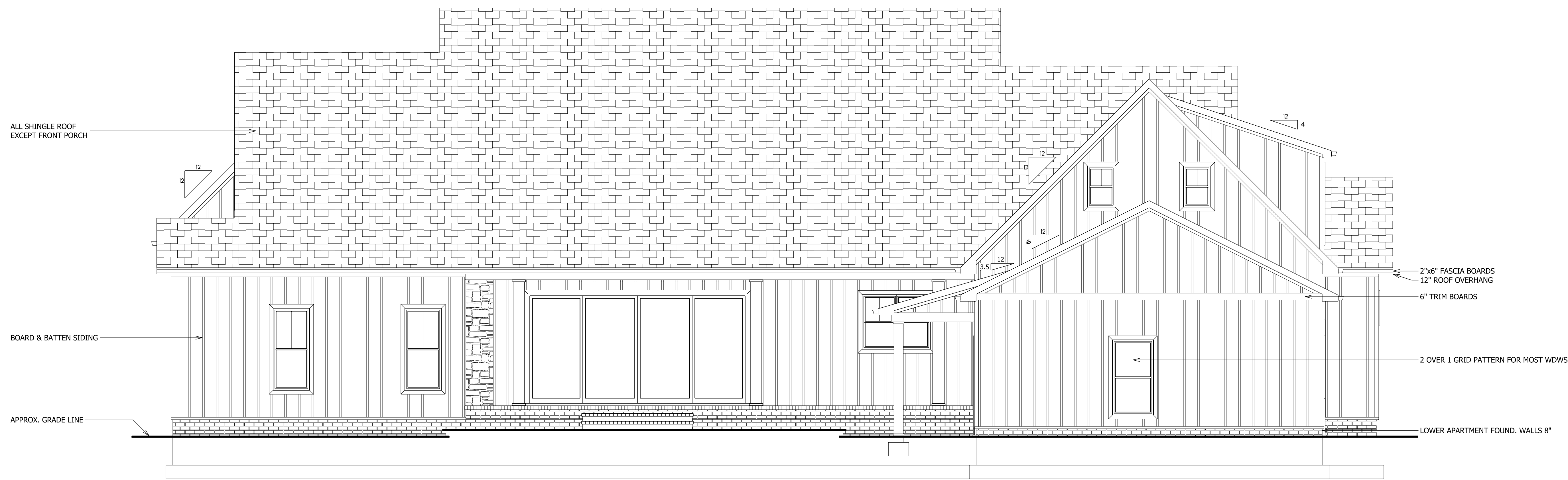




**FRONT ELEVATION**  
SCALE: 1/4" = 1'



**REAR ELEVATION**  
SCALE: 1/4" = 1'



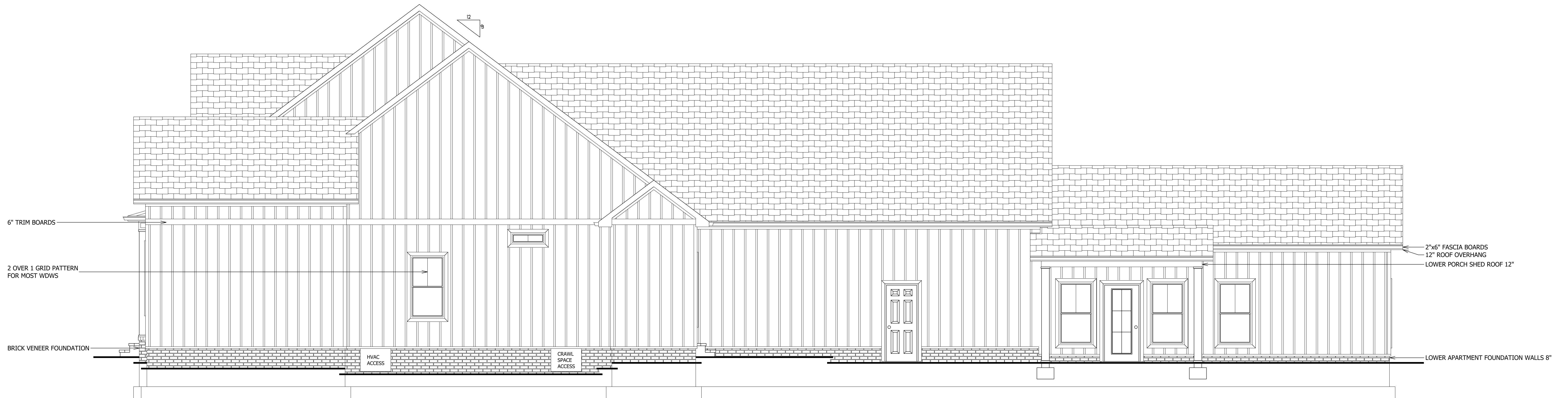
WHILE EVERY ATTEMPT HAS BEEN MADE IN THE PREPARATION OF THIS PLAN TO AVOID ERRORS, OMISSIONS, AND MISTAKES, THE DRAFTSMAN CAN NOT GUARANTEE AGAINST HUMAN ERROR. THE CONTRACTOR AND OR CLIENT SHALL VERIFY ALL CONDITIONS, DIMENSIONS, DETAILS AND SPECIFICATIONS AND BE RESPONSIBLE FOR SAME. THE DRAFTSMAN WILL NOT BE LIABLE FOR ERRORS AFTER CONSTRUCTION BEGINS.  
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**SOUTHERN HOME DESIGNS**  
106 WALNUT LANE COLUMBIA, TN 38401  
PHONE 931-580-9375 EMAIL [dwilliamsshd64@gmail.com](mailto:dwilliamsshd64@gmail.com)  
HOME DESIGNS SINCE 1997

SCALE  
1/4" = 1'  
PLAN NO.  
1S-2851-24

DATE  
6/17/24  
PAGE NO.  
1 of 5

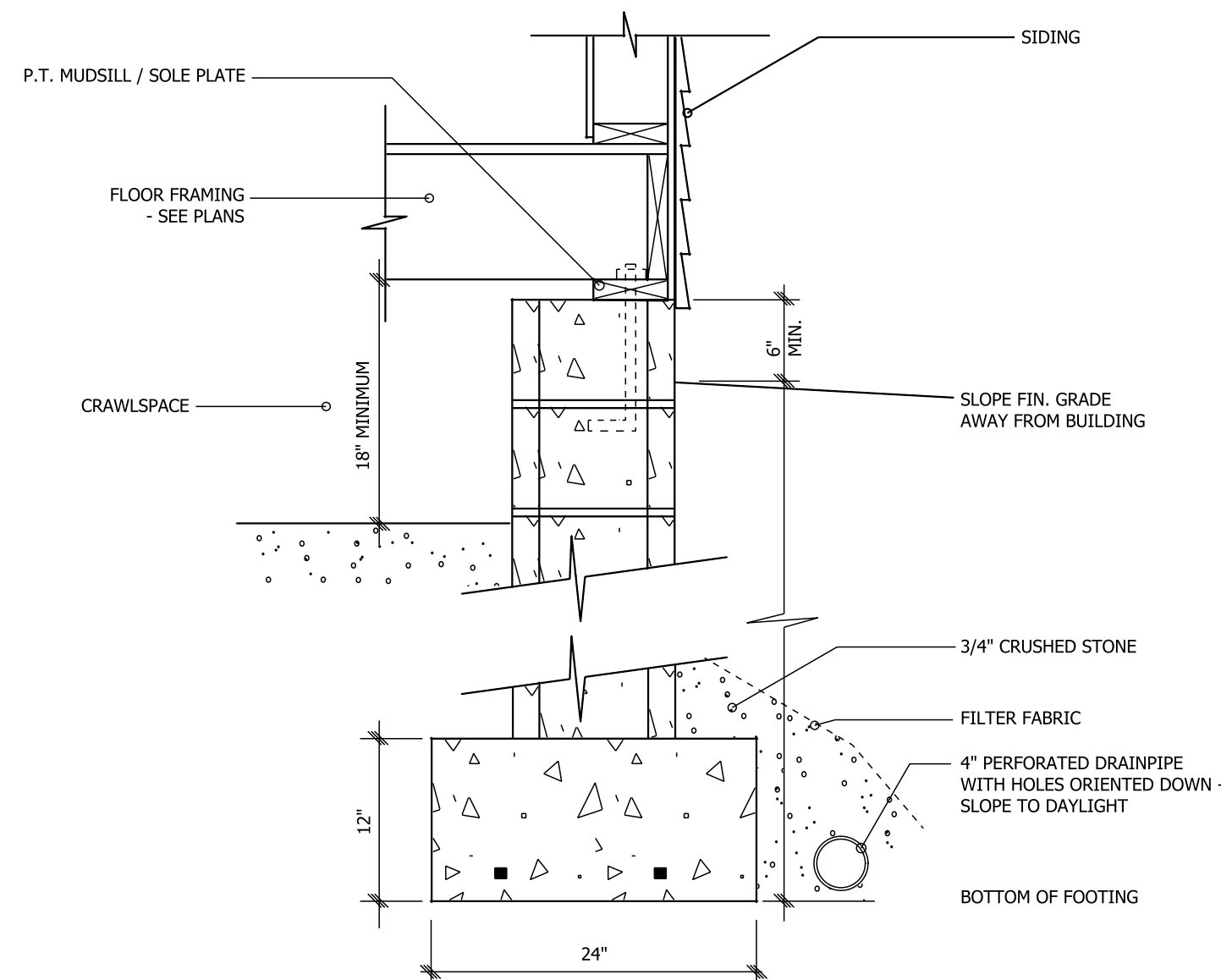
DRAWN BY  
Daniel Williams  
**R. MORAN**



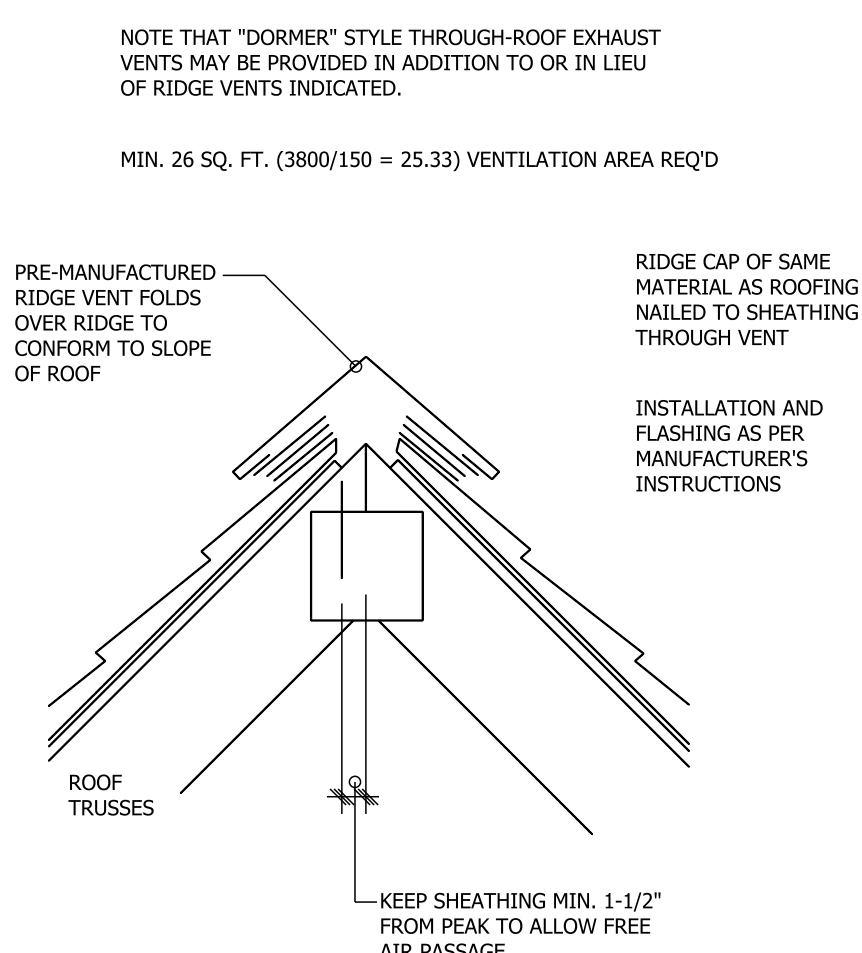
**RIGHT ELEVATION**  
SCALE: 1/4" = 1'



**LEFT ELEVATION**  
SCALE: 1/4" = 1'



**CMU FOOTING DETAIL**



**RIDGE VENT**



WHILE EVERY ATTEMPT HAS BEEN MADE IN THE PREPARATION OF THIS PLAN TO AVOID ERRORS, OMISSIONS, AND MISTAKES, THE DRAFTSMAN CAN NOT GUARANTEE AGAINST HUMAN ERROR. THE CONTRACTOR AND OR CLIENT SHALL VERIFY ALL CONDITIONS, DIMENSIONS, DETAILS AND SPECIFICATIONS AND BE RESPONSIBLE FOR SAME. THE DRAFTSMAN WILL NOT BE LIABLE FOR ERROR AFTER CONSTRUCTION BEGINS.  
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106 WALNUT LANE COLUMBIA, TN 38401  
PHONE 931-580-9375 EMAIL [dwilliamshd64@gmail.com](mailto:dwilliamshd64@gmail.com)  
HOME DESIGNS SINCE 1997

SCALE	DATE	DRAWN BY
1/4" = 1'	6/17/24	Daniel Williams
PLAN NO.	PAGE NO.	
1S-2851-24	5 of 5	<b>R. MORAN</b>

GENERAL STRUCTURAL NOTES:

- CONSTRUCTION SHALL CONFORM TO 2018 NC RESIDENTIAL BUILDING CODE.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS. CONTRACTOR SHALL COMPLY WITH THE CONTENTS OF THE DRAWINGS FOR THIS SPECIFIC PROJECT. ENGINEER IS NOT RESPONSIBLE FOR ANY DEVIATIONS FROM THIS PLAN.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY BRACING REQUIRED TO RESIST ALL FORCES ENCOUNTERED DURING ERECTION.
- THE FOLLOWING DESIGN LOADS ARE USED:
  - ROOF LOAD: 20 PSF LL, 20 PSF DL
  - FLOOR LOAD: 40 PSF LL, 15 PSF DL
  - ATTIC LOAD: 20 PSF LL, 10 PSF DL
  - EXTERIOR BALCONY: 60 PSF LL, 10 PSF DL
  - WIND LOAD: 15 MPH
- PROPERTIES USED IN THE DESIGN ARE AS FOLLOWS: MICROLAM (LVL):  $F_y=2600$  PSI,  $F_v=285$  PSI,  $E=1.81 \times 10^6$  PSI PARALAM (PSL):  $F_y=2600$  PSI,  $F_v=290$  PSI,  $E=1.25 \times 10^6$  PSI
- ALL WOOD MEMBERS SHOULD BE #2 SPF UNLESS NOTED ON PLANS. ALL STUD COLUMNS AND JOISTS SHOULD BE #2 SPF UNLESS NOTED OTHERWISE.
- ALL BEAMS SHOULD BE SUPPORTED WITH A (2) 2X4 #2 SPF STUD COLUMN AT EACH END UNLESS NOTED OTHERWISE.
- ALL PARALLEL NON-LOAD BEARING WALLS SHOULD BE SUPPORTED WITH A DOUBLE JOIST UNLESS NOTED OTHERWISE.
- COMPRESSIVE STRENGTH OF CONCRETE SHOULD BE A MINIMUM OF 3000 PSI AT 28-DAYS.
- SOIL BEARING CAPACITY TO BE A MINIMUM OF 2000 PSF.
- ALL REINFORCING STEEL SHALL BE GRADE 60 BARS CONFORMING TO ASTM A615 AND SHALL HAVE A MINIMUM COVER OF 3".
- FOOTINGS AND PIERS SHALL BE CENTERED AROUND THEIR RESPECTIVE ELEMENTS. PROVIDE A MINIMUM OF 3" FOOTING PROJECTION FROM FACE OF MASONRY.
- MAXIMUM DEPTH OF UNBALANCED FILL AGAINST MASONRY WALLS TO BE AS SPECIFIED IN THE 2018 NC BUILDING CODE TABLE R404.1.1.
- FOUNDATION ANCHORAGE SHALL BE CONSTRUCTED PER NC RESIDENTIAL BUILDING CODE 2002 SECTION 403.1.6, 1/2" DIA. BOLTS SPACED AT 6'-0" CENTERS WITH A 7" MINIMUM EMBEDMENT INTO MASONRY OR CONCRETE. ANCHOR BOLTS SHALL BE 12" FROM THE END OF EACH PLATE SECTION.
- POSITIVE AND NEGATIVE WALL CLADDING DESIGN VALUES FOR 15MPH, CATEGORY B, AND MRH 30 FEET OR LESS ARE 18 AND 241 RESPECTIVELY.
- COMPONENT & CLADDING DESIGNED FOR THE FOLLOWING LOADS: (N PSF)

