

FRONT ELEVATION

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

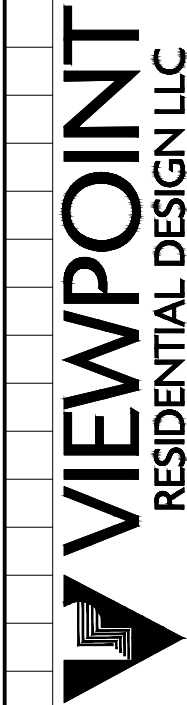
ONE-TIME-BUILD LICENSE AGREEMENT

NOTE: GOVERNING CODES &
GENERAL CONTRACTOR'S WRITTEN SPECIFICATIONS
TAKE PRECEDENCE OVER THESE PLANS.

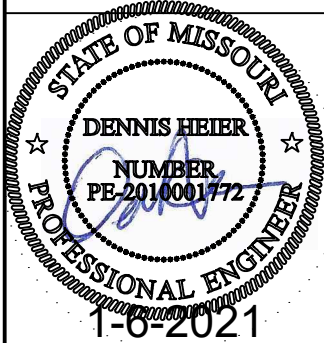
RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

01/11/2021

"For God so loved
the world, that he
gave his only
begotten Son,
that whosoever
believeth in him
should not perish,
but have
everlasting life"
(John 3:16)



Designed for:
**Ariel & Dina
COWAN**
Site Description:
**Lot 130, Napa
Valley**
Street Address:
**1526 SW
Blackstone Pl.,
Lee's Summit,
Missouri**
General Contractor:
**Kevin Higdon
Construction, LLC**



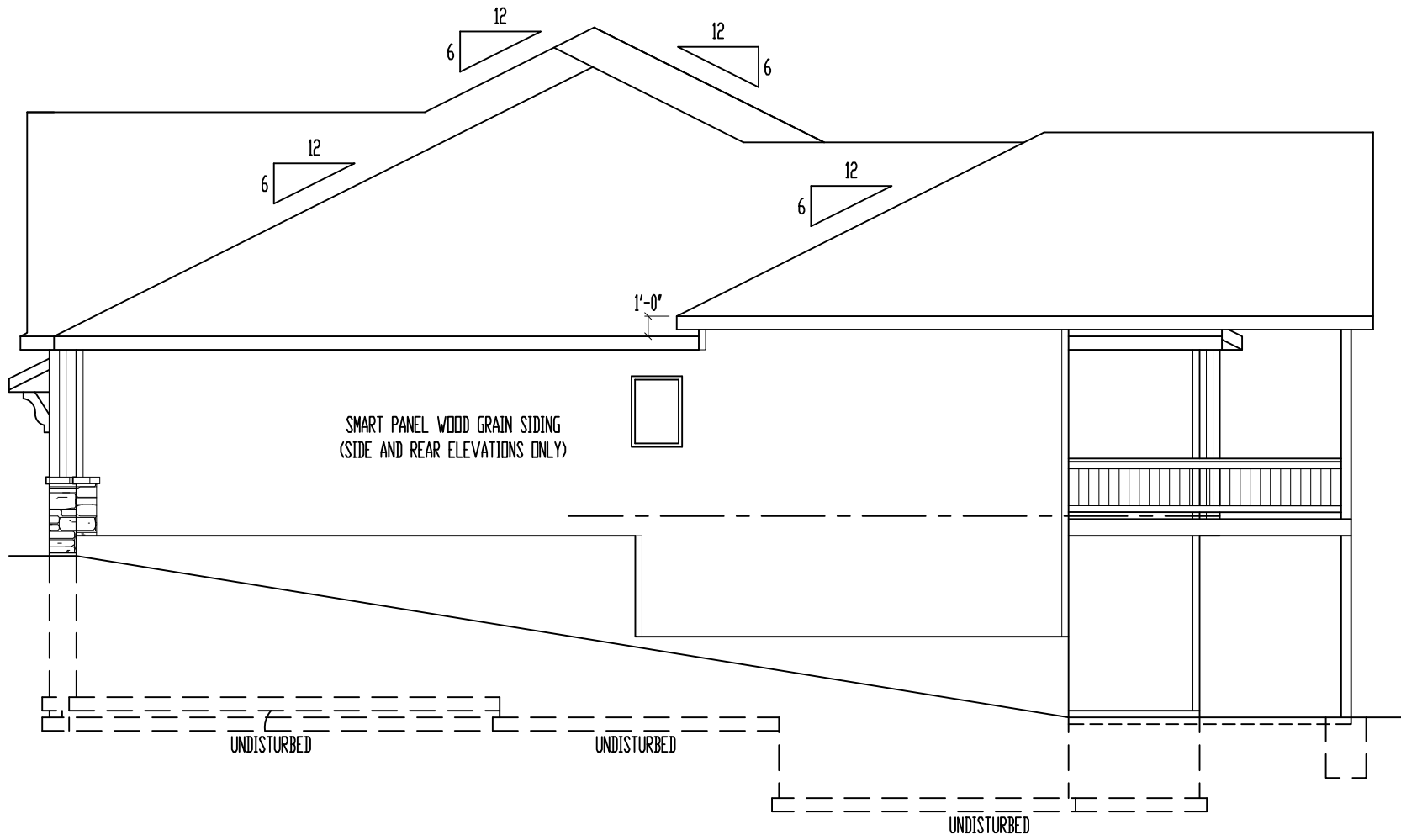
Date: 1 - 6 - AD 2021
Rev. 1:
Rev. 2:
Rev. 3:

Sheet Title:
**FRONT
ELEVATION**

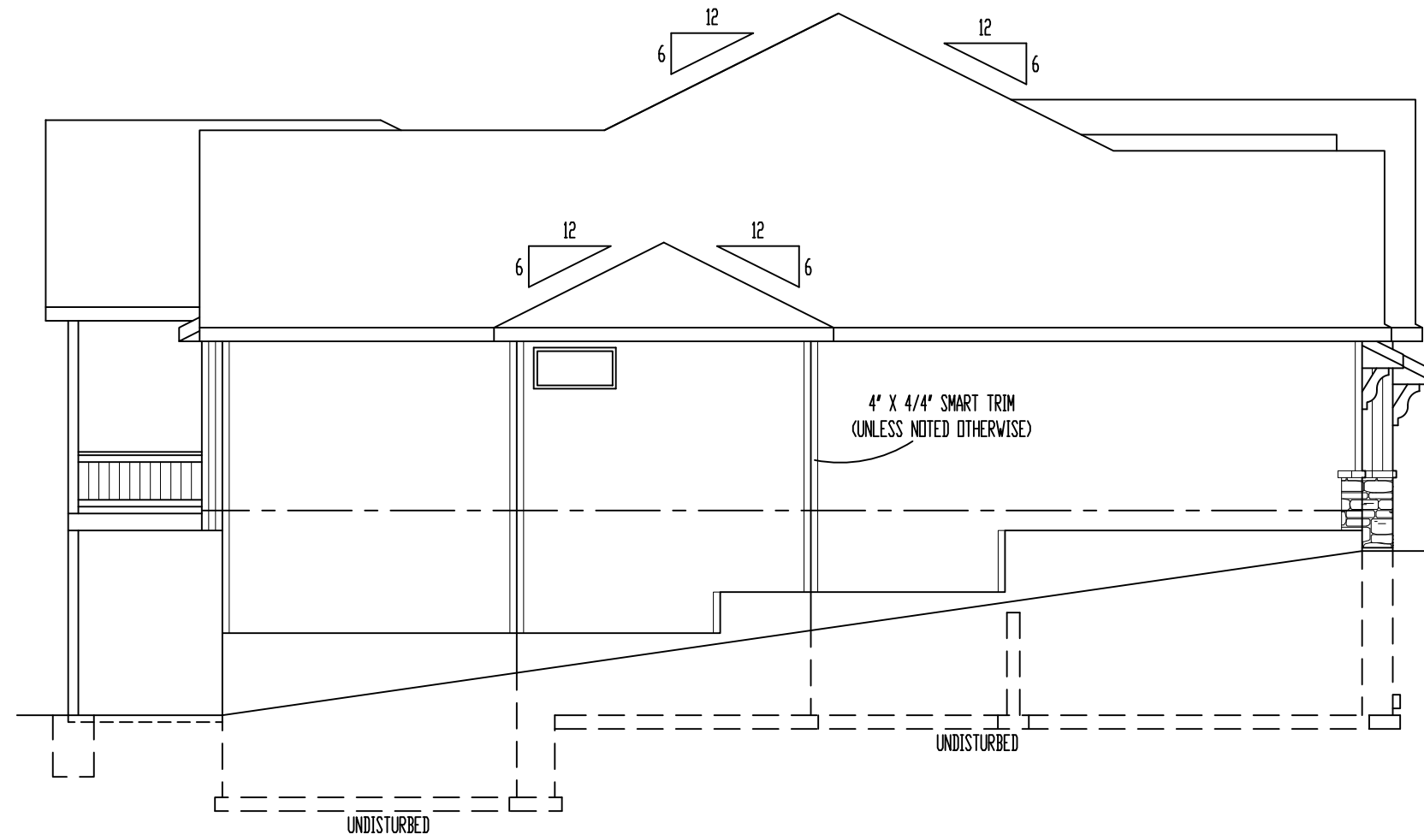
Sheet No.:
A-1 of 5

These plans and specifications are protected under federal copyright laws.
Copyright A.D. 2021 Viewpoint Residential Design, LLC.

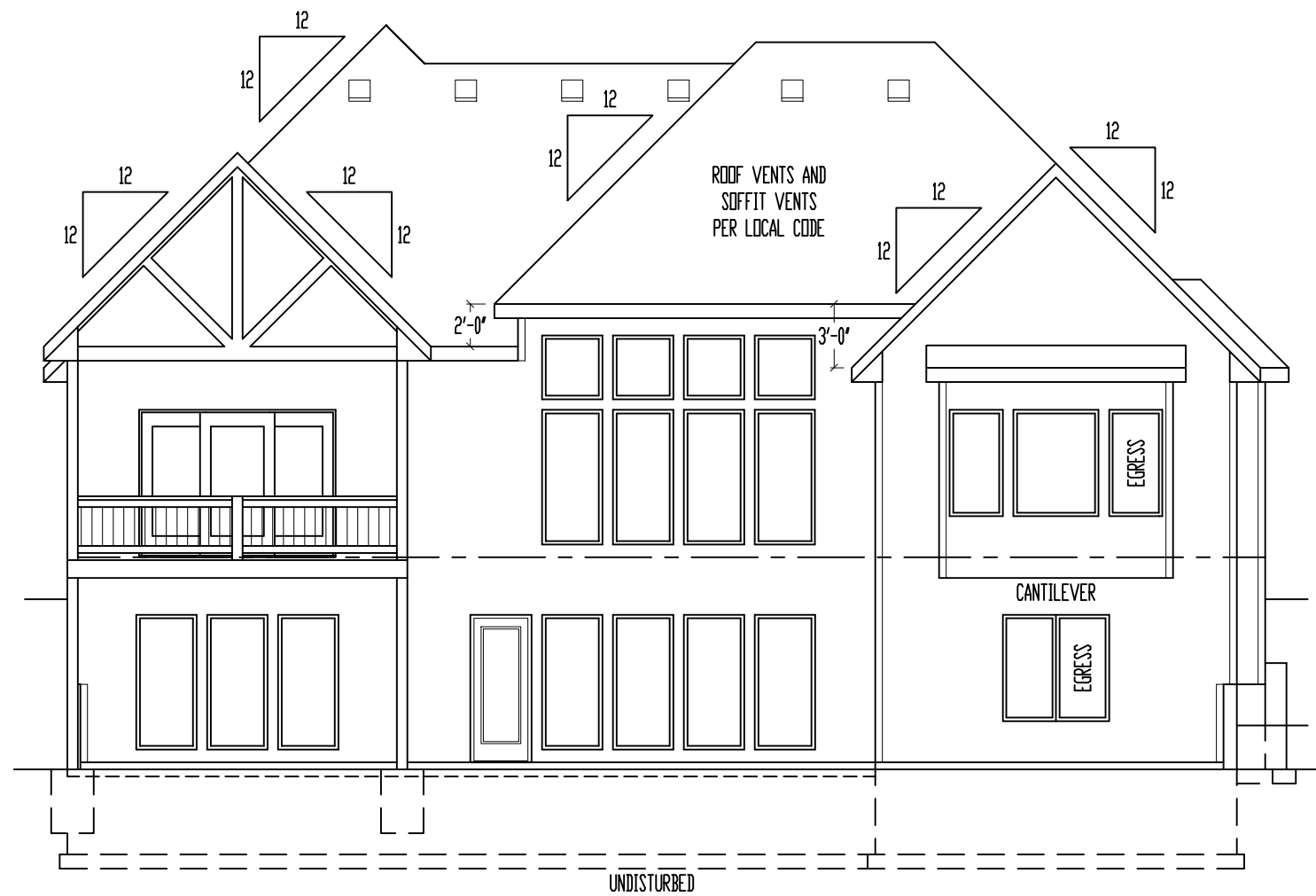
Care and effort have gone into the creation and design of this plan. However, the
designer is not an architect or engineer and construction from these plans should not be
undertaken without the assistance of a construction professional, architect or engineer.
Because of the impossibility of any on site consultation and supervision, Viewpoint
Residential Design, LLC, and Designer assume no responsibility for any damages,
including structural failures, due to any deficiencies, omissions or error in the design or
blueprints. Also, site conditions may vary from those illustrated on this plan. Designer
does not warrant the suitability of these plans for use on your specific site. Consult your
architect to determine the suitability of these plans for your specific site and application.



RIGHT ELEVATION
SCALE: 1/8" = 1'-0"



LEFT ELEVATION
SCALE: 1/8" = 1'-0"



REAR ELEVATION
SCALE: 1/8" = 1'-0"

ELEVATIONS:
SMART PANEL WOOD GRAIN SIDING ON SIDES AND REAR ELEVATIONS
COMPOSITION ROOF SHINGLES
LOCATE ROOF AND SOFFIT VENTS PER CODE
ADJUST FOUNDATION TO GRADE

DECK:
DECK CONSTRUCTION TO COMPLY WITH MUNICIPALITY'S
RESIDENTIAL DECK STANDARDS
2" X 10" #2 TTD. @ 16" O.C. FLOOR JOISTS (MAX. SPAN 14'-0")
2" X 6" CEDAR DECKING
6" X 6" CEDAR/TTD. POSTS
2" X 2" CEDAR SPINDLES
2" X 6" CEDAR TOP RAIL
DETERMINE OPTIONAL STAIRS ON SITE

These plans and specifications are protected under federal copyright laws.
Copyright A.D. 2021 Viewpoint Residential Design, LLC.

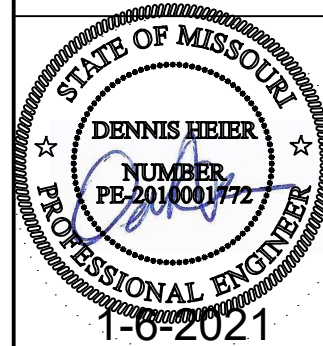
Care and effort have gone into the creation and design of this plan. However, the designer is not an architect or engineer and construction from these plans should not be undertaken without the assistance of a construction professional, architect or engineer. Because of the impossibility of any on site consultation and supervision, Viewpoint Residential Design, LLC, and Designer assume no responsibility for any damages, including structural failures, due to any deficiencies, omissions or error in the design or blueprints. Also, site conditions may vary from those illustrated on this plan. Designer does not warrant the suitability of these plans for use on your specific site. Consult your architect to determine the suitability of these plans for your specific site and application.

"For God so loved the world, that he gave his only begotten Son, that whosoever believeth in him should not perish, but have everlasting life" (John 3:16).

VIEWPOINT
RESIDENTIAL DESIGN LLC

M/T: (816)547-4437 E: Plans@ViewpointDesign.net

Designed for:
Ariel & Dina COWAN
Site Description:
Lot 130, Napa Valley
Street Address:
1526 SW Blackstone Pl., Lee's Summit, Missouri
General Contractor:
Kevin Higdon Construction, LLC







Date: 1 - 6 - AD 2021
Rev. 1:
Rev. 2:
Rev. 3:

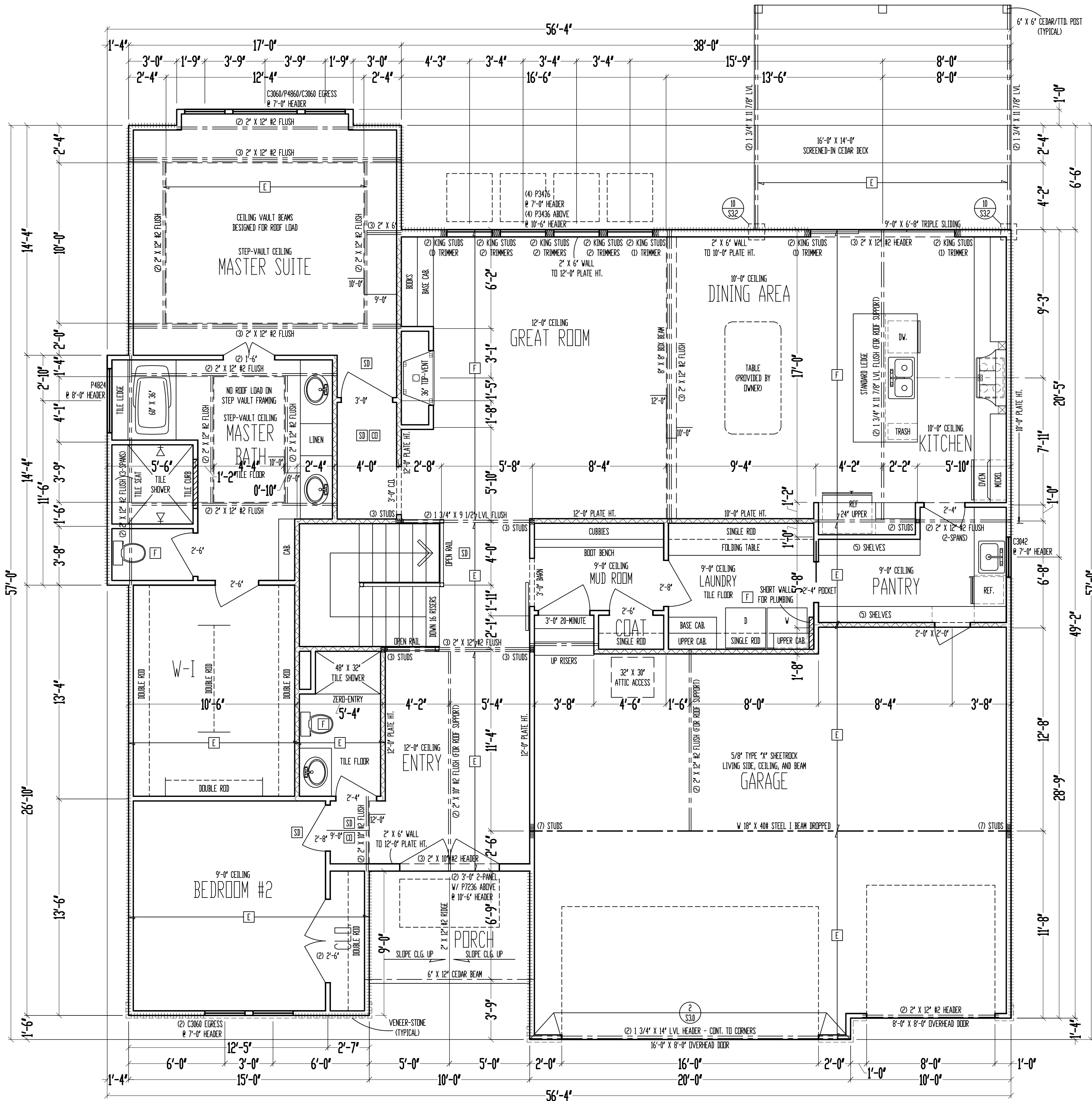
Sheet Title:
SIDES & REAR ELEVATIONS

Sheet No.:
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/11/2021



- * VERTICAL BRACE IF DOT IS UNDER HIP OR VALLEY
- * SLASH IS TOP END OF BRACE (/),
DOT IS BOTTOM OF BRACE (o).
- *  DENOTES BEARING WALL
- *  DENOTES ROOF BRACE
- *  DENOTES PURLIN
- *  DENOTES BEARING STRUCTURE

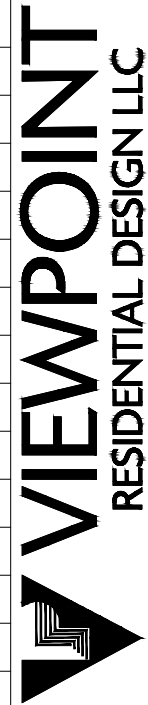
Sheet No. :
RELEASE FOR CONSTRUCTION
A-3
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 01/11/2021



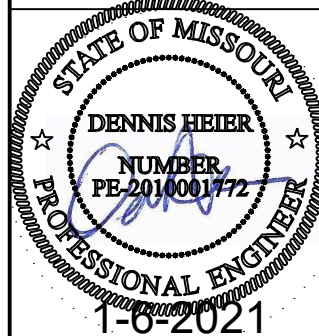
These plans and specifications are protected under federal copyright laws.
Copyright A.D. 2021 Viewpoint Residential Design, LLC.

