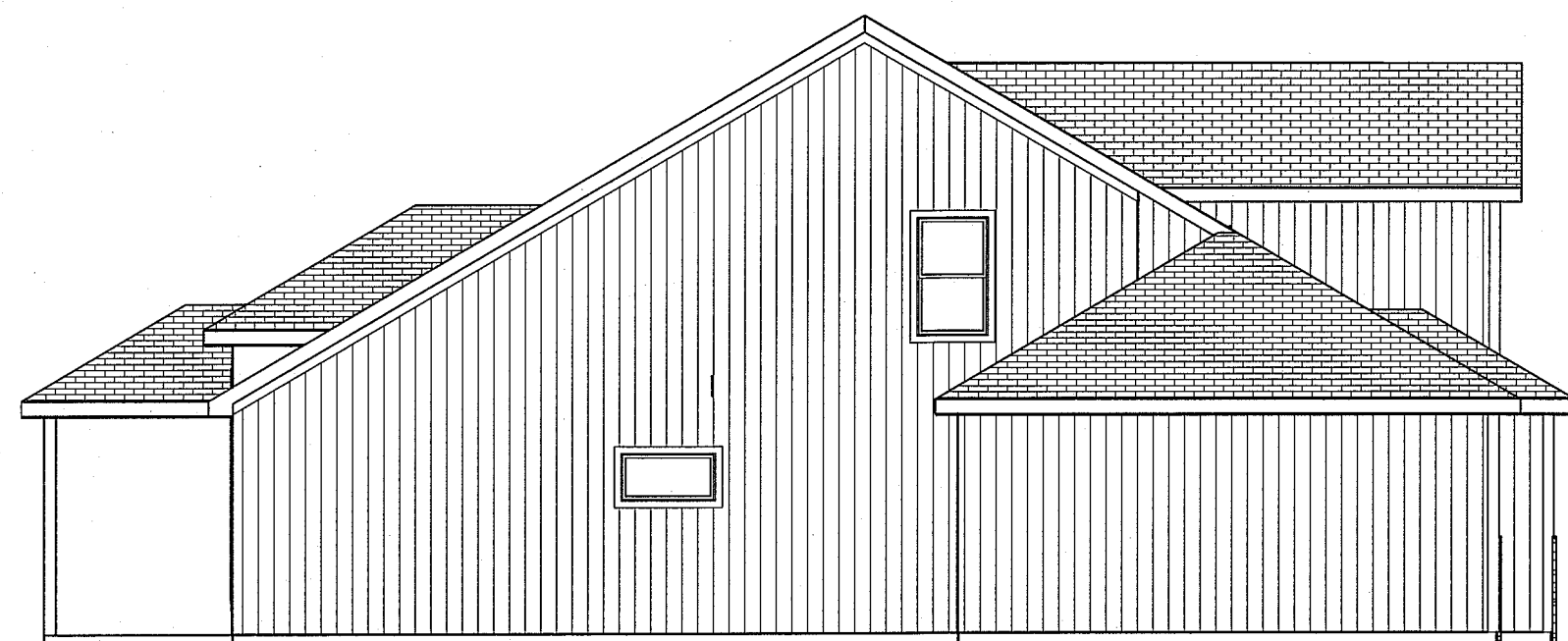


ROOF PLAN  
1/8 = 1-0  
ROOF PITCHES 7/12 U.N.O.  
RAFTERS 2 X 6 DF NO 2 @ 16" OC TYP. U.N.O.  
HIPS AND RIDGES 2 X 8 DF NO 2 TYP. U.N.O.