MEAN ROOF HT	UP TO 30'	30'-1" - 35'	35'-1" - 40'	40'-1" - 45'
ZONE 1	23.7	-43.5	24.9	-45.7
ZONE 2a	23.7	-43.5	24.9	-45.7
ZONE 2b	23.7	-47.9	24.9	-50.3
ZONE 2c	23.7	-43.5	24.9	-45.7
ZONE 3a	23.7	-56.7	24.9	-61.6
ZONE 3b	23.7	-47.9	24.9	-50.3
ZONE 4	25.9	-28.1	27.2	-29.5
ZONE 5	25.9	-34.7	27.2	-36.4

BASIC DESIGN WIND VELOCITY = 120 MPH, EXPOSURE B

- CONTRACTOR TO PROVIDE LOOKOUTS WHEN CEILING JOISTS SPAN PERPENDICULAR TO RAFTERS.
- FUTCH BEAMS AND 3" OR 4"-R1 LVL'S SHALL BE BOLTED TOGETHER W/ 1/2" THRU BOLTS SPACED @ 24" O.C. (MAX) STAGGERED. MINIMUM EDGE DISTANCE SHALL BE 2" AND (2) BOLTS SHALL BE LOCATED MINIMUM 6" FROM EACH END OF BEAM.
- ALL NON-LOAD BEARING INTERIOR DOOR HEADERS SHALL BE (2) FLAT 2X4 DROPPED, UNO.

DJ=DOUBLE JOIST  
DR=DOUBLE RAFTER  
TR=TRIPLE RAFTER  
OC=ON CENTER  
PL=POINT LOAD

TS=TIMBER STRAND  
SC=STUD COLUMN  
EE=EACH END  
L=TRIPLE JOIST  
CL=CENTER LINE

HEADER SCHEDULE			
TAG	SIZE	JACKS (EACH END)	
A	(2) 2x6	(1)	
B	(2) 2x8	(2)	
C	(2) 2x10	(2)	
D	(2) 2x12	(2)	
E	(2) 1-3/4"x9-1/4" LVL'S	(3)	
Z	EXISTING HEADER	EXISTING S.C.	

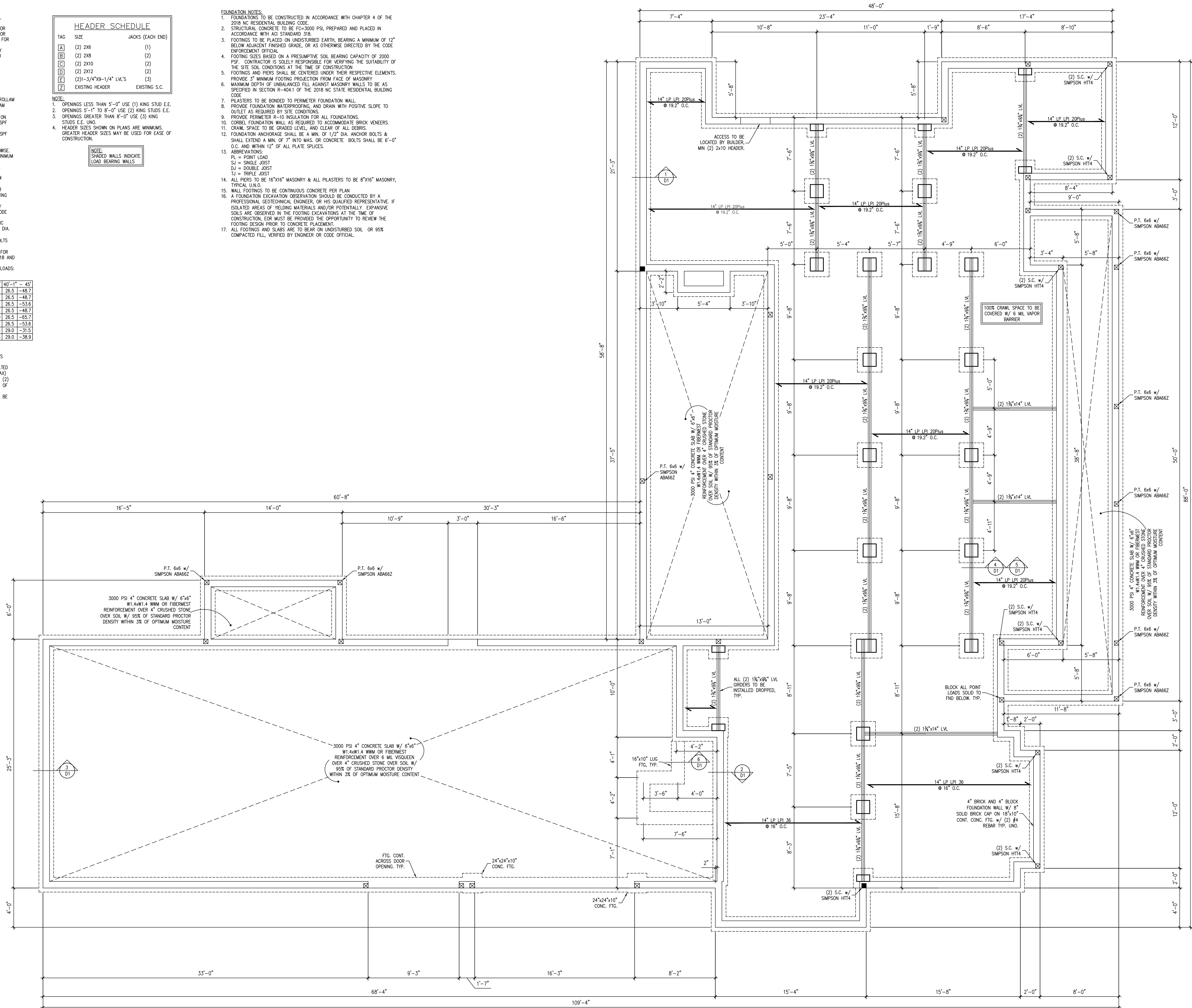
NOTE:

- OPENINGS LESS THAN 5'-0" USE (1) KING STUD E.E.
- OPENINGS 5'-1" TO 8'-0" USE (2) KING STUDS E.E.
- OPENINGS GREATER THAN 8'-0" USE (3) KING STUDS E.E. UNO.
- HEADER SIZES SHOWN ON PLANS ARE MINIMUMS. GREATER HEADER SIZES MAY BE USED FOR EASE OF CONSTRUCTION.

NOTE:  
SHADED WALLS INDICATE  
LOAD BEARING WALLS

FOUNDATION NOTES:

- FOUNDATIONS TO BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 4 OF THE 2018 NC RESIDENTIAL BUILDING CODE.
- STRUCTURAL CONCRETE TO BE F<sub>y</sub>=3000 PSI, PREPARED AND PLACED IN ACCORDANCE WITH ACI STANDARD 318.
- FOOTINGS TO BE PLACED ON UNDISTURBED EARTH, BEARING A MINIMUM OF 12" BELOW ADJACENT FINISHED GRADE, OR AS OTHERWISE DIRECTED BY THE CODE ENFORCEMENT OFFICIAL.
- FOOTING SIZES BASED ON A PRESUMPTIVE SOIL BEARING CAPACITY OF 2000 PSF. CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFYING THE SUITABILITY OF THE SITE SOIL CONDITIONS AT THE TIME OF CONSTRUCTION.
- FOOTINGS AND PIERS SHALL BE CENTERED UNDER THEIR RESPECTIVE ELEMENTS. PROVIDE 3" MINIMUM FOOTING PROJECTION FROM FACE OF MASONRY.
- MAXIMUM DEPTH OF UNBALANCED FILL AGAINST MASONRY WALLS TO BE AS SPECIFIED IN SECTION R-404.1 OF THE 2018 NC STATE RESIDENTIAL BUILDING CODE.
- PLASTER TO BE BONDIC TO PERMETER FOUNDATION WALL.
- PROVIDE FOUNDATION WATERPROOFING, AND DRAIN WITH POSITIVE SLOPE TO OUTLET AS REQUIRED BY SITE CONDITIONS.
- PROVIDE PERIMETER R-10 INSULATION FOR ALL FOUNDATIONS.
- CORREL FOUNDATION WALL AS REQUIRED TO ACCOMMODATE BRICK VENEERS.
- DRAIN SPACE TO BE GRADED LEVEL AND CLEAR OF ALL DEBRIS.
- FOUNDATION ANCHORAGE SHALL BE A MIN. OF 1/2" DIA. ANCHOR BOLTS & SHALL EXTEND A MIN. OF 7" INTO MAS. OR CONCRETE. BOLTS SHALL BE 6'-0" O.C. AND WITHIN 12" OF ALL PLATE SPICES.
- ABBREVIATIONS:
  - PL = POINT LOAD
  - SJ = SINGLE JOIST
  - DJ = DOUBLE JOIST
  - TJ = TRIPLE JOIST
- ALL PIERS TO BE 16"x16" MASONRY & ALL PLASTER TO BE 8"x16" MASONRY, TYPICAL UNO.
- WALL FOOTINGS TO BE CONTINUOUS CONCRETE PER PLAN.
- A FOUNDATION EXCAVATION OBSERVATION SHOULD BE CONDUCTED BY A PROFESSIONAL GEOTECHNICAL ENGINEER, OR HIS QUALIFIED REPRESENTATIVE, IF ISOLATED AREAS OF YIELDING MATERIALS AND/OR POTENTIALLY EXPANSIVE SOILS ARE OBSERVED IN THE FOOTING EXCAVATIONS AT THE TIME OF CONSTRUCTION, EOR MUST BE PROVIDED THE OPPORTUNITY TO REVIEW THE FOOTING DESIGN PRIOR TO CONCRETE PLACEMENT.
- ALL FOOTINGS AND SLABS ARE TO BEAR ON UNDISTURBED SOIL OR 95% COMPACTED FILL, VERIFIED BY ENGINEER OR CODE OFFICIAL.



FOUNDATION PLAN

1/4" = 1'-0"

ORIGINAL PLAN	DATE	CHECKED BY:	DRAWN BY:
PROJECT NO. 2401-226	08/06/2024	JES	JES
REVISIONS	DATE	MADE BY:	CHECKED BY:





CONTINUOUS WOOD STRUCTURAL PANEL  
(CS-WSP) METHOD  
3/4" OSB/PLYWOOD EDGES BLOCKED W/ 6d  
NAILS @ 6" O.C. EDGE AND 12" O.C. FIELD.  
MINIMUM LENGTH REQUIRED = 6.8'  
LENGTH PROVIDED = 24.7'  
BWL-1

GYPSUM BOARD (GB) METHOD  
1/2" (MIN.) GYPSUM BOARD BOTH SIDES OF  
WALL, EDGES BLOCKED W/ 5d NAILS @ 7"  
O.C. EDGE AND 12" O.C. FIELD.  
MINIMUM LENGTH REQUIRED = 22.9'  
LENGTH PROVIDED = 24.7'  
BWL-2

CONTINUOUS WOOD STRUCTURAL PANEL  
(CS-WSP) METHOD  
3/4" OSB/PLYWOOD EDGES BLOCKED W/ 6d  
NAILS @ 6" O.C. EDGE AND 12" O.C. FIELD.  
MINIMUM LENGTH REQUIRED = 10.2'  
LENGTH PROVIDED = 34.5'  
BWL-3

CONTINUOUS WOOD STRUCTURAL PANEL  
(CS-WSP) METHOD  
3/4" OSB/PLYWOOD EDGES BLOCKED W/ 6d  
NAILS @ 6" O.C. EDGE AND 12" O.C. FIELD.  
MINIMUM LENGTH REQUIRED = 7.5'  
LENGTH PROVIDED = 17.2'  
BWL-4

CONTINUOUS WOOD STRUCTURAL PANEL  
(CS-WSP) METHOD  
3/4" OSB/PLYWOOD EDGES BLOCKED W/ 6d  
NAILS @ 6" O.C. EDGE AND 12" O.C. FIELD.  
MINIMUM LENGTH REQUIRED = 9.1'  
LENGTH PROVIDED = 22.3'  
BWL-A

CONTINUOUS WOOD STRUCTURAL PANEL  
(CS-WSP) METHOD  
3/4" OSB/PLYWOOD EDGES BLOCKED W/ 6d  
NAILS @ 6" O.C. EDGE AND 12" O.C. FIELD.  
MINIMUM LENGTH REQUIRED = 10.9'  
LENGTH PROVIDED = 16.8'  
BWL-B

CONTINUOUS WOOD STRUCTURAL PANEL  
(CS-WSP) METHOD  
3/4" OSB/PLYWOOD EDGES BLOCKED W/ 6d  
NAILS @ 6" O.C. EDGE AND 12" O.C. FIELD.  
MINIMUM LENGTH REQUIRED = 10.9'  
LENGTH PROVIDED = 16.7'  
BWL-D

CONTINUOUS WOOD STRUCTURAL PANEL  
(CS-WSP) METHOD  
3/4" OSB/PLYWOOD EDGES BLOCKED W/ 6d  
NAILS @ 6" O.C. EDGE AND 12" O.C. FIELD.  
MINIMUM LENGTH REQUIRED = 11.2'  
LENGTH PROVIDED = 12'  
BWL-E

CONTINUOUS WOOD STRUCTURAL PANEL  
(CS-WSP) METHOD  
3/4" OSB/PLYWOOD EDGES BLOCKED W/ 6d  
NAILS @ 6" O.C. EDGE AND 12" O.C. FIELD.  
MINIMUM LENGTH REQUIRED = 3.9'  
LENGTH PROVIDED = 10.9'  
BWL-F

CONTINUOUS WOOD STRUCTURAL PANEL  
(CS-WSP) METHOD  
3/4" OSB/PLYWOOD EDGES BLOCKED W/ 6d  
NAILS @ 6" O.C. EDGE AND 12" O.C. FIELD.  
MINIMUM LENGTH REQUIRED = 9.1'  
LENGTH PROVIDED = 14.3'  
BWL-C

- BRACED WALL PANEL NOTES**
1. BRACED WALL PANEL METHODS AND DESIGN IN ACCORDANCE WITH SECTION R602.10 FROM THE 2018 NORTH CAROLINA RESIDENTIAL CODE.
  2. ALL BRACED WALL PANELS TO BE FULL WALL HEIGHT AND SHALL NOT EXCEED 10 FEET WITHOUT ADDITIONAL ENGINEERING CALCULATIONS.
  3. WINDOW AND DOOR OPENING SIZES CONFORM WITH ARCHITECTURAL PLANS.
  4. CONTINUOUS SHEATHING METHODS REQUIRE STRUCTURAL PANEL SHEATHING TO BE USED ON ALL SHEATHABLE SURFACES ON ONE SIDE OF A BRACED WALL LINE INCLUDING AREAS ABOVE AND BELOW OPENINGS AND GABLE END WALLS.
  5. CORNERS AND BRACED WALL LINE INTERSECTIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DETAILS 10/D1 AND 11/D1 (BASED ON SECTION R602.10.4.4 AND FIGURE R602.10.4.4(1) OF THE 2018 NRC).
  6. BRACED WALL PANEL CONNECTIONS TO FLOOR/CEILING SHALL BE CONSTRUCTED IN ACCORDANCE WITH DETAIL 9/D1 (BASED ON FIGURES R602.10.6(1) AND R602.10.6(2) OF THE 2018 NRC).
  7. BRACED WALL PANEL CONNECTIONS TO RAFTERS OR ROOF TRUSSES SHALL BE CONSTRUCTED IN ACCORDANCE WITH DETAIL 7/D1 AND 8/D1 (BASED ON SECTION R602.10.6.2 AND FIGURES R602.10.6.2(1) THROUGH R602.10.6.2(3) OF THE 2018 NRC).
  8. HOLDINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FRAMING DETAIL 12/D1.
  9. WALL SHEATHING IS FOR EXTERIOR APPLICATION ONLY, UNLESS NOTED OTHERWISE FOR BOTH SIDES APPLICATION.

