNIFORM SUPPORT OF THE SLAB AND SHALL NOT EXCEED 24” OF COMPACTED GRANULATED MATERIAL (SAND OR GRAVEL) OR 8” OF EARTH:
  - THIS MAY OCCUR AT GARAGE FLOOR FILLS, OR OVER EXCAVATED AREAS UNDER FLOOR SLABS.
  - THE DESIGN AND INSTALLATION DETAILS IN THIS DOCUMENT (WHERE APPLICABLE BASED ON SIZE AND SPACING LIMITATIONS) MAY BE USED IN LIEU OF PROVIDING A SEPARATE DESIGN.
  - STRUCTURAL SLABS EXCEEDING THE SPANS AND CONDITIONS OF THE APPROVED DETAILS SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER.
- SLABS AT MAX 4’-0” OVER-DIG ADJACENT T0 FOUNDATION WALL:
  - WHERE SOIL IS EXCAVATED FOR A MAXIMUM DIMENSION OF 4’-0” HORIZONTALLY ADJACENT TO A FOUNDATION WALL, THE STANDARD OVER-DIG DETAIL MAY BE USED IN LIEU OF A COMPLETE STRUCTURAL SLAB.
  - SEE “TYPICAL FOOTING/FOUNDATION WALL/STANDARD SLAB AT MAX 4’-0” OVER-DIG” DETAIL.

C.3 VAPOR RETARDER / BARRIER (IRC R506.2.3)

- A 6 MILLIMETER POLYETHYLENE OR APPROVED VAPOR RETARDER WITH JOINTS LAPPED A MINIMUM OF 6” IS REQUIRED BETWEEN THE CONCRETE FLOOR SLAB AND THE BASE COURSE OR PREPARED SUBGRADE, (NOT REQUIRED FOR GARAGE SLABS OR DETACHED UNHEATED ACCESSORY BUILDINGS).

C.4 FOOTINGS

- THE BOTTOM OF ALL FOOTINGS SHALL EXTEND NOT LESS THAN 36” BELOW GRADE FOR FROST PROTECTION (IRC R403.1.4).
- FOOTINGS FOR FREESTANDING ACCESSORY STRUCTURES WITH AN AREA OF 600 SQ. FT. OR LESS AND AN EAVE HEIGHT OF 10’-0” OR LESS SHALL EXTEND BELOW GRADE A MINIMUM OF 12”.
- EXTERIOR WALLS, BEARING WALLS, COLUMNS AND PIERS SHALL BE SUPPORTED ON CONTINUOUS SOLID MASONRY OR CONCRETE FOOTINGS, OR APPROVED STRUCTURAL SYSTEM TO SAFELY SUPPORT THE IMPOSED LOADS AND SHALL BE SIZED AND REINFORCED IN ACCORDANCE WITH THIS STANDARD OR SHALL BE ENGINEERED DESIGN.
- FOOTINGS UNDER FOUNDATION WALLS SHALL BE CONTINUOUS AROUND THE STRUCTURE AND FROM ONE LEVEL TO THE NEXT.
- THE CONTINUOUS TRANSITIONS BETWEEN FOOTINGS AT DIFFERENT LEVELS ENCLOSING USABLE SPACE SHALL BE MADE BY APPROVED SOLID JUMPS OR SUPPORT SYSTEMS TO PROVIDE SAFE SUPPORT OF THE STRUCTURE.
- SEE “TYPICAL FOOTING/FOUNDATION WALLS/STANDARD SLAB AT MAXIMUM 4” OVER-DIG” AND “FOOTING JUMP” DETAILS.

C.5 CONCRETE

- ALL CONCRETE CONSTRUCTION SHOULD CONFORM TO ACI 318-14 (OR ACI 332) OR 2018 IRC.
- THE MINIMUM CONCRETE 28 DAY COMPRESSIVE STRENGTH SHALL BE AS SPECIFIED IN IRC TABLE R402.2.

C.5 CONCRETE (CONT.)

- CONCRETE MIX TO UTILIZE A MAXIMUM WATER-CEMENT MATERIALS RATIO OF 0.45 FOR ALL APPLICATIONS. ADMIXTURES SHALL NOT CONTAIN ANY CHLORIDES.
- CONCRETE POURED AGAINST AN EXISTING SURFACE SHOULD BE ROUGHENED TO A MINIMUM OF 1/4 INCH AMPLITUDE.
- REBAR PLACEMENT SHALL BE AS FOLLOWS:
  - CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3.0 IN CLR
  - CONCRETE EXPOSED TO EARTH OR WEATHER 1.5 IN CLR
  - NOT EXPOSED TO WEATHER OR GROUND
    1) SLABS, WALLS, JOISTS 3/4 IN CLR
    2) BEAMS, COLUMNS 1.5 IN CLR
- CONCRETE MIX DESIGN SHALL BE 6% (±1%) AIR-ENTRAINED FOR GARAGE SLABS, FOOTINGS, WALLS, OR FLATWORK EXPOSED TO WEATHER
- SHORING AND SUPPORTING FORMWORK SHALL NOT BE REMOVED FROM HORIZONTAL MEMBERS BEFORE CONCRETE STRENGTH REACHES 70% OF STRENGTH DETERMINED BY CYLINDERS OR 28 DAYS.
- ALL FOUNDATION WALLS ENCLOSING BELOW GRADE SPACE SHALL BE DAMPPROOFED. THE DAMPPROOFING SHALL EXTEND FROM THE EDGE OF THE FOOTING TO THE FINISHED GRADE. (IRC R406.1)

C.6 CONCRETE WALLS WITH REINFORCEMENT STEEL

- REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 40.
- SMOOTH BARS OR WELDED WIRE FABRIC SHALL CONFORM TO ASTM 185.
- 90 DEG. HOOK SHOWN IN DRAWINGS SHALL BE STANDARD PER ACI 318-14.
  - STRAIGHT EXTENSION LENGTH = 12X BAR DIA.
  - BEND DIAMETER = 12X BAR DIA.
- HOOKED DOWELS:
  - HOOKED DOWELS FROM FOUNDATIONS TO WALL SHALL BE PROVIDED TO MATCH VERTICAL WALL REINFORCING AND EXTENDED TO 3” CLEAR FROM BOTTOM OF FOUNDATION.
  - HOOKED DOWELS MATCH SLAB REINFORCING FROM SLAB TO WALLS OR SLAB TO FOUNDATION.
- PROVIDE (2) - #5 BARS AROUND PERIMETER OF ALL SUSPENDED SLABS.
- WHERE SPLICES ARE NECESSARY IN REINFORCEMENT, THE LENGTH OF LAP SPLICE SHALL BE IN ACCORDANCE WITH TABLE R608.5.4(1) AND FIGURE R608.5.4(1). THE MAXIMUM GAP BETWEEN NONCONTACT PARALLEL BARS AT A LAP SPLICE SHALL NOT EXCEED THE SMALLER OF ONE-FIFTH THE REQUIRED LAP LENGTH AND 6 INCHES (152MM) [SEE FIGURE R608.5.4.(1)].
- TOP HORIZONTAL REINFORCEMENT SHALL BE PLACED WITHIN 12” FROM THE TOP OF THE WALL.
- HORIZONTAL WALL REINFORCEMENT SHALL TERMINATE AT THE END OF THE WALL WITH A STANDARD HOOK

C.7 COLD WEATHER CONCRETE

- COLD WEATHER IS DEFINED AS THREE CONSECUTIVE DAYS WHERE THE AVERAGE DAILY TEMPERATURE DROPS BELOW 40 DEGREES FAHRENHEIT AND NOT ABOVE 50 DEGREES FAHRENHEIT FOR MORE THAN HALF OF ANY ONE OF THOSE THREE DAYS.
- COLD WEATHER CONCRETE WORK SHALL CONFORM TO ACI 306.
- ALL MATERIALS AND EQUIPMENT REQUIRED FOR PROTECTION SHALL BE AVAILABLE AT THE PROJECT SITE BEFORE COLD WEATHER CONCRETING BEGINS.
- THE CONCRETE MIX DESIGN PROVIDED BY THE SUPPLIER SHALL AT A MINIMUM REACH THE AVERAGE 28 DAY MIX DESIGN COMPRESSIVE STRENGTH IN MINIMUM 72 HOURS OR 2000 PSI – WHICHEVER IS GREATER.
- THE TEMPERATURE OF CONCRETE AT PLACEMENT SHALL BE A MINIMUM OF 55 DEGREES FAHRENHEIT .
- THE MINIMUM CONCRETE TEMPERATURE AT THE TIME OF MIXING SHALL NOT BE BELOW 65 DEGREES FAHRENHEIT.
- ALL SNOW, ICE AND FROST MUST BE REMOVED PRIOR TO PLACING CONCRETE.
- THE CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION FOR CONCRETE AGAINST FREEZING AND MAINTAIN A CONCRETE TEMPERATURE OF 55 DEGREES FAHRENHEIT FOR A 72 HOUR PERIOD AFTER CONCRETE PLACEMENT. THIS MAY BE ACHIEVED WITH THE USE OF INSULATING BLANKETS AND/OR THE USE OF TEMPORARY HEATERS.
- GROUND TEMPERATURE AT THE TIME OF PLACEMENT OF SLAB OR FOOTINGS SHALL NOT BE LESS THAN 35 DEGREES FAHRENHEIT.
- INSULATION, FORMS AND HEATERS MAY BE REMOVED AFTER 72 HOURS .
- MAINTAIN ADEQUATE PROTECTION OF SUB GRADE AND ADEQUATE DRAINAGE AWAY FROM EXPOSED CONCRETE ELEMENT TO PREVENT FREEZING.

C.8 FOOTNOTES

- VERTICAL REINFORCEMENT FOR CONCRETE WALLS THAT ARE NOT FULL HEIGHT AND FOR REINFORCEMENT SPACED 24” O.C. MAY BE PLACED IN THE MIDDLE OF THE WALL. OTHER WALLS SHALL HAVE VERTICAL REINFORCEMENT PLACED AS FOLLOWS:
  - 8” WALL – MINIMUM 2" FROM TENSION FACE
  - 10” WALL – MINIMUM 6-3/4” FROM THE OUTSIDE FACE
  - EXTEND BARS TO WITHIN 8” OF THE TOP OF THE WALL
- HORIZONTAL REINFORCEMENT:
  - ONE BAR SHALL BE PLACED WITHIN 12” OF THE TOP OF THE WALL
  - OTHER BARS SHALL BE EQUALLY SPACED WITH SPACING NOT TO EXCEED 24” O.C.
  - HORIZONTAL BARS SHOULD BE AS CLOSE TO THE TENSION FACE AS POSSIBLE (INTERIOR); AND BEHIND THE VERTICAL REINFORCEMENT (I.E. 2” FROM INSIDE FACE)
  - SUPPLEMENTAL REINFORCEMENT AT CORNERS – PLACE 1 #4 REBAR 48” LONG AT 45 DEGREE ANGLE AT CORNERS OF OPENINGS. PLACE REINFORCEMENT WITHIN 6” OF THE EDGE OF INSIDE CORNERS.
- AT MASONRY LEDGES THE MINIMUM WALL THICKNESS SHALL BE 3-1/2”. LEDGES SHALL NOT EXCEED A DEPTH OF MORE THAN 24” BELOW THE TOP OF THE WALL FOR WALL THICKNESS LESS THAN 4”. PROVIDE #4 BARS AT MAXIMUM 24” O.C. TO WITHIN 8” OF THE TOP OF THE WALL.
- STRAIGHT WALLS MORE THAN 5’-0” TALL AND MORE THAN 16-0”’ LONG SHALL BE PROVIDED WITH EXTERIOR BRACED RETURN WALLS. WALL LENGTH SHALL BE MEASURED USING INSIDE THE SHORTEST DIMENSION BETWEEN INTERSECTING WALLS (SEE TYPICAL DEAD MAN SECTION).

MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF CONCRETE PER TABLE R402.2

TYPE OR LOCATION OF CONCRETE CONSTRUCTION	MINIMUM SPECIFIED COMPRESSIVE STRENGTH (f'c) FOR SEVER WEATHERING POTENTIAL
BASEMENT WALLS, FOUNDATIONS AND OTHER CONCRETE NOT EXPOSED TO THE WEATHER	2,500
BASEMENT SLABS AND INTERIOR SLABS ON GRADE, EXCEPT GARAGE FLOOR SLABS	2,500
BASEMENT WALLS, FOUNDATION WALLS, EXTERIOR WALLS AND OTHER VERTICAL CONCRETE WORK EXPOSED TO THE WEATHER	3,000
PORCHES, CARPORT SLABS AND STEPS EXPOSED TO THE WEATHER,AND GARAGE FLOOR SLABS	3,500
SUSPENDED SLABS	4,000

D. FRAMING/STRUCTURE

D.1 FRAMING NOTES

- ALL NON TREATED LUMBER SIZES ARE DOUGLAS FIR-LARCH #2 OR SOUTHERN YELLOW PINE #1 UNLESS OTHERWISE NOTED.
- ALL TREATED/ROT RESISTANT LUMBER SIZES ARE #2 TREATED SOUTHERN YELLOW PINE, UNLESS OTHERWISE NOTED.
- ALL UNMARKED HEADERS SHALL BE A MINIMUM #2 DOUGLAS FIR-LARCH OR SOUTHERN YELLOW PINE #1 (2) 2X10 ON LOAD BEARING WALLS.
- ALL HEADERS/BEAMS TO BEAR ON A MINIMUM OF (2) 2X4 JACK STUDS UNO. KING STUDS SHALL BE PROVIDED AT ALL HEADERS IN ACCORDANCE WITH IRC TABLE R602.7.5.
- DOUBLE JOIST UNDER PARALLEL INTERIOR NON-LOAD BEARING WALLS.
- CANTILEVERS, OVER BEAMS AND DOOR JAMBS SHALL BE BLOCKED.
- ANY WOOD MEMBER IN CONTACT WITH CONCRETE OR MASONRY (OR THE FURRING THEY ARE ATTACHED TO) SHALL BE OF DECAY RESISTANT MATERIAL.
- IN BEARING WALLS, STUDS WHICH ARE NOT MORE THAN 10’-0” FEET IN LENGTH SHALL BE SPACED NOT MORE THAN IS SPECIFIED IN IRC TABLE R602.3(5) FOR THE CORRESPONDING STUD SIZE. THOSE STUDS GREATER THAN 10’-0” FEET IN LENGTH SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER OR REGISTERED ARCHITECT.
- ALL WOOD STRUCTUAL PANELS SHALL CONFORM TO THE MOST CURRENT APPLICABLE SPECIFICATION AND SUPPLEMENTS OF THE APA OR EQUIVALENT. ALL PANEL END JOINTS SHALL OCCUR OVER SUPPORTS AND SHALL BE STAGGERED ONE HALF PANEL LENGTH FROM ADJACENT PANELS. PROVIDE 1/8" INCH SPACE AT PANEL ENDS. WOOD STRUCTURAL PANEL MOISTURE CONTENT SHALL BE LESS THEN OR EQUAL TO 16%.
- ALL STRUCTURAL FRAMING MEMBERS SHALL BE AS FOLLOWS UNO:
  - 2X4 OR 2X6 EXTERIOR WALLS AS PERMITTED BY CODE: DOUGLAS FIR-LARCH #2 (DF-L #2), SOUTHERN YELLOW PINE #1 OR BETTER.
  - EXTERIOR WALLS TO BE CONTINUOUSLY SHEATHED WITH MIN. 7/16" OSB., UNLESS BRACING IS SHOWN ON PLANS
  - EXTERIOR OSB SHEATHING TO BE FASTENED WITH 8D COMMON NAILS; 6" O. C. AT PANEL EDGES, 12" O. C. IN THE FIELD.
  - 2X4 OR 2X6 INTERIOR LOAD BEARING WALLS DF-L #2 OR BETTER.
  - LOAD BEARING, BRACED, AND SHEAR WALLS, REQUIRE A DOUBLE TOP PLATE. THE TOP PLY BEING FIELD APPLIED WITH A MIN. 24" LAP SPLICE
  - FIELD APPLIED LAP SPLICED TOP PLATE: DF-L #2 OR BETTER
  - LOAD BEARING HEADERS PER HEADER SCHEDULE OR AS SHOWN ON FRAMING PLANS.
  - LOAD BEARING HEADERS TO BE FABRICATED WITH THE HEADER AT THE UNDER SIDE OF THE TOP PLATE WITH CRIPPLE FRAMING BELOW AS NEEDED UNO.
  - INTERIOR NON LOAD BEARING WALLS: DF-L #2 STUD GRADE OR BETTER
  - DOUBLE TOP PLATE IS NOT REQUIRED FOR INTERIOR NON LOAD BEARING WALLS
  - HEADER CRIPPLE SPACING CAN BE 24" O. C. REGARDLESS OF WALL STUD SPACING FOR NON LOAD BEARING WALLS
  - CRIPPLE FRAMING NOT REQUIRED ABOVE OR BELOW OPENINGS WHERE THE VERTICAL CLEAR HEIGHT IS 22" OR LESS FOR NON-LOAD BEARING WALLS.
- ALL LUMBER IN CONTACT WITH MASONRY OR OTHERWISE EXPOSED TO WEATHERING TO BE PRESSURE TREATED (PT).
  - FIELD APPLIED SILL PLATE: TREATED LUMBER
  - BOTTOM (SOLE) PLATE IN CONTACT WITH MASONRY: TREATED LUMBER
- ALL PRESSURE TREATED WOOD SHALL BE PRESSURE TREATED WITH WATER-BORNE PRESERVATIVES. PRESSURE TREATMENT SHALL COMPLY WITH THE REQUIREMENTS OF AWPB, C2, LP-22, AND IRC SECTION R317. ALL LUMBER < 8" ABOVE THE FINISHED GRADE SHALL BE PRESSURE TREATED.
- FASTENERS, INCLUDING NUTS AND WASHERS, FOR PRESSURE TREATED WOOD SHALL BE HOT-DIPPED, ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER. COATING TYPES AND WEIGHTS FOR CONNECTORS IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE IN ACCORDANCE WITH THE CONNECTOR MANUFACTURER'S RECOMMENDATIONS. IN THE ABSENCE OF MANUFACTURER'S RECOMMENDATIONS, A MIN. OF ASTM A653 TYPE G185 ZINC-COATED GALVANIZED STEEL, OR EQUIVALENT, SHALL BE USED. FOR EXCEPTIONS, REFER TO R317.3.1.