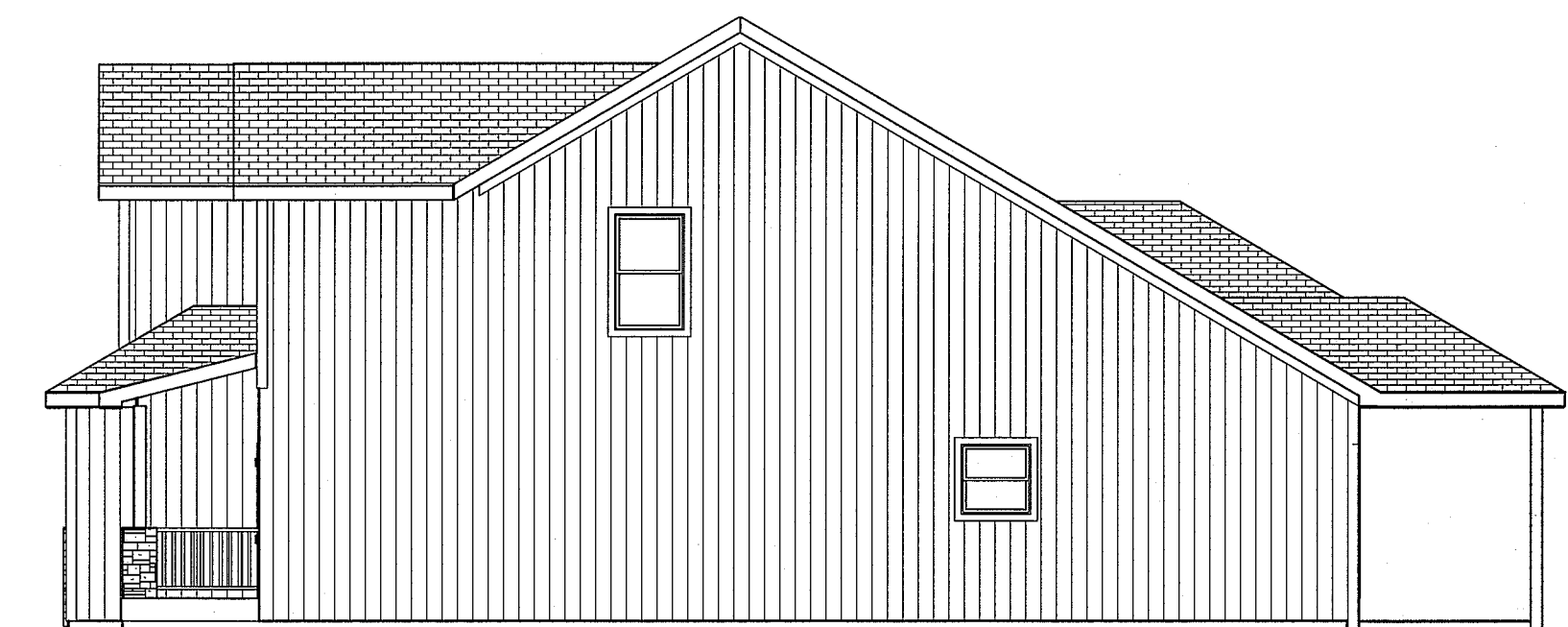


LEFT EL.  
1/8 = 1-0

3 SIDES LP PANEL SIDING

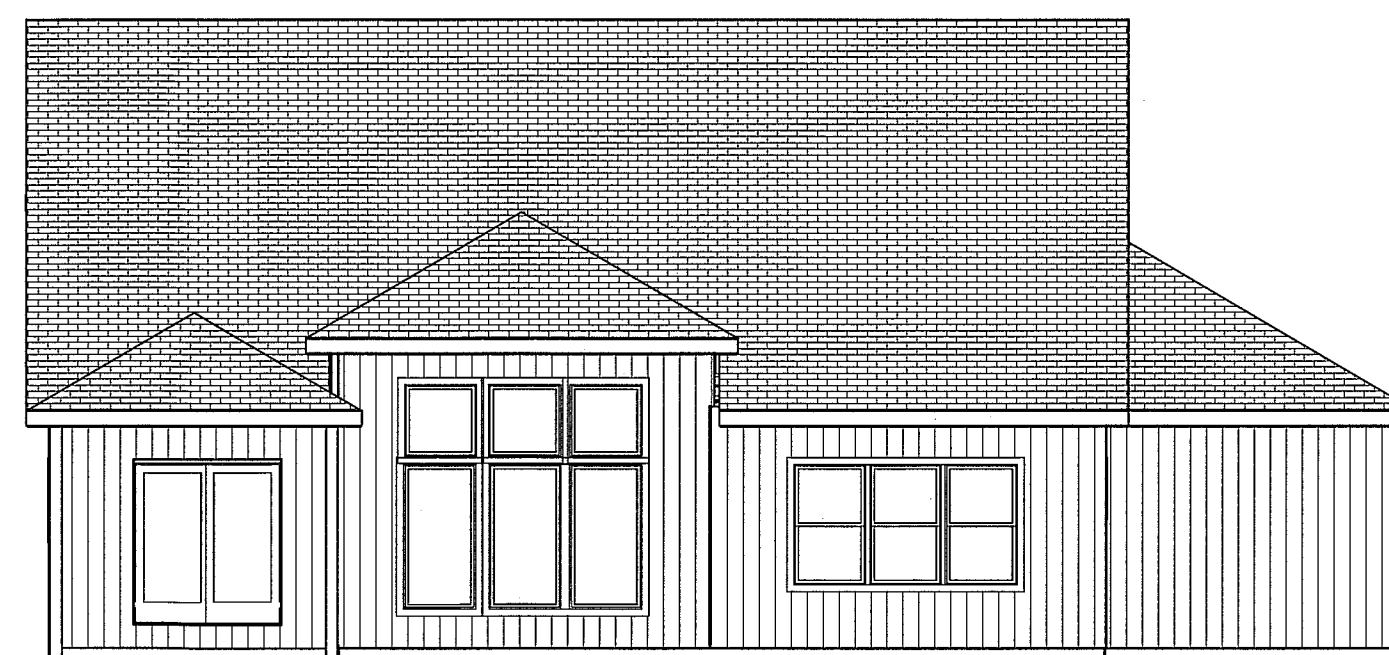


FRONT EL.  
BOARD & BATT, LAP  
AND STONE



RIGHT EL.  
1/8 = 1-0

3 SIDES LP PANEL SIDING



REAR EL.  
1/8 = 1-0

RELEASE FOR  
CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
02/04/2021

JOSEPH A. TOWNS P.E.  
MO. LIC E 22017  
PROFESSIONAL SEAL  
APPLIES TO STRUCTURAL  
ELEMENTS ONLY

BUILD IN ACCORDANCE WITH  
2018 INTERNATIONAL  
RESIDENTIAL CODE AND  
LOCAL CODES.

