

ABBREVIATIONS		
ABV ABOVE	L LENGTH	
AC AIR CONDITIONING	LA LAUNDRY	
ADJ AREA DRAIN	LAV LAVATORY	
ADJ ADJUSTABLE	LVR LOUVER	
ALT ALTERNATE	MAX MAXIMUM	
ALUM ALUMINUM	MCH MECHANICAL	
ARCH ARCHITECTURAL	MFG MANUFACTURER	
BA BATHROOM	MIN MINIMUM	
BD BOARD	MISC MISCELLANEOUS	
BF BIFOLD (DOOR)	N NORTH	
BLDG BUILDING	N.T.S. NOT TO SCALE	
BLK BLOCK (CMU)	O.S.D. OVERHEAD GARAGE DOOR	
BLM BELON	OH OVERHEAD	
BM BEAM	OPT OPTIONAL	
BP BI-PASS (DOOR)	PAR PARALLEL	
BOT BOTTOM	P.B. PUSH BUTTON	
BTWN BETWEEN	PDR POWDER	
CAB CABINET	PED PEDESTAL	
CER CERAMIC	PL PLATE	
C.J. CONTROL JOINT OR CONSTRUCTION JOINT	PR PAIR	
CL CLOSET OR CENTER LINE	P.T. PRESSURE TREATED WOOD	
CLS CEILING	P.V.C. POLYVINYL CHLORIDE PIPE	
CLR CLEAR	P.V.M.T. PAVEMENT	
CMU CONCRETE MASONRY UNIT	P.W. PRE-WIRE	
COL COLUMN	P.W. PRE-WIRE	
CONC CONCRETE	P.W. PRE-WIRE	
C CARPET	R RISER	
CR CORROSION RESISTANT	RAG RETURN AIR GRILL	
CSMT CEMENT	REF REFERENCE	
C.T. CERAMIC TILE	REFR REFRIGERATOR	
D DRYER	REQ REQUIRED	
DBL DOUBLE	S SOUTH	
DH DOUBLE HUNG	SD SMOKE DETECTOR	
DIM DIMENSION	S.F. SQUARE FEET	
DISP DISPOSAL	S.G.D. SLIDING GLASS DOOR	
DN DOWN	SH SINGLE HUNG OR SHELF	
DR DOOR	SH SHIM	
DS DOWNSPOUT	SL SLOPE / SLIDING	
DW DISH WASHER	SL SHELF AND POLE	
DWG DRAWING	SPEC SPECIFICATIONS	
E EAST	STD STANDARD	
EA EACH	STR STRUCTURAL	
ELEV ELEVATION	SQ SQUARE	
ELEC ELECTRICAL	SYM SYMBOL	
EQ EQUAL	S45 SMOOTH FOUR SIDES	
EXT EXTERIOR	T TREAD (AT STAIRS) OR TILE	
FAU FORCED AIR UNIT	T.B. TOWEL BAR	
F.C. FLOOR CHANGE	TEMP TEMPERED (GLASS)	
F.D. FLOOR DRAIN	T&G TONGUE & GROOVE	
F.F. FINISH FLOOR LINE	T.O.C. TOP OF CURB	
F.G. FINISHED GRADE	TV TELEVISION	
FLR FLOOR(ING)	TTY TYPICAL	
FL FLOURESCENT (LIGHT)	UNO. UNLESS NOTED OTHERWISE	
FND FOUNDATION	V.B. VAPOR BARRIER	
F.O.S. FACE OF STUD	VERT VERTICAL	
FTG FOOTING	V.T.R. VENT THRU ROOF	
FX FIXED GLASS	W WASHING MACHINE	
GALV GALVANIZED	WD WOOD	
GAR GARAGE	WDM WINDOW	
G.B. GYPSUM BOARD	WH WATER HEATER	
GD GRADE OR GRADING	W HUNG IRON	
G.D.O. GARAGE DOOR OPENER	WMC WALK-IN CLOSET	
GFI GROUND FAULT INTERRUPTER	W NO WITH OR WITHOUT	
GL GLASS OR GLAZING	WP WATERPROOFING	
GYP BD GYPSUM BOARD	WM MELDED WIRE MESH	
HD HOSE BIBB	IL PROPERTY LINE	
HD HEAD OR HARD	Ø ROUND / DIAMETER	
HDR HEADER	± AND	
HGT HEIGHT	Q CENTERLINE	
HVAC HEATING/VENTILATING/AIR COND.	■ FOUND / NUMBER	
HWD HARDWOOD		
INT INTERIOR		
JST JOIST		
JT JOINT		
KIT KITCHEN		

BUILDING CODE COMPLIANCE / PROJECT INFORMATION	
ALL CONSTRUCTION TO COMPLY WITH LOCAL CODES AND ORDINANCES CURRENTLY IN USE WITH THE LOCAL JURISDICTION.	
APPLICABLE CODES: FOLLOW ALL APPLICABLE STATE AND LOCAL CODES. 2018 NORTH CAROLINA STATE SUPPLEMENTS AND AMENDMENTS	
CONTRACTOR AND BUILDER SHALL REVIEW ENTIRE PLAN TO VERIFY CONFORMANCE WITH ALL CURRENT APPLICABLE CODES IN EFFECT AT TIME OF CONSTRUCTION. BY USING THESE DRAWINGS FOR CONSTRUCTION IT IS UNDERSTOOD THAT CONFORMANCE WITH ALL APPLICABLE CODES IS THE RESPONSIBILITY OF THE BUILDER AND CONTRACTOR.	
PRODUCT: SINGLE FAMILY RESIDENCE	
OCCUPANCY CLASSIFICATION RESIDENTIAL R-3	
CONSTRUCTION TYPE: TYPE VB	

INDEX			
MODEL 'GALEN'			
0	TITLE SHEET / COVER SHEET	1 E	FRONT ELEVATION 'E'
1 A	FRONT ELEVATION 'A'	1.1 E	ROOF PLAN 'E'
1.1 A	ROOF PLAN 'A'	2 E	SIDE AND REAR ELEVATIONS 'E'
2 A	SIDE AND REAR ELEVATIONS 'A'	3 MS E	MONOLITHIC SLAB PLAN 'E'
3 MS A	MONOLITHIC SLAB PLAN 'A'	3 SW E	STEM WALL PLAN 'E'
3 SW A	STEM WALL PLAN 'A'	3 BS E	BASEMENT PLAN 'E'
3 BS A	BASEMENT PLAN 'A'	4 E	1ST FLOOR PLAN 'E'
4 A	1ST FLOOR PLAN 'A'	5 E	2ND FLOOR PLAN 'E'
5 A	2ND FLOOR PLAN 'A'		
1 B	FRONT ELEVATION 'B'	1 F	FRONT ELEVATION 'F'
1.1 B	ROOF PLAN 'B'	1.1 F	ROOF PLAN 'F'
2 B	SIDE AND REAR ELEVATIONS 'B'	2 F	SIDE AND REAR ELEVATIONS 'F'
3 MS B	MONOLITHIC SLAB PLAN 'B'	3 MS F	MONOLITHIC SLAB PLAN 'F'
3 SW B	STEM WALL PLAN 'B'	3 SW F	STEM WALL PLAN 'F'
3 BS B	BASEMENT PLAN 'B'	3 BS F	BASEMENT PLAN 'F'
4 B	1ST FLOOR PLAN 'B'	4 F	1ST FLOOR PLAN 'F'
5 B	2ND FLOOR PLAN 'B'	5 F	2ND FLOOR PLAN 'F'
1 C	FRONT ELEVATION 'C'		
1.1 C	ROOF PLAN 'C'	1 A S	BUILDING SECTIONS
2 C	SIDE AND REAR ELEVATIONS 'C'	1.1 A S	BUILDING SECTIONS
3 MS C	MONOLITHIC SLAB PLAN 'C'	2.1	OPTIONAL ELEVATIONS
3 SW C	STEM WALL PLAN 'C'	6	1ST FLOOR UTILITY PLAN
3 BS C	BASEMENT PLAN 'C'	7	2ND FLOOR UTILITY PLAN
4 C	1ST FLOOR PLAN 'C'		
5 C	2ND FLOOR PLAN 'C'		
1 D	FRONT ELEVATION 'D'		
1.1 D	ROOF PLAN 'D'		
2 D	SIDE AND REAR ELEVATIONS 'D'		
3 MS D	MONOLITHIC SLAB PLAN 'D'	54	ARCHITECTURAL SHEETS
3 SW D	STEM WALL PLAN 'D'		
3 BS D	BASEMENT PLAN 'D'		
4 D	1ST FLOOR PLAN 'D'		
5 D	2ND FLOOR PLAN 'D'		
ALL CONSULTANT DRAWINGS ACCOMPANYING THESE ARCHITECTURAL DRAWINGS HAVE NOT BEEN PREPARED BY OR UNDER THE DIRECTION OF GMD DESIGN GROUP, INC. GMD DESIGN GROUP INC. THEREFORE ASSUMES NO LIABILITY FOR THE COMPLETENESS OR CORRECTNESS OF THESE DRAWINGS.			

EXPRESS HOMES

40' SERIES

MODEL 'GALEN-RH'

Cross Creek
Lot 5
Spring Lake, NC 28390

PLAN CHANGES:	
DATE:	DESCRIPTION:
03.30.23	INITIAL PLAN RELEASE
07.04.23	ELECTRICAL REVISIONS
01.19.24	ADDED BASEMENT FOUNDATION
11.08.24	COUNTY REVISIONS

CONSULTANTS:			

GENERAL NOTES DESIGNER NORTH CAROLINA:			BUILDER SET:		AREA CALCULATIONS:	
THESE DOCUMENTS ARE THE PROPERTY OF THE DESIGNER AND SHALL NOT BE COPIED, DUPLICATED, ALTERED, MODIFIED OR REVISED IN ANY WAY WITHOUT THE EXPRESSED WRITTEN APPROVAL OF THE DESIGNER.			THE SCOPE OF THIS SET OF PLANS IS TO PROVIDE A "BUILDER'S SET" OF CONSTRUCTION DOCUMENTS AND GENERAL NOTES HEREINAFTER REFERRED TO AS "PLANS". THIS SET OF PLANS IS SUFFICIENT TO OBTAIN A BUILDING PERMIT; HOWEVER, ALL MATERIALS AND METHODS OF CONSTRUCTION NECESSARY TO COMPLETE THE PROJECT ARE NOT NECESSARILY DESCRIBED. THE PLANS DELINEATE AND DESCRIBE ONLY LOCATIONS, DIMENSIONS, TYPES OF MATERIALS, AND GENERAL METHODS OF ASSEMBLING OR FASTENING. THEY ARE NOT INTENDED TO SPECIFY PARTICULAR PRODUCTS OR OTHER METHODS OF ANY SPECIFIC MATERIALS, PRODUCT OR METHOD. THE IMPLEMENTATION OF THE PLANS REQUIRES A CLIENT / CONTRACTOR THOROUGHLY KNOWLEDGEABLE WITH THE APPLICABLE BUILDING CODES AND METHODS OF CONSTRUCTION SPECIFIC TO THIS PRODUCT TYPE AND TYPE OF CONSTRUCTION.		MODEL 'GALEN' SQUARE FOOTAGES	
CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE SITE AND ALL INCONSISTENCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DEVELOPER AND THE DESIGNER BEFORE PROCEEDING WITH WORK.			CONSTRUCTION REQUIREMENTS AND QUALITY: PROVIDE WORK OF THE SPECIFIC QUALITY, WHERE QUALITY LEVEL IS NOT INDICATED, PROVIDE WORK OF QUALITY CUSTOMARY IN SIMILAR TYPES OF WORK. WHERE THE PLANS AND SPECIFICATIONS, CODES, LAWS, REGULATIONS, MANUFACTURER'S RECOMMENDATIONS OR INDUSTRY STANDARDS REQUIRE WORK OF HIGHER QUALITY OR PERFORMANCE, PROVIDE WORK COMPLYING WITH THOSE REQUIREMENTS AND QUALITY. WHERE TWO OR MORE QUALITY PROVISIONS OF THOSE REQUIREMENTS CONFLICT WITH THE MOST STRINGENT REQUIREMENT; WHERE REQUIREMENTS ARE DIFFERENT BUT APPARENTLY EQUAL, AND WHERE IT IS UNCERTAIN WHICH REQUIREMENT IS MOST STRINGENT, OBTAIN CLARIFICATION FROM THE GMD DESIGN GROUP BEFORE PROCEEDING.		AREA	ELEV 'D'/E'/F'
ANY ERRORS OR OMISSIONS FOUND IN THESE DRAWINGS SHALL BE BROUGHT TO DEVELOPERS AND DESIGNERS ATTENTION IMMEDIATELY.			WINDOW SUPPLIER TO VERIFY AT LEAST ONE WINDOW IN ALL BEDROOMS TO HAVE A CLEAR OPENABLE AREA OF 4.0 SQ FT. THE MINIMUM NET CLEAR OPENING HEIGHT SHALL BE 22" AND THE MINIMUM NET CLEAR OPENING WIDTH SHALL BE 20". GLAZING TOTAL AREA OF NOT LESS THAN 5.0 SQ FT IN THE CASE OF A GROUND WINDOW AND NOT LESS THAN 5.7 SQ FT IN THE CASE OF AN UPPER STORY WINDOW. (PER NCRC SECTION R310.1.1)		1st FLOOR	982 SF
DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.			ALL HANDRAIL BALLUSTERS TO BE SPACED SUCH THAT A 4" SPHERE CANNOT PASS BETWEEN BALLUSTERS. (PER LOCAL CODES.)		2nd FLOOR	1358 SF
ALL DIMENSIONS ARE TO FACE OF STUD OR TO FACE OF FRAMING UNLESS OTHERWISE NOTED.			PROVIDE STAIR HANDRAILS AND GUARDRAILS PER LOCAL CODES.		TOTAL LIVING	2340 SF
ALL TRUSS DRAWINGS TO BE REVIEWED AND APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO ISSUANCE OF BUILDING PERMIT.					GARAGE	416 SF
ALL OR EQUAL SUBSTITUTIONS MUST BE SUBMITTED TO AND APPROVED BY CITY BUILDING OFFICIAL PRIOR TO INSTALLATION.					PORCH	87 SF
ALL ANGLED PARTITIONS ARE 45 DEGREES UNLESS OTHERWISE NOTED.					OPT. BASEMENT	926 SF
PROVIDE FIREBLOCKING. (PER LOCAL CODES.)					**BASEMENT AREA IS TAKEN TO INSIDE OF CONCRETE WALL**	
ALL ELECTRICAL AND MECHANICAL EQUIPMENT AND METERS ARE SUBJECT TO RELOCATION DUE TO FIELD CONDITIONS, CONTRACTOR TO VERIFY.						

NO:	DATE:	REVISION:
1	01.19.24	
2	11.08.24	COUNTY REVISIONS

PROFESSIONAL SEAL:
PROJECT TITLE:

40' Series

CLIENTS NAME:
Express HOMES

PROJECT NO: GMD17049
SHEET TITLE:
TITLE SHEET
PRINT DATE:
March 30, 2023
SHEET NO:
0

FOR CONSTRUCTION

NOTES:

- GRADE CONDITIONS MAY VARY FOR INDIVIDUAL SITE FROM THAT SHOWN. BUILDER SHALL VERIFY AND COORDINATE PER ACTUAL SITE CONDITIONS.

- WINDOW HEAD HEIGHTS:
1ST FLOOR = 6'-8" UNO. ON ELEVATIONS.
2ND FLOOR = 7'-0" UNO. ON ELEVATIONS.

- ROOFING: PITCHED SHINGLES PER DEVELOPER.

- WINDOWS: MANUFACTURER PER DEVELOPER. DIVIDED LITES AS SHOWN ON THE EXTERIOR ELEVATIONS.

- ENTRY DOOR: AS SELECTED BY DEVELOPER.

- GARAGE DOORS: AS SELECTED BY DEVELOPER, RAISED PANEL AS SHOWN.

- ALL EXTERIOR MATERIALS TO BE INSTALLED PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

- PROTECTION AGAINST DECAY:
(ALL PORTIONS OF A PORCH, SCREEN PORCH OR DECK FROM THE BOTTOM OF THE HEADER DOWN, INCLUDING POST, RAILS, PICKETS, STEPS AND FLOOR STRUCTURE.)

- INSULATION: PER TABLE N102.1.2.
EXTERIOR WALLS: R-15 BATTS MINIMUM. VERIFY
CEILING WITH ATTIC ABOVE: R-30 BATTS MINIMUM. VERIFY
FLOOR OVER GARAGE: R-19 BATTS MINIMUM. VERIFY
ATTIC KNEEWALL: R-19 BATTS MINIMUM. VERIFY
CRAWL SPACE FLOORING: R-19 BATTS MINIMUM. VERIFY

KEY NOTES:

MASONRY:

1

ADHERED STONE VENEER AS SELECTED BY DEVELOPER. HEIGHT AS NOTED.

2

MASONRY FULL BRICK AS SELECTED BY DEVELOPER. HEIGHT AS NOTED.

3

MASONRY FULL STONE AS SELECTED BY DEVELOPER. HEIGHT AS NOTED.

4

8" SOLDIER COURSE.

5

ROWLOCK COURSE

6

N/A

TYPICALS:

7

CORROSION RESISTANT SCREEN LOUVERED VENTS, SIZE AS NOTED.

8

CODE APPROVED TERMINATION CHIMNEY CAP.

4

CORROSION RESISTANT ROOF TO WALL FLASHING. CODE COMPLIANT FLASHING PER NRC R405.2.B.3

10

STANDING SEAM METAL ROOF, INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

11

DECORATIVE WROUGHT IRON. SEE DETAILS.

SIDING:

12

VINYL SHAKE SIDING PER DEVELOPER WITH VINYL CORNER TRIM PER DEVELOPER.
(AT SPECIFIED LOCATIONS:
FIBER CEMENT SHAKE SIDING PER DEVELOPER W/ 1X4 CORNER TRIM BOARD.)

13

VINYL LAP SIDING PER DEVELOPER WITH VINYL CORNER TRIM PER DEVELOPER.
(AT SPECIFIED LOCATIONS:
FIBER CEMENT LAP SIDING PER DEVELOPER W/ 1X4 CORNER TRIM BOARD.)

14

VINYL WAVY SIDING PER DEVELOPER WITH VINYL CORNER TRIM PER DEVELOPER.
(AT SPECIFIED LOCATIONS:
FIBER CEMENT WAVY SIDING PER DEVELOPER W/ 1X4 CORNER TRIM BOARD.)

15

VINYL BOARD AND BATT SIDING PER DEVELOPER WITH VINYL CORNER TRIM PER DEVELOPER.
(AT SPECIFIED LOCATIONS:
FIBER CEMENT PANEL SIDING W/ 1X3 BATTS AT 12" O.C. PER DEVELOPER W/ 1X4 CORNER TRIM BOARD.)

16

VINYL TRIM SIZE AS NOTED
(AT SPECIFIC LOCATIONS:
1X FIBER CEMENT TRIM OR EQUAL, UNO. SIZE AS NOTED

17

FYPON SHUTTERS, TYPE AS SHOWN. SIZE AS NOTED.
(AT SPECIFIC LOCATIONS: FALSE VINYL SHUTTERS, TYPE AS SHOWN. SIZE AS NOTED.)

ALL WINDOWS WHOSE OPENING IS LESS THAN 24" ABOVE THE FINISH FLOOR AND WHOSE OPENING IS GREATER THAN 72" ABOVE THE OUTSIDE WALKING SURFACE MUST HAVE WINDOW OPENING LIMITING DEVICES COMPLYING WITH THE NRC SECTION R312.2.1 AND R312.2.2.



NO.	DATE:	REVISION:
1	01.14.24	
2	11.08.24	COUNTY REVISIONS

PROFESSIONAL SEAL:

PROJECT TITLE:

40' Series

CLIENTS NAME:



PROJECT NO: GMD17049

SHEET TITLE:
'GALEN' - LH
EXTERIOR
ELEVATIONS
'4EGF-F'

PRINT DATE:
March 30, 2023

SHEET NO:

1F

FOR
CONSTRUCTION

ATTIC VENT CALCULATION FOR PLAN 'GALEN': 1:150 RATIO.

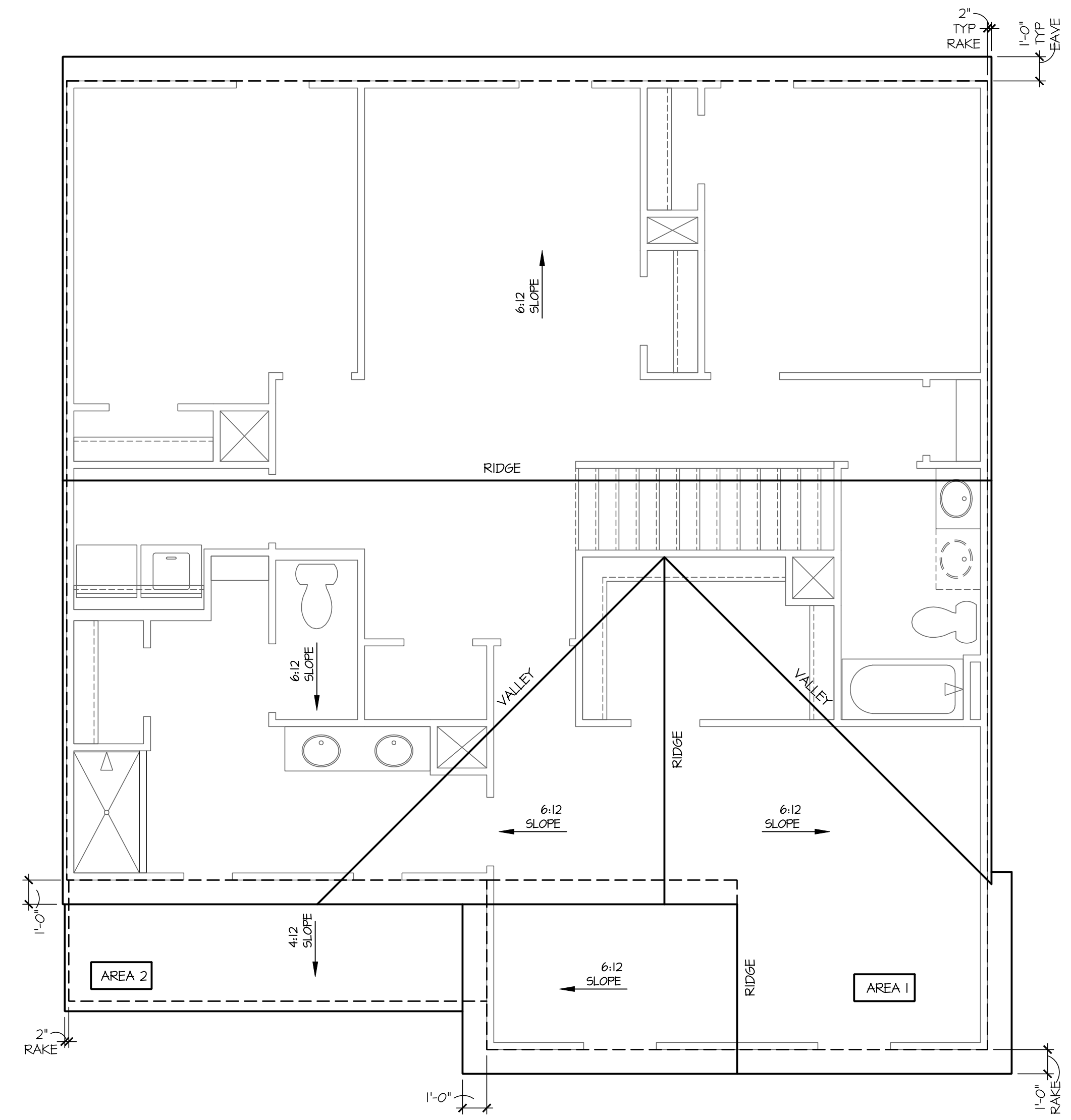
THE NET FREE VENTILATING AREA SHALL NOT BE LESS THAN 1/150 OF THE AREA OF THE SPACE VENTILATED, PROVIDED THAT AT LEAST 50 PERCENT AND NOT MORE THAN 80 PERCENT OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED AT LEAST 3 FEET ABOVE THE EAVE OR CORNICE VENTS WITH THE BALANCE OF THE REQUIRED VENTILATION PROVIDED BY EAVE OR CORNICE VENTS. EXCEPTIONS: 1. EXCLOSED ATTIC/RAFTER SPACES REQUIRING LESS THAN 1 SQ FT OF VENTILATION MAY BE VENTED WITH CONTINUOUS SOFFIT VENTILATION ONLY. 2. ENCLOSED ATTIC/RAFTER SPACES OVER UNCONDITIONED SPACE MAY BE VENTED WITH CONTINUOUS SOFFIT VENT ONLY. GENERAL CONTRACTOR SHALL VERIFY THE NET FREE VENTILATION OF THE VENT PRODUCT SELECTED BY OWNER. VERIFY WITH MANUFACTURER OF HIGH AND LOW VENTS TO BE USED FOR MINIMUM CALCULATED VENTS REQUIRED. THE REQUIRED VENTILATION SHALL BE MAINTAINED. PROVIDE INSULATION STOP SUCH THAT INSULATION DOES NOT OBSTRUCT FREE AIR MOVEMENT AS REQUIRED BY THE BUILDING OFFICIAL. ALL OVERLAP FRAMED ROOF AREAS SHALL HAVE OPENINGS BETWEEN THE ADJACENT ATTICS IN THE ROOF SHEATHING (AS ALLOWED BY THE STRUCTURAL ENGINEER) TO ALLOW PASSAGE AND ATTIC VENTILATION BETWEEN THE TWO OR ISOLATED ATTIC SPACES SHALL BE VENTED INDEPENDENTLY TO CBC REQUIREMENTS. PER DEVELOPER, AT ALL CANTILEVERED FLOORS, CANTILEVERED ARCHITECTURAL POP-OUTS, AND ANY DOUBLE FRAMING PROJECTIONS THAT ARE SEPARATED FROM THE VENTING CALCULATIONS SHOWN ABOVE, PROVIDE A CONTINUOUS 2" CORROSION RESISTANT SOFFIT VENT AT UNDERSIDE OF FRAMED ELEMENT.	(PER SECTION R806.2) 1 SQUARE INCH VENT FOR EVERY 150 SQUARE INCHES OF CEILING *144 SQ. IN. = 1 SQ. FT. BLDG. CEILING (SF) X 144 = BLDG (SQ. IN.) BLDG. (SQ. IN.) / 150 = SQ. IN. OF VENT REQUIRED ROOF AREA 1:= 1344 SF 1344 SQ. FT. X 144 = 201456 SQ. IN. 201456 SQ. IN. / 150 = 1343.04 SQ. IN. OF VENT REQ'D ROOF AREA 2:= 30 SF 30 SQ. FT. X 144 = 4320 SQ. IN. 4320 SQ. IN. / 150 = 28.80 SQ. IN. OF VENT REQ'D
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NOTES:	
- ALL ROOF DRAINAGE SHALL BE PIPED TO STREET OR APPROVED DRAINAGE FACILITY.	- TRUSS MANUFACTURER SHALL SUBMIT STRUCTURAL CALCS AND SHOP DRAWINGS TO THE BUILDER'S GENERAL CONTRACTOR AND BUILDING DEPARTMENT FOR REVIEW PRIOR TO FABRICATIONS.
- DASHED LINES INDICATE WALL BELOW.	- ALL PLUMBING VENTS SHALL BE COMBINED INTO A MINIMUM AMOUNT OF ROOF PENETRATIONS. ALL ROOF PENETRATIONS SHALL OCCUR TO THE REAR OF THE MAIN RIDGE.
- LOCATE GUTTER AND DOWNSPOUTS PER BUILDER.	
- PITCHED ROOFS AS NOTED.	

ATTIC VENT CALCULATION FOR PLAN 'GALEN': 1:300 RATIO.

AS AN ALTERNATE TO THE 1/150 RATIO LISTED ABOVE, THE NET FREE CROSS-VENTILATION AREA MAY BE REDUCED TO 1/300 WHEN A CLASS I OR II VAPOR RETARDER IS INSTALLED ON THE WARM - IN - WINTER SIDE OF THE CEILING. GENERAL CONTRACTOR SHALL VERIFY THE NET FREE VENTILATION OF THE VENT PRODUCT SELECTED BY OWNER. VERIFY WITH MANUFACTURER OF HIGH AND LOW VENTS TO BE USED FOR MINIMUM CALCULATED VENTS REQUIRED. THE REQUIRED VENTILATION SHALL BE MAINTAINED. PROVIDE INSULATION STOP SUCH THAT INSULATION DOES NOT OBSTRUCT FREE AIR MOVEMENT AS REQUIRED BY THE BUILDING OFFICIAL. ALL OVERLAP FRAMED ROOF AREAS SHALL HAVE OPENINGS BETWEEN THE ADJACENT ATTICS IN THE ROOF SHEATHING (AS ALLOWED BY THE STRUCTURAL ENGINEER) TO ALLOW PASSAGE AND ATTIC VENTILATION BETWEEN THE TWO OR ISOLATED ATTIC SPACES SHALL BE VENTED INDEPENDENTLY TO CBC REQUIREMENTS. PER DEVELOPER, AT ALL CANTILEVERED FLOORS, CANTILEVERED ARCHITECTURAL POP-OUTS, AND ANY DOUBLE FRAMING PROJECTIONS THAT ARE SEPARATED FROM THE VENTING CALCULATIONS SHOWN ABOVE, PROVIDE A CONTINUOUS 2" CORROSION RESISTANT SOFFIT VENT AT UNDERSIDE OF FRAMED ELEMENT.	(PER SECTION R806.2) 1 SQUARE INCH VENT FOR EVERY 300 SQUARE INCHES OF CEILING *144 SQ. IN. = 1 SQ. FT. BLDG. CEILING (SF) X 144 = BLDG (SQ. IN.) BLDG. (SQ. IN.) / 300 = SQ. IN. OF VENT REQUIRED SQ. IN. OF VENT REQUIRED / 2 = 50% AT HIGH & 50% AT LOW. ROOF AREA 1:= 1344 SF 1344 SQ. FT. X 144 = 201456 SQ. IN. 201456 SQ. FT. / 300 = 671.52 SQ. IN. OF VENT REQ'D 671.52 SQ. IN. / 2 = 335.76 SQ. IN. 335.76 SQ. IN. OF VENT AT HIGH & 335.76 SQ. IN. OF VENT AT LOW REQUIRED. ROOF AREA 2:= 30 SF 30 SQ. FT. X 144 = 4320 SQ. IN. 4320 SQ. FT. / 300 = 14.40 SQ. IN. OF VENT REQ'D 14.40 SQ. IN. / 2 = 7.20 SQ. IN. 7.20 SQ. IN. OF VENT AT HIGH & 7.20 SQ. IN. OF VENT AT LOW REQUIRED.	AT SINGLE FAMILY DETACHED PLANS: PREFINISHED VENTED SOFFIT AT EAVE PER MANUFACTURER. (VERIFY FIRE SEPARATION DISTANCE FOR SOFFIT PROTECTION PER NCRC SECTION R302.1.1 AND TABLE R302.1)
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BUILDER TO PROVIDE (2) LAYERS OF UNDERLAYMENT AT ANY ROOF W/ A SLOPE FROM 2:12 TO LESS THAN 4:12



Roof Plan 'F'

SCALE: 1/4"=1'-0" AT 22"x34" LAYOUT 1/8"=1'-0" AT 11"x17" LAYOUT

NO.	DATE:	REVISION:
1	01.14.24	
2	11.08.24	COUNTY REVISIONS

PROFESSIONAL SEAL:

PROJECT TITLE:

40' Series

CLIENTS NAME:



PROJECT NO: GMD17049

SHEET TITLE:

'GALEN' - LH

ROOF PLAN

'4EGF-F'

PRINT DATE:

March 30, 2023

SHEET NO:

1.1 F

FOR CONSTRUCTION

NOTES:

- GRADE CONDITIONS MAY VARY FOR INDIVIDUAL SITE FROM THAT SHOWN. BUILDER SHALL VERIFY AND COORDINATE PER ACTUAL SITE CONDITIONS.