ENGINEERED LUMBER MINIMUM DESIGN REQUIREMENTS

	F_b (PSI)	E (PSI)	F_v (PSI)
LVL	3100	1.9X10^6	285
GLU-LAM	2400	1.8X10^6	230

D.2 STRUCTURAL STEEL

- STEEL DESIGN, FABRICATION, AND ERECTION SHALL CONFORM WITH AMERICAN INSTITUTE OF STEEL CONSTRUCTION.
- STEEL PIPE COLUMNS SHALL BE A MINIMUM OF SCHEDULE 40.
- STEEL GRADE AND SPECIFICATION SHALL BE AS FOLLOWS:
  - HOLLOW STRUCTURAL SECTIONS: ASTM A500 (F_Y = 46 KSI)
  - CHANNELS, PLATES, ANGLES, AND COLUMNS: ASTM A36 (F_Y = 36 KSI)
  - WIDE FLANGES: ASTM A992 (F_Y = 50 KSI)
  - STEEL PIPE COLUMN ASTM A53 GR.B (F_Y = 35 KSI)
  - ANCHOR RODS: ASTM F1554 (F_Y = 36 KSI)
- BOLTS SHALL CONFORM TO ASTM A307
- WELDING SHALL CONFORM TO THE AWS CODES FOR BUILDING CONSTRUCTION, WELDING SHALL BE PERFORMED IN ACCORDANCE TO WELDING PROCEDURE SPECIFICATIONS (WPS) AS REQUIRED IN AWS D1.1. THE WPS VARIABLES SHALL BE WITHIN THE PARAMETERS ESTABLISHED BY THE FILLER-METAL MANUFACTURER.
- WELDS SHALL USE E70XX ELECTRODES AND A MINIMUM OF 3/16” SIZE UNLESS NOTED OTHERWISE.
- ALL WELDS SPECIFIED AS FIELD WELDS MAY BE SHOP WELDED AT THE CONTRACTOR’S OPTION IF ERECTION CAN STILL BE EXECUTED.

E. GLAZING

- GLAZING IN HAZARDOUS LOCATIONS AS IDENTIFIED IN IRC R308.4 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 OF THE GLAZING IS WITHIN A 24” ARC OF EITHER VERTICAL EDGE OF THE DOOR IN A CLOSED POSITION AND WHERE THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 60” ABOVE THE FLOOR.
  - GLAZING ADJACENT TO THE LANDING AT THE BOTTOM OF THE STAIRWAY WHERE THE GLAZING IS LESS THAN 36 INCHES ABOVE THE LANDING AND WITHIN A 60 IN HORIZONTAL ARC LESS THAN 180 DEGREES FROM THE BOTTOM TREAD NOSING SHALL BE CONSIDERED A HAZARDOUS LOCATION.
  - GLAZING IN WALLS, ENCLOSURES OR FENCES CONTAINING OR FACING HOT TUBS, SPAS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS, SHOWERS, AND INDOOR OR OUTDOOR SWIMMING POOLS WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60” MEASURED VERTICALLY ABOVE ANY STANDING OR WALKING SURFACE.
- WINDOW FALL PROTECTION SHALL BE PROVIDED IN ACCORDANCE WITH IRC R312.2.

F. STAIRWAYS

- STAIRWAYS SHALL PROVIDE A MAXIMUM 7-3/4” RISE AND A MINIMUM 10” RUN.
- REQUIRED GUARD RAILS AT OPEN-SIDED WALKING SURFACES, INCLUDING STAIRS, PORCHES, BALCONIES, OR LANDINGS, SHALL NOT BE LESS THAN 36” HIGH MEASURED VERTICALLY ABOVE THE ADJACENT WALKING SURFACE.
  - EXCEPTION (1): GUARD RAILS ON THE OPEN SIDES OF STAIRS SHALL HAVE A HEIGHT NOT LESS THAN 34” MEASURED VERTICALLY FROM A LINE CONNECTING THE LEADING EDGES OF THE TREADS.
  - EXCEPTION (2): WHERE THE TOP OF THE GUARD ALSO SERVES AS A HANDRAIL ON THE OPEN SIDES OF STAIRS, THE TOP OF THE GUARD SHALL NOT BE LESS THAN 34” AND NOT MORE THAN 38” MEASURED VERTICALLY FROM A LINE CONNECTING THE LEADING EDGES OF THE TREADS.
- GUARD RAIL ENCLOSURES SHALL HAVE INTERMEDIATE RAILS OF ORNAMENTAL PATTERNS THAT DO NOT ALLOW PASSAGE OF A SPHERE 4” IN DIAMETER.
- EACH STAIRWAY OF FOUR OR MORE RISERS SHALL PROVIDE A CONTINUOUS HANDRAIL ON AT LEAST ONE SIDE BETWEEN 34” AND 38” ABOVE THE NOSING OF THE TREADS.
- HANDRAILS SHALL HAVE A CIRCULAR CROSS SECTION OF 1-1/4” TO 2” OR OTHER APPROVED GRASPABLE SHAPE PER IRC R311.7.8.5.
- MINIMUM 6’-8” OF HEADROOM CLEARANCE IS REQUIRED IN STAIRWAYS.
- ENCLOSED ACCESSIBLE SPACE UNDER STAIRWAYS SHALL HAVE WALLS AND THE UNDERSIDE OF THE STAIR AND LANDING PROTECTED WITH ½” GYPSUM BOARD ON ENCLOSURE PER IRC R302.7.

G. GARAGES

- THE GARAGE FLOOR SHALL SLOPE 1/8" PER 12" TO DRAIN OR VEHICLE ENTRY DOORWAYS.
- DOORS BETWEEN THE GARAGE AND THE DWELLING TO BE: SELF CLOSING, MINIMUM 1-3/8” SOLID CORE OR HONEYCOMBED STEEL DOOR, AND AT LEAST 20 MINUTE FIRE RATED.
- THE GARAGE SHALL BE SEPARATED FROM THE DWELLING AND ITS ATTIC AREAS BY A MINIMUM 1/2” GYPSUM BOARD APPLIED TO THE GARAGE SIDE WHERE A FLOOR/CEILING SPACE IS PROVIDED ABOVE.
- THE GARAGE COLUMNS AND BEAMS SUPPORTING THE SEPARATION SHALL ALSO BE PROTECTED WITH 1/2” GYPSUM BOARD OR EQUIVALENT.
-
- WHERE HABITABLE SPACE OCCURS ABOVE THE GARAGE FLOOR/CEILING ASSEMBLY SHALL BE PROTECTED WITH A MINIMUM 5/8" TYPE “X” GYPSUM BOARD ON THE GARAGE CEILING.
- GARAGE DOOR AND FRAME – THE “H” FRAME FOR THE ATTACHMENT OF THE TRACK AND COUNTER BALANCE SHALL CONSIST OF THE FOLLOWING: 2X6 VERTICAL JAMBS RUNNING FROM THE FLOOR TO CEILINGS, ATTACHED WITH 1-3/4” X 0.120” NAILS AT 7” O.C. STAGGERED WITH (7) 3-1/4” X 0.120” NAILS THROUGH THE JAMB INTO THE HEADER, 2X8 HEADER (MINIMUM) FOR ATTACHMENT OF COUNTER BALANCE SYSTEM.
- GARAGE VEHICLE DOORS AND FRAMES SHALL BE DESIGNED AND INSTALLED TO MEET THE 115 MPH WIND LOAD REQUIREMENT OF DASMA 108 AND ASTM E330-96 (IRC R301.2.1).

H. ROOF

- THE ROOF IS DESIGNED FOR 20 PSF GROUND SNOW LOAD (MINIMUM).
- PROVIDE 2X SOLID BLOCKING SUPPORT BELOW ALL POINT LOADS CONTINUOUS TO BEARING STRUCTURE AND/OR FOUNDATION BELOW.
- ROOF IS ENGINEERED TO COMPLY WITH IRC R802.
- ROOF TO BE ASPHALT SHINGLES UNO AND SHALL COMPLY WITH IRC 2018 SECT. R905.2
- MINIMUM ROOF SLOPE FOR ASPHALT SHINGLES SHALL BE 2:12.
- ROOF SLOPES IN BETWEEN 2:12 AND 4:12 SHALL REQUIRE DOUBLE UNDERLAYMENT IN ACCORDANCE WITH IRC 2018 SECTION R905.2.2:

  “APPLY A 19-INCH (483MM) STRIP OF UNDERLAYMENT FELT PARALLEL TO AND STARTING AT THE EAVES, FASTENED SUFFICIENTLY TO HOLD IN PLACE. STARTING AT THE EAVE, APPLY 36-INCH-WIDE (914 MM) SHEETS OF UNDERLAYMENT, OVERLAPPING SUCCESSIVE SHEETS 19 INCHES (483MM), AND FASTENED SUFFICIENTLY TO HOLD IN PLACE. END LAPS SHALL BE 4-INCH (102MM) AND SHALL BE OFFSET BY 6 FEET (1829 MM). DISTORTIONS IN THE UNDERLAYMENT SHALL NOT INTERFERE WITH THE ABILITY OF THE SHINGLES TO SEAL.”

I. SAFETY REQUIREMENTS

I.1 EMERGENCY EGRESS AND RESCUE

- PROVIDE ONE WINDOW FROM EACH BEDROOM THAT HAS A MINIMUM OPENABLE AREA OF 5.7 SQ. FT. WITH A MINIMUM OPENABLE HEIGHT OF 24” AND WIDTH OF 20”.
- BASEMENT EGRESS TO MEET THE REQUIREMENTS OF IRC R310.

I.2 SMOKE AND CARBON MONOXIDE SAFETY (PER IRC R314)

- PROVIDE SMOKE ALARMS IN EACH SLEEPING ROOM, OUTSIDE OF EACH SLEEPING AREA AND ON EACH FLOOR INCLUDING BASEMENTS.
- SMOKE ALARMS SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTUATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE DWELLING.
- CARBON MONOXIDE DETECTORS SHALL BE INSTALLED AS REQUIRED PER IRC R315.

J. ENERGY REQUIREMENTS
(THE FOLLOWING SHALL APPLY UNLESS "ECA" SHEETS HAVE BEEN INCLUDED IN THE PLAN SET)

- LIGHTING FIXTURES PENETRATING THE THERMAL ENVELOPE SHALL BE IC-RATED, LEAKAGE RATED AND SEALED TO THE GYPSUM WALLBOARD AS REQUIRED PER IRC N1102.4.5.
- PROGRAMMABLE THERMOSTATS SHALL BE INSTALLED AS REQUIRED PER IRC N1103.1.1.
- AIR HANDLERS SHALL BE RATED FOR MAXIMUM 2% AIR LEAKAGE RATE PER IRC N1103.3.2.1.
- *BUILDING* FRAMING CAVITIES SHALL NOT BE USED AS DUCTS OR PLENUMS.
- HOT WATER PIPES SHALL BE INSULATED AS REQUIRED PER IRC N1103.4.
- ALL EXHAUST FANS SHALL TERMINATE TO THE BUILDING EXTERIOR AS REQUIRED PER IRC M1504.3.
- MAKEUP AIR SYSTEMS SHALL BE INSTALLED FOR KITCHEN EXHAUST HOODS THAT EXCEED 400 CFM AS REQUIRED PER IRC M1503.6.
- AN AIR HANDLING SYSTEM SHALL NOT SERVE BOTH THE LIVING SPACE AND THE GARAGE PER IRC M1601.6 ENERGY CONSERVATION.

K. ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
AB	ANCHOR BOLT
BM	BEAM
BRG	BEARING
BFF	BELOW FINISHED FLOOR
BOT	BOTTOM
BWL	BRACED WALL LINE
CJ	CEILING JOIST
CLR	CLEAR
COL	COLUMN
CONC	CONCRETE
CMU	CONCRETE MASONRY UNIT
CXN	CONNECTION
CONT	CONTINUOUS
DBL	DOUBLE
DIA	DIAMETER
EW	EACH WAY
EFF	EFFECTIVE
EL	ELEVATION
EC	END CONDITION
EOR	ENGINEER OF RECORD
EQ	EQUAL
EQUIV	EQUIVALENT
EFP	EQUIVALENT FLUID PRESSURE
EX	EXISTING
FV	FIELD VERIFY
FF	FINISHED FLOOR
FJ	FLOOR JOIST
FTG	FOOTING
FND	FOUNDATION
HDR	HEADER
HORZ	HORIZONTAL
MAX	MAXIMUM
MIN	MINIMUM
NTS	NOT TO SCALE
OC	ON CENTER
PED	PEDESTAL
PCF	POUNDS PER CUBIC FOOT
PLF	POUNDS PER LINEAR FOOT
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQURE INCH
PT	PRESSURE TREATED
RAF	RAFTER
SIP	STRUCTURAL INSULATED PANEL
STL	STEEL
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL

EVERSTEAD
ENGINEERING & DESIGN

JAHMIR T. CLARK
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SUMMIT HOMES
HIGHLAND MEADOWS #196 - CAROLINA MODERN PRAIRIE
1039 SW FIORD DR LEE'S SUMMIT, MO 64082

REVISIONS

STRUCTURAL
GENERAL NOTES

S000

DATE 2/25/2025 3:25:48 PM
SCALE As indicated

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
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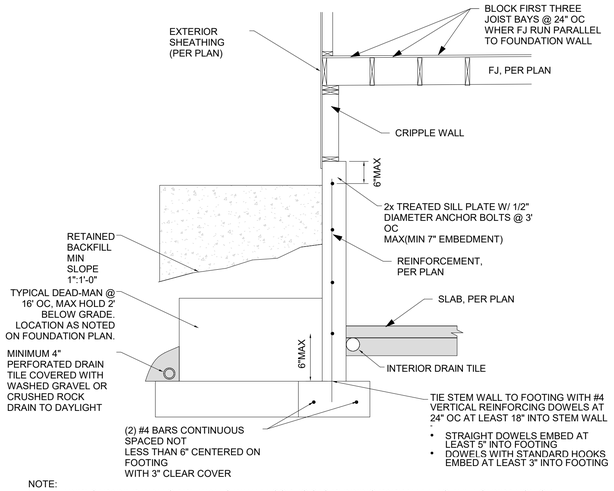
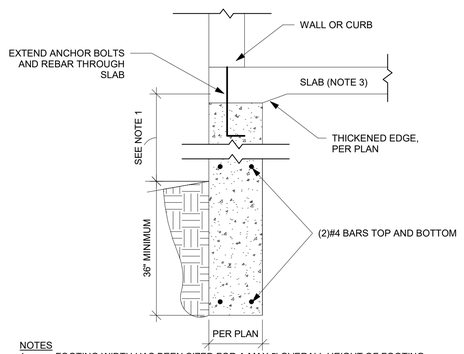


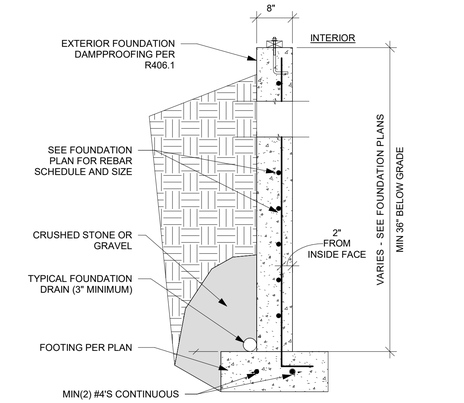
NOTE:
1. UNRESTRAINED WALLS ARE WALLS WITH FLOOR JOISTS RUNNING PARRALLEL TO THE FOUNDATION OR FOUNDATION WALLS W/ CRIPPLE WALLS INSTALLED ATOP.
2. DEADMAN TO BE INSTALLED PER PLAN / DETAIL SPACING.
3. FOUNDATION WALL MUST HAVE A SLAB AT THE BASE, UNO ON PLAN. DO NOT BACKFILL PRIOR TO PLACEMENT OF SLAB, DEADMAN, AND FLOOR SYSTEM.
4. FOUNATION WALL TO BE CONSTRUCTED PER PLAN / TYPCIAL WALL SECTION.

1 TYPICAL "UNRESTRAINED" FOUNDATION WALL DETAIL
NTS



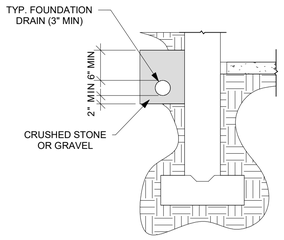
NOTES
1. FOOTING WIDTH HAS BEEN SIZED FOR A MAX 5' OVERALL HEIGHT OF FOOTING. THE FOOTING WIDTH MUST BE INCREASED BY 3" FOR EVERY 6" OF OVERALL FOOTING DEPTH/HEIGHT ABOVE 5'.
2. IF FND EXTENDS MORE THAN 12 " ABOVE GRADE, PROVIDE #4 VERT BAR @12" OC TO WITHIN TOP 8" OF FND AND #4 HOR @12" OC. MAXIMUM 48" OF UNBALANCED BACKFILL PERMITED.
3. CONC SLAB MAY SIT ON OR TIE INTO TRENCH FOOTING / FOUNDATION PER DETAILS ON S503. IF CONC CURB IS POURED ONTOP OF THE SLAB, IT MUST BE CONNECTED TO THE SLAB/TRENCH FTG WITH #4 HOOKED VERTICAL BARS SPACED 12" OC.

2 TRENCH FOOTING WITH SLAB DETAIL
NTS



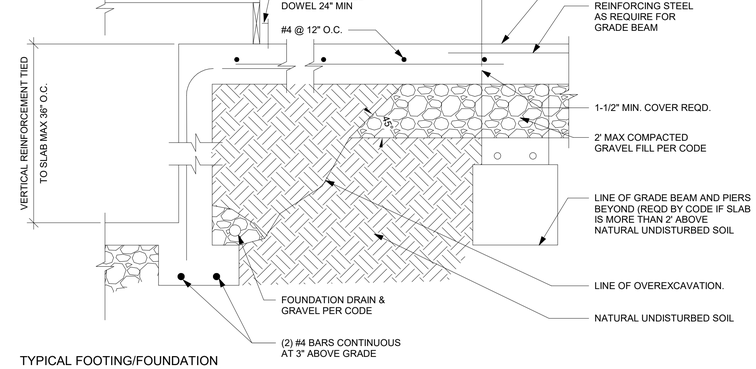
NOTES:
1. VERT. BARS SHALL BE CONTINUED UP TO WITHIN 3" OF TOP OF WALL.
2. REBAR SHALL BE POSITIONED AT THE TENSION FACE OF THE WALL. (2" FROM THE INSIDE FACE)
3. REINFORCEMENT SHALL LAP A MINIMUM OF 24 INCHES AT ENDS, SPLICES, AND AROUND CORNERS.

3 TYPICAL WALL SECTION DETAIL
NTS

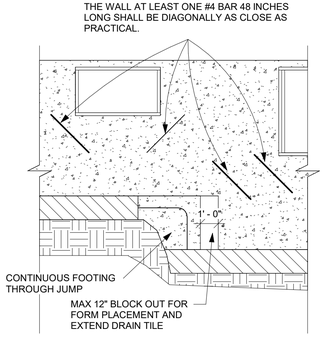


NOTE:
1. INSTALLATION OF A CONTINUOUS FOUNDATION DRAIN IS REQUIRED WHERE HABITABLE OR USABLE SPACE FOR ANY PORTION OF THE STRUCTURE IS LOCATED BELOW GRADE.
2. THE FOUNDATION DRAIN SHALL BE AT OR BELOW THE AREA BEING PROTECTED.
3. DRAINAGE TILE SHALL BE PLACED WITH POSITIVE OR NEUTRAL SLOPE TO MINIMIZE THE ACCUMULATION OF DEPOSITS IN THE DRAINAGE PIPE.
4. PLACEMENT OF DRAIN TILE DIRECTLY ON TOP OF THE FOOTING IS ACCEPTABLE.
5. [IRC R405], SEE "TYPICAL FOOTING/FOUNDATION WALL/STANDARD SLAB AT MAXIMUM 4' OVERDIG" AND "FOUNDATION DRAIN DETAIL AT RAISED SLAB" DIAGRAMS FOR DETAILS.

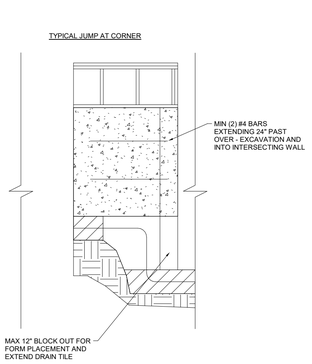
4 FOUNDATION DRAIN AND RAISED SLAB DETAIL
NTS



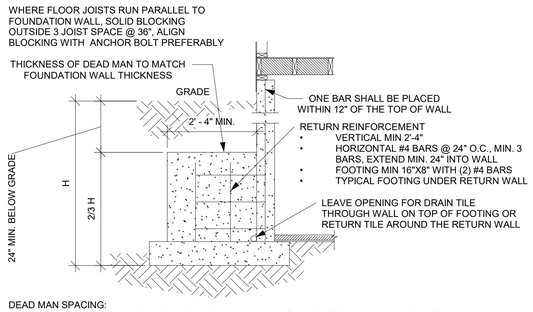
TYPICAL FOOTING/FOUNDATION WALL/STANDARD SLAB AT MAX 4 OVERDIG
5 NTS



6 FOUNDATION WALL JUMP DETAIL
NTS

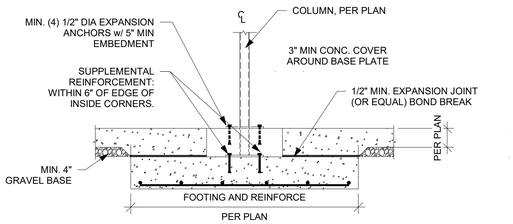


7 FOUNDATION WALL JUMP DETAIL 2
NTS

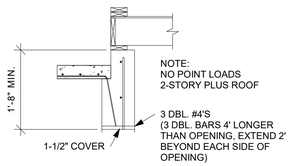


DEAD MAN SPACING:
1. ALL DEAD MAN SHALL BE SPACED NO MORE THAN 16' FROM EGRESS WELL, REAR GARAGE WALL, 24" RETURN ON FOUNDATION WALL OR ANOTHER DEAD MAN.
2. DEAD MEN ARE NOT REQUIRED ON EXTERIOR GARAGE WALLS OR FOUNDATION WALLS THAT ARE 5' OR LESS.
3. WALL TRANSITIONING FROM LESS THAN 5' TALL TO MORE THAN 5' TALL WITH STEP DOWNS: A DEAD MAN IS REQUIRED WITHIN 8' OF STEP DOWN (TRANSITIONING FROM LESS THAN 5' TALL TO MORE THAN 5' TALL WALL LOCATION) ON WALL 5' TALL OR MORE.