## BRACED WALL PLAN

1/4" = 1'-0"

ORIGINAL PLAN	DATE	DRAWN BY	CHECKED BY
PROJECT NO. 2401-226	08/06/2024	JES	JES
REVISIONS	DATE	MADE BY	DESCRIPTION

APPROVED  
8/16/24  
J. S. CONSULTING & DESIGN

Nix Industries, LLC  
2664 Erwin Chapel Road, Dunn, NC 28334  
Braced Wall Plan

SHEET NUMBER

S5

- GENERAL STRUCTURAL NOTES:
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  - CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY BRACING REQUIRED TO RESIST ALL FORCES ENCOUNTERED DURING ERECTION.
  - THE FOLLOWING DESIGN LOADS ARE USED:  
ROOF LOAD 20 PSF LL 20 PSF DL  
FLOOR LOAD 40 PSF LL 15 PSF DL  
ATTIC LOAD 20 PSF LL 10 PSF DL  
EXTERIOR BALCONY 60 PSF LL 10 PSF DL  
WIND LOAD 115 MPH
  - PROPERTIES USED IN THE DESIGN ARE AS FOLLOWS: MICROLAM (LVL):  $F_y=2600$  PSI,  $F_v=285$  PSI,  $E=1.91 \times 10^6$  PSI PARALLAM (PSL):  $F_y=2900$  PSI,  $F_v=290$  PSI,  $E=1.25 \times 10^6$  PSI  
ALL WOOD MEMBERS SHOULD BE #2 SPF UNLESS NOTED ON PLANS. ALL STUD COLUMNS AND JOISTS SHOULD BE #2 SPF UNLESS NOTED OTHERWISE.
  - ALL BEAMS SHOULD BE SUPPORTED WITH A (2) 2X4 #2 SPF STUD COLUMN AT EACH END UNLESS NOTED OTHERWISE.
  - ALL PARALLEL NON-LOAD BEARING WALLS SHOULD BE SUPPORTED WITH A DOUBLE JOIST UNLESS NOTED OTHERWISE.
  - COMPRESSIVE STRENGTH OF CONCRETE SHOULD BE A MINIMUM OF 3000 PSI AT 28-DAYS.
  - SOIL BEARING CAPACITY TO BE A MINIMUM OF 3000 PSF.
  - ALL REINFORCING STEEL SHALL BE GRADE 60 BARS CONFORMING TO ASTM A615 AND SHALL HAVE A MINIMUM COVER OF 3".
  - FOOTINGS AND PIERS SHALL BE CENTERED AROUND THEIR RESPECTIVE ELEMENTS. PROVIDE A MINIMUM OF 3" FOOTING PROJECTION FROM FACE OF MASONRY.
  - MAXIMUM DEPTH OF UNBALANCED FILL AGAINST MASONRY WALLS TO BE AS SPECIFIED IN THE 2018 NC BUILDING CODE TABLE R404.1.1.
  - FOUNDATION ANCHORAGE SHALL BE CONSTRUCTED PER NC RESIDENTIAL BUILDING CODE 2002 SECTION 403.1.6. 1/2" DIA. BOLTS SPACED AT 6'-0" CENTERS WITH A 7" MINIMUM EMBEDMENT INTO MASONRY OR CONCRETE. ANCHOR BOLTS SHALL BE 12" FROM THE END OF EACH PLATE SECTION.
  - POSITIVE AND NEGATIVE WALL CLADDING DESIGN VALUES FOR 15MPH CATEGORY B, AND MRH 30 FEET OR LESS ARE 18 AND 24.1 RESPECTIVELY.
  - COMPONENT & CLADDING DESIGNED FOR THE FOLLOWING LOADS: (IN PSF)  

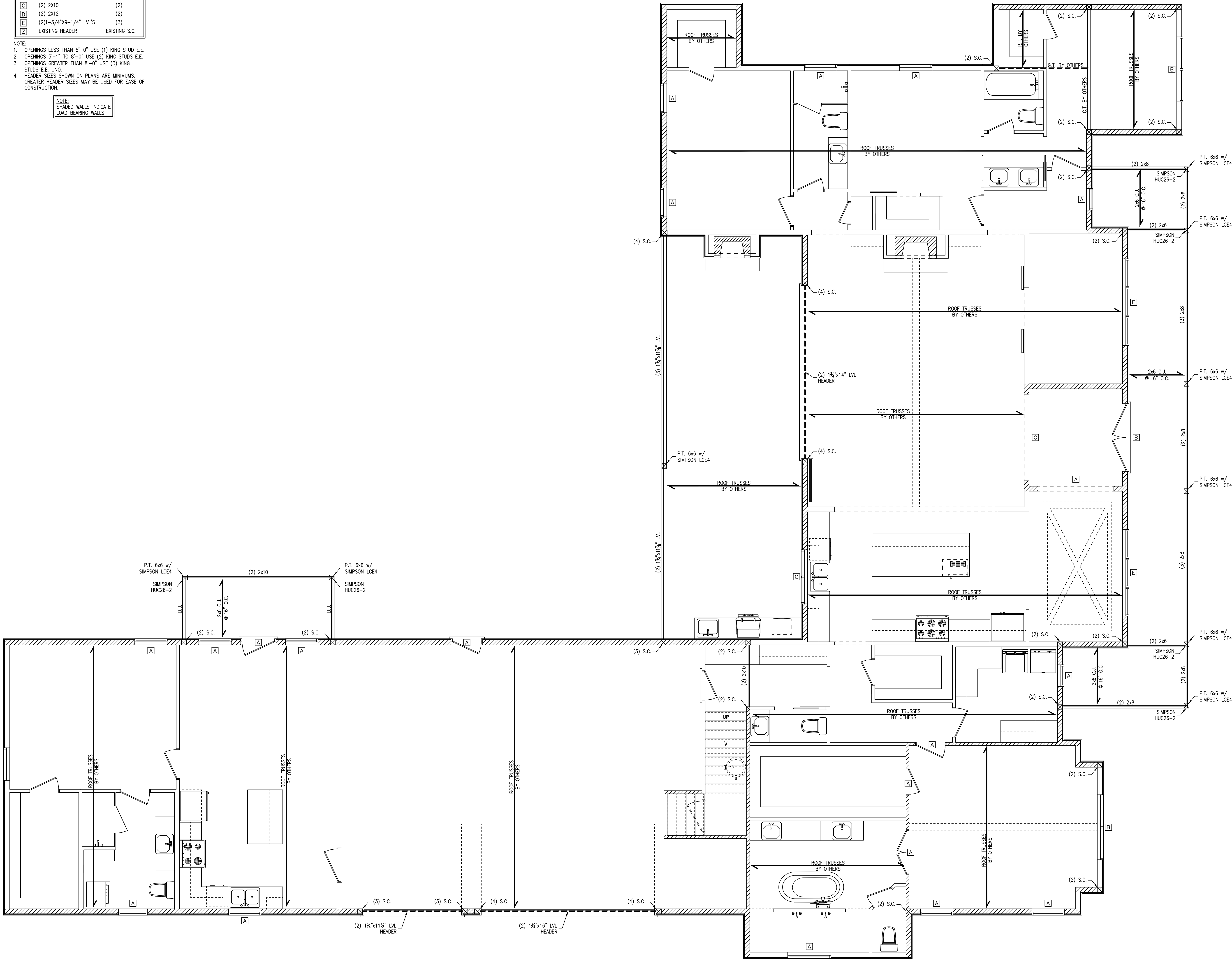
MEAN ROOF HT.	UP TO 30'	30'-1" - 35'	35'-1" - 40'	40'-1" - 45'
ZONE 1	23.7 -43.5	24.9 -45.7	25.8 -47.4	26.5 -48.7
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ZONE 2b	23.7 -47.9	24.9 -50.3	25.8 -52.2	26.5 -53.6
ZONE 2c	23.7 -43.5	24.9 -45.7	25.8 -47.4	26.5 -48.7
ZONE 3a	23.7 -58.7	24.9 -61.6	25.8 -64.0	26.5 -65.7
ZONE 3b	23.7 -47.9	24.9 -50.3	25.8 -52.2	26.5 -53.6
ZONE 4	25.9 -28.1	27.2 -29.5	28.2 -30.6	29.0 -31.5
ZONE 5	25.9 -34.7	27.2 -38.4	28.2 -37.8	29.0 -38.8

  
BASIC DESIGN WIND VELOCITY = 120 MPH, EXPOSURE B
  - CONTRACTOR TO PROVIDE LOOKOUTS WHEN CEILING JOISTS SPAN PERPENDICULAR TO RAFTERS.  
FLITCH BEAMS AND 3- OR 4-PLY LVLS SHALL BE BOLTED TOGETHER W/ 1/2" THRU BOLTS SPACED @ 24" O.C. (MAX) STAGGERED. MINIMUM EDGE DISTANCE SHALL BE 2" AND (2) BOLTS SHALL BE LOCATED MINIMUM 6" FROM EACH END OF BEAM.
  - ALL NON-LOAD BEARING INTERIOR DOOR HEADERS SHALL BE (2) FLAT 2X4 DROPPED, UNO.  
  
DJ=DOUBLE JOIST  
DR=DOUBLE RAFTER  
TR=TRIPLE RAFTER  
OC=ON CENTER  
PL=POINT LOAD  
  
TS=TIMBER STRAND  
SC=STUD COLUMN  
EE=END END  
TJ=TRIPLE JOIST  
CL=CENTER LINE

HEADER SCHEDULE			
TAG	SIZE	JACKS (EACH END)	
A	(2) 2x6	(1)	
B	(2) 2x8	(2)	
C	(2) 2x10	(2)	
D	(2) 2x12	(2)	
E	(2)-3/4"x9-1/4" LVL'S	(3)	
Z	EXISTING HEADER	EXISTING S.C.	

- NOTE:
- OPENINGS LESS THAN 5'-0" USE (1) KING STUD E.E.
  - OPENINGS 5'-1" TO 8'-0" USE (2) KING STUDS E.E.
  - OPENINGS GREATER THAN 8'-0" USE (3) KING STUDS E.E. UNO.
  - HEADER SIZES SHOWN ON PLANS ARE MINIMUMS. GREATER HEADER SIZES MAY BE USED FOR EASE OF CONSTRUCTION.

WALL,  
SHADED WALLS INDICATE  
LOAD BEARING WALLS



1st FLOOR FRAMING PLAN

1/4" = 1'-0"

ORIGINAL PLAN	DATE	CHECKED BY:	DRAWN BY:
PROJECT NO. 2401-226	08/06/2024	JES	JES
REVISIONS	DATE	MADE BY:	DESCRIPTION:
REV PROJECT NO.:			





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  - THE FOLLOWING DESIGN LOADS ARE USED:  
ROOF LOAD: 20 PSF LL 20 PSF DL  
FLOOR LOAD: 40 PSF LL 15 PSF DL  
ATTIC LOAD: 20 PSF LL 10 PSF DL  
EXTERIOR BALCONY: 60 PSF LL 10 PSF DL  
WINDLOAD: 115 MPH
  - PROPERTIES USED IN THE DESIGN ARE AS FOLLOWS: MICROLAM (LVL): F<sub>y</sub>=2600 PSI, F<sub>v</sub>=285 PSI, E=1.8X10<sup>6</sup> PSI PARALLAM (PSL): F<sub>y</sub>=2600 PSI, F<sub>v</sub>=290 PSI, E=1.25X10<sup>6</sup> PSI
  - ALL WOOD MEMBERS SHOULD BE #2 SPF UNLESS NOTED ON PLANS. ALL STUD COLUMNS AND JOISTS SHOULD BE #2 SPF UNLESS NOTED OTHERWISE.
  - ALL BEAMS SHOULD BE SUPPORTED WITH A (2) 2X4 #2 SPF STUD COLUMN AT EACH END UNLESS NOTED OTHERWISE.
  - ALL PARALLEL NON-LOAD BEARING WALLS SHOULD BE SUPPORTED WITH A DOUBLE JOIST UNLESS NOTED OTHERWISE.
  - COMPRESSIVE STRENGTH OF CONCRETE SHOULD BE A MINIMUM OF 3000 PSI AT 28-DAYS.
  - SOIL BEARING CAPACITY TO BE A MINIMUM OF 2000 PSF.
  - ALL REINFORCING STEEL SHALL BE GRADE 60 BARS CONFORMING TO ASTM A615 AND SHALL HAVE A MINIMUM COVER OF 3".
  - FOOTINGS AND PIERS SHALL BE CENTERED AROUND THEIR RESPECTIVE ELEMENTS. PROVIDE A MINIMUM OF 3" FOOTING PROJECTION FROM FACE OF MASONRY.
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  - FOUNDATION ANCHORAGE SHALL BE CONSTRUCTED PER NC RESIDENTIAL BUILDING CODE 2002 SECTION 403.1.6. 1/2" DIA. BOLTS SPACED AT 6"-0" CENTERS WITH A 7" MINIMUM EMBEDMENT INTO MASONRY OR CONCRETE. ANCHOR BOLTS SHALL BE 12" FROM THE END OF EACH PLATE SECTION.
  - POSITIVE AND NEGATIVE WALL CLADDING DESIGN VALUES FOR 115MPH, CATEGORY B, AND MRH 30 FEET OR LESS ARE 18 AND 24.1 RESPECTIVELY.
  - COMPONENT & CLADDING DESIGNED FOR THE FOLLOWING LOADS: (N PSF)

MEAN ROOF HT	UP TO 30'	30'-1" - 35'	35'-1" - 40'	40'-1" - 45'
ZONE 1	23.7 -43.5	24.9 -45.7	25.8 -47.4	26.5 -48.7
ZONE 2a	23.7 -43.5	24.9 -45.7	25.8 -47.4	26.5 -48.7
ZONE 2b	23.7 -47.9	24.9 -50.3	25.8 -52.2	26.5 -53.6
ZONE 2c	23.7 -43.5	24.9 -45.7	25.8 -47.4	26.5 -48.7
ZONE 3a	23.7 -58.7	24.9 -61.6	25.8 -64.0	26.5 -65.7
ZONE 3b	23.7 -47.9	24.9 -50.3	25.8 -52.2	26.5 -53.6
ZONE 4	25.9 -26.1	27.2 -29.5	28.2 -30.6	29.0 -31.5
ZONE 5	25.9 -34.7	27.2 -36.4	28.2 -37.8	29.0 -38.9

BASIC DESIGN WIND VELOCITY = 120 MPH, EXPOSURE B

- CONTRACTOR TO PROVIDE LOOKOUTS WHEN CEILING JOISTS SPAN PERPENDICULAR TO RAFTERS.
- FUTCH BEAMS AND 3- OR 4-PLY LVL'S SHALL BE BOLTED TOGETHER W/ 1/2" THRU BOLTS SPACED @ 24" O.C. (MAX) STAGGERED. MINIMUM EDGE DISTANCE SHALL BE 2" AND (2) BOLTS SHALL BE LOCATED MINIMUM 6" FROM EACH END OF BEAM.
- ALL NON-LOAD BEARING INTERIOR DOOR HEADERS SHALL BE (2) FLAT 2X4 DROPPED, UNO.