Care and effort have gone into the creation and design of this plan. However, the designer is not an architect or engineer and construction from these plans should not be undertaken without the assistance of a construction professional, architect or engineer. Because of the impossibility of any on site consultation and supervision, Viewpoint Residential Design, LLC, and Designer assume no responsibility for any damages, including structural failures, due to any deficiencies, omissions or error in the design or blueprints. Also, site conditions may vary from those illustrated on this plan. Designer does not warrant the suitability of these plans for use on your specific site. Consult your architect to determine the suitability of these plans for your specific site and application.

"For God so loved the world, that he gave his only begotten Son, that whosoever should not perish, but have everlasting life" (John 3:16).



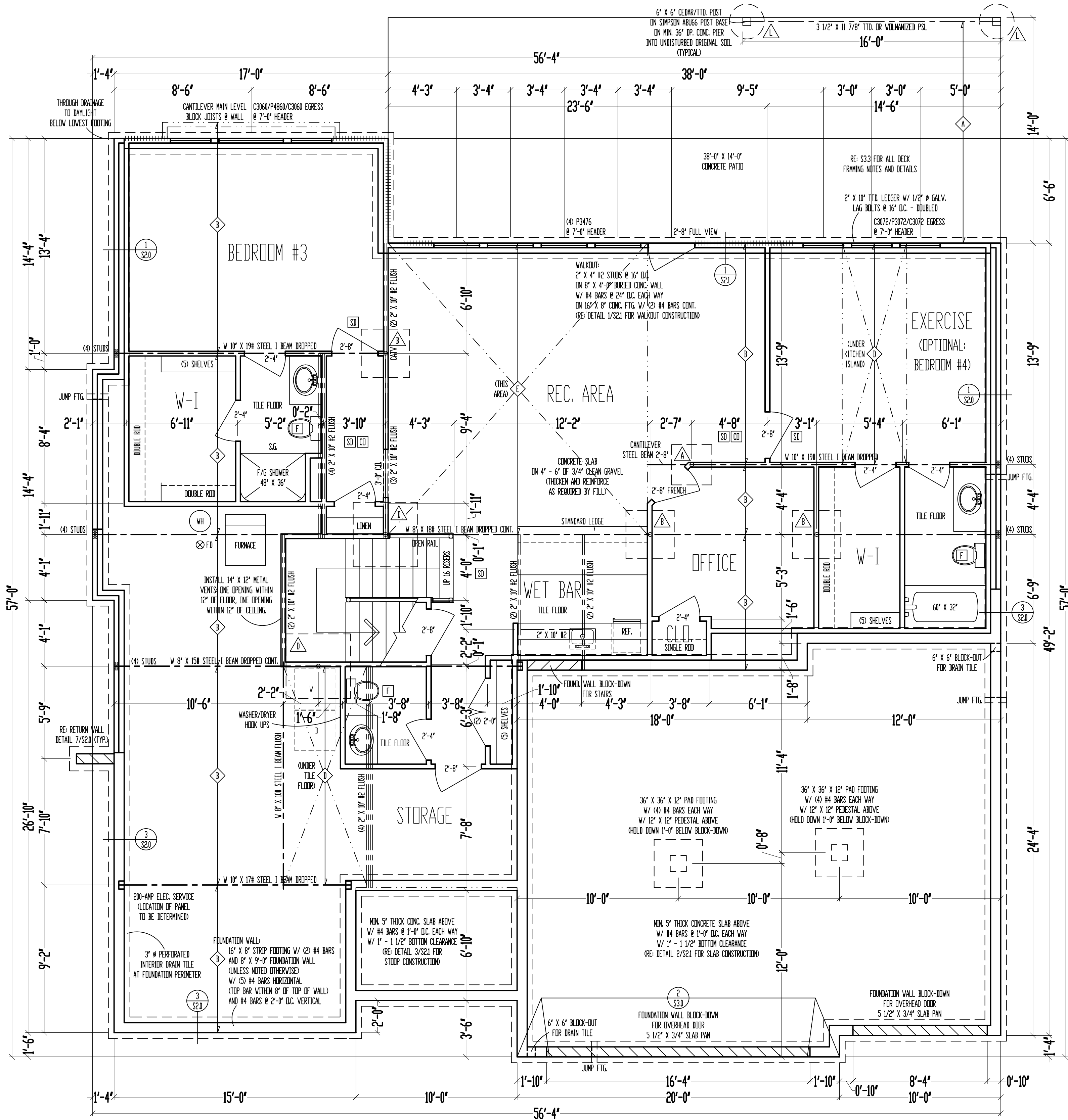
Designed for:
Ariel & Dina COWAN
Site Description:
Lot 130, Napa Valley
Street Address:
1526 SW Blackstone Pl., Lee's Summit, Missouri
General Contractor:
Kevin Higdon Construction, LLC



Date: 1 - 6 - AD 2021
Rev. 1:
Rev. 2:
Rev. 3:

Sheet Title:
MAIN LEVEL PLAN

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT PERMITS
LEE'S SUMMIT, MISSOURI 5
01/11/2021



9'-0" FOUNDATION WALLS
(UNLESS NOTED OTHERWISE)
ON 16" X 8" STRIP FOOTINGS
(STEP WHERE GRADE REQUIRES)

2" X 10" FLOOR SYSTEM
FOUNDATION
SCALE: 1/4" = 1'-0"

| STEEL COLUMN & PAD FOOTING SCHEDULE | |
|-------------------------------------|---|
| A | 3" X 11 GA. STEEL COLUMN ON 30" X 30" X 10" PAD FOOTING W/ (4) #4 BARS EACH WAY (12.5K) |
| B | 3 1/2" X 11 GA. STEEL COLUMN ON 36" X 36" X 10" PAD FOOTING W/ (4) #4 BARS EACH WAY (18.0K) |
| C | 3" SCH. 40 STEEL COLUMN ON 42" X 42" X 12" PAD FOOTING W/ (5) #4 BARS EACH WAY (24.5K) |
| D | 3 1/2" SCH. 40 STEEL COLUMN ON 48" X 48" X 12" PAD FOOTING W/ (6) #4 BARS EACH WAY (32.0K) |
| E | 3 1/2" SCH. 40 STEEL COLUMN ON 54" X 54" X 14" PAD FOOTING W/ (7) #4 BARS EACH WAY (40.5K) |
| F | 3 1/2" SCH. 40 STEEL COLUMN ON 60" X 60" X 14" PAD FOOTING W/ (8) #4 BARS EACH WAY (50.0K) |

| PIER FOOTING SCHEDULE | |
|-----------------------|-----------------|
| G | 12" Ø PIER FTG. |
| H | 16" Ø PIER FTG. |
| I | 18" Ø PIER FTG. |
| J | 24" Ø PIER FTG. |
| K | 26" Ø PIER FTG. |

| JOIST SCHEDULE | |
|----------------|--|
| A | 2" X 10" #2 TTD. FLOOR JOIST @ 16" O.C. |
| B | 2" X 10" #2 FLOOR JOIST @ 16" O.C. |
| C | 2" X 10" #3 FLOOR JOIST @ 16" O.C. |
| D | 2" X 10" #2 FLOOR JOIST @ 16" O.C. - DOUBLE EVERY OTHER |
| E | 2" X 10" #2 FLOOR JOIST @ 16" O.C. - DOUBLED |

***** = WALL BRACING PER FRAMING NOTE #1 AND PER CALCULATIONS ON SHEET S11.

FRAMING NOTES:
1. BASEMENT LEVEL EXTERIOR WOOD-FRAMED WALLS SHALL BE SHEATHED W/ 7/16" OSB. APA PANELS W/ 8d COMMON NAILS @ 4" O.C. AT EDGES & @ 12" O.C. IN THE FIELD. SMART PANEL, OR EQUAL, INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
2. / / / / / / / / / / = G.B. 1/2" MIN. GYPSUM BOARD OVER STUDS SPACED 24" MAX. FASTENED W/ NO. 6 - 1 1/4" TYPE W OR S DRYWALL SCREWS @ 7" O.C. EDGES & FIELD. (MIN. 8'-0" SECTIONS ONE SIDE OF WALL (OR MIN. 4'-0" SECTION FOR BOTH SIDES))
3. / / / / / / / / / / = LOAD BEARING INTERIOR WALL.
4. (2) 2" X 10" #2 HEADER AT ALL EXTERIOR AND LOAD BEARING WALLS, UNLESS NOTED OTHERWISE.
5. LOW TIES @ 4'-0" O.C. (TYPICAL)
6. RUN STUDS THE FULL HEIGHT OF RAISED PLATE WALLS.
7. BLOCK JOISTS ABOVE BEAMS, CANTILEVERS AND LOAD BEARING WALLS WITH JOIST MATERIAL (NOT REQUIRED WITH I-JOISTS).
8. PROVIDE MULTIPLE STUDS FOR SOLID BEARING BELOW ALL BEAMS.
9. ALL DESIGNATED 2" X 6" WALLS SHALL HAVE DOUBLE KING STUDS AT DOOR AND WINDOW OPENINGS.
10. ALL UNSQUARE WALLS SHALL BE 45°, UNLESS NOTED OTHERWISE.
11. ALL WALLS TO BE FRAMED W/ MIN. STUD GRADE 2" X 4'S @ 16" O.C., UNLESS NOTED OTHERWISE.
12. 1/2" Ø ANCHOR BOLTS W/ MIN. 7" EMBEDMENT @ 48" O.C. MAX. & WITHIN 6" - 12" OF END OF EACH PLATE LENGTH.
13. NEW FOUNDATION SHALL BEAR ON UNDISTURBED ORIGINAL SOIL WITH MINIMUM BEARING CAPACITY OF 1500 PSF. A GEOTECHNICAL ENGINEER IS RECOMMENDED FOR VERIFICATION OF THESE CONDITIONS DURING THE EXCAVATION PHASE. ENGINEER OF RECORD ASSUMES NO RESPONSIBILITY FOR CONSTRUCTION NOT VERIFIED TO BE FOUNDED ON ANYTHING SHORTER THAN THE ABOVEMENTIONED REQUIREMENTS.
14. CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD BEFORE CONSTRUCTION OF ANY DEFLECTION LIMITATIONS MORE STRINGENT THAN CODE MINIMUMS ABOVE ANY OPENINGS.

These plans and specifications are protected under federal copyright laws.
Copyright A.D. 2021 Viewpoint Residential Design, LLC.

"For God so loved the world, that he gave his only begotten Son, that whosoever believeth in him should not perish, but have everlasting life" (John 3:16).

VIEWPOINT
RESIDENTIAL DESIGN LLC

Designed for:
Ariel & Dina COWAN
Site Description:
Lot 130, Napa Valley
Street Address:
1526 SW Blackstone Pl., Lee's Summit, Missouri
General Contractor:
Kevin Higdon Construction, LLC

STATE OF MISSOURI
DENNIS HEIER
NUMBER
PE-2014001772
PROFESSIONAL ENGINEER
1-6-2021

Date: 1 - 6 - AD 2021
Rev. 1:
Rev. 2:
Rev. 3:

Sheet Title:
FOUNDATION PLAN

RELEASED FOR CONSTRUCTION
AS NOTED ON PLANS
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/11/2021

| FASTENER SCHEDULE FOR STRUCTURAL MEMBERS | | |
|---|---|---|
| DESCRIPTION OF BUILDING ELEMENTS | NUMBER AND TYPE OF FASTENER | SPACING AND LOCATION |
| ROOF ¹ | | |
| BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE, TOE NAIL | 4-8d (2½" x 0.113") | TOENAIL |
| CEILING JOISTS TO PLATE, TOE NAIL | 4-8d (2½" x 0.113") | PER JOIST, TOENAIL |
| CEILING JOISTS NOT ATTACHED TO PARALLEL RAFTER, LAPS OVER PARTITIONS, FACE NAIL | 4-10d (3" x 0.128") | FACE NAIL |
| CEILING JOIST TO PARALLEL RAFTER (HEEL JOINT) | TBLE R802.5.2 | FACE NAIL |
| COLLAR TIE TO RAFTER, FACE NAIL OR 1 ½" x 20 GA. RIDGE STRAP TO RAFTER | 4-10d (3" x 0.128") | FACE NAIL, EACH RAFTER |
| RAFTER OR ROOF TRUSS TO PLATE | 3-16d BOX NAILS (¾" x 0.135") OR 3-10d COMMON NAILS (3" x 0.148") | 2 TOE NAILS ON ONE SIDE AND 1 TOE NAIL ON OPPOSITE SIDE OF EACH RAFTER OR TRUSS |
| WALL | | |
| STUD TO STUD (NOT AT BRACED WALL PANELS) | 10d (3" x 0.128") | 16" O.C. FACE NAIL |
| STUD TO STUD AND ABUTTING STUDS AT INTERSECTING WALL CORNERS (AT BRACED WALL PANELS) | 16d (3½" x 0.135") | 12" O.C. FACE NAIL |
| BUILT-UP HEADER, TWO PIECES WITH ½" SPACER | 16d (3½" x 0.135") | 12" O.C. EACH EDGE FACE NAIL |
| CONTINUOUS HEADER TO STUD | 4-8d (2½" x 0.131") | TOENAIL |
| TOP PLATE TO TOP PLATE | 10d (3" x 0.128") | 12" O.C. FACE NAIL |
| DOUBLE TOP PLATE SPLICE | 8-16d COMMON (3 ½" x 0.162") | FACE NAIL ON EACH SIDE OF END JOINT (MIN. 24" LAP SPLICE LENGTH EACH SIDE OF END JOINT) |
| BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST, OR BLOCKING (NOT AT BRACED WALL PANELS) | 16d COMMON (3 ½" x 0.162") | 16" O.C. FACE NAIL |
| BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST, OR BLOCKING (AT BRACED WALL PANEL) | 3-16d BOX (3 ½" x 0.135") | 3 EACH 16" O.C. FACE NAIL |
| TOP OR SOLE PLATE TO STUD, END NAIL | 4-8d BOX (2 ½" x 0.113") - TOENAIL; 3-16d BOX (3 ½" x 0.135") - END NAIL | TOENAIL, END NAIL (SEE LEFT) |
| TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS | 3-10d BOX (3" x 0.128") | FACE NAIL |
| 1" BRACE TO EACH STUD AND PLATE | 3-8d BOX (2 ½" x 0.113") | FACE NAIL |
| 1"x6" SHEATHING TO EACH BEARING | 3-8d BOX (2 ½" x 0.113") | FACE NAIL |
| 1"x8" SHEATHING TO EACH BEARING | 3-8d BOX (2 ½" x 0.113") - FACE NAIL; WIDER THAN 1"x8" - 4-8d BOX (2 ½" x 0.113") | FACE NAIL |
| FLOOR | | |
| JOIST TO SILL, TOP PLATE, OR GIRDER | 4-8d BOX (2 ½" x 0.113") | TOE NAIL |
| RIM JOIST, BAND JOIST, OR BLOCKING TO SILL OR TOP PLATE (ROOF APPLICATIONS ALSO) | 8d BOX (2 ½" x 0.113") | 4" O.C. TOE NAIL |
| 1" x 6" SUBFLOOR OR LESS TO EACH JOIST | 3-8d BOX (2 ½" x 0.113") | FACE NAIL |
| 2" SUBFLOOR TO JOIST OR GIRDER | 3-16d BOX (3 ½" x 0.135") | BLIND AND FACE NAIL |
| 2" PLANKS (PLAN & BEAM - FLOOR AND ROOF) | 3-16d BOX (3 ½" x 0.135") | AT EACH BEARING, FACE NAIL |
| BAND OR RIM JOIST TO JOIST | 3-16d COMMON (3 ½" x 0.162") | END NAIL |
| BUILT-UP GIRDERS AND BEAMS, 2-INCH LUMBER LAYERS | 10d BOX (3" x 0.128") | 24" O.C. FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES |
| LEDGER STRIP SUPPORTING JOISTS OR RAFTERS | 4-16d BOX (3 ½" x 0.135") | AT EACH JOIST OR RAFTER, FACE NAIL |
| BRIDGING OR BLOCKING TO JOIST | 2-10d BOX (3" x 0.128") | EACH END, TOENAIL |

| FASTNER SCHEDULE FOR STRUCTURAL MEMBERS | | | |
|--|--|-----------------------|--------------------------------|
| DESCRIPTION OF BUILDING MATERIALS | DESCRIPTION OF FASTENER | EDGE SPACING (INCHES) | INTERMEDIATE SUPPORTS (INCHES) |
| WOOD STRUCTURAL PANELS, SUBFLOOR, ROOF AND INTERIOR WALL SHEATHING TO FRAMING AND PARTICLEBOARD WALL SHEATHING TO FRAMING ¹ | | | |
| ¾" - ½" | 6d COMMON (2" x 0.113") NAIL (SUBFLOOR, WALL) 8d COMMON NAIL (ROOF) | 6 | 12 |
| ⅝" - 1" | 8d COMMON NAIL (2½" x 0.131") | 6 | 12 |
| 1⅝" - 1¼" | 10d COMMON (3" x 0.148") NAIL OR 8d (2½" x 0.131") DEFORMED NAIL | 6 | 12 |
| OTHER WALL SHEATHING ¹ | | | |
| ½" STRUCTURAL CELLULOSIC FIBERBOARD SHEATHING | 1 ½" GALVANIZED ROOFING NAIL, ⅝" HEAD DIAMETER, OR 1 ½" LONG 16 GA. STAPLE WITH ⅝" OR 1" CROWN | 3 | 6 |
| ⅝" STRUCTURAL CELLULOSIC FIBERBOARD SHEATHING | 1 ¾" GALVANIZED ROOFING NAIL, ⅝" HEAD DIAMETER, OR 1 ¾" LONG 16 GA. STAPLE WITH ⅝" OR 1" CROWN | 3 | 6 |
| ½" GYPSUM SHEATHING | 1½" GALVANIZED ROOFING NAIL; STAPLE GALVANIZED, 1½" LONG; 1½" SCREWS, TYPE W OR S | 7 | 7 |
| ⅝" GYPSUM SHEATHING | 1½" GALVANIZED ROOFING NAIL; STAPLE GALVANIZED, 1½" LONG; 1½" SCREWS, TYPE W OR S | 7 | 7 |
| WOOD STRUCTURAL PANELS, COMBINATION SUBFLOOR UNDERLAYMENT TO FRAMING | | | |
| ¾" AND LESS | 6d DEFORMED (2" x 0.120") NAIL OR 8d COMMON (2½" x 0.131") NAIL | 6 | 12 |
| ¾" - 1" | 8d COMMON (2½" x 0.131") NAIL OR 8d DEFORMED (2½" x 0.120") NAIL | 6 | 12 |
| 1⅝" - 1¼" | 10d COMMON (3" x 0.148") NAIL OR 8d DEFORMED (2½" x 0.120") NAIL | 6 | 12 |

1. IF INFORMATION LISTED ON PLAN SHEETS CONTRADICTS INFORMATION IN THIS TABLE, INFORMATION ON PLANS TAKES PRECEDENCE OVER INFORMATION LISTED IN THIS TABLE

FOUNDATION NOTES

- CONCRETE SHALL BE AIR-ENTRAINED BETWEEN 5%-7% WITH A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 2500 PSI FOR BASEMENT AND INTERIOR FLOOR SLABS-ON-GRADE, 3000 PSI FOR FOUNDATION WALLS, AND 3500 PSI FOR PORCHES AND GARAGE FLOOR SLABS
- THE FOUNDATION DESIGN SHALL COMPLY WITH THE ENFORCING JURISDICTION'S RESIDENTIAL FOUNDATION STANDARDS
- PROVIDE A MINIMUM 4"-DIAMETER PERFORATED DRAIN PIPE ALONG PERIMETER OF USABLE SPACE AT FOOTING LEVEL OR OTHER EQUIVALENT MATERIALS PER IRC SECTION R405.1. THE PIPE SHALL BE COVERED WITH A MINIMUM OF 6" OF GRAVEL OR CRUSHED ROCK. THE DRAIN SHALL DAYLIGHT BELOW FOOTING LEVEL OR TERMINATE IN A MINIMUM 20 GALLON SUMP PIT.
- FOUNDATION SHALL BE DESIGNED FOR A BEARING CAPACITY OF 1500 PSF AND FOUNDED ON COMPETENT ORIGINAL SOIL AS DETERMINED AND CONFIRMED BY A LICENSED GEOTECHNICAL ENGINEER OR ENGINEERING GEOLOGIST. ENGINEER OF RECORD ASSUMES NO RESPONSIBILITY FOR CONSTRUCTION NOT VERIFIED TO BE FOUNDED ON ANY SOIL WITH THE AFOREMENTIONED MINIMUM PROPERTIES.
- FOOTINGS SHALL BE A MINIMUM OF 16" WIDE x 8" DEEP AND SHALL HAVE A MINIMUM OF (2) CONTINUOUS GRADE 40 #4 BARS WITH 3" BOTTOM CLEARANCE. BOTTOM OF FOOTING SHALL BE LOCATED A MINIMUM OF 3'-0" BELOW GRADE FOR FROST PROTECTION.
- CONCRETE PADS SUPPORTING COLUMN LOADS SHALL BE NO SMALLER THAN 2'-0" x 2'-0" x 1'-0" DEEP WITH A MINIMUM OF (4) GRADE 40 #4 BARS EACH WAY WITH 3" BOTTOM CLEARANCE
- FOUNDATION WALLS SHALL BE A MINIMUM OF 8" NOMINAL WIDTH AND SHALL HAVE HOIZONTAL GRADE 40 #4 BARS AT 2'-0" O.C. MAX. WITH VERTICAL #4 BARS AS REQUIRED ON FOUNDATION CROSS SECTION ON SHEET S2.0
- REINFORCEMENT SHALL LAP A MINIMUM OF 2'-0" (CLASS B SPLICE)
- INTERIOR BEARING WALLS AND COLUMNS SHALL BE ISOLATED FROM THE BASEMENT FLOOR SLAB
- BASEMENT FLOOR SLAB SHALL BE A MINIMUM OF 4" THICK ON A MINIMUM BASE COURSE OF 4" TO 6" OF SAND, GRAVEL OR CRUSHED ROCK. BETWEEN THE BASE COURSE AND FLOOR SLAB SHALL BE PLACED A 6-MIL POLY VAPOR RETARDER WITH MINIMUM OVERLAP OF 6" AT DISCONTINUITIES
- IF A FLOOR IS TO BE SUPPORTED BY A MINIMUM OF 2'-0" OF GRANULAR FILL OR 8" OF EARTH, BASEMENT SLAB SHALL BE DESIGNED BY A LICENSED ENGINEER
- SILL PLATES SHALL BE ANCHORED TO THE FOUNDATION WALL WITH ½" Ø ANCHOR BOLTS EMBEDDED A MINIMUM OF 7" INTO CENTER OF WALL STEM AND SHALL BE INSTALLED AT A MAXIMUM OF 6'-0" O.C. (OR AS NOTED ON PLANS) AND SHALL BE INSTALLED WITHIN 6" TO 12" OF EACH END OF EACH SILL PLATE LENGTH, PER IRC SECTION R403.1.6
- FOUNDATION WINDOW WELLS SHALL BE PROVIDED WITH MINIMUM DIMENSIONS AS SHOWN IN DETAIL ON SHEET S2.0
- THE GARAGE FLOOR SHALL SLOPE TOWARD THE VEHICLE DOORS OR TO A TRENCH OR UNTRAPPED DRAIN THAT DISCHARGES TO THE EXTERIOR, ABOVE GRADE