8 TYPICAL DEAD MAN DETAIL
NTS

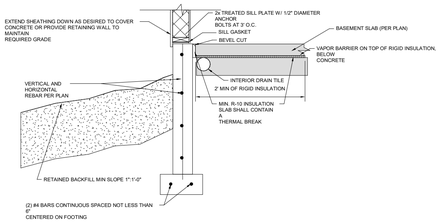


TYPICAL ISOLATED COLUMN PAD DETAIL
9 NTS



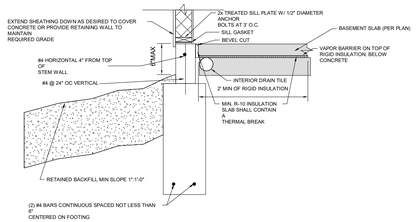
10 6' MAXIMUM OPENING HEADER DETAIL
NTS

APPLIES TO BASEMENT SLABS WITH FLOOR SURFACE LESS THAN 12" BELOW GRADE



SLAB INSULATION DETAIL FOR STEM WALL AND FOOTING
11 NTS

APPLIES TO BASEMENT SLABS WITH FLOOR SURFACE LESS THAN 12" BELOW GRADE



SLAB INSULATION DETAIL FOR TRENCH FOOTING WITH STEM WALL
12 NTS

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S501

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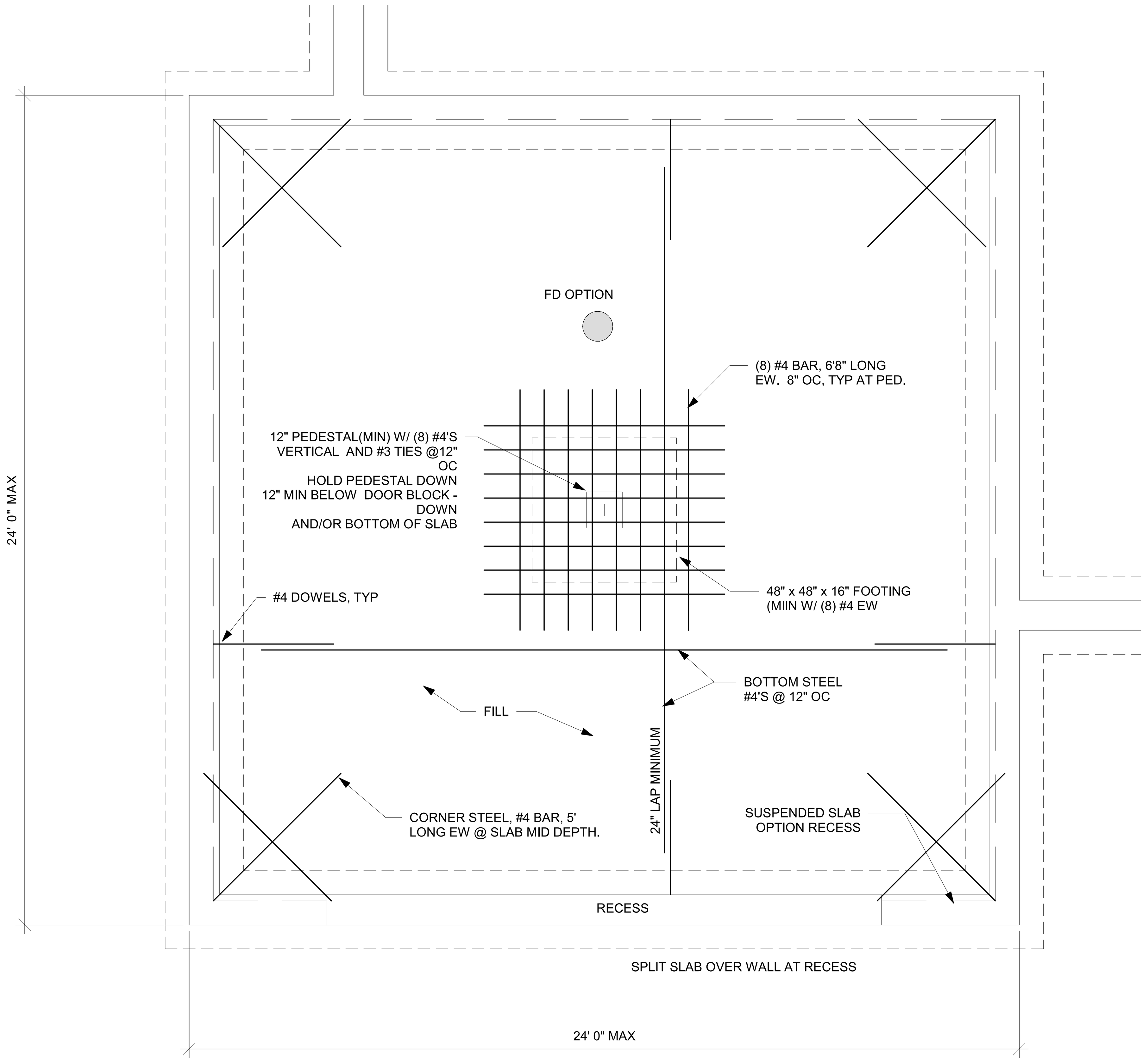
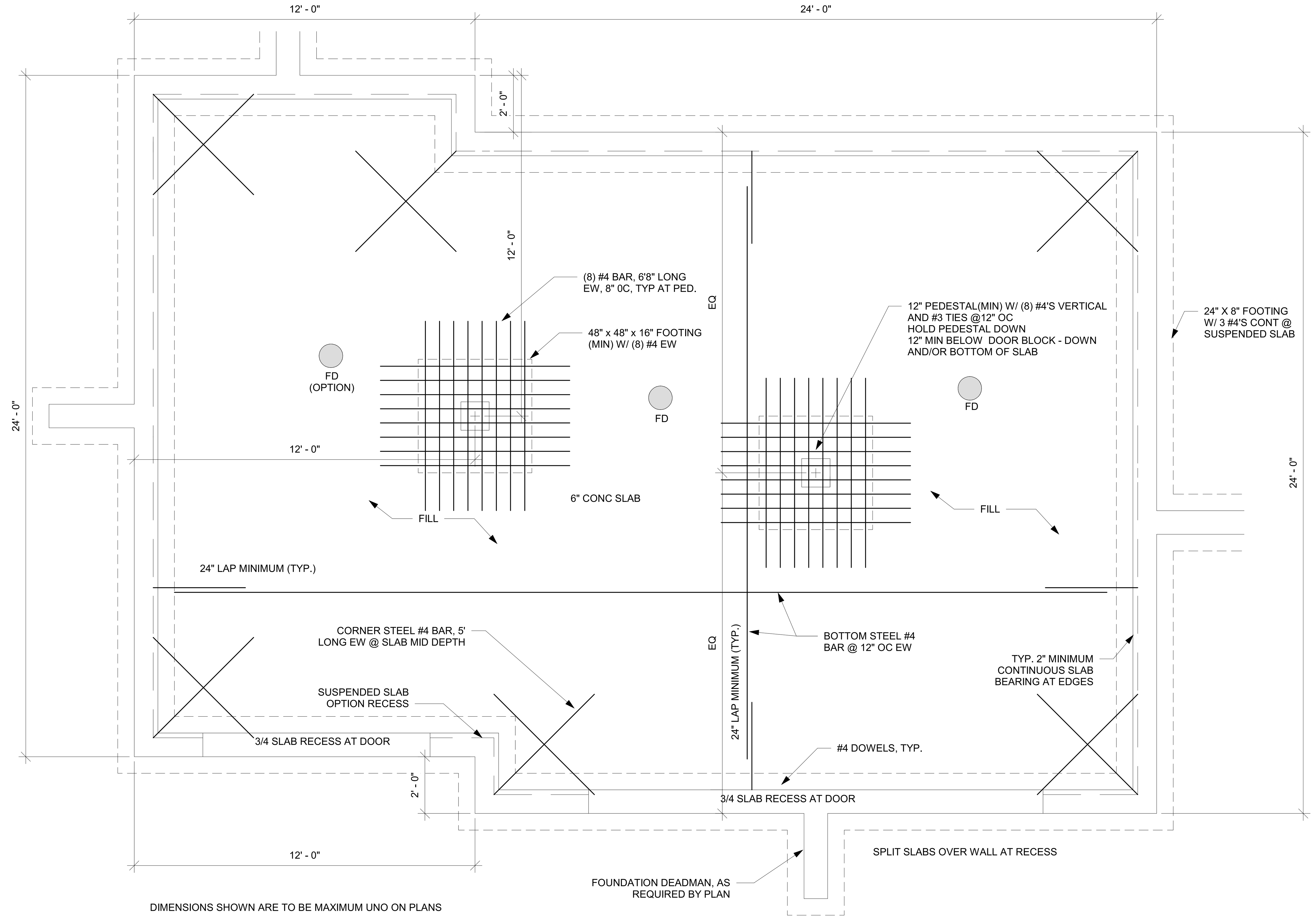
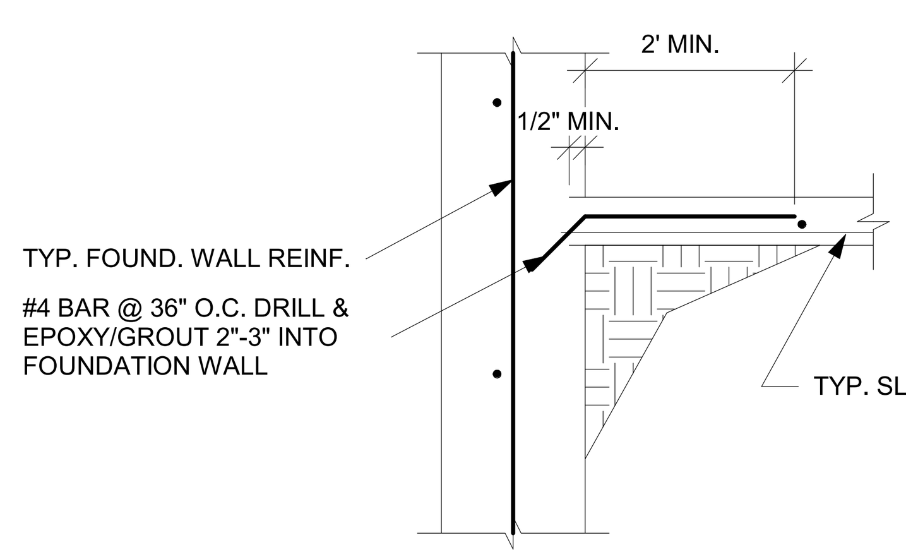


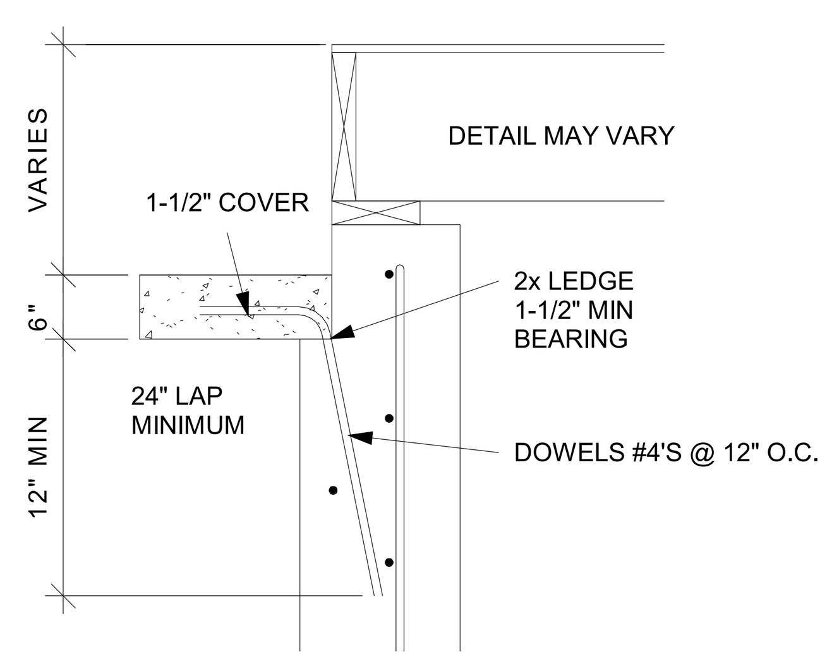
1 2 CAR GARAGE SLAB ON FILL DETAIL
NTS



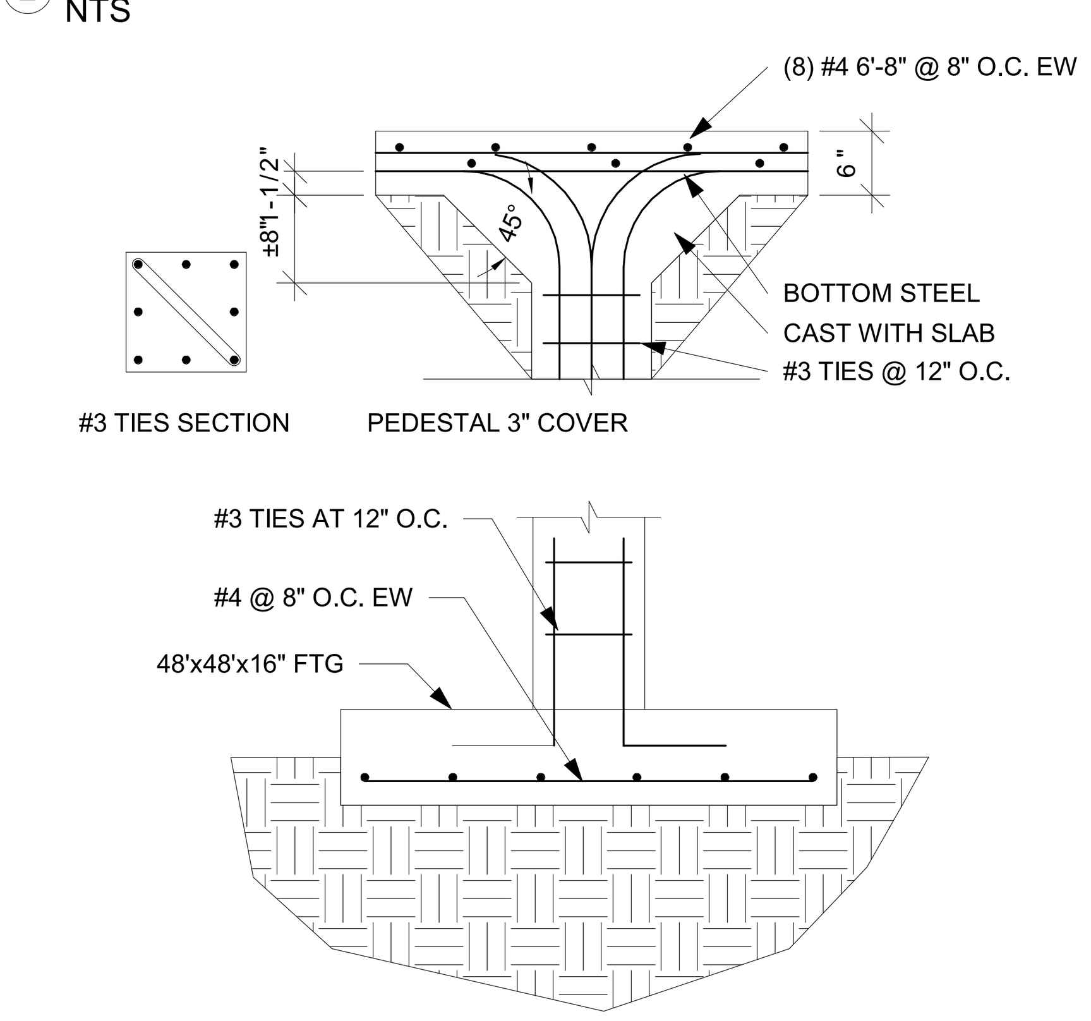
2 3 CAR GARAGE SLAB ON FILL DETAIL 2
NTS



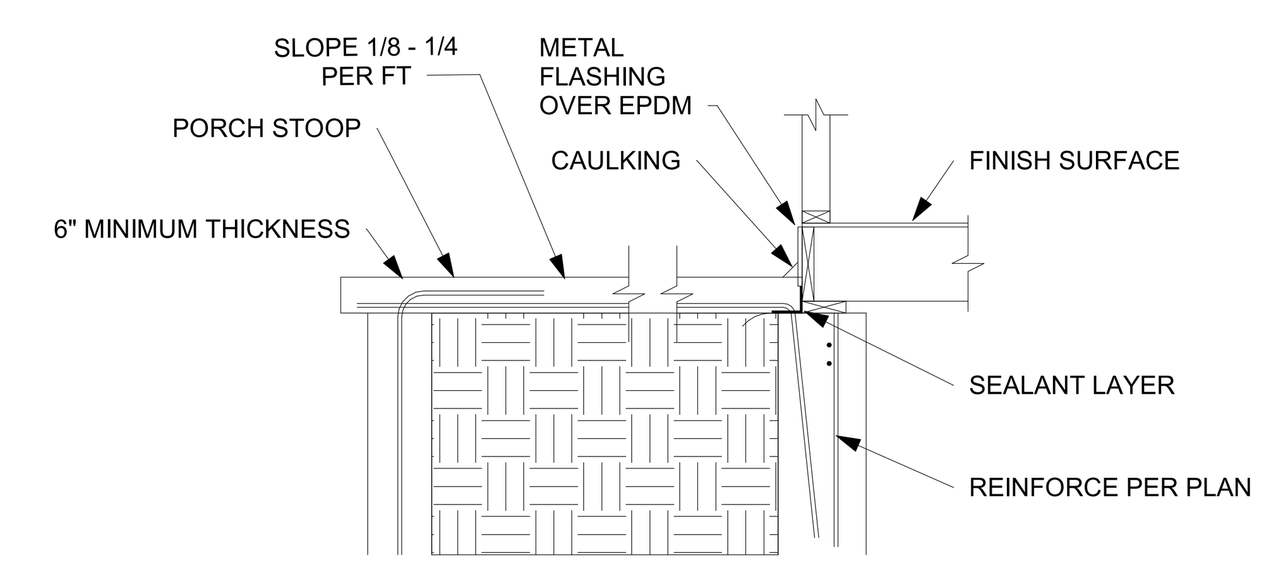
3 SLAB CONNECTION DETAIL
NTS



4 SUSPENDED SLAB AT WALL DETAIL
NTS



5 PEDESTAL AT SLAB AND FOOTING DETAIL
NTS



ELEVATED PORCH SLABS SPANNING 6' OR LESS IN ANY ONE DIRECTION CAN BE CONSTRUCTED AS FOLLOWS:

- MAX SPAN OF 6'
- MINIMUM THICKNESS OF 6"
- #4 BARS AT 12" O.C. EACH WAY
- MINIMUM 1-1/2" OF CONTINUOUS BEARING AT THE EDGES FO THE SLAB.

ELEVATED PORCH SLAB SPANNING GREATER THAN 6' SHALL BE TREATED AS AN ELEVATED GARAGE SLAB.