- WINDOW HEAD HEIGHTS:
1ST FLOOR = 6'-8" U.N.O. ON ELEVATIONS.
2ND FLOOR = 7'-0" U.N.O. ON ELEVATIONS.

- ROOFING: PITCHED SHINGLES PER DEVELOPER.

- WINDOWS: MANUFACTURER PER DEVELOPER. DIVIDED LITES AS SHOWN ON THE EXTERIOR ELEVATIONS.

- ENTRY DOOR: AS SELECTED BY DEVELOPER.

- GARAGE DOORS: AS SELECTED BY DEVELOPER, RAISED PANEL AS SHOWN.

- ALL EXTERIOR MATERIALS TO BE INSTALLED PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

- PROTECTION AGAINST DECAY:
(ALL PORTIONS OF A PORCH, SCREEN PORCH OR DECK FROM THE BOTTOM OF THE HEADER DOWN, INCLUDING POST, RAILS, PICKETS, STEPS AND FLOOR STRUCTURE.)

- INSULATION: PER TABLE N102.1.2.
EXTERIOR WALLS: R-15 BATTS MINIMUM. VERIFY
CEILING WITH ATTIC ABOVE: R-38 BATTS MINIMUM. VERIFY
FLOOR OVER GARAGE: R-19 BATTS MINIMUM. VERIFY
ATTIC KNEEWALL: R-19 BATTS MINIMUM. VERIFY
CRAWL SPACE FLOORING: R-19 BATTS MINIMUM. VERIFY

KEY NOTES:

MASONRY:

1 ADHERED STONE VENEER AS SELECTED BY DEVELOPER. HEIGHT AS NOTED.

2 MASONRY FULL BRICK AS SELECTED BY DEVELOPER. HEIGHT AS NOTED.

3 MASONRY FULL STONE AS SELECTED BY DEVELOPER. HEIGHT AS NOTED.

4 8" SOLDIER COURSE.

5 RANLOCK COURSE

6 N/A

TYPICALS:

7 CORROSION RESISTANT SCREEN LOUVERED VENTS, SIZE AS NOTED.

8 CODE APPROVED TERMINATION CHIMNEY CAP.

9 CORROSION RESISTANT ROOF TO WALL FLASHING. CODE COMPLIANT FLASHING PER NRC R405.2.B.3

10 STANDING SEAM METAL ROOF, INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

11 DECORATIVE WROUGHT IRON. SEE DETAILS.

SIDING:

12 VINYL SHAKE SIDING PER DEVELOPER WITH VINYL CORNER TRIM PER DEVELOPER.
(AT SPECIFIED LOCATIONS:
FIBER CEMENT SHAKE SIDING PER DEVELOPER W/ 1X4 CORNER TRIM BOARD.)

13 VINYL LAP SIDING PER DEVELOPER WITH VINYL CORNER TRIM PER DEVELOPER.
(AT SPECIFIED LOCATIONS:
FIBER CEMENT LAP SIDING PER DEVELOPER W/ 1X4 CORNER TRIM BOARD.)

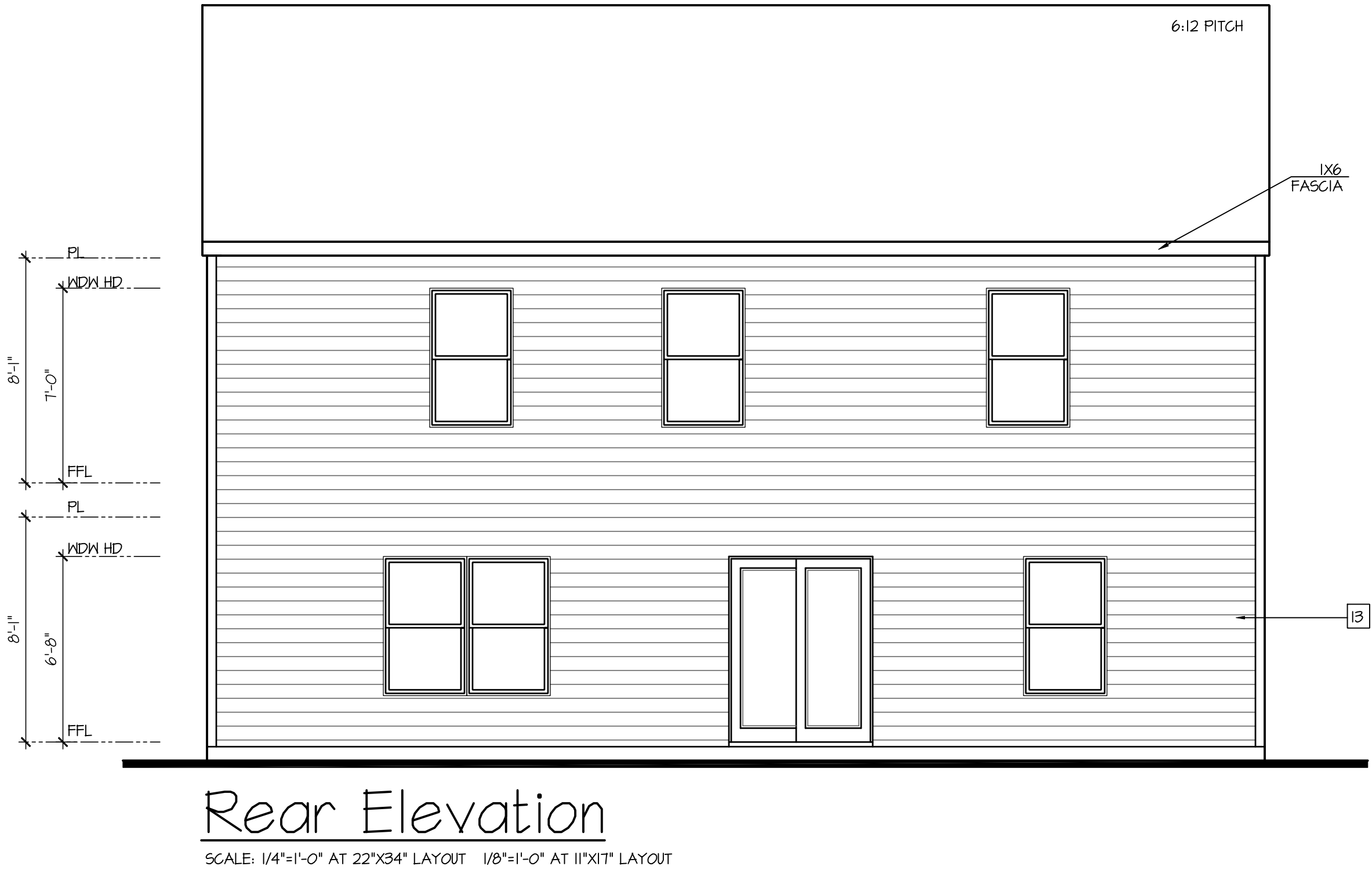
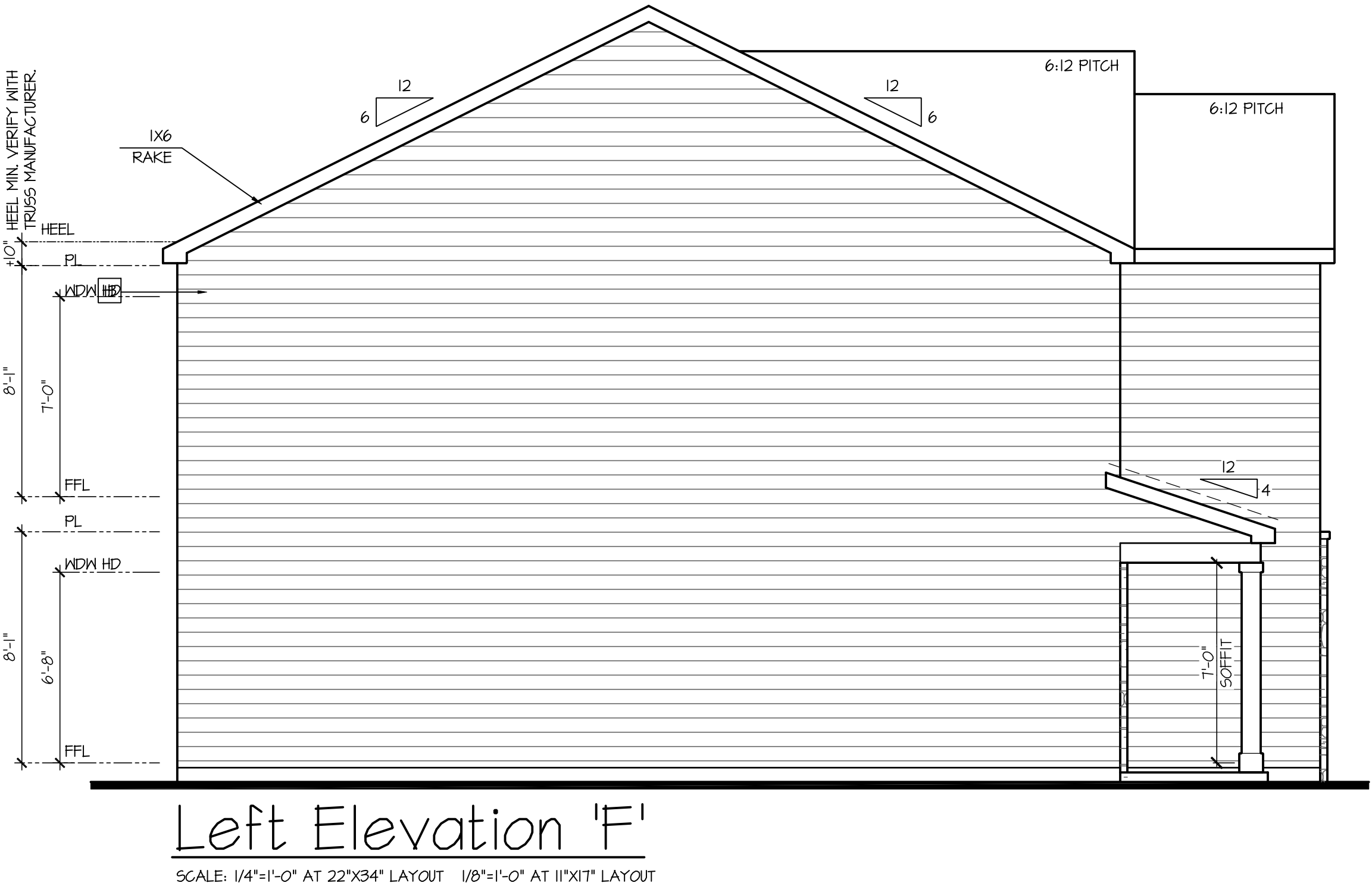
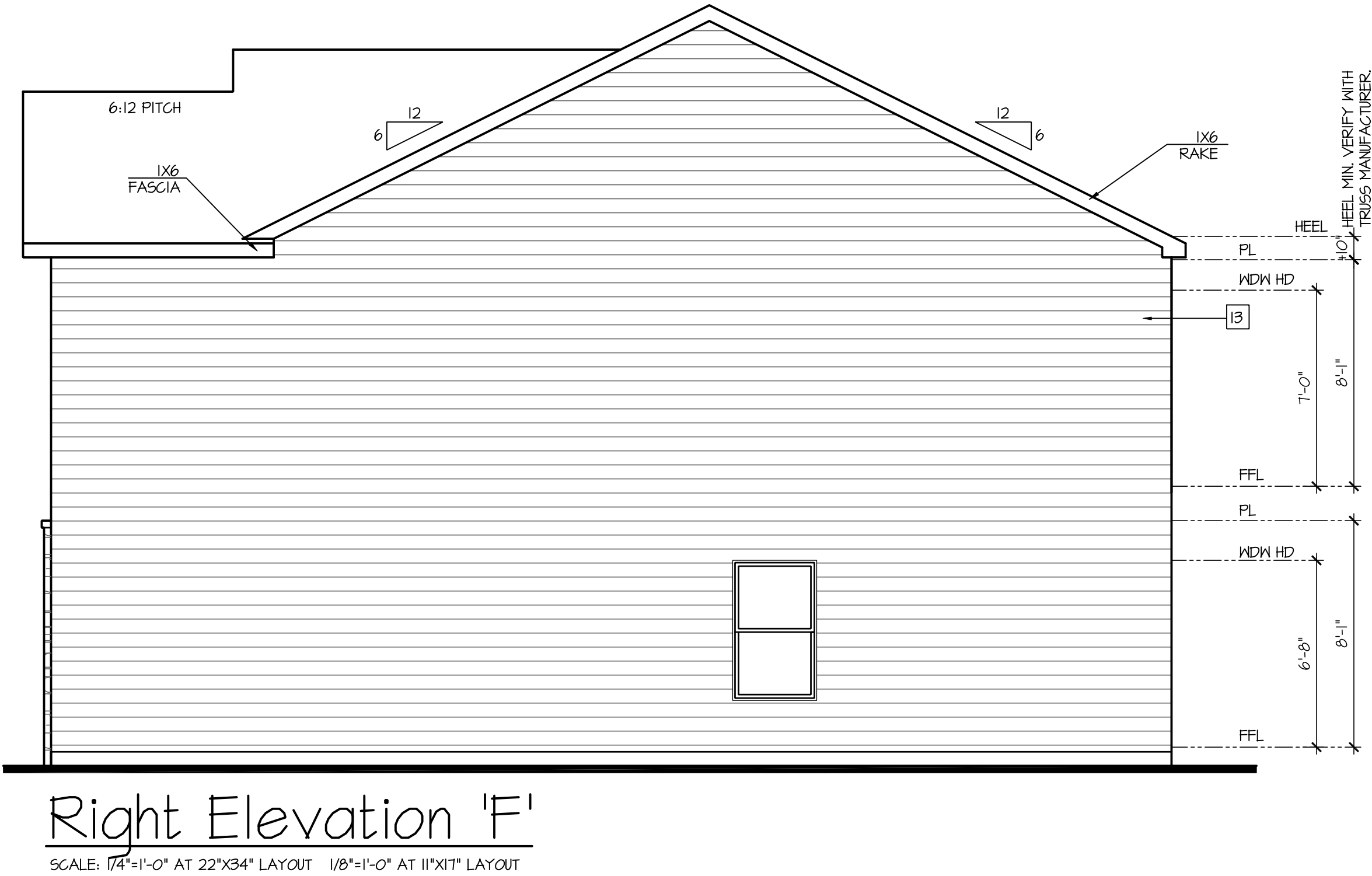
14 VINYL WAVY SIDING PER DEVELOPER WITH VINYL CORNER TRIM PER DEVELOPER.
(AT SPECIFIED LOCATIONS:
FIBER CEMENT WAVY SIDING PER DEVELOPER W/ 1X4 CORNER TRIM BOARD.)

15 VINYL BOARD AND BATT SIDING PER DEVELOPER WITH VINYL CORNER TRIM PER DEVELOPER.
(AT SPECIFIED LOCATIONS:
FIBER CEMENT PANEL SIDING W/ 1X3 BATTS AT 12" O.C. PER DEVELOPER W/ 1X4 CORNER TRIM BOARD.)

16 VINYL TRIM SIZE AS NOTED
(AT SPECIFIC LOCATIONS:
1X FIBER CEMENT TRIM OR EQUAL, U.N.O. SIZE AS NOTED

17 FYPON SHUTTERS, TYPE AS SHOWN. SIZE AS NOTED.
(AT SPECIFIC LOCATIONS: FALSE VINYL SHUTTERS, TYPE AS SHOWN. SIZE AS NOTED.)

ALL WINDOWS WHOSE OPENING IS LESS THAN 24" ABOVE THE FINISH FLOOR AND WHOSE OPENING IS GREATER THAN 12" ABOVE THE OUTSIDE WALKING SURFACE MUST HAVE WINDOW OPENING LIMITING DEVICES COMPLYING WITH THE NRC SECTION R312.2.1 AND R312.2.2.



NO.	DATE:	REVISION:
1	01.14.24	
2	11.08.24	COUNTY REVISIONS

PROFESSIONAL SEAL:

PROJECT TITLE:

40' Series

CLIENTS NAME:



PROJECT NO: GMD17049

SHEET TITLE:
'GALEN' - LH
EXTERIOR
ELEVATIONS
'4EGF-F'

PRINT DATE:
March 30, 2023

SHEET NO:

2F

FOR
CONSTRUCTION

- IRRIGATION SYSTEM SHALL BE DESIGNED TO PREVENT THE SATURATION OF SOIL ADJACENT TO BUILDING.
- THIS PERIMETER DIMENSION PLAN IS FOR DIMENSIONAL INFORMATION ONLY.
- SLOPE ALL STOOPS AND HARDSCAPE MATERIAL AWAY FROM BUILDING - TYPICAL.
- SLOPE GARAGE FLOOR 1/8" PER FOOT TO GARAGE DOOR OPENING.
- VERIFY CURB CUT BLOCKOUT WITH GARAGE DOOR MANUFACTURER.
- REFER TO CIVIL DRAWINGS FOR FINISH SURFACE ELEVATIONS.
- FINISH GRADE SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDING, REFER TO SOILS REPORT FOR ANY SPECIFIC REQUIREMENTS.
- REFER TO STRUCTURAL DRAWINGS FOR HOLD/DOWNS, FOOTING DETAILS, CURB THICKNESS, AND INFORMATION NOT SHOWN ON THIS PLAN.
- PLUMBING FIXTURES, VENT LOCATIONS, ETC. ARE APPROXIMATE. CONTRACTOR TO VERIFY COUNT AND LOCATION.
- VERIFY THE SUPPLY FOR SEPARATE CONDUITS TO ANY ISLAND FOR GAS, WATER OR ELECTRIC.
- VERIFY ALL DOOR THRESHOLD HEIGHTS TO HARD SURFACES.
Ø 1/4" MAX AT INSWING DOORS. (PER NCRC SECTION R311.3.1.)
- TYP STOOPT AT INSWING/SLIDER DOORS: 36" DEEP BY THE WIDTH OF THE DOOR SERVED, MINIMUM.
(PER NCRC SECTION R311.3) PROVIDE A SLIP-RESISTANT FINISH.
- FOR THE USE OF EXPOSED GAS WATER HEATERS IN THE GARAGE, PROTECT THE WATER HEATER WITH 3" DIA CONCRETE FILLED STEEL PIPE EMBEDDED INTO CONCRETE FOOTING.
- SOILS TREATMENT:
BORACARE TERMITE TO BE APPLIED TO FRAMING PER PRODUCT SPECIFICATIONS.
(PROVIDE CHEMICAL TREATMENT FOR PROTECTION FROM TERMITE INFESTATION
ACCORDING TO THE STANDARDS OF THE NC DEPT OF AGRICULTURE.)
- WOOD CONTACTING CONCRETE OR MASONRY OR LESS THAN CODE REQUIRED
SEPARATION TO GRADE SHALL BE PRESSURE TREATED OR FOUNDATION GRADE
REDWOOD. SET ALL EXTERIOR WALL SILLS IN MASTIC.



SCALE: 1/4"=1'-0" AT 22"X34" LAYOUT 1/8"=1'-0" AT 11"X17" LAYOUT

NO:	DATE:	REVISION:
①	01.19.24	COUNTY REVISIONS
②	11.08.24	

PROFESSIONAL SEAL:

PROJECT TITLE:

40' Series

CLIENTS NAME:



PROJECT NO: GMD17049

SHEET TITLE:
'GALEN' - LH
MONOLITHIC
SLAB
PLAN '4EGF-F'

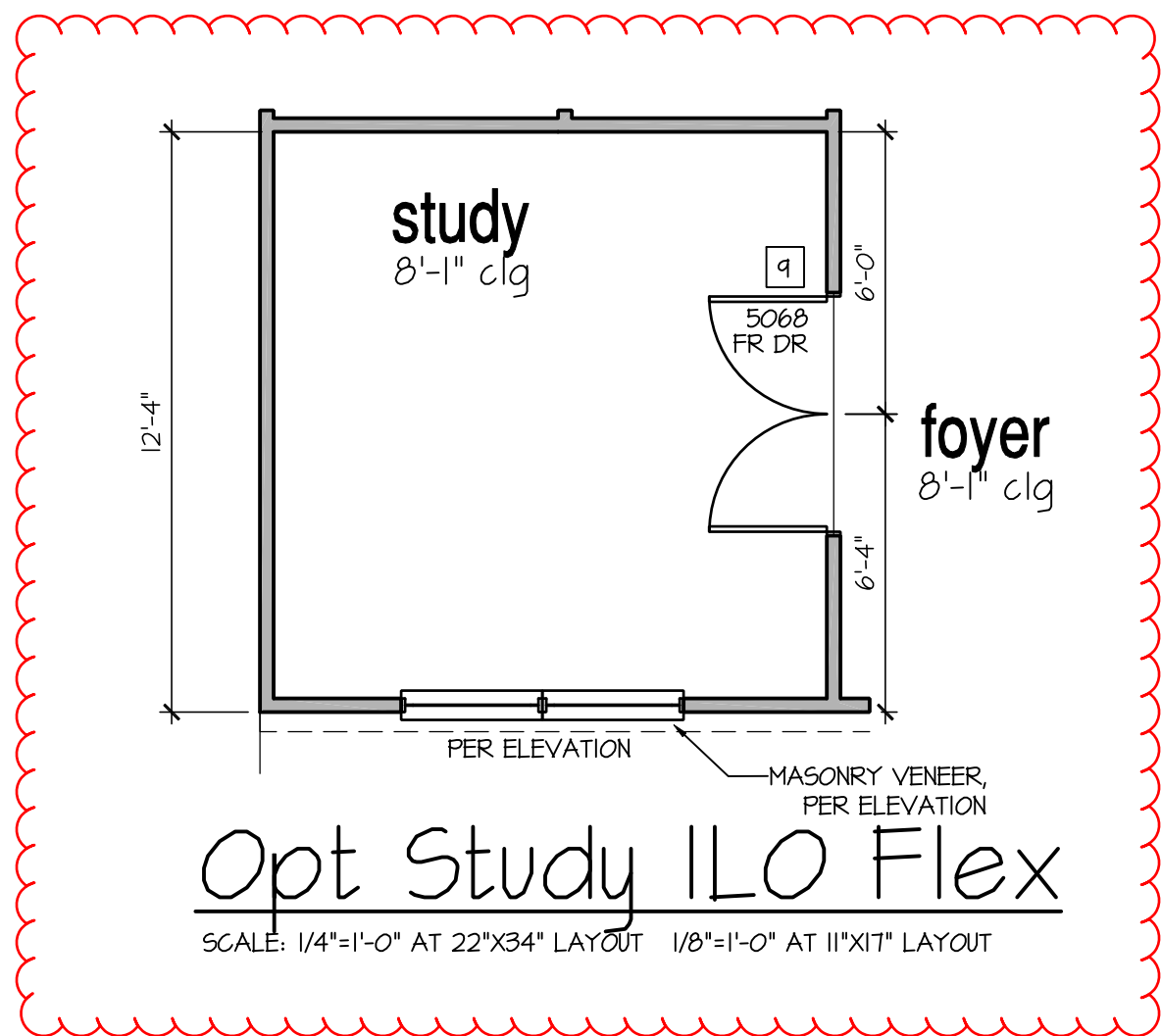
PRINT DATE

March 30, 2023

SHEET NO:

3 MS F

**FOR
CONSTRUCTION**



9'-1" STAIR NOTE: (USE 14" T.J. WITH 3/4" PLYWOOD SUBFLOOR) 15 TREADS AT 10" EACH VERIFY 16 RISERS AT +/- 1.13" = 123 3/4" TOTAL RISE VERIFY
8'-1" STAIR NOTE: (USE 14" T.J. WITH 3/4" PLYWOOD SUBFLOOR) 14 TREADS AT 10" EACH VERIFY 15 RISERS AT +/- 1.45" = 111 3/4" TOTAL RISE VERIFY

- FOR ADDITIONAL NOTES SEE GENERAL NOTES ON TITLE SHEET AND DETAILS.
- WINDOW HEAD HEIGHTS:
1ST FLOOR = 6'-8" U.N.O. ON ELEVATIONS.
2ND FLOOR = 7'-0" U.N.O. ON ELEVATIONS.

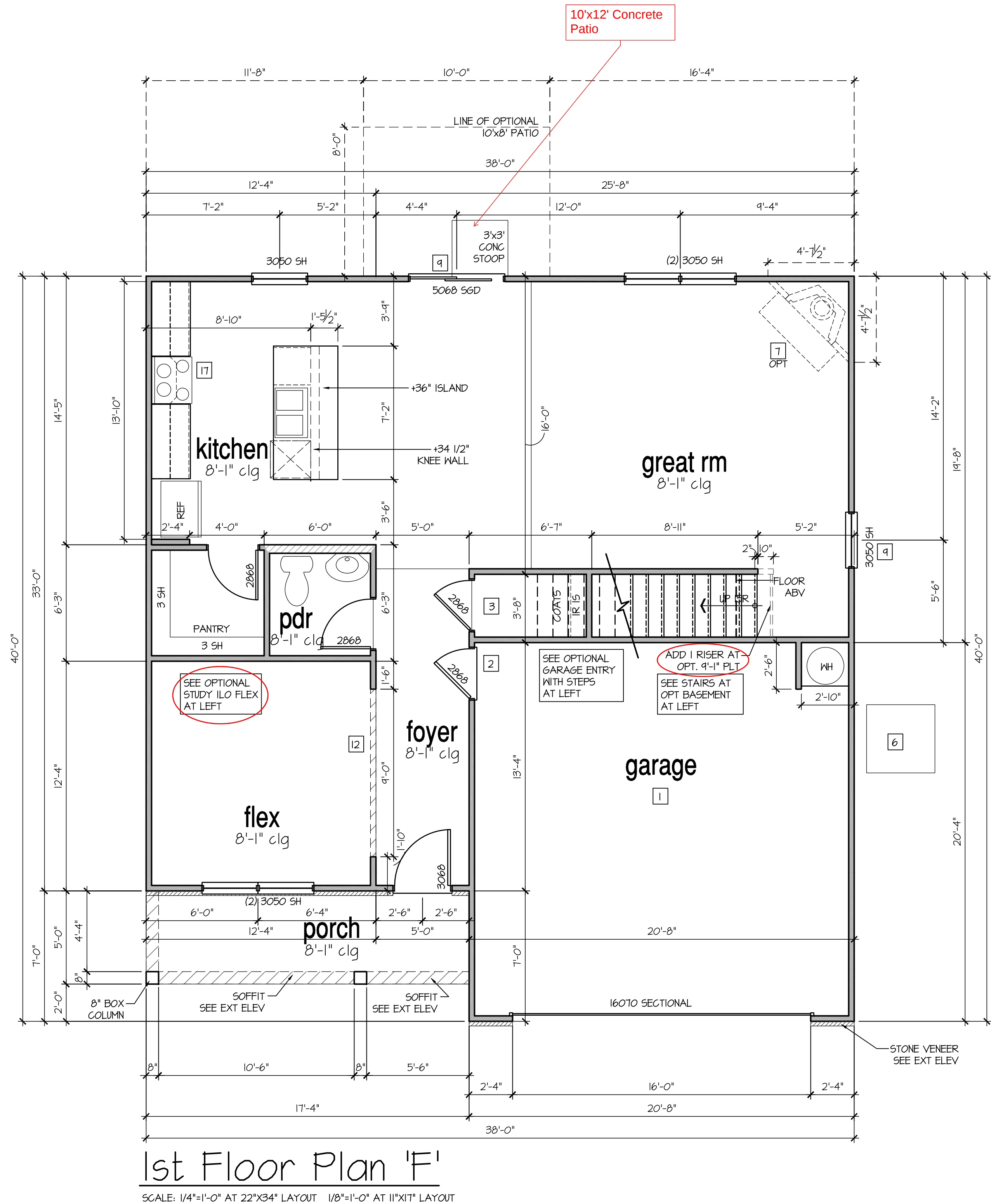
ALL DIMENSIONS TO WINDOWS AND DOORS ARE TO CENTERLINE.

WALL LEGEND:

FULL HEIGHT 2X4 WOOD STUD PARTITION	FULL HEIGHT 2X6 WOOD STUD PARTITION
BRICK / STONE VENEER	STUD WALL BELOW HEIGHT AND STUD SIZE AS NOTED
LOW GYPSUM BOARD WALL HEIGHT AND STUD SIZE AS NOTED	DRYWALL OPENING. HEIGHT AS NOTED ON PLAN.

KEY NOTES FOR NORTH CAROLINA:

- FIRE PROTECTION:
- HOUSE TO GARAGE FIRE SEPARATION. GARAGE/HOUSE SEPARATION AT VERTICAL SURFACES SHALL BE PROTECTED WITH ONE (1) LAYER 1/2" GYPSUM BOARD. (PER NCRC TABLE R302.6.) GARAGE/HOUSE SEPARATION AT HORIZONTAL SURFACES SHALL BE PROTECTED WITH ONE (1) LAYER 5/8" TYPE 'X' GYPSUM BOARD. (PER NCRC TABLE R302.6.)
 - HOUSE TO GARAGE DOOR SEPARATION. PROVIDE 1-3/8" SOLID CORE DOOR OR APPROVED 20 MINUTE RATED DOOR. (PER NCRC SECTION R302.5.1.)
 - BENEATH STAIRS AND LANDINGS, 1/2" GYPSUM BOARD ON WALLS AND CEILING OF ENCLOSED ACCESSIBLE AREAS. (PER NCRC SECTION R302.1.) IN CONCEALED SPACES BETWEEN STAIR STRINGERS PROVIDE FIREBLOCKING PER R302.11 MEPS.
 - GAS WATER HEATER ON 18" HIGH PLATFORM. (PER CHAPTER 5 NCRC-PLUMBING)
 - FAU 8'X8' PLATFORM. VERIFY WITH TRUSS MANUFACTURER. (6'-6" MIN. CLEAR HEIGHT TO HORIZONTAL MEMBERS, 2"X6" OVER 2"X4" BOTTOM CHORD, OF TRUSS, VERIFY W/ TRUSSES.)
 - A/C CONDENSER PAD. (VERIFY)
 - PRE-FABRICATED METAL FIREPLACE. INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
 - ATTIC ACCESS LARGE ENOUGH TO REMOVE LARGEST PIECE OF EQUIPMENT BUT NOT LESS THAN 30"x22". FIRE RATED ACCESS AS NOTED. (PER NCRC 801.1) ATTIC ACCESS LADDER. VERIFY LOCATION AND SIZE WITH TRUSSES. (25 1/2" X 54" SIZE) FOR GARAGE TO ATTIC SEPARATION PER NCRC 302.5.1 EXCEPTION.
 - TYPICALS:
[4] TEMPERED SAFETY GLASS. (PER NCRC SECTION 308.4)
[10] PLYWOOD SHELF ABOVE WITH DRYWALL FINISH OVER. HEIGHT AS NOTED.
[11] HALF WALL, HEIGHT AS NOTED.
 - INTERIOR SOFFITS: FFL = 8'-1" U.N.O. SFL = 7'-6" U.N.O.
BATHS:
[9] SHOWER. TEMPERED GLASS ENCLOSURE.
[14] TUB-SHOWER COMBO. TEMPERED GLASS ENCLOSURE.
[15] CERAMIC TILE SHOWER AND FLOOR. TEMPERED GLASS ENCLOSURE.
KITCHEN:
[17] 30" SLIDE-IN ELECTRICAL RANGE W/ HOOD AND MICRO ABV. VENT PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
[18] 30" GAS COOKTOP AND HOOD. VENT PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
[19] ELECTRIC OVEN WITH MICROWAVE OVEN.