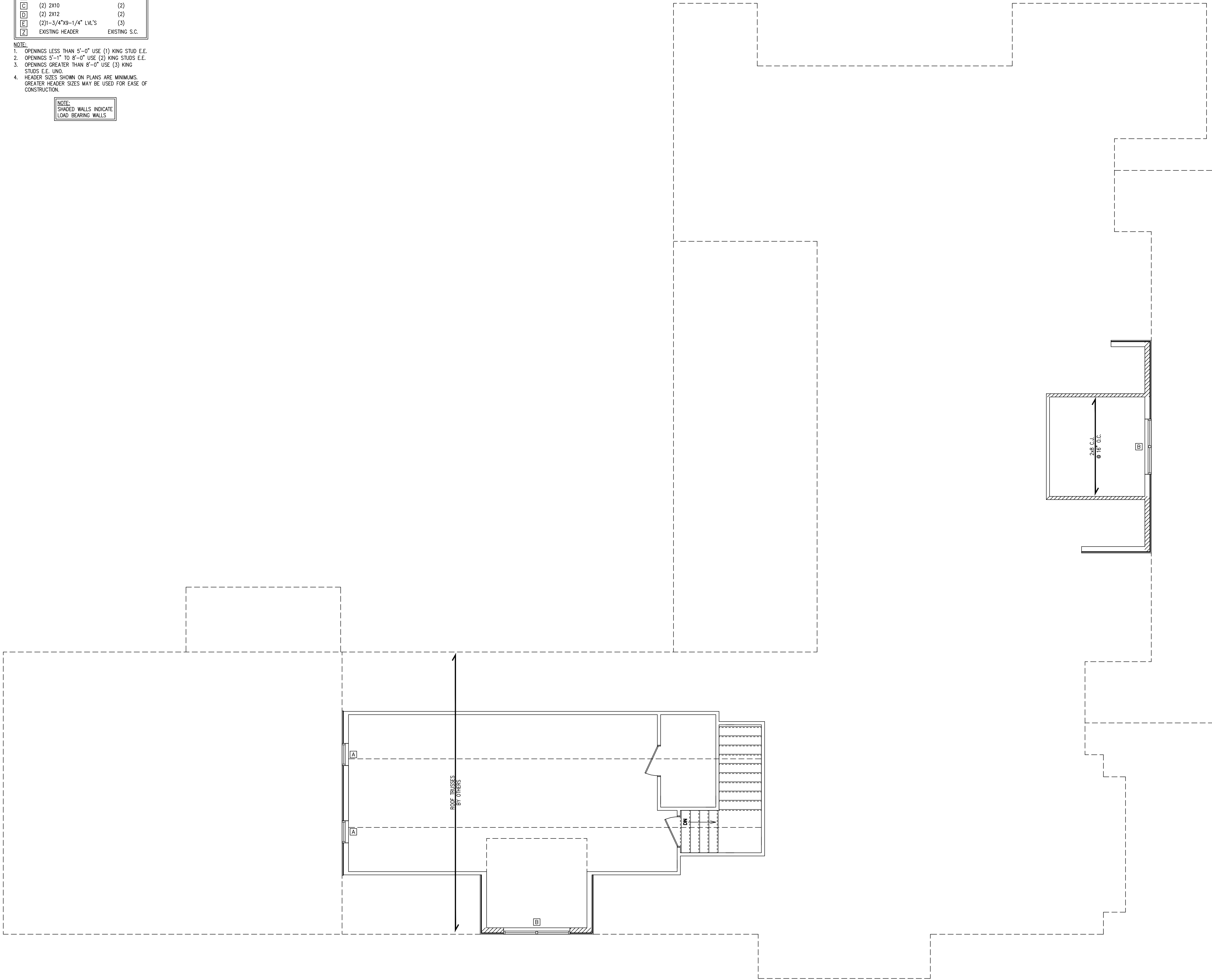
DL=DOUBLE JOIST  
DR=DOUBLE RAFTER  
TR=TRIPLE RAFTER  
OC=ON CENTER  
PL=POINT LOAD

TS=TIMBER STRAND  
SC=STUD COLUMN  
EE=EACH END  
TJ=TRIPLE JOIST  
CL=CENTER LINE

HEADER SCHEDULE		
TAG	SIZE	JACKS (EACH END)
[A]	(2) 2X6	(1)
[B]	(2) 2X8	(2)
[C]	(2) 2X10	(2)
[D]	(2) 2X12	(2)
[E]	(2)1-3/4"X9-1/4" LVL'S	(3)
[Z]	EXISTING HEADER	EXISTING S.C.

- NOTE:
- OPENINGS LESS THAN 5'-0" USE (1) KING STUD E.E.
  - OPENINGS 5'-1" TO 8'-0" USE (2) KING STUDS E.E.
  - OPENINGS GREATER THAN 8'-0" USE (3) KING STUDS E.E. UNO.
  - HEADER SIZES SHOWN ON PLANS ARE MINIMUMS. GREATER HEADER SIZES MAY BE USED FOR EASE OF CONSTRUCTION.

NOTE:  
SHADED WALLS INDICATE  
LOAD BEARING WALLS



## 2nd FLOOR FRAMING PLAN

1/4" = 1'-0"

Nix Industries, LLC  
2664 Erwin Chapel Road, Dunn, NC 28334  
2nd Floor Framing Plan

SHEET NUMBER

S3



ORIGINAL PLAN	DATE	CHECKED BY:	DRAWN BY:
PROJECT NO.: 2401-226	08/06/2024	JES	JES
REVISIONS	DATE	MADE BY:	CHECKED BY:
REV PROJECT NO.:			

MAX GIRDER TRUSS REACTION (LBS)			
NO TBE, SPF #2 TOP PLATE			
# OF PLYS	2x4 WALL	2x6 WALL	
2	5134	7013	
3	7702	10519	
4	10269	14025	
WITH TBE, SPF #2 TOP PLATE			
2	7045	8933	
3	9622	12439	
4	12189	15945	

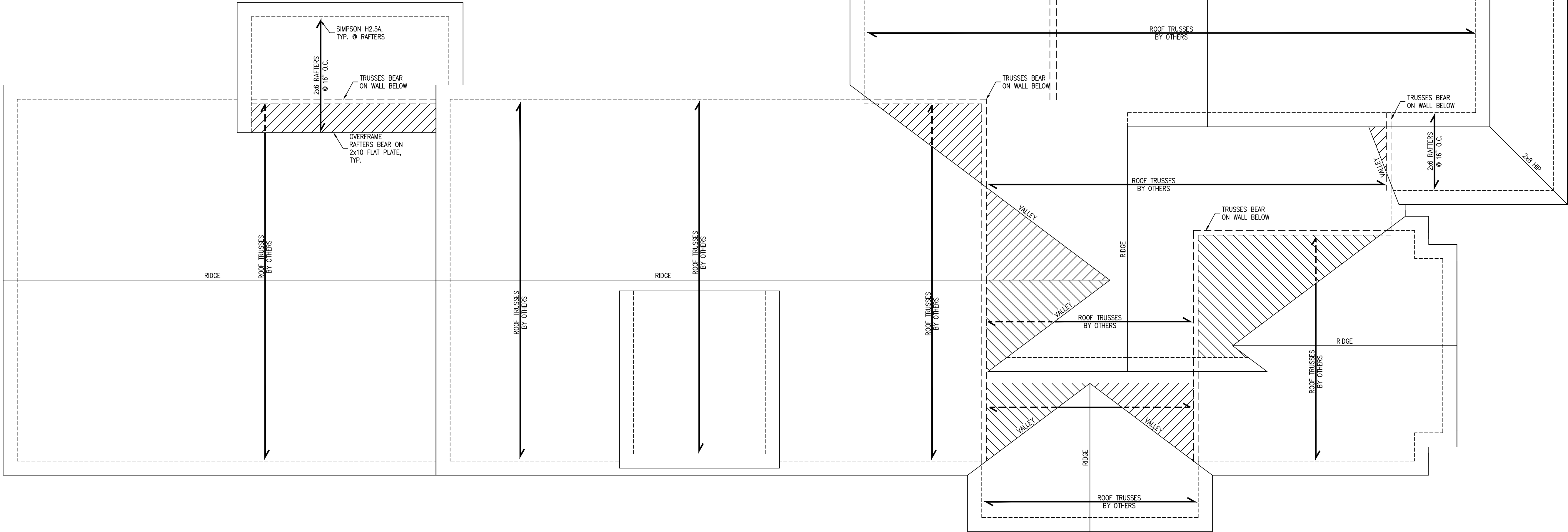
GIRDER TRUSS PLYS SHOWN ARE FOR ILLUSTRATION ONLY. PLEASE REFER TO TRUSS LAYOUT DRAWINGS PROVIDED BY TRUSS MANUFACTURER FOR ACTUAL NUMBER OF PLYS REQUIRED

TRUSS UPLIFT CONNECTOR SCHEDULE		
MODEL #	MAX UPLIFT	
H1	400	
H2A	495	
H2.5T	545	
H4	235	
HTDA*	1015	
H16*	1265	
HT20*	1245	

USE BELOW ONLY FOR 2-PLY OR GREATER GIRDER TRUSSES THAT EXCEED THE UPLIFT REQUIREMENTS ABOVE.

MODEL #	MAX UPLIFT (LBS)	PLY #
LG12*	1785	2
LG13-SDS2.5*	2655	3
LG14-SDS3*	2925	4
HGT-2*	6485	2
HGT-3*	9035	3
HGT-4*	9250	4

1. SST PRODUCTS SHOWN. EQUIV. PRODUCT MAY BE USED PROVIDING UPLIFT REQUIREMENTS ARE MET.  
2. VALUES SHOWN ARE FOR A SINGLE ANCHOR. DOUBLE ANCHORS MAY BE USED TO DOUBLE THE UPLIFT CAPACITY SHOWN ABOVE, QUILLY IF THE MEMBER IS A MINIMUM THICKNESS OF 2x6.  
3. UPLIFT VALUES ARE FOR SPF WOOD SPECIES. PLEASE CONTACT ENGINEER OR TRUSS MANUFACTURER IF USING DIFFERENT.  
4. GIRDER TRUSS-GIRDER TRUSS CONNECTIONS ARE TO BE SPECIFIED AND SUPPLIED BY THE TRUSS COMPANY. ENGINEER IS NOT RESPONSIBLE FOR THESE CONNECTIONS.  
5. ITEMS DENOTED WITH "\*" MAY NOT BE DOUBLED TO INCREASE LOAD CAPACITY.



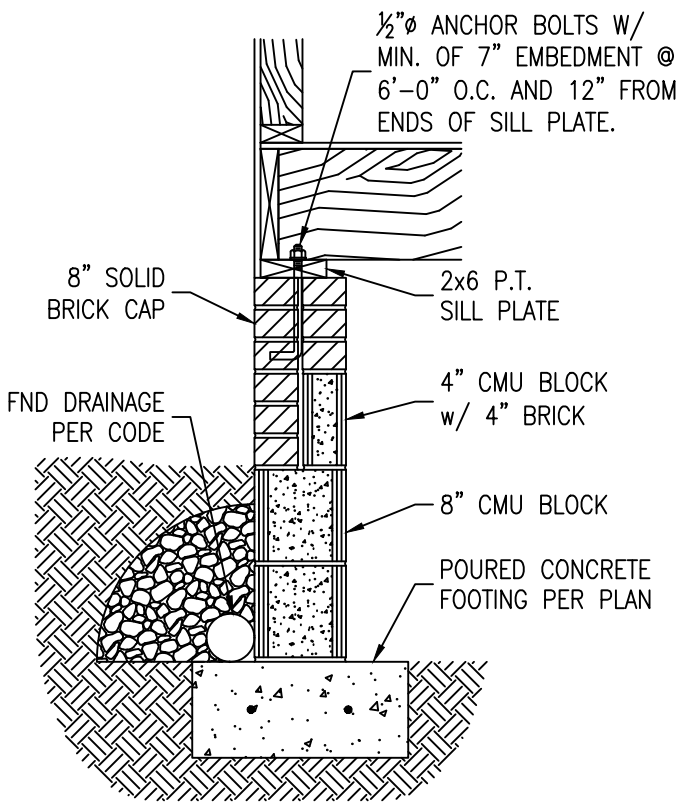
ROOF FRAMING PLAN

1/4" = 1'-0"

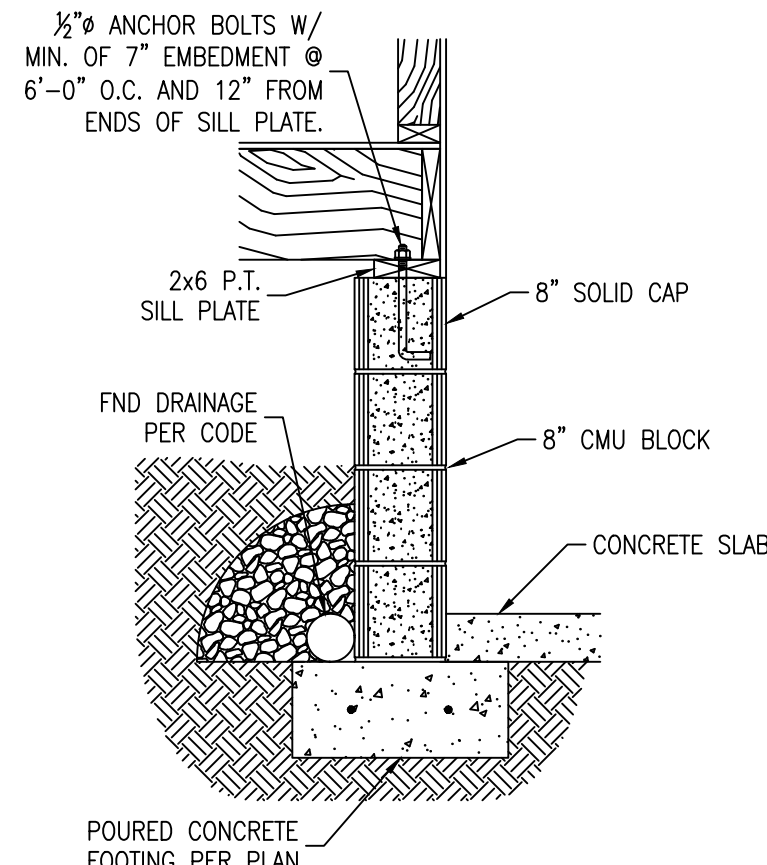
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PROJECT NO. 2401-226	08/06/2024	JES	JES
REVISIONS	DATE	MADE BY	DESCRIPTION