6 STANDARD PORCH SLAB DETAIL
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GARAGE/SLAB DETAILS

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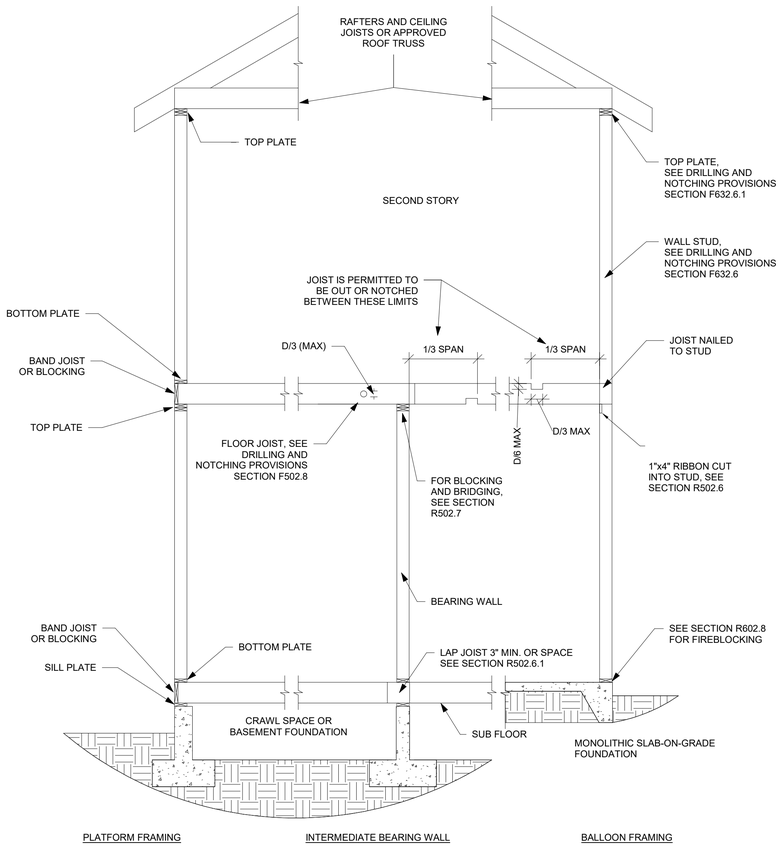
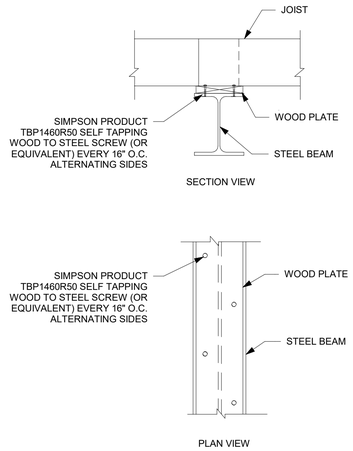
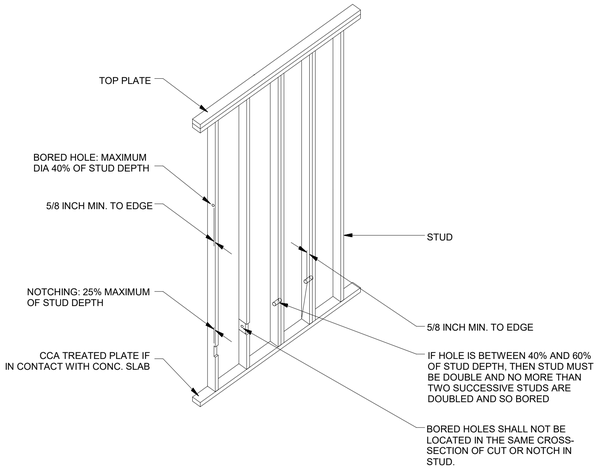
THE FOLLOWING DETAILS MEET OR EXCEED KCMO CPD-DS AND JOHNSON COUNTY STANDARDS



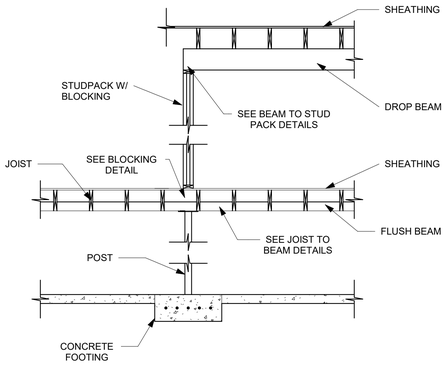
1 TYPICAL WALL, FLOOR, AND ROOF FRAMING DETAIL
NTS



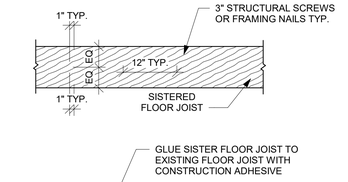
2 WOOD PLATE TO STEEL BEAM CONNECTION DETAIL
NTS



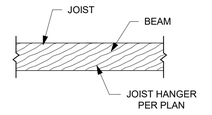
3 TYPICAL WALL NOTCHING DETAIL
NTS



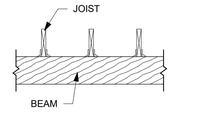
4 POST TO BEAM DETAIL
NTS



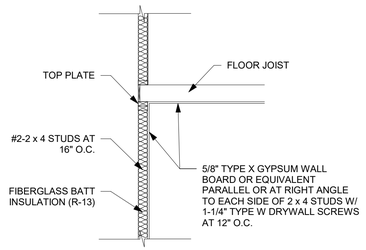
5 SISTERED FLOOR JOISTS DETAIL
NTS



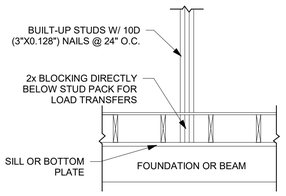
6 UPSET BEAM DETAIL
NTS



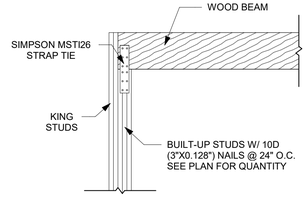
7 DROPPED BEAM DETAIL
NTS



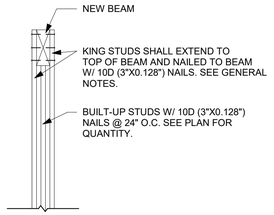
8 GARAGE FIRE SEPERATION DETAIL
NTS



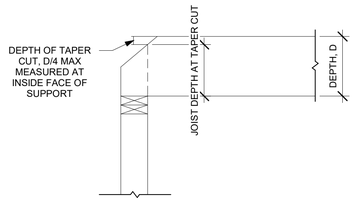
9 BLOCKING DETAIL
NTS



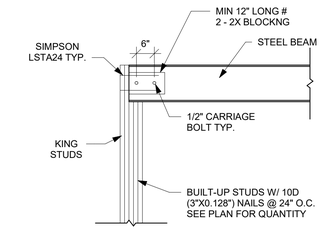
10 BEAM TO STUD PACK PARALLEL TO WALL DETAIL
NTS



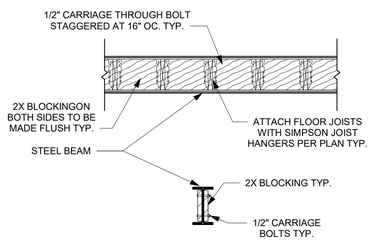
11 BEAM TO STUD PACK PERPENDICULAR TO WALL DETAIL
NTS



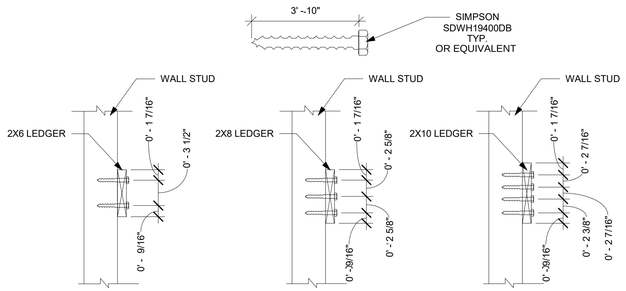
16 CEILING JOIST TAPER CUT
NTS



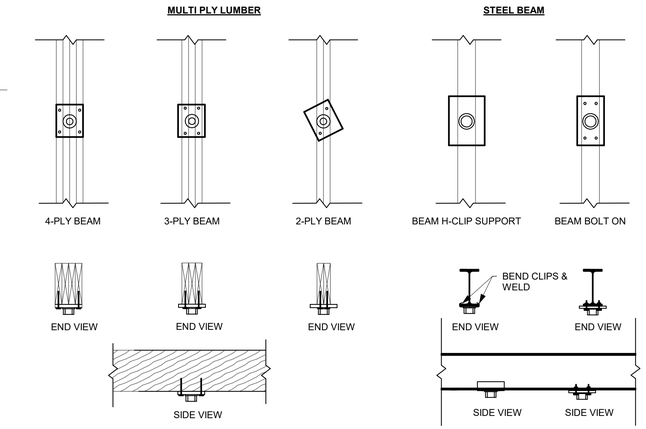
12 STEEL BEAM TO STUD PACK DETAIL
NTS



13 FLOOR JOIST TO STEEL BEAM DETAIL
NTS



14 WALL LEDGER DETAIL
NTS



15 POST/BEAM CONNECTION DETAIL
NTS

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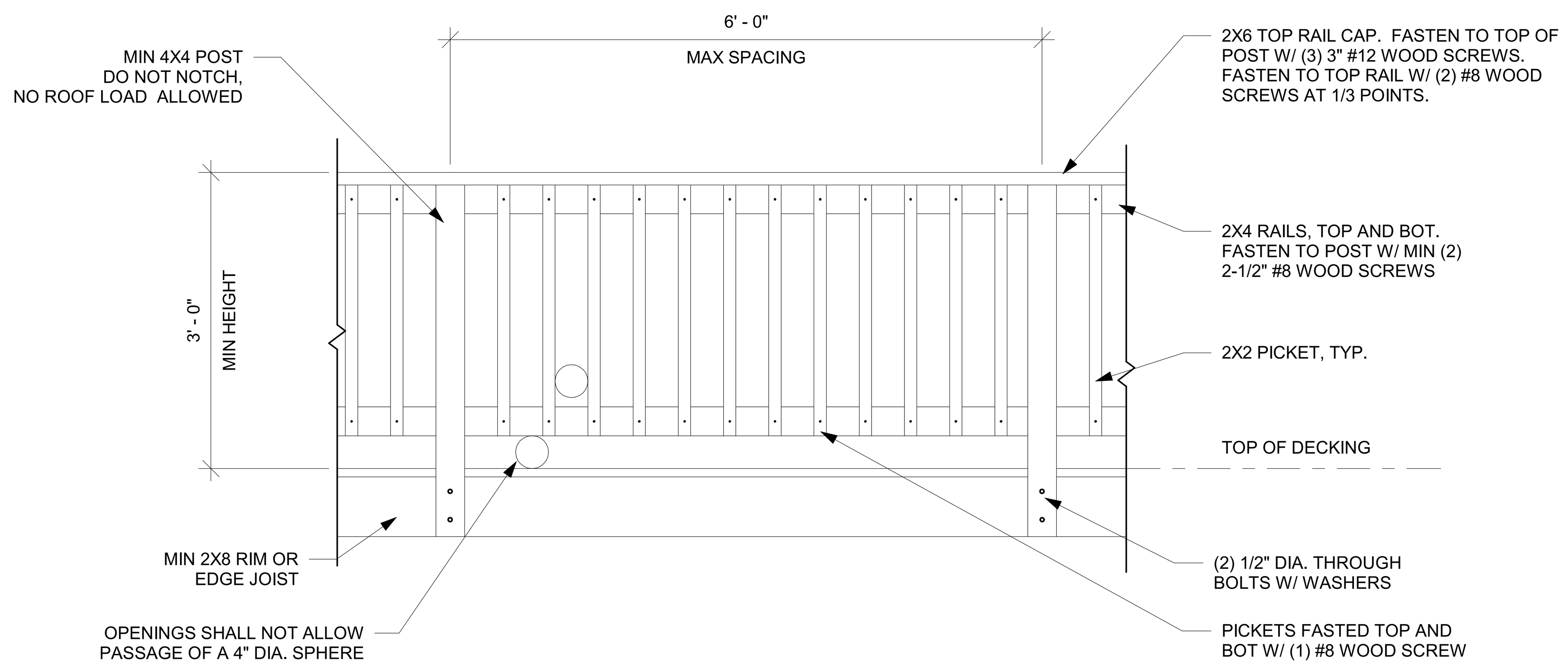
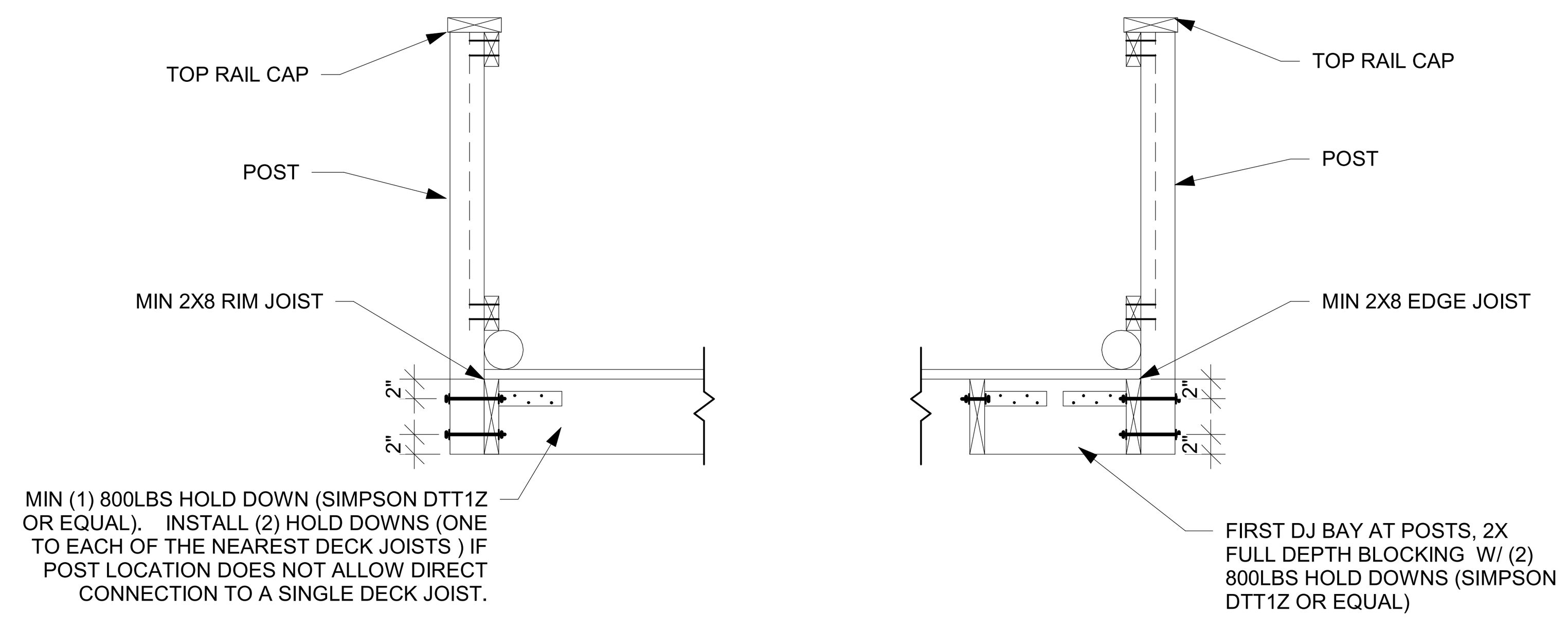
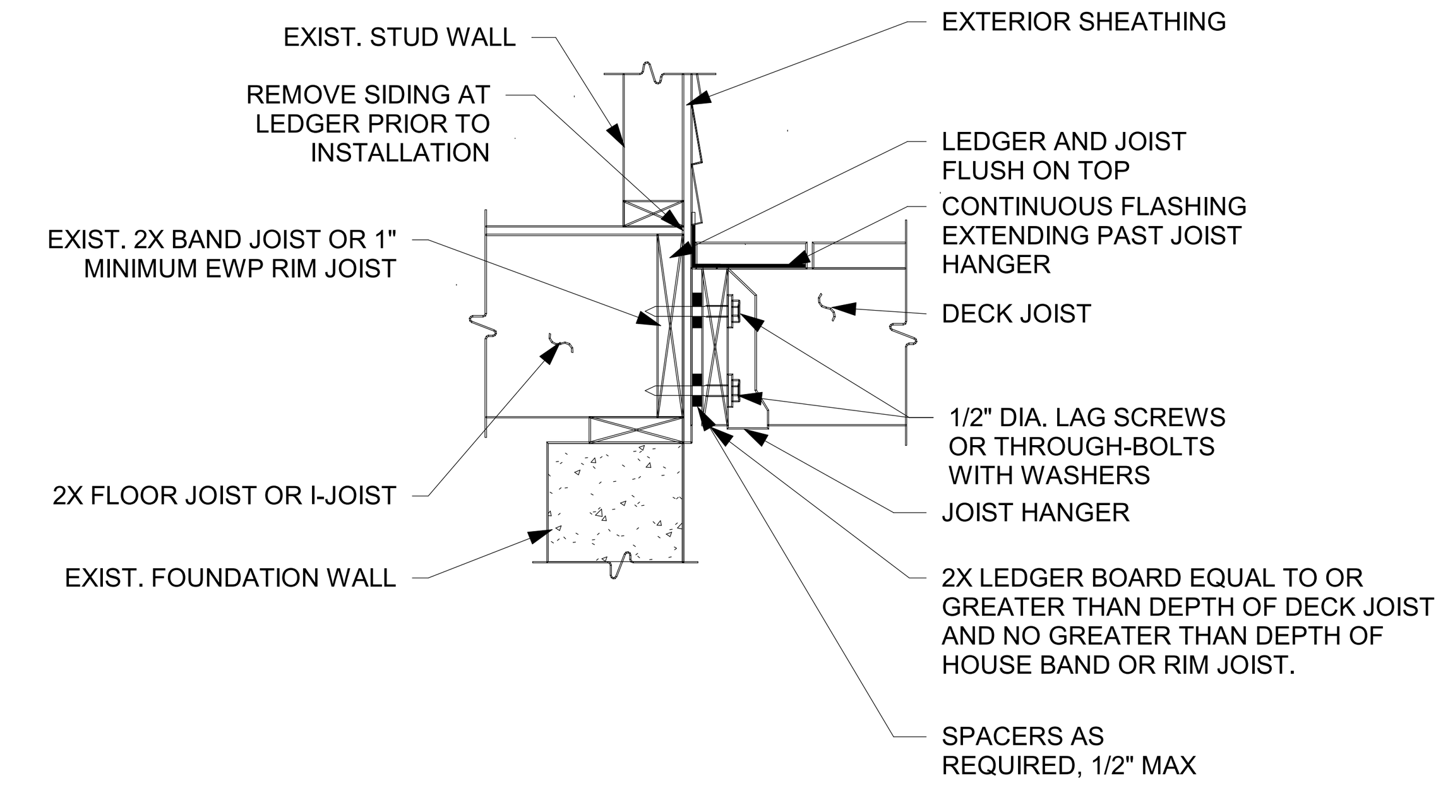


DECK RAILING DETAIL DRAWN TO MEET THE INTENT OF R312 OF THE 2018 IRC AND A CONCENTRATED LOAD OF 200 LBS PER 1607.8.1 OF THE 2018 IBC.