NO.	DATE:	REVISION:
1	01.14.24	
2	11.08.24	COUNTY REVISIONS

PROFESSIONAL SEAL:

PROJECT TITLE:

40' Series

CLIENTS NAME:



PROJECT NO: GMD17049

SHEET TITLE:
'GALEN' - LH
1st FLOOR
PLAN '4EGF-F'

PRINT DATE:
March 30, 2023

SHEET NO:
4 F

FOR
CONSTRUCTION

9'-1" STAIR NOTE:
(USE 14" T.J. WITH 3/4" PLYWOOD SUBFLOOR)
15 TREADS AT 10" EACH VERIFY
16 RISERS AT +/- 1.13" = 123 3/4" TOTAL
RISE VERIFY

8'-1" STAIR NOTE:
(USE 14" T.J. WITH 3/4" PLYWOOD SUBFLOOR)
14 TREADS AT 10" EACH VERIFY
15 RISERS AT +/- 1.45" = 111 3/4" TOTAL
RISE VERIFY

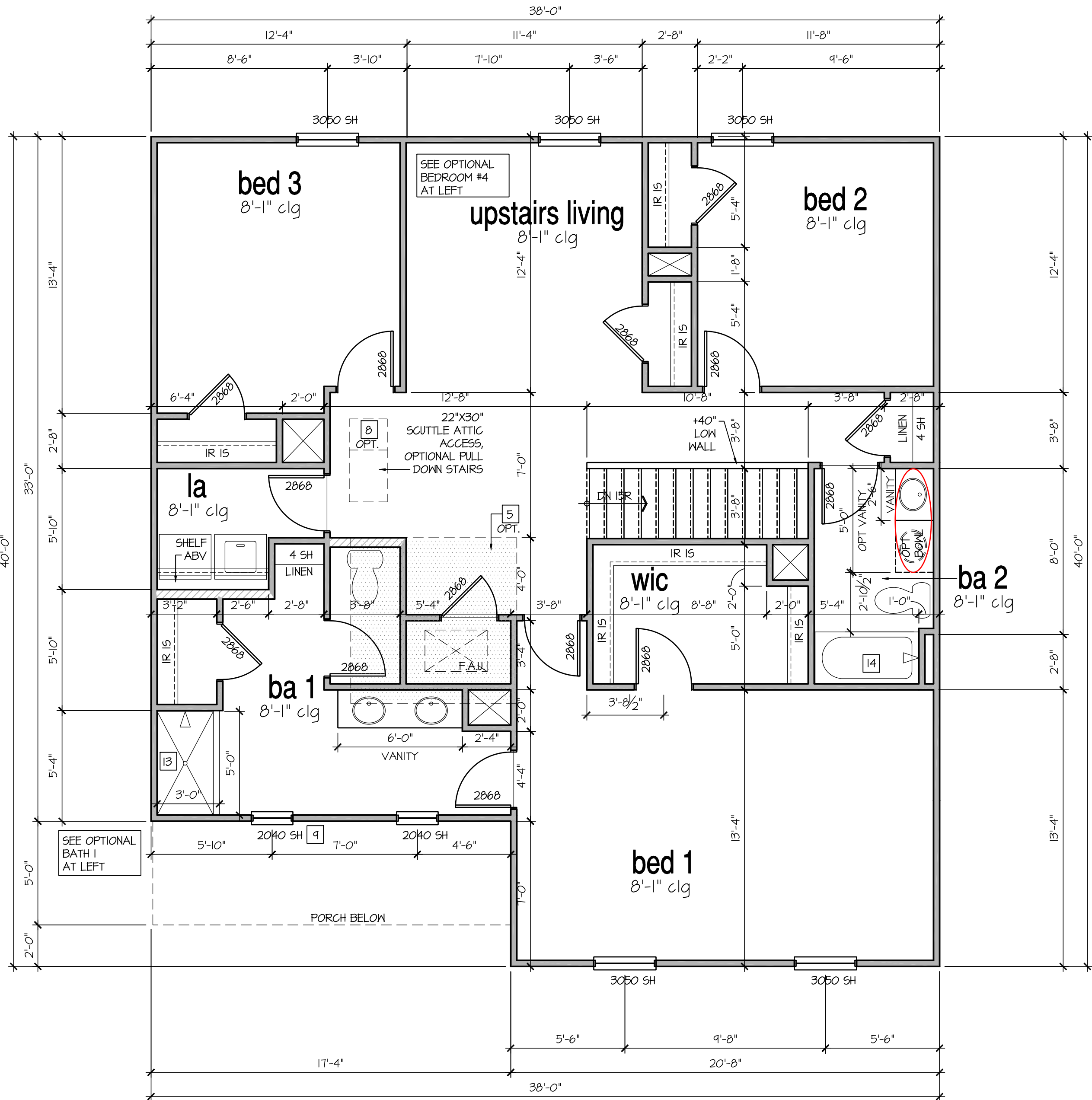
- FOR ADDITIONAL NOTES SEE GENERAL NOTES ON TITLE SHEET AND DETAILS.
- WINDOW HEAD HEIGHTS:
1ST FLOOR = 6'-8" U.N.O. ON ELEVATIONS.
2ND FLOOR = 7'-0" U.N.O. ON ELEVATIONS.

ALL DIMENSIONS TO WINDOWS AND DOORS ARE TO CENTERLINE.

WALL LEGEND:	
	FULL HEIGHT 2X4 WOOD STUD PARTITION
	FULL HEIGHT 2X6 WOOD STUD PARTITION
	BRICK / STONE VENEER
	LOW GYPSUM BOARD WALL HEIGHT AND STUD SIZE AS NOTED
	DRYWALL OPENING. HEIGHT AS NOTED ON PLAN.

KEY NOTES FOR NORTH CAROLINA:

- FIRE PROTECTION:
- [1] HOUSE TO GARAGE FIRE SEPARATION. GARAGE/HOUSE SEPARATION AT VERTICAL SURFACES SHALL BE PROTECTED WITH ONE (1) LAYER 1/2" GYPSUM BOARD. (PER NCRC TABLE R302.6.)
- [2] HOUSE TO GARAGE DOOR SEPARATION. PROVIDE 1-3/8" SOLID CORE DOOR OR APPROVED 20 MINUTE RATED DOOR. (PER NCRC SECTION R302.5.1.)
- [3] BENEATH STAIRS AND LANDINGS. 1/2" GYPSUM BOARD ON WALLS AND CEILING OF ENCLOSED ACCESSIBLE AREAS. (PER NCRC SECTION R302.1.) IN CONCEALED SPACES BETWEEN STAIR STRINGERS PROVIDE FIREBLOCKING PER R302.11
- [4] GAS WATER HEATER ON 18" HIGH PLATFORM. (PER CHAPTER 5 NCRC-PLUMBING)
- [5] FAU 8'X8' PLATFORM. VERIFY WITH TRUSS MANUFACTURER. (6'-6" MIN. CLEAR HEIGHT TO HORIZONTAL MEMBERS. 2'X6" OVER 2'X4" BOTTOM CHORD. OF TRUSS, VERIFY W/ TRUSSES.)
- [6] A/C CONDENSER PAD. (VERIFY)
- [7] PRE-FABRICATED METAL FIREPLACE. INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
- [8] ATTIC ACCESS LARGE ENOUGH TO REMOVE LARGEST PIECE OF EQUIPMENT BUT NOT LESS THAN 30"x22". FIRE RATED ACCESS AS NOTED. (PER NCRC 801.1) ATTIC ACCESS LADDER. VERIFY LOCATION AND SIZE WITH TRUSSES. (25 1/2" X 54" SIZE) FOR GARAGE TO ATTIC SEPARATION PER NCRC 302.5.1 EXCEPTION.
- TYPICALS:
- [9] TEMPERED SAFETY GLASS. (PER NCRC SECTION 308.4)
- [10] PLYWOOD SHELF ABOVE WITH DRYWALL FINISH OVER. HEIGHT AS NOTED.
- [11] HALF WALL, HEIGHT AS NOTED.
- [2] INTERIOR SOFFITS: FFL = 8'-1" U.N.O. SFL = 7'-6" U.N.O.
- BATHS:
- [3] SHOWER. TEMPERED GLASS ENCLOSURE.
- [14] TUB-SHOWER COMBO. TEMPERED GLASS ENCLOSURE.
- [5] CERAMIC TILE SHOWER AND FLOOR. TEMPERED GLASS ENCLOSURE.
- [6] ACRYLIC TUB W/ CERAMIC PLATFORM
- KITCHEN:
- [17] 30" SLIDE-IN ELECTRICAL RANGE W/ HOOD AND MICRO ABV. VENT PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
- [8] 30" GAS COOKTOP AND HOOD. VENT PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
- [19] ELECTRIC OVEN WITH MICROWAVE OVEN.



2nd Floor Plan 'F'

SCALE: 1/4"=1'-0" AT 22'X34" LAYOUT 1/8"=1'-0" AT 11"X17" LAYOUT

NO.	DATE:	REVISION:
1	01.14.24	
2	11.08.24	COUNTY REVISIONS

PROFESSIONAL SEAL:

PROJECT TITLE:

40' Series

CLIENTS NAME:



PROJECT NO: GMD17049

SHEET TITLE:
'GALEN' - LH
2nd FLOOR
PLAN '4EGF-F'

PRINT DATE:
March 30, 2023

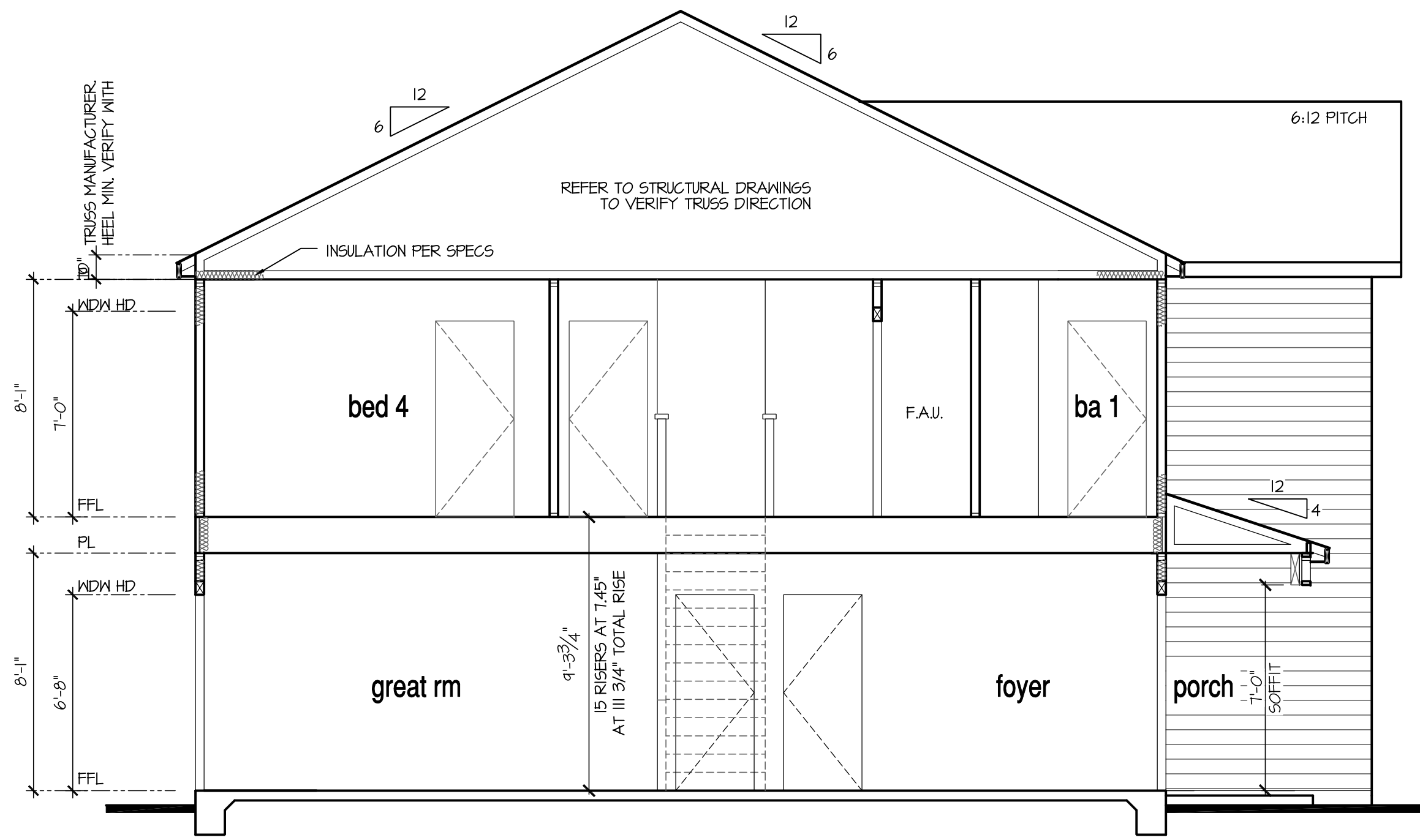
SHEET NO:
5 F

FOR
CONSTRUCTION

9'-1" STAIR NOTE:
(USE 14" TJI WITH 3/4" PLYWOOD SUBFLOOR)
15 TREADS AT 10" EACH VERIFY
16 RISERS AT +/- 1.13" = 123 3/4" TOTAL
RISE VERIFY

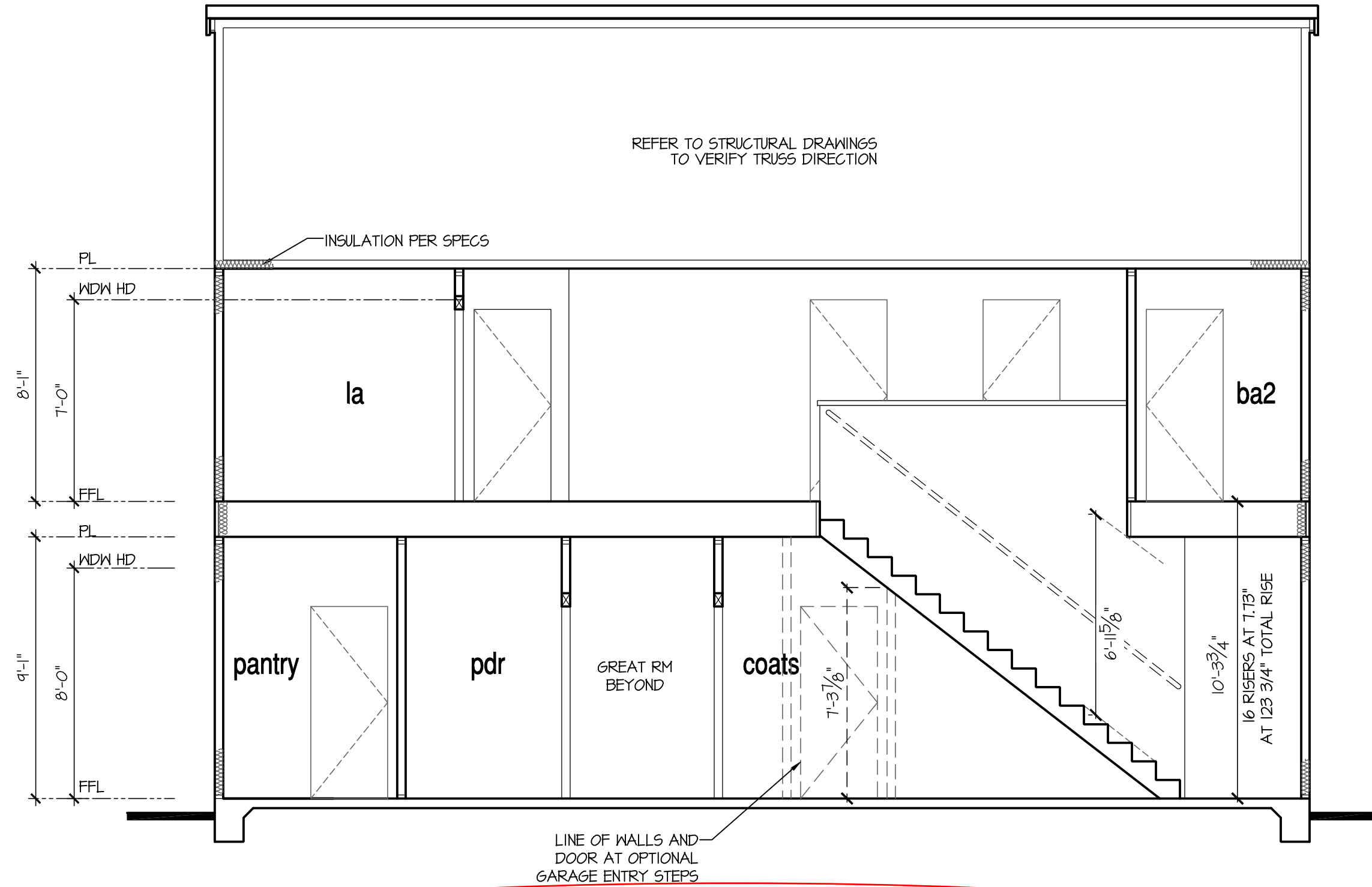
8'-1" STAIR NOTE:
(USE 14" TJI WITH 3/4" PLYWOOD SUBFLOOR)
14 TREADS AT 10" EACH VERIFY
15 RISERS AT +/- 1.45" = 111 3/4" TOTAL
RISE VERIFY

- NOTES:
- REFER TO FLOOR PLAN NOTES FOR TYPICAL FIRE PROTECTION NOTES AND LOCATIONS.
 - THESE BUILDING SECTIONS MAY VARY AT ALTERNATE ELEVATION STYLES AND AT "PLAN OPTION" CONDITIONS. REFER TO MAIN FLOOR PLAN AND ALTERNATE FLOOR PLANS FOR INFORMATION NOT SHOWN HERE.
 - BUILDING SECTIONS SHOWN HERE DEPICT VOLUMN SPACES WITHIN THE STRUCTURE. REFER TO STRUCTURAL DRAWINGS, TRUSS DRAWINGS, STRUCTURAL DETAILS AND CALCULATIONS BY OTHER FOR ALL STRUCTURAL INFO.
 - ROOFING: PITCHED SHINGLE ROOF. REFER TO ROOF PLAN FOR TYPICALS.
 - WOOD FLOORS: FLOOR SHEATHING OVER FLOOR JOIST. REFER TO STRUCTURAL AND TRUSS DRAWINGS BY OTHERS.
 - VERIFY STAIRS MINIMUM AND MAXIMUM REQUIREMENTS FOR CONSTRUCTION CLEARANCES WITH LOCAL CODES.
 - INSULATION:
 - EXTERIOR WALLS ZONE 3: R-13 BATTS MINIMUM. VERIFY
 - EXTERIOR WALLS ZONE 4: R-15 BATTS MINIMUM. VERIFY
 - CEILING WITH ATTIC ABOVE COMPRESSED INSULATION: R-30 BATTS MINIMUM. VERIFY
 - CEILING WITH ATTIC ABOVE UNCOMPRESSED INSULATION (HEELS IN TRUSSES): R-30 BATTS MINIMUM. VERIFY
 - FLOOR OVER GARAGE: R-19 BATTS MINIMUM. VERIFY
 - ATTIC KNEEWALL: R-19 BATTS MINIMUM. VERIFY
 - CRANL SPACE FLOORING: R-19 BATTS MINIMUM. VERIFY
- PER STATE RESIDENTIAL CODE COMPLIANCE METHOD TO BE DETERMINED BY BUILDER.
- WINDOW GLAZING "U" FACTOR: 0.35



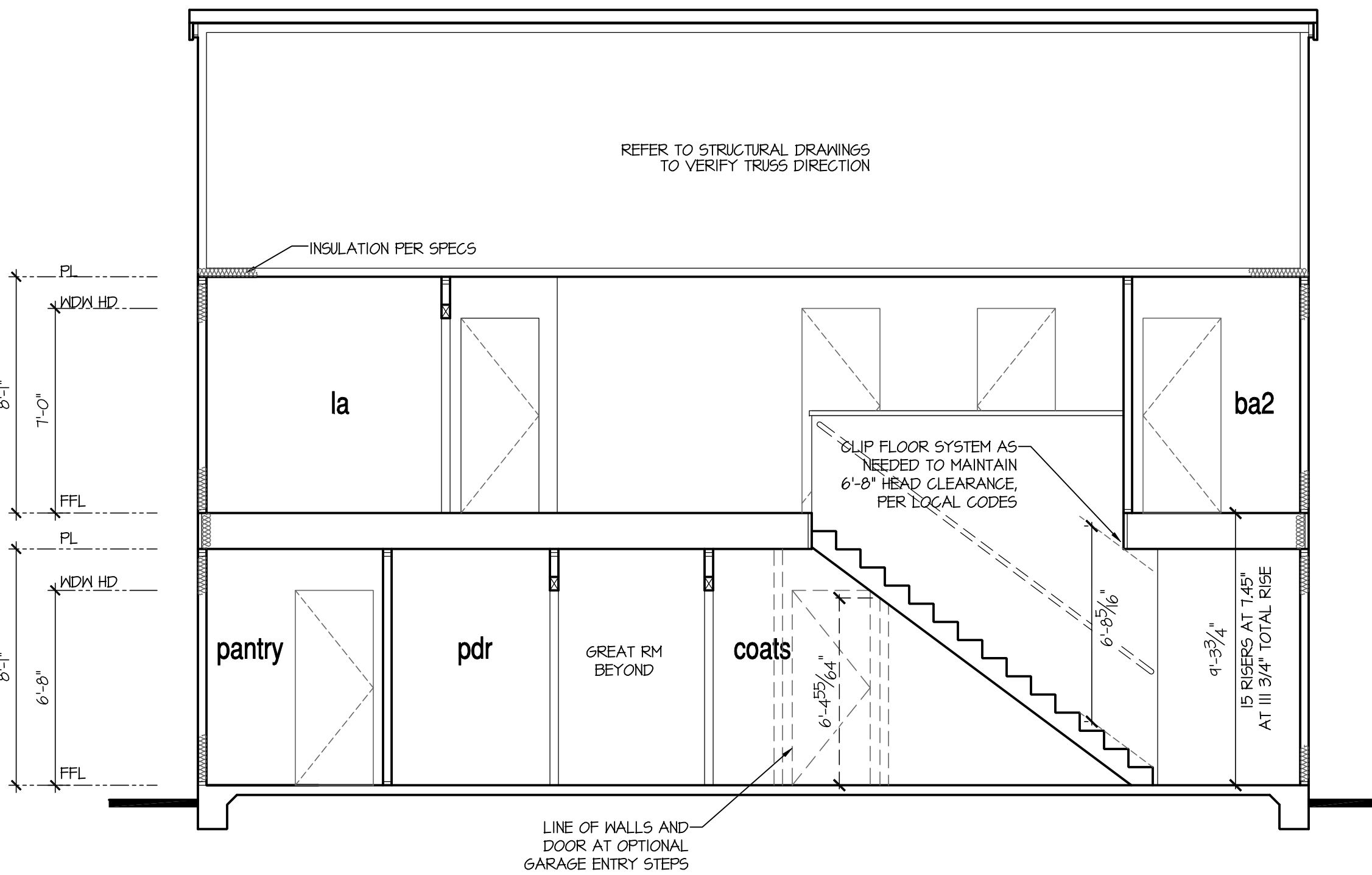
Building Section I at Monolithic Slab

SCALE: 1/4"=1'-0" AT 22'X34" LAYOUT 1/8"=1'-0" AT 11'X17" LAYOUT



Building Section 2 at Optional 9' Plt

SCALE: 1/4"=1'-0" AT 22'X34" LAYOUT 1/8"=1'-0" AT 11'X17" LAYOUT



Building Section 2 at Monolithic Slab

SCALE: 1/4"=1'-0" AT 22'X34" LAYOUT 1/8"=1'-0" AT 11'X17" LAYOUT

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PROFESSIONAL SEAL:

PROJECT TITLE:

40' Series

CLIENTS NAME:



PROJECT NO: GMD17049

SHEET TITLE:

'GALEN' - LH
BUILDING
SECTIONS

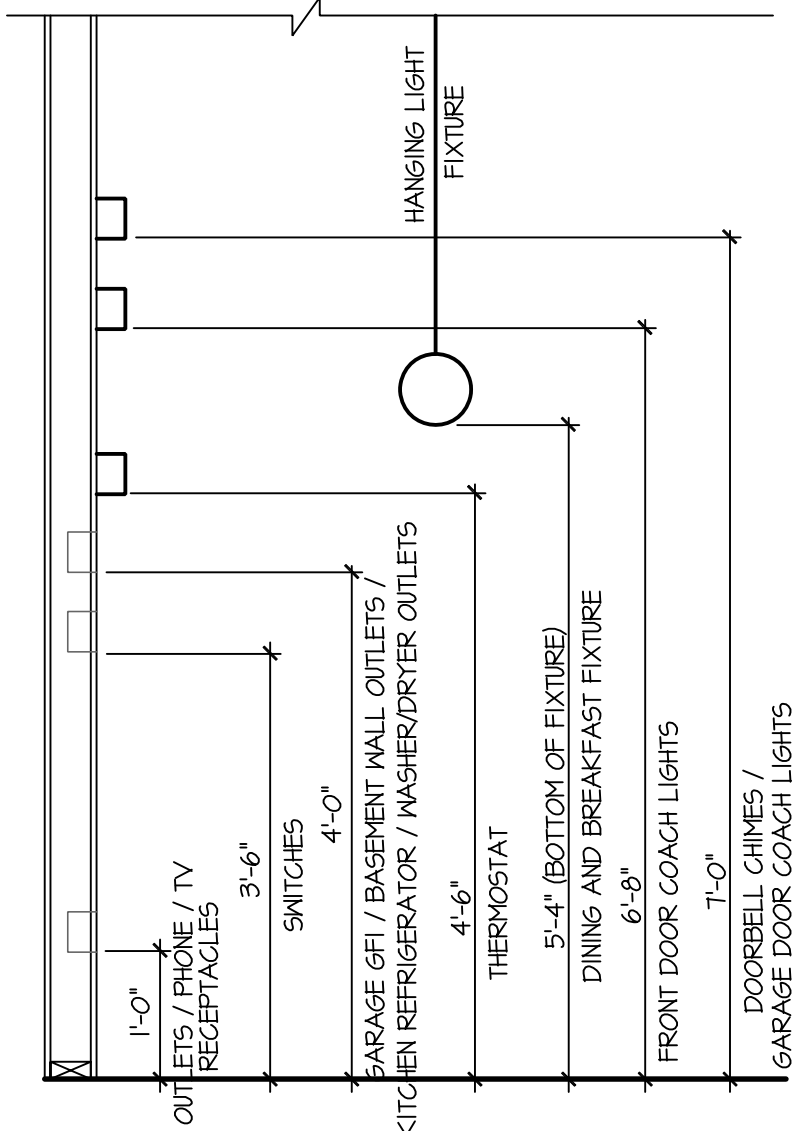
PRINT DATE:

March 30, 2023

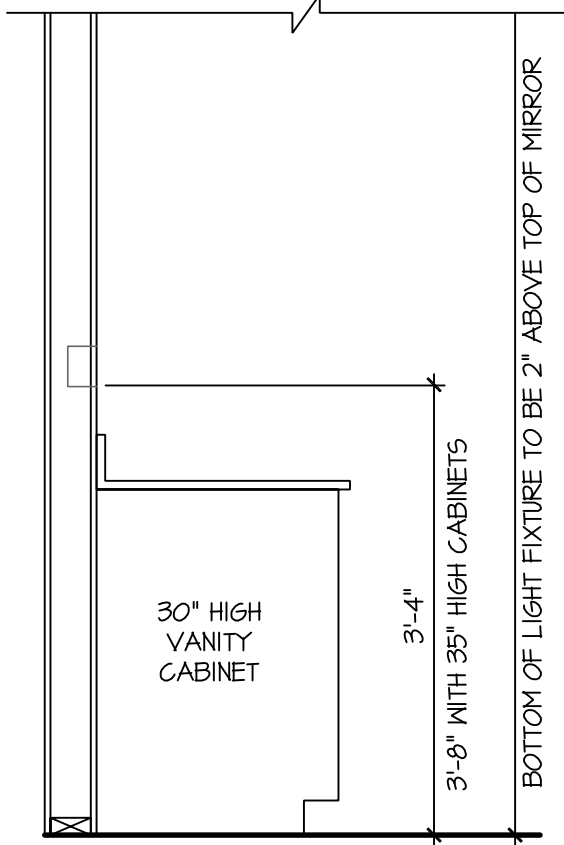
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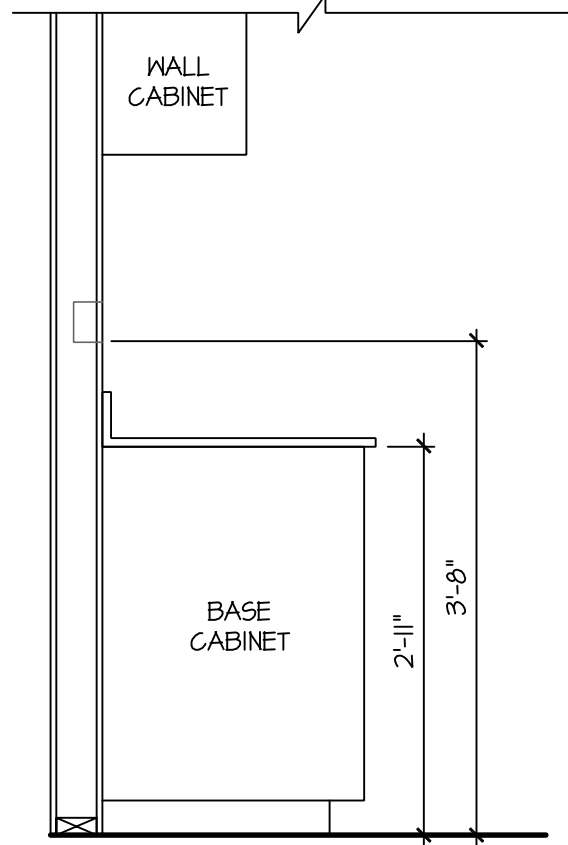
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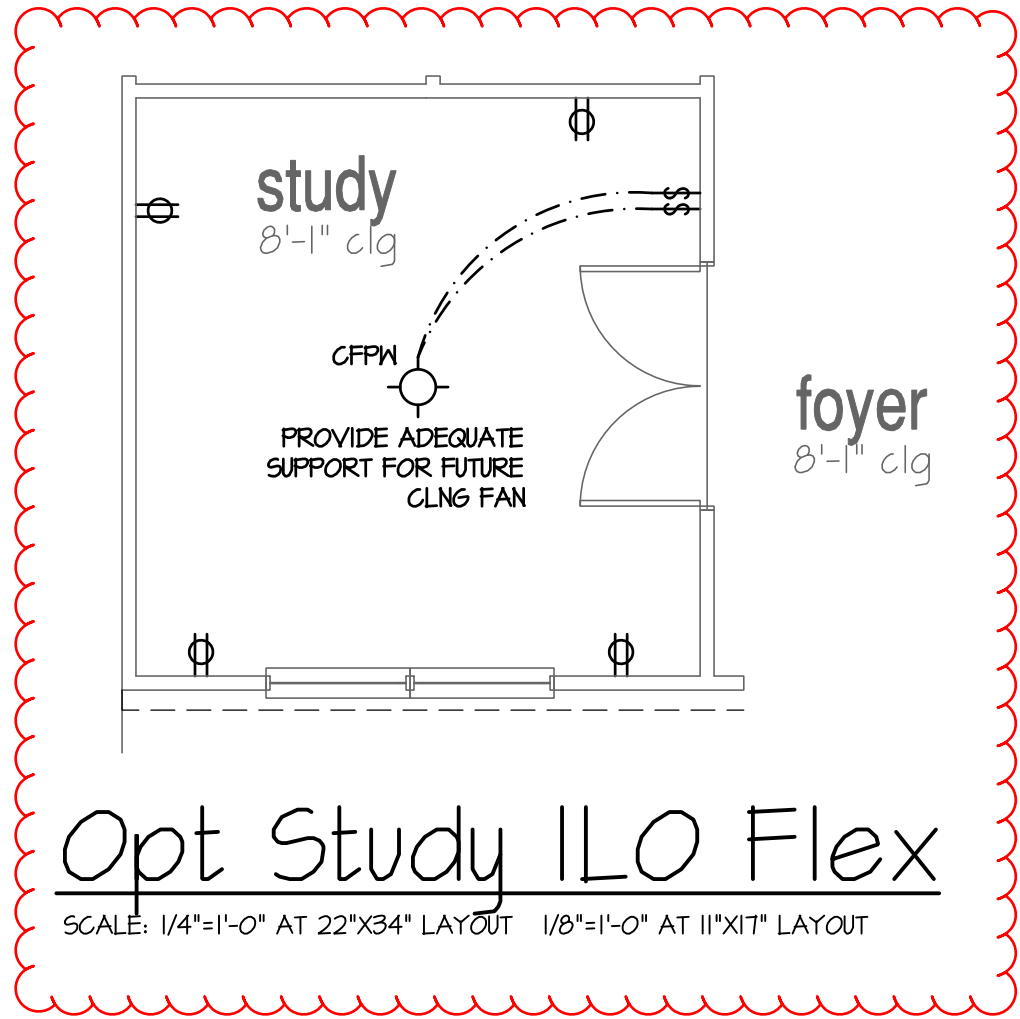
STANDARD ELECTRICAL BOX HEIGHTS