BEHOME LLC  
LOT 74 MONTICELLO  
1221 NE GOSHEN DR  
LEE SUMMIT MO

SCALE  
1/4" = 1-0

DATE  
2-4-21

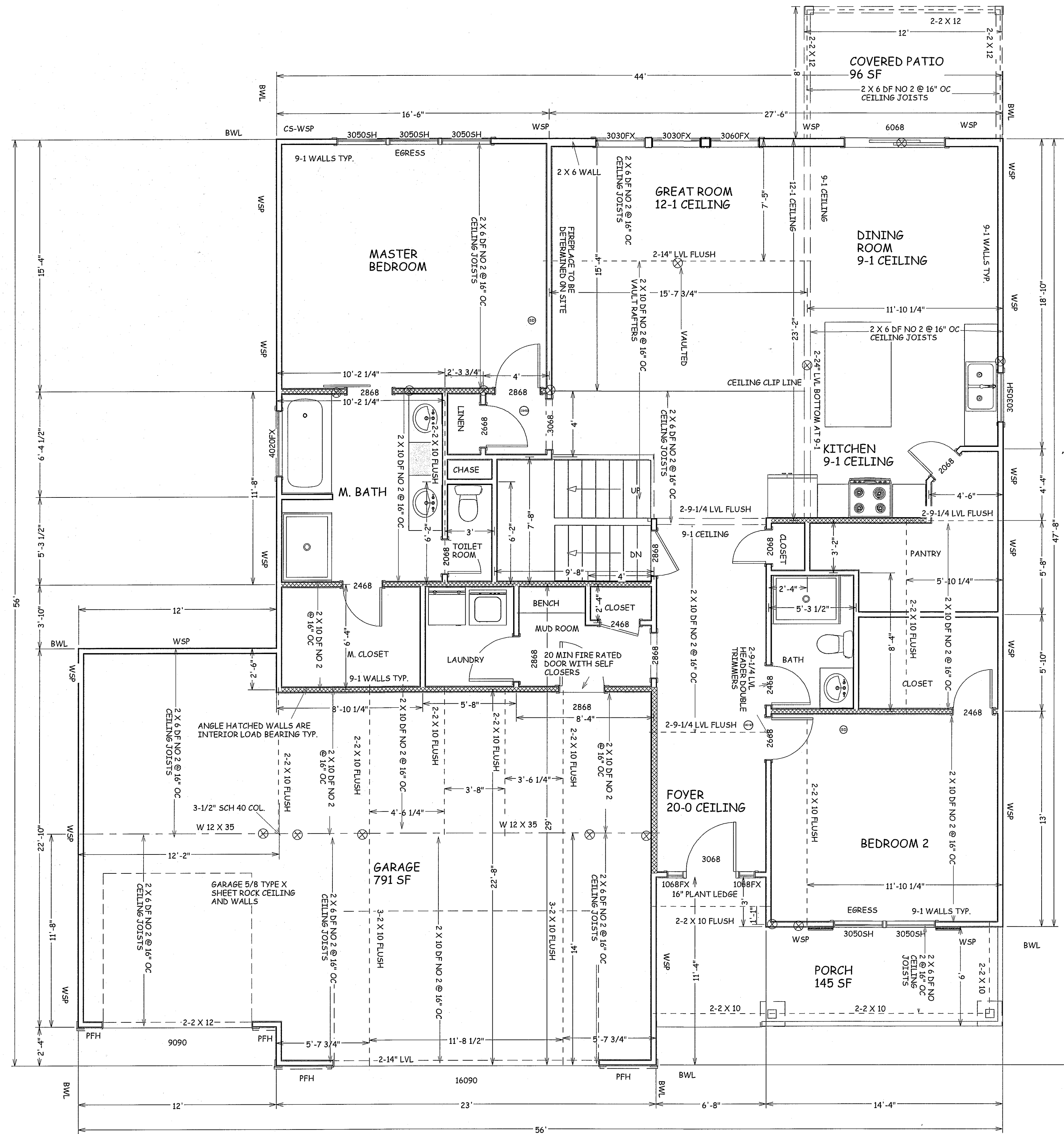
PLAN NO.  
3356

SHEET NO.  
1 OF 5

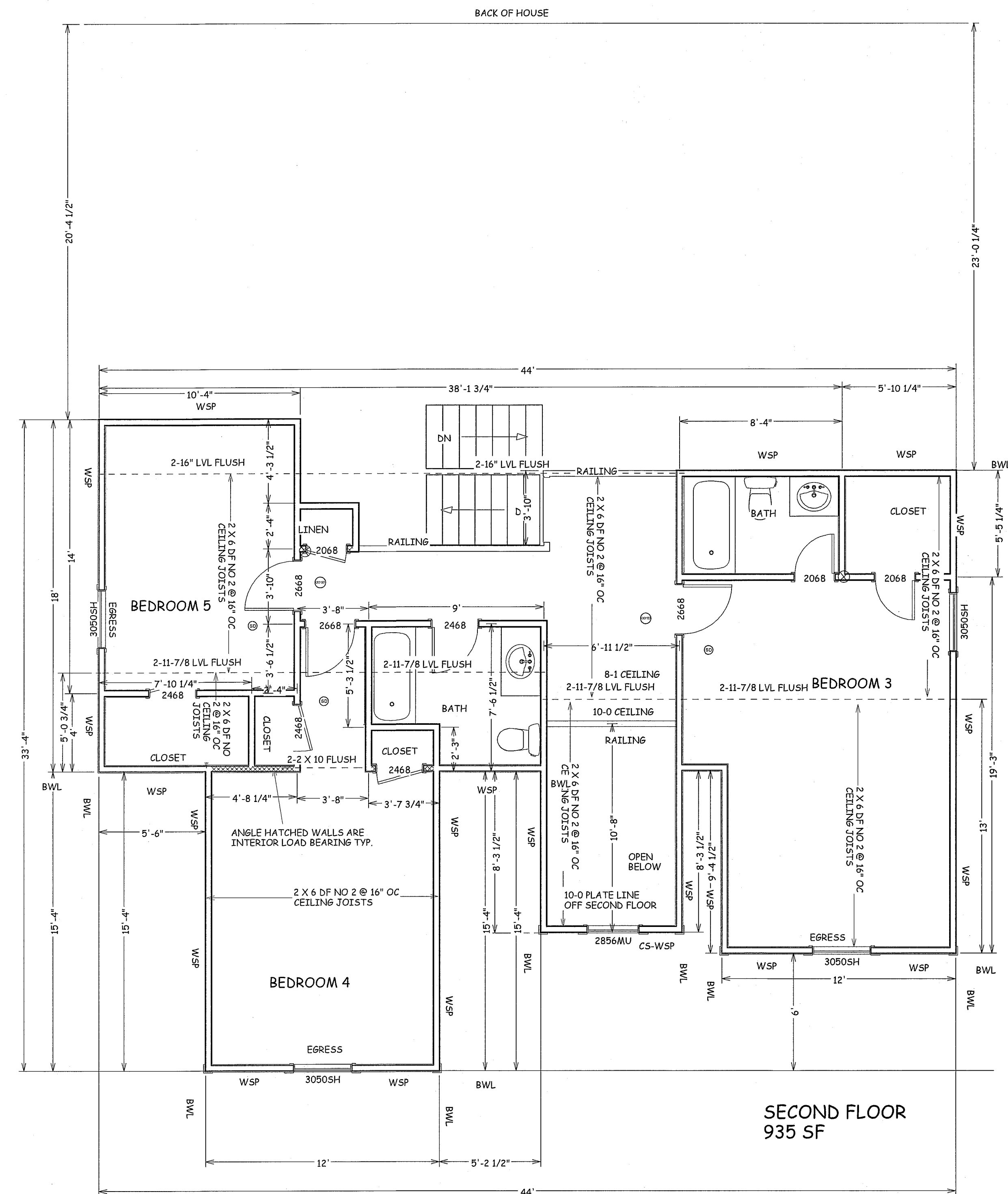








MAIN FLOOR  
1754 SF



SECOND FLOOR  
935 SF

RELEASE FOR  
CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
02/04/2021



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BEHOME LLC  
LOT 74 MONTICELLO  
1221 NE GOSHEN DR  
LEE SUMMIT MO

SCALE  
1/4" = 1-0

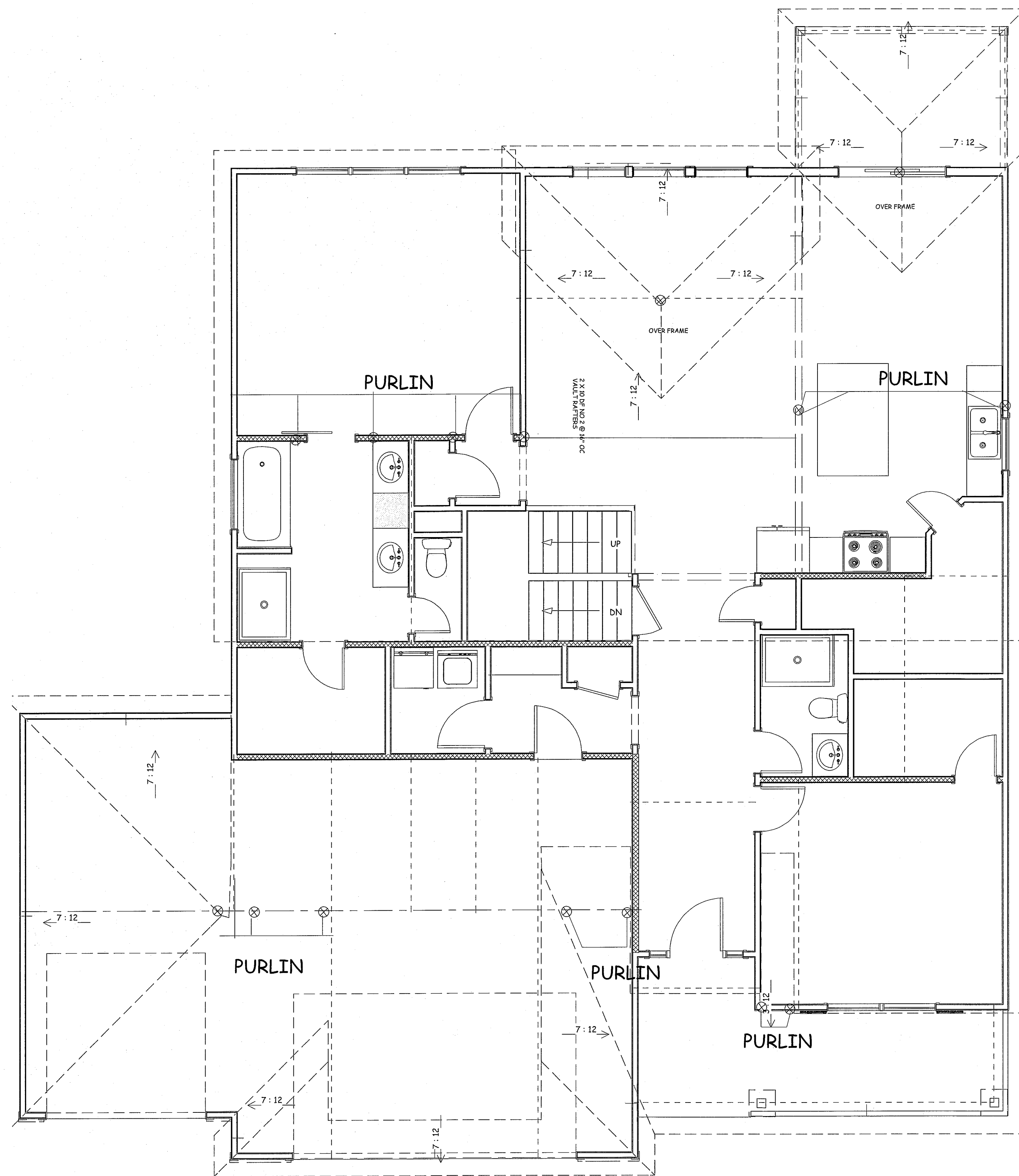
DATE  
2-4-21

PLAN NO.

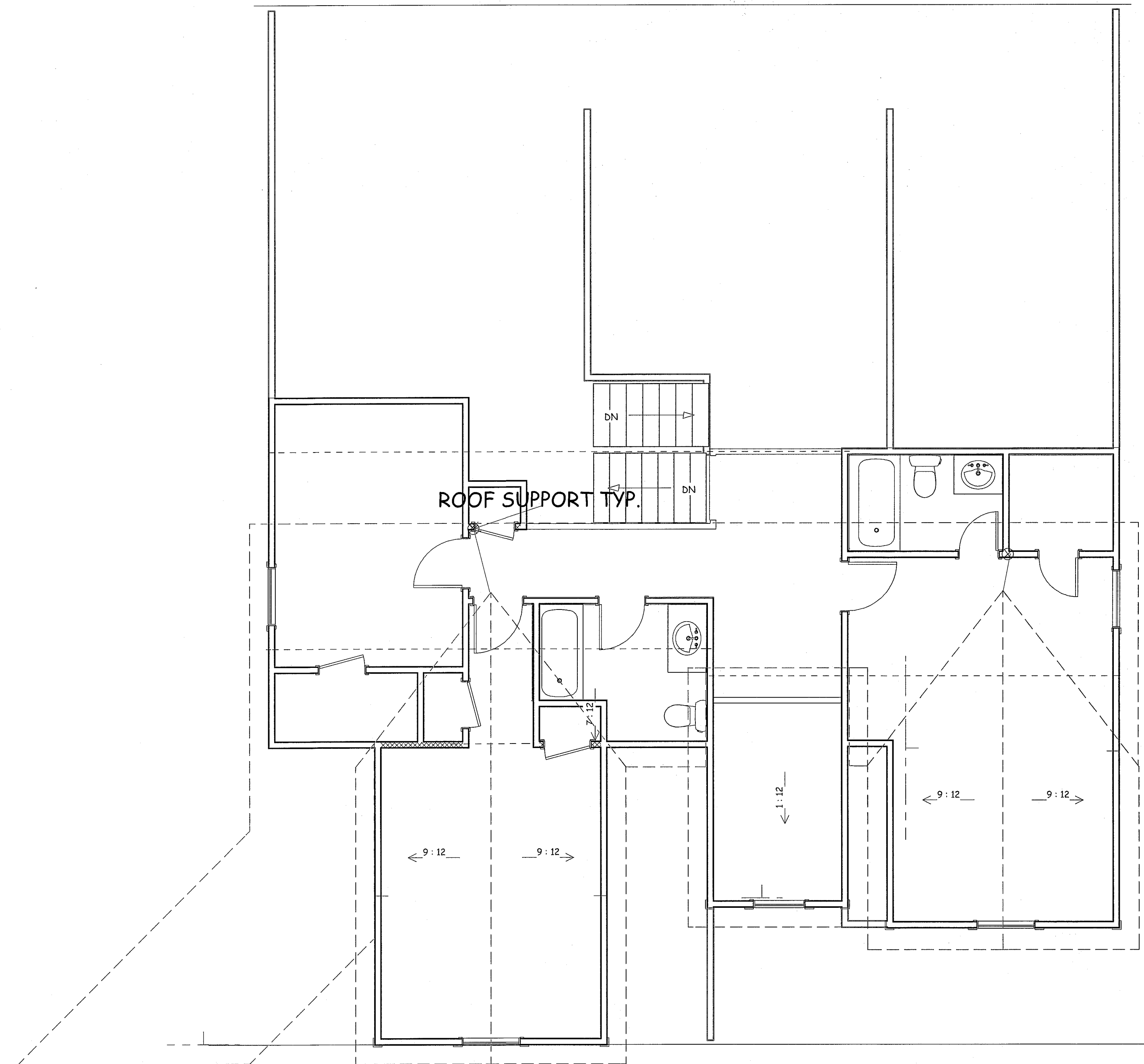
3356

SHEET NO.