FRAMING NOTES

- ALL DIMENSIONAL LUMBER SHALL BE DOUGLAS-FIR-LARCH GRADE #2, UNLESS NOTED OTHERWISE ON PLANS
- ALL INTERIOR LOAD-BEARING AND EXTERIOR WALL HEADERS SHALL BE (2) #2 - 2x10's, UNLESS NOTED OTHERWISE ON PLANS
- BLOCK OVER BEAMS AND AT CANTILEVERS AND DOOR JAMBS
- INTERIOR NON-BEARING WALLS RESTING ON BASEMENT SLAB SHALL BE ISOLATED FROM ABOVE FRAMING BY A MINIMUM OF ½"
- ALL HEADERS/BEAMS SHALL BEAR ON A MINIMUM OF (2) 2x4 POSTS (KING AND JACK STUDS), UNLESS NOTED OTHERWISE
- WHERE JOISTS SPAN PARALLEL TO FOUNDATION, BLOCKING SHALL BE PROVIDED IN THE TWO SPACES MOST ADJACENT TO THE FOUNDATION WALL AT 4'-0" O.C. FOR THE PURPOSE OF TRANSFERRING LATERAL FOUNDATION WALL LOAD TO THE FLOOR DIAPHRAGM. FASTEN JOISTS AND BLOCKING TO SILL PLATE WITH (4) 10d NAILS. IF MECHANICAL DUCTWORK IS INSTALLED IN ONE OF THESE FIRST TWO BAYS, FASTEN 2x4's FLAT AT 4'-0" O.C. BETWEEN JOIST(S) AND/OR SILL AND PROVIDE BLOCKING AS PRESCRIBED ABOVE IN THE NEXT TWO JOIST BAYS. SECURE 2x4's TO JOIST(S)/SILL PLATE WITH (4) 10d NAILS.
- ALL WOOD MATERIAL SUPPORTED ON CONCRETE OR MASONRY SHALL BE TREATED OR OF DECAY-RESISTANT MATERIAL
- JOISTS UNDER BEARING PARTITIONS ON PLANS HAVE BEEN SIZED TO SUPPORT THE DESIGN LOAD.
- JOISTS FRAMING INTO THE FACE OF A STEEL OR WOOD BEAM SHALL BE SUPPORTED WITH APPROPRIATE COLD-FORMED STEEL JOIST HANGERS
- JOISTS FRAMED ON TOP OF STRUCTURAL MEMBER SHALL BE SUPPORTED AT EN DS BY FULL-DEPTH SOLID BLOCKING MIN. 1½" IN THICKNESS OR BY FASTENING RIM TO JOISTS PER FASTENING TABLE TO LEFT
- ALL WALL COVERINGS SHALL COMPLY WITH IRC SECTION R702.3
- ALL RAFTERS AND COLLAR TIES SHALL COMPLY WITH IRC SECTION R802.3
- ALL RAFTERS SHALL HAVE 2x4 COLLAR TIES @ 4'-0" O.C. IN UPPER ½ OF VERTICAL DISTANCE BETWEEN CEILING AND ROOF
- BLOCKING BETWEEN JOISTS UNDER A LOAD-BEARING WALL IS NOT REQUIRED
- PER IRC SECTION 501.3, BOTTOM OF ALL FLOOR ASSEMBLIES ABOVE UNFINISHED AREAS SHALL BE PROVIDED WITH A ½" GYPSUM BOARD MEMBRANE OR RESIDENTIAL FIRE SPRINKLER SYSTEM WHEN FLOOR SYSTEM IS CONSTRUCTED OF OTHER THAN DIMENSION LUMBER OR STRUCTURAL COMPOSITE LUMBER EQUAL TO OR GREATER THAN 2x10 NOMINAL DIMENSION(WHERE REQUIRED BY ENFORCING JURISDICTION)
- ENGINEERED LVL's SHALL HAVE MINIMUM PROPERTIES OF Fb = 2600 psi, E=1900 ksi, AND Fv=285 psi
- ENGINEERED PARALLAMS SHALL HAVE MINIMUM PROPERTIES OF Fb = 2600 psi, E = 2000 ksi, AND Fv = 290 psi
- COLUMN CONNECTION TO STEEL BEAMS SHALL BE WITH A CLIP POST CAP WITH ALL FOUR TAB EARS BENT AROUND THE BOTTOM FLANGE OF THE BEAM. FOR A BEARING PLATE, FOUR HOLES SHALL BE DRILLED IN THE BOTTOM FLANGE OF THE STEEL BEAM TO MATCH THE HOLE PATTERN OF THE PLATE. ½" x 2" BOLTS SHALL THEN BE INSTALLED WITH A FLAT WASHER, LOCK WASHER, AND A NUT IN EACH OF THE HOLES. THE POST CAP MAY BE WELDED TO THE STEEL BEAM IN ACCORDANCE WITH AWS D1.1-92 AS AN ALTERNATIVE, AND WOULD NEED TO BE INSPECTED BY AN AWS-CERTIFIED INSPECTOR.
- WHEN MECHANICAL EQUIPMENT IS LOCATED IN AN ENCLOSED ROOM, THERE SHALL BE (2) 14"x12" VENTS LOCATED IN A WALL COMMON WITH ADDITIONAL LIVING AREA. ONE VENT SHALL BE LOCATED SUCH THAT THE BOTTOM OF THE VENT BEGINS 12" FROM THE FLOOR AND THE OTHER VENT SHALL BE LOCATED SUCH THAT THE TOP OF THE VENT BEGINS 12" FROM THE CEILING.
- ALL ROOF SHEATHING SHALL BE ⅝" OSB WITH 8d COMMON NAILS @ 6" O.C. AT PANEL EDGES AND @ 12" O.C. IN FIELD
- GLAZING IN HAZARDOUS LOCATIONS AS IDENTIFIED IN IRC SECTION R308.4 SHALL BE OF 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 2'-0" ARC OF THE DOOR IN A CLOSED POSITION AND FOR WHICH THE BOTTOM EDGE IS WITHIN 5'-0" OF THE FLOOR, WALLS ENCLOSING STAIRWAYS AND LANDINGS WHERE THE GLAZING IS WITHIN 5'-0" OF THE TOP OR BOTTOM OF THE STAIR, ENCLOSURES FOR SPAS, TUBS, SHOWERS, AND WHIRLPOOLS, GLAZING IN FIXED OR OPENABLE PANELS EXCEEDING NINE SQUARE FEET AND FOR WHICH THE BOTTOM EDGE IS LESS THAN 1'-6" ABOVE THE FLOOR OR WALKING SURFACE WITHIN 3'-0"
- ALL OPERABLE WINDOWS SHALL HAVE FALL PROTECTION PER IRC SECTION R612.2

GLAZING NOTES

- GLAZING IN HAZARDOUS LOCATIONS AS IDENTIFIED IN IRC SECTION R308.4 SHALL BE OF 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 2'-0" ARC OF THE DOOR IN A CLOSED POSITION AND FOR WHICH THE BOTTOM EDGE IS WITHIN 5'-0" OF THE FLOOR, WALLS ENCLOSING STAIRWAYS AND LANDINGS WHERE THE GLAZING IS WITHIN 5'-0" OF THE TOP OR BOTTOM OF THE STAIR, ENCLOSURES FOR SPAS, TUBS, SHOWERS, AND WHIRLPOOLS, GLAZING IN FIXED OR OPENABLE PANELS EXCEEDING NINE SQUARE FEET AND FOR WHICH THE BOTTOM EDGE IS LESS THAN 1'-6" ABOVE THE FLOOR OR WALKING SURFACE WITHIN 3'-0"
- ALL OPERABLE WINDOWS SHALL HAVE FALL PROTECTION PER IRC SECTION R612.2

ATTIC 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 ½" TO ¾" OPENINGS. THE TOTAL FREE VENTILATING AREA SHALL NOT BE LESS THAN ⅓ OF THE AREA OF SPACE VENTILATED, EXCEPT WHERE THE VENTILATORS ARE LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED - THE REQUIRED AREA MAY BE REDUCED TO 1/300.

EMERGENCY EGRESS

- PROVIDE A MINIMUM OF ONE WINDOW FOR EACH BEDROOM THAT HAS A MINIMUM OPENABLE AREA OF 5.7 SQUARE FEET WITH A MINIMUM OPENABLE HEIGHT OF 2'-0" AND A MINIMUM WIDTH OF 1'-9". IN ADDITION, THE OPENABLE PORTION OF EGRESS WINDOWS SHALL NOT EXCEED 3'-8" ABOVE THE ADJOINING FLOOR OR PERMANENT STEP.
- PROVIDE SMOKE ALARMS IN EACH SLEEPING ROOM, OUTSIDE OF EACH SLEEPING AREA AND ON EACH FLOOR, INCLUDING BASEMENT (IF APPLICABLE). ALARMS SHALL BE HARDWIRED TOGETHER SO THAT THE ACTIVATION OF ONE SMOKE ALARM WILL ACTIVATE ALL SMOKE ALARMS IN THE DWELLING. PROVIDE CARBON MONOXIDE DETECTORS OUTSIDE EACH SLEEPING AREA.

MASONRY VENEER

- MASONRY VENEER SHALL BE ANCHORED TO THE SUPPORTING WALL STUDS WITH CORROSION-RESISTANT METAL TIES EMBEDDED IN MORTAR OR GROUT AND EXTENDING INTO THE VENEER A MINIMUM OF 1½", WITH NOT LESS THAN ¾" MORTAR OR GROUT COVER TO OUTSIDE FACE.
- VEENEY TIES, IF STRAND WIRE, SHALL NOT BE LESS IN THICKNESS THAN NO. 9 U.S. GAGE WIRE AND SHALL HAVE A HOOK EMBEDDED IN THE MORTAR JOINT, OR IF SHEET METAL, SHALL BE NOT LESS THAN NO. 22 U.S. GAGE BY ½" CORRUGATED.
- EACH TIE SHALL SUPPORT NOT MORE THAN 2.67 SQUARE FEET OF WALL AREA AND SHALL BE SPACED NOT MORE THAN 32 INCHES ON CENTER HORIZONTALLY AND 24 INCHES ON CENTER VERTICALLY.
- VEENEY TIES AROUND WALL OPENINGS: ADDITIONAL METAL TIES SHALL BE PROVIDED AROUND ALL WALL OPENINGS GREATER THAN 16 INCHES IN EITHER DIMENSION. METAL TIES AROUND THE PERIMETER OF OPENINGS SHALL BE SPACED NOT MORE THAN 3 FEET ON CENTER AND PLACED WITHIN 12 INCHES OF THE WALL OPENING.

GARAGE NOTES

- DOOR(S) BETWEEN THE GARAGE AND DWELLING SHALL BE MINIMUM 1½" SOLID CORE OR HONEY-COMBED STEEL DOOR WITH 20-MINUTE FIRE RATING EQUIPPED WITH A SELF-CLOSING DEVICE
- VEHICLE DOORS AND FRAMES SHALL BE DESIGNED AND INSTALLED TO MEET THE 115-MPH 3-SECOND GUST LOADING PER DASMA 108 AND ASTM E 330-96 PER IRC 2018

GARAGE NOTES (CONTINUED)

- THE GARAGE SHALL BE SEPARATED FROM THE DWELLING AND ITS ATTIC AREAS BY MINIMUM ¾" GYP. BOARD APPLIED TO THE GARAGE SIDE OF FRAMING. WHERE HABITABLE SPACE OCCURS ABOVE THE GARAGE, THE GARAGE CEILING ASSEMBLY SHALL BE PROTECTED WITH A MINIMUM ¾" TYPE X GYP. BOARD. WHERE A FLOOR/CEILING SPACE IS PROVIDED ABOVE THE GARAGE COLUMNS AND BEAMS SUPPORTING THE SEPARATION SHALL ALSO BE PROTECTED WITH ¾" GYP. BOARD.
- GARAGE DOOR H-FRAME FOR THE ATTACHMENT OF THE TRACK AND COUNTER BALANCE SHALL CONSIST OF THE FOLLOWING: 2x6 VERTICAL JAMBS RUNNING FROM FLOOR TO CEILING AND SHALL BE FASTENED WITH 2½" x 0.120" NAILS AT 7" O.C. STAGGERED WITH (7) 3½" x 0.120" NAILS THROUGH THE JAMB INTO THE HEADER. MINIMUM 2x8 HEADER FOR ATTACHMENT OF COUNTER BALANCE SYSTEM.

DESIGN LOADING (PER TABLE R301.5)

| MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS (PSF) | | |
|--|------------------|----------------------------------|
| USE | LIVE LOAD | DEAD LOAD |
| UNINHABITABLE ATTICS WITHOUT STORAGE | 10 | 10 |
| UNINHABITABLE ATTICS WITH LIMITED STORAGE | 20 | 10 |
| HABITABLE ATTICS AND ATTICS SERVED WITH FIXED STAIRS | 30 | 10 |
| BALCONIES (EXTERIOR) AND DECKS | 40 | 10 ^d |
| FIRE ESCAPES | 40 | 10 |
| GUARDRAILS AND HANDRAILS ^a | 200 ^c | - |
| GUARDRAIL IN-FILL COMPONENTS ^b | 50 ^c | - |
| PASSENGER VEHICLE GARAGES | 50 | DEPENDENT UPON SLAB CONSTRUCTION |
| ROOMS OTHER THAN SLEEPING ROOM | 40 | 10 ^d |
| SLEEPING ROOM | 30 | 10 ^d |
| STAIRS | 40 | 10 ^d |

- a. A single concentrated load applied in any direction at any point along the top.
- b. Guard in-fill components (all those except the handrail), ballusters and panel fillers shall be designed to withstand a horizontally applied normal load of 50 pounds on an area equal to one square foot. This load need not be assumed to act concurrently with any other live load requirement.
- c. Glazing used in handrail assemblies and guards shall be designed with a safety factor of 4. The safety factor shall be applied to each of the concentrated loads applied to the top of the rail, and to the load on the in-fill components. These loads shall be determined independently of one another, and loads are assumed not to occur with any other live load.
- d. An additional dead loading of 10 psf shall be applied where thinslet tile floor is to be installed. An additional dead loading of 50 psf shall be applied where mudset tile floor is to be installed.

INSULATION/EFFICIENCY

- BUILDING ENVELOPE INSULATION SHALL COMPLY WITH IRC TABLE N1102.1.1 OR THE 2012 IECC (SEE SHEET S3.1 FOR FRAMING DETAILS AND TABLES ON THIS SHEET FOR MORE INFORMATION)
- CATHEDRAL -VAULTED CEILING FRAMING SHALL BE FRAMED WITH A MINIMUM INSULATION VALUE OF R-38. IF VAULTED RAFTERS DO NOT PROVIDE REQUIRED DEPTH TO ACHIEVE R-38 INSULATION BUILDER SHALL FUR DOWN RAFTERS PER DETAILS PROVIDED ON SHEET S3.1.

| INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT (TABLE N1102.1.1) | |
|---|----------------------------|
| CLIMATE ZONE | 4-A |
| FENESTRATION U-FACTOR | 0.35 |
| SKYLIGHT U-FACTOR | 0.55 |
| GLAZED FENSTRATION SHGC | 0.40 |
| CEILING R-VALUE | 49 |
| WOOD FRAME WALL R-VALUE | 15 |
| MASS WALL R-VALUE | 8 / 13 |
| FLOOR R-VALUE | 19 |
| BASEMENT WALL R-VALUE | 10-CONTINUOUS OR 13-CAVITY |
| SLAB R-VALUE AND DEPTH | 10 AT 2'-0" |
| CRAWL SPACE WALL R-VALUE | 10-CONTINUOUS OR 13-CAVITY |
| DUCTWORK EXPOSED TO OUTSIDE AIR R-VALUE | 8 |
| DUCTWORK NOT EXPOSED TO OUTSIDE AIR R-VALUE | 6 |
| CATHEDRAL VAULTED CEILING R-VALUE | 38 |

DUCT SEALING

N1103.2.2 (R403.2.2) SEALING (MANDATORY). DUCTS, AIR HANDLERS, AND FILTER BOXES SHALL BE SEALED. JOINTS AND SEAMS SHALL COMPLY WITH SECTION M1601.4.1 OF 2018 IRC.

EXCEPTIONS:

- AIR-IMPERMEABLE SPRAY FOAM PRODUCTS SHALL BE PERMITTED TO BE APPLIED WITHOUT ADDITIONAL JOINT SEALS.
- WHERE A DUCT CONNECTION IS MADE THAT IS PARTIALLY INACCESSIBLE, THREE SCREWS OR RIVETS SHALL BE EQUALLY SPACED ON THE EXPOSED PORTION OF THE JOINT SO AS TO PREVENT A HINGE EFFECT.
- CONTINUOUSLY WELDED AND LOCKING-TYPE LONGITUDINAL JOINTS AND SEAMS IN DUCTS OPERATING AT STATIC PRESSURES LESS THAN 2 INCHES OF WATER COLUMN PRESSURE CLASSIFICATION SHALL NOT REQUIRE ADDITIONAL CLOSURE SYSTEMS.

DUCT TIGHTNESS SHALL BE VERIFIED BY EITHER OF THE FOLLOWING:

- POST-CONSTRUCTION TEST: TOTAL LEAKAGE SHALL BE LESS THAN OR EQUAL TO 4 CFM PER 100 SQUARE FEET OF CONDITIONED FLOOR AREA WHEN TESTED AT A PRESSURE DIFFERENTIAL OF 0.1 INCHES W.G. ACROSS THE ENTIRE SYSTEM, INCLUDING THE MANUFACTURER'S AIR HANDLER ENCLOSURE. ALL REGISTER BOOTS SHALL BE TAPED OR OTHERWISE SEALED DURING THE TEST.
- ROUGH-IN TEST: TOTAL LEAKAGE SHALL BE LESS THAN OR EQUAL TO 4 CFM PER 100 SQUARE FEET OF CONDITIONED FLOOR AREA WHEN TESTED AT A PRESSURE DIFFERENTIAL OF 0.1 INCHES W.G. ACROSS THE SYSTEM, INCLUDING THE MANUFACTURER'S AIR HANDLER ENCLOSURE. ALL REGISTERS SHALL BE TAPED OR OTHERWISE SEALED DURING THE TEST. IF THE AIR HANDLER IS NOT INSTALLED AT THE TIME OF THE TEST, TOTAL LEAKAGE SHALL BE LESS THAN OR EQUAL TO 3 CFM PER 100 SQUARE FEET OF CONDITIONED FLOOR AREA.