SWITCH AND RECEPTACLE BOXES OVER BATH CABINETS

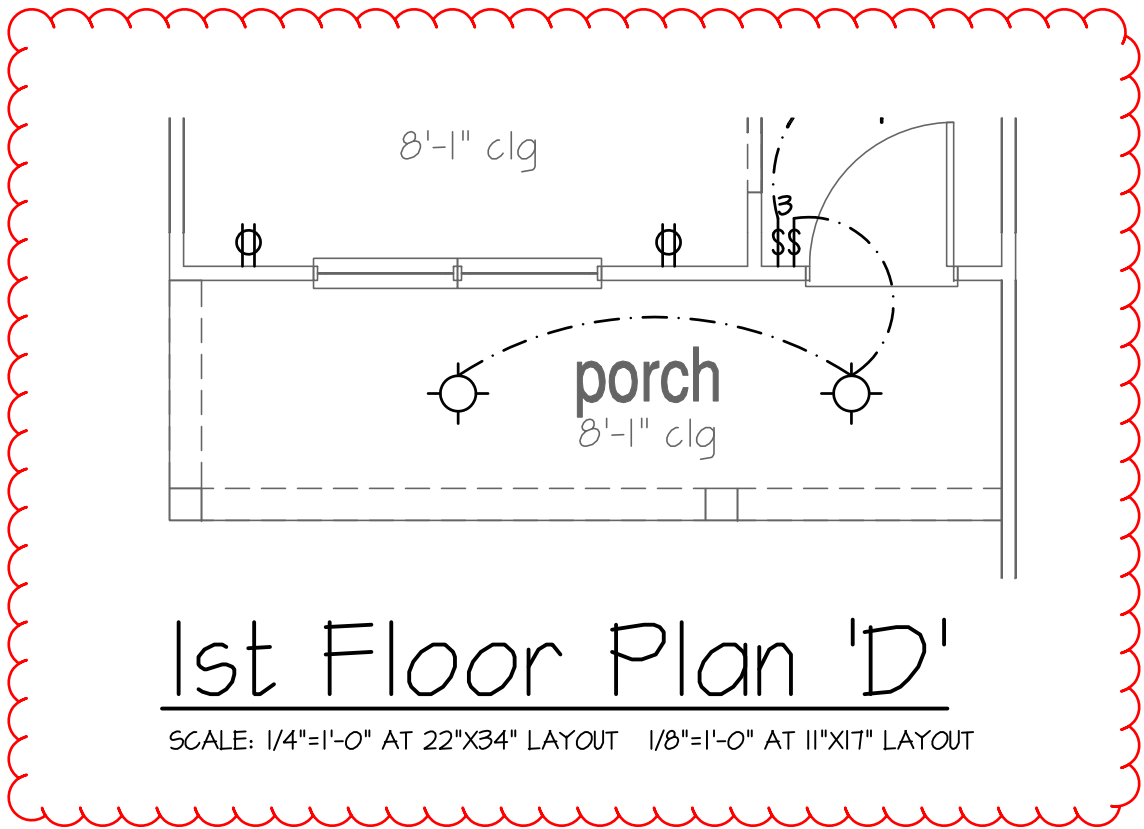


SWITCH AND RECEPTACLE BOXES OVER KITCHEN CABINETS



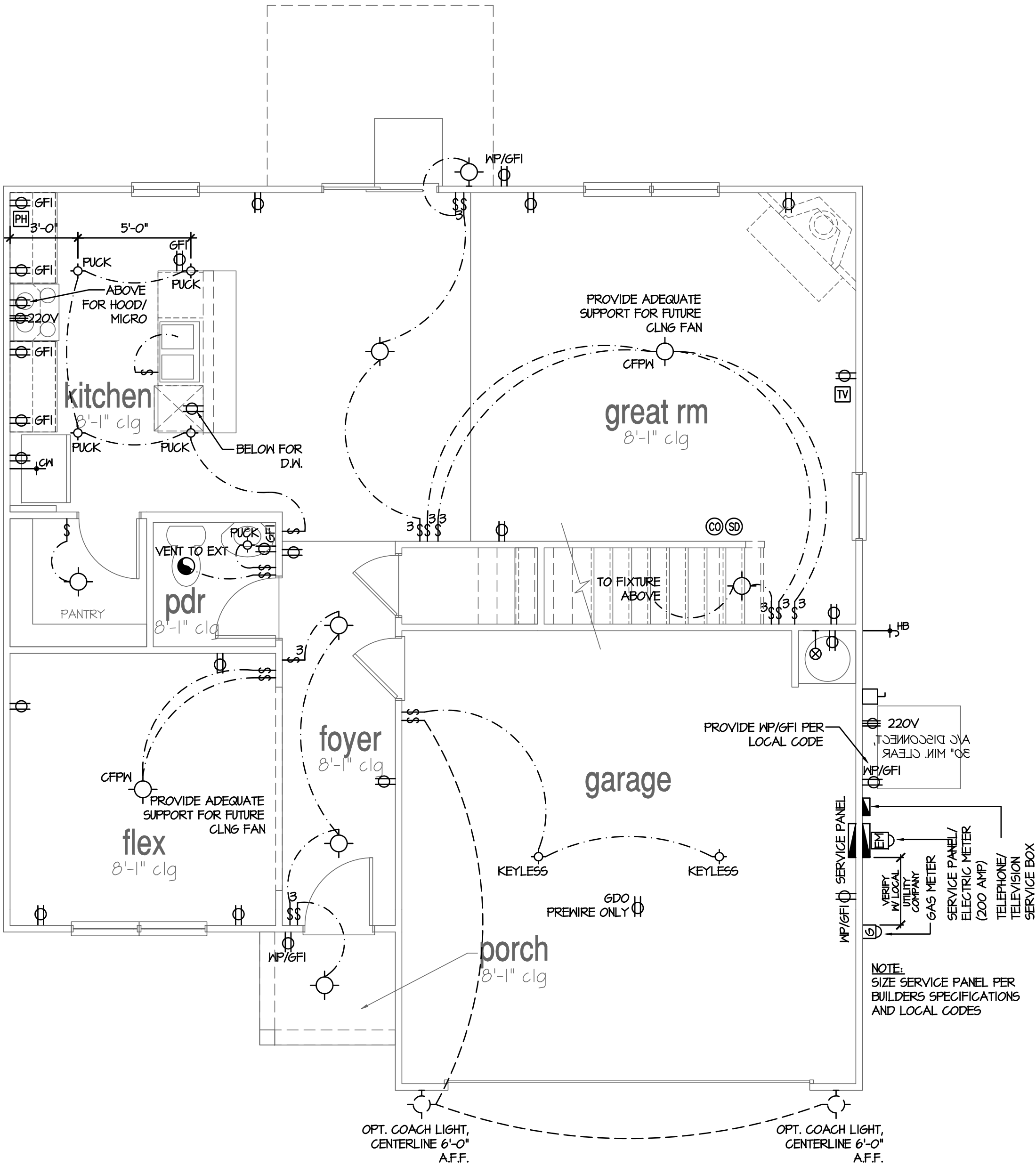
Opt Study ILO Flex

SCALE: 1/4"=1'-0" AT 22"x34" LAYOUT 1/8"=1'-0" AT 11"x11" LAYOUT



1st Floor Plan 'D'

SCALE: 1/4"=1'-0" AT 22"x34" LAYOUT 1/8"=1'-0" AT 11"x11" LAYOUT



1st Floor Plan 'A'

SCALE: 1/4"=1'-0" AT 22"x34" LAYOUT 1/8"=1'-0" AT 11"x11" LAYOUT

NOTES:

- PROVIDE GROUNDING ELECTRICAL ROD PER LOCAL CODES.
- PROVIDE AND INSTALL ARC FAULT CIRCUIT-INTERRUPTERS (AFCI) AS REQUIRED BY NATIONAL ELECTRICAL CODE (NEC) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES.
- ALL EXHAUST FANS SHALL HAVE BACKDRAFT DAMPERS.
- FAN/LIGHTS IN WET/DAMP LOCATIONS SHALL BE LABELED "SUITABLE FOR WET OR DAMP LOCATIONS."
- ELECTRICAL SYSTEMS ARE SHOWN FOR INTENT ONLY. THESE SYSTEMS SHALL BE ENGINEERED BY OTHERS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND PLACEMENT.
- PROVIDE AND INSTALL LOCALLY CERTIFIED SMOKE DETECTORS AND CO2 DETECTORS AS REQUIRED BY NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES.
- PROVIDE AND INSTALL GROUND FAULT CIRCUIT-INTERRUPTERS (GFI) AS REQUIRED BY NATIONAL ELECTRICAL CODE (NEC) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES.
- ELECTRICAL CONTRACTOR TO PROVIDE REQUIRED DIRECT HOOK-UPS/CUTOFFS.
- HVAC CONTRACTOR TO VERIFY THERMOSTAT LOCATIONS.
- ALL ELECTRICAL AND MECHANICAL EQUIPMENT (FURNACES, A/C UNITS, ELECTRICAL PANELS, SANITARY SUMP PITS, DRAIN TILE PUMP, AND WATER HEATERS) ARE SUBJECT TO RELOCATION DUE TO FIELD CONDITIONS.
- PROVIDE POWER, LIGHT AND SWITCH AS REQUIRED FOR ATTIC FURNACE PER CODE AND MANUFACTURER'S WRITTEN INSTRUCTIONS.

LEGEND:

	DUPLEX OUTLET		FLUSH-MOUNT LED CEILING FIXTURE		CHIMES		CEILING FAN (PROVIDE ADEQUATE SUPPORT)			
	WEATHERPROOF GFI DUPLEX OUTLET		HANGING FIXTURE		PUSHBUTTON SWITCH					
	GROUND-FAULT CIRCUIT-INTERRUPTER DUPLEX OUTLET		FLUSH-MOUNT LED CEILING FIXTURE (PROVIDE CEILING FAN SUPPORT)		110V SMOKE DETECTOR W/ BATTERY BACKUP					
	HALF-SWITCHED DUPLEX OUTLET				CO2 DETECTOR		GAS SUPPLY WITH VALVE			
	220 VOLT OUTLET			2-LIGHT VANITY FIXTURE			THERMOSTAT			
	REINFORCED JUNCTION BOX			3-LIGHT VANITY FIXTURE			TELEPHONE		HOSE BIBB	
	WALL SWITCH			4-LIGHT VANITY FIXTURE			TELEVISION			1/4" WATER STUB OUT
	THREE-WAY SWITCH			WALL MOUNT FIXTURE			ELECTRIC METER			
	FOUR-WAY SWITCH				ELECTRIC PANEL					
			EXHAUST FAN (VENT TO EXTERIOR)		DISCONNECT SWITCH		WALL SCONCE			

NO.	DATE:	REVISION:
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2	11.08.24	COUNTY REVISIONS

PROFESSIONAL SEAL:

PROJECT TITLE:

40' Series

CLIENTS NAME:



PROJECT NO: GMD17049

SHEET TITLE:

'GALEN' - LH
1st FLOOR
UTILITY PLAN

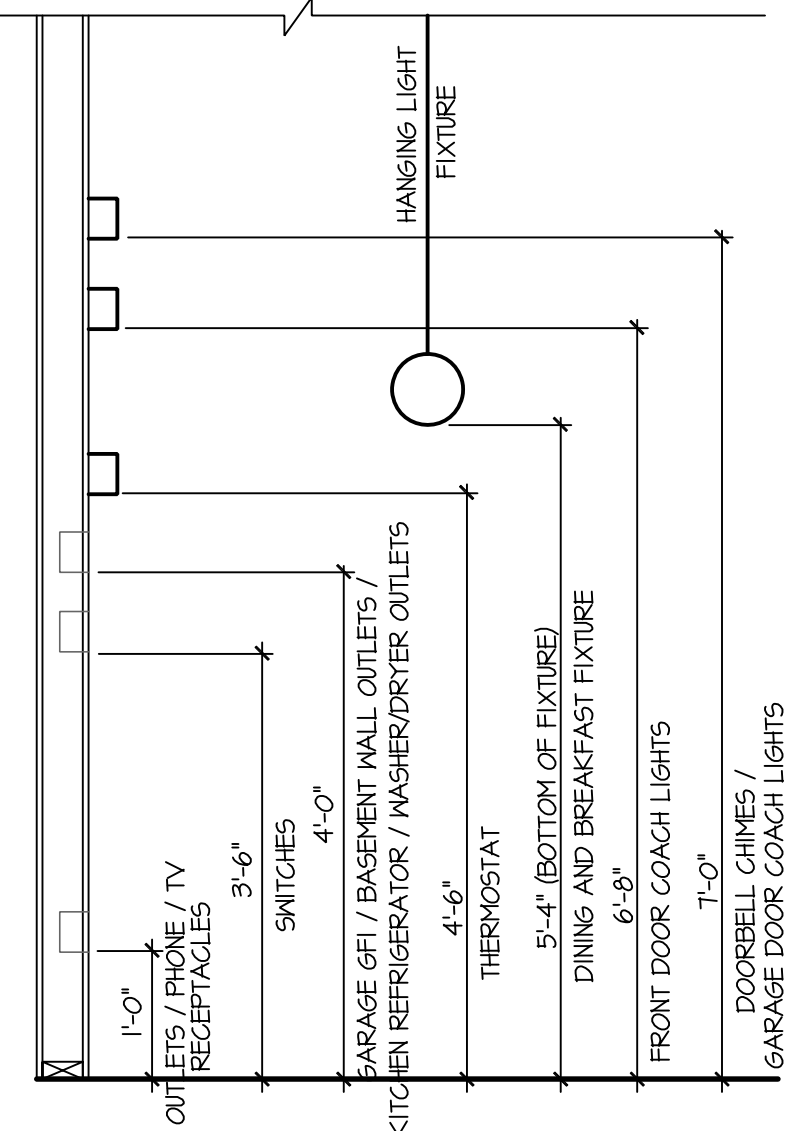
PRINT DATE:

March 30, 2023

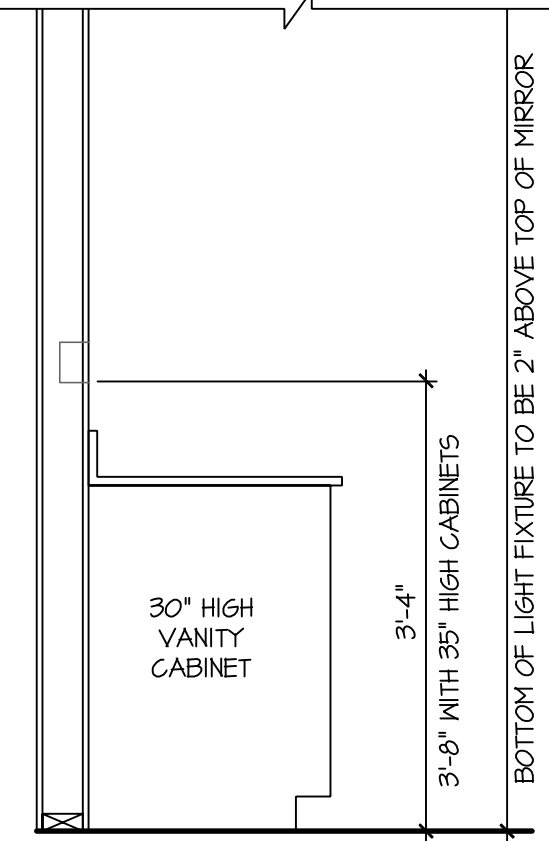
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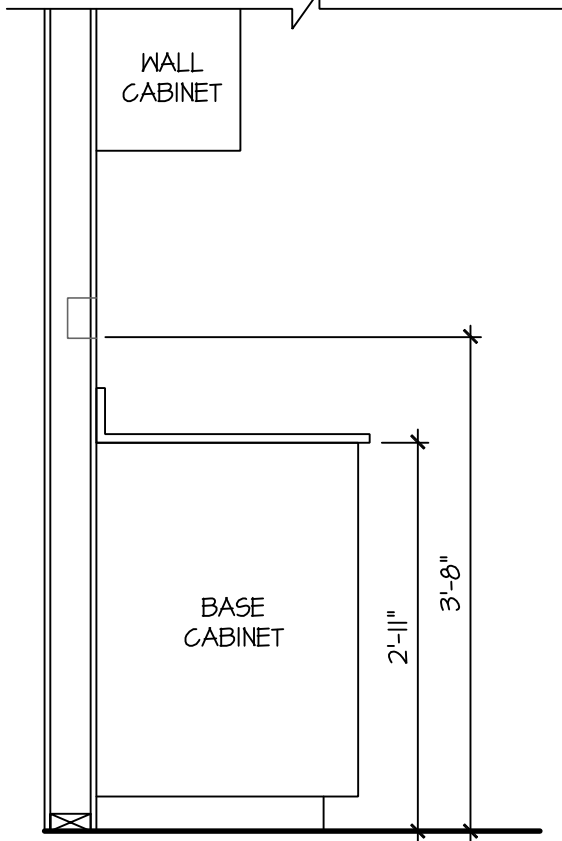
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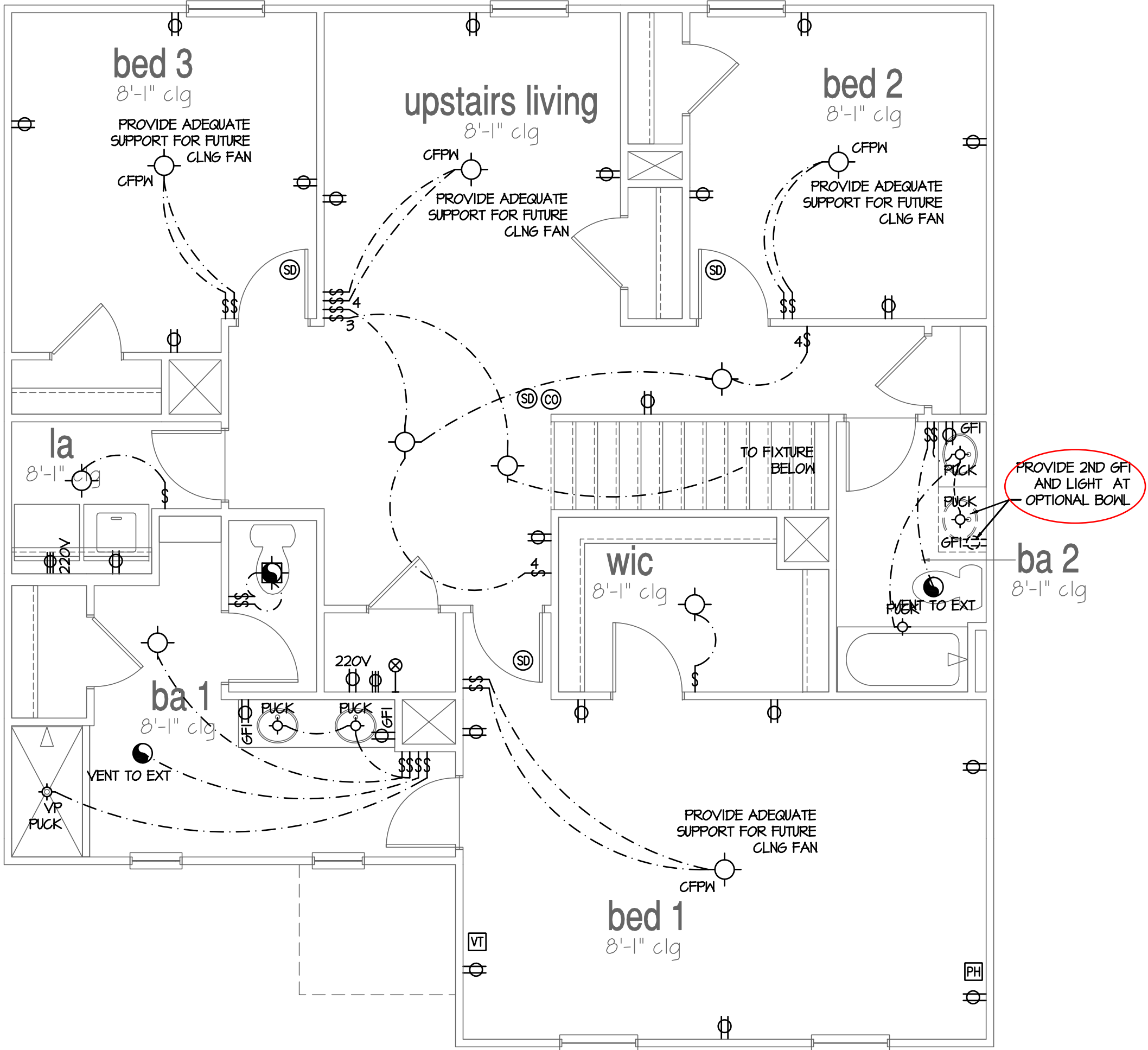
STANDARD ELECTRICAL BOX HEIGHTS



SWITCH AND RECEPTACLE BOXES OVER BATH CABINETS



SWITCH AND RECEPTACLE BOXES OVER KITCHEN CABINETS



2nd Floor Plan 'A'

SCALE: 1/4"=1'-0" AT 22"X34" LAYOUT 1/8"=1'-0" AT 11"X11" LAYOUT

NOTES:		LEGEND:			
- PROVIDE GROUNDING ELECTRICAL ROD PER LOCAL CODES. - PROVIDE AND INSTALL ARC FAULT CIRCUIT-INTERRUPTERS (AFCI) AS REQUIRED BY NATIONAL ELECTRICAL CODE (NEC) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES. - ALL EXHAUST FANS SHALL HAVE BACKDRAFT DAMPERS. - FAN/LIGHTS IN WET/DAMP LOCATIONS SHALL BE LABELED "SUITABLE FOR WET OR DAMP LOCATIONS." - ELECTRICAL SYSTEMS ARE SHOWN FOR INTENT ONLY. THESE SYSTEMS SHALL BE ENGINEERED BY OTHERS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND PLACEMENT. - PROVIDE AND INSTALL LOCALLY CERTIFIED SMOKE DETECTORS AND CO2 DETECTORS AS REQUIRED BY NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES. - PROVIDE AND INSTALL GROUND FAULT CIRCUIT-INTERRUPTERS (GFI) AS REQUIRED BY NATIONAL ELECTRICAL CODE (NEC) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES. - ELECTRICAL CONTRACTOR TO PROVIDE REQUIRED DIRECT HOOK-UPS/CUTOFFS. - HVAC CONTRACTOR TO VERIFY THERMOSTAT LOCATIONS. - ALL ELECTRICAL AND MECHANICAL EQUIPMENT (FURNACES, A/C UNITS, ELECTRICAL PANELS, SANITARY SUMP PITS, DRAIN TILE SUMP, AND WATER HEATERS) ARE SUBJECT TO RELOCATION DUE TO FIELD CONDITIONS. - PROVIDE POWER, LIGHT AND SWITCH AS REQUIRED FOR ATTIC FURNACE PER CODE AND MANUFACTURER'S WRITTEN INSTRUCTIONS.		DUPLEX OUTLET	FLUSH-MOUNT LED CEILING FIXTURE	CHIMES	CEILING FAN (PROVIDE ADEQUATE SUPPORT)
		WEATHERPROOF GFI DUPLEX OUTLET	HANGING FIXTURE	PUSHBUTTON SWITCH	
		GFI GROUND-FAULT CIRCUIT-INTERRUPTER DUPLEX OUTLET	FLUSH-MOUNT LED CEILING FIXTURE (PROVIDE CEILING FAN SUPPORT)	110V SMOKE DETECTOR W/ BATTERY BACKUP	GAS SUPPLY WITH VALVE
		HALF-SWITCHED DUPLEX OUTLET	2-LIGHT VANITY FIXTURE	CO2 DETECTOR	
		220V 220 VOLT OUTLET	3-LIGHT VANITY FIXTURE	THERMOSTAT	HOSE BIBB
		REINFORCED JUNCTION BOX	4-LIGHT VANITY FIXTURE	TELEPHONE	
		WALL SWITCH	WALL MOUNT FIXTURE	TELEVISION	1/4" WATER STUB OUT
		3 THREE-WAY SWITCH	EXHAUST FAN (VENT TO EXTERIOR)	ELECTRIC METER	
		4 FOUR-WAY SWITCH		ELECTRIC PANEL	WALL SCONCE
				DISCONNECT SWITCH	

NO.	DATE:	REVISION:
1	01.14.24	
2	11.08.24	COUNTY REVISIONS

PROFESSIONAL SEAL:

PROJECT TITLE:

40' Series

CLIENTS NAME:



PROJECT NO: GMD17049

SHEET TITLE:

'GALEN' - LH
2nd FLOOR
UTILITY PLAN

PRINT DATE:

March 30, 2023

SHEET NO:

7

FOR
CONSTRUCTION

Construction Type: Commerical ☐ Residential ☒

- 2018 North Carolina Residential Building Code with All Local Amendments
- ASCE 7-10: Minimum Design Loads for Buildings and Other Structures

1. Roof Live Loads		
1.1. Conventional 2x	20	PSF
1.2. Truss	20	PSF
1.2.1. Attic Truss	60	PSF
2. Roof Dead Loads		
2.1. Conventional 2x	10	PSF
2.2. Truss	20	PSF
3. Snow	15	PSF
3.1. Importance Factor	1.0	
4. Floor Live Loads		
4.1. Typ. Dwelling	40	PSF
4.2. Sleeping Areas	30	PSF
4.3. Decks	40	PSF
4.4. Passenger Garage	50	PSF
5. Floor Dead Loads		
5.1. Conventional 2x	10	PSF
5.2. I-Joist	15	PSF
5.3. Floor Truss	15	PSF
6. Ultimate Design Wind Speed (3 sec. gust)	130	MPH
6.1. Exposure		B
6.2. Importance Factor	1.0	
6.3. Wind Base Shear		
6.3.1. $V_x =$		
6.3.2. $V_y =$		
7. Component and Cladding (in PSF)		

MEAN ROOF HT.	UP TO 30'	30'1"-35'	35'1"-40'	40'1"-45'
ZONE 1	16.7,-18.0	17.5,-18.9	18.2,-19.6	18.7,-20.2
ZONE 2	16.7,-21.0	17.5,-22.1	18.2,-22.9	18.7,-23.5
ZONE 3	16.7,-21.0	17.5,-22.1	18.2,-22.9	18.7,-23.5
ZONE 4	18.2,-19.0	19.2,-20.0	19.9,-20.7	20.4,-21.3
ZONE 5	18.2,-24.0	19.2,-25.2	19.9,-26.1	20.4,-26.9

8.1. Site Class	D
8.2. Design Category	C
8.3. Importance Factor	1.0
8.4. Seismic Use Group	1
8.5. Spectral Response Acceleration	
8.5.1. S _{ms} = %g	
8.5.2. S _{m1} = %g	
8.6. Seismic Base Shear	
8.6.1. V _x =	
8.6.2. V _y =	
8.7. Basic Structural System (check one)	
☒ Bearing Wall	
☐ Building Frame	
☐ Moment Frame	
☐ Dual w/ Special Moment Frame	
☐ Dual w/ Intermediate R/C or Special Steel	
☐ Inverted Pendulum	
8.8. Arch/Mech Components Anchored	No
8.9. Lateral Design Control: Seismic ☐ Wind ☒	
Assumed Soil Bearing Capacity	2000psf

9. Assumed Soil Bearing Capacity 2000psf



**FORMERLY SUMMIT ENGINEERING, LABORATORY, &
TESTING INC.**

GALEN - RH

OWNER:
DR Horton, Inc.

DESIGNER:
GMD Design Group
102 Fountain Brook Circle, Suite C
Cary, NC 27511

These drawings are to be coordinated with the architectural, mechanical, plumbing, electrical, and civil drawings. This coordination is not the responsibility of the structural engineering of record (SER). Should any discrepancies become apparent, the contractor shall notify UES Professional Solutions 29, Inc. (UES) before construction begins.

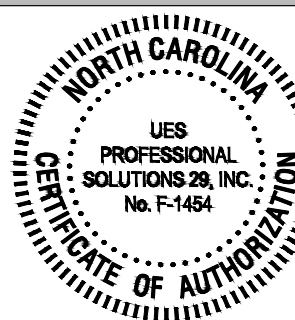
AB	ANCHOR BOLT	PT	PRESSURE TREATED
AFF	ABOVE FINISHED FLOOR	RS	ROOF SUPPORT
CJ	CEILING JOIST	SC	STUD COLUMN
CLR	CLEAR	SJ	SINGLE JOIST
DJ	DOUBLE JOIST	SPF	SPRUCE PINE FIR
DSF	DOUBLE STUD POCKET	SST	SIMPSON STRONG-TIE
EE	EACH END	SPY	SOUTHERN YELLOW PINE
EW	EACH WAY	TJ	TRIPLE JOIST
NTS	NOT TO SCALE	TSP	TRIPLE STUD POCKET
OC	ON CENTER	TYN	TYPICAL
PSF	POUNDS PER SQUARE FOOT	UNO	UNLESS NOTED OTHERWISE
PSI	POUNDS PER SQUARE INCH	WWF	WELDED WIRE FABRIC

Roof truss and floor joist layouts, and their corresponding loading details, were not provided to UES Professional Solutions 29, Inc. (UES) prior to the initial design. Therefore, truss and joist directions were assumed based on the information provided by DR Horton, Inc. Subsequent plan revisions based on roof truss and floor joist layouts shall be noted in the revision list, indicating the date the layouts were provided. Should any discrepancies become apparent, the contractor shall notify UES immediately.