3 OF 5



MAIN FLOOR  
PURLIN PLAN



SECOND FLOOR  
PURLIN PLAN

RELEASE FOR  
CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
02/04/2021



JOSEPH A. TOWNS P.E.  
MO. LIC E 22017  
PROFESSIONAL SEAL  
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2018 INTERNATIONAL  
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LOCAL CODES.

BEHOME LLC  
LOT 74 MONTICELLO  
1221 NE GOSHEN DR  
LEE SUMMIT MO

SCALE  
1/4" = 1'-0"

DATE  
2-4-21

PLAN NO.

3356

SHEET NO.

4 OF 5



| EXPOSURE CATEGORY B<br>30-FOOT MEAN ROOF HEIGHT<br>10-FOOT WALL HEIGHT<br>2 BRACED WALL LINES | Ultimate Design Wind Speed (mph) | Story Location | MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE <sup>a</sup> |                         |           |  |                             |
|---|----------------------------------|----------------|---|-------------------------|-----------|--|-----------------------------|
|   |                                  |                | Braced Wall Line Spacing (feet)   | Method LIB <sup>b</sup> | Method GB | Methods DWB, WSP, SFB, PBS, PCT, HPS, BV-WSP, ABW, PFG, CS-WSP, CS-SFB | Methods CS-WSP, CS-G, CS-PP |
| ≤ 115   | 10                               |                | 10  | 3.5                     | 3.5       | 2.0  | 2.0                         |
|   |                                  |                | 20  | 6.5                     | 6.5       | 3.5  | 3.5                         |
|   |                                  |                | 30  | 9.5                     | 9.5       | 5.5  | 4.5                         |
|   |                                  |                | 40  | 12.5                    | 12.5      | 7.0  | 6.0                         |
|   |                                  |                | 50  | 15.0                    | 15.0      | 9.0  | 7.5                         |
|   |                                  |                | 60  | 18.0                    | 18.0      | 10.5   | 9.0                         |
|   | 20                               |                | 10  | 7.0                     | 7.0       | 4.0  | 3.5                         |
|   |                                  |                | 20  | 12.5                    | 12.5      | 7.5  | 6.5                         |
|   |                                  |                | 30  | 18.0                    | 18.0      | 10.5   | 9.0                         |
|   |                                  |                | 40  | 23.5                    | 23.5      | 13.5   | 11.5                        |
|   |                                  |                | 50  | 29.0                    | 29.0      | 16.5   | 14.0                        |
|   |                                  |                | 60  | 34.5                    | 34.5      | 20.0   | 17.0                        |
|   | 30                               |                | 10  | NP                      | 10.0      | 6.0  | 5.0                         |
|   |                                  |                | 20  | NP                      | 18.5      | 11.0   | 9.0                         |
|   |                                  |                | 30  | NP                      | 27.0      | 15.5   | 13.0                        |
|   |                                  |                | 40  | NP                      | 35.0      | 20.0   | 17.0                        |
|   |                                  |                | 50  | NP                      | 43.0      | 24.5   | 21.0                        |
|   |                                  |                | 60  | NP                      | 51.0      | 29.0   | 25.0                        |