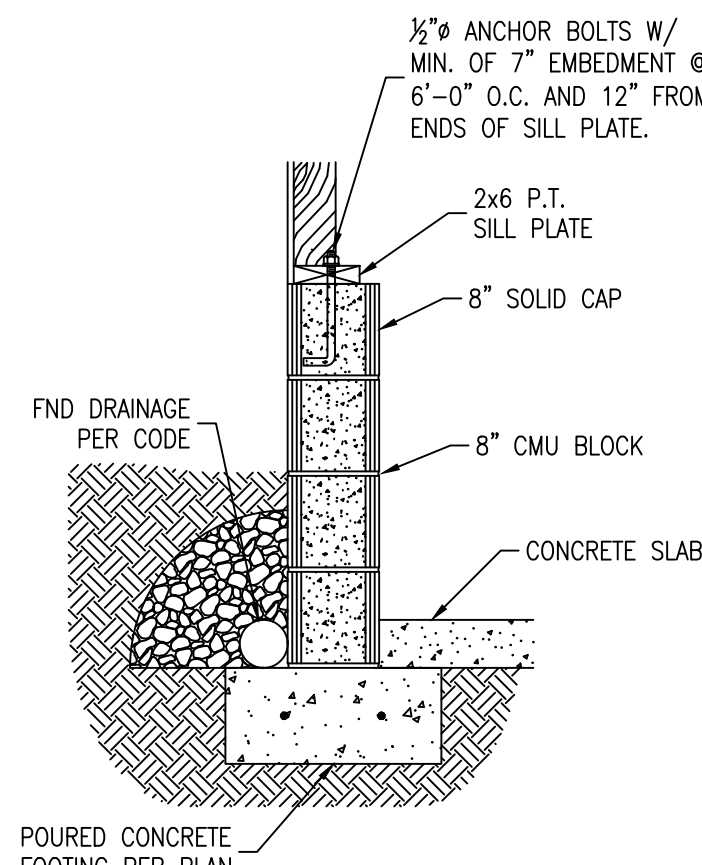




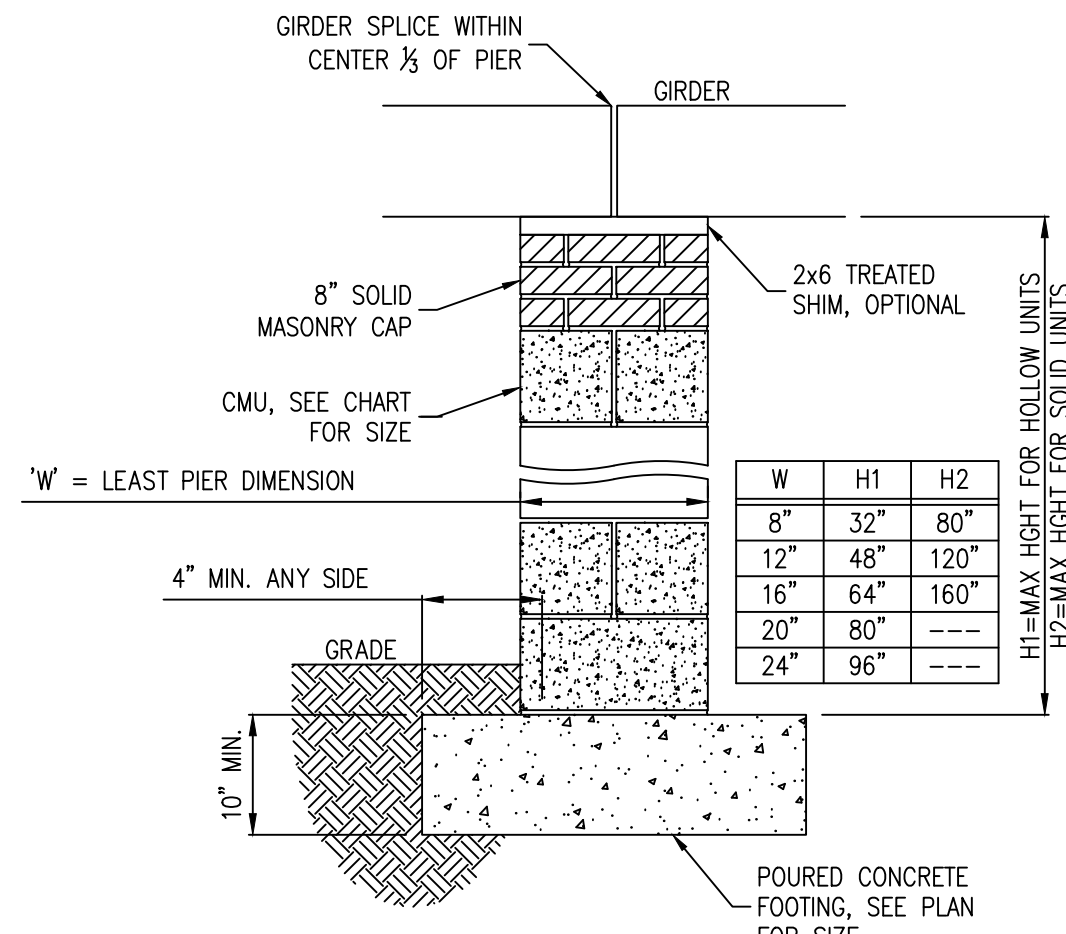
1 FOUNDATION WALL  
3/4" = 1'-0"



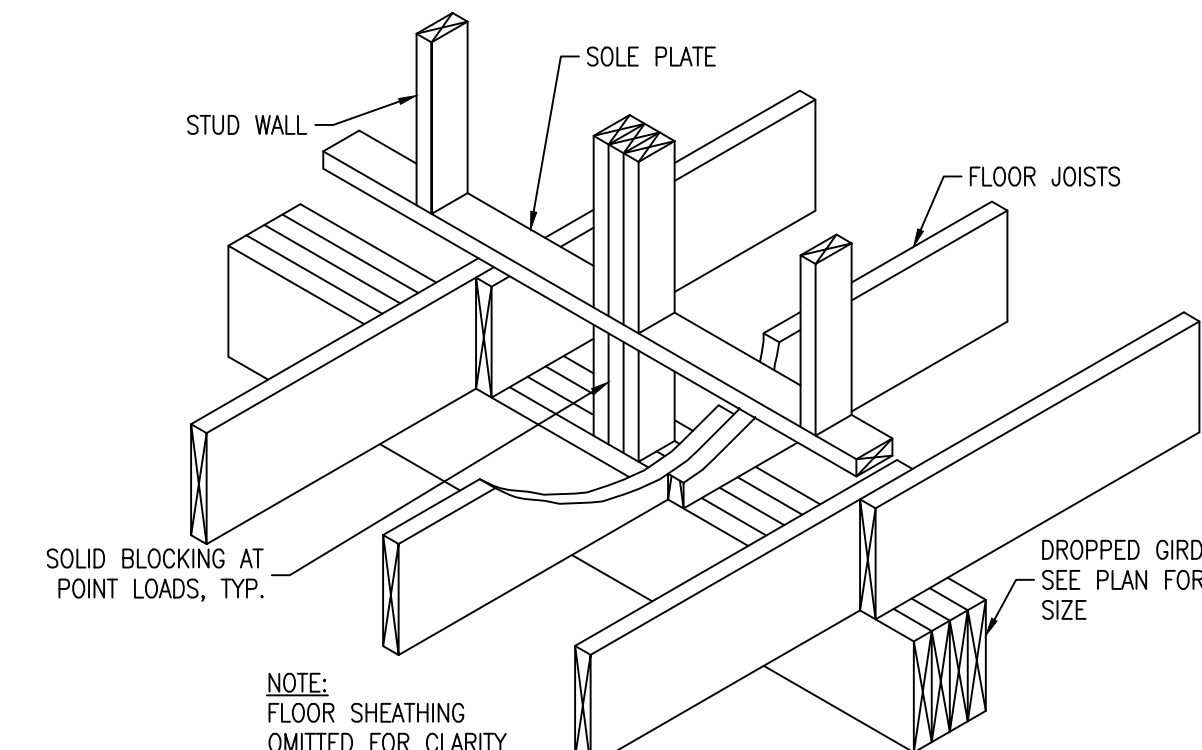
2 GARAGE INT. FND  
3/4" = 1'-0"



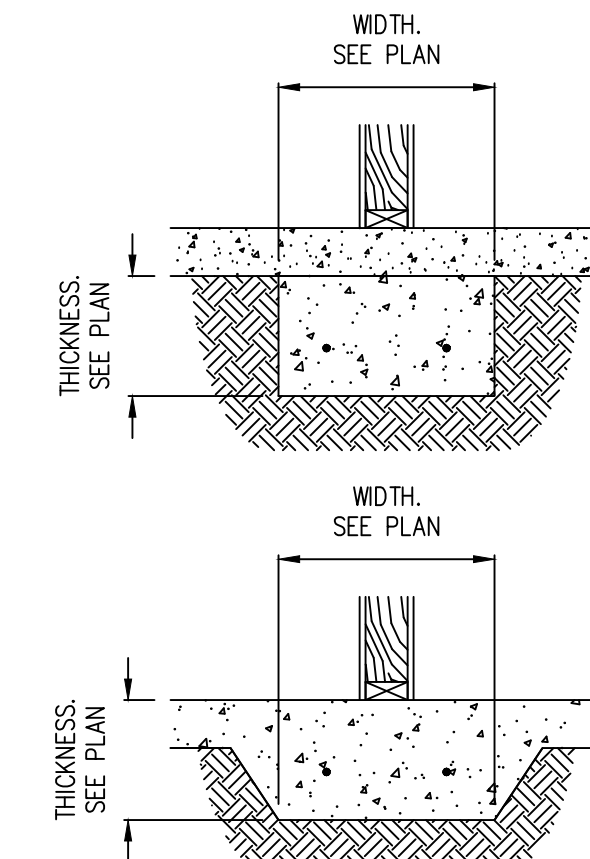
3 GARAGE EXT. FND  
3/4" = 1'-0"



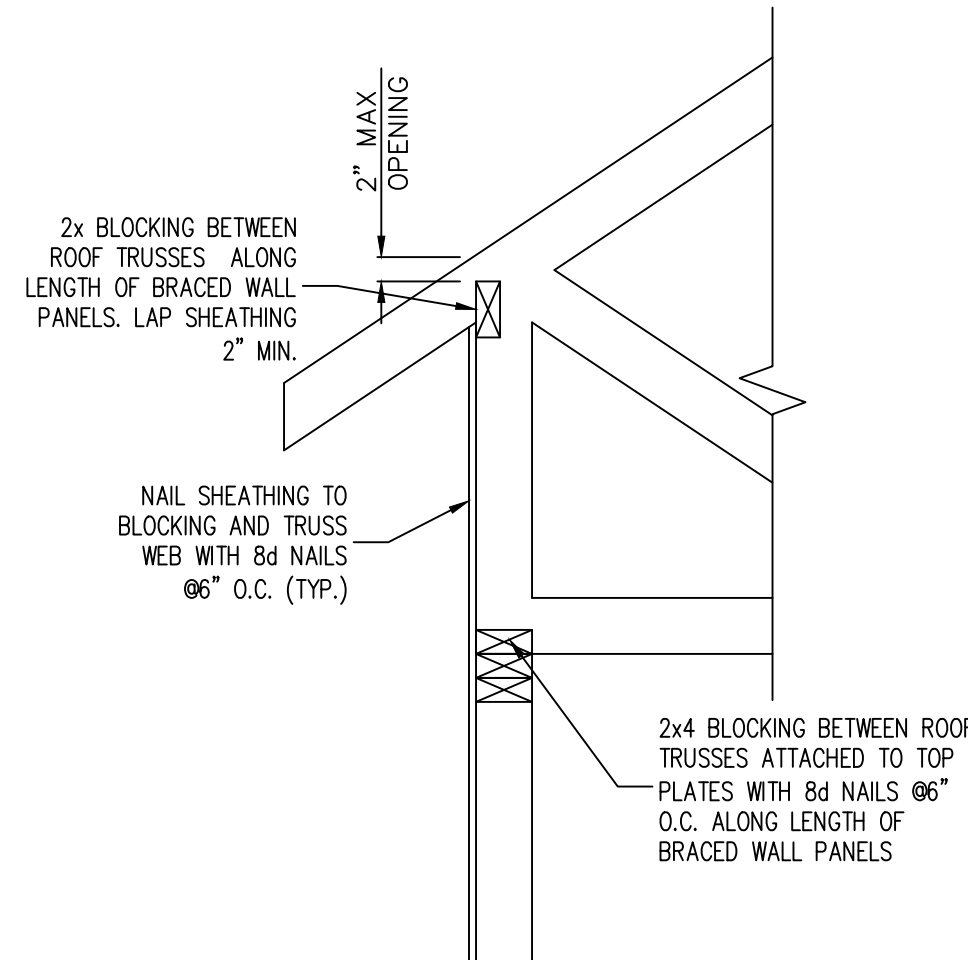
4 TYP. PIER  
3/4" = 1'-0"



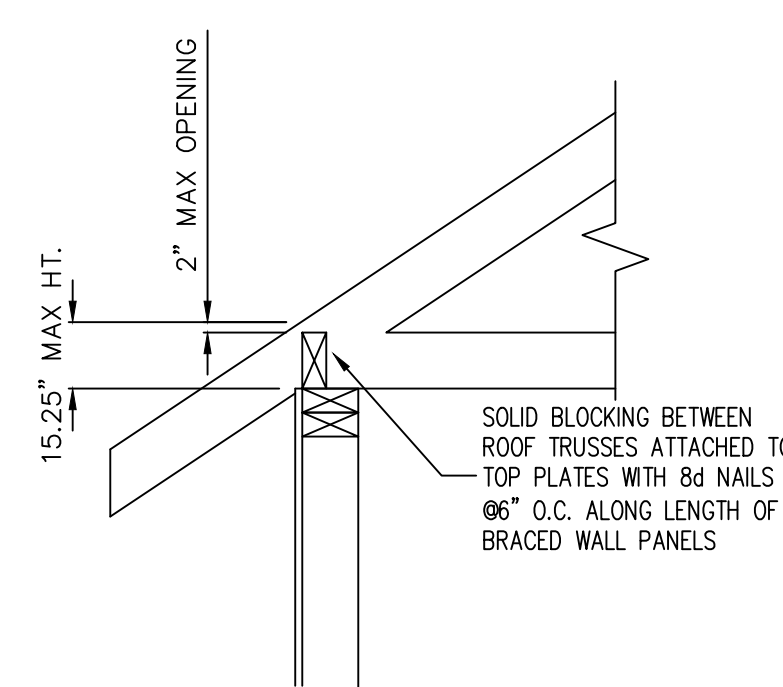
5 TYP. DROPPED GIRDER  
3/4" = 1'-0"