Sheet No.	Description
CS1	Cover Sheet, Specifications, Revisions
S1.0m	Monolithic Slab Foundation
S1.0s	Stem Wall Foundation
S1.0c	Crawl Space Foundation
S1.0b	Basement Foundation
S2.0	Basement Plan
S3.0	First Floor Plan
S4.0	Second Floor Plan
S5.0	Roof Framing Plan

[illegible]

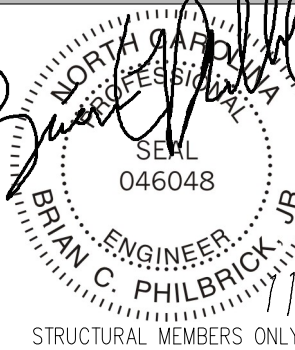
Manager	Signature
Operations	
Operations System	
Operations Product Development	



CLIENT:
DR Horton, Inc.
8001 Arrowridge Blvd.
Charlotte, NC 28273

PROJECT:

Galen - RH



DRAWING

DATE: 11/06/2024

SCALE: 22x34 1/4"=1'-0"
11x17 1/8"=1'-0"

PROJECT #: A23117.00300.000

DRAWN BY: GGG

CHECKED BY: BCP

ORIGINAL INFORMATION	
PROJECT #	DATE
T0928	04/26/23

REFER TO COVER SHEET FOR A COMPLETE
LIST OF REVISIONS

SHEET

CS1

GENERAL STRUCTURAL NOTES:

- The design professional whose seal appears on these drawings is the structural engineer of record (SER) for this project. The SER bears the responsibility of the primary structural elements and the performance of this structure. No other party may revise, alter, or delete any structural aspects of these construction documents without written permission of UES Professional Solutions 29, Inc. (UES) or the SER. For the purposes of these construction documents the SER and UES shall be considered the same entity.
- The structure is only stable in its completed form. The contractor shall provide all required temporary bracing during construction to stabilize the structure.
- The SER is not responsible for construction sequences, methods, or techniques in connection with the construction of this structure. The SER will not be held responsible for the contractor's failure to conform to the contract documents, should any non-conformities occur.
- Any structural elements or details not fully developed on the construction drawings shall be completed under the direction of a licensed professional engineer. These shop drawings shall be submitted to UES for review before any construction begins. The shop drawings will be reviewed for overall compliance as it relates to the structural design of this project. Verification of the shop drawings for dimensions, or for actual field conditions, is not the responsibility of the SER or UES.
- Verification of assumed field conditions is not the responsibility of the SER. The contractor shall verify the field conditions for accuracy and report any discrepancies to UES before construction begins.
- The SER is not responsible for any secondary structural elements or non-structural elements, except for the elements specifically noted on the structural drawings.
- This structure and all construction shall conform to all applicable sections of the international residential code.
- This structure and all construction shall conform to all applicable sections of local building codes.
- All structural assemblies are to meet or exceed to requirements of the current local building code.
- The Structural Engineer of Record's (SER) seal applies to structural components only. The SER's seal does not certify dimensional accuracy or architectural layout, including roof geometry. UES Professional Solutions 29, Inc. (UES) nor the SER assumes no liability for changes made to sealed drawings by others, construction methods, or any deviation from these plans. The SER shall be notified prior to construction if any discrepancies are noted on the plans.
- All sealed structural drawings shall have a signed and dated seal to be valid and are limited to the following uses:
 - If these structural drawings are issued as part of a master-plan set intended to be used for mass development, these drawings shall be valid for a period of two (2) years from the date on the seal, or if any code required updates are placed in effect by the governing jurisdiction.
 - If these structural drawings are not issued as part of a master plan set intended for mass development, these drawings are valid for a conditional one time use for the lot of the address specified within the title block.
- UES Professional Solutions 29, Inc. (UES) as its option, may create a set of standard details for a client that are referenced within our drawings. Any details created by UES whether specific to one plan or as part of a "Standard Detail" package are only valid with use of drawings created by UES Professional Solutions 29, Inc. (UES) and shall not be used with any other drawings or for any other construction purposes.

FOUNDATIONS:

- The structural engineer has not performed a subsurface investigation. Verification of this assumed value is the responsibility of the owner or the contractor. Should any adverse soil condition be encountered the SER must be contacted before proceeding.
- The bottom of all footings shall extend below the frost line for the region in which the structure is to be constructed. However, the bottom of all footings shall be a minimum of 12" below grade.
- Any fill shall be placed under the direction or recommendation of a licensed professional engineer.
- The resulting soil shall be compacted to a minimum of 95% maximum dry density.
- Excavations of footings shall be lined temporarily with a 6 mil polyethylene membrane if placement of concrete does not occur within 24 hours of excavation.
- No concrete shall be placed against any subgrade containing water, ice, frost, or loose material.

STRUCTURAL STEEL:

- Structural steel shall be fabricated and erected in accordance with the American Institute of Steel Construction "Code of Standard Practice for Steel Buildings and Bridges" and the manual of Steel Construction "Load Resistance Factor Design" latest editions.
- Structural steel shall receive one coat of shop applied rust-inhibitive paint.
- All steel shall have a minimum yield stress (F_y) of 36 ksi unless otherwise noted.
- Welding shall conform to the latest edition of the American Welding Society's Structural Welding Code AWS D1.1. Electrodes and consumables for both shop and field welding shall be 70ksi. All welding shall be performed by a certified welder per the above standards.

CONCRETE:

- Concrete shall be nominal weight concrete with no aggregate larger than 3/4" and a minimum compressive strength (f'_c) at 28 days of 3000 psi, unless otherwise noted on the plan.
- Concrete shall be proportioned, mixed, and placed in accordance with the latest editions of ACI 318: "Building Code Requirements for Reinforced Concrete" and ACI 301: "Specifications for Structural Concrete for Buildings".
- Air entrained concrete must be used for all structural elements exposed to freeze/thaw cycles and deicing chemicals. Air entrainment amounts (in percent) shall be within -1% to +2% of target values as follows:
 - Footings: 5%
 - Exterior Slabs: 5%
- No admixtures shall be added to any structural concrete without written permission of the SER.
- Concrete slabs-on-grade shall be constructed in accordance with the latest version of ACI 302.1: "Guide for Concrete Slab and Slab Construction".
- The concrete slab-on-grade has been designed using a subgrade modulus of $k=250$ pci and a design loading of 200 psf. The SER is not responsible for differential settlement, slab cracking or other future defects resulting from unreported conditions not in accordance with the above assumptions.
- Control or saw cut joints shall be spaced in interior slabs-on-grade at a maximum of 15'-0" O.C. and in exterior slabs-on-grade at a maximum of 10'-0" unless otherwise noted.
- Control or saw cut joints shall be produced using conventional process within 4 to 12 hours after the slab has been finished.
- Reinforcing steel may not extend through a control joint. Reinforcing steel may extend through a saw cut joint.

- All welded wire fabric (W.W.F.) for concrete slabs-on-grade shall be placed at mid-depth of slab. The W.W.F. shall be securely supported during the concrete pour.

CONCRETE REINFORCEMENT:

- Fibrous concrete reinforcement, or fibermesh, specified in concrete slabs-on-grade may be used for control of cracking due to shrinkage and thermal expansion/contraction, lowered water migration, an increase in impact capacity, increased abrasion resistance, and residual strength.
- Fibermesh reinforcing to be 100% virgin polypropylene fibers containing no reprocessed olefin materials and specifically manufactured for use as concrete secondary reinforcement.
- Application of fibermesh per cubic yard of concrete shall equal a minimum of 0.1% by volume (1.5 pounds per cubic yard)
- Fibermesh shall comply with ASTM C1116, any local building code requirements, and shall meet or exceed the current industry standard.
- Steel reinforcing bars shall be new billet steel conforming to ASTM A615, grade 60.
- Detailing, fabrication, and placement of reinforcing steel shall be in accordance with the latest edition of ACI 315: "Manual of Standard Practice for Detailing Concrete Structures"
- Horizontal footing and wall reinforcement shall be continuous and shall have 90° bends, or corner bars with the same size/spacing as the horizontal reinforcement with a class B tension splice.
- Lap reinforcement as required, a minimum of 40 bar diameters for tension or compression unless otherwise noted. Splices in masonry shall be a minimum of 48 bar diameters.
- Where reinforcing dowels are required, they shall be equivalent in size and spacing to the vertical reinforcement. The dowel shall extend 48 bar diameters vertically and 20 bar diameters into the footing.
- Where reinforcing steel is required vertically, dowels shall be provided unless otherwise noted.

WOOD FRAMING:

- Solid sawn wood framing members shall conform to the specifications listed in the latest edition of the "National Design Specification for Wood Construction" (NDS). Unless otherwise noted, all wood framing members are designed to be Southern-Yellow-Pine (SYP) #2.
- LVL or PSL engineered wood shall have the following minimum design values:
 - $E = 1,900,000$ psi
 - $F_b = 2600$ psi
 - $F_v = 285$ psi
 - $F_c = 700$ psi
- Wood in contact with concrete, masonry, or earth shall be pressure treated in accordance with AWPA standard C-15. All other moisture exposed wood shall be treated in accordance with AWPA standard C-2
- Nails shall be common wire nails unless otherwise noted.
- Lag screws shall conform to ANSI/ASME standard B18.2.1-1981. Lead holes for lag screws shall be in accordance with NDS specifications.
- All beams shall have full bearing on supporting framing members unless otherwise noted.
- Exterior and load bearing stud walls are to be 2x4 SYP #2 @ 16" O.C. unless otherwise noted. Studs shall be continuous from the sole plate to the double top plate. Studs shall only be discontinuous at headers for window/door openings. A minimum of one king stud shall be placed at each end of the header. King studs shall be continuous.

- Individual studs forming a column shall be attached with one 10d nail @ 6" O.C. staggered. The stud column shall be continuous to the foundation or beam. The column shall be properly blocked at all floor levels to ensure proper load transfer.
- Multi-ply beams shall have each ply attached with (3) 12d nails @ 12" O.C.
- Four and five ply beams shall be bolted together with (2) rows of 1/2" diameter through bolts staggered @ 16" O.C. unless noted otherwise.
- All fasteners that will be exposed to the elements shall be hot dipped galvanized.

WOOD TRUSSES:

- The wood truss manufacturer/fabricator is responsible for the design of the wood trusses. Submit sealed shop drawings and supporting calculations to the SER for review prior to fabrication. The SER shall have a minimum of five (5) days for review. The review by the SER shall review for overall compliance with the design documents. The SER shall assume no responsibility for the correctness for the structural design for the wood trusses.
- The wood trusses shall be designed for all required loadings as specified in the local building code, the ASCE Standard "Minimum Design Loads for Buildings and Other Structures." (ASCE 7-16), and the loading requirements shown on these specifications. The truss drawings shall be coordinated with all other construction documents and provisions provided for loads shown on these drawings including but not limited to HVAC equipment, piping, and architectural fixtures attached to the trusses.
- The trusses shall be designed, fabricated, and erected in accordance with the latest edition of the "National Design Specification for Wood Construction." (NDS) and "Design Specification for Metal Plate Connected Wood Trusses."
- The truss manufacturer shall provide adequate bracing information in accordance with "Commentary and Recommendations for Handling, Installing, and Bracing Metal Plate Connected Wood Trusses" (HIB-91). This bracing, both temporary and permanent, shall be shown on the shop drawings. Also, the shop drawings shall show the required attachments for the trusses.
- Any chords or truss webs shown on these drawings have been shown as a reference only. The final design of the trusses shall be per the manufacturer.

EXTERIOR WOOD FRAMED DECKS:

- Decks are to be framed in accordance with local building codes and as referenced on the structural plans, either through code references or construction details.

WOOD STRUCTURAL PANELS:

- Fabrication and placement of structural wood sheathing shall be in accordance with the APA Design/Construction Guide "Residential and Commercial," and all other applicable APA standards.
- All structurally required wood sheathing shall bear the mark of the APA.
- Wood wall sheathing shall comply with the requirements of local building codes for the appropriate state as indicated on these drawings. Refer to wall bracing notes in plan set for more information. Sheathing shall be applied with the long direction perpendicular to framing, unless noted otherwise.

- Roof sheathing shall be APA rated sheathing exposure 1 or 2. Roof sheathing shall be continuous over two supports and attached to its supporting roof framing with (1)-8d CC nail at 6"o/c at panel edges and at 12"o/c in panel field unless otherwise noted on the plans. Sheathing shall be applied with the long direction perpendicular to framing. Sheathing shall have a span rating consistent with the framing spacing. Use suitable edge support by use of plywood clips or lumber blocking unless otherwise noted. Panel end joints shall occur over framing. Apply building paper over the sheathing as required by the state Building Code.
- Wood floor sheathing shall be APA rated sheathing exposure 1 or 2. Attach sheathing to its supporting framing with (1)-8d CC ringshank nail at 6"o/c at panel edges and at 12"o/c in panel field unless otherwise noted on the plans. Sheathing shall be applied perpendicular to framing. Sheathing shall have a span rating consistent with the framing spacing. Use suitable edge support by use of 1&G plywood or lumber blocking unless otherwise noted. Panel end joints shall occur over framing. Apply building paper over the sheathing as required by the state Building Code.
- Sheathing shall have a 1/8" gap at panel ends and edges as recommended in accordance with the APA.

STRUCTURAL FIBERBOARD PANELS:

- Fabrication and placement of structural fiberboard sheathing shall be in accordance with the applicable AFA standards.
- All structurally required fiberboard sheathing shall bear the mark of the AFA.
- Fiberboard wall sheathing shall comply with the requirements of local building codes for the appropriate state as indicated on these drawings. Refer to wall bracing notes in plan set for more information.
- Sheathing shall have a 1/8" gap at panel ends and edges as recommended in accordance with the AFA.

FOUNDATION NOTES:

1. FOUNDATIONS TO BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 4 OF THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE WITH ALL LOCAL AMENDMENTS.
2. STRUCTURAL CONCRETE TO BE $f_c = 3000$ PSI, PREPARED AND PLACED IN ACCORDANCE WITH ACI STANDARD 318.
3. 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.
4. 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.
5. FOOTINGS AND PIERS SHALL BE CENTERED UNDER THEIR RESPECTIVE ELEMENTS. PROVIDE 2" MINIMUM FOOTING PROJECTION FROM THE FACE OF MASONRY.
6. MAXIMUM DEPTH OF UNBALANCED FILL AGAINST MASONRY WALLS TO BE AS SPECIFIED IN SECTION R404.1 OF THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE.
7. PILASTERS TO BE BONDED TO PERIMETER FOUNDATION WALL.
8. PROVIDE FOUNDATION WATERPROOFING, AND DRAIN WITH POSITIVE SLOPE TO OUTLET AS REQUIRED BY SITE CONDITIONS.
9. PROVIDED PERIMETER INSULATION FOR ALL FOUNDATIONS PER 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE.
10. CORBEL FOUNDATION WALL AS REQUIRED TO ACCOMMODATE BRICK VENEERS.
11. CRAWL SPACE TO BE GRADED LEVEL, AND CLEARED OF ALL DEBRIS.
8. FOUNDATION ANCHORAGE SHALL BE CONSTRUCTED PER THE 2018 NORTH CAROLINA RESIDENTIAL CODE SECTION R403.1.6. MINIMUM 1/2" DIA. BOLTS SPACED AT 6'-0" ON CENTER WITH A 7" MINIMUM EMBEDMENT INTO MASONRY OR CONCRETE. ANCHOR BOLTS SHALL BE 12" FROM THE END OF EACH PLATE SECTION. MINIMUM (2) ANCHOR BOLTS PER PLATE SECTION. ANCHOR BOLTS SHALL BE LOCATED IN THE CENTER THIRD OF THE PLATE.
9. ABBREVIATIONS:

DJ = DOUBLE JOIST	SJ = SINGLE JOIST
GT = GIRDER TRUSS	FT = FLOOR TRUSS
SC = STUD COLUMN	DR = DOUBLE RAFTER
EE = EACH END	TR = TRIPLE RAFTER
TJ = TRIPLE JOIST	OC = ON CENTER
CL = CENTER LINE	PL = POINT LOAD

10. ALL PIERS TO BE 16"x16" MASONRY AND ALL PILASTERS TO BE 8"x16" MASONRY, TYPICAL. (UNO)
11. WALL FOOTINGS TO BE CONTINUOUS CONCRETE, SIZES PER STRUCTURAL PLAN.
12. 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, UES PROFESSIONAL SOLUTIONS 29, INC. (UES) MUST BE PROVIDED THE OPPORTUNITY TO REVIEW THE FOOTING DESIGN PRIOR TO CONCRETE PLACEMENT.
13. ALL FOOTINGS & SLABS ARE TO BEAR ON UNDISTURBED SOIL OR 95% COMPACTED FILL, VERIFIED BY ENGINEER OR CODE OFFICIAL.

REFER TO BRACED WALL PLAN FOR PANEL LOCATIONS AND ANY REQUIRED HOLDDOWNS. ADDITIONAL INFORMATION PER SECTION R602.10.8 AND FIGURES R602.10.6.5, R602.10.7, R602.10.8(1) AND R602.10.8(2) OF THE 2015 IRC

NOTE: ALL EXTERIOR FOUNDATION DIMENSIONS ARE TO FRAMING AND NOT BRICK VENEER, UNO

NOTE: A 4" CRUSHED STONE BASE COURSE IS NOT REQUIRED WHEN SLAB IS INSTALLED ON WELL-DRAINED OR SAND-GRAVEL MIXTURE SOILS CLASSIFIED AS GROUP I PER TABLE R405.1

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY DR HORTON COMPLETED/REVISED ON 03/30/23. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY UES PROFESSIONAL SOLUTIONS 29, INC. (UES) IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. UES PROFESSIONAL SOLUTIONS 29, INC. (UES) CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

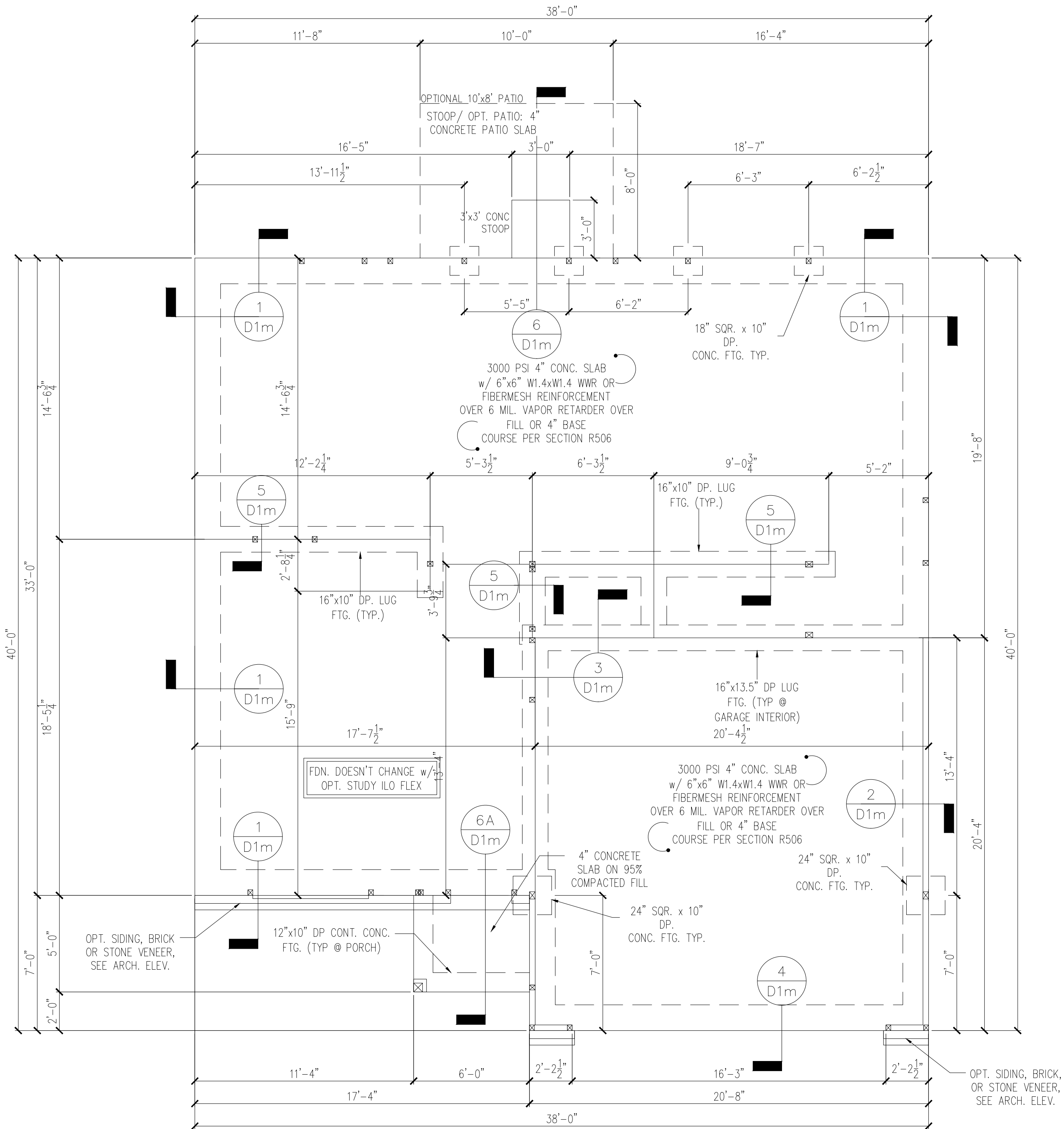
STRUCTURAL MEMBERS ONLY

ENGINEERING SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS ON THIS DOCUMENT. SEAL DOES NOT INCLUDE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS. ANY DEVIATIONS OR DISCREPANCIES ON PLANS ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF UES PROFESSIONAL SOLUTIONS 29, INC. (UES). FAILURE TO DO SO WILL VOID UES LIABILITY.

STRUCTURAL ANALYSIS BASED ON 2018 NCRS.

MONOLITHIC SLAB FOUNDATION PLAN

SCALE: 1/4"=1'-0" ON 22"x34" OR 1/8"=1'-0" ON 11"x17"



MONOLITHIC SLAB FOUNDATION PLAN – ELEVATION A, B, C



CLIENT:
DR Horton, Inc.
8001 Arrowridge Blvd.
Charlotte, NC 28273

PROJECT:
Cullen – RH
Monolithic Slab Foundation



DATE: 11/06/2024
SCALE: 22x34 1/4"=1'-0"
11x17 1/8"=1'-0"
PROJECT #: A23117.00300.000
DRAWN BY: GGG
CHECKED BY: BCP
ORIGINAL INFORMATION
PROJECT # 13925 DATE 04/28/23
REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS
SHEET
S1.0m

FOUNDATION NOTES:

1. FOUNDATIONS TO BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 4 OF THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE WITH ALL LOCAL AMENDMENTS.
2. STRUCTURAL CONCRETE TO BE $F_c = 3000$ PSI, PREPARED AND PLACED IN ACCORDANCE WITH ACI STANDARD 318.
3. 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.
4. 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.
5. FOOTINGS AND PIERS SHALL BE CENTERED UNDER THEIR RESPECTIVE ELEMENTS. PROVIDE 2" MINIMUM FOOTING PROJECTION FROM THE FACE OF MASONRY.
6. MAXIMUM DEPTH OF UNBALANCED FILL AGAINST MASONRY WALLS TO BE AS SPECIFIED IN SECTION R404.1 OF THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE.
7. PILASTERS TO BE BONDED TO PERIMETER FOUNDATION WALL.
8. PROVIDE FOUNDATION WATERPROOFING, AND DRAIN WITH POSITIVE SLOPE TO OUTLET AS REQUIRED BY SITE CONDITIONS.
9. PROVIDED PERIMETER INSULATION FOR ALL FOUNDATIONS PER 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE.
10. CORBEL FOUNDATION WALL AS REQUIRED TO ACCOMMODATE BRICK VENEERS.
11. CRAWL SPACE TO BE GRADED LEVEL, AND CLEARED OF ALL DEBRIS.
8. FOUNDATION ANCHORAGE SHALL BE CONSTRUCTED PER THE 2018 NORTH CAROLINA RESIDENTIAL CODE SECTION R403.1.6. MINIMUM 1/2" DIA. BOLTS SPACED AT 6'-0" ON CENTER WITH A 7" MINIMUM EMBEDMENT INTO MASONRY OR CONCRETE. ANCHOR BOLTS SHALL BE 12" FROM THE END OF EACH PLATE SECTION. MINIMUM (2) ANCHOR BOLTS PER PLATE SECTION. ANCHOR BOLTS SHALL BE LOCATED IN THE CENTER THIRD OF THE PLATE.
9. ABBREVIATIONS:

DJ = DOUBLE JOIST	SJ = SINGLE JOIST
GT = GIRDER TRUSS	FT = FLOOR TRUSS
SC = STUD COLUMN	DR = DOUBLE RAFTER
EE = EACH END	TR = TRIPLE RAFTER
TJ = TRIPLE JOIST	OC = ON CENTER
CL = CENTER LINE	PL = POINT LOAD

10. ALL PIERS TO BE 16"x16" MASONRY AND ALL PILASTERS TO BE 8"x16" MASONRY, TYPICAL. (UNO)
11. WALL FOOTINGS TO BE CONTINUOUS CONCRETE, SIZES PER STRUCTURAL PLAN.
12. 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, UES PROFESSIONAL SOLUTIONS 29, INC. (UES) MUST BE PROVIDED THE OPPORTUNITY TO REVIEW THE FOOTING DESIGN PRIOR TO CONCRETE PLACEMENT.
13. ALL FOOTINGS & SLABS ARE TO BEAR ON UNDISTURBED SOIL OR 95% COMPACTED FILL, VERIFIED BY ENGINEER OR CODE OFFICIAL.

REFER TO BRACED WALL PLAN FOR PANEL LOCATIONS AND ANY REQUIRED HOLDDOWNS. ADDITIONAL INFORMATION PER SECTION R602.10.8 AND FIGURES R602.10.6.5, R602.10.7, R602.10.8(1) AND R602.10.8(2) OF THE 2015 IRC

NOTE: ALL EXTERIOR FOUNDATION DIMENSIONS ARE TO FRAMING AND NOT BRICK VENEER, UNO

NOTE: A 4" CRUSHED STONE BASE COURSE IS NOT REQUIRED WHEN SLAB IS INSTALLED ON WELL-DRAINED OR SAND-GRAVEL MIXTURE SOILS CLASSIFIED AS GROUP I PER TABLE R405.1

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY DR HORTON COMPLETED/REVISED ON 03/30/23. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY UES PROFESSIONAL SOLUTIONS 29, INC. (UES) IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. UES PROFESSIONAL SOLUTIONS 29, INC. (UES) CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

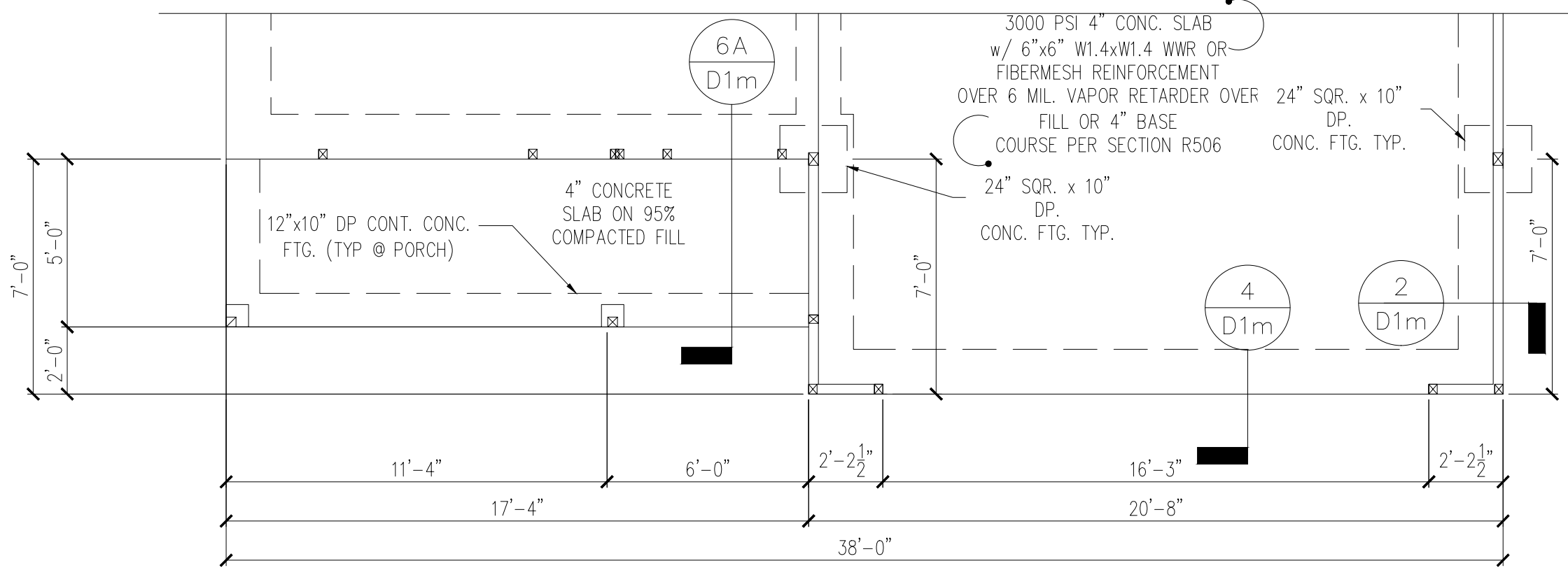
STRUCTURAL MEMBERS ONLY

ENGINEERING SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS ON THIS DOCUMENT. SEAL DOES NOT INCLUDE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS. ANY DEVIATIONS OR DISCREPANCIES ON PLANS ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF UES PROFESSIONAL SOLUTIONS 29, INC. (UES). FAILURE TO DO SO WILL VOID UES LIABILITY.