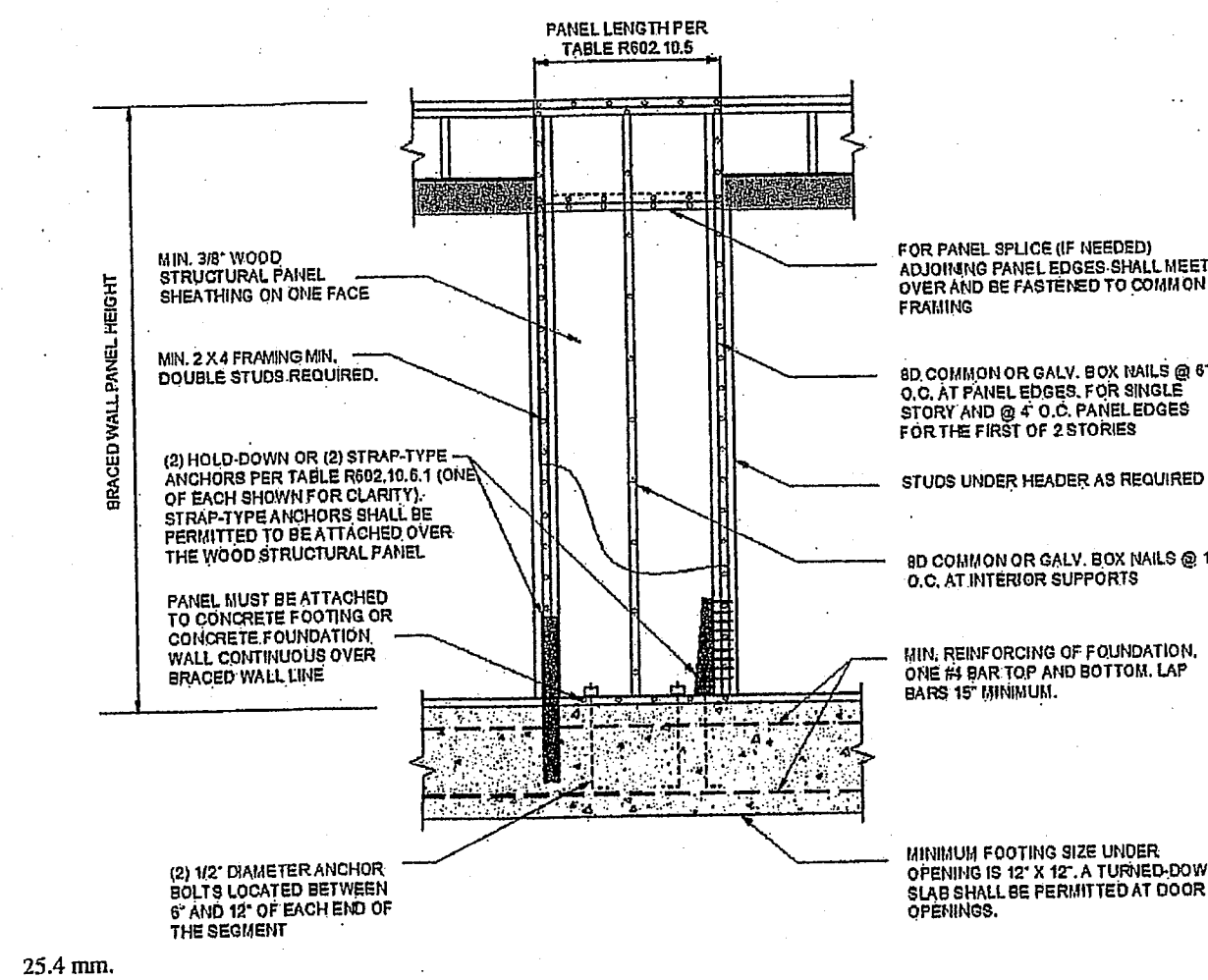
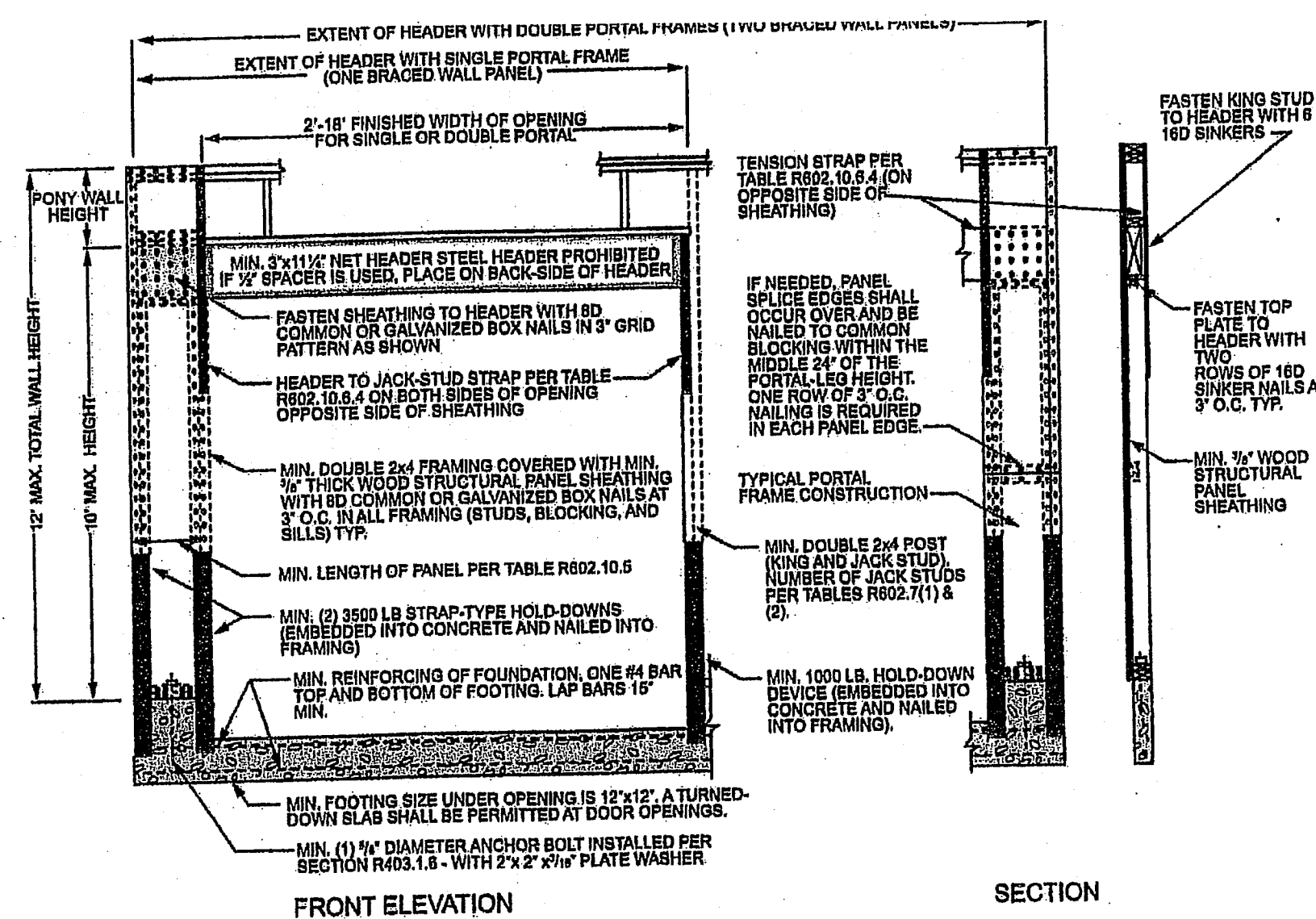







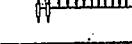


FIGURE R602.10.6.1  
METHOD ABW—ALTERNATE BRACED WALL PANEL









4 mm, 1 foot = 304.8 mm.