EXCEPTION: THE TOTAL LEAKAGE TEST IS NOT REQUIRED FOR DUCTS AND AIR HANDLERS LOCATED ENTIRELY WITHIN THE BUILDING THERMAL ENVELOPE.

| MECHANICAL VENTILATION SYSTEM FAN EFFICACY | | | |
|--|-----------------------------|-----------------------------|-----------------------------|
| FAN LOCATION | AIR FLOW RATE MINIMUM (CFM) | MINIMUM EFFICACY (CFM/WATT) | AIR FLOW RATE MAXIMUM (CFM) |
| RANGE HOODS | ANY | 2.8 | ANY |
| IN-LINE FAN | ANY | 2.8 | ANY |
| BATHROOM, UTILITY ROOM | 10 | 1.4 | 90 |
| BATHROOM, UTILITY ROOM | 90 | 2.8 | ANY |



VISTA
—STRUCTURAL—
ENGINEERING, LLC

14718 NW DELIA STREET * PORTLAND, OREGON 97229
OFFICE: 971.645.0901 * MOBILE: 971.645.0901 *
EMAIL: DENNIS@VISTASTRUCTURAL.COM

CLIENT: KEVIN HIGDON CONSTRUCTION, LLC

JOB TITLE: NPV130 COWAN
LOT130, NAPA VALLEY

LOCATION: LEE'S SUMMIT, MISSOURI



STATE OF MISSOURI
DENNIS HEIER
NUMBER
PE-2014001772
PROFESSIONAL ENGINEER
12-15-2020

| NO. | DATE | REVISION | BY |
|-----|------|----------|----|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

DRAWING TITLE

STRUCTURAL NOTES

| | |
|------------------|-----------------|
| ENGINEER: DMH | CHECKED BY: DMH |
| JOB NO: 2952 | DRAWN BY: DMH |
| DATE: 12-15-2020 | |
| SHEET NUMBER | |

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

01/11/2021

| INPUT |
|------------------|
| CALCULATED VALUE |

| PROJECTED AREAS (WIND DESIGN PER 115 MPH 3-SECOND GUST, EXPOSURE C AND MEAN ROOF HEIGHT <= 30 FT ASSUMED) | | | | | | | |
|---|--------|--------|-------------------|-------------------|--------|------|-------------------------|
| FRONT-TO-BACK | | | | SIDE-TO-SIDE | | | |
| | AREA | LOAD | | | AREA | LOAD | |
| SLOPED ROOF | 350 | 2978 | | SLOPED ROOF | 738 | 6263 | |
| VERT. ROOF | 278 | 3456 | CUMULATIVE | VERT. ROOF | 0 | 0 | CUMULATIVE |
| 1ST | 619.63 | 7703 | 14213 | 1ST | 638 | 7910 | 14249 |
| BSMT ^a | 0 | 0 | BSMT ^a | BSMT ^a | 177 | 2506 | 9631 |
| PRESSURE (PSF) - PER ASCE CH. 6 | | | | | | | |
| SLOPED ROOF | | ZONE B | 9.7 | | ZONE C | 11.3 | 2a (FIG. 28.6-1, ASCE7) |
| WALL/VERT. ROOF | | ZONE A | 14.2 | | ZONE D | 7.7 | 11.266 |
| MEAN ROOF HT., <i>h</i> | | | 24.5 | | | | |

1ST FLOOR TRIBUTARY WEIGHT
BASEMENT TRIBUTARY WEIGHT
 S_S (SITE GROUND MOTION - %g - FROM ASCE7 SEISMIC MAP)
 F_a (from ASCE7 Table 11.4-1)
 S_{DS} ($= 2/3 * S_S * F_a$)
 R (from ASCE7 Table 12.2-1)

| |
|-------|
| 73413 |
| 73413 |
| 12.0% |
| 1.6 |
| 0.128 |
| 6.5 |

| Sheathing Location | Min. Sheathing Schedule | Fastening Schedule | Allowable Shear (#/LF) | Code Reference |
|-----------------------------|---|---|------------------------|---------------------------|
| Exterior (Option #1) | 7/16" APA Rated Plywood/OSB | 1-1/2" 16gs. Staples w/ 1" penetration @ 6" O.C. Edges, 6" O.C. Field For 24" stud spacing, 12" O.C. Field For 18" stud spacing | 155 | per IBC, Table 2303B.3(1) |
| Exterior (Option #2) | 7/16" APA Rated Plywood/OSB | 1-1/2" 16gs. Staples w/ 1" penetration @ 4" O.C. Edges, 6" O.C. Field For 24" stud spacing, 12" O.C. Field For 18" stud spacing | 230 | per IBC, Table 2303B.3(1) |
| Exterior (Option #3) | 7/16" APA Rated Plywood/OSB | 1-1/2" 16gs. Staples w/ 1" penetration @ 3" O.C. Edges, 6" O.C. Field For 24" stud spacing, 12" O.C. Field For 18" stud spacing | 310 | per IBC, Table 2303B.3(1) |
| Exterior (Option #4) | 7/16" APA Rated Plywood/OSB or shiplap panel sheathing, or 3/8" shiplap panel sheathing with tighter nail spacing | 8d Common Nails w/ 1-3/8" penetration @ 6" O.C. Edges, 12" O.C. Field for 7/16" APA-rated plywood/OSB or shiplap panel sheathing OR @ 4" O.C. Edges, 12" O.C. Field for 3/8" shiplap panel sheathing | 220 | AF&PA SDPWS Table 4.3A |
| Exterior (Option #5) | 7/16" APA Rated Plywood/OSB or shiplap panel sheathing, or 3/8" shiplap panel sheathing with tighter nail spacing | 8d Common Nails w/ 1-3/8" penetration @ 4" O.C. Edges, 12" O.C. Field for 7/16" APA-rated plywood/OSB or shiplap panel sheathing OR @ 3" O.C. Edges, 12" O.C. Field for 3/8" shiplap panel sheathing | 320 | AF&PA SDPWS Table 4.3A |
| Exterior (Option #6) | 7/16" APA Rated Plywood/OSB or shiplap panel sheathing, or 3/8" shiplap panel sheathing with tighter nail spacing and double studs at each panel edge | 8d Common Nails w/ 1-3/8" penetration @ 3" O.C. Edges, 12" O.C. Field | 410 | AF&PA SDPWS Table 4.3A |
| Interior | 1/2" Gypsum Board | No. 6- 1 1/4" Type W or S Screws @ 8" O.C. Edges, 12" O.C. Field | 60 | per IBC, Table 2306.4.4 |
| Interior | 16 Ga. Simpson/USP Type WB Steel X-Brace (or equal) | (3) 16d @ end studs & (1) 8d @ intermediate studs (per manufacture specifications - see detail on sheet S3) | 325 | |

| | |
|---------------------------|-------|
| WIDTH OF 1ST STORY (FT.) | 56.33 |
| DEPTH OF 1ST STORY (FT.) | 58 |
| BACK WALL OF GARAGE (FT.) | 30 |
| GAR. WALL: 1=F-B, 2=S-S | 2 |

| ADDITIONAL RESISTANCE REQUIRED | |
|--------------------------------|------|
| SEISMIC | WIND |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |

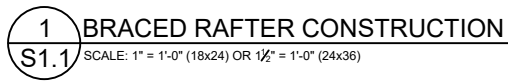
| Anchor Bolt Spacing (in.) | |
|---------------------------|-------|
| diameter (in.) | 0.5 |
| Shear value (per NDS) | 944 |
| Spacing F-B (inches) | 147.9 |
| spacing S-S (inches) | 143.3 |

| | |
|--|----|
| 16d Nail Spacing req'd at bottom plate (in.) | |
| 1st Floor F-B | 22 |
| 1st Floor S-S | 21 |

| RESISTANCE REQUIRED IN ADDITION TO RESISTANCE PROVIDED BY EXTERIOR WALLS** | | | | | | | |
|--|---|--|-----------------------------------|--|---|--|-----|
| | ADDITIONAL RESISTANCE REQUIRED (POUNDS) | PORTAL FRAMES OR PERF. SHEAR WALL RESISTANCE | INTERIOR X-BRACES (325#/BRACE) | INTERIOR WALL LENGTH W/ 1/2" GYPSUM BOARD PER TABLE (FT.) | INT. WALL LENGTH SHEATHED W/ OSB (TOTAL LENGTH, ONE SIDE, FT.) | RESISTANCE PROVIDED BY ADDITIONAL METHODS (POUNDS) | OK? |
| 1ST FLOOR FRONT-TO-BACK | 0 | | | | | 0 | YES |
| 1ST FLOOR SIDE-TO-SIDE | 0 | | | | | 0 | YES |
| BASEMENT FRONT-TO-BACK | 0 | | | | | 0 | YES |
| BASEMENT SIDE-TO-SIDE | 0 | | | | | 0 | YES |

| WIND UPLIFT ANALYSIS | | | | | | | |
|-------------------------|-------------------------------|--|---|----------------------|-------------------|---------------------------------------|------|
| ROOF PITCH (MAX) | X/12 12 | DEGREES 45.0 | PITCH OF 6 OR LESS: EOH -13.3, E -7.2, G -5.2 | | | | |
| ASCE 7 | | | | | | | |
| | LENGTH (FT.) | PRESSURE (PSF) | LINEAL FT. OF OH | UPLIFT PER FT* (LBS) | | | |
| OVERHANG | 1 | -1.08 | 230.66 | -1.08 | | | |
| | TOTAL AREA (FT ²) | ZONE E AREA (FT ²) | ZONE G AREA (FT ²) | PRESSURE ZN. G (PSF) | TOTAL FORCE (LBS) | FORCE PER LINEAL FT @ PERIMETER (LBS) | |
| MAIN ROOF** | 3267.14 | -462.627024 | 3729.767024 | -1.08 | -0.36 | -843 | -3.7 |
| *ALONG PERIMETER | | | | | | | |
| **INSIDE EXTERIOR WALLS | | TOTAL UPLIFT PER LINEAL FOOT ALONG EXTERIOR (POUNDS) | | | -4.8 | UPLIFT OK | |
| | | RESISTANCE DUE TO DEAD WEIGHT & (3) 104 TOENAILS | | | 251.6 | | |

NOTE: SOIL SITE CLASS ASSUMED TO BE CLASS D. IF SITE CONDITIONS ARE DETERMINED TO BE CLASS E OR F, CONSULT ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION



Furnace

Water Heater

| | |
|--------|-------|
| 100000 | BTU/h |
| 50000 | BTU/h |

150000 BTU/h

1087 ft²

8.5 ft

Yes

0

7500 ft³882 ft²

OK

150 in²

14 x 11

g.

CLIENT: KEVIN HIGDON CONSTRUCTION, LLC

JOB TITLE: NPV130 COWAN
LOT130, NAPA VALLEY

LOCATION: LEE'S SUMMIT, MISSOURI



12-15-2020

| NO. | DATE | REVISION | BY |
|-----|------|----------|----|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

DRAWING TITLE

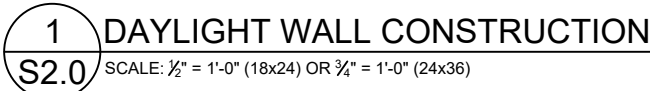
STRUCTURAL CALCULATIONS

| | |
|------------------|-----------------|
| ENGINEER: DMH | CHECKED BY: DMH |
| JOB NO. 2952 | DRAWN BY: DMH |
| DATE: 12-15-2020 | |
| SHEET NUMBER | |

RELEASE FOR CONSTRUCTION

12-13-2020
NUMBER
RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS RE
DEVELOPMENT SERVIC
LEE'S SUMMIT, MISSOU

01/11/2021

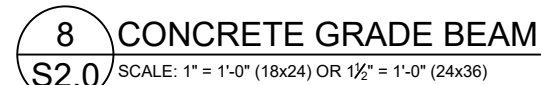
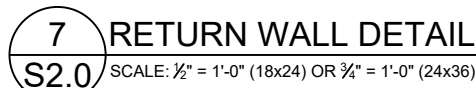
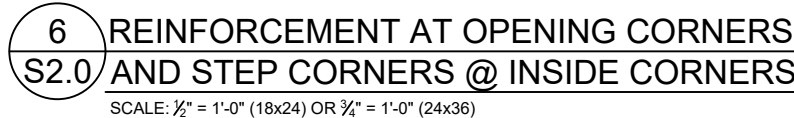
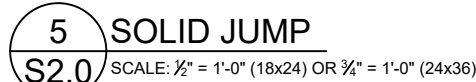
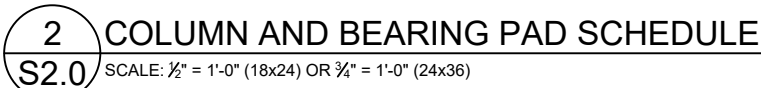


This technical cross-section diagram illustrates the foundation and drainage details for a basement wall. The wall is shown with a vertical reinforcement bar (labeled '4') and horizontal reinforcement bars (labeled '4'). The wall is finished with siding on the exterior. The ground level is indicated by a line labeled 'GRADE'. A vertical dimension of 6" is shown from the grade to the top of the wall. A horizontal dimension of 1'-6" (TYP.) is shown from the exterior face of the wall to the center of the reinforcement bar. A 2" clearance is specified from the basement face of the wall to the reinforcement bar. A vertical and horizontal reinforcement bar is shown per 4/S2.0. A perforated drain pipe is shown at the base of the wall, surrounded by filter fabric. The drain pipe is labeled 'PERFORATED DRAIN PIPE' and the filter fabric is labeled 'FILTER FABRIC'. A seal/bond break is indicated at the base of the wall. The foundation is shown with a carrier slab and a 6" washed concrete base in gravel.

Labels and dimensions in the diagram include:
 - SIDING
 - GRADE
 - 6"
 - 1'-6" (TYP.)
 - 2" CLEARANCE FROM BASEMENT FACE OF WALL
 - VERTICAL AND HORIZONTAL REINFORCEMENT PER 4/S2.0
 - PERFORATED DRAIN PIPE
 - FILTER FABRIC
 - SEAL/BOND BREAK
 - 6"
 - CARRIER SLAB
 - 6" WASHED CONCRETE BASE IN GRAVEL

3 CONCRETE WALL SECTION

S2.0 SCALE: $\frac{1}{2}" = 1'-0"$ (18x24) OR $\frac{3}{4}" = 1'-0"$ (24x36)



FOOTNOTES:

- 1) WALL HEIGHT IS MEASURED FROM THE TOP OF THE WALL TO THE TOP OF THE FLOOR SLAB
- 2) HORIZONTAL REINFORCEMENT FOR CONCRETE WALLS THAT ARE NOT FULL HEIGHT, AND FOR REINFORCEMENT SPACING 24" OC, REINFORCEMENT MAY BE PLACED IN THE MIDDLE OF THE WALL. OTHER WALLS SHALL HAVE VERTICAL REINFORCEMENT AS FOLLOWS:
 - A) 8" WALL - MINIMUM 5" FROM THE OUTSIDE FACE
 - B) 10" WALL - MINIMUM 6¾" FROM THE OUTSIDE FACE
 - C) EXTEND BARS TO WITHIN 8" OF THE TOP OF THE WALL
- 3) REINFORCEMENT CLEARANCES:
 - A) CONCRETE EXPOSED TO EARTH - MINIMUM 1½"
 - B) NOT EXPOSED TO WEATHER (INTERIOR SIDE OF WALLS) - ¾"
 - C) CONCRETE EXPOSED TO WEATHER (TOP CLEARANCE IN GARAGE AND DRIVEWAY SLABS) - 1½"
- 4) HORIZONTAL REINFORCEMENT:
 - A) ONE BAR SHALL BE PLACED WITHIN 12" OF THE TOP OF THE WALL
 - B) OTHER BARS SHALL BE EQUALLY SPACED WITH SPACING NOT TO EXCEED 24" OC
 - C) HORIZONTAL BARS SHOULD BE AS CLOSE TO THE TENSION FACE AS POSSIBLE (INTERIOR) AND BEHIND THE VERTICAL REINFORCEMENT (I.E. 2" TOWARD THE INSIDE)
 - D) SUPPLEMENTAL REINFORCEMENT AT CORNERS - PLACE (1) #4 BAR 48" LONG AT 45 DEGREE ANGLE AT CORNERS OF OPENINGS. PLACE REINFORCEMENT WITHIN 6" OF THE EDGE OF INSIDE CORNERS.
- 5) REINFORCEMENT SHALL BE LAPPED A MINIMUM 24" AT ENDS, SPLICES, AND AROUND CORNERS.
- 6) AT MASONRY LEDGES THE MINIMUM WALL THICKNESS SHALL BE 3½". LEDGES SHALL NOT EXCEED A DEPTH OF MORE THAN 24" BELOW THE TOP OF THE WALL. FOR WALL THICKNESSES LESS THAN 4" PROVIDE #4 BARS AT MAX. 24" OC TO WITHIN 8" OF THE TOP OF THE WALL.
- 7) STRAIGHT WALLS MORE THAN 5' 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
- 8) WALL SHALL NOT BE BACKFILLED UNTIL FLOOR SYSTEM AND DIAPHRAGM ARE IN PLACE

4 S2.0 FOUNDATION WALL REINFORCEMENT TABLE NO SCALE

CLIENT: KEVIN HIGDON CONSTRUCTION, LLC
JOB TITLE: NPV130 COWAN
LOT130, NAPA VALLEY
LOCATION: LEE'S SUMMIT, MISSOURI



| | | | |
|-----|------|----------|-----|
| NO. | DATE | REVISION | B'Y |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