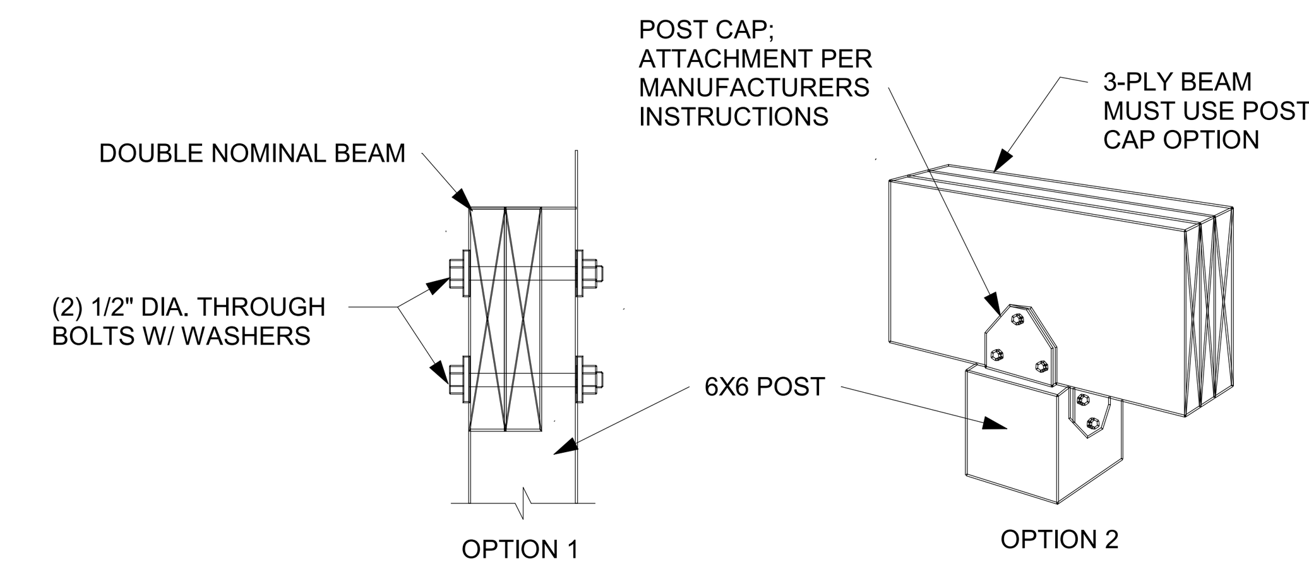


RAILING ATTACHED TO RIM JOIST **RAILING ATTACHED TO EDGE JOIST**

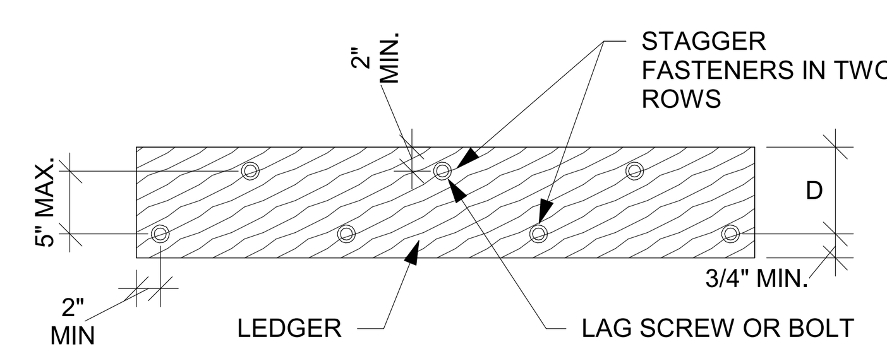
1 DECK RAILING
NTS



2 LEDGER BOARD TO BAND BOARD DETAIL
NTS



3 TYPICAL POST TO BEAM ATTACHMENT DETAIL
NTS

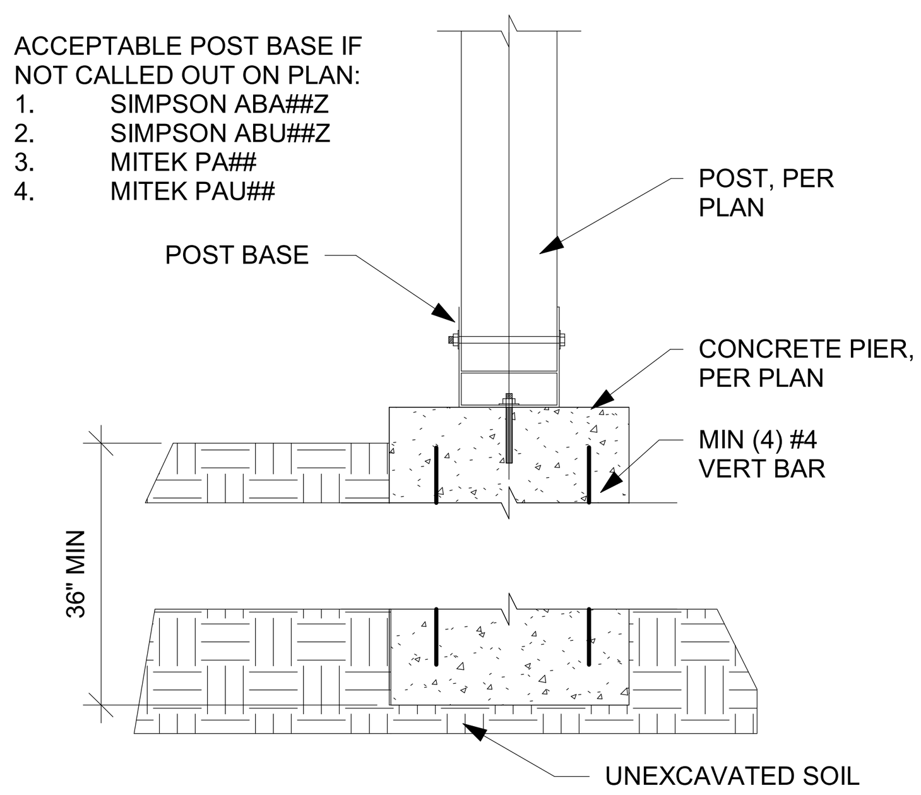


D = 5.5" MIN. FOR 2x8*
D = 6.5" MIN. FOR 2x10
D = 7.5" MIN. FOR 2X12

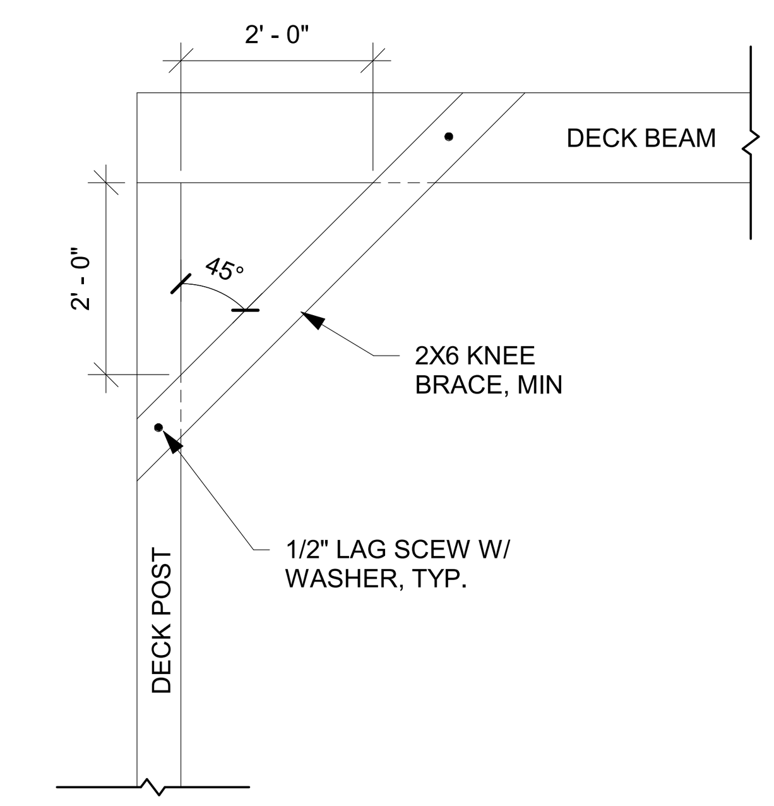
*DISTANCE SHALL BE PERMITTED TO BE REDUCED TO 4.5" IF LAG SCREWS ARE USED OR BOLT SPACING IS REDUCED TO THAT OF LAG SCREWS TO ATTACH 2x8 LEDGERS TO 2X8 BAND JOISTS

4 DECK LEDGER DIMENSION DETAIL
NTS

ACCEPTABLE POST BASE IF NOT CALLED OUT ON PLAN:
1. SIMPSON ABA##Z
2. SIMPSON ABU##Z
3. MITEK PA##
4. MITEK PAU##



5 POST BASE DETAIL
NTS



6 KNEE BRACING DETAIL
NTS

TABLE R507.9.1.3(1) DECK LEDGER CONNECTION TO BAND JOIST
(DECK LIVE LOAD = 40 PSF, DECK DEAD LOAD = 10 PSF, SNOW LOAD ≤ 40 PSF)

CONNECTION DETAILS	JOIST SPAN						
	6' AND LESS	6'1" TO 8'	8'1" TO 10'	10'1" TO 12'	12'1" TO 14'	14'1" TO 16'	16'1" TO 18'
	ON-CENTER SPACING OF FASTENERS (INCHES)						
1/2" DIAMETER LAG SCREW WITH 1/2" MAXIMUM SHEATHING	30	23	18	15	13	11	10
1/2" DIAMETER BOLT WITH 1/2" MAXIMUM SHEATHING	36	36	34	29	24	21	19
1/2" DIAMETER BOLT WITH 1" MAXIMUM SHEATHING	36	36	29	24	21	18	16

7 DECK LEDGER CONNECTION TO BAND JOIST (R507.9.1.3(1))
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DECK DETAILS

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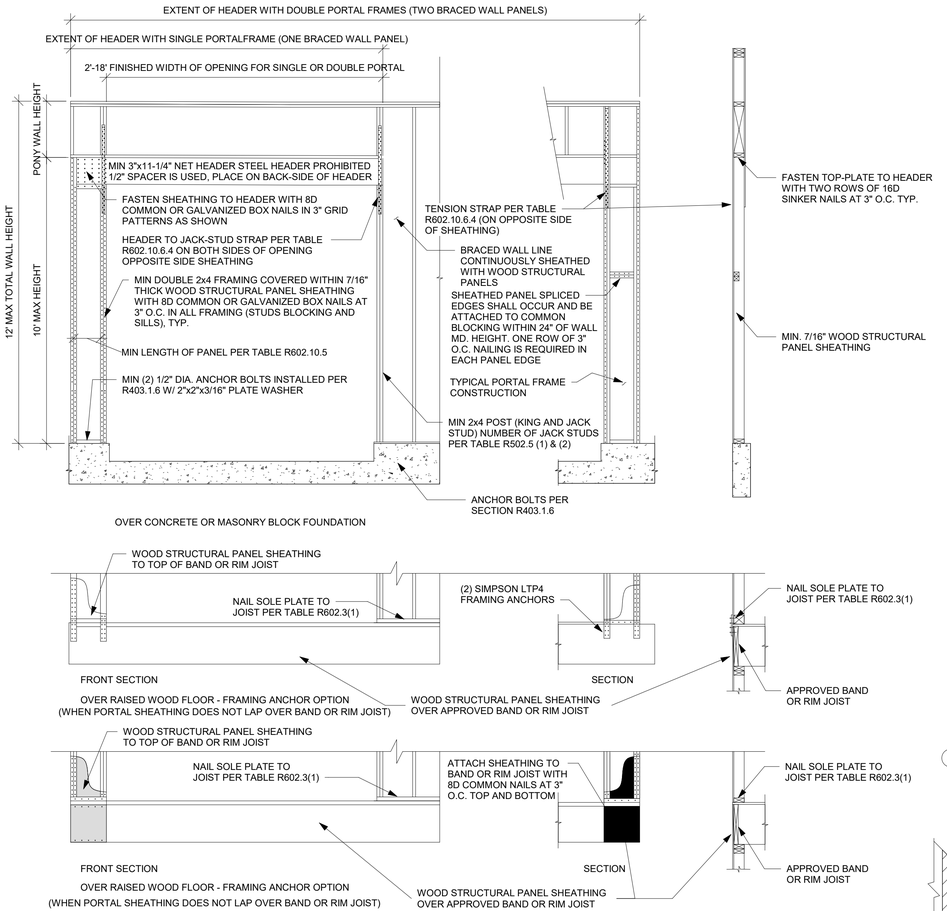
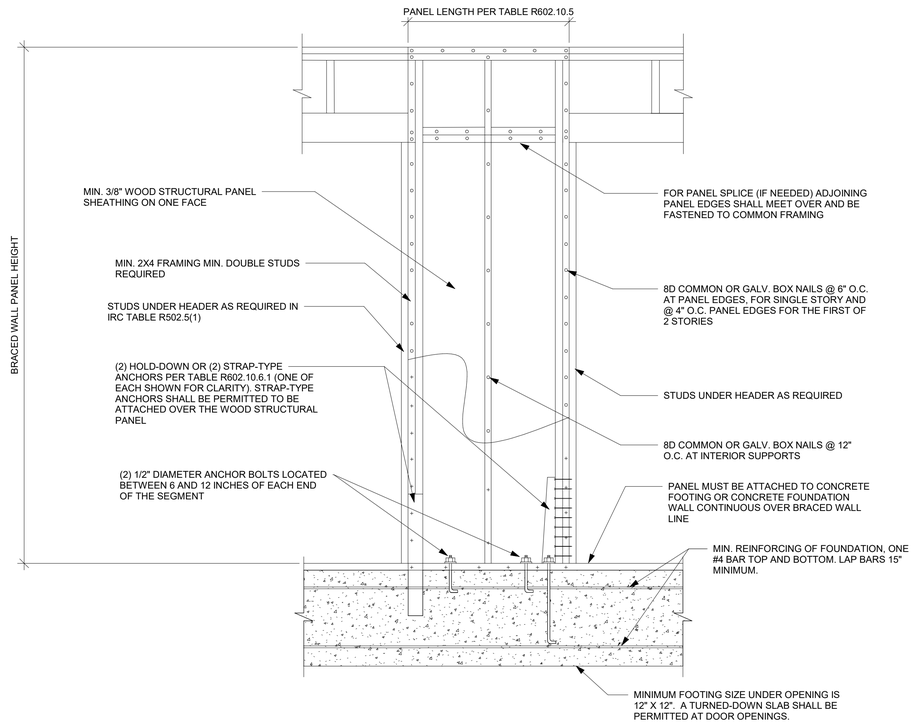
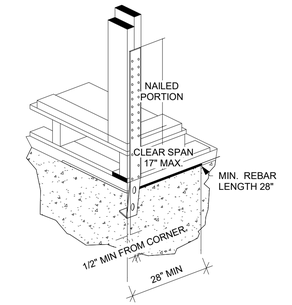