FIGURE R602.10.6.2  
METHOD PFH—PORTAL FRAME WITH HOLD-DOWNS

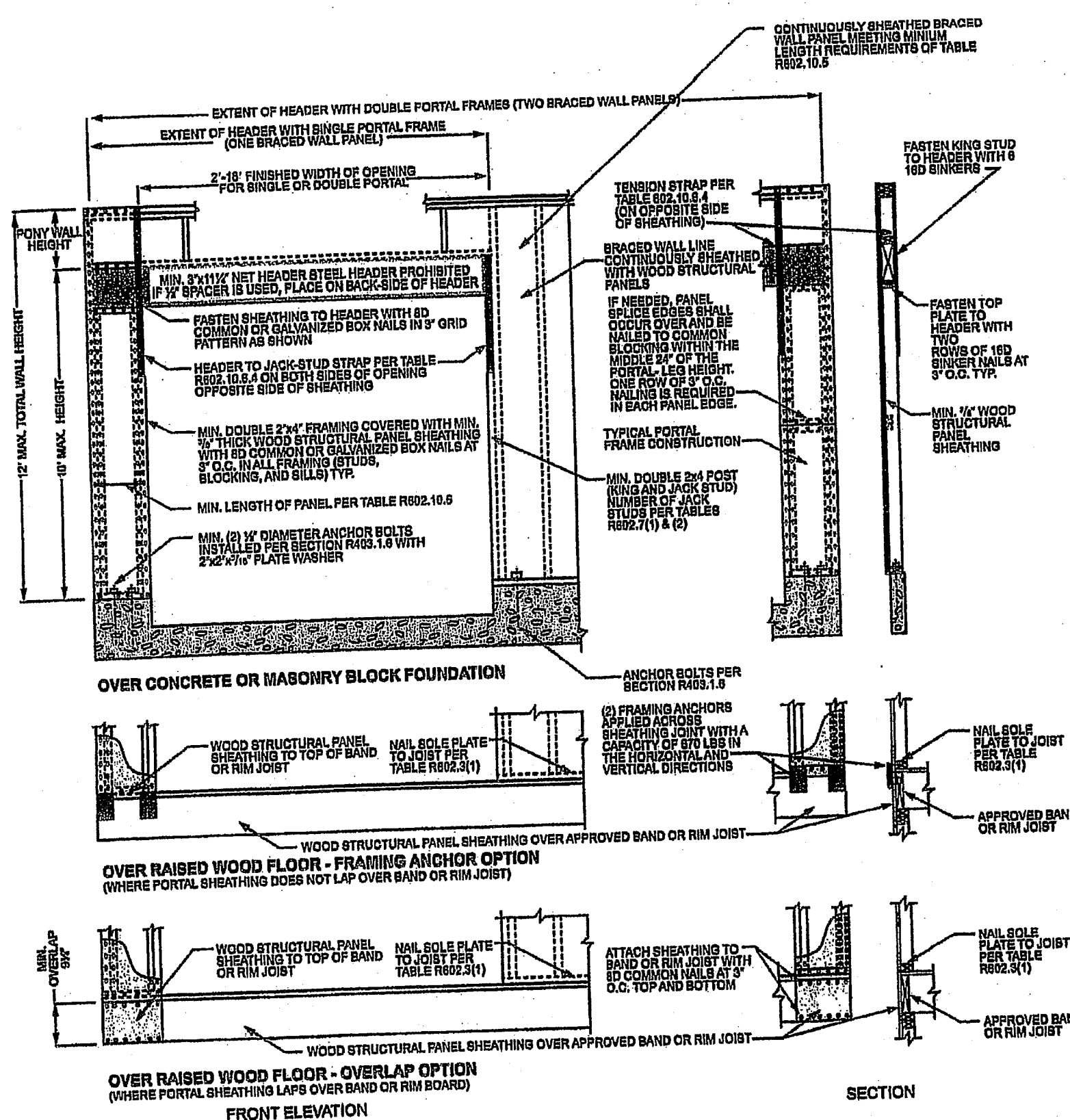
| TABLE R602.10.4<br>BRACING METHODS |   |   |   |   |  |
|------------------------------------|---|---|---|---|--|
| METHODS, MATERIAL                  | MINIMUM THICKNESS   | FIGURE  | CONNECTION CRITERIA <sup>a</sup>  |   |  |
|                                    |   |   | Fasteners   | Spacing   |  |
| Intermittent Bracing Methods       | LIB<br>Let-in bracing   | 1 × 4 wood or approved metal straps at 45° to 60° angles for maximum 16" stud spacing |  | Wood: 2-8d common nails or<br>3-8d (2 1/4" long × 0.113" dia.) nails<br><br>Metal strap: per manufacturer                   | Wood: per stud top and bottom plates<br><br>Metal: per manufacturer                      |
|                                    | DWB<br>Diagonal wood boards   | 3/4" (1" nominal) for maximum 24" stud spacing  |  | 2-8d (2 1/4" long × 0.113" dia.) nails or<br>2 - 1 1/2" long staples  | Per stud   |
|                                    | WSP<br>Wood structural panel<br>(See Section R604)  | 7/8"  |  | Exterior sheathing per Table R602.3(3)<br><br>Interior sheathing per Table R602.3(1) or R602.3(2)                           | 6" edges 12" field<br><br>Varies by fastener   |
|                                    | BV-WSP <sup>b</sup><br>Wood structural panels with stone or masonry veneer<br>(See Section R602.10.6.5) | 7/8"  | See Figure R602.10.6.5  | 8d common (2 1/2" × 0.131" nails  | 4" at panel edges<br>12" at intermediate supports<br>4" at braced wall panel end points  |
|                                    | SRB<br>Structural fiberboard sheathing  | 1/2" or 7/8" for maximum 16" stud spacing   |  | 1 1/2" × 0.12" dia. (for 1/2" thick sheathing) 1 1/4" long × 0.12" dia. (for 7/8" thick sheathing) galvanized roofing nails | 3" edges 6" field  |
|                                    | GB<br>Gypsum board  | 1/2"  |   | Nails or screws per Table R602.3(1) for exterior locations<br><br>Nails or screws per Table R702.3.5 for interior locations | For all braced wall panel locations: 7" edges (including top and bottom plates) 7" field |
|                                    | FBS<br>Particulate sheathing<br>(See Section R605)  | 3/4" or 1 1/4" for maximum 16" stud spacing   |  | For 1 1/4": 6d common (2" long × 0.113" dia.) nails<br>For 3/4": 8d common (2 1/4" long × 0.131" dia.) nails                | 3" edges 6" field  |
|                                    | FCP<br>Portland cement plaster  | See Section R703.7 for maximum 16" stud spacing                                       |  | 1 1/2" long, 11 gage, 7/8" dia. head nails or<br>1 1/2" long, 16 gage staples   | 6" o.c. on all framing members   |
|                                    | HSB<br>Hardboard panel siding   | 7/8" for maximum 16" stud spacing   |  | 0.092" dia., 0.225" dia. head nails with length to accommodate 1 1/4" penetration into studs                                | 4" edges 8" field  |
|                                    | ABW<br>Alternate braced wall  | 3/4"  |  | See Section R602.10.6.1   | See Section R602.10.6.1  |