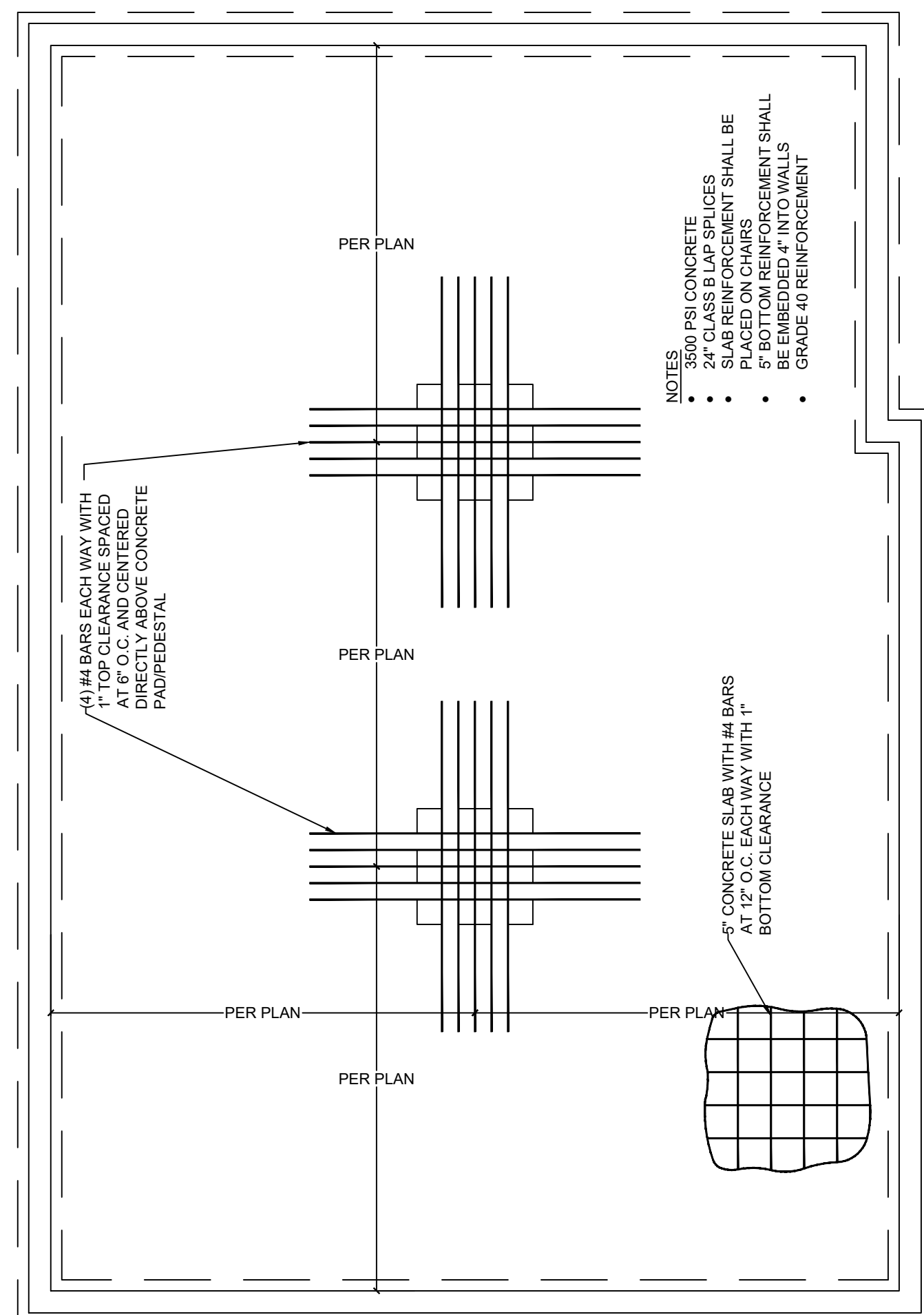
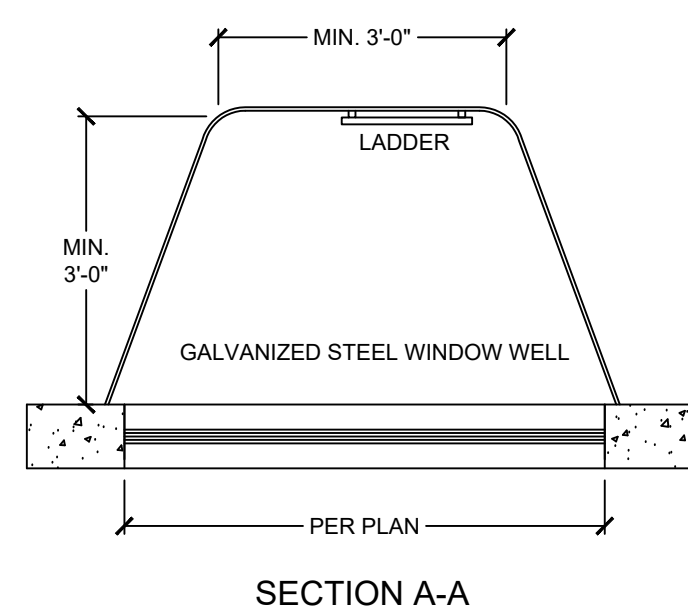
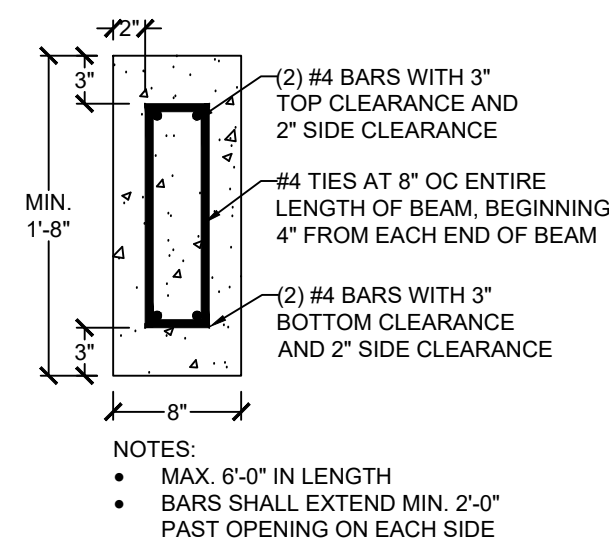
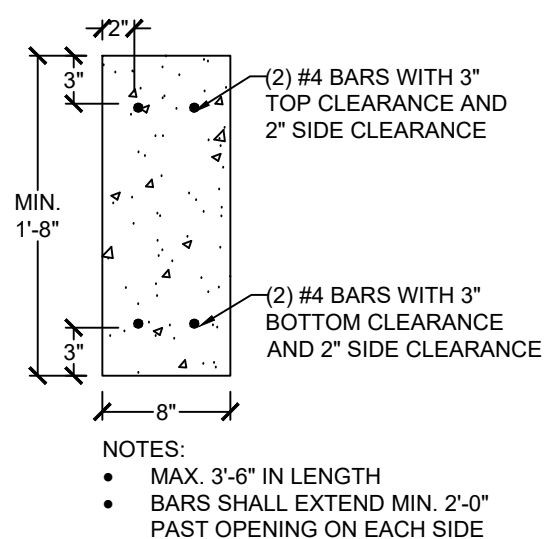
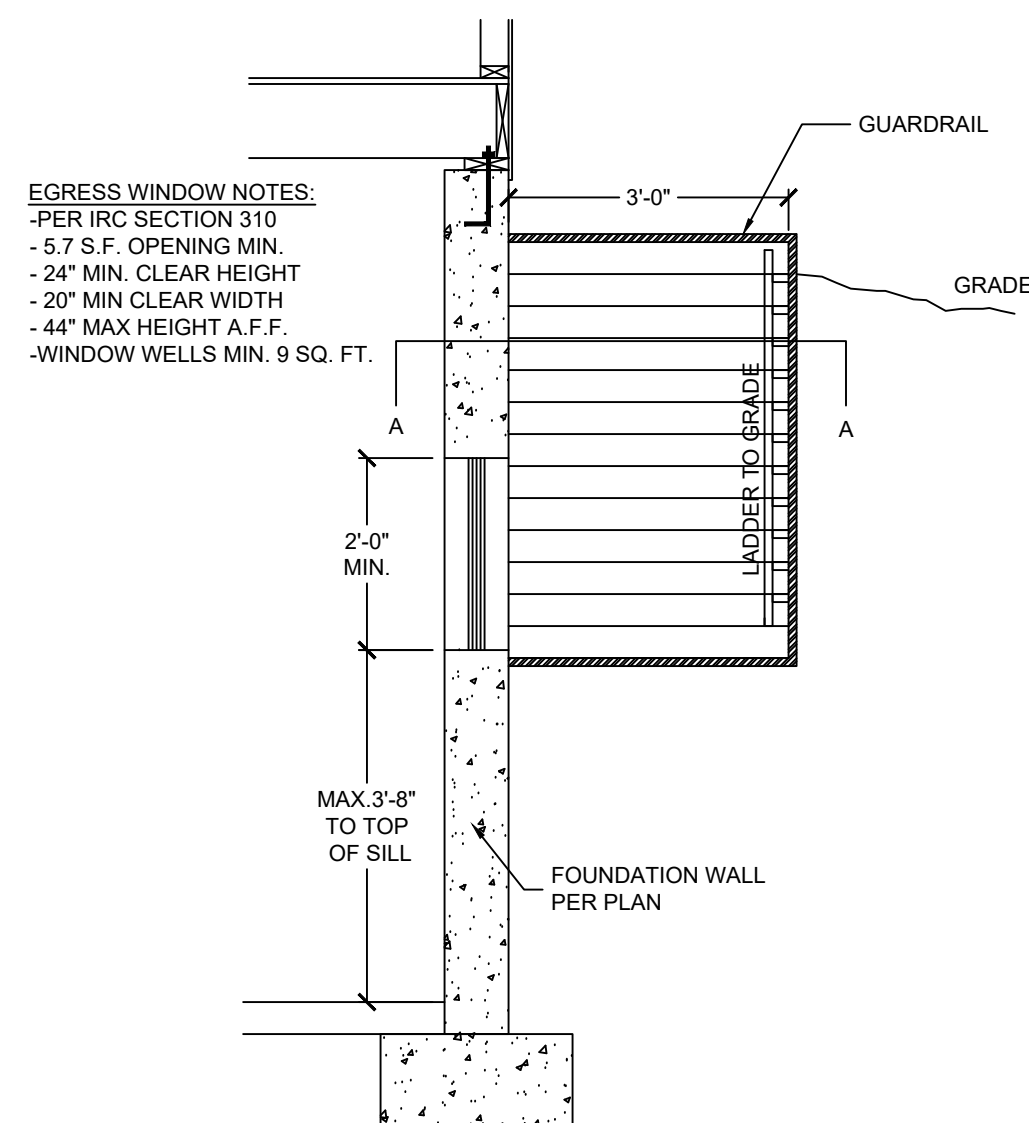
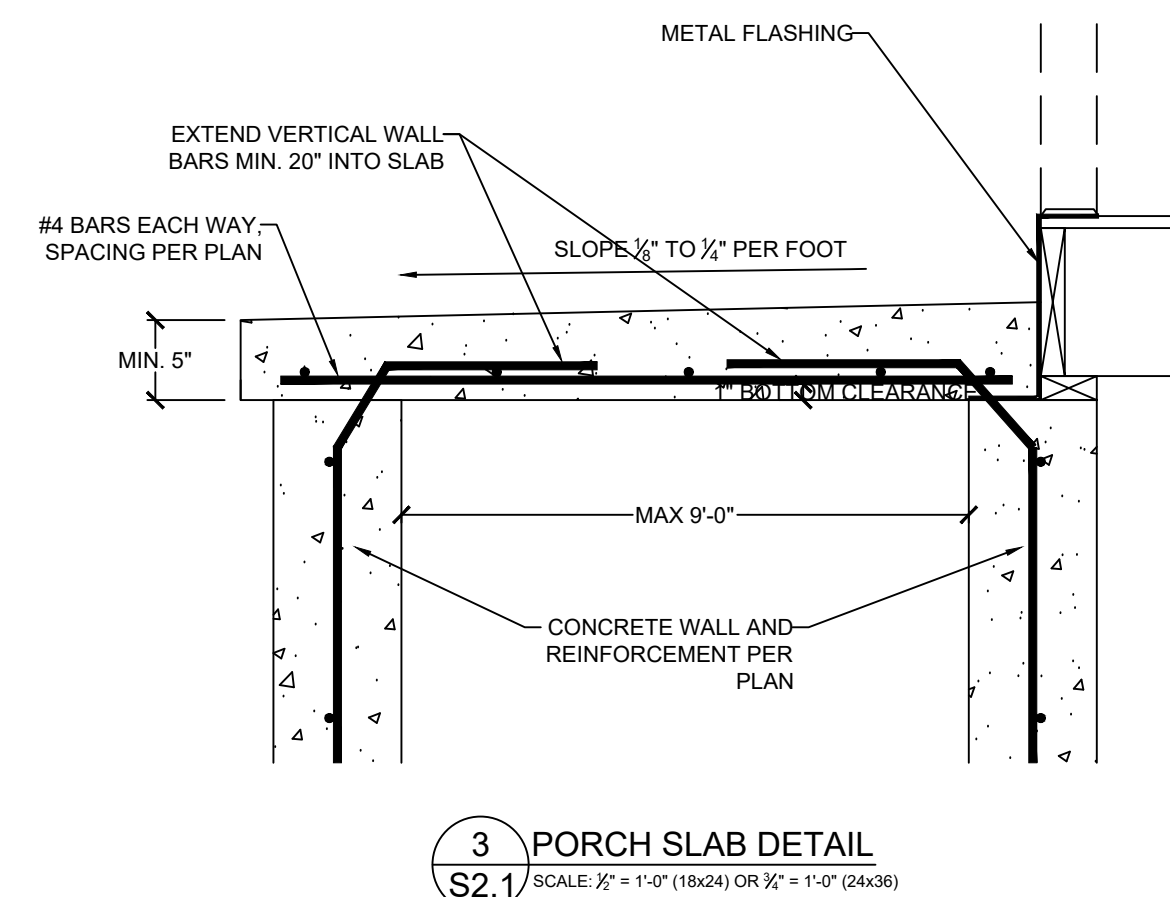
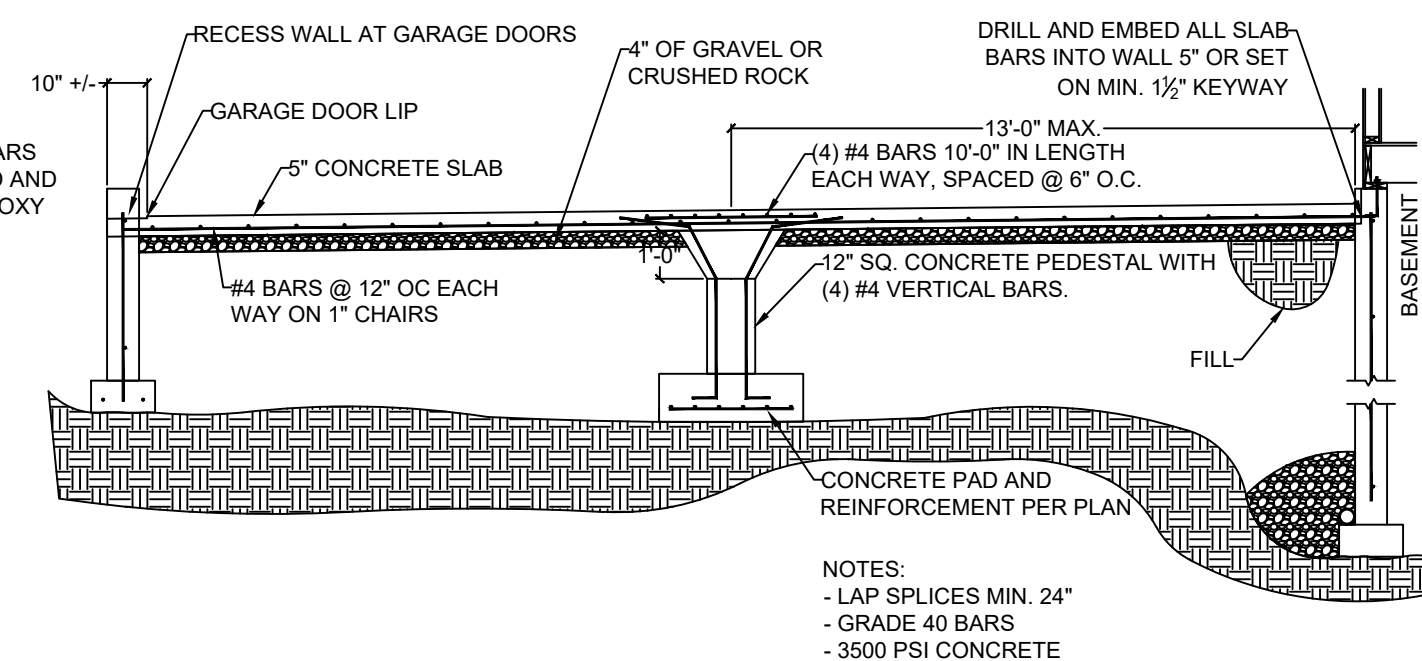
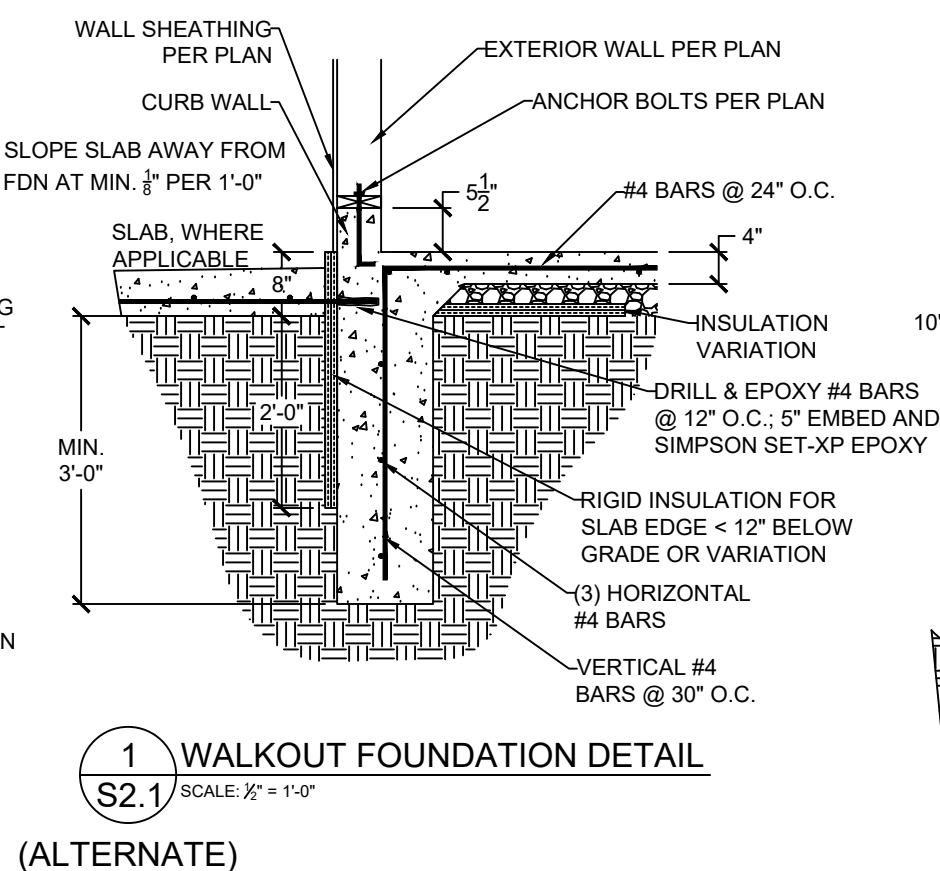
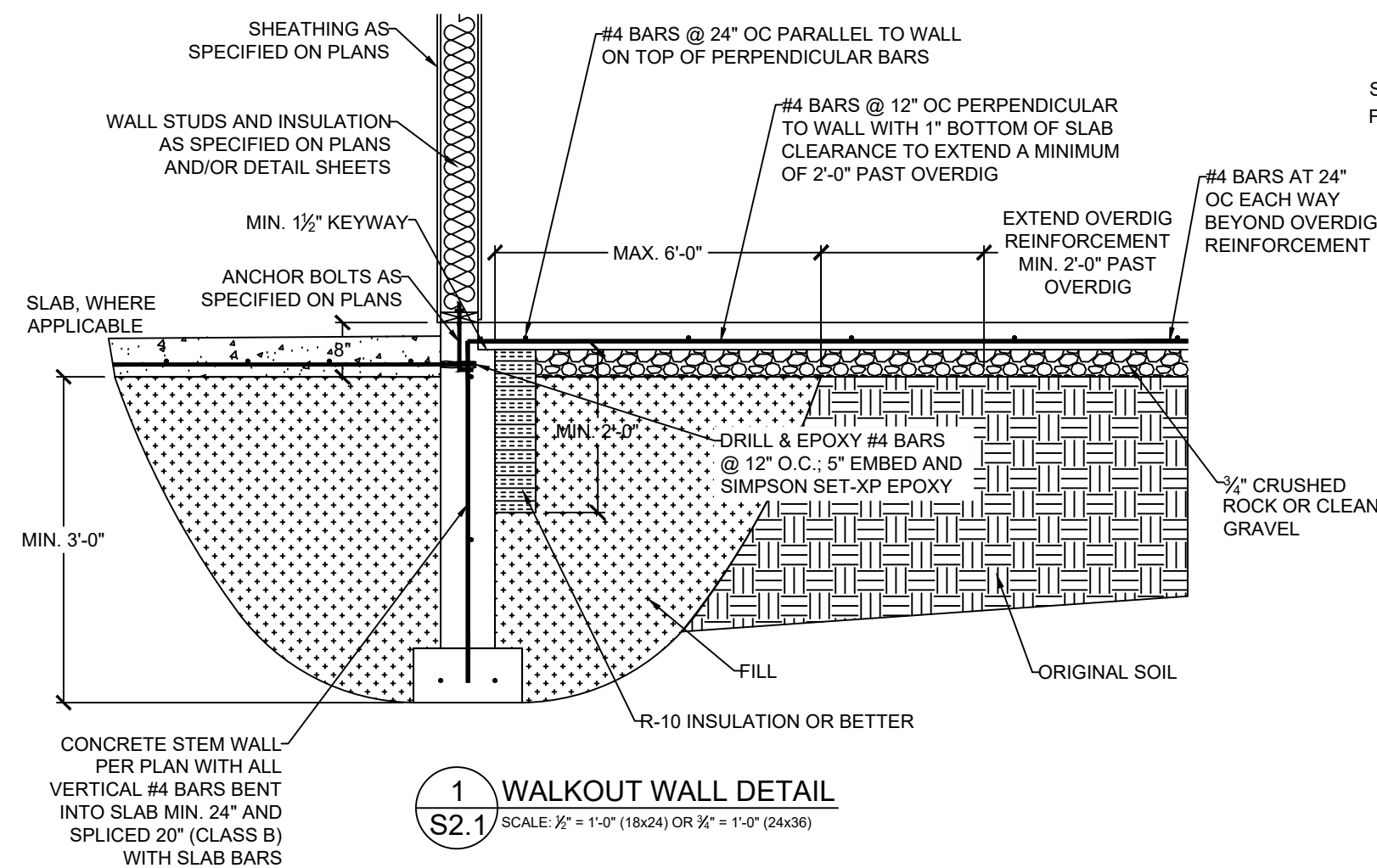
DRAWING TITLE

FOUNDATION DETAILS

| | |
|------------------|---------------------------------|
| ENGINEER: DMH | CHECKED BY: DMH |
| JOB NO. 2952 | DRAWN BY: DMH |
| DATE: 12-15-2029 | RELEASE FOR CONSTRUCTION |

SHEET NUMBER _____

CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/11/2023



VISTA
—**STRUCTURAL**—
ENGINEERING, LLC

14718 NW DELLA STREET * PORTLAND, OREGON 97229
OFFICE: 971.645.0901 * MOBILE: 971.645.0901 *
EMAIL: DENNIS@VISTASTRUCTURAL.COM

CLIENT: KEVIN HIGDON CONSTRUCTION, LLC

JOB TITLE: NPV130 COWAN
LOT130, NAPA VALLEY

LOCATION: LEE'S SUMMIT, MISSOURI

STATE OF MISSOURI
DENNIS HEIER
NUMBER
PE-2010001772
PROFESSIONAL ENGINEER
12-15-2020

| NO. | DATE | REVISION | BY |
|-----|------|----------|----|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

DRAWING TITLE

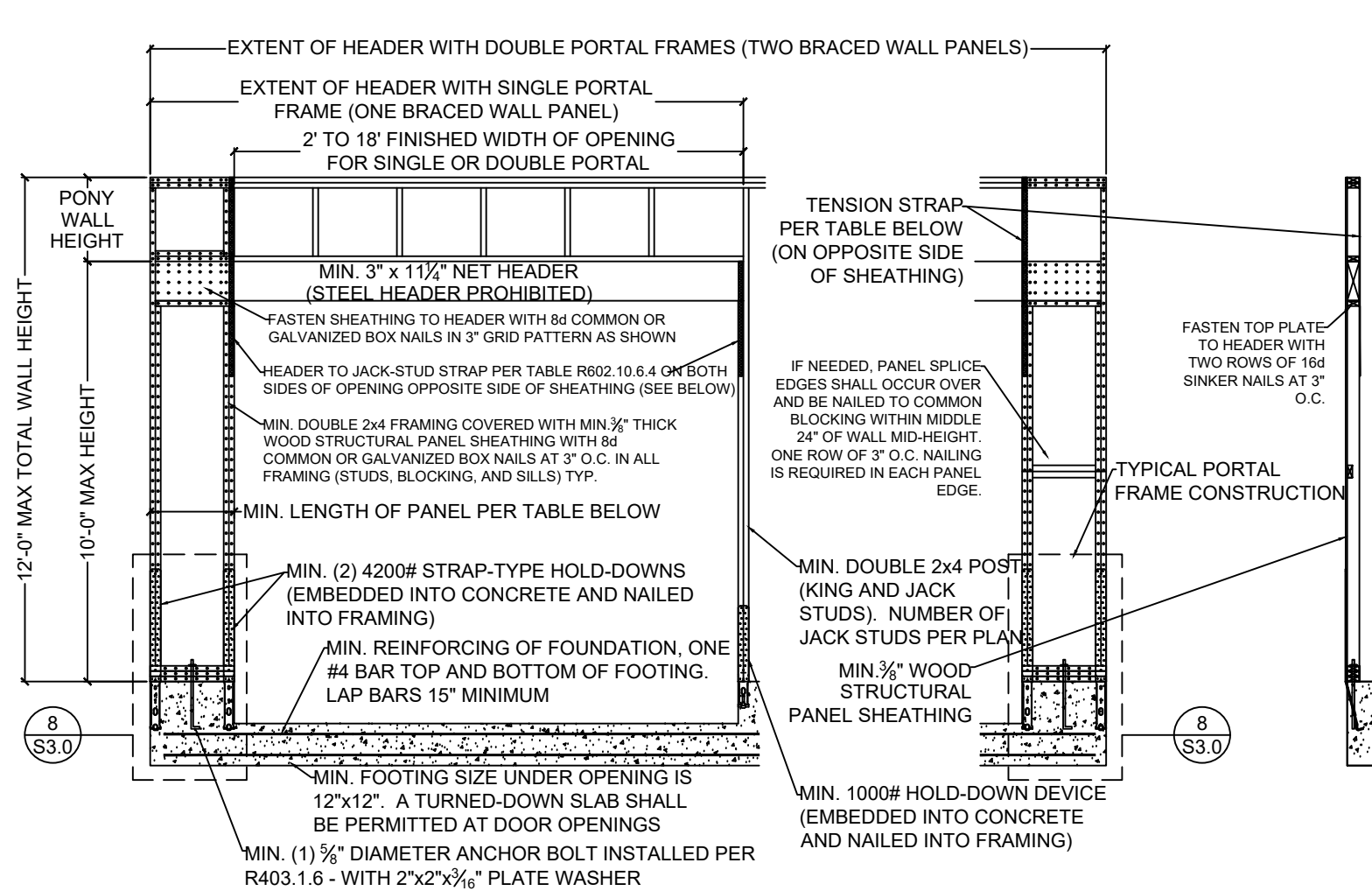
FOUNDATION DETAILS

| | |
|------------------|-----------------|
| ENGINEER: DMH | CHECKED BY: DMH |
| JOB NO. 2952 | DRAWN BY: DMH |
| DATE: 12-15-2020 | |
| SHEET NUMBER | |