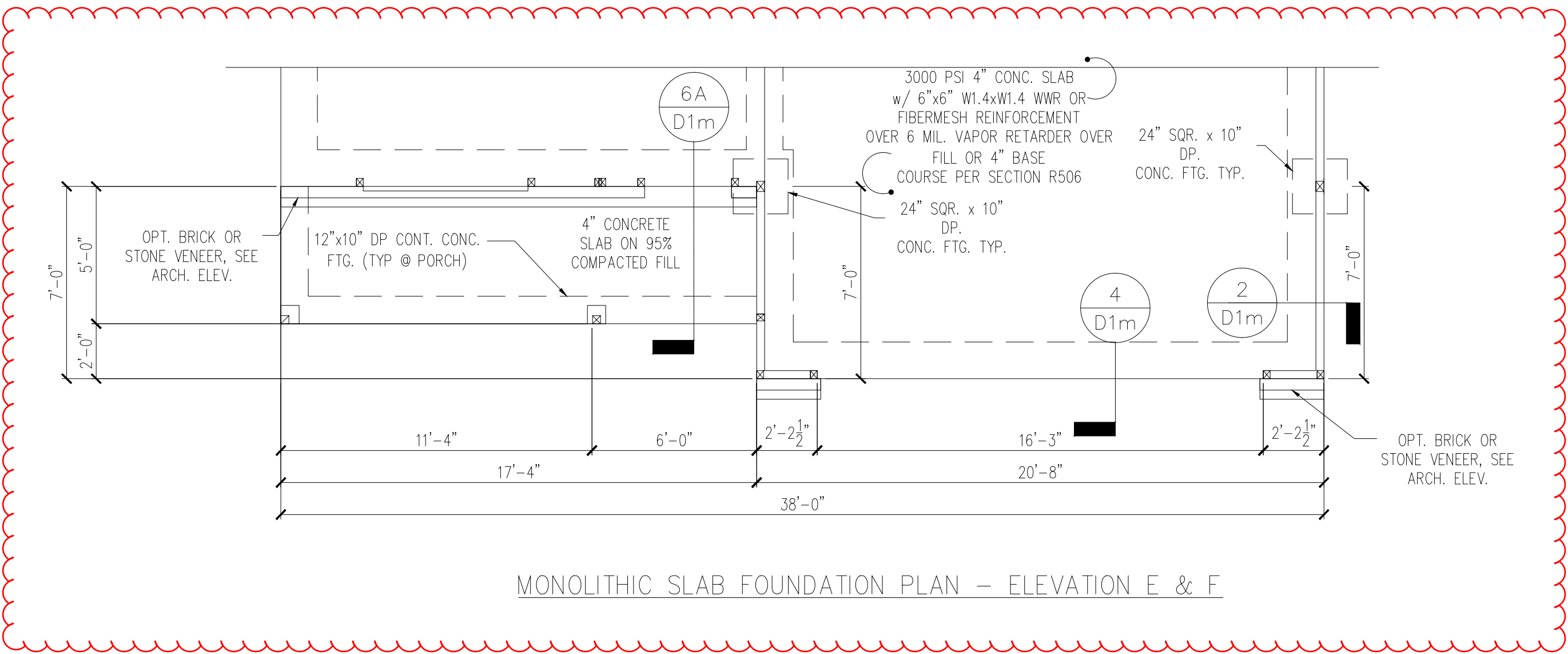
STRUCTURAL ANALYSIS BASED ON 2018 NCRS.

MONOLITHIC SLAB FOUNDATION PLAN

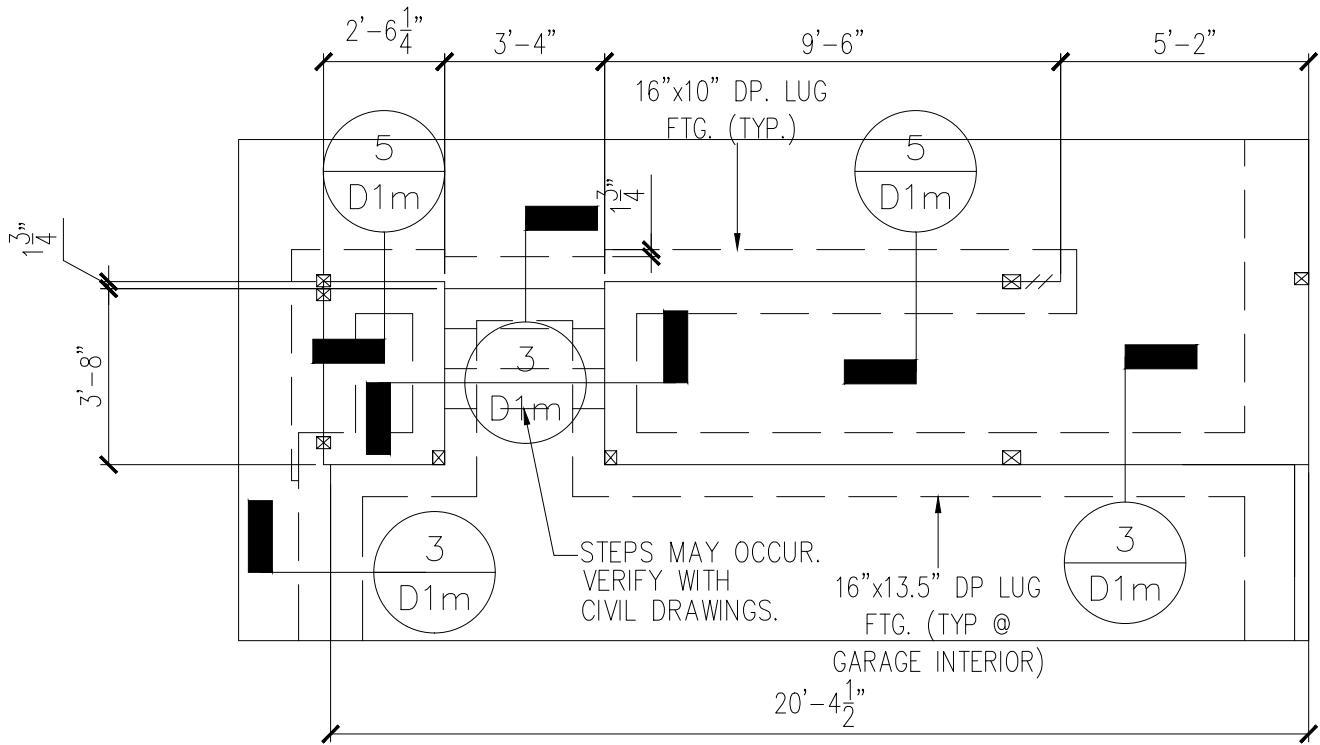
SCALE: 1/4"=1'-0" ON 22"x34" OR 1/8"=1'-0" ON 11"x17"



MONOLITHIC SLAB FOUNDATION PLAN – ELEVATION D



MONOLITHIC SLAB FOUNDATION PLAN – ELEVATION E & F



OPT. GARAGE ENTRY STEPS

REQUIRED BRACED WALL PANEL CONNECTIONS				
METHOD	MATERIAL	MIN. THICKNESS	REQUIRED CONNECTION	
			@ PANEL EDGES	@ INTERMEDIATE SUPPORTS
CS-WSP	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS @ 6" O.C.	6d COMMON NAILS @ 12" O.C.
			5d COOLER NAILS** @ 7" O.C.	5d COOLER NAILS** @ 7" O.C.
GB	GYP SUM BOARD	1/2"		
WSP	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS @ 6" O.C.	6d COMMON NAILS @ 12" O.C.
PF	WOOD STRUCTURAL PANEL	7/16"	PER FIGURE R602.10.6.4	PER FIGURE R602.10.6.4
**OR EQUIVALENT PER TABLE R702.3.5				

GENERAL STRUCTURAL NOTES:

- CONSTRUCTION SHALL CONFORM TO 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE WITH ALL LOCAL AMENDMENTS.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS. CONTRACTOR SHALL COMPLY WITH THE CONTENTS OF THE DRAWING 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.
- PROPERTIES USED IN THE DESIGN ARE AS FOLLOWS:
MICROLLAM (LVL): $F_b = 2600$ PSI, $F_v = 285$ PSI, $E = 1.9 \times 10^6$ PSI
PARALLAM (PSL): $F_b = 2900$ PSI, $F_v = 290$ PSI, $E = 1.25 \times 10^6$ PSI
- ALL WOOD MEMBERS SHALL BE #2 SYP OR #2 SPF UNLESS NOTED ON PLAN. ALL STUD COLUMNS AND JOISTS SHALL BE #2 SYP OR #2 SPF (UNO).
- ALL BEAMS SHALL BE SUPPORTED WITH A (2) 2x4 #2 SYP OR A (2) 2x4 #2 SPF STUD COLUMN AT EACH END UNLESS NOTED OTHERWISE.
- ALL REINFORCING STEEL SHALL BE GRADE 60 BARS CONFORMING TO ASTM A615 AND SHALL HAVE A MINIMUM COVER OF 3".
- FOUNDATION ANCHORAGE SHALL BE CONSTRUCTED PER THE 2018 NORTH CAROLINA RESIDENTIAL CODE SECTION R403.1.6. MINIMUM 1/2" DIA. BOLTS SPACED AT 6'-0" ON CENTER WITH A 7" MINIMUM EMBEDMENT INTO MASONRY OR CONCRETE. ANCHOR BOLTS SHALL BE 12" FROM THE END OF EACH PLATE SECTION. MINIMUM (2) ANCHOR BOLTS PER PLATE SECTION. ANCHOR BOLTS SHALL BE LOCATED IN THE CENTER THIRD OF THE PLATE.
- CONTRACTOR TO PROVIDED LOOKOUTS WHEN CEILING JOISTS SPAN PERPENDICULAR TO RAFTERS.
- FLITCH BEAMS, 4-PLY LVLs AND 3-PLY SIDE LOADED LVLs SHALL BE BOLTED TOGETHER WITH 1/2" DIA. THRU BOLTS SPACED AT 24" O.C. (MAX) STAGGERED OR EQUIVALENT CONNECTIONS PER DETAIL 1/D3f. MIN. EDGE DISTANCE SHALL BE 2" AND (2) BOLTS SHALL BE LOCATED MINIMUM 6" FROM EACH END OF THE BEAM.
- ALL NON-LOAD BEARING HEADERS SHALL BE (1) FLAT 2x4 SYP #2 OR (1) FLAT 2x4 SPF #2, DROPPED. FOR NON-LOAD BEARING HEADERS EXCEEDING 8'-0" IN WIDTH AND/OR WITH MORE THAN 2'-0" OF CRIPPLE WALL ABOVE, SHALL BE (2) FLAT 2x4 SYP #2 OR (2) FLAT 2x4 SPF #2 DROPPED. (UNLESS NOTED OTHERWISE)
- ABBREVIATIONS:

DJ = DOUBLE JOIST SJ = SINGLE JOIST
GT = GIRDER TRUSS FT = FLOOR TRUSS
SC = STUD COLUMN DR = DOUBLE RAFTER
EE = EACH END TR = TRIPLE RAFTER
TJ = TRIPLE JOIST OC = ON CENTER
CL = CENTER LINE PL = POINT LOAD

NOTE:
===== DESIGNATES JOIST SUPPORTED LOAD BEARING WALL ABOVE. PROVIDE BLOCKING UNDER JOIST SUPPORTED LOAD BEARING WALL.

JOIST & BEAM SIZES SHOWN ARE MINIMUMS. BUILDER MAY INCREASE DEPTH FOR EASE OF CONSTRUCTION.

INSTALL ANY REQUIRED HOLDDOWNS PER SECTION R602.10.8 AND FIGURES R602.10.6.5, R602.10.7, R602.10.8(1) AND R602.10.8(2) OF THE 2015 IRC

NOTE: MEMBER NOTED AS PRESSURE TREATED MAY BE FRAMED WITH NON-PRESSURE TREATED LUMBER PROVIDED THE ENTIRETY OF THE MEMBER IS WRAPPED TO PREVENT MOISTURE INTRUSION.

NOTE: REDUCE JOIST SPACING UNDER TILE FLOORS, GRANITE COUNTERTOPS AND/OR ISLANDS.

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY DR HORTON COMPLETED/REVISED ON 03/30/23. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY UES PROFESSIONAL SOLUTIONS 29, INC. (UES) IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. UES PROFESSIONAL SOLUTIONS 29, INC. (UES) CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

STRUCTURAL MEMBERS ONLY

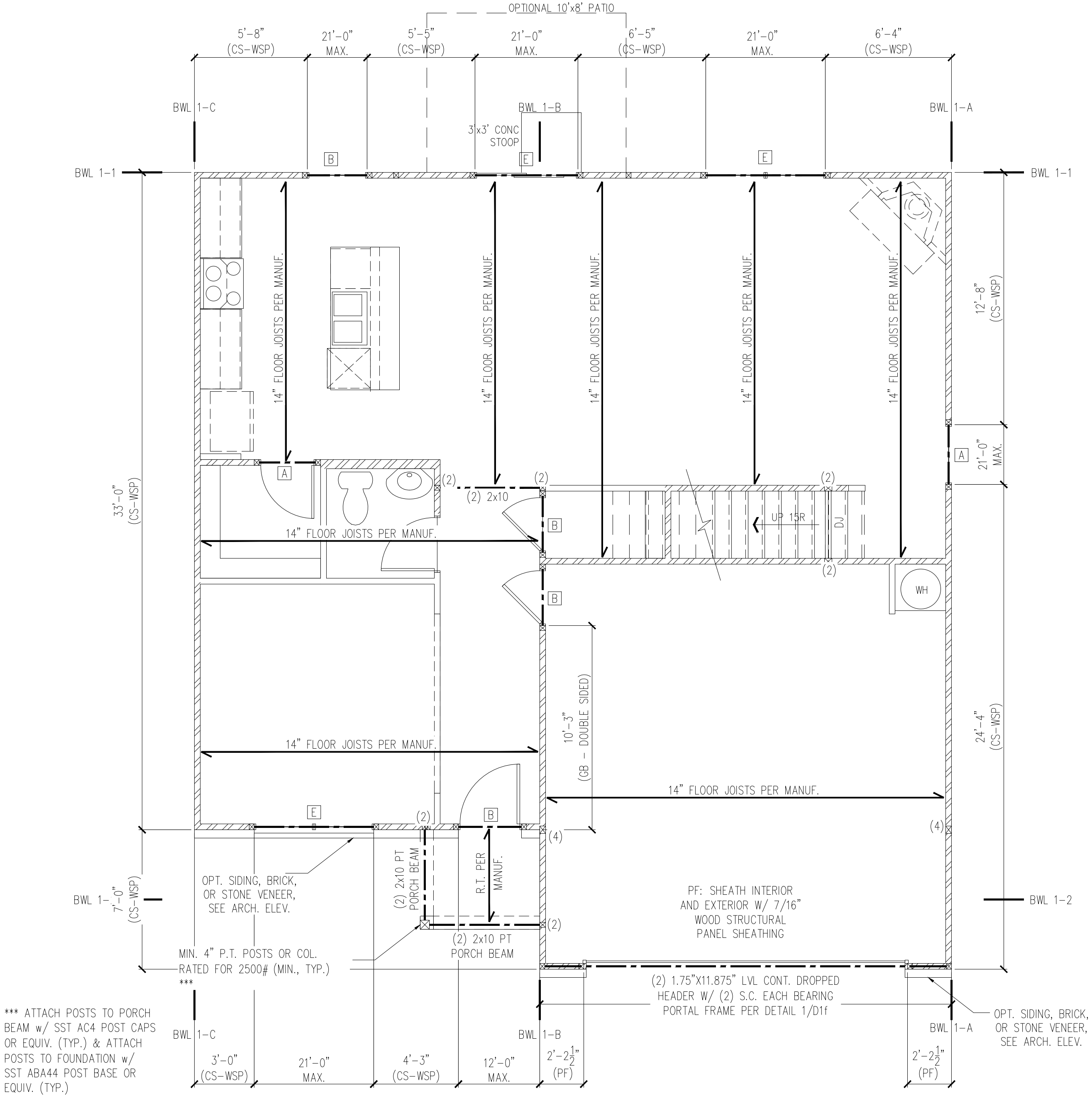
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STRUCTURAL ANALYSIS BASED ON 2018 NCRC.

FIRST FLOOR FRAMING PLAN

SCALE: 1/4"=1'-0" ON 22"x34" OR 1/8"=1'-0" ON 11"x17"

FIRST FLOOR BRACING (FT)		
CONTINUOUS SHEATHING METHOD		
	REQUIRED	PROVIDED
BWL 1-1	13.9	23.8
BWL 1-2	13.9	20.5
BWL 1-A	9.9	37.0
BWL 1-B	9.9	12.1
BWL 1-C	8.6	33.0



FIRST FLOOR FRAMING PLAN – ELEVATION A, B, C

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) 9-1/4" LSL/LVL	(3)
F	(3) 2x6	(1)
G	(3) 2x8	(2)
H	(3) 2x10	(2)
I	(3) 2x12	(2)
HEADER SIZES SHOWN ON PLANS ARE MINIMUMS. GREATER HEADER SIZES MAY BE USED FOR EASE OF CONSTRUCTION. ALL HEADERS TO BE DROPPED UNLESS NOTED OTHERWISE. SC NOTED ON PLAN OVERRIDE SC LISTED ABOVE.		

LINTEL SCHEDULE		
TAG	SIZE	OPENING SIZE
①	L3x3x1/4"	LESS THAN 6'-0"
②	L5x3x1/4"	6'-0" TO 10'-0"
③	L5x3-1/2"x5/16"	GREATER THAN 10'-0"
④	L5x3-1/2"x5/16" ROLLED OR EQUIV.	ALL ARCHED OPENINGS
SECURE LINTEL TO HEADER w/ (2) 1/2" DIAMETER LAG SCREWS STAGGERED @ 16" O.C. (TYP FOR ③)		
ALL HEADERS WHERE BRICK IS USED, TO BE: ①(UNO)		

WALL STUD SCHEDULE	
1ST & 2ND FLOOR LOAD BEARING STUDS: 2x4 STUDS @ 16" O.C. OR 2x6 STUDS @ 24" O.C.	
1ST FLOOR LOAD BEARING STUDS w/ WALK-UP ATTIC: 2x4 STUDS @ 12" O.C. OR 2x6 STUDS @ 16" O.C.	
BASEMENT LOAD BEARING STUDS: 2x4 STUDS @ 12" O.C. OR 2x6 STUDS @ 16" O.C.	
NON-LOAD BEARING STUDS (ALL FLOORS): 2x4 STUDS @ 24" O.C.	
TWO STORY WALLS: 2x4 STUDS @ 12" O.C. OR 2x6 STUDS @ 16" O.C.	
BALLOON FRAMED w/ CROSS BRACING @ 6'-0" O.C.	
VERTICALLY	

KING STUD REQUIREMENTS	
OPENING WIDTH	KINGS (EACH END)
LESS THAN 3'-0"	(1)
3'-0 TO 4'-0"	(2)
4'-0 TO 8'-0"	(3)
8'-0 TO 12'-0"	(5)
12'-0 TO 16'-0"	(6)
KING STUD REQUIREMENTS ABOVE DO NOT APPLY TO PORTAL FRAMED OPENINGS	

BRACED WALL NOTES:

- WALLS SHALL BE DESIGNED IN ACCORDANCE WITH SECTION R602.10 FROM THE 2015 INTERNATIONAL RESIDENTIAL CODE AS ALLOWED PER SECTION R602.10 OF THE 2018 NC RESIDENTIAL CODE
- WALLS ARE DESIGNED FOR SEISMIC ZONES A-C AND ULTIMATE WIND SPEEDS UP TO 130 MPH.
- REFER TO ARCHITECTURAL PLAN FOR DOOR/WINDOW OPENING SIZES.
- BRACING MATERIALS, METHODS AND FASTENERS SHALL BE IN ACCORDANCE WITH IRC TABLE R602.10.4.
- ALL BRACED WALL PANELS SHALL BE FULL WALL HEIGHT AND SHALL NOT EXCEED 10 FEET FOR ISOLATED PANEL METHOD AND 12 FEET FOR CONTINUOUS SHEATHING METHOD WITHOUT ADDITIONAL ENGINEERING CALCULATIONS.
- MINIMUM PANEL LENGTH SHALL BE PER TABLE R602.10.5.
- THE INTERIOR SIDE OF EXTERIOR WALLS AND BOTH SIDES OF INTERIOR WALLS SHALL BE SHEATHED CONTINUOUSLY WITH MINIMUM 1/2" GYP SUM BOARD (UNO).
- FOR CONTINUOUS SHEATHING METHOD, EXTERIOR WALLS SHALL BE SHEATHED ON ALL SHEATHABLE SURFACES INCLUDING INFILL AREAS BETWEEN BRACED WALL PANELS, ABOVE AND BELOW WALL OPENINGS, AND ON GABLE END WALLS.
- FLOORS SHALL NOT BE CANTILEVERED MORE THAN 24" BEYOND THE FOUNDATION OR BEARING WALL BELOW WITHOUT ADDITIONAL ENGINEERING CALCULATIONS.
- A BRACED WALL PANEL SHALL BE LOCATED WITHIN 10 FEET OF EACH END OF A BRACED WALL LINE.
- THE MAXIMUM EDGE DISTANCE BETWEEN BRACED WALL PANELS SHALL NOT EXCEED 20 FEET.
- MASONRY OR CONCRETE STEM WALLS WITH A LENGTH OF 48" OR LESS SUPPORTING A BRACED WALL PANEL SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE R602.10.9 OF THE 2015 IRC.
- BRACED WALL PANEL CONNECTIONS TO FLOOR/CEILING SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R602.10.8
- BRACED WALL PANEL CONNECTIONS TO ROOF SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R602.10.8.2 AND FIGURES R602.10.8(1)&(2)&(3).
- CRIPPLE WALLS AND WALK OUT BASEMENT WALLS SHALL BE DESIGNED IN ACCORDANCE WITH SECTION R602.10.11
- PORTAL WALLS SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE R602.10.6.4 (UNO)
- ON SCHEMATIC, SHADED WALLS INDICATE BRACED WALL PANELS.
- ABBREVIATIONS:

GB = GYP SUM BOARD WSP = WOOD STRUCTURAL PANEL
CS-xxx = CONT. SHEATHED ENG = ENGINEERED SOLUTION
PF = PORTAL FRAME PF-ENG = ENG. PORTAL FRAME

CLIENT:
DR Horton, Inc.
8001 Arrowridge Blvd.
Charlotte, NC 28273

PROJECT:
Colleen - RH

First Floor Framing Plan

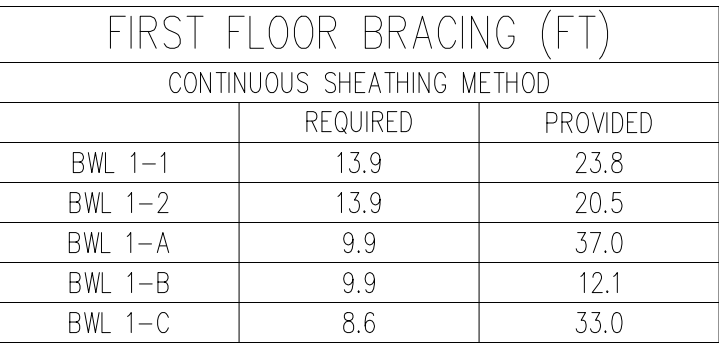
DRAWING
DATE: 11/06/2024
SCALE: 22x34 1/4"=1'-0"
11x17 1/8"=1'-0"
PROJECT #: A23117.00300.000
DRAWN BY: GGG
CHECKED BY: BGP

ORIGINAL INFORMATION
PROJECT # 19225 DATE 04/28/23

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET

S3.0



	REQUIRED	PROVIDED
BWL 1-1	13.9	23.8
BWL 1-2	13.9	20.5
BWL 1-A	9.9	37.0
BWL 1-B	9.9	12.1
BWL 1-C	8.6	33.0

[illegible]

Architectural elevation drawing of a building facade. The drawing shows a porch area on the left and a main structure on the right. Dimensions and material callouts are as follows:

- Vertical Dimensions:**
 - Overall height: 33'-0" (CS-WSP)
 - Porch height: 7'-0" (CS-WSP)
- Horizontal Dimensions:**
 - Porch width: 3'-0" (CS-WSP)
 - Main structure width: 21'-0" MAX.
 - Right side width: 4'-3" (CS-WSP)
- Structural Details:**
 - 14" FLOOR JOISTS PER MANUF.
 - Archway in the main structure.
 - Foundation line labeled 'E'.
- Material Callouts:**
 - OPT. SIDING, BRICK, OR STONE VENEER, SEE ARCH. ELEV.
- Table:**

FIR
BWL 1-B
BWL 1-A
BWL 1-B
BWL 1-C

FIRST FLOOR BRACING (FT)		
CONTINUOUS SHEATHING METHOD		
	REQUIRED	PROVIDED
BWL 1-1	13.9	23.8
BWL 1-2	13.9	20.5
BWL 1-A	9.9	37.0
BWL 1-B	9.9	12.1
BWL 1-C	8.6	33.0

SEE SHEET S3.0 FOR FRAMING
& BRACING NOTES


 The seal is circular with a double border. The outer border contains the text "NORTH CAROLINA" at the top and "PROFESSIONAL ENGINEER" at the bottom. Inside the seal, the name "BRIAN C. PHILBRICK, JR." is written in a circular path. In the center, the word "SEAL" is at the top and the number "046048" is below it. The seal is stamped over a signature and the date "1/17/24".

1/17/24
 STRUCTURAL MEMBERS ONLY

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) 9-1/4" LSL/LVL	(3)
F	(3) 2x6	(1)
G	(3) 2x8	(2)
H	(3) 2x10	(2)
I	(3) 2x12	(2)
HEADER SIZES SHOWN ON PLANS ARE MINIMUMS. GREATER HEADER SIZES MAY BE USED FOR EASE OF CONSTRUCTION. ALL HEADERS TO BE DROPPED UNLESS NOTED OTHERWISE. SC NOTED ON PLAN OVERRIDE SC LISTED ABOVE.		

LINTEL SCHEDULE		
TAG	SIZE	OPENING SIZE
①	L3x3x1/4"	LESS THAN 6'-0"
②	L5x3x1/4"	6'-0" TO 10'-0"
③	L5x3-1/2"x5/16"	GREATER THAN 10'-0"
④	L5x3-1/2"x5/16" ROLLED OR EQUIV.	ALL ARCHED OPENINGS
SECURE LINTEL TO HEADER w/ (2) 1/2" DIAMETER LAG SCREWS STAGGERED @ 16" O.C. (TYP FOR ③)		
ALL HEADERS WHERE BRICK IS USED, TO BE: ①(UNO)		

WALL STUD SCHEDULE	
1ST & 2ND FLOOR LOAD BEARING STUDS: 2x4 STUDS @ 16" O.C. OR 2x6 STUDS @ 24" O.C. 1ST FLOOR LOAD BEARING STUDS w/ WALK-UP ATTIC: 2x4 STUDS @ 12" O.C. OR 2x6 STUDS @ 16" O.C. BASEMENT LOAD BEARING STUDS: 2x4 STUDS @ 12" O.C. OR 2x6 STUDS @ 16" O.C. NON-LOAD BEARING STUDS (ALL FLOORS): 2x4 STUDS @ 24" O.C. TWO STORY WALLS: 2x4 STUDS @ 12" O.C. OR 2x6 STUDS @ 16" O.C. BALLOON FRAMED w/ CROSS BRACING @ 6'-0" O.C. VERTICALLY	

INSTALL ANY REQUIRED HOLDDOWNS PER SECTION R602.10.8 AND FIGURES R602.10.6.5, R602.10.7, R602.10.8(1) AND R602.10.8(2) OF THE 2015 IRC

NOTE:
----- DESIGNATES JOIST SUPPORTED LOAD BEARING WALL ABOVE. PROVIDE BLOCKING UNDER JOIST SUPPORTED LOAD BEARING WALL.

JOIST & BEAM SIZES SHOWN ARE MINIMUMS. BUILDER MAY INCREASE DEPTH FOR EASE OF CONSTRUCTION.

NOTE: MEMBER NOTED AS PRESSURE TREATED MAY BE FRAMED WITH NON-PRESSURE TREATED LUMBER PROVIDED THE ENTIRETY OF THE MEMBER IS WRAPPED TO PREVENT MOISTURE INTRUSION.

NOTE: REDUCE JOIST SPACING UNDER TILE FLOORS, GRANITE COUNTERTOPS AND/OR ISLANDS.

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY DR HORTON COMPLETED/REVISED ON 03/30/23. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY UES PROFESSIONAL SOLUTIONS 29, INC. (UES) IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. UES PROFESSIONAL SOLUTIONS 29, INC. (UES) CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

STRUCTURAL MEMBERS ONLY

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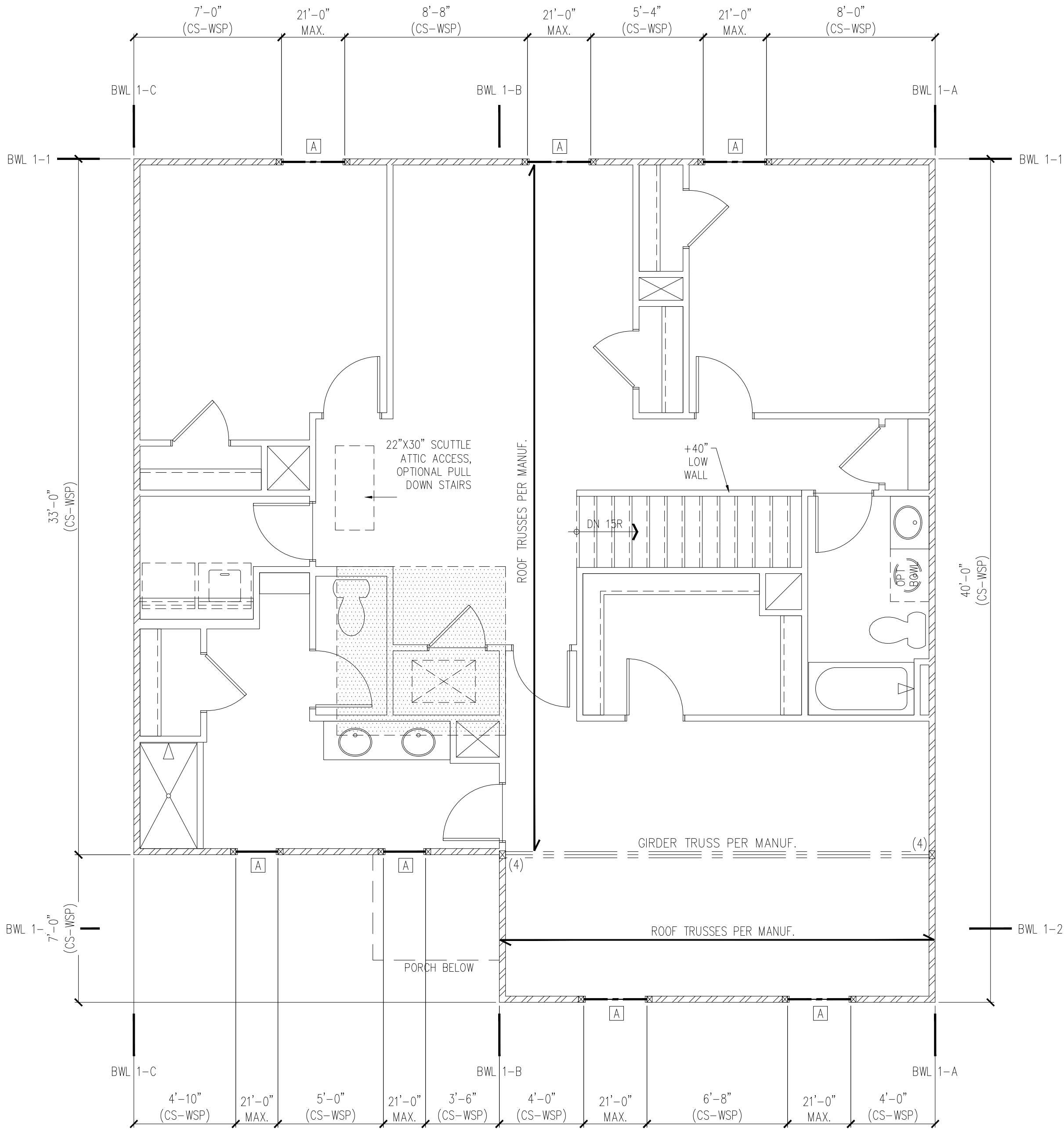
STRUCTURAL ANALYSIS BASED ON 2018 NCRC.