| METHOD<br>(See Table R602.10.4)      | MINIMUM LENGTH <sup>a</sup> (feet)  |        |         |         |         |                       | CONTRIBUTING LENGTH (feet)  |
|--------------------------------------|---|--------|---------|---------|---------|-----------------------|-----------------------------|
|                                      | 8 feet  | 9 feet | 10 feet | 11 feet | 12 feet | Actual <sup>b</sup>   |                             |
| DWB, WSP, SFB, PBS, PCT, HPS, BV-WSP | 48  | 48     | 48      | 53      | 58      | Actual <sup>b</sup>   | Actual <sup>b</sup>         |
| GB                                   | 48  | 48     | 48      | 53      | 58      | Double sided = Actual | Single sided = 0.5 x Actual |
| LIB                                  | 55  | 62     | 69      | NP      | NP      | Actual <sup>b</sup>   | Actual <sup>b</sup>         |
| ABW                                  | SDC A, B and C, ultimate design wind speed < 140 mph  | 28     | 32      | 34      | 38      | 42                    | 48                          |
|                                      | SDC D <sub>1</sub> , D <sub>2</sub> and D <sub>3</sub> , ultimate design wind speed < 140 mph | 32     | 32      | 34      | NP      | NP                    | Actual <sup>b</sup>         |
| CS-G                                 | Adjacent clear opening height (inches)  | 24     | 27      | 30      | 33      | 36                    | Actual <sup>b</sup>         |
| CS-WSP, CS-SFB                       | ≤ 64  | 24     | 27      | 30      | 33      | 36                    | Actual <sup>b</sup>         |
|                                      | 68  | 25     | 27      | 30      | 33      | 36                    |                             |
|                                      | 72  | 27     | 27      | 30      | 33      | 36                    |                             |
|                                      | 76  | 30     | 29      | 30      | 33      | 36                    |                             |
|                                      | 80  | 32     | 30      | 30      | 33      | 36                    |                             |
|                                      | 84  | 35     | 32      | 32      | 33      | 36                    |                             |
|                                      | 88  | 38     | 35      | 33      | 33      | 36                    |                             |
|                                      | 92  | 43     | 37      | 35      | 35      | 36                    |                             |
|                                      | 96  | 48     | 41      | 38      | 36      | 36                    |                             |
|                                      | 100   | —      | 44      | 40      | 38      | 38                    |                             |
|                                      | 104   | —      | 49      | 43      | 40      | 39                    |                             |
|                                      | 108   | —      | 54      | 46      | 43      | 41                    |                             |
|                                      | 112   | —      | —       | 50      | 45      | 43                    |                             |
|                                      | 116   | —      | —       | 55      | 48      | 45                    |                             |
|                                      | 120   | —      | —       | 60      | 52      | 48                    |                             |
|                                      | 124   | —      | —       | —       | 56      | 51                    |                             |
|                                      | 128   | —      | —       | —       | 61      | 54                    |                             |
|                                      | 132   | —      | —       | —       | 66      | 58                    |                             |
|                                      | 136   | —      | —       | —       | —       | 62                    |                             |
|                                      | 140   | —      | —       | —       | —       | 66                    |                             |
|                                      | 144   | —      | —       | —       | —       | 72                    |                             |
| PFH                                  | Supporting roof only  | 16     | 16      | 16      | Note c  | Note c                | 48                          |
|                                      | Supporting one story and roof   | 24     | 24      | 24      | Note c  | Note c                | 1.5 x Actual <sup>b</sup>   |
|                                      | PFG   | 24     | 27      | 30      | Note d  | Note d                | 1.5 x Actual <sup>b</sup>   |
|                                      | SDC A, B and C  | 16     | 18      | 20      | Note e  | Note e                | Actual <sup>b</sup>         |
| CS-PP                                | SDC D <sub>1</sub> , D <sub>2</sub> and D <sub>3</sub>  | 16     | 18      | 20      | Note e  | Note e                | Actual <sup>b</sup>         |

For Sft: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mile per hour = 0.447 m/s.  
NP = Not Permitted.  
a. Linear interpolation shall be permitted.  
b. Use the actual length where it is greater than or equal to the minimum length.  
c. Maximum header height for PFH is 10 feet in accordance with Figure R602.10.6.2, but wall height shall be permitted to be increased to 12 feet with pony wall.  
d. Maximum header height for PFG is 10 feet in accordance with Figure R602.10.6.3, but wall height shall be permitted to be increased to 12 feet with pony wall.  
e. Maximum header height for CS-PP is 10 feet in accordance with Figure R602.10.6.4, but wall height shall be permitted to be increased to 12 feet with pony wall.

| TABLE R602.10.4—continued<br>BRACING METHODS |   |  |   |  |  |
|--|---|--|---|--|--|
|  | METHODS, MATERIAL   | MINIMUM THICKNESS                          | FIGURE  | CONNECTION CRITERIA <sup>a</sup>   |  |
|  |   |  |   | Fasteners  | Spacing                                  |
| Intermittent Bracing Methods                 | PFH<br>Portal frame with hold-downs   | 3/4"                                       |  | See Section R602.10.6.2  | See Section R602.10.6.2                  |
|  | PFG<br>Portal frame at garage   | 7/16"                                      |  | See Section R602.10.6.3  | See Section R602.10.6.3                  |
|  | CS-WSP<br>Continuously sheathed wood structural panel   | 3/4"                                       |  | Exterior sheathing per Table R602.3(3)<br>Interior sheathing per Table R602.3(1) or R602.3(2)  | 6" edges 12" field<br>Varies by fastener |
| Continuous Sheathing Methods                 | CS-GS <sup>b</sup><br>Continuously sheathed wood structural panel adjacent to garage openings | 3/4"                                       |  | See Method CS-WSP  | See Method CS-WSP                        |
|  | CS-CP<br>Continuously sheathed portal frame   | 3/16"                                      |  | See Section R602.10.6.4  | See Section R602.10.6.4                  |
|  | CS-SFB <sup>c</sup><br>Continuously sheathed structural floorboard                            | 1/4" or 3/16" for maximum 16" stud spacing |  | 1 1/2" x long x 0.12" dia.<br>(or 1 1/2" thick sheathing)<br>1 1/2" x long x 0.12" dia.<br>(or 1 1/2" thick sheathing)<br>galvanized roofing nails | 3" edges 6" field                        |

For Sft: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 degree = 0.0175 rad, 1 pound per square foot = 47.8 N/m<sup>2</sup>, 1 mile per hour = 0.447 m/s.  
a. Adhesive attachment of wall sheathing, including Method GB, shall not be permitted in Seismic Design Categories C, D<sub>1</sub>, D<sub>2</sub> and D<sub>3</sub>.  
b. Apply to panels used to garage door opening, where supporting gable end wall or roof load only. Shall only be used on one wall of the garage. In Seismic Design Categories D<sub>1</sub>, D<sub>2</sub> and D<sub>3</sub>, roof covering dead load shall not exceed 3 psf.  
c. Garage openings adjacent to a Method CS-G panel shall be provided with a header in accordance with Table R602.7(1). A full-height clear opening shall not be permitted adjacent to a Method CS-G panel.  
d. Method CS-SFB does not apply in Seismic Design Categories D<sub>1</sub>, D<sub>2</sub> and D<sub>3</sub>.  
e. Method applies to detached one- and two-family dwellings in Seismic Design Categories D<sub>1</sub> through D<sub>3</sub> only.



For Sft: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

FIGURE R602.10.6.4  
METHOD CS-PF—CONTINUOUSLY SHEATHED PORTAL FRAME PANEL CONSTRUCTION

BUILD IN ACCORDANCE WITH  
2018 INTERNATIONAL  
RESIDENTIAL CODE AND  
LOCAL CODES.

BEHOME LLC  
LOT 74 MONTICELLO  
1221 NE GOSHEN DR  
LEE SUMMIT MO

SCALE  
1/4" = 1-0

DATE  
2-4-21

PLAN NO.

3356

SHEET NO.

5 OF 5

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