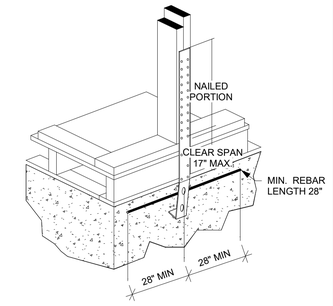
BRACING METHOD CS-PF -
CONTINUOUSLY SHEATHED PORTAL
FRAME PANEL DETAIL
1 NTS



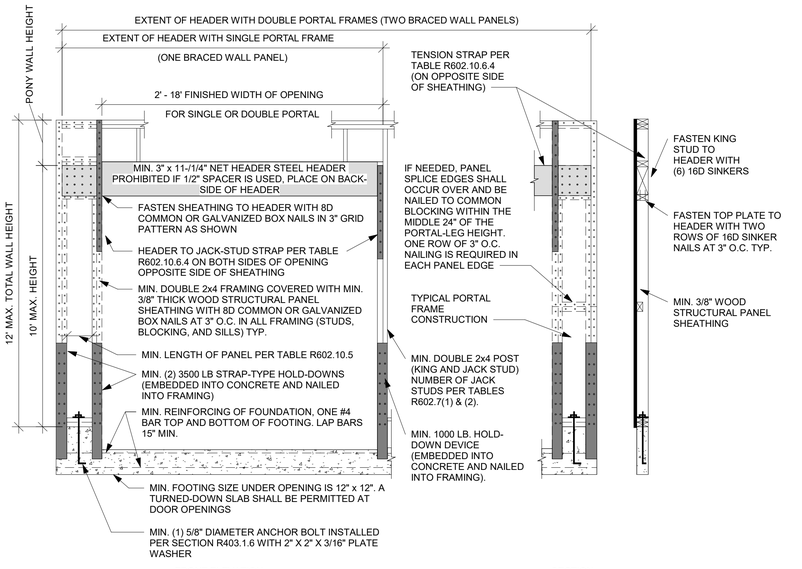
BRACING METHOD ABW - ALTERNATE
BRACED WALL PANEL DETAIL
2 NTS



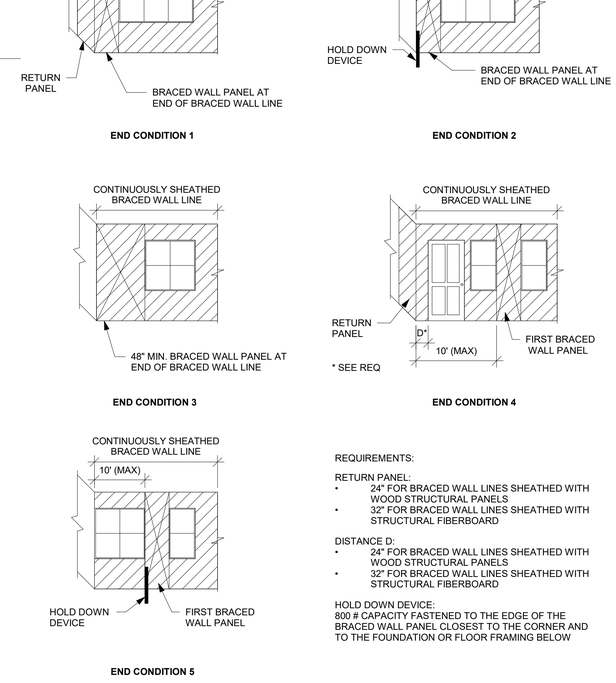
TYPICAL STHD14RJ CORNER
INSTALLATION DETAIL
3 NTS



TYPICAL STHD14RJ MID-WALL
INSTALLATION DETAIL
4 NTS



BRACING METHOD PFH - PORTAL
FRAME WITH HOLD DOWNS DETAIL
5 NTS



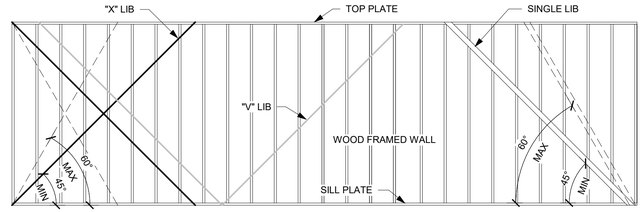
CONTINUOUSLY SHEATHED END
CONDITIONS
6 NTS

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 # CAPACITY FASTENED TO THE EDGE OF THE BRACED WALL PANEL CLOSEST TO THE CORNER AND TO THE FOUNDATION OR FLOOR FRAMING BELOW



"X" AND "V" LIB
1. LISTED METAL STRAP IS ACCEPTABLE FOR BOTH THE "X" AND "V" INSTALLATION METHOD ONLY.
   A. SIMPSON WB AND WBC
   B. 16GAUGE X 1-1/4" STRAP
2. MIN LENGTHS
   A. "X" - LENGTH SHOWN ON PLANS
   B. "V" - DOUBLE LENGTH SHOWN ON PLANS
3. MIN AND MAX ANGLE SHOWN FOR "X" LIB SHALL APPLY TO "V" LIB.

SINGLE LIB:
1. 1X4 LUMBER
2. SIMPSON TWB (MIN 2X4 STUD)
3. SIMPSON RCWB
   A. EXTERIOR / LOAD BEARING (MIN 2X6 STUD)
   B. INTERIOR / NON LOAD (MIN 2X4 STUD

LET IN BRACING (LIB) DETAIL
7 NTS

REQUIREMENTS FOR WOOD STRUCTURAL PANEL WALL SHEATHING USED TO RESIST WIND PRESSURES IRC TABLE 602.3(3) (PARTIAL)

MINIMUM NAIL		MINIMUM WOOD STRUCTURAL PANEL SPAN RATING	MINIMUM NOMINAL PANEL THICKNESS (IN)	MAX WALL STUD SPACING	PANEL NAIL SPACING		ULTIMATE DESIGN WIND SPEED, V ULT (MPH)
SIZE	PENETRATION (IN)				EDGES (IN O.C.)	FIELD (IN O.C.)	B
6d COMMON	1.5	24/0	3/8	16	6	12	140
8d COMMON	1.75	24/16	7/16	16	6	12	170
				24	6	12	140

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BRACING METHODS TABLE R602.10.4 (PARTIAL)			
METHODS, MATERIAL	MINIMUM THICKNESS	CONNECTION CRITERIA	
		FASTENERS	SPACING
WSP - WOOD STRUCTURAL PANEL AND CS-WSP CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANEL	3/8" PANEL W/ MINIMUM 24/0 STRUCTURAL PANEL SPAN RATING	6d COMMON NAILS (2.0" x .113") W/ MINIMUM 1.5" PENETRATION	6" EDGES, 12" FIELD
	7/16" PANEL W/ MINIMUM 24/16 STRUCTURAL PANEL SPAN RATING	8d COMMON NAILS (2.5" x .131") W/ MINIMUM 1.75" PENETRATION	6" EDGES, 12" FIELD
PFH - PORTAL FRAME WITH HOLD-DOWNS	3/8"	SEE DETAIL ON THIS PAGE	SEE DETAIL ON THIS PAGE
PFG - PORTAL FRAME AT GARAGE	3/8"	SEE IRC SECTION R602.10.6.3	SEE IRC SECTION R602.10.6.3
LIB LET-IN-BRACING	1x4 WOOD OR APPROVED METAL STRAPS AT 45 TO 60 DEGREE ANGLES FOR MAX 16" STUD SPACING	WOOD: 2-8d COMMON NAILS OR 3-8d (2-1/2" LONG x .113" DIA.) NAILS	WOOD: PER STUD AND TOP AND BOTTOM PLATES
		SIMPSON WB/WBC INSTALLED IN "X" PAIRS OR IN OPPOSING "V" FASHION AND FASTENED W/ (2) 16d COMMON NAILS FOR PLATE AND (1) 8d COMMON NAIL FOR STUDS	METAL: PER STUD AND TOP AND BOTTOM PLATES
GB-GYPSUM BOARD	1/2"	1/2" INTERIOR SHEATHING W/ STUDS AT 16" O.C.: 13 GAGE, 1-3/8" LONG, 19/64" HEAD; .098" DIA., 1-1/4" LONG, ANNULAR-RINGED; 5d COOLER NAIL, .086" DIA., 1-5/8" LONG, 15/64" HEAD; OR GYPSUM BOARD NAIL, .086" DIA. 1-5/8" LONG, 9/32" HEAD PER TABLE R702.3.5 (SEE TABLE FOR OTHER PANEL THICKNESS OPTIONS)	FOR ALL BRACED WALL PANEL LOCATIONS: 7" EDGES (INCLUDING TOP AND BOTTOM PLATES) 7" FIELD
		EXTERIOR 1/2" SHEATHING: 1-1/2" GALVANIZED ROOFING NAIL; STAPLE GALVANIZED, 1-1/2" LONG; 1-1/4" SCREWS, TYPE W OR S PER TABLE R602.3(1)	
		EXTERIOR 5/8" SHEATHING: 1-3/4" GALVANIZED ROOFING NAIL; STAPLE GALVANIZED, 1-5/8" LONG; 1-5/8" SCREWS, TYPE W OR S PER TABLE R602.3(1)	

DESCRIPTION OF BUILDING MATERIALS	NUMBER AND TYPE OF FASTENER	SPACING AND LOCATION OF FASTENERS
ROOF		
BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE	4-8d BOX (2-1/2"x0.113") OR 3-8d COMMON (2-1/2"x0.131") OR 3-10d BOX (3"x0.128") OR 3-3"x0.131" NAILS	TOE NAIL
CEILING JOISTS TO PLATE	4-8d BOX (2-1/2"x0.131") OR 3-8d COMMON (2-1/2"x0.131") OR 3-10 BOX (3"x0.128") OR 3-3"x0.131" NAILS	TOE NAIL
CEILING JOISTS NOT ATTACHED TO PARALLEL RAFTER LAPS OVER PARTITIONS	4-10d BOX (3"x0.128") OR 3-16d COMMON (3-1/2"x0.162") OR 4-3"x0.131" NAILS	FACE NAIL
COLLAR TIE TO RAFTER, FACE NAIL OR 1-1/4"x20 GAGE RIDGE STRAP	4-10d BOX (3"x0.128") OR 3-10d COMMON (3"x0.148") OR 4-3"x0.131" NAILS	FACE NAIL EACH RAFTER
RAFTER OR ROOF TRUSS TO TOP PLATE, TOE NAIL	4-16d BOX (3-1/2"x0.135") OR 3-10d COMMON (3"x0.148") OR 4-10d BOX (3"x0.128") OR 4-3"x0.131" NAILS	2 TOE NAILS ON ONE SIDE AND 1 TOE NAIL ON OPPOSITE SIDE OF EACH RAFTER OR TRUSS
ROOF RAFTERS TO RIDGE, VALLEY OR HIP RAFTERS	4-16d BOX (3-1/2"x0.135") OR 3-10d COMMON (3"x0.148") OR 4-10d BOX (3"x0.128") OR 4-3"x0.131" NAILS	TOE NAIL
	3-16d BOX (3-1/2"x0.135") OR 2-16d COMMON (3-1/2"x0.162") OR 3-10d BOX (3"x0.128") OR 3-3"x0.131" NAILS	END NAIL
WALL		
STUD TO STUD (NOT AT BRACED WALL PANELS)	16d COMMON (3-1/2"x0.162")	24" O.C. FACE NAIL
	10d BOX (3"x0.128") OR 3"x0.131" NAIL	16" O.C. FACE NAIL
STUD TO STUD AND ABUTTING STUDS AT INTERSECTION WALL CORNERS (AT BRACED WALL PANELS)	16d BOX (3-1/2"x0.135") OR 3"x0.131" NAIL	12" O.C. FACE NAIL
	16d COMMON (3-1/2"x0.162")	16" O.C. FACE NAIL
BUILT-UP HEADER, TWO PIECES WITH 1/2" SPACER	16d COMMON (3-1/2"x0.162")	16" O.C. EACH EDGE FACE NAIL
	16d BOX (3-1/2"x0.135")	12" O.C. EACH EDGE FACE NAIL
CONTINUOUS HEADER TO STUD	5-8d BOX (2-1/2"x0.113") OR 4-8d COMMON (2-1/2"x0.131") OR 4-10d BOX (3"x0.128")	TOE NAIL
TOP PLATE TO TOP PLATE	16d COMMON (3-1/2"x0.162")	16" O.C. FACE NAIL
	10d BOX (3"x0.128") OR 3"x0.131" NAIL	12" O.C. FACE NAIL
DOUBLE TOP PLATE SPLICE	8-16d COMMON (3-1/2"x0.162") OR 12-16d BOX (3-1/2"x0.135") OR 12-10d BOX (3"x0.128") OR 12-3"x0.131" NAILS	FACE NAIL ON EACH SIDE OF END JOINT (MINIMUM 24" LAP SPLICE LENGTH EACH SIDE OF END JOINT)
BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST, OR BLOCKING (NOT BRACED WALL PANELS)	16d COMMON (3-1/2"x0.162")	16" O.C. FACE NAIL
	-16d BOX (3-1/2"x0.135") OR 3"x0.131" NAIL	12" O.C. FACE NAIL
BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST, OR BLOCKING (AT BRACED WALL PANELS)	3-16d BOX (3-1/2"x0.135") OR 2-16d COMMON (3-1/2"x0.162") OR 4-3"x0.131" NAILS	3 EACH 16" O.C. FACE NAIL 2 EACH 16" O.C. FACE NAIL 4 EACH 16" O.C. FACE NAIL
TOP OR BOTTOM PLATE TO STUD	4-8d BOX (2-1/2"x0.113") OR 3-16d BOX (3-1/2"x0.135") OR 4-8d COMMON (2-1/2"x0.131") OR 4-10d BOX (3"x0.128") OR 4-3"x0.131" NAILS	TOE NAIL
	3-16d BOX (3-1/2"x0.135") OR 2-16d COMMON (3-1/2"x0.162") OR 3-10d BOX (3"x0.128") OR 3-3"x0.131" NAILS	END NAIL
TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS	3-10d BOX (3"x0.128") OR 2-16d COMMON (3-1/2"x0.162") OR 3-3"x0.131" NAILS	FACE NAIL
1" BRACE TO EACH STUD AND PLATE	3-8d BOX (2-1/2"x0.113") OR 2-8d COMMON (2-1/2"x0.131") OR 2-10d BOX (3"x0.128") OR 2 STAPLES 1-3/4"	FACE NAIL
1"x6" SHEATHING TO EACH BEARING	3-8d BOX (2-1/2"x0.113") OR 2-8d COMMON (2-1/2"x0.131") OR 2-10d BOX (3"x0.128") OR 2 STAPLES, 1" CROWN, 16 GA., 1-3/4" LONG	FACE NAIL
1"x8" AND WIDER SHEATHINGTO EACH BEARING	3-8d BOX (2-1/2"x0.113") OR 3-8d COMMON (2-1/2"x0.131") OR 3-10d BOX (3"x0.128") OR 3 STAPLES, 1" CROWN, 16 GA., 1-3/4" LONG	FACE NAIL
	WIDER THAN 1"x8": 4-8d BOX (2-1/2"x0.113") OR 3-8d COMMON (2-1/2"x0.131") OR 3-10d BOX (3"x0.128") OR 4 STAPLES, 1" CROWN, 16 GA., 1-3/4" LONG	