6 TYP. LUG FTG  
3/4" = 1'-0"

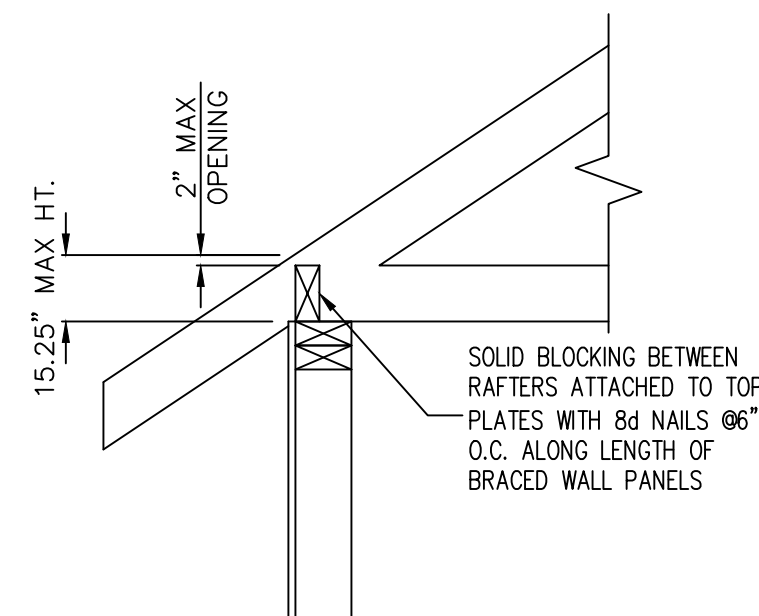


HEEL HEIGHT GREATER THAN 15.25"

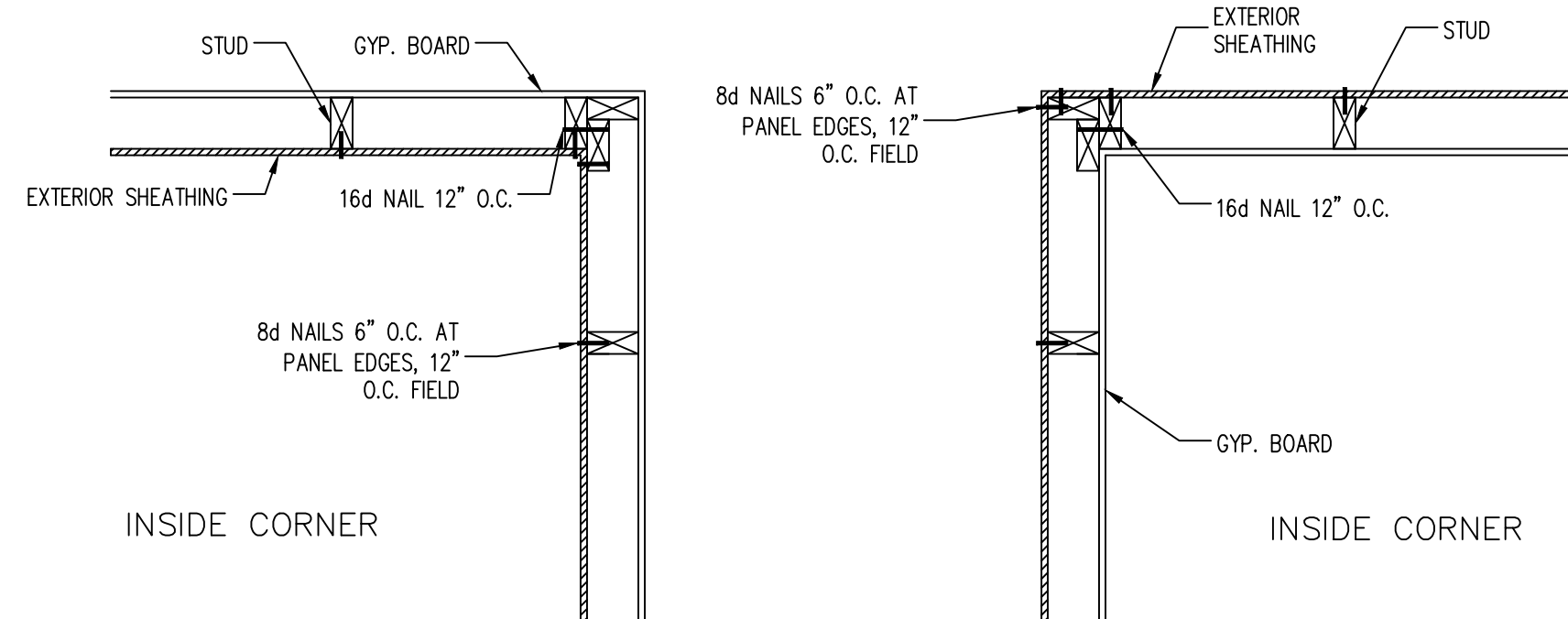


HEEL HEIGHT LESS THAN 15.25"

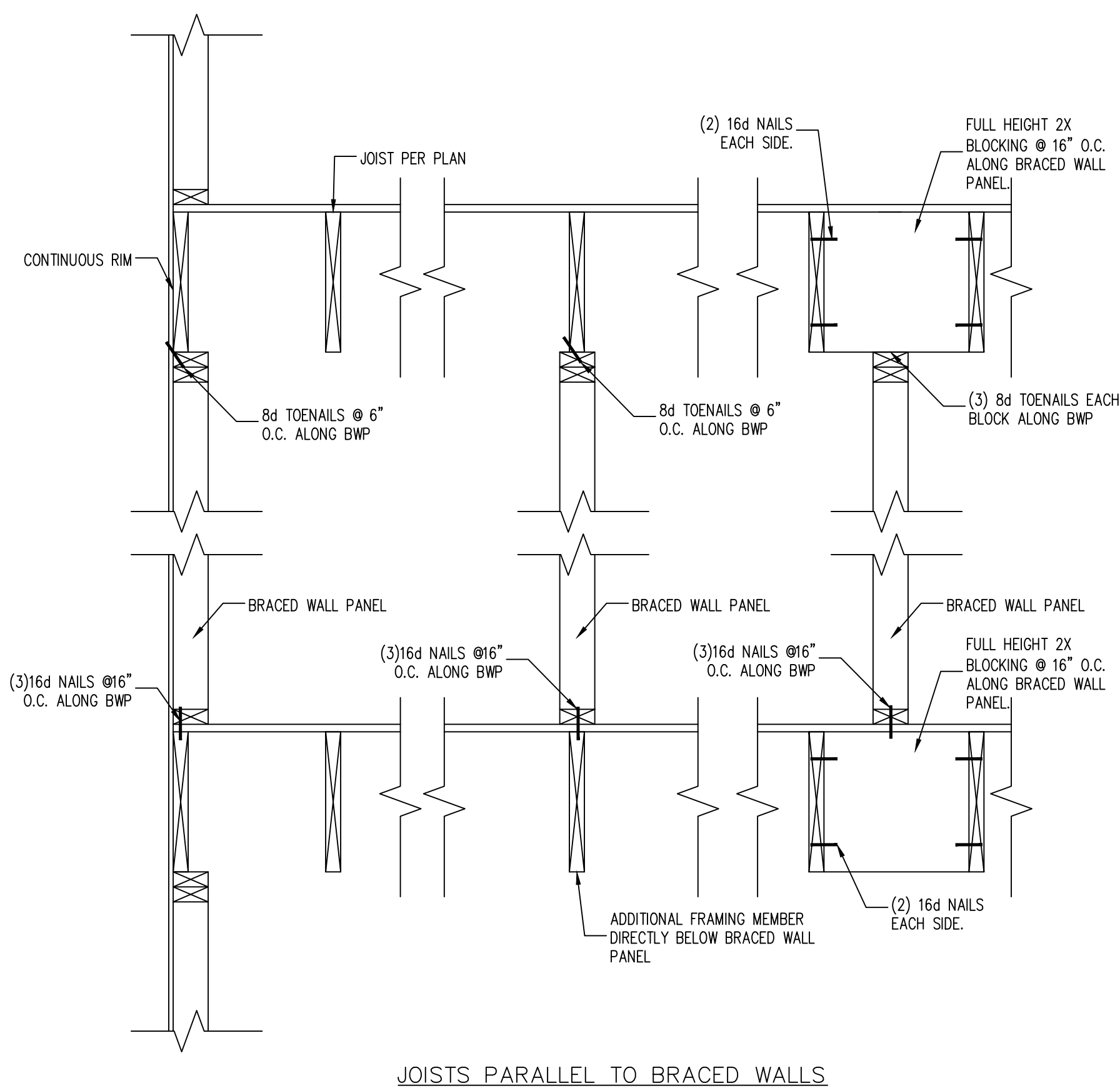
7 TYP. WALL PANEL TO ROOF TRUSS CONNECTION  
3/4" = 1'-0"



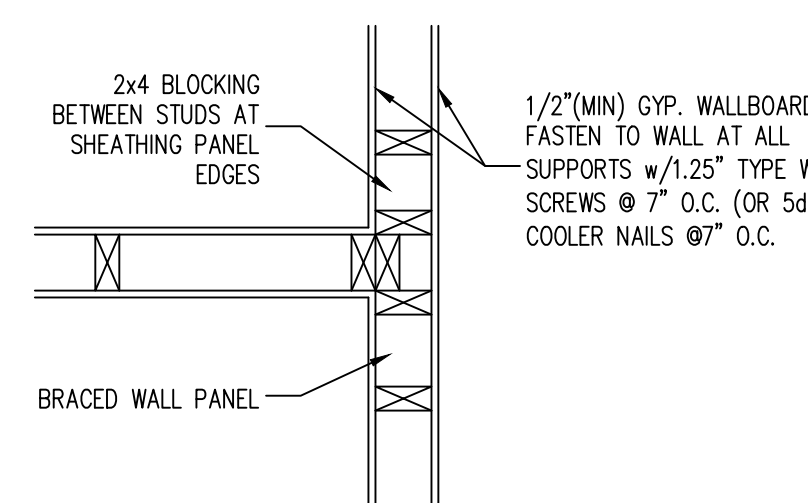
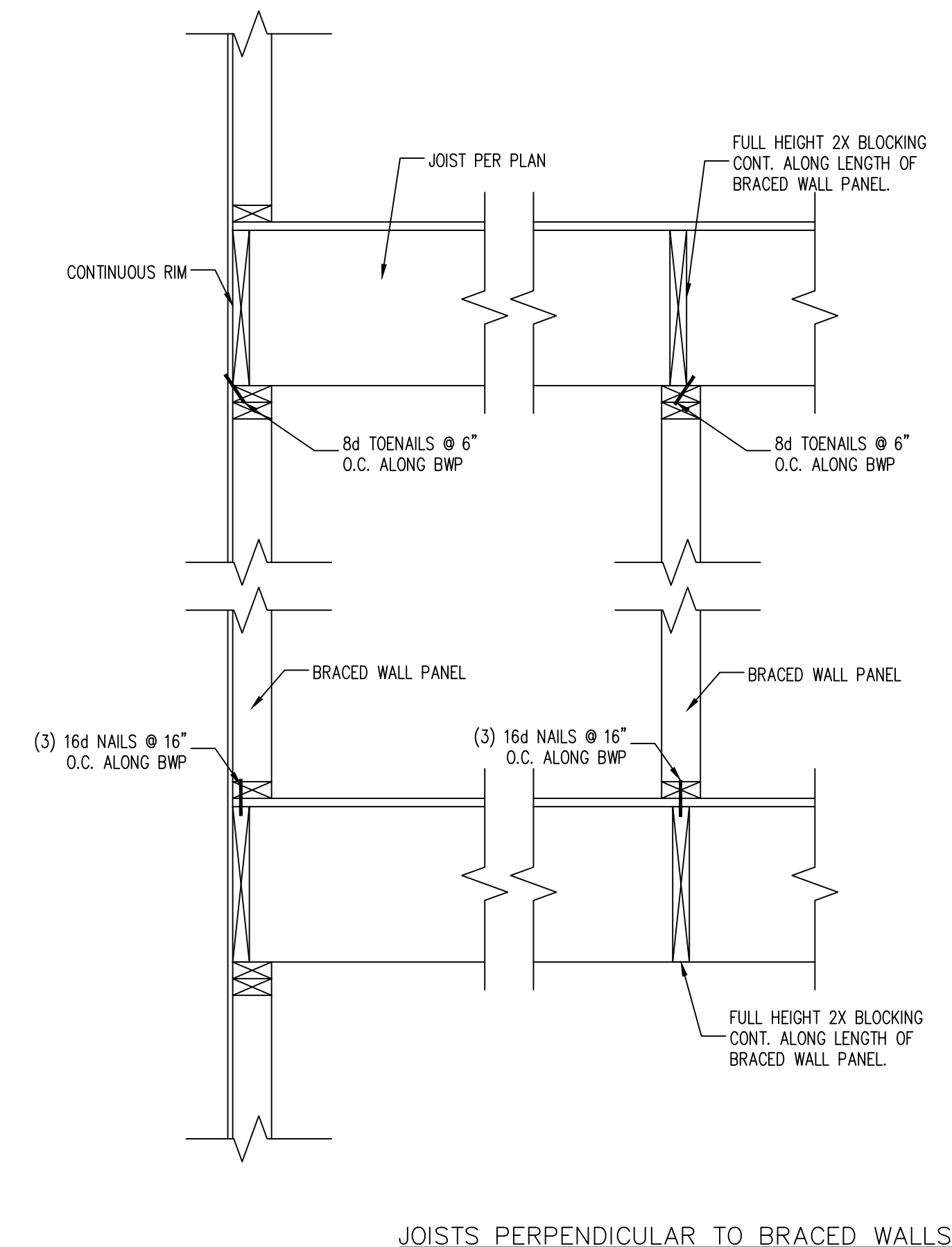
8 TYP. WALL PANEL TO RAFTER CONNECTION  
3/4" = 1'-0"



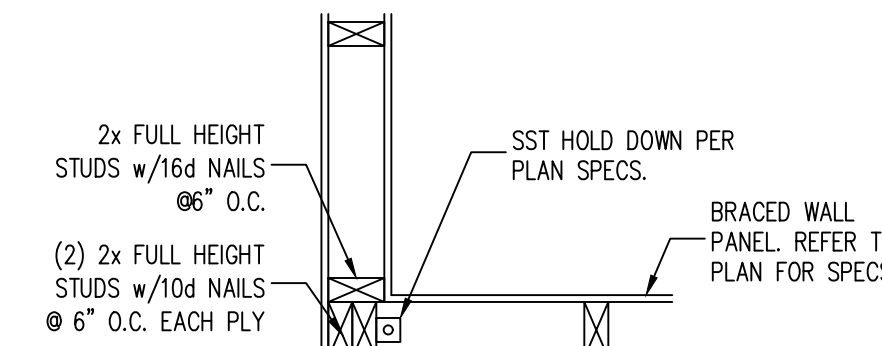
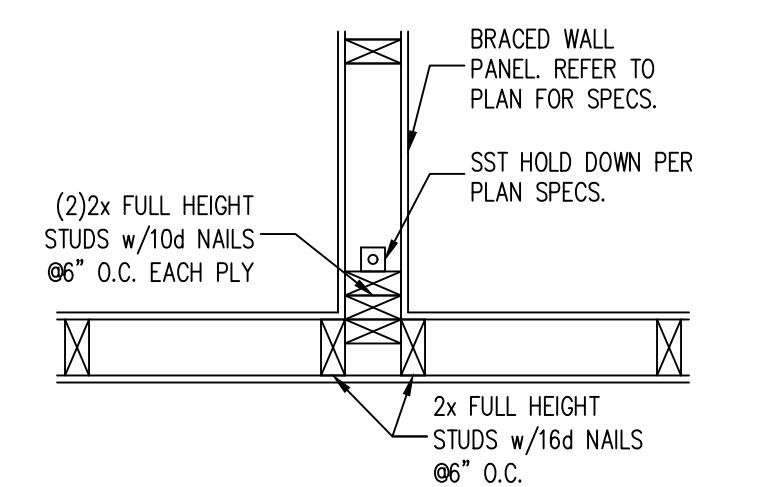
10 TYP. EXTERIOR CORNER FRAMING  
3/4" = 1'-0"



9 TYP. WALL PANEL TO FLOOR/CEILING CONNECTION  
3/4" = 1'-0"



11 INT. 3-STUD WALL INTERSECTION  
3/4" = 1'-0"



12 TYP. HOLD DOWN DETAIL  
3/4" = 1'-0"



TWO CONT. 2x TOP PLATE, EXTEND EACH  
END INTO ADJACENT WALL. NAIL SPLICES  
WITH 8-16d NAILS PER SPLICE/LAP.