**RELEASE FOR
CONSTRUCTION**
AS NOTED ON PLANS REVIEWED
FOR DEVELOPMENT SERVICES
LEAS SUMMIT, MISSOURI

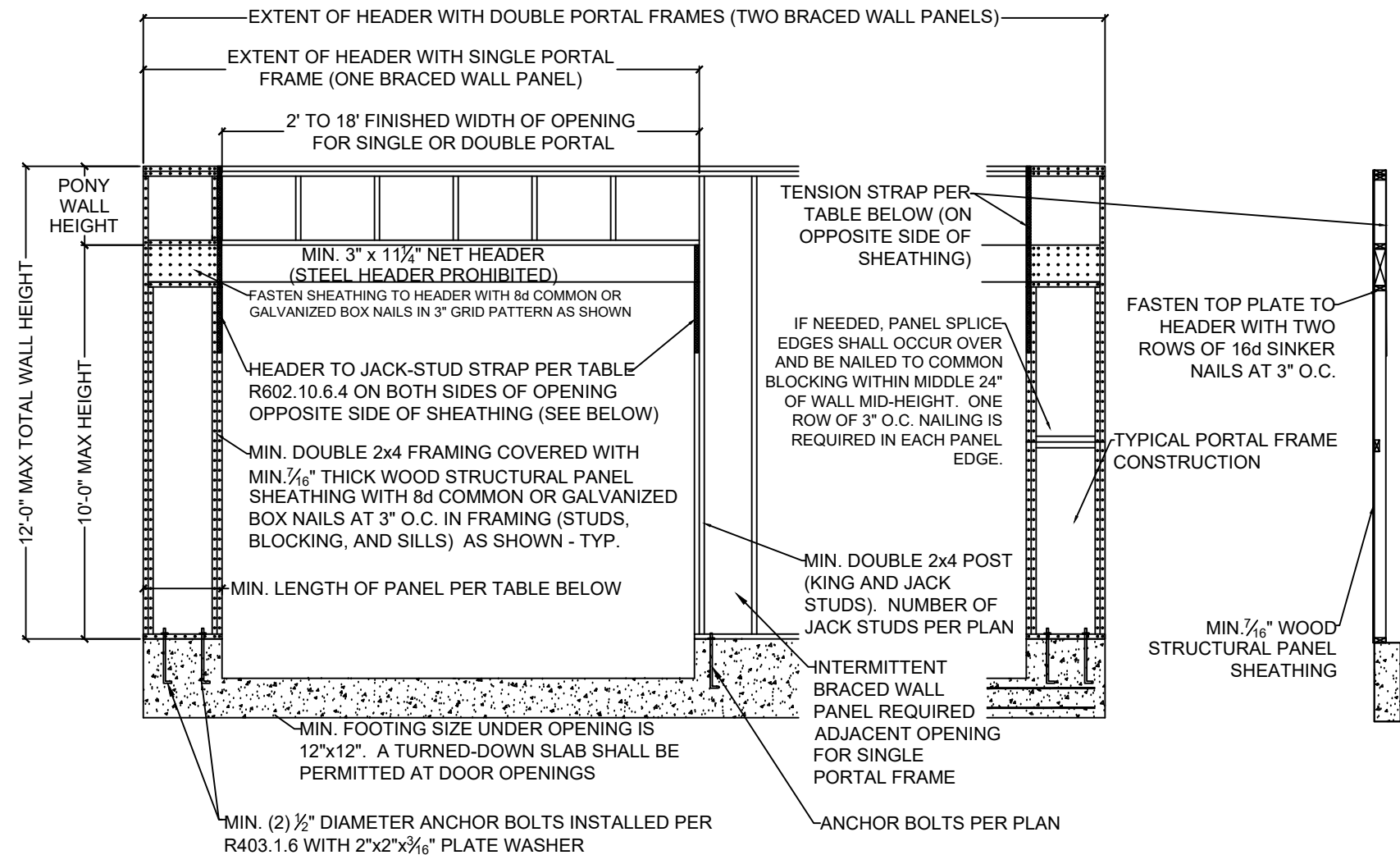
S2.1

01/11/2021



1 METHOD PFH (PORTAL FRAME WITH HOLD-DOWNS) - PER FIGURE IRC R602.10.6.2
SCALE: 1/2" = 1'-0" (18x24) OR 3/8" = 1'-0" (24x36)

| | MINIMUM PANEL LENGTH FOR DETAIL 1/S3.0 (INCHES) | | | | |
|-------------------------------|---|--------|---------|---------|---------|
| | WALL HEIGHT | | | | |
| | 8 FEET | 9 FEET | 10 FEET | 11 FEET | 12 FEET |
| SUPPORTING ROOF ONLY | 16 | 16 | 16 | 18 | 20 |
| SUPPORTING ONE STORY AND ROOF | 24 | 24 | 24 | 27 | 29 |

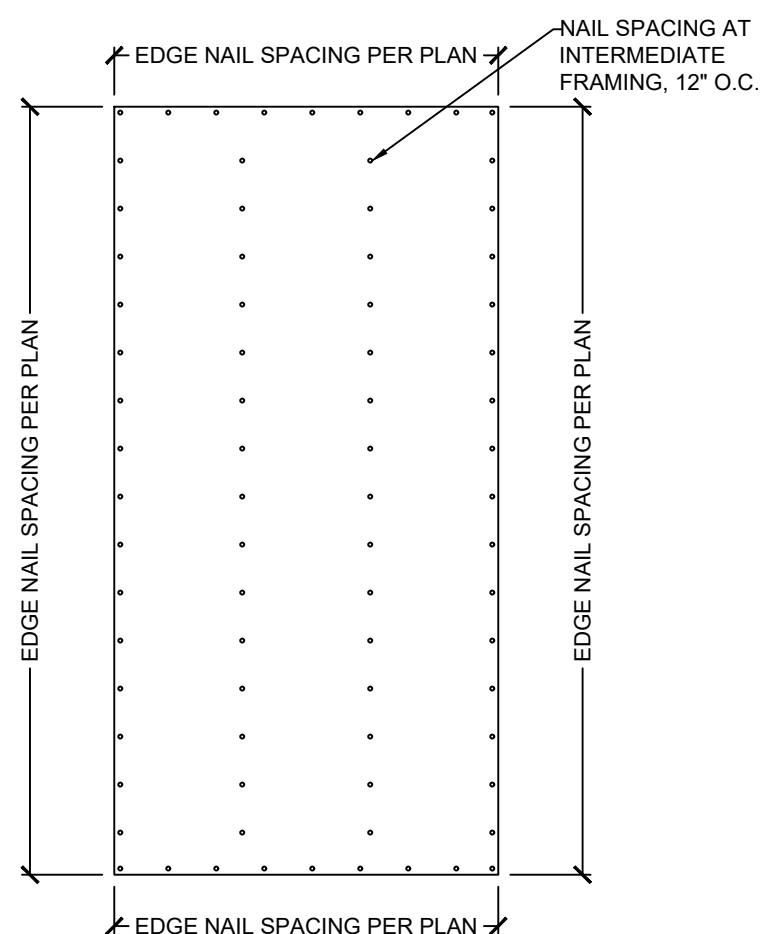


2 METHOD PFG (PORTAL FRAME AT GARAGE DOOR) - PER FIGURE IRC R602.10.6.3
SCALE: 1/2" = 1'-0" (18x24) OR 3/8" = 1'-0" (24x36)

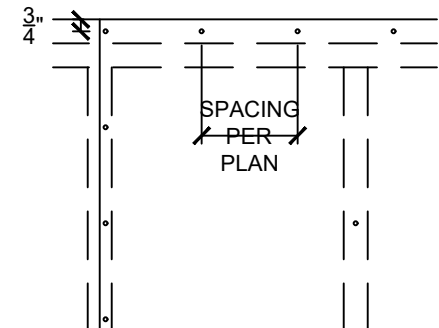
| MINIMUM PANEL LENGTH FOR DETAIL 2/S3.0 (INCHES) | | | | |
|---|--------|---------|-----------------|-----------------|
| WALL HEIGHT | | | | |
| 8 FEET | 9 FEET | 10 FEET | 11 FEET | 12 FEET |
| 24 | 27 | 30 | 33 ^a | 36 ^a |

a. Maximum opening height for PFG is 10 feet in accordance with Figure R602.10.6.3, but wall height may be increased to 12 feet with pony wall

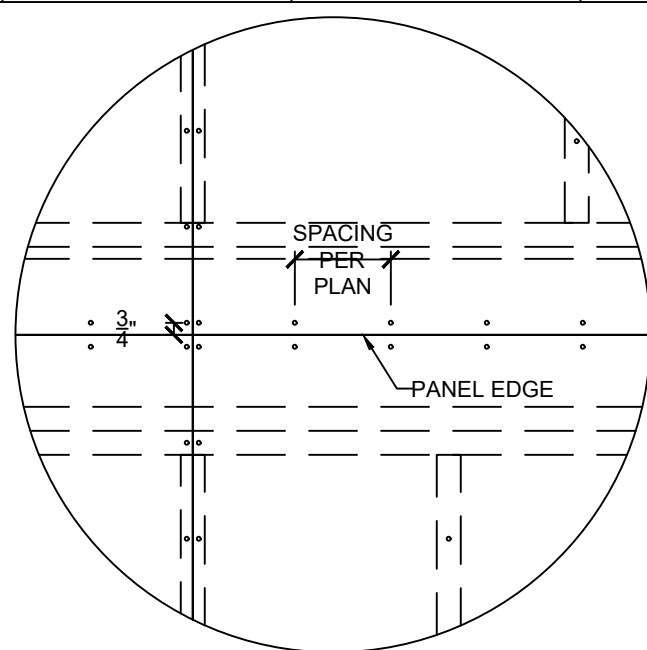
| TENSION STRAP REQUIRED FOR HEADER TO JACK STUD FOR DETAILS 1/S3.0 AND 2/S3.0 (FROM TABLE R602.10.6.4) | | | | | |
|---|--------------------------|------------------------|-----------------------|---|--|
| MAX GARAGE OPENING (FT.) | PONY WALL WALL HT. (FT.) | REQUIRED SIMPSON STRAP | MIN. STRAP END LENGTH | NAILS REQUIRED IN EACH STRAP END LENGTH | |
| 18'-0" | 0'-0" | CS20 | 0'-9" | (7) 8d | |
| 9'-0" | 1'-0" | CS20 | 0'-9" | (7) 8d | |
| 18'-0" | 1'-0" | CS14 | 1'-4" | (15) 8d | |
| 9'-0" | 2'-0" | CS18 | 0'-11" | (9) 8d | |
| 18'-0" | 2'-0" | CMSTC16 | 1'-8" | (25) 16d SINKER | |
| 9'-0" | 4'-0" | CMSTC16 | 1'-8" | (25) 16d SINKER | |
| 16'-0" | 4'-0" | CMST14 | 2'-6" | (33) 10d | |



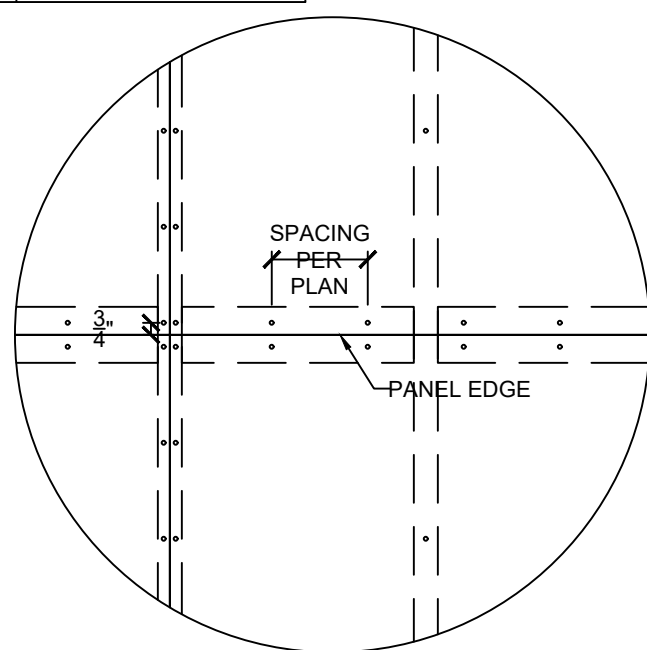
3 EXTERIOR WALL SHEATHING PANEL ATTACHMENT
SCALE: 1/2" = 1'-0" (18x24) OR 3/4" = 1'-0" (24x36)



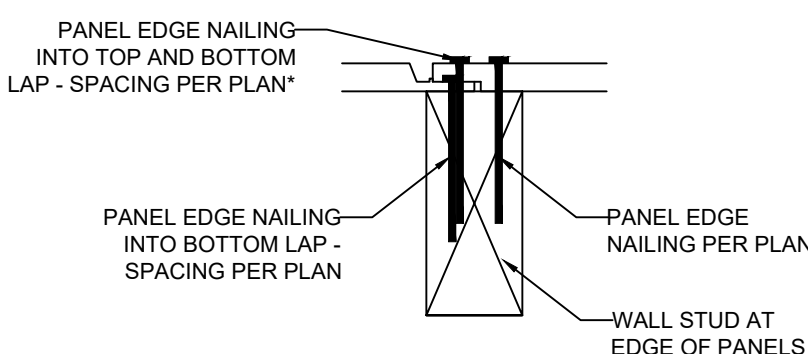
4 SHEATHING EDGE AT TOP AND BOTTOM PLATES
SCALE: 1" = 1'-0" (18x24) OR 1 1/2" = 1'-0" (24x36)



5 SHEATHING EDGE AT HORIZONTAL FRAMING MEMBER
SCALE: 1" = 1'-0" (18x24) OR 1 1/2" = 1'-0" (24x36)

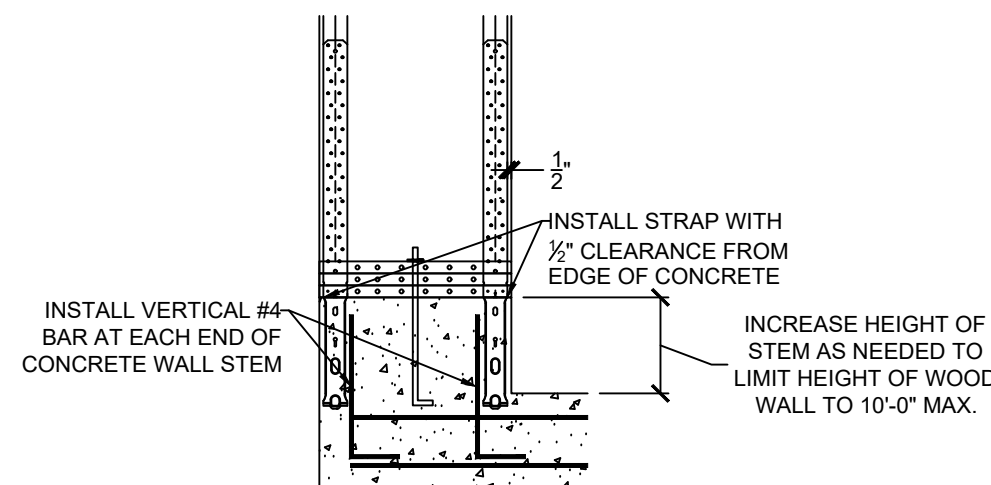


6 SHEATHING EDGE AT PANEL SPLICE ACROSS STUDS
SCALE: 1" = 1'-0" (18x24) OR 1 1/2" = 1'-0" (24x36)



*NOTE: NAILING INTO TOP AND BOTTOM LAP IS IN ADDITION TO NAILING REQUIRED INTO BOTTOM LAP. FOR EXAMPLE, IF PLAN CALLS FOR NAILS @ 6" O.C. AT EDGES, BOTTOM LAP SHALL BE FASTENED AT 6" O.C. AND, IN ADDITION, NAILING SHALL ALSO BE INSTALLED THROUGH TOP AND BOTTOM LAP @ 6" O.C. STAGGERED 3" FROM BOTTOM LAP NAILING

7 FASTENING INSTRUCTIONS FOR SHIPLAP PANEL SHEATHING
SCALE: 4" = 1'-0" (18x24) OR 6" = 1'-0" (24x36)



8 GARAGE HOLD-DOWN STRAP INSTALLATION
SCALE: 1/2" = 1'-0" (18x24) OR 3/4" = 1'-0" (24x36)

VISTA
-STRUCTURAL-
ENGINEERING, LLC

14718 NW DELIA STREET * PORTLAND, OREGON 97229
OFFICE: 971.645.0901 * MOBILE: 971.645.0901 *
EMAIL: DENNIS@VISTASTRUCTURAL.COM

CLIENT: KEVIN HIGDON CONSTRUCTION, LLC
JOB TITLE: NPV130 COWAN LOT130, NAPA VALLEY
LOCATION: LEE'S SUMMIT, MISSOURI

STATE OF MISSOURI
DENNIS HEIER
NUMBER PE-2010001772
PROFESSIONAL ENGINEER
12-15-2020

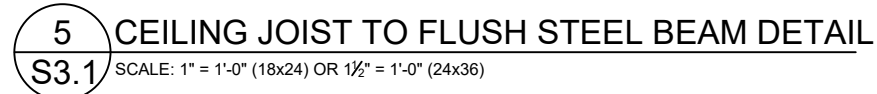
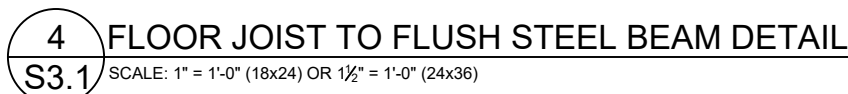
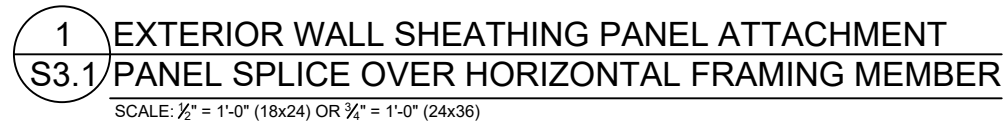
NO. DATE REVISION BY