SECOND FLOOR FRAMING PLAN

SCALE: 1/4"=1'-0" ON 22"x34" OR 1/8"=1'-0" ON 11"x17"

KING STUD REQUIREMENTS	
OPENING WIDTH	KINGS (EACH END)
LESS THAN 3'-0"	(1)
3'-0" TO 4'-0"	(2)
4'-0" TO 8'-0"	(3)
8'-0" TO 12'-0"	(5)
12'-0" TO 16'-0"	(6)
KING STUD REQUIREMENTS ABOVE DO NOT APPLY TO PORTAL FRAMED OPENINGS	

SECOND FLOOR BRACING (FT)		
CONTINUOUS SHEATHING METHOD		
	REQUIRED	PROVIDED
BWL 1-1	6.8	29.0
BWL 1-2	6.8	13.3
BWL 1-A	4.9	40.0
BWL 1-B	4.9	7.0
BWL 1-C	4.3	33.0

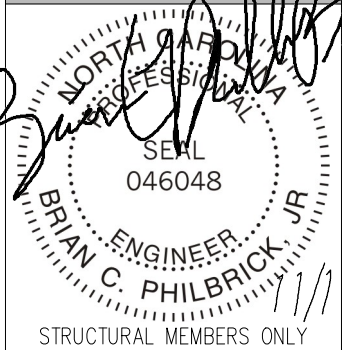


SECOND FLOOR FRAMING PLAN – ELEVATION A, B, C



CLIENT:
DR Horton, Inc.
8001 Arrowridge Blvd.
Charlotte, NC 28273

PROJECT:
Cullen – RH
Second Floor Framing Plan



DRAWING	
DATE:	11/06/2024
SCALE:	22x34 1/4"=1'-0" 11x17 1/8"=1'-0"
PROJECT #:	A23117.00300.000
DRAWN BY:	GGC
CHECKED BY:	BCP
ORIGINAL INFORMATION	
PROJECT #	DATE
13925	04/26/23
REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS	
SHEET	
S4.0	

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) 9-1/4" LSL/LVL	(3)
F	(3) 2x6	(1)
G	(3) 2x8	(2)
H	(3) 2x10	(2)
I	(3) 2x12	(2)

HEADER SIZES SHOWN ON PLANS ARE MINIMUMS. GREATER HEADER SIZES MAY BE USED FOR EASE OF CONSTRUCTION. ALL HEADERS TO BE DROPPED UNLESS NOTED OTHERWISE. SC NOTED ON PLAN OVERRIDE SC LISTED ABOVE.

LINTEL SCHEDULE		
TAG	SIZE	OPENING SIZE
①	L3x3x1/4"	LESS THAN 6'-0"
②	L5x3x1/4"	6'-0" TO 10'-0"
③	L5x3-1/2"x5/16"	GREATER THAN 10'-0"
④	L5x3-1/2"x5/16" ROLLED OR EQUIV.	ALL ARCHED OPENINGS

SECURE LINTEL TO HEADER w/ (2) 1/2" DIAMETER LAG SCREWS STAGGERED @ 16" O.C. (TYP FOR ③)

ALL HEADERS WHERE BRICK IS USED, TO BE: ①(UNO)

WALL STUD SCHEDULE	
1ST & 2ND FLOOR LOAD BEARING STUDS: 2x4 STUDS @ 16" O.C. OR 2x6 STUDS @ 24" O.C.	
1ST FLOOR LOAD BEARING STUDS w/ WALK-UP ATTIC: 2x4 STUDS @ 12" O.C. OR 2x6 STUDS @ 16" O.C.	
BASEMENT LOAD BEARING STUDS: 2x4 STUDS @ 12" O.C. OR 2x6 STUDS @ 16" O.C.	
NON-LOAD BEARING STUDS (ALL FLOORS): 2x4 STUDS @ 24" O.C.	
TWO STORY WALLS: 2x4 STUDS @ 12" O.C. OR 2x6 STUDS @ 16" O.C.	
BALLOON FRAMED w/ CROSS BRACING @ 6'-0" O.C. VERTICALLY	

INSTALL ANY REQUIRED HOLDOWNS PER SECTION R602.10.8 AND FIGURES R602.10.6.5, R602.10.7, R602.10.8(1) AND R602.10.8(2) OF THE 2015 IRC

NOTE:
----- DESIGNATES JOIST SUPPORTED LOAD BEARING WALL ABOVE. PROVIDE BLOCKING UNDER JOIST SUPPORTED LOAD BEARING WALL.

JOIST & BEAM SIZES SHOWN ARE MINIMUMS. BUILDER MAY INCREASE DEPTH FOR EASE OF CONSTRUCTION.

NOTE: MEMBER NOTED AS PRESSURE TREATED MAY BE FRAMED WITH NON-PRESSURE TREATED LUMBER PROVIDED THE ENTIRETY OF THE MEMBER IS WRAPPED TO PREVENT MOISTURE INTRUSION.

NOTE: REDUCE JOIST SPACING UNDER TILE FLOORS, GRANITE COUNTERTOPS AND/OR ISLANDS.

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY DR. HORTON, COMPLETED/REVISED ON 03/30/23. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY UES PROFESSIONAL SOLUTIONS 29, INC. (UES) IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. UES PROFESSIONAL SOLUTIONS 29, INC. (UES) CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

STRUCTURAL MEMBERS ONLY

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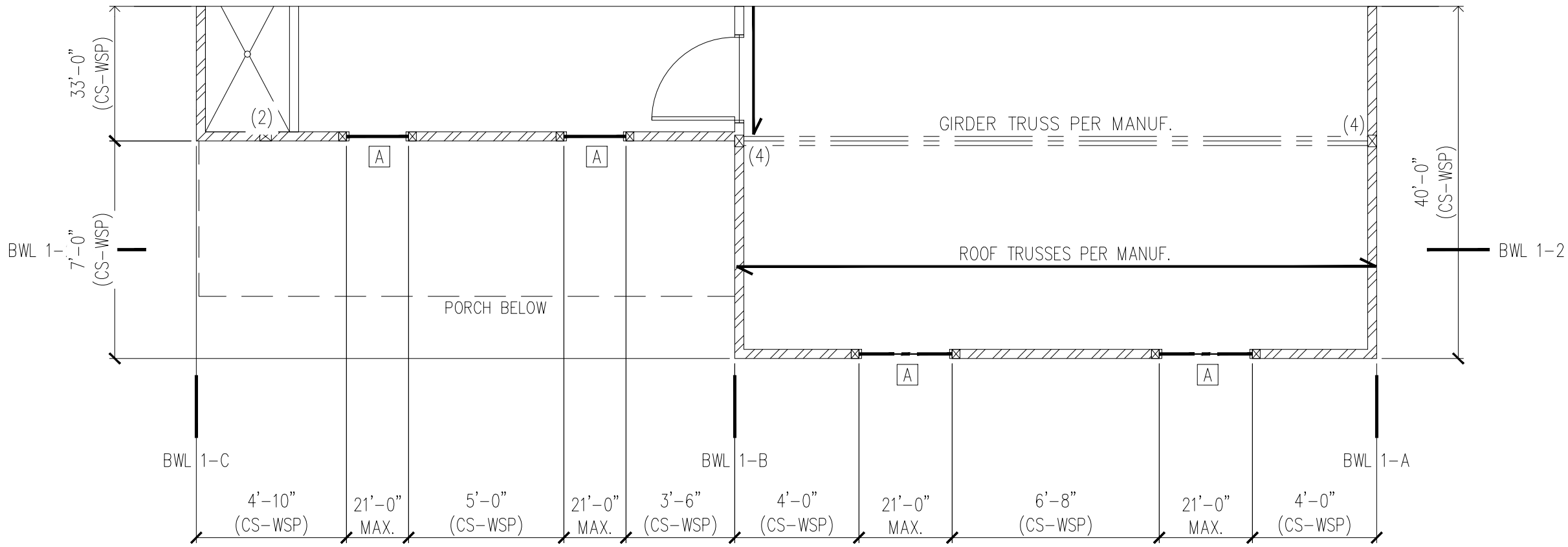
STRUCTURAL ANALYSIS BASED ON 2018 NCRG.

SECOND FLOOR FRAMING PLAN

SCALE: 1/4"=1'-0" ON 22"x34" OR 1/8"=1'-0" ON 11"x17"

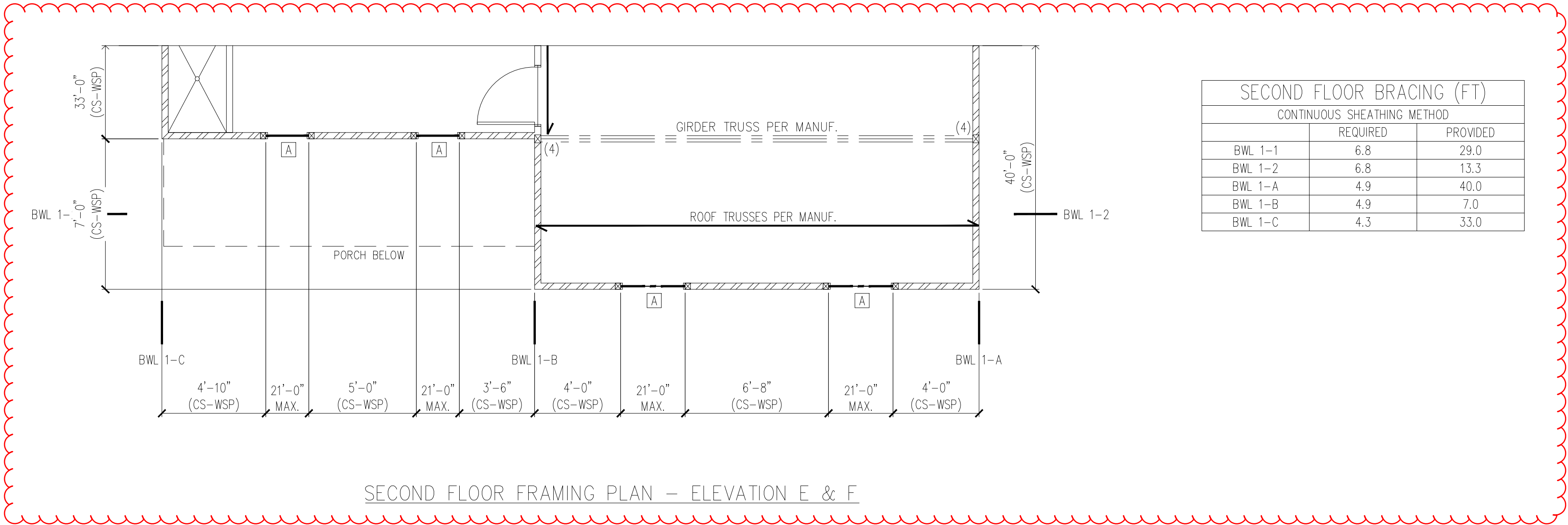
KING STUD REQUIREMENTS	
OPENING WIDTH	KINGS (EACH END)
LESS THAN 3'-0"	(1)
3'-0 TO 4'-0"	(2)
4'-0" TO 8'-0"	(3)
8'-0" TO 12'-0"	(5)
12'-0" TO 16'-0"	(6)

KING STUD REQUIREMENTS ABOVE DO NOT APPLY TO PORTAL FRAMED OPENINGS



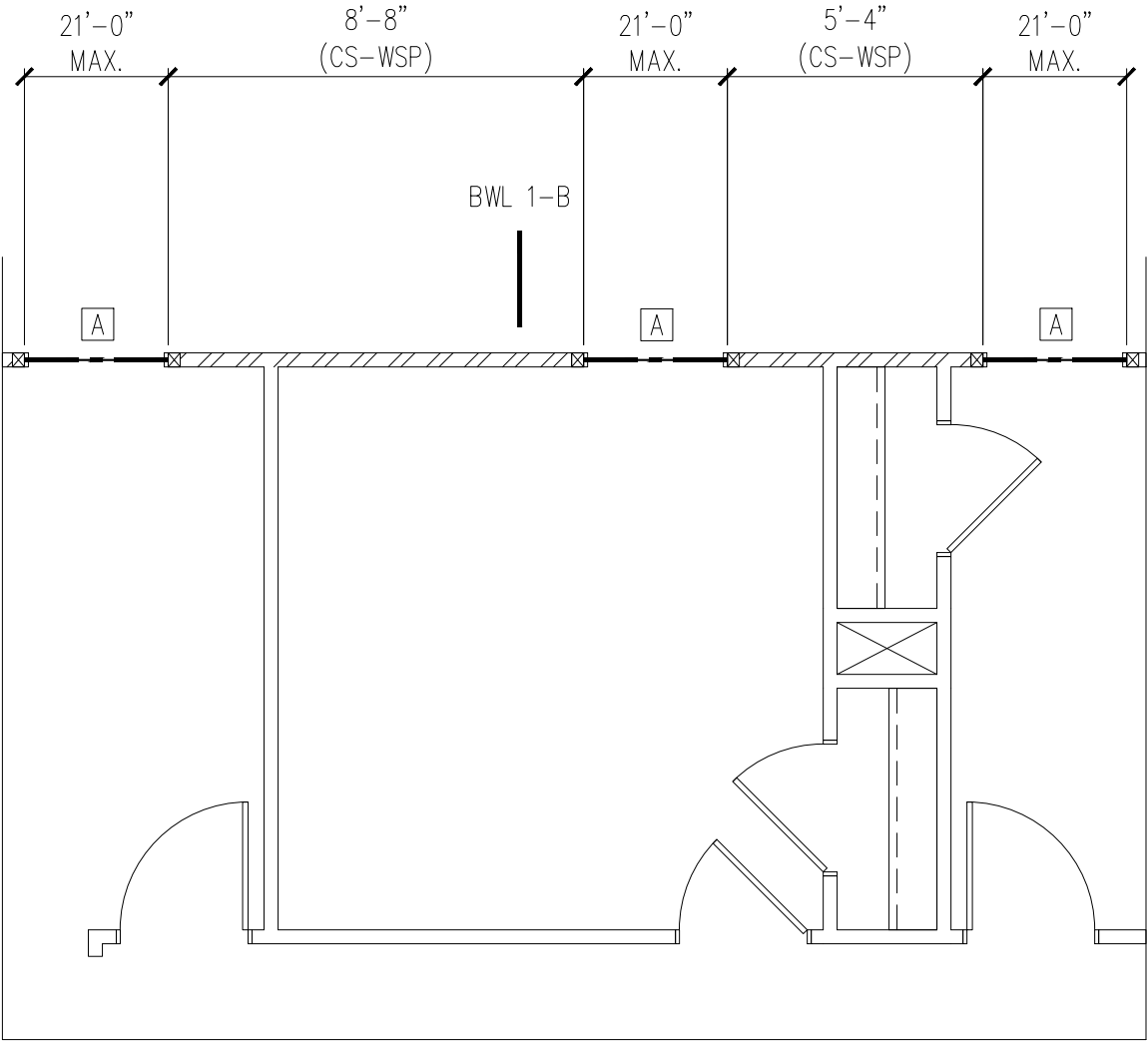
SECOND FLOOR FRAMING PLAN – ELEVATION D

SECOND FLOOR BRACING (FT)		
CONTINUOUS SHEATHING METHOD		
	REQUIRED	PROVIDED
BWL 1-1	6.8	29.0
BWL 1-2	6.8	13.3
BWL 1-A	4.9	40.0
BWL 1-B	4.9	7.0
BWL 1-C	4.3	33.0



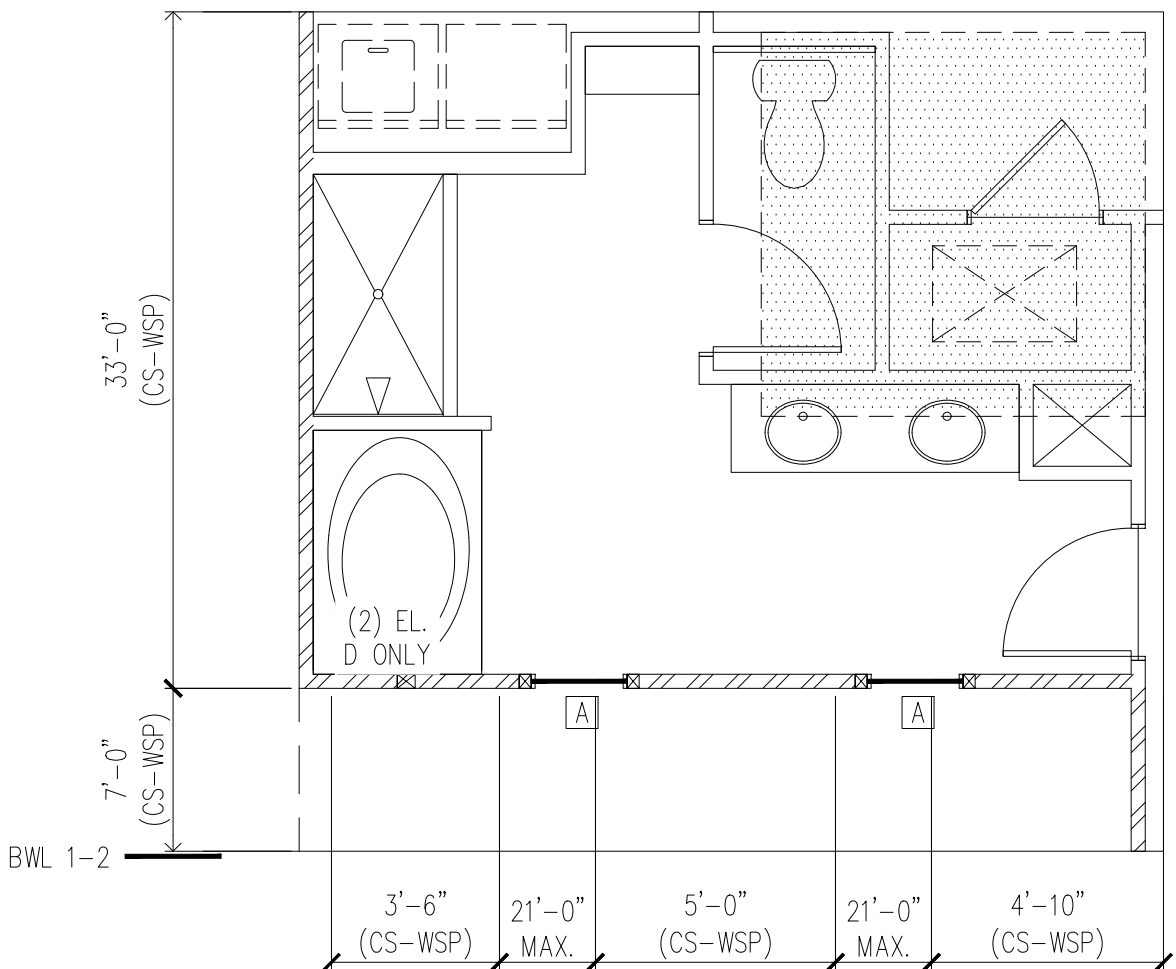
SECOND FLOOR FRAMING PLAN – ELEVATION E & F

SECOND FLOOR BRACING (FT)		
CONTINUOUS SHEATHING METHOD		
	REQUIRED	PROVIDED
BWL 1-1	6.8	29.0
BWL 1-2	6.8	13.3
BWL 1-A	4.9	40.0
BWL 1-B	4.9	7.0
BWL 1-C	4.3	33.0



OPT. BEDROOM 4

SECOND FLOOR BRACING (FT)		
CONTINUOUS SHEATHING METHOD		
	REQUIRED	PROVIDED
BWL 1-1	6.8	29.0
BWL 1-2	6.8	13.3
BWL 1-A	4.9	40.0
BWL 1-B	4.9	7.0
BWL 1-C	4.3	33.0



OPT. BATH 1

SECOND FLOOR BRACING (FT)		
CONTINUOUS SHEATHING METHOD		
	REQUIRED	PROVIDED
BWL 1-1	6.8	29.0
BWL 1-2	6.8	13.3
BWL 1-A	4.9	40.0
BWL 1-B	4.9	7.0
BWL 1-C	4.3	33.0

NOTE: 1ST PLY OF ALL SHOWN GIRDER TRUSSES TO ALIGN WITH INSIDE FACE OF WALL (TYP, UNO)

NOTE: ROOF TRUSSES SHALL BE SPACE TO SUPPORT FALSE FRAMED DORMER WALLS (TYP, UNO)

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY DR HORTON, COMPLETED/REVISED ON 03/30/23. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY UES PROFESSIONAL SOLUTIONS 29, INC. (UES) IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. UES PROFESSIONAL SOLUTIONS 29, INC. (UES) CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

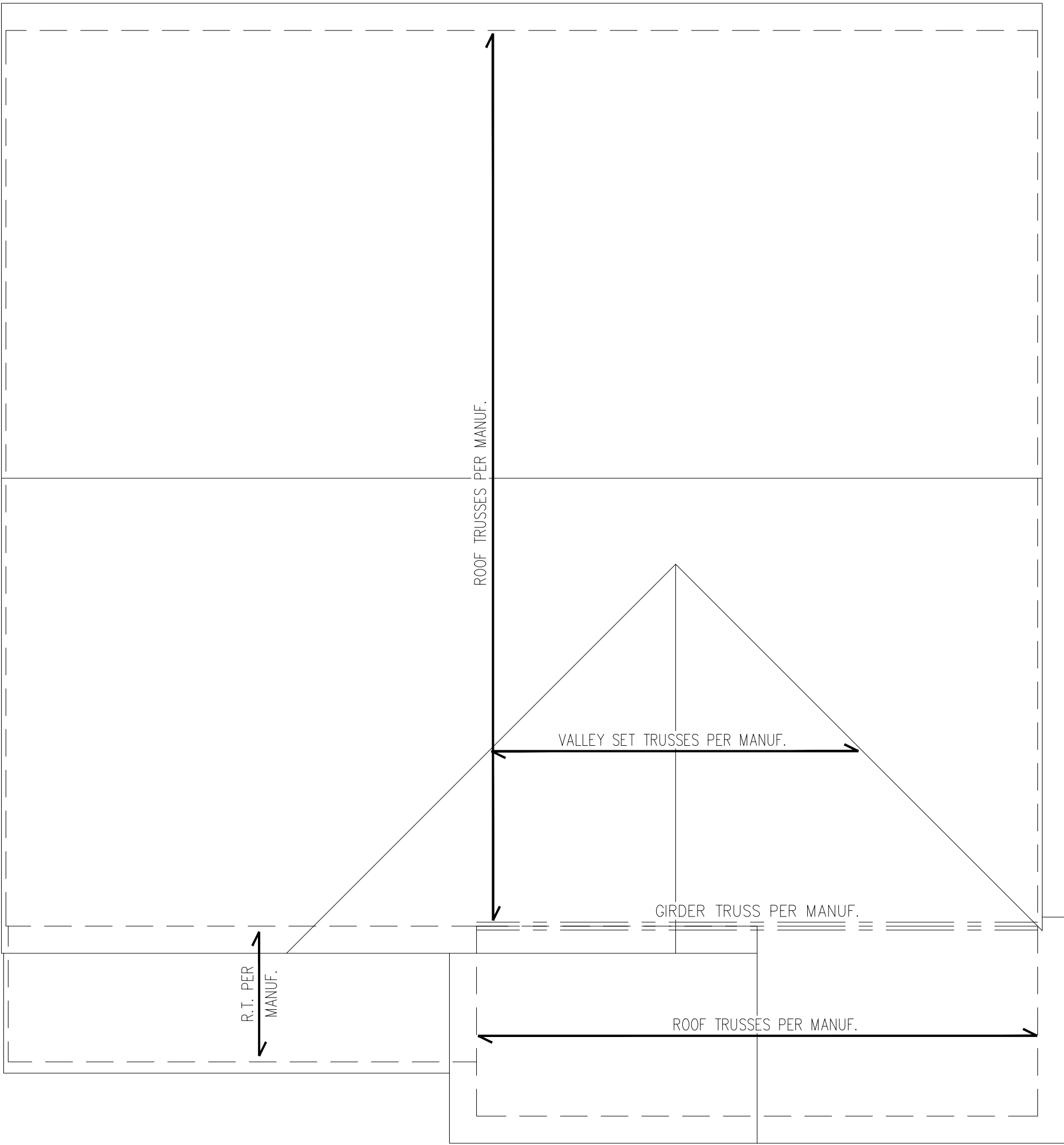
STRUCTURAL MEMBERS ONLY

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STRUCTURAL ANALYSIS BASED ON 2018 NCRC.

ROOF FRAMING PLAN

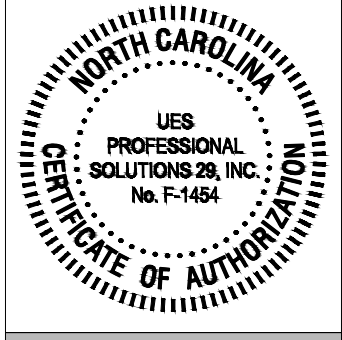
SCALE: 1/4"=1'-0" ON 22"x34" OR 1/8"=1'-0" ON 11"x17"



ROOF FRAMING PLAN – ELEVATION E & F

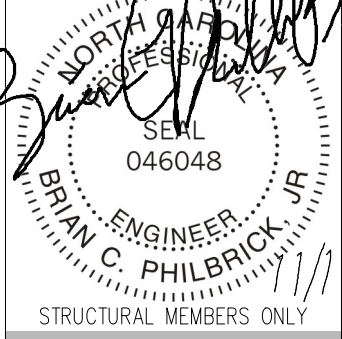


UES PROFESSIONAL SOLUTIONS 29, INC.
FORMERLY SUMMIT ENGINEERING,
LABORATORY & TESTING, INC.
10121 Pineville Distribution St
Pineville, NC 28134
Office: 704.604.1117
Fax: 704.604.1125
www.ues29.com



CLIENT:
DR Horton, Inc.
8001 Arrowridge Blvd.
Charlotte, NC 28273

PROJECT:
Colten – RH
Roof Framing Plan



STRUCTURAL MEMBERS ONLY

DRAWING
DATE: 11/06/2024
SCALE: 22x34 1/4"=1'-0"
11x17 1/8"=1'-0"
PROJECT #: A23117.00300.000
DRAWN BY: GCG
CHECKED BY: BCP

ORIGINAL INFORMATION
PROJECT # DATE
13925 04/26/23

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

SHEET
S5.2

STRUCTURAL PLANS PREPARED FOR:

PROJECT ADDRESS:	OWNER:
TBD	DR Horton Carolinas Division 8001 Arrowridge Blvd Charlotte, NC 28273
ARCHITECT/DESIGNER:	
GMD Design Group 1845 Satellite Blvd. Duluth, GA 30097	

PLAN ABBREVIATIONS:

AB	ANCHOR BOLT	PT	PRESSURE TREATED
AFF	ABOVE FINISHED FLOOR	RS	ROOF SUPPORT
CJ	CEILING JOIST	SC	STUD COLUMN
CLR	CLEAR	SJ	SINGLE JOIST
DJ	DOUBLE JOIST	SPF	SPRUCE PINE FIR
DSP	DOUBLE STUD POCKET	SST	SIMPSON STRONG-TIE
EE	EACH END	SYN	SOUTHERN YELLOW PINE
EW	EACH WAY	TJ	TRIPLE JOIST
NTS	NOT TO SCALE	TSP	TRIPLE STUD POCKET
OC	ON CENTER	TPY	TYPICAL
PF	POUNDS PER SQUARE FOOT	UNO	UNLESS NOTED OTHERWISE
PSI	POUNDS PER SQUARE INCH	WWF	WELDED WIRE FABRIC

SHEET LIST:

Sheet No.	Description
CS1	Cover Sheet, Specifications, Revisions
D1m	Monolithic Slab Foundation Details
D1s	Stem Wall Foundation Details
D1c	Crawl Space Foundation Details
D1b	Basement Foundation Details
D1f	Framing Details

REVISION LIST:

[illegible]

DR HORTON PROJECT SIGN-OFF:

Manager	Signature
Operations	
Operations System	
Operations Product Development	



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Fax: 704.504.1125
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CLIENT:
DR Horton Carolina Division
8001 Arrowridge Blvd.
Charlotte, NC 28273

1. The design professional whose seal appears on these drawings is the structural engineer of record (SER) for this project. The SER bears the responsibility of the primary structural elements and the performance of this structure. No other party may revise, alter, or delete any structural aspects of these construction documents without written permission of UES Professional Solutions 29, Inc. (UES) or the SER. For the purposes of these construction documents the SER and UES shall be considered the same entity.
2. The structure is only stable in its completed form. The contractor shall provide all required temporary bracing during construction to stabilize the structure.
3. The SER is not responsible for construction sequences, methods, or techniques in connection with the construction of this structure. The SER will not be held responsible for the contractor's failure to conform to the contract documents, should any non-conformities occur.
4. Any structural elements or details not fully developed on the construction drawings shall be completed under the direction of a licensed professional engineer. These shop drawings shall be submitted to UES for review before any construction begins. The shop drawings will be reviewed for overall compliance as it relates to the structural design of this project. Verification of the shop drawings for dimensions, or for actual field conditions, is not the responsibility of the SER or UES.
5. Verification of assumed field conditions is not the responsibility of the SER. The contractor shall verify the field conditions for accuracy and report any discrepancies to UES before construction begins.
6. The SER is not responsible for any secondary structural elements or non-structural elements, except for the elements specifically noted on the structural drawings.
7. This structure and all construction shall conform to all applicable sections of the international residential code.
8. This structure and all construction shall conform to all applicable sections of local building codes.
9. All structural assemblies are to meet or exceed to requirements of the current local building code.

1. The structural engineer has not performed a subsurface investigation. Verification of this assumed value is the responsibility of the owner or the contractor. Should any adverse soil condition be encountered the SER must be contacted before proceeding.

2. The bottom of all footings shall extend below the frost line for the region in which the structure is to be constructed. However, the bottom of all footings shall be a minimum of 12" below grade.
3. Any fill shall be placed under the direction or recommendation of a licensed professional engineer.
4. The resulting soil shall be compacted to a minimum of 95% maximum dry density.
5. Excavations of footings shall be lined temporarily with a 6 mil polyethylene membrane if placement of concrete does not occur within 24 hours of excavation.
6. No concrete shall be placed against any subgrade containing water, ice, frost, or loose material.

1. Structural steel shall be fabricated and erected in accordance with the American Institute of Steel Construction "Code of Standard Practice for Steel Buildings and Bridges" and the manual of Steel Construction "Load Resistance Factor Design" latest editions.
2. Structural steel shall receive one coat of shop applied rust-inhibitive paint.
3. All steel shall have a minimum yield stress (F_y) of 36 ksi unless otherwise noted.
4. Welding shall conform to the latest edition of the American Welding Society's Structural Welding Code AWS D1.1. Electrodes for shop and field welding shall be class E70XX. All welding shall be performed by a certified welder per the above standards.

1. Concrete shall have a normal weight aggregate and a minimum compressive strength (f'_c) at 28 days of 3000 psi, unless otherwise noted on the plan.
2. Concrete shall be proportioned, mixed, and placed in accordance with the latest editions of ACI 318: "Building Code Requirements for Reinforced Concrete" and ACI 301: "Specifications for Structural Concrete for Buildings".
3. Air entrained concrete must be used for all structural elements exposed to freeze/thaw cycles and deicing chemicals. Air entrainment amounts (in percent) shall be within -1% to +2% of target values as follows:
 - 3.1. Footings: 5%
 - 3.2. Exterior Slabs: 5%
4. No admixtures shall be added to any structural concrete without written permission of the SER.