CONT. 2x PLATE WITH 10d NAILS AT 16"  
O.C. INTO HEADER/BREAM

NAIL SHEATHING IN SHADED AREAS TO  
BEAM w/8d NAILS @3" O.C. EACH WAY

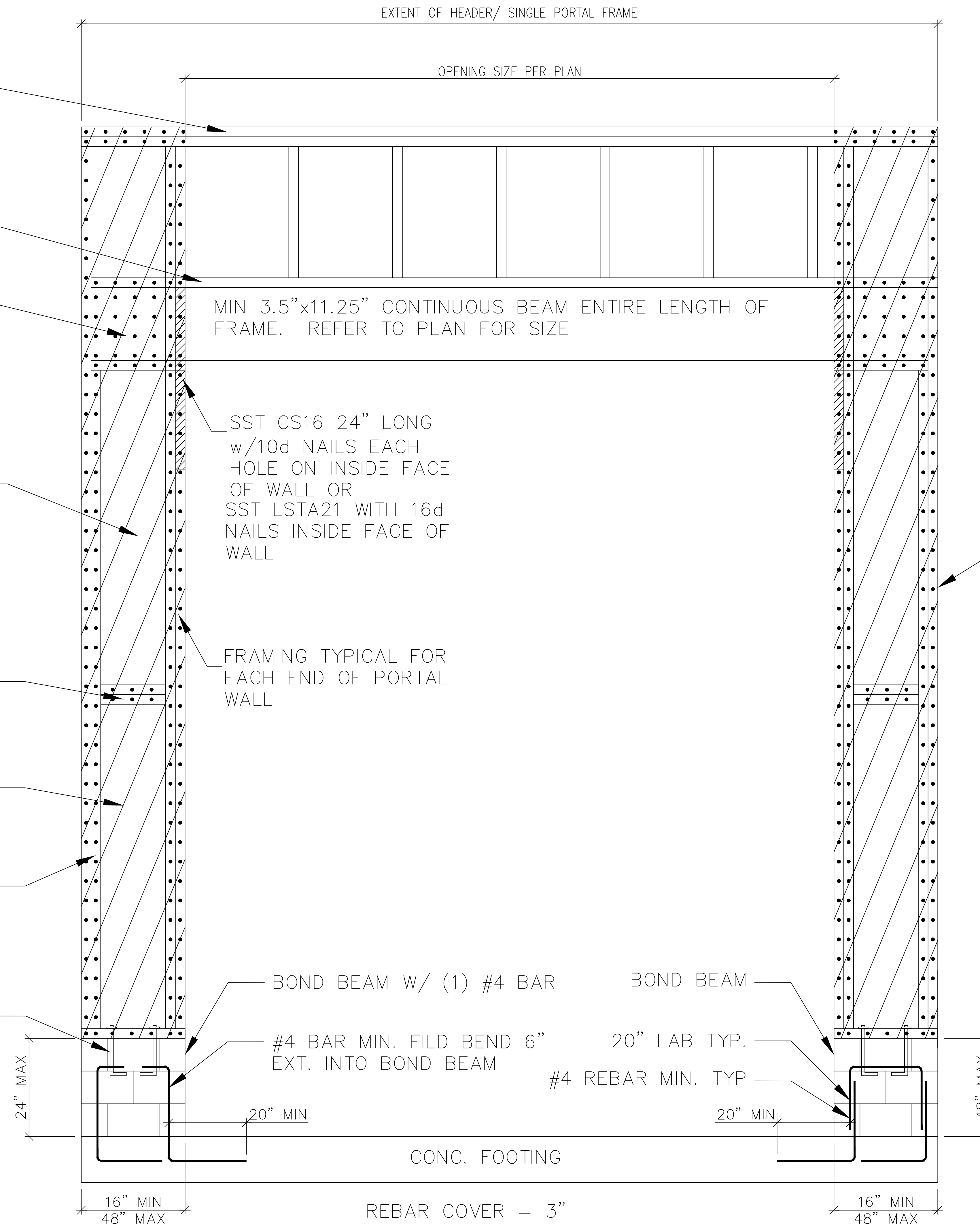
7/16" OSB OR 15/32" PLYWOOD EXT. WALL  
SHEATHING IN SHADED AREAS ATTACHED  
TO ALL SUPPORTS (STUDS, PLATES,  
BLOCKING, ETC) WITH 8d NAILS AT 3" O.C.  
EDGE AND 3" O.C. FIELD.

(2)2x4 BLOCKING AT ALL PANEL EDGES  
(TYP.)

ADD ADDITIONAL STUDS IF WALL WIDTH  
EXCEEDS 16"

(2)2x STUDS (MIN) AT START/END OF  
WALL SEGMENTS EACH SIDE OF OPENING.

2x4 P.T. PLATE WITH (2)1/2" DIA ANCHOR  
BOLTS EMBEDDED IN CONC. 7" MIN. WITH  
3/16"x2"x2" PLATE WASHERS



13  
D2

CS METHOD: CONTINUOUSLY SHEATHED PORTAL FRAME

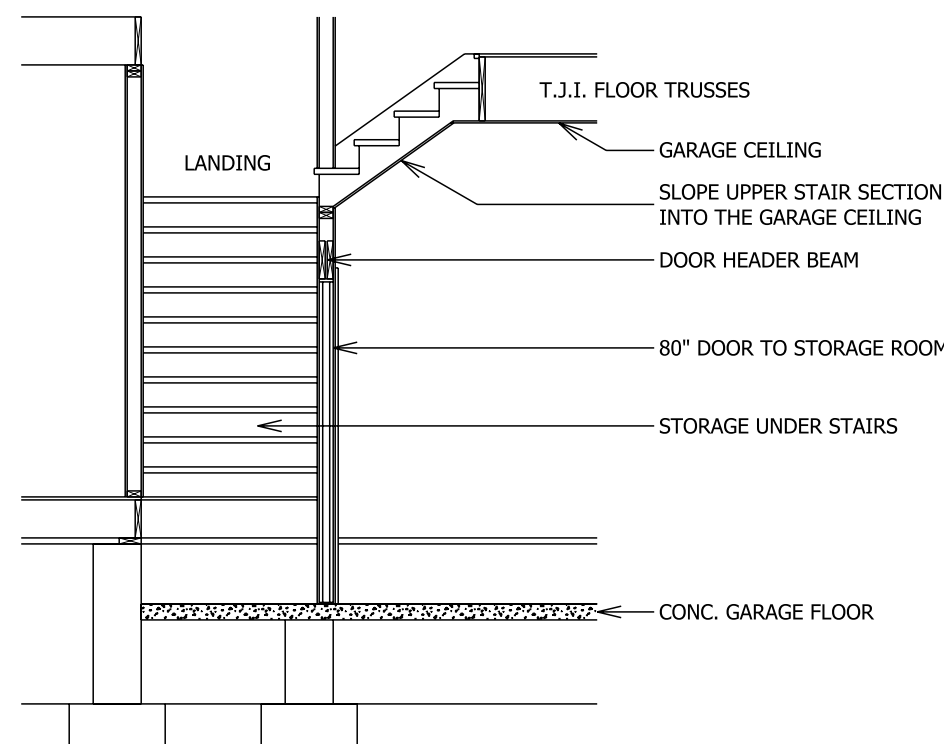
N.T.S.

ORIGINAL PLAN	DATE	DRAWN BY	CHECKED BY
PROJECT NO.: 2401-226	08/06/2024	JES	JES
REVISIONS	DATE	MADE BY	CHECKED BY
REV PROJECT NO:			

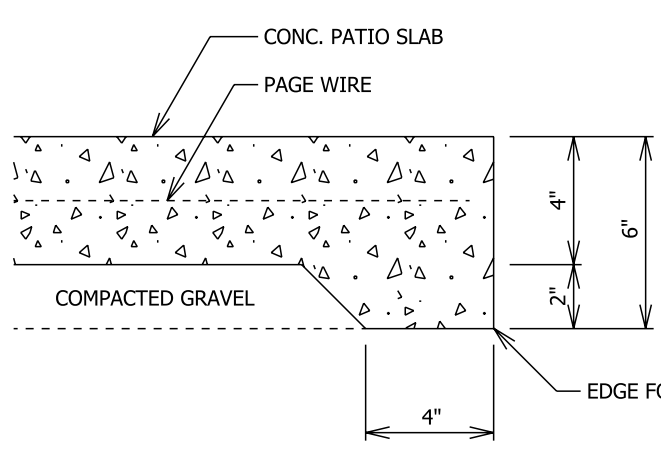


Nix Industries, LLC  
2664 Erwin Chapel Road, Dunn, NC 28834  
Details

WINDOW & DOOR SCHEDULE				
PRODUCT CODE	SIZE	HINGE DIRECTION	COUNT	
32X80 COLONIAL A 1	2'-8"	R	1	
192X96 FACE SLIDING 4	16080 ACCORDIAN DOOR	RRRR	1	
36X80 FRENCH A 1	3'-0" 6 LITE	L	1	
72X96 COUNTRY A 2	6080 DBL 4 LITE	LR	1	
108X96 - 3 PANEL	9'-0" x 8'-0"	U	1	
192X96 - 3 PANEL	16'-0" x 8'-0"	U	1	
28X80 COLONIAL A 1	2'-4"	R	1	
32X80 COLONIAL A 1	2'-8"	L	3	
32X80 COLONIAL A 1	2'-8"	R	2	
36X80 COLONIAL A 1	3'-0"	L	1	
28X80 GLASS - Shower	2'-4"	R	1	
30X80 GLASS - Shower	2'-6"	L	1	
24X96 COLONIAL A 1	2'-0"	R	1	
28X96 COLONIAL A 1	2'-4"	L	5	
28X96 COLONIAL A 1	2'-4"	R	1	
32X96 COLONIAL A 1	2'-8"	L	3	
32X96 COLONIAL A 1	2'-8"	R	3	
48X96 COLONIAL A 2	4'-0"	LR	1	
28X96 COLONIAL POCKET 1	2'-4"	N	3	
60X60 DOUBLE HUNG 2	5'-0" x 5'-0"	NN	1	
72X66 DOUBLE HUNG 2	6'-0" x 5'-6"	NN	1	
24X36 SINGLE HUNG 1	2'-0" x 3'-0"	U	2	
24X48 SINGLE HUNG 1	2'-0" x 4'-0"	U	2	
32X48 SINGLE HUNG 1	2'-8" x 4'-0"	U	1	
36X36 SINGLE HUNG 1	3'-0" x 3'-0"	U	1	
36X66 SINGLE HUNG 1	3'-0" x 5'-6"	U	5	
32X72 SINGLE HUNG 1	2'-8" x 6'-0"	U	2	
36X72 SINGLE HUNG 1	3'-0" x 6'-0"	U	2	
60X48 SINGLE HUNG 2	5'-0" x 4'-0"	UU	1	
72X72 SINGLE HUNG 2	6'-0" x 6'-0"	UU	2	
96X84 SINGLE HUNG 3	8'-0" x 7'-0"	NA	2	
36X12 TRANSOM	3'-0" x 1'-0"	N	1	
48X24 TRANSOM	4'-0" x 2'-0"	N	1	