DRAWING TITLE
FRAMING DETAILS

ENGINEER: DMH CHECKED BY: DMH
JOB NO: 2952 DRAWN BY: DMH
DATE: 12-15-2020
SHEET NUMBER

S3.0

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/11/2021



JOB TITLE: NPV130 COWAN
LOT130, NAPA VALLEY

LOCATION: LEE'S SUMMIT, MISSOURI



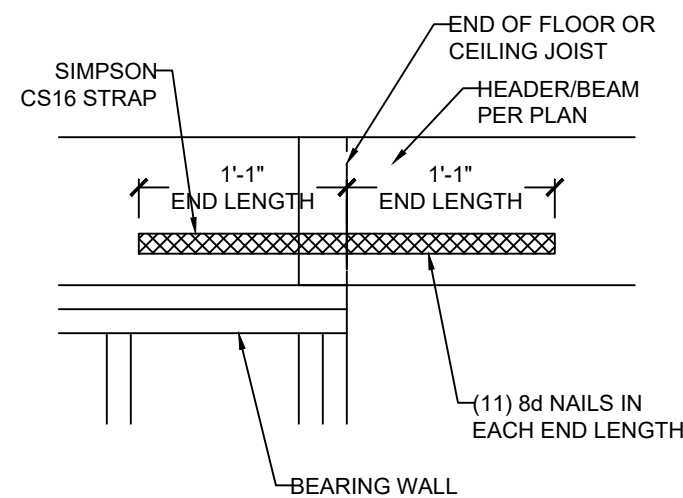
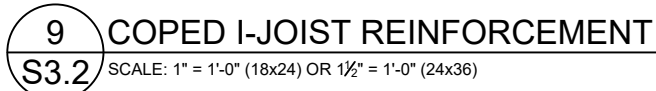
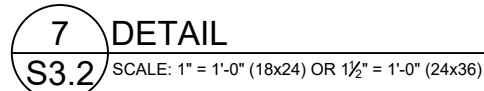
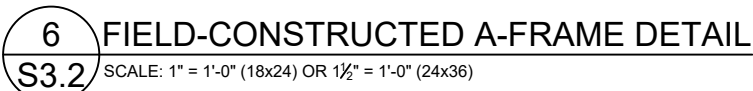
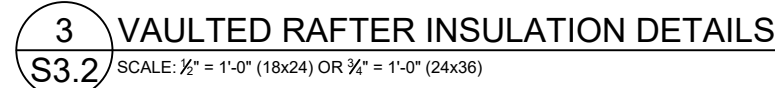
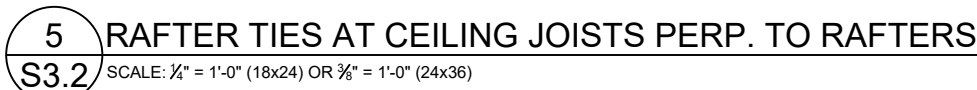
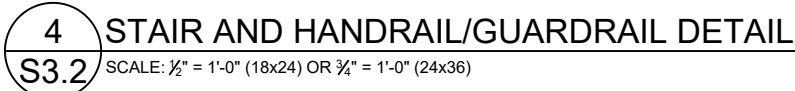
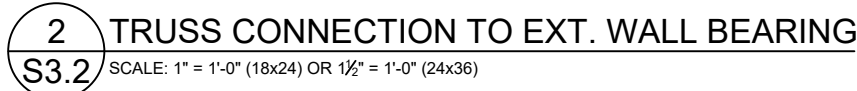
DRAWING TITLE

| | |
|---------------|-----------------|
| ENGINEER: DMH | CHECKED BY: DMH |
| JOB NO. 2952 | DRAWN BY: DMH |

| | |
|------------------|-------------|
| DATE: 12-15-2020 | |
| SHEET NUMBER | RELEASE FOR |

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

1/11/2021



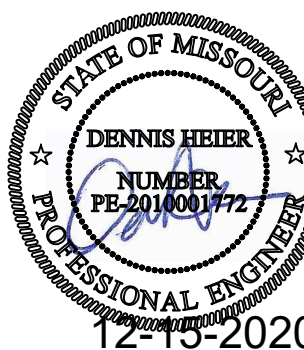
NOTES:

- 1) DR = DESIGN REQUIRED
- 2) UTILITY, STANDARD, STUD AND #3 GRADE LUMBER OF ANY SPECIES ARE NOT PERMITTED
- 3) THIS TABLE DOES NOT APPLY FOR STUDS SUPPORTING MEMBERS WITH A TRIB. LENGTH GREATER THAN 6'-0"



JOB TITLE: NPV130 COWAN
LOT130. NAPA VALLEY

LOCATION: LEE'S SUMMIT, MISSOURI

[illegible]

| | |
|---------------|--|
| | |
| DRAWING TITLE | |

FRAMING DETAILS

ENGINEER: DMH CHECKED BY: DMH

| | | | |
|---------|------|-----------|-----|
| JOB NO. | 2952 | DRAWN BY: | DMH |
|---------|------|-----------|-----|

DATE: 12-15-2020

SHEET NUMBER **RELEASE FOR**

RELEASE FOR

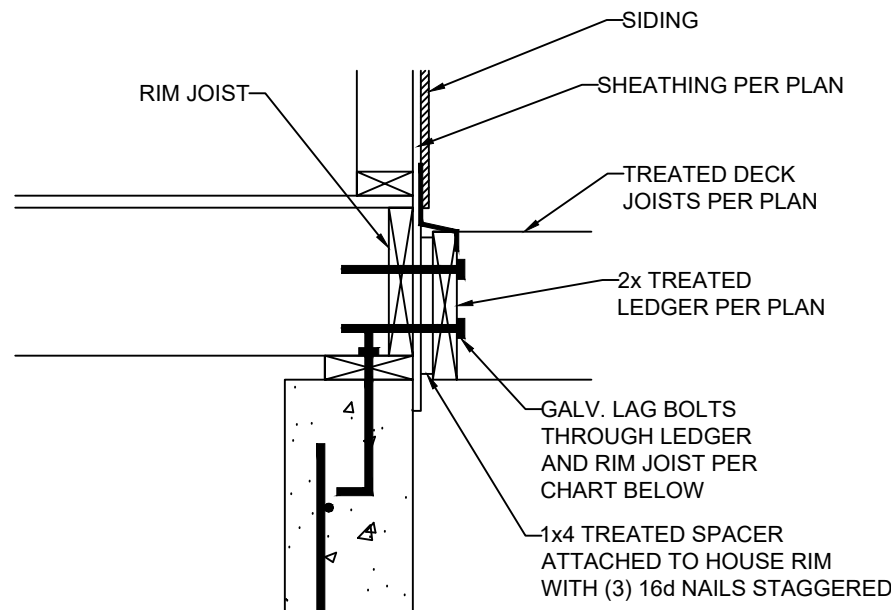
CONSTRUCTION

NOTED ON PLANS RE
DEVELOPMENT SERVIC

LEE'S SUMMIT, MISSOURI

01/11/2021

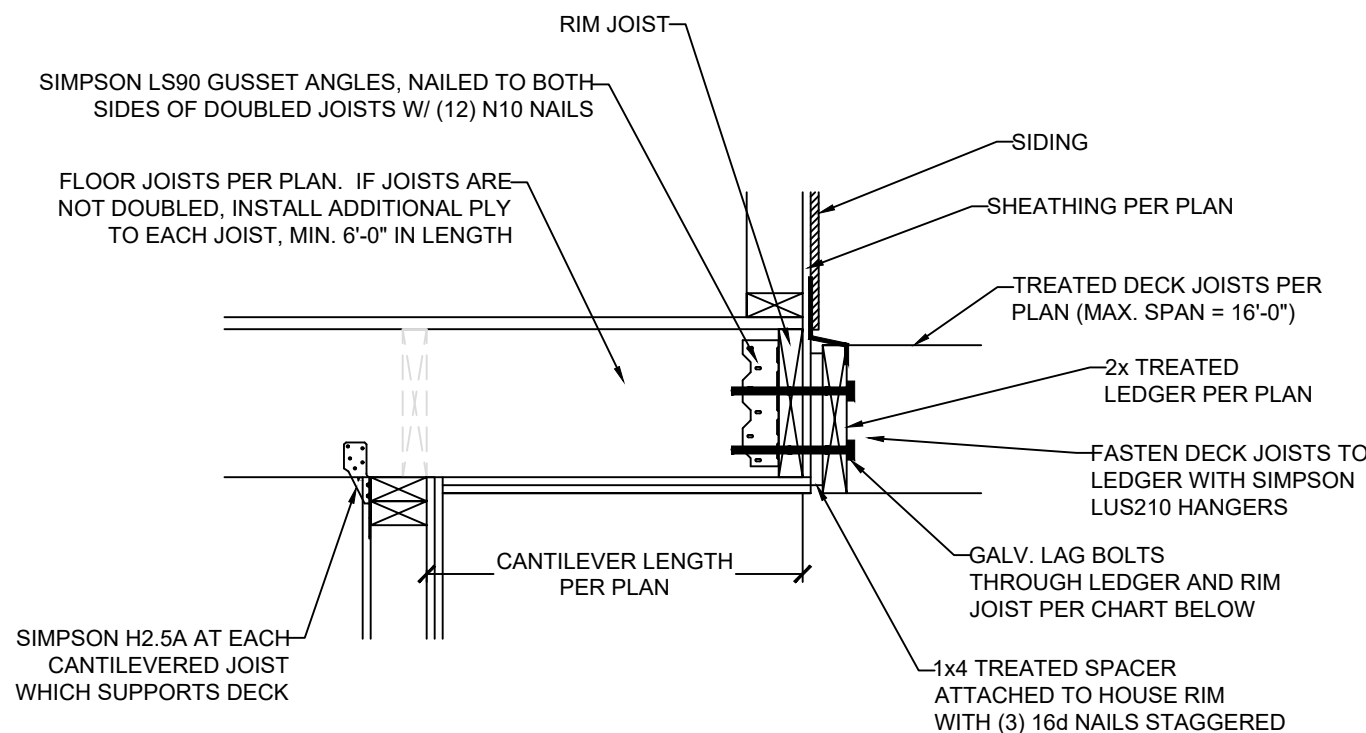
01/11/2021



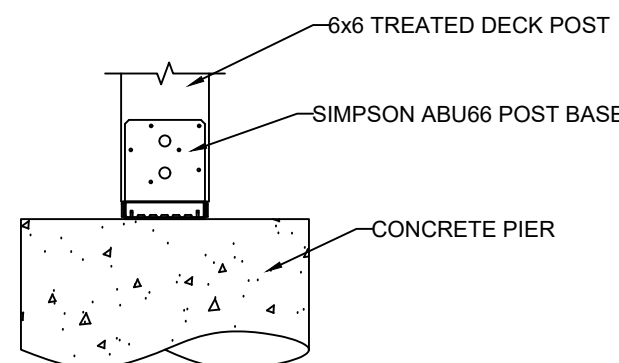
DECK LEDGER ATTACHMENT GUIDE

| DECK JOIST SPAN | 1/2" Ø GALV. LAG OR 3/8" Ø LEDGER-LOK SPACING |
|------------------|---|
| 10'-0" OR LESS | 16" OC |
| 10'-0" - 13'-11" | 12" OC OR @ 16" OC DOUBLED EVERY OTHER |
| 14'-0" - 18'-0" | 8" OC OR @ 16" OC DOUBLED |

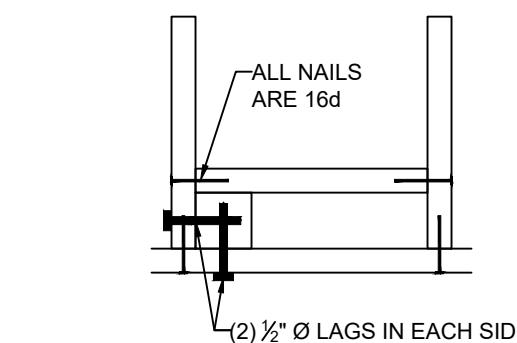
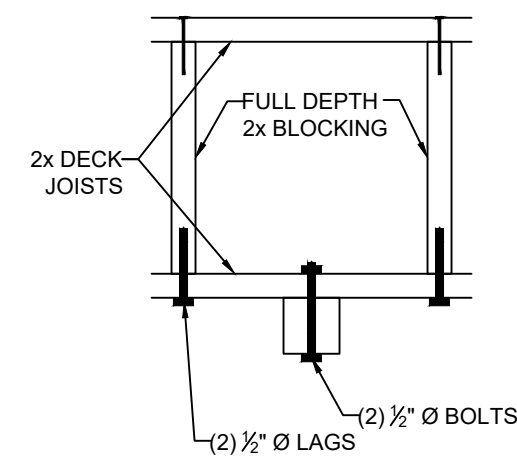
1 LEDGER ATTACHMENT
S3.3 SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)



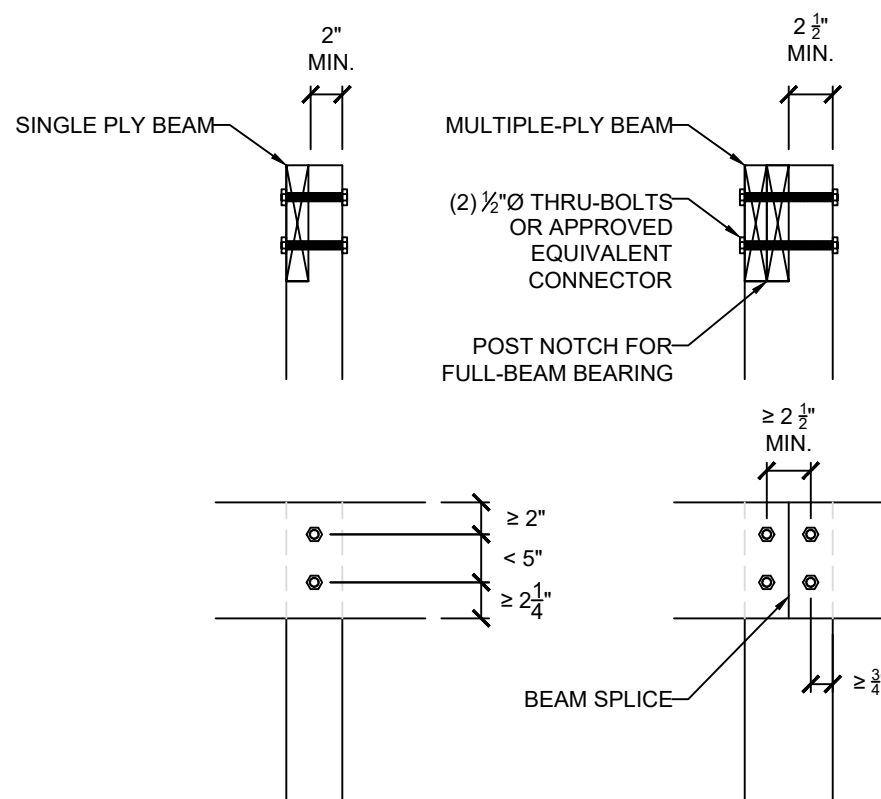
2 CANTILEVER WITH DECK ATTACHMENT
S3.3 SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)



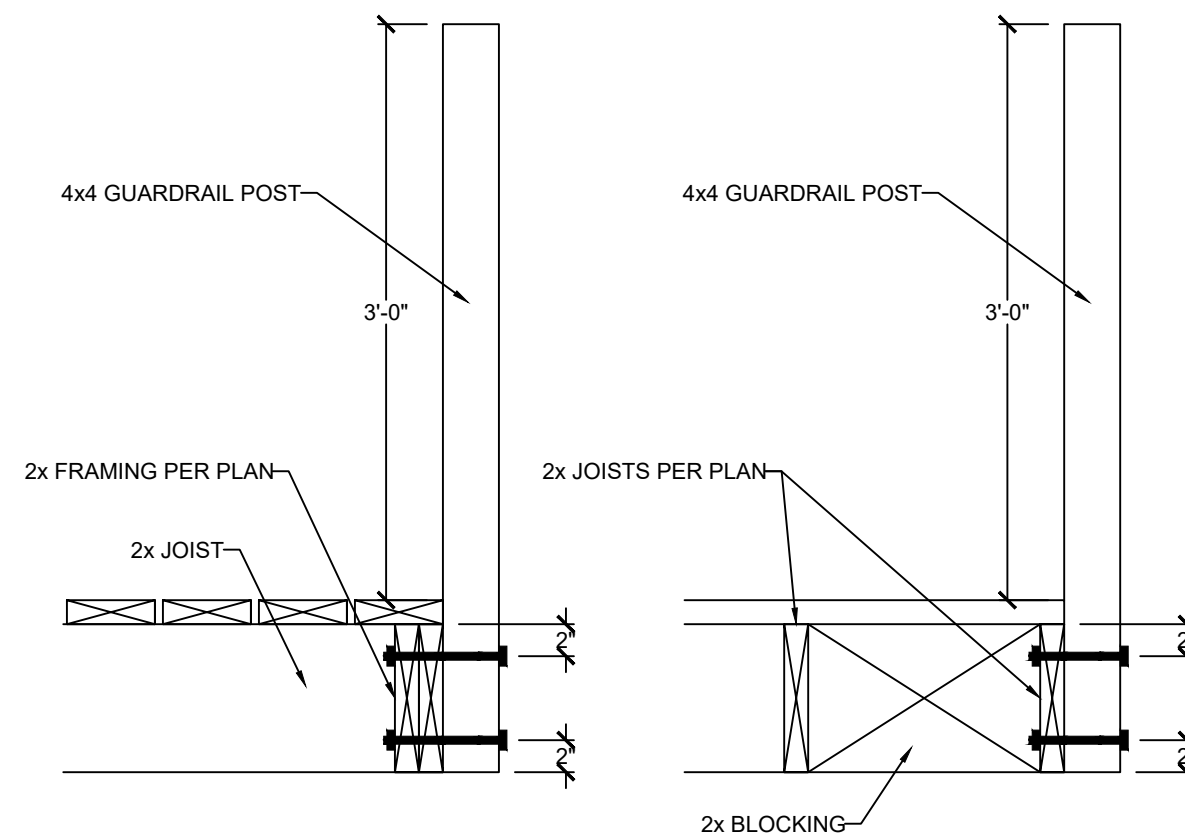
3 DECK POST BASE
S3.3 SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)



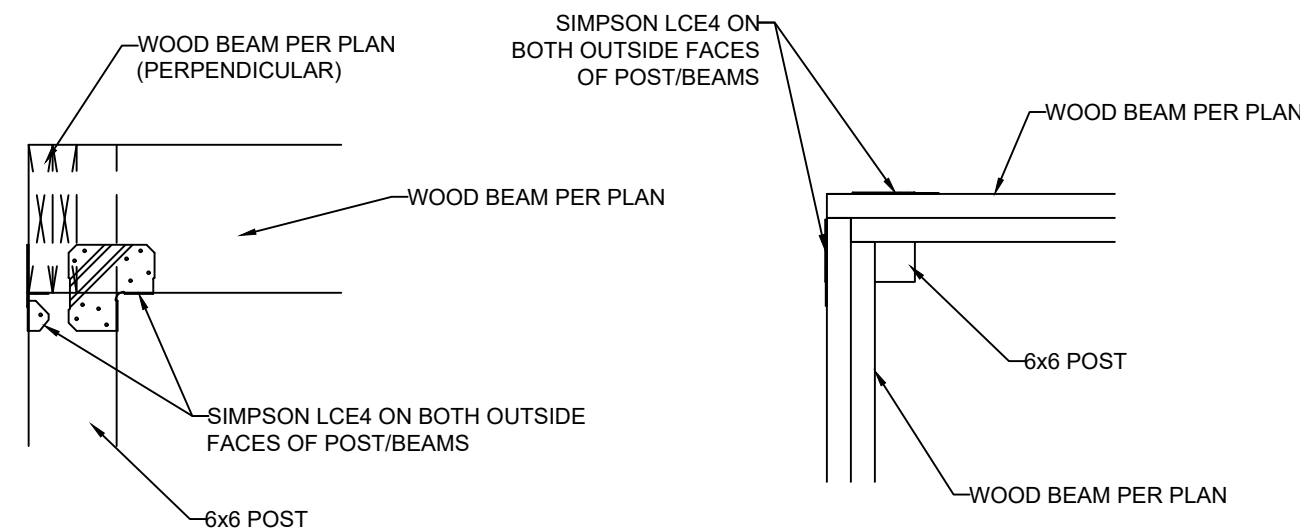
4 REINF. POST CONNECTIONS
S3.3 SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)



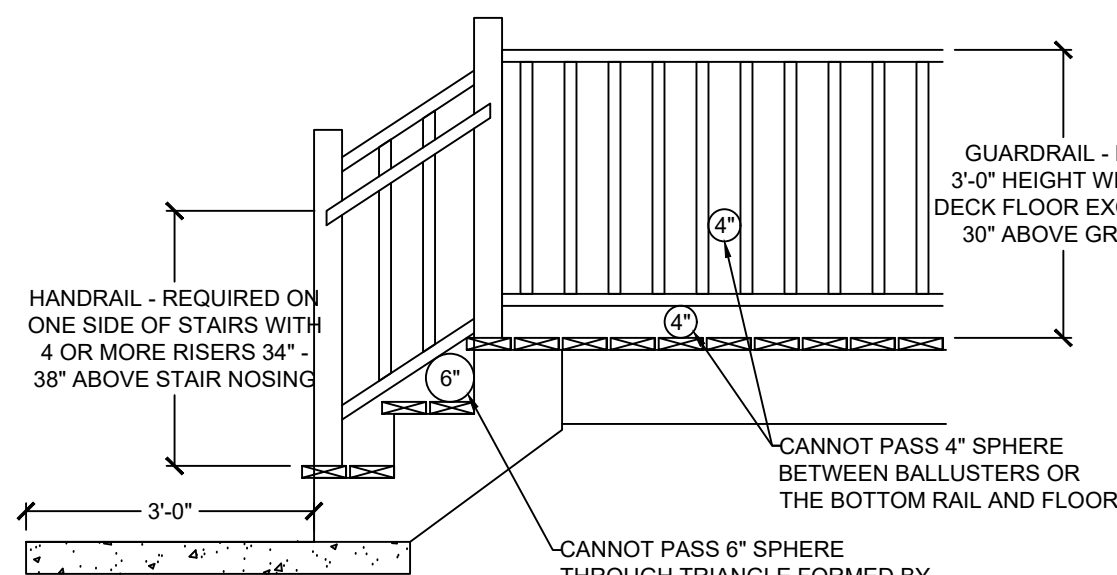
5 LET-IN (COVERED) DECK BEAM CONNECTION
S3.3 SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)