DESCRIPTION OF BUILDING MATERIALS	NUMBER AND TYPE OF FASTENER	SPACING AND LOCATION OF FASTENERS	
FLOOR			
JOIST TO SILL, TOP PLATE, OR GIRDER	4-8d BOX (2-1/2"x0.113") OR 3-8d COMMON (2-1/2"x0.131") OR 3-10d BOX (3"x0.128") OR 3-3"x0.131" NAILS	TOE NAIL	
RIM JOIST, BAND JOIST OR BLOCKING TO SILL OR TOP PLATE (ROOF APPLICATIONS ALSO)	8d BOX (2-1/2"x0.113")	4" O.C. TOE NAIL	
	8d COMMON (2-1/2"x0.131") OR 10d BOX (3"x0.128") OR 3"x0.131" NAIL	6" O.C. TOE NAIL	
1"x6" SUBFLOOR OR LESS TO EACH JOIST	3-8d BOX (2-1/2"x0.113") OR 2-8d COMMON (2-1/2"x0.131") OR 3-10d BOX (3"x0.128") OR 2 STAPLES, 1" CROWN, 16 GA., 1-3/4" LONG	FACE NAIL	
2" SUBFLOOR TO JOIST OR GIRDER	3-16d BOX (3-1/2"x0.135") OR 2-16d COMMON (3-1/2"x0.162")	BLIND AND FACE NAIL	
2" PLANKS (PLANK & BEAM-FLOOR & ROOF)	3-16d BOX (3-1/2"x0.135") OR 2-16d COMMON (3-1/2"x0.162")	AT EACH BEARING FACE NAIL	
BAND OR RIM JOIST TO JOIST	3-16d COMMON (3-1/2"x0.162") OR 4-10d BOX (3"x0.128") OR 4-3"x0.131" NAILS OR 4 3"x14 GA. STAPLES, 7/16" CROWN	END NAIL	
BUILT-UP GIRDERS AND BEAMS, 2" LUMBER LAYERS	20d COMMON (3"x0.128")	NAIL EACH LAYER AS FOLLOWS: 32" O.C AT TOP END AND BOTTOM AND STAGGERED.	
	10d BOX (3"x0.128") OR 3"x0.131" NAIL	24" O.C. FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES	
	AND: 2-20d COMMON (4"x0.192") OR 3-10d BOX (3"x0.128") OR 3-3"x0.131" NAILS	FACE NAIL AT ENDS AND AT EACH SPLICE	
LEDGER STRIP SUPPORTING JOISTS OR RAFTERS	4-16d BOX (3-1/2"x0.135") OR 3-16d COMMON (3-1/2"x0.162") OR 4-10d BOX (3"x0.128") OR 4-3"x0.131" NAILS	AT EACH JOIST OR RAFTER, FACE NAIL	
BRIDGING OR BLOCKING TO JOIST	2-10d BOX (3"x0.128") OR 2-8d COMMON (2-1/2"x0.131") OR 2-3"x0.131" NAILS	EACH END, TOE NAIL	
DESCRIPTION OF BUILDING MATERIALS	NUMBER AND TYPE OF FASTENER	EDGES (IN)	INTERMEDIATE SUPPORTS (IN)
WOOD STRUCTURAL PANELS, SUBFLOOR, ROOF AND INTERIOR WALL SHEATHING TO FRAMING AND PARTICLEBOARD WALL SHEATHING TO FRAMING [SEE TABLE R602.3(3) FOR WOOD STRUCTURAL PANEL EXTERIOR WALL SHEATHING TO WALL FRAMING]			
3/8" - 1/2"	6d COMMON (2"x0.113") NAIL (SUBFLOOR, WALL) OR 8d COMMON (2-1/2"x0.131") NAILS (ROOF) OR RSRS-01 (2-3/8"x0.113") NAIL (ROOF)	6	12
19/32" - 1"	8d COMMON NAIL (2-1/2"x0.131") OR RSRS-01 (2-3/8"x0.113") NAIL (ROOF)	6	12
1-1/8" - 1-1.4"	10d COMMON (3"x0.148") NAIL OR 8d (2-1/2"x0.131") DEFORMED NAIL	6	12
OTHER WALL SHEATHING			
1/2" STRUCTURAL CELLULOSIC FIBERBOARD SHEATHING	1-1/2" GALVANIZED ROOFING NAIL, 7/16" HEAD DIAMETER OR 1-1/4" LONG 16 GA. STAPLE WITH 7/16" OR 1" CROWN	3	6
25/32" STRUCTURAL CELLULOSIC FIBERBOARD SHEATHING	1-3/4" GALVANIZED ROOFING NAIL, 7/16" HEAD DIAMETER OR 1-1/2" LONG 16 GA. STAPLE WITH 7/16" OR 1" CROWN	3	6
1/2" GYPSUM INTERIOR COVERING (R702.3.5)	1-1/2" GALVANIZED ROOFING NAIL: STAPLE GALVANIZED, 1-1/2" LONG; 1-1/4" SCREWS, TYPE "W" OR "S"	7	7
5/8" GYPSUM INTERIOR COVERING (R702.3.5)	1-3/4" GALVANIZED ROOFING NAIL: STAPLE GALVANIZED, 1-5/8" LONG; 1-5/8" SCREWS, TYPE "W" OR "S"	7	7
WOOD STRUCTURAL PANELS, COMBINATION SUBFLOOR UNDERLAYMENT TO FRAMING			
3/4" AND LESS	6d DEFORMED (2"x0.120") NAIL OR 8d COMMON (2-1/2"x0.131") NAIL	6	12
7/8" - 1"	8d COMMON (2-1/2"x0.131") NAIL OR 8d DEFORMED (2-1/2"x0.120") NAIL	6	12
1-1/8" - 1-1/4"	10d COMMON (3"x0.148") NAIL OR 8d DEFORMED (2-1/2"x0.120") NAIL	6	12

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SUMMIT HOMES

HIGHLAND MEADOWS #196 - CAROLINA MODERN PRAIRIE
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REVISIONS

FASTENING SCHEDULE

S550

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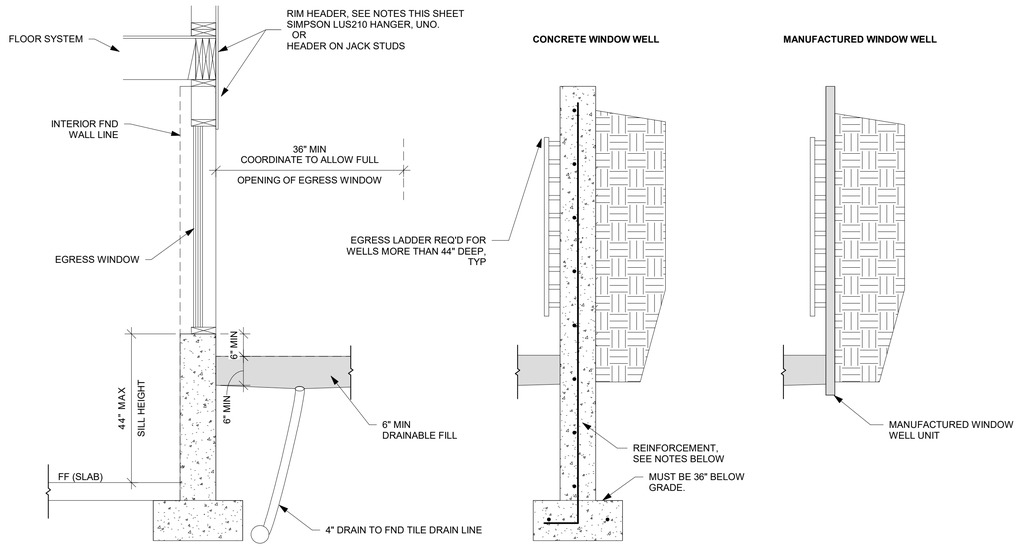
SCALE 1/4" = 1'-0"

GENERAL NOTES

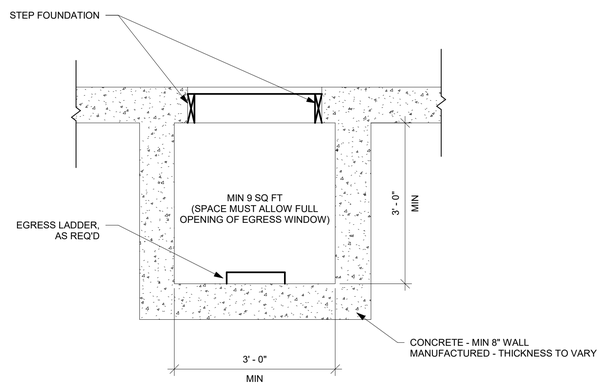
1. ALL CONSTRUCTION SHALL CONFORM TO 2018 INTERNATIONAL RESIDENTIAL CODE OR ATTACHED ENGINEER SPECIFICATIONS WHERE APPLICABLE.
2. THE INFORMATION PROVIDED ON THIS PLAN SHEET IS DESIGNED AND REVIEWED IN ACCORDANCE WITH THE IRC.
3. CONCRETE WINDOW WELLS SHALL BE MINIMUM 3000 PSI COMPRESSIVE STRENGTH.
4. ASSUMED SOIL MINIMUM BEARING CAPACITY 1500 PSF.
5. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING CONDITIONS AND DIMENSIONS CRITICAL FOR CONSTRUCTION OF NEW WORK.
6. MEANS AND METHODS OF CONTRUCTION ARE OUT OF SCOPE OF THE DESIGN PROVIDED.
7. TEMPORARY SUPPORTS SHALL BE INSTALLED BEFORE REMOVAL OF LOAD BEARING STRUCTURES.
8. DIMENSIONAL LUMBER SHALL BE MINIMUM DOUGLAS FIR LARCH NO. 2 OR SOUTHERN YELLOW PINE #1.
9. LVL BEAMS SHALL HAVE MINIMUM 2.0E AND 3100F_b
10. STEEL POST COLUMNS SHALL BE MINIMUM SCHEDULE 40, Fy=35KSI.
11. MINIMUM HEADERS
    A. ASSUMES LOADING FOR BUILDING WITH MAXIMIMUM WIDTH OF 36 FT (ROOF WITH 30PSF SNOW LOADS, CEILING, AND TWO FLOORS W/ CENTER BEARING) PER TABLE R602.7(1)

HEADER	MAX CLEAR SPAN	MIN JACK STUDS
(2) 2X10	4'-0"	2
(3) 2X10	5'-1"	2
(2) 2X12	4'-9"	3
(3) 2X12	5'-11"	2
(2) 1.75X9.25 LVL	7'-6"	3
(2) 1.75X11.25 LVL	9'-3"	3

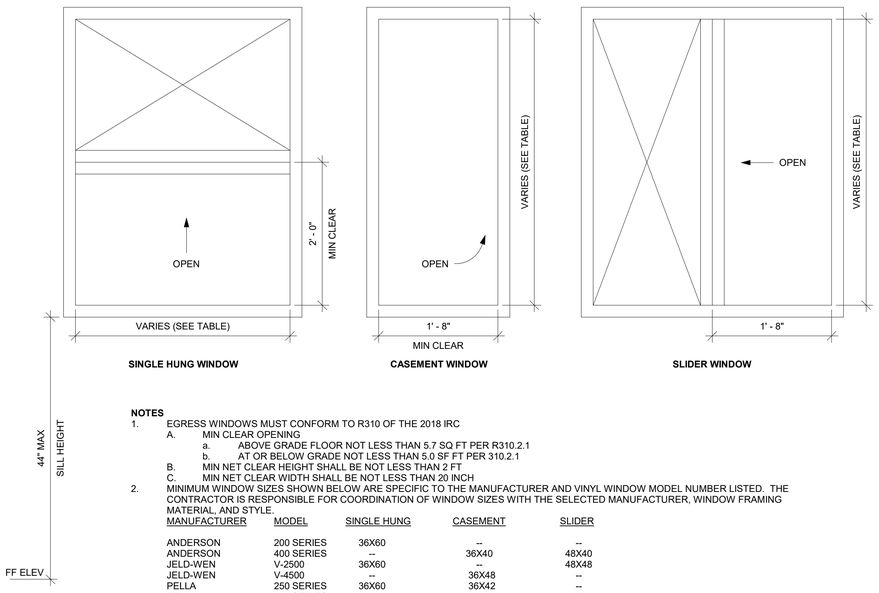


NOTES:
1. WINDOW WELL MUST MEET REQUIREMENT IN R310.2.6 OF THE IRC AND LOCALLY ADOPTED CODE
2. CONCRETE WINDOW WELL
   A. INTALLED WITH NEW FOUNDATION
      a. POUR WINDOW WELL MONOLITHICALLY WITH ADJACENT FND WALL.
      b. REINFORCEMENT
         - MATCH ADJACENT WALL REINFORCEMENT, SEE PLANS
   B. INSTALLED TO EXISTING FOUNDATION
      a. REINFORCEMENT
         - #4 BAR @ 12" OC EW IN WALLS
         - DRILL AND EXPOY HOR BAR INTO EX FND, MIN 6" EMBEDMENT INTO EX FND WALL.
         - (2) #4 BAR CONT IN WALL FTG.
      b. SEAL WHERE NEW CONCRETE IS POURED AGAINST EX FND WITH MASTIC STRIPS OR OTHER WATER STOP MATERIAL.
3. MANUFACTURED WINDOW WELL
   A. INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS
   B. COORDINATE DEPTH OF WELL WITH WINDOW AND MANUFACTURER REQUIREMENTS.

SECTION



PLAN



NOTES

1. EGRESS WINDOWS MUST CONFORM TO R310 OF THE 2018 IRC
   A. MIN CLEAR OPENING
      a. ABOVE GRADE FLOOR NOT LESS THAN 5.7 SQ FT PER R310.2.1
      b. AT OR BELOW GRADE NOT LESS THAN 5.0 SF FT PER 310.2.1
   B. MIN NET CLEAR HEIGHT SHALL BE NOT LESS THAN 2 FT
   C. MIN NET CLEAR WIDTH SHALL BE NOT LESS THAN 20 INCH
2. MINIMUM WINDOW SIZES SHOWN BELOW ARE SPECIFIC TO THE MANUFACTURER AND VINYL WINDOW MODEL NUMBER LISTED. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF WINDOW SIZES WITH THE SELECTED MANUFACTURER, WINDOW FRAMING MATERIAL, AND STYLE

MANUFACTURER	MODEL	SINGLE HUNG	CASEMENT	SLIDER
ANDERSON	200 SERIES	36X60	--	--
ANDERSON	400 SERIES	--	36X40	48X40
JELD-WEN	V-2500	36X60	--	48X48
JELD-WEN	V-4500	--	36X48	--
PELLA	250 SERIES	36X60	36X42	--
PELLA	150 SERIES	--	--	48X48

WINDOW EGRESS (NTS)

WINDOW WELL FOR EGRESS (NTS)

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REVISIONS

EGRESS WINDOWS

S560

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SCALE AS NOTED