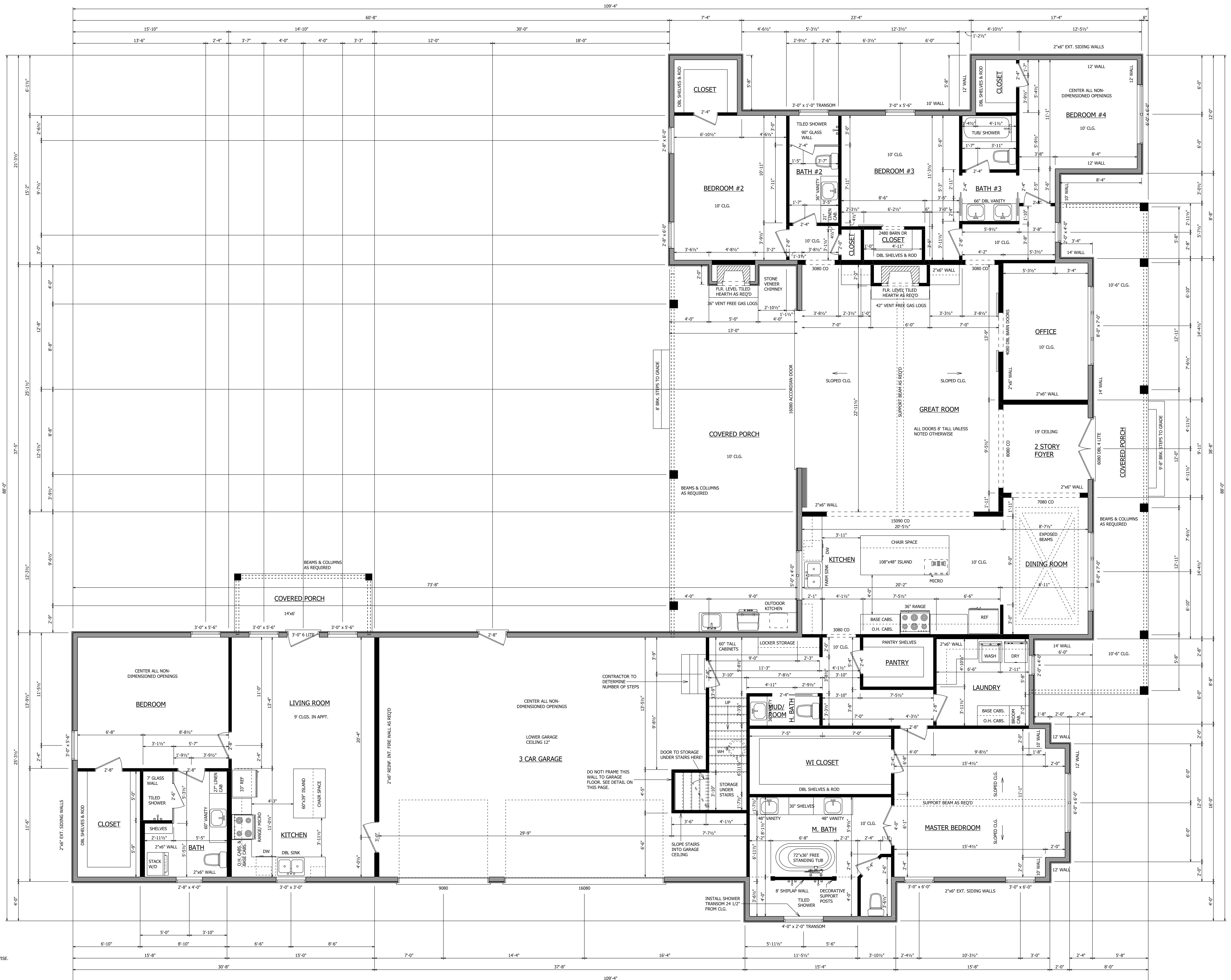
SLOPE CEILING DETAIL



CONC. PORCH SLAB EDGE FOOTING

#### GENERAL NOTES:

- 10' CEILINGS ON 1ST FLOOR, EXCEPT WHERE NOTED OTHERWISE.
- 9' CEILINGS IN APARTMENT.
- SEE DETAILS WHERE NEEDED.
- PROVIDE SOLID SUPPORT UNDER ALL BEAMS AND HEADERS.
- PROVIDE DOUBLE JOISTS UNDER PARALLEL WALLS ABOVE.
- RAFTERS AND JOIST SPANS ARE BASED ON #2 YELLOW PINE.
- 2"x10" EXTERIOR HEADERS, 2"x8" INTERIOR HEADERS.
- STATED BEAM SIZES TO BE VERIFIED BY SUPPLIER.
- INSTALL A SILL SEALER, EQUAL TO "POLY-CEL ONE" UNDER EXTERIOR SILLS OF HEATED AREA.
- INSTALL METAL BACK-UP CLIPS ON EXTERIOR STUDS OF HEATED AREA AS PER WALL CONSTRUCTION DETAILS.
- INSTALL INSULATION IN EXT. STUDS OF HEATED AREA AS REQ'D.
- INSTALL INSULATION IN FLOOR JOISTS OF LOWER LEVEL HEATED AREA AS REQ'D.
- INSTALL INSULATION IN CEILINGS OF HEATED AREA AS REQ'D.
- CAULK AROUND DOORS, WINDOWS, AND ALL OTHER OPENINGS OF EXTERIOR WALLS OF HEATED AREA.
- OF EXTERIOR WALLS OF HEATED AREA.
- ALL INTERIOR 2x4 WALLS ARE 3 1/2" WIDE.
- ALL INTERIOR 2x6 WALLS ARE 5 1/2" WIDE.
- ALL EXTERIOR 2x4 BRICK WALLS ARE 8 1/2" WIDE.
- ALL EXTERIOR 2x6 SIDING WALLS ARE 5" WIDE.
- ALL EXTERIOR 2x6 SIDING WALLS ARE 7" WIDE.



#### FLOOR PLAN

SCALE: 1/4"= 1'

SQUARE FOOTAGE	
LIVING SPACE	2851
GARAGE	921
APARTMENT	787
BONUS ROOM	604
COVERED PORCHES	907
TOTAL UNDER ROOF	6070



WHILE EVERY ATTEMPT HAS BEEN MADE IN THE PREPARATION OF THIS PLAN TO AVOID ERRORS, OMISSIONS, AND MISTAKES, THE DRAFTSMAN CAN NOT GUARANTEE AGAINST HUMAN ERROR. THE CONTRACTOR AND OR CLIENT SHALL VERIFY ALL CONDITIONS, DIMENSIONS, DETAILS AND SPECIFICATIONS AND BE RESPONSIBLE FOR SAME. THE DRAFTSMAN WILL NOT BE LIABLE FOR ERROR AFTER CONSTRUCTION BEGINS.  
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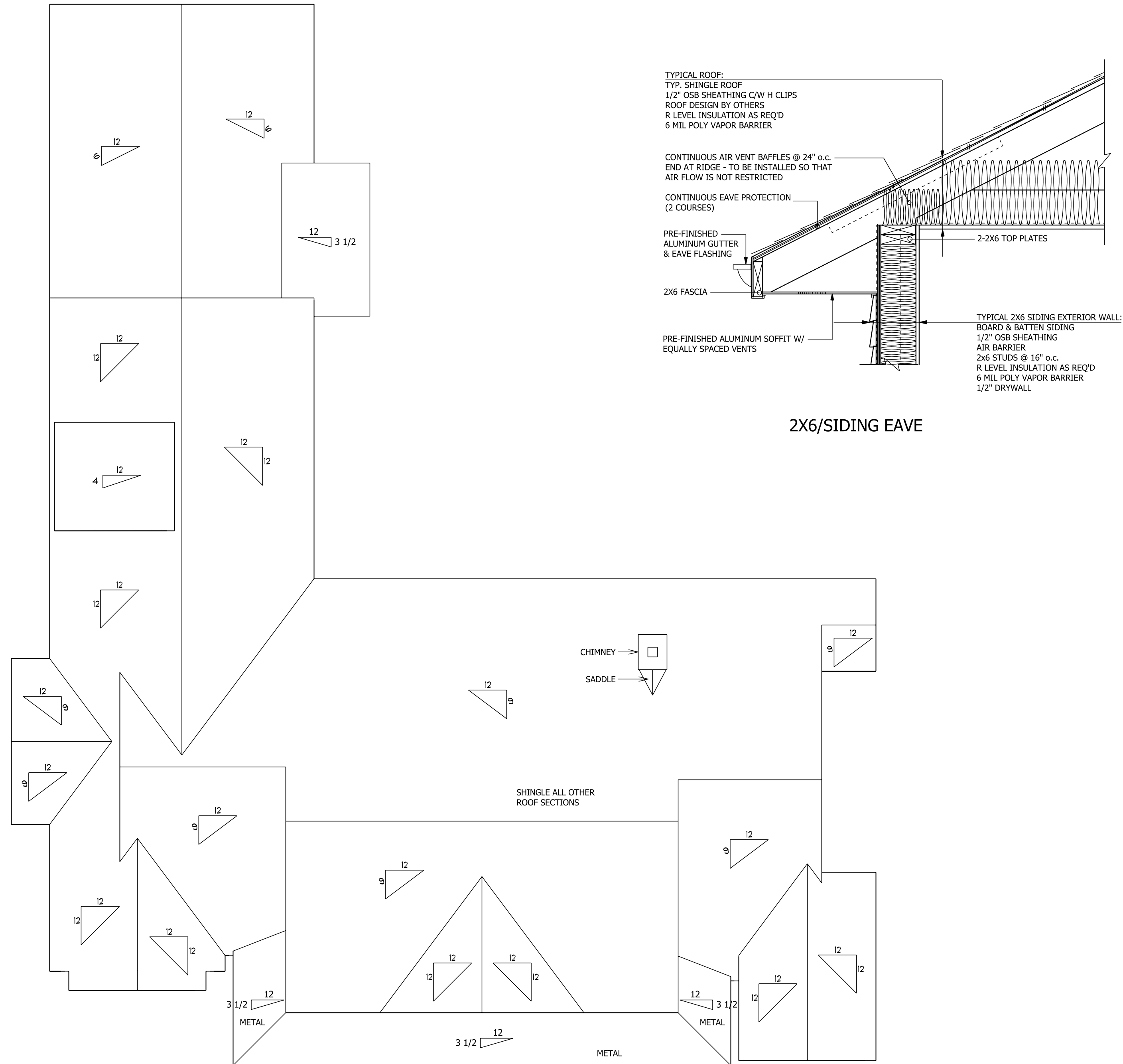
**SOUTHERN HOME DESIGNS**  
106 WALNUT LANE COLUMBIA, TN 38401  
PHONE 931-580-9375 EMAIL dwilliamssh64@gmail.com  
HOME DESIGNS SINCE 1997

SCALE  
1/4"= 1'  
PLAN NO.  
1S-2851-24

DATE  
6/17/24  
PAGE NO.  
3 of 5

DRAWN BY  
Daniel Williams  
**R. MORAN**

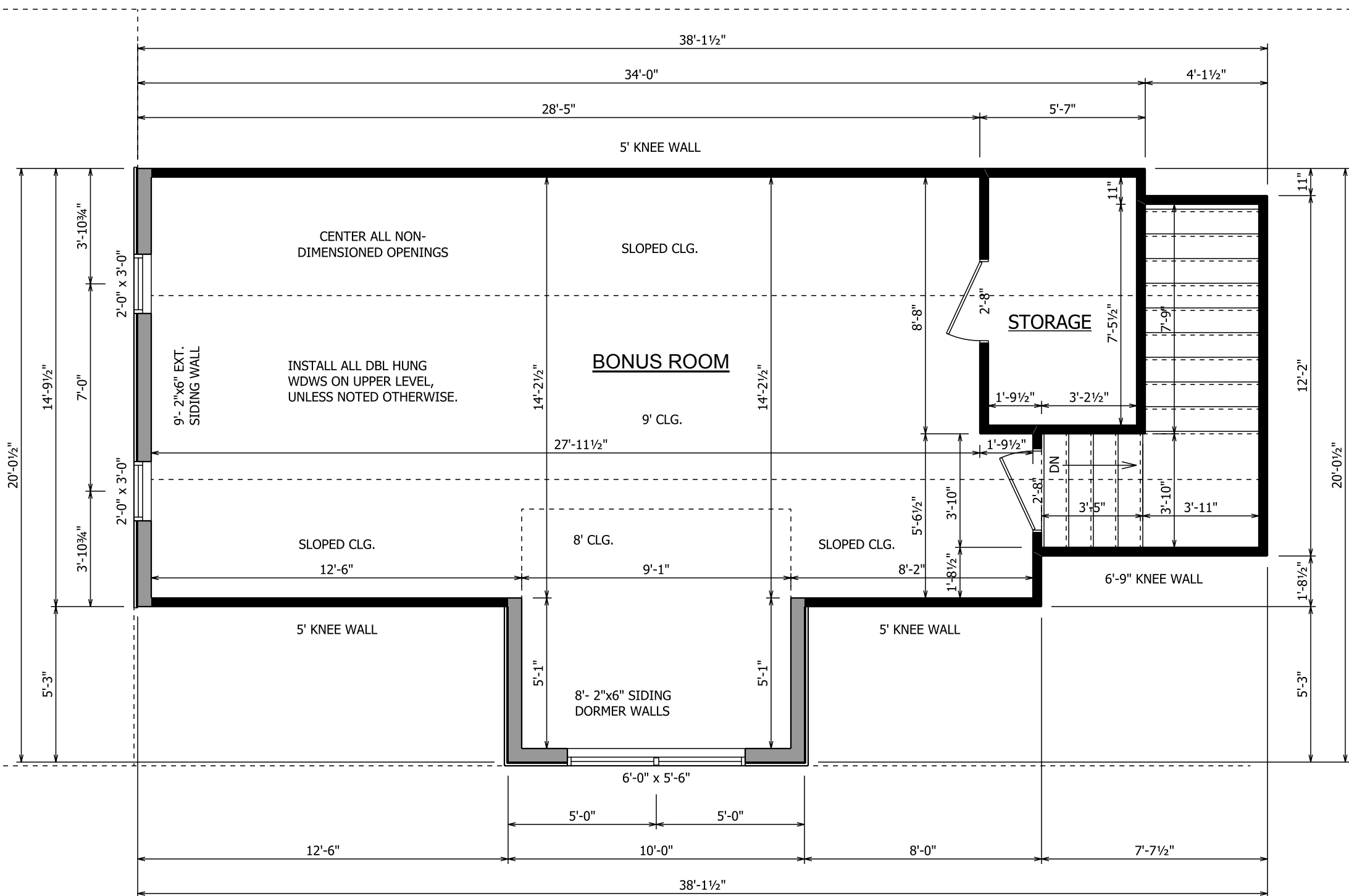




ROOF PITCH DETAIL  
SCALE: 1/8"= 1'

- GENERAL NOTES:
- 9' CEILING ON BONUS ROOM LEVEL, EXCEPT WHERE NOTED OTHERWISE.
  - SEE DETAILS WHERE NEEDED.
  - PROVIDE SOLID SUPPORT UNDER ALL BEAMS AND HEADERS.
  - PROVIDE DOUBLE JOISTS UNDER PARALLEL WALLS ABOVE.
  - RAFTERS AND JOIST SPANS ARE BASED ON #2 YELLOW PINE.
  - 2"x10" EXTERIOR HEADERS, 2"x8" INTERIOR HEADERS.
  - STATED BEAM SIZES TO BE VERIFIED BY SUPPLIER.
  - INSTALL A SILL SEALER, EQUAL TO "POLY-CEL ONE" UNDER EXTERIOR SILLS OF HEATED AREA.
  - INSTALL METAL BACK-UP CLIPS ON EXTERIOR STUDS OF HEATED AREA AS PER WALL CONSTRUCTION DETAILS.
  - INSTALL INSULATION IN EXT. STUDS OF HEATED AREA AS REQ'D.
  - INSTALL INSULATION IN FLOOR JOISTS OF LOWER LEVEL HEATED AREA AS REQ'D.
  - INSTALL INSULATION IN CEILINGS OF HEATED AREA AS REQ'D.
  - CAULK AROUND DOORS, WINDOWS, AND ALL OTHER OPENINGS OF EXTERIOR WALLS OF HEATED AREA.
  - ALL INTERIOR 2x4 WALLS ARE 3 1/2" WIDE.
  - ALL INTERIOR 2x6 WALLS ARE 5 1/2" WIDE.
  - ALL EXTERIOR 2x4 BRICK WALLS ARE 5 1/2" WIDE.
  - ALL EXTERIOR 2x4 SIDING WALLS ARE 5" WIDE.
  - ALL EXTERIOR 2x6 SIDING WALLS ARE 7" WIDE.

APARTMENT BELOW



BONUS ROOM PLAN  
SCALE: 1/4"= 1'

SQUARE FOOTAGE	
LIVING SPACE	2851
GARAGE	921
APARTMENT	787
BONUS ROOM	604
COVERED PORCHES	907
TOTAL UNDER ROOF	6070

ACTUAL SIZE, TYPE, & LOCATION OF ATTIC ACCESS DOORS TO BE DETERMINED BY CONTRACTOR



WHILE EVERY ATTEMPT HAS BEEN MADE IN THE PREPARATION OF THIS PLAN TO AVOID ERRORS, OMISSIONS, AND MISTAKES, THE DRAFTSMAN CAN NOT GUARANTEE AGAINST HUMAN ERROR. THE CONTRACTOR AND/OR CLIENT SHALL VERIFY ALL CONDITIONS, DIMENSIONS, DETAILS AND SPECIFICATIONS AND BE RESPONSIBLE FOR SAME. THE DRAFTSMAN WILL NOT BE LIABLE FOR ERROR AFTER CONSTRUCTION BEGINS.  
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HOME DESIGNS SINCE 1997

SCALE	DATE	DRAWN BY
1/4"= 1'	6/17/24	Daniel Williams
PLAN NO.	PAGE NO.	
1S-2851-24	4 of 5	R. MORAN