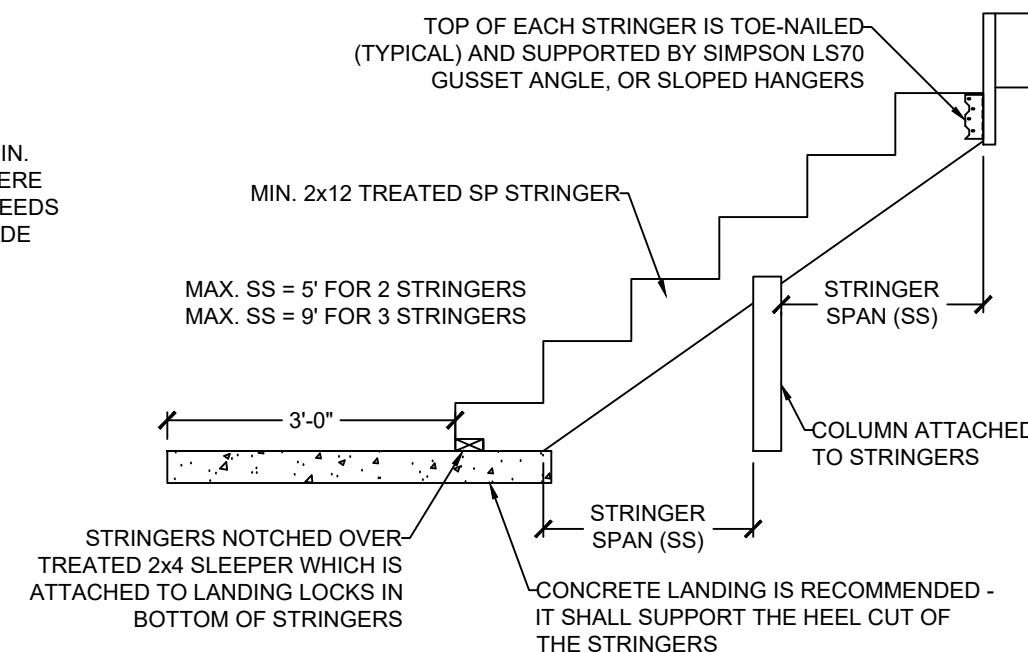
6 GUARDRAIL CONNECTION
S3.3 SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)



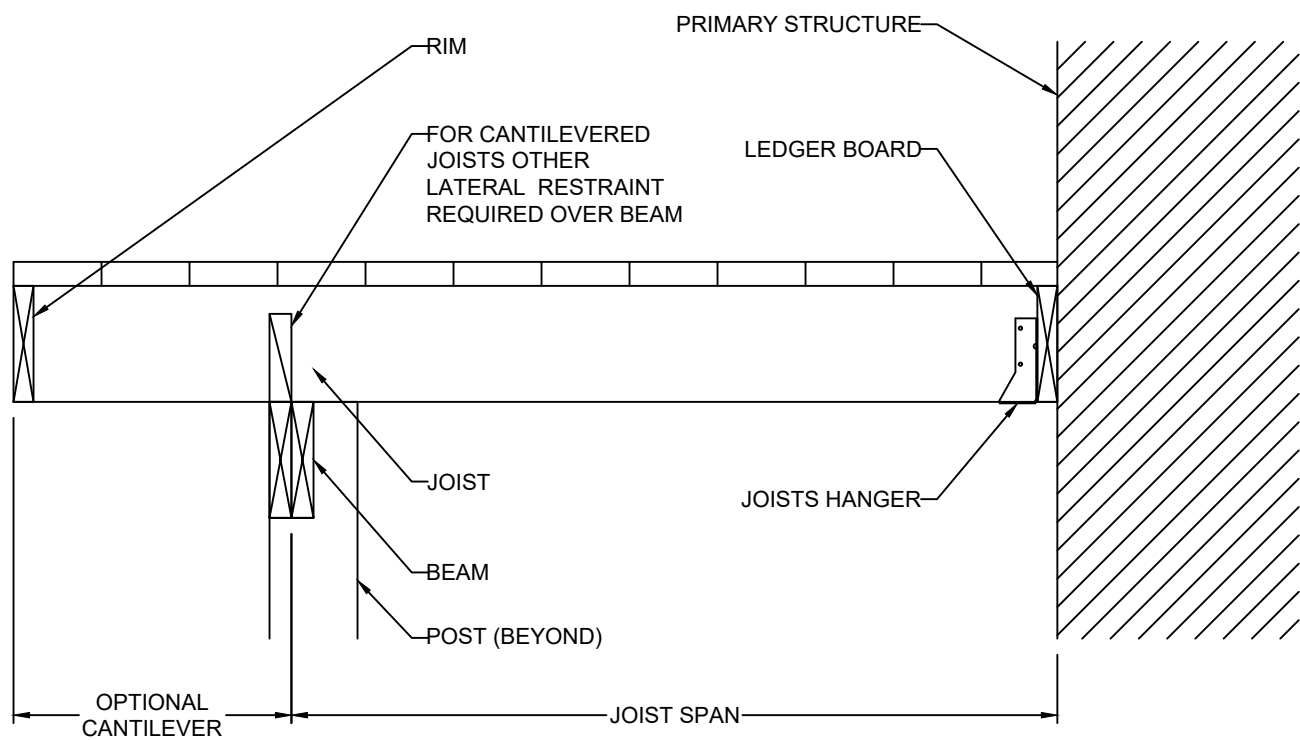
7 ALTERNATE COVERED DECK/PORCH INTERSECTION CORNER BEAM CONNECTION
S3.3 SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)



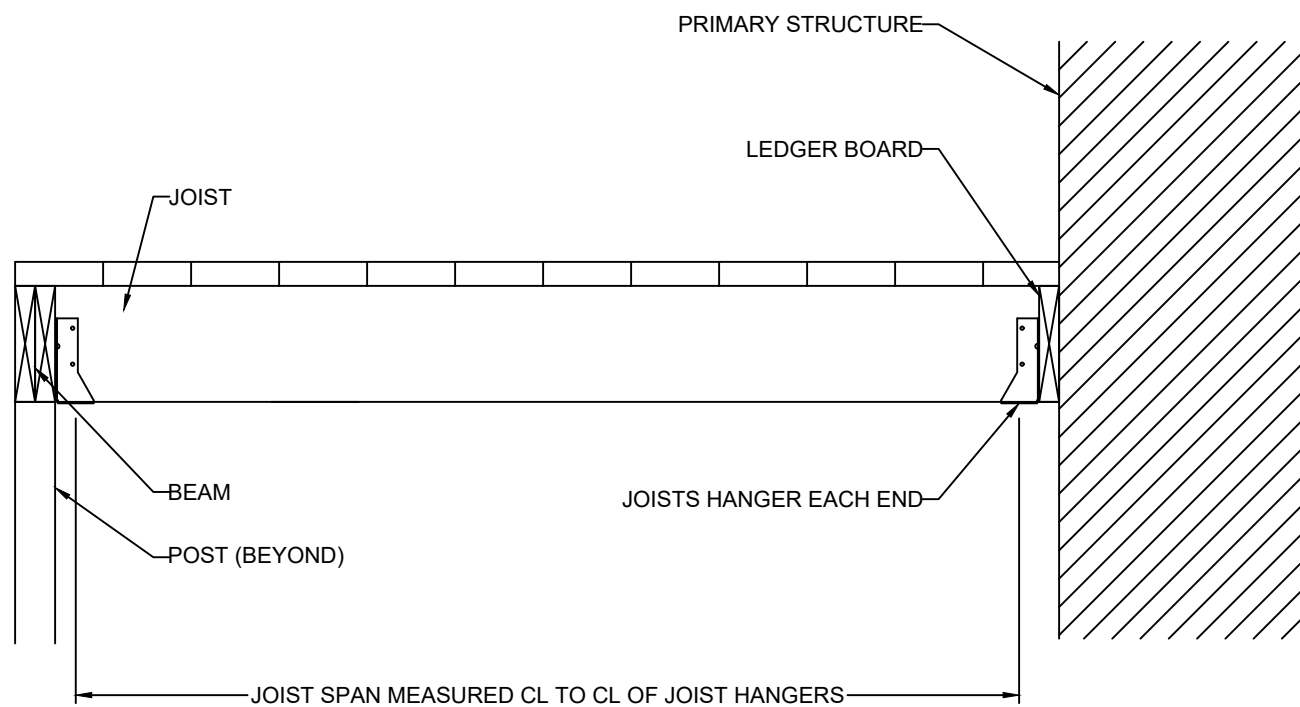
8 GUARDRAIL DETAIL
S3.3 SCALE: 1/2" = 1'-0" (18x24) OR 3/4" = 1'-0" (24x36)



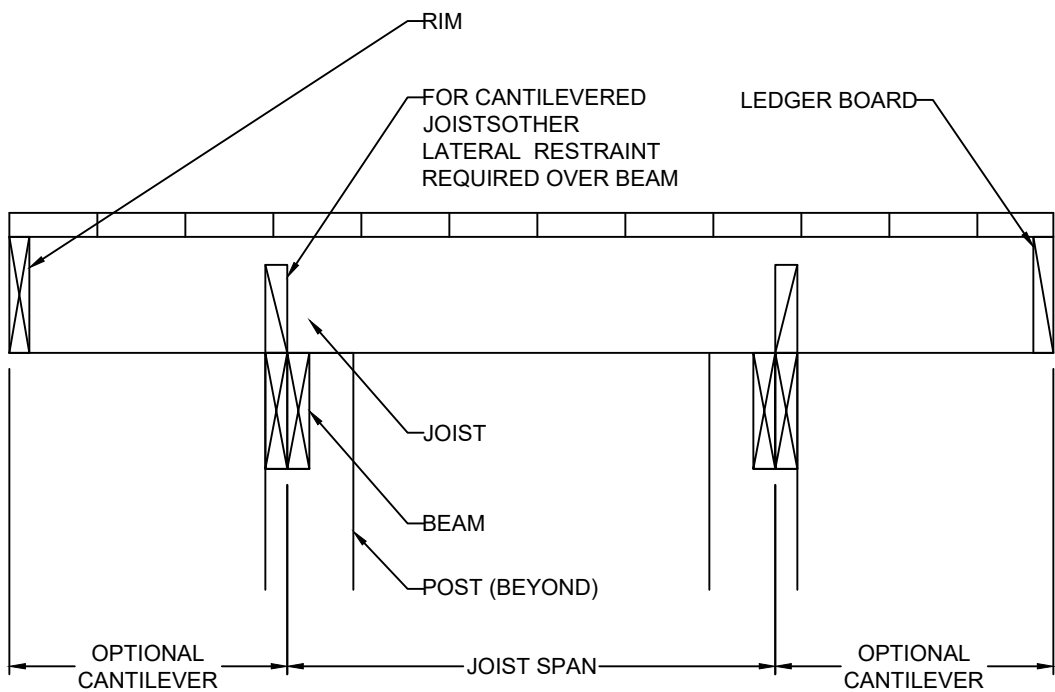
9 STAIR STRINGER DETAIL (MAX. 5' STAIR WIDTH)
S3.3 SCALE: 1/2" = 1'-0" (18x24) OR 3/4" = 1'-0" (24x36)



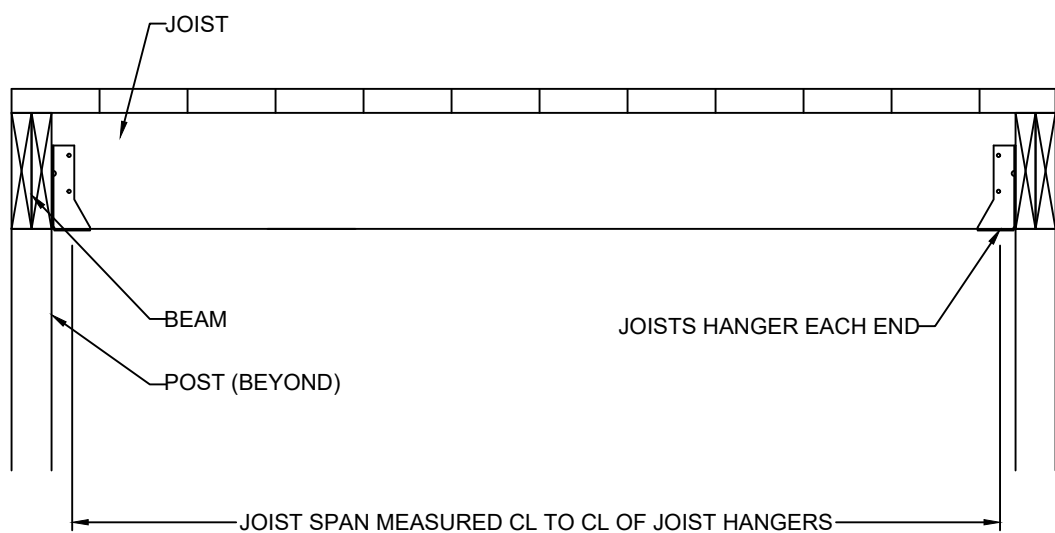
CANTILEVERED JOISTS
WITH DROPPED BEAM



JOISTS WITH FLUSH BEAM

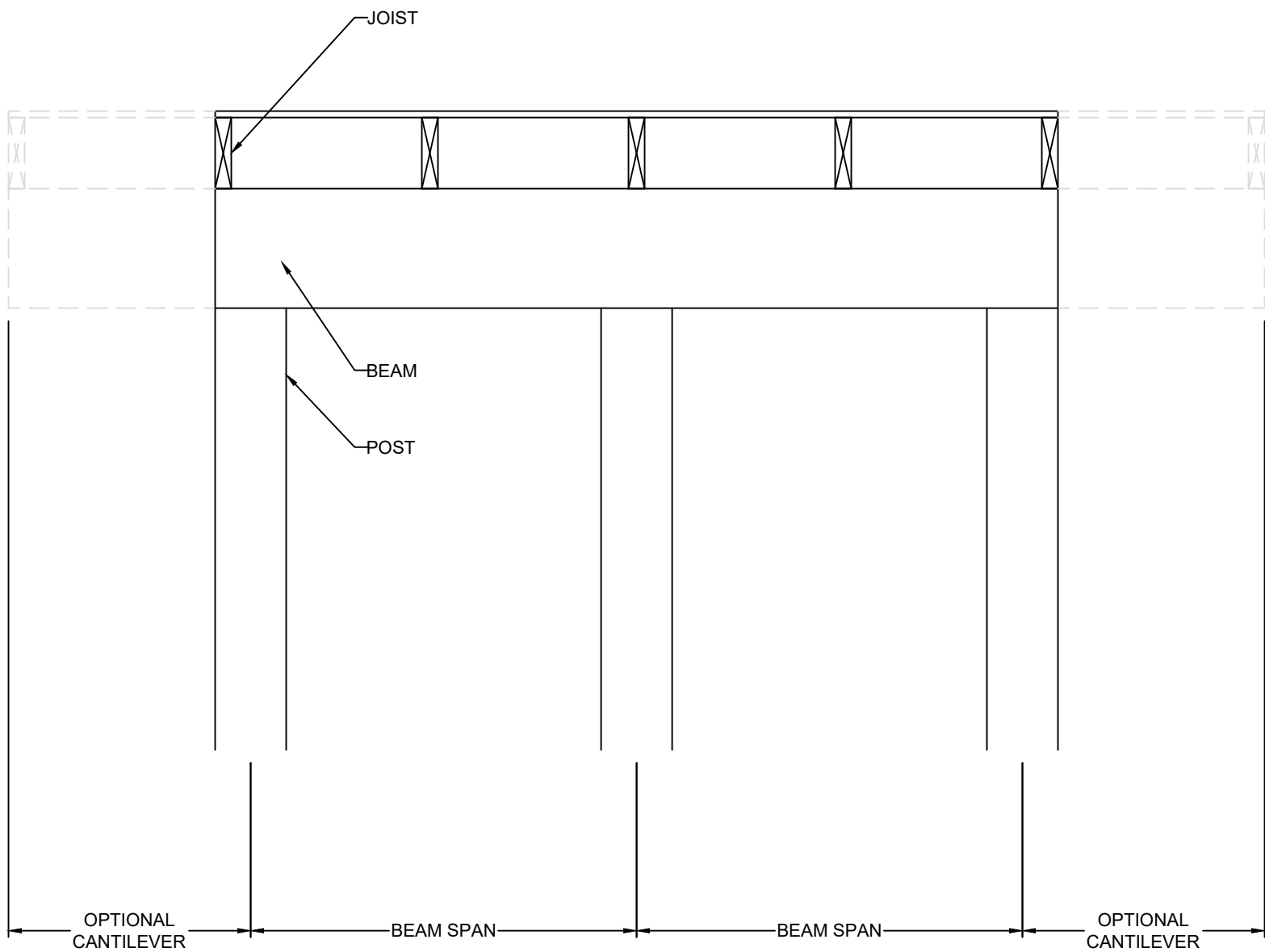


JOISTS ON FREE-STANDING
DECK WITH DROPPED BEAM

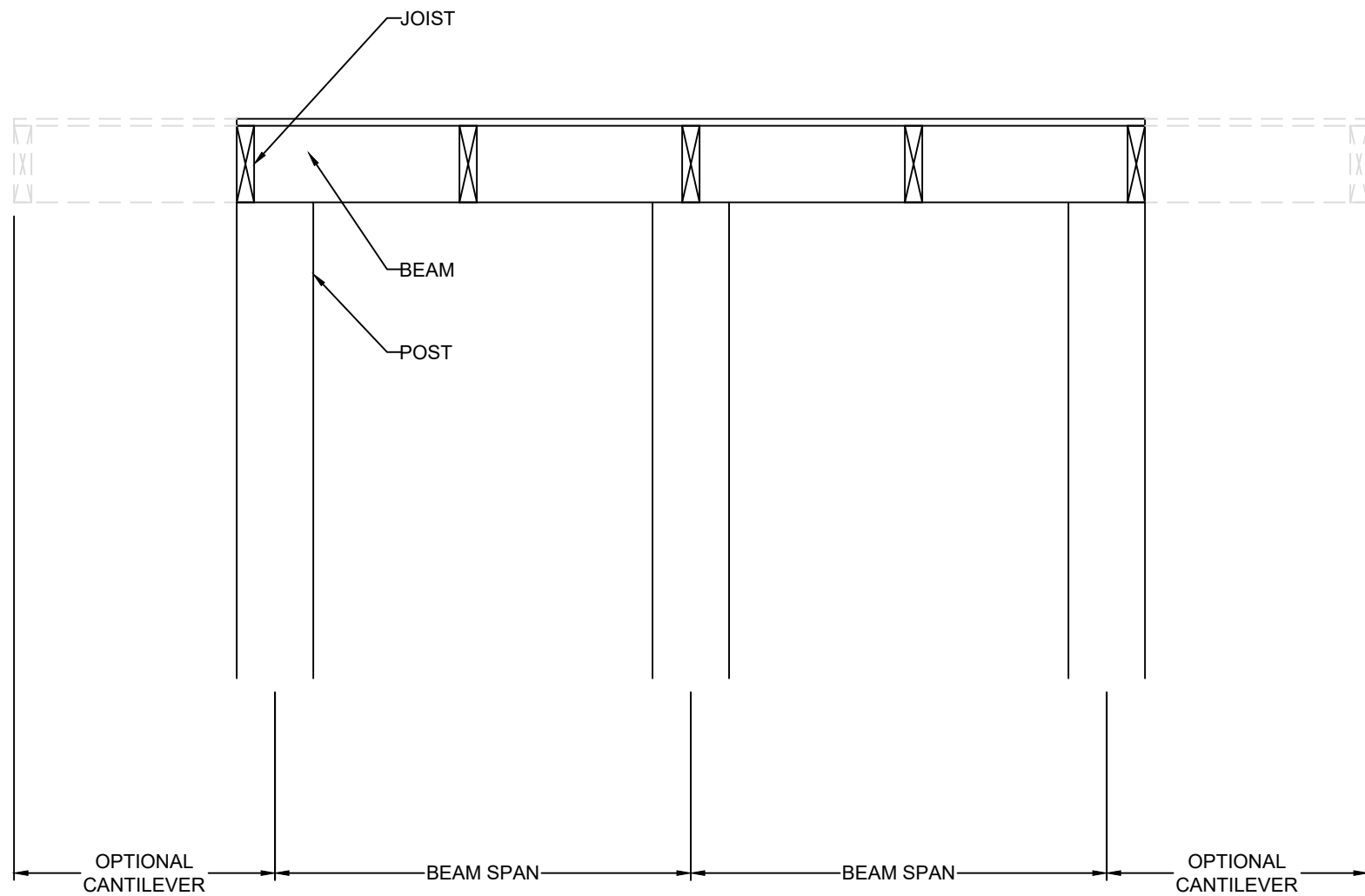


JOISTS WITH FLUSH BEAM

10 TYP. DECK JOIST SPANS
S3.3 SCALE: 1" = 1'-0" (18x24) OR 1/2" = 1'-0" (24x36)



DROPPED BEAM



FLUSH BEAM



VISTA
— STRUCTURAL —
ENGINEERING, LLC

14718 NW DELLA STREET * PORTLAND, OREGON 97229
OFFICE: 971.645.0901 * MOBILE: 971.645.0901 *
EMAIL: DENNIS@VISTASTRUCTURAL.COM

CLIENT: KEVIN HIGDON CONSTRUCTION, LLC

JOB TITLE: NPV130 COWAN
LOT130, NAPA VALLEY

LOCATION: LEE'S SUMMIT, MISSOURI



STATE OF MISSOURI
DENNIS HEIER
NUMBER
PE-2010001772
PROFESSIONAL ENGINEER
12-15-2020

| NO. | DATE | REVISION | BY |
|-----|------|----------|----|
| | | | |
| | | | |
| | | | |
| | | | |

DRAWING TITLE

**FRAMING
DETAILS**

ENGINEER: DMH CHECKED BY: DMH
JOB NO.: 2952 DRAWN BY: DMH
DATE: 12-15-2020
SHEET NUMBER

S3.3b

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
07/11/2021