5. Concrete slabs-on-grade shall be constructed in accordance with ACI 302.1R-96: "Guide for Concrete Slab and Slab Construction".
6. The concrete slab-on-grade has been designed using a subgrade modulus of $k=250$ pci and a design loading of 200 psf. The SER is not responsible for differential settlement, slab cracking or other future defects resulting from unreported conditions not in accordance with the above assumptions.
7. Control or saw cut joints shall be spaced in interior slabs-on-grade at a maximum of 15'-0" O.C. and in exterior slabs-on-grade at a maximum of 10'-0" unless otherwise noted.
8. Control or saw cut joints shall be produced using conventional process within 4 to 12 hours after the slab has been finished.
9. Reinforcing steel may not extend through a control joint.
10. Reinforcing steel may extend through a saw cut joint.
11. All welded wire fabric (W.W.F.) for concrete slabs-on-grade shall be placed at mid-depth of slab. The W.W.F. shall be securely supported during the concrete pour.

1. Fibrous concrete reinforcement, or fibermesh, specified in concrete slabs-on-grade may be used for control of cracking due to shrinkage and thermal expansion/contraction, lowered water migration, an increase in impact capacity, increased abrasion resistance, and residual strength.
2. Fibermesh reinforcing to be 100% virgin polypropylene fibers containing no reprocessed olefin materials and specifically manufactured for use as concrete secondary reinforcement.
3. Application of fibermesh per cubic yard of concrete shall equal a minimum of 0.1% by volume (1.5 pounds per cubic yard).
4. Fibermesh shall comply with ASTM C1116, any local building code requirements, and shall meet or exceed the current industry standard.
5. Steel reinforcing bars shall be new billet steel conforming to ASTM A615, grade 60.
6. Detailing, fabrication, and placement of reinforcing steel shall be in accordance with the latest edition of ACI 315: "Manual of Standard Practice for Detailing Concrete Structures".
7. Horizontal footing and wall reinforcement shall be continuous and shall have 90° bends, or corner bars with the same size/spacing as the horizontal reinforcement with a class B tension splice.
8. Lap reinforcement as required, a minimum of 40 bar diameters for tension or compression unless otherwise noted. Splices in masonry shall be a minimum of 48 bar diameters.

9. Where reinforcing dowels are required, they shall be equivalent in size and spacing to the vertical reinforcement. The dowel shall extend 48 bar diameters vertically and 20 bar diameters into the footing.
10. Where reinforcing steel is required vertically, dowels shall be provided unless otherwise noted.
11. Unless otherwise specified, concrete reinforcing is not required.

1. Solid sawn wood framing members shall conform to the specifications listed in the latest edition of the "National Design Specification for Wood Construction" (NDS). Unless otherwise noted, all wood framing members are designed to be Spruce-Yellow-Pine (SYP) #2.
2. LVL or PSL engineered wood shall have the following minimum design values:

- 2.1. $E = 1,900,000$ psi
- 2.2. $F_b = 2600$ psi
- 2.3. $F_v = 285$ psi
- 2.4. $F_c = 700$ psi
3. Wood in contact with concrete, masonry, or earth shall be pressure treated in accordance with AWP/A standard C-15. All other moisture exposed wood shall be treated in accordance with AWP/A standard C-2
4. Nails shall be common wire nails unless otherwise noted.
5. Lag screws shall conform to ANSI/ASME standard B18.2.1-1981. Lead holes for lag screws shall be in accordance with NDS specifications.
6. All beams shall have full bearing on supporting framing members unless otherwise noted.
7. Exterior and load bearing stud walls are to be 2x4 SYP #2 @ 16" O.C. unless otherwise noted. Studs shall be continuous from the sole plate to the double top plate. Studs shall only be discontinuous at headers for window/door openings. A minimum of one king stud shall be placed at each end of the header. King studs shall be continuous.
8. Individual studs forming a column shall be attached with one 10d nail @ 6" O.C. staggered. The stud column shall be continuous to the foundation or beam. The column shall be properly blocked at all floor levels to ensure proper load transfer.
9. Multi-ply beams shall have each ply attached with (3) 10d nails @ 24" O.C.

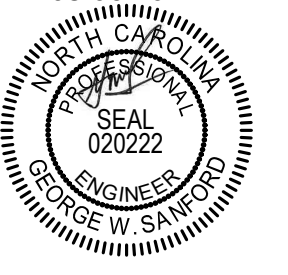
1. The wood truss manufacturer/fabricator is responsible for the design of the wood trusses. Submit sealed shop drawings and supporting calculations to the SER for review prior to fabrication. The SER shall have a minimum of five (5) days for review. The review by the SER shall review for overall compliance with the design documents. The SER shall assume no responsibility for the correctness for the structural design for the wood trusses.
2. The wood trusses shall be designed for all required loadings as specified in the local building code, the ASCE Standard "Minimum Design Loads for Buildings and Other Structures," (ASCE 7-05), and the loading requirements shown on these specifications. The truss drawings shall be coordinated with all other construction documents and provisions provided for loads shown on these drawings including but not limited to HVAC equipment, piping, and architectural fixtures attached to the trusses.
3. The trusses shall be designed, fabricated, and erected in accordance with the latest edition of the "National Design Specification for Wood Construction," (NDS) and "Design Specification for Metal Plate Connected Wood Trusses."
4. The truss manufacturer shall provide adequate bracing information in accordance with "Commentary and Recommendations for Handling, Installing, and Bracing Metal Plate Connected Wood Trusses" (HIB-91). This bracing, both temporary and permanent, shall be shown on the shop drawings. Also, the shop drawings shall show the required attachments for the trusses.
5. Any chords or truss webs shown on these drawings have been shown as a reference only. The final design of the trusses shall be per the manufacturer.

1. Decks are to be framed in accordance with local building codes and as referenced on the structural plans, either through code references or construction details.

1. Fabrication and placement of structural wood sheathing shall be in accordance with the APA Design/Construction Guide "Residential and Commercial," and all other applicable APA standards.
2. All structurally required wood sheathing shall bear the mark of the APA.
3. Wood wall sheathing shall comply with the requirements of local building codes for the appropriate state as indicated on these drawings. Refer to wall bracing notes in plan set for more information. Sheathing shall be applied with the long direction perpendicular to framing, unless noted otherwise.
4. Roof sheathing shall be APA rated sheathing exposure 1 or 2. Roof sheathing shall be continuous over two supports and attached to its supporting roof framing with (1)-8d CC nail at 6"/c at panel edges and at 12"/c in panel field unless otherwise noted on the plans. Sheathing shall be applied with the long direction perpendicular to framing. Sheathing shall have a span rating consistent with the framing spacing. Use suitable edge support by use of plywood clips or lumber blocking unless otherwise noted. Panel end joints shall occur over framing. Apply building paper over the sheathing as required by the state Building Code.
5. Wood floor sheathing shall be APA rated sheathing exposure 1 or 2. Attach sheathing to its supporting framing with (1)-8d CC ringshank nail at 6"/c at panel edges and at 12"/c in panel field unless otherwise noted on the plans. Sheathing shall be applied perpendicular to framing. Sheathing shall have a span rating consistent with the framing spacing. Use suitable edge support by use of 2x6 plywood or lumber blocking unless otherwise noted. Panel end joints shall occur over framing. Apply building paper over the sheathing as required by the state Building Code.
6. Sheathing shall have a 1/8" gap at panel ends and edges as recommended in accordance with the APA.

PROJECT: Standard Details (OX-IS)
Coversheet

05.06.2024



STRUCTURAL MEMBERS ONLY

DRAWING

DATE: 05/06/2024

SCALE: 22x34 1/4"=1'-0"
11x17 1/8"=1'-0"

PROJECT #: A21117.00066.000

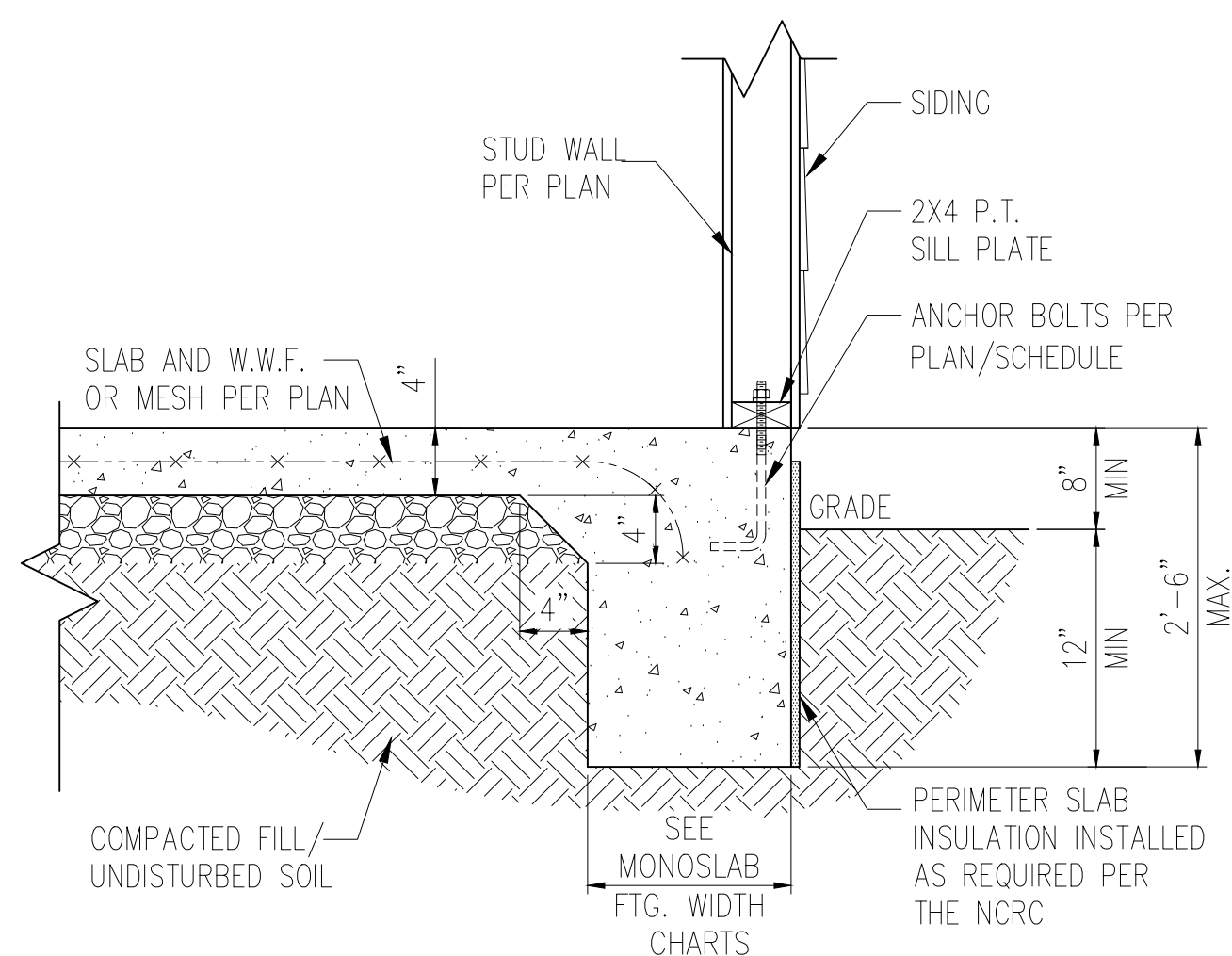
DRAWN BY: MGC

CHECKED BY: GWS

ORIGINAL INFORMATION
PROJECT # DATE
1-734-0013

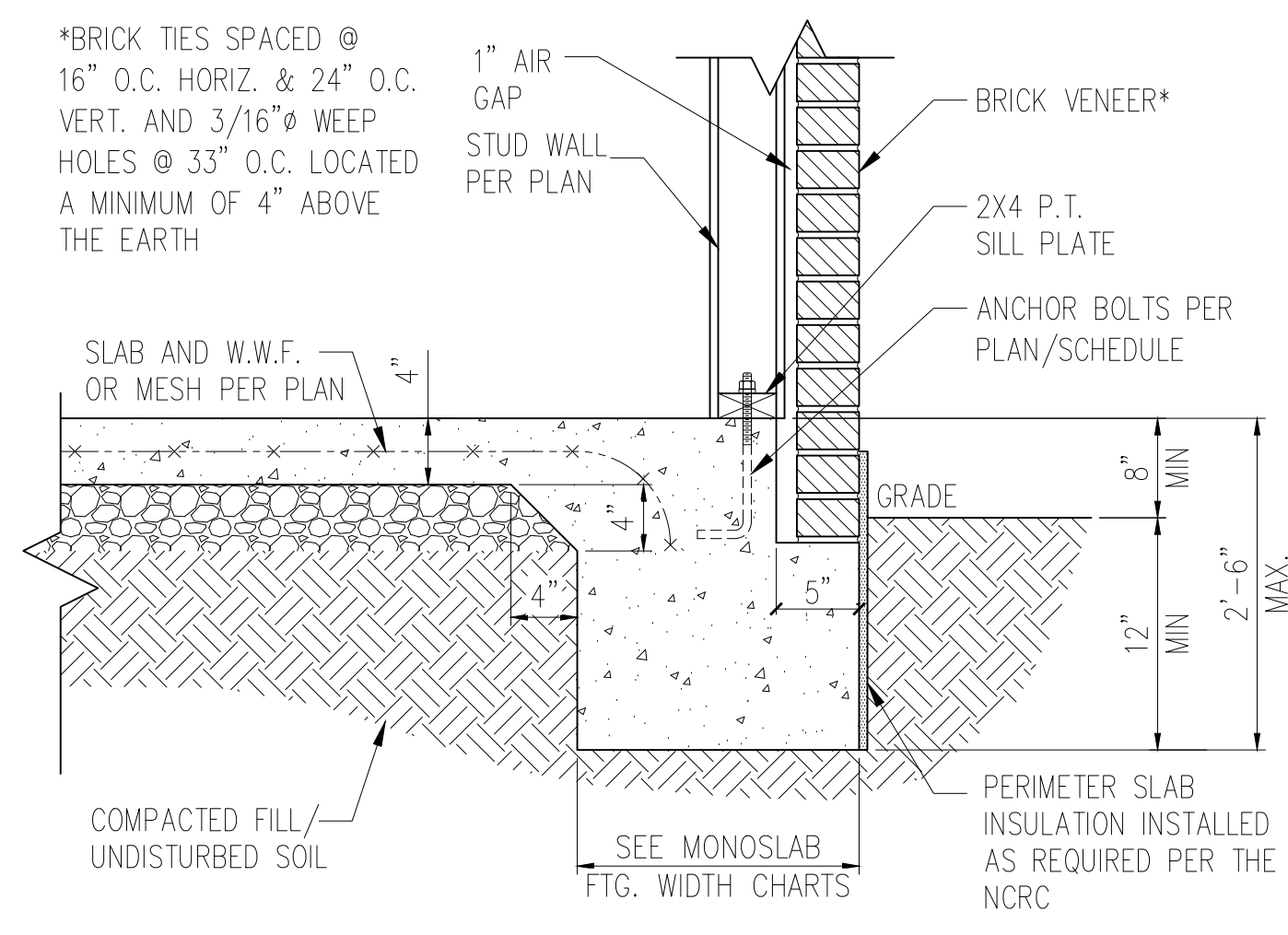
REFER TO COVER SHEET FOR A COMPLETE
LIST OF REVISIONS

CS1



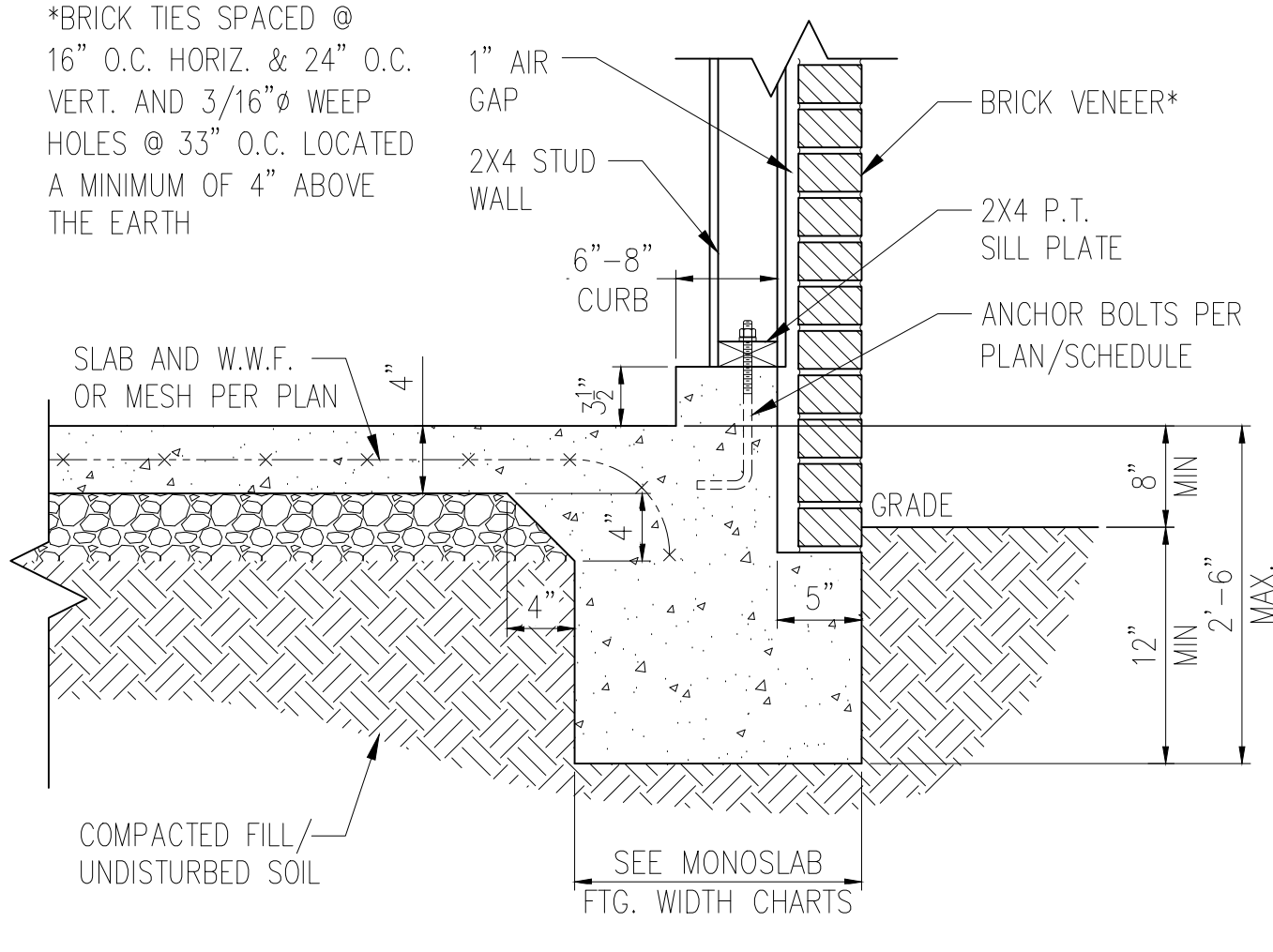
STANDARD – SIDING

1 TYP. SLAB DETAIL
D1m N.T.S.

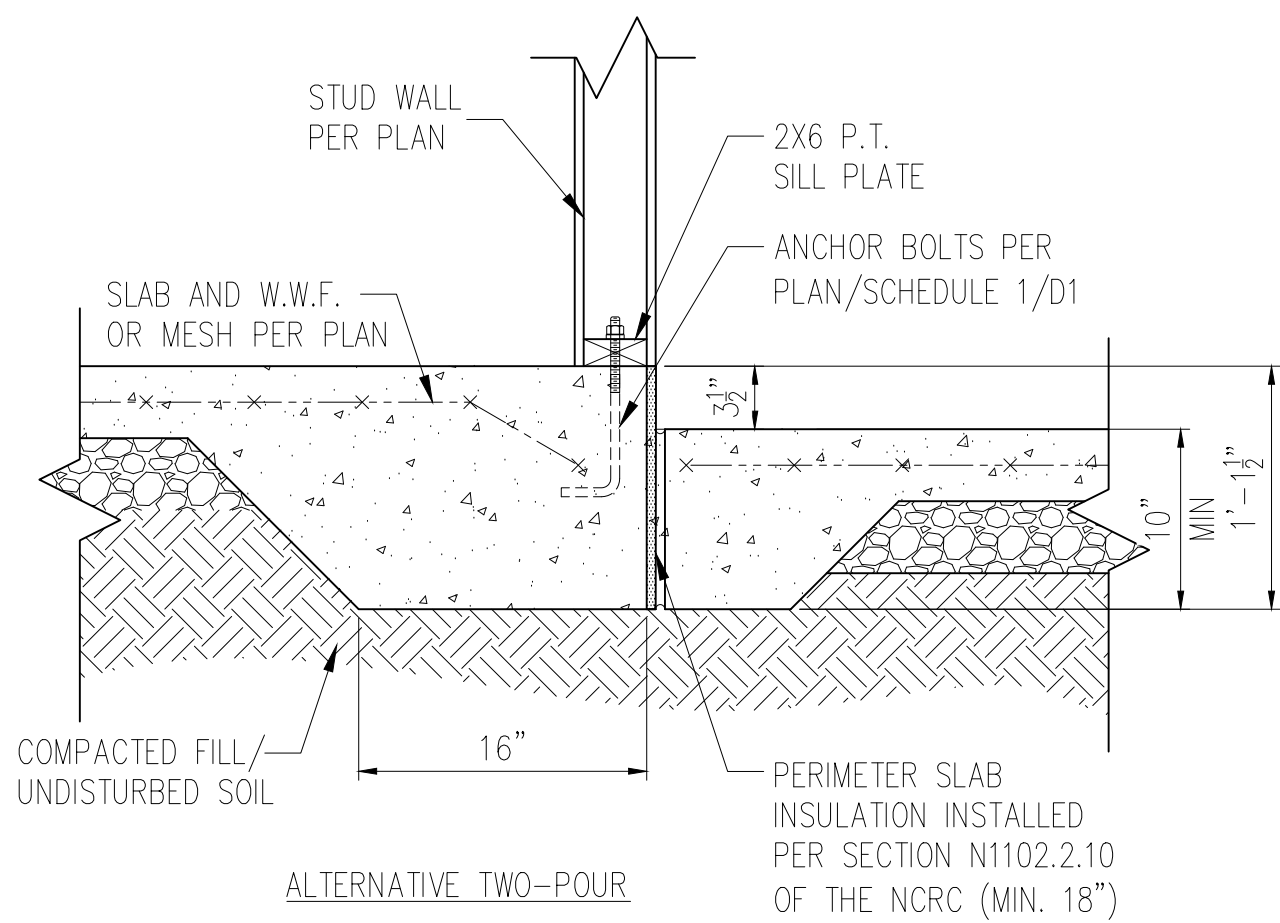


STANDARD – BRICK

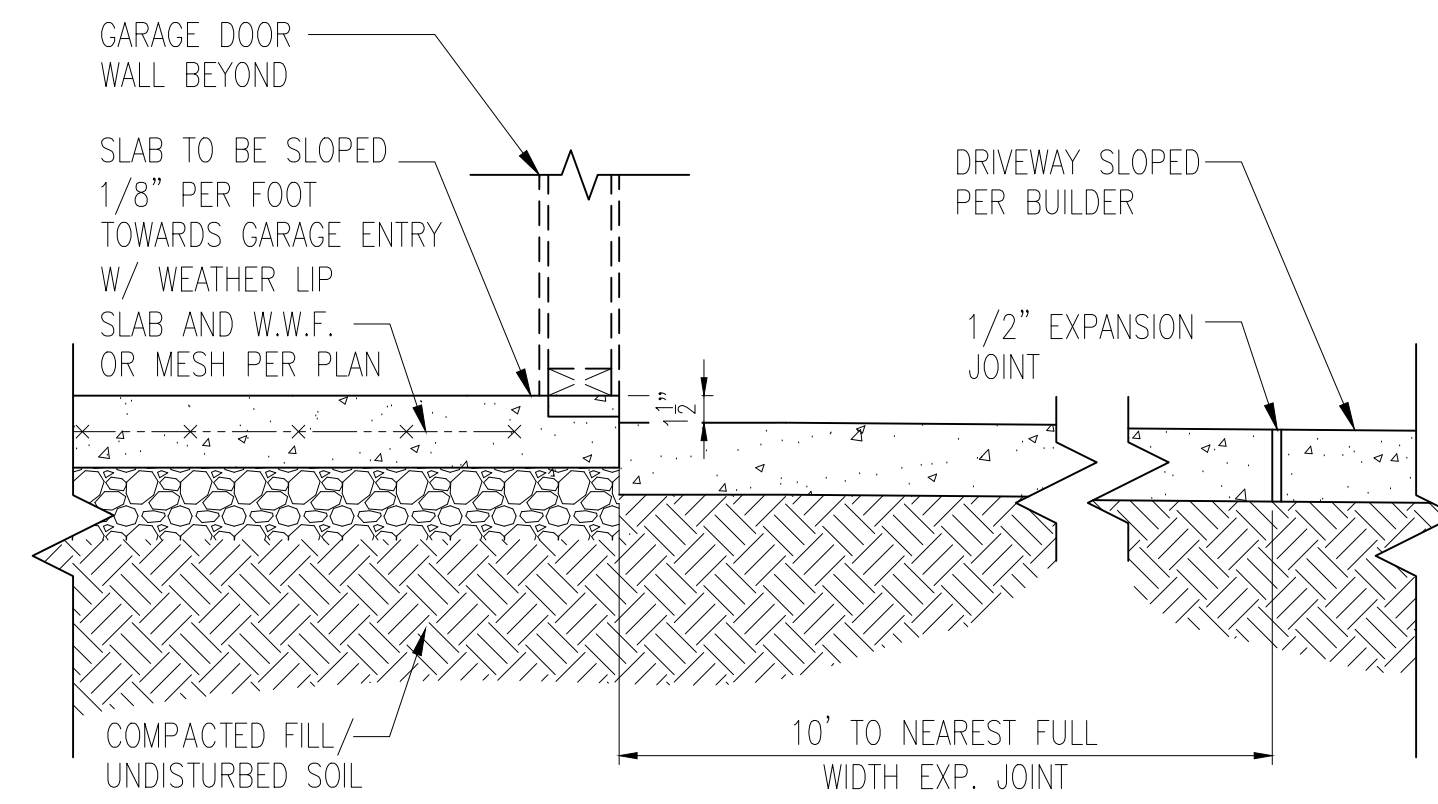
2 TYP. GARAGE CURB DETAIL
D1m N.T.S.



3 STEP IN GARAGE
D1m N.T.S.



3A ALTERNATE TWO-POUR DETAIL
D1m N.T.S.



5 TYP. THICKENED SLAB DETAIL
D1m N.T.S.

MONOLITHIC FOOTING WIDTH			
# OF STORIES	WIDTH BASED ON SOIL BEARING CAPACITY		
	1500 PSF	2000 PSF	2500 PSF
1 STORY – STD.	16"	16"	16"
1 STORY – BRICK VENEER	21"*	21"*	21"*
2 STORY – STD.	16"	16"	16"
2 STORY – BRICK VENEER	21"*	21"*	21"*
3 STORY – STD.	23"	18"	18"
3 STORY – BRICK VENEER	32"*	24"*	24"*

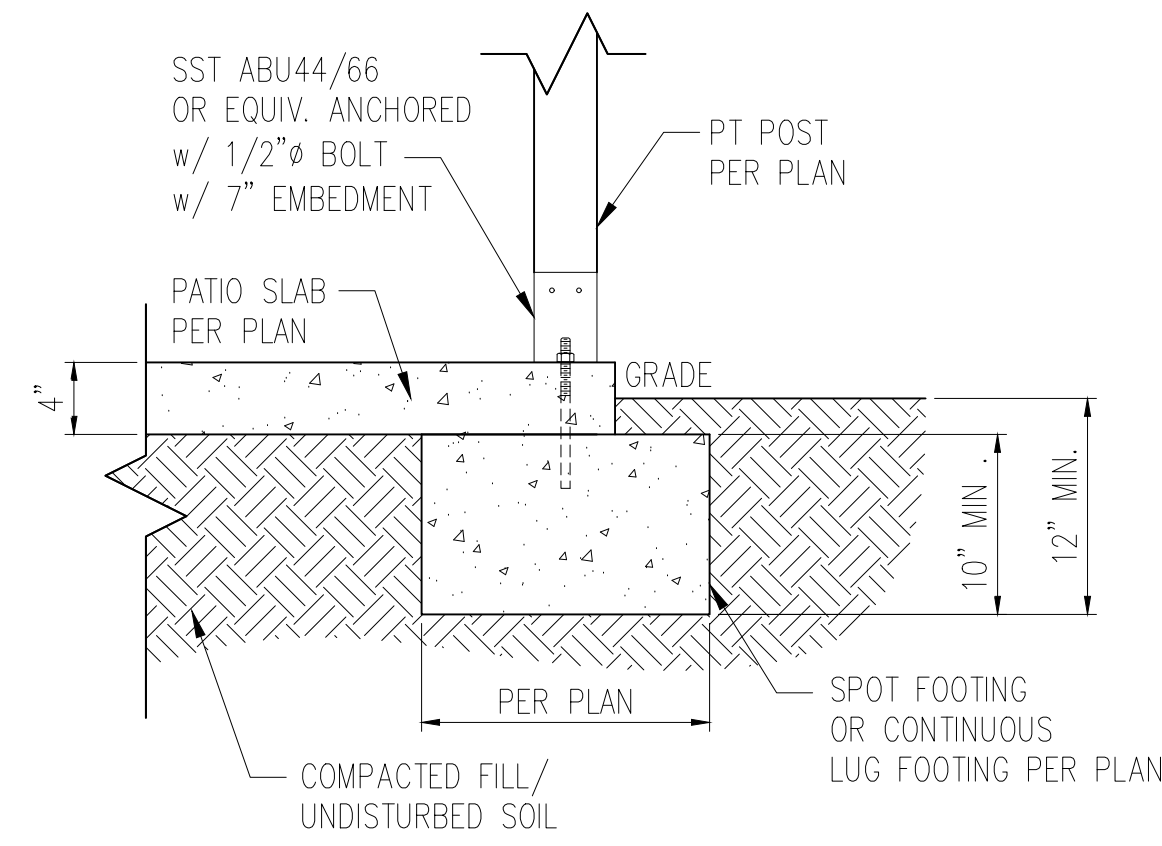
*5" BRICK LEDGE HAS BEEN ADDED TO THE MONOLITHIC FOOTING WIDTH FOR BRICK SUPPORT

WALL ANCHOR SCHEDULE				
TYPE OF ANCHOR	MIN. CONC. EMBEDMENT	SPACING	INTERIOR WALL	EXTERIOR WALL
1/2" Ø A307 BOLTS w/ STD. 90° BEND	7"	6'-0"	YES	YES
SST – MAS	4"	5'-0"	NO	YES
SIMPSON TITEN HD 1/2" Ø – 8"	6-1/2"	6'-0"	YES	YES
1/2" Ø HILTI THREADED ROD w/ HIT HY150 ADHESIVE	7"	6'-0"	YES	YES
1/2" Ø HILTI KWIK BOLT, SST WEDGE-ALL, OR EQUIVALENT WEDGE ANCHOR	7"	6'-0"	YES	YES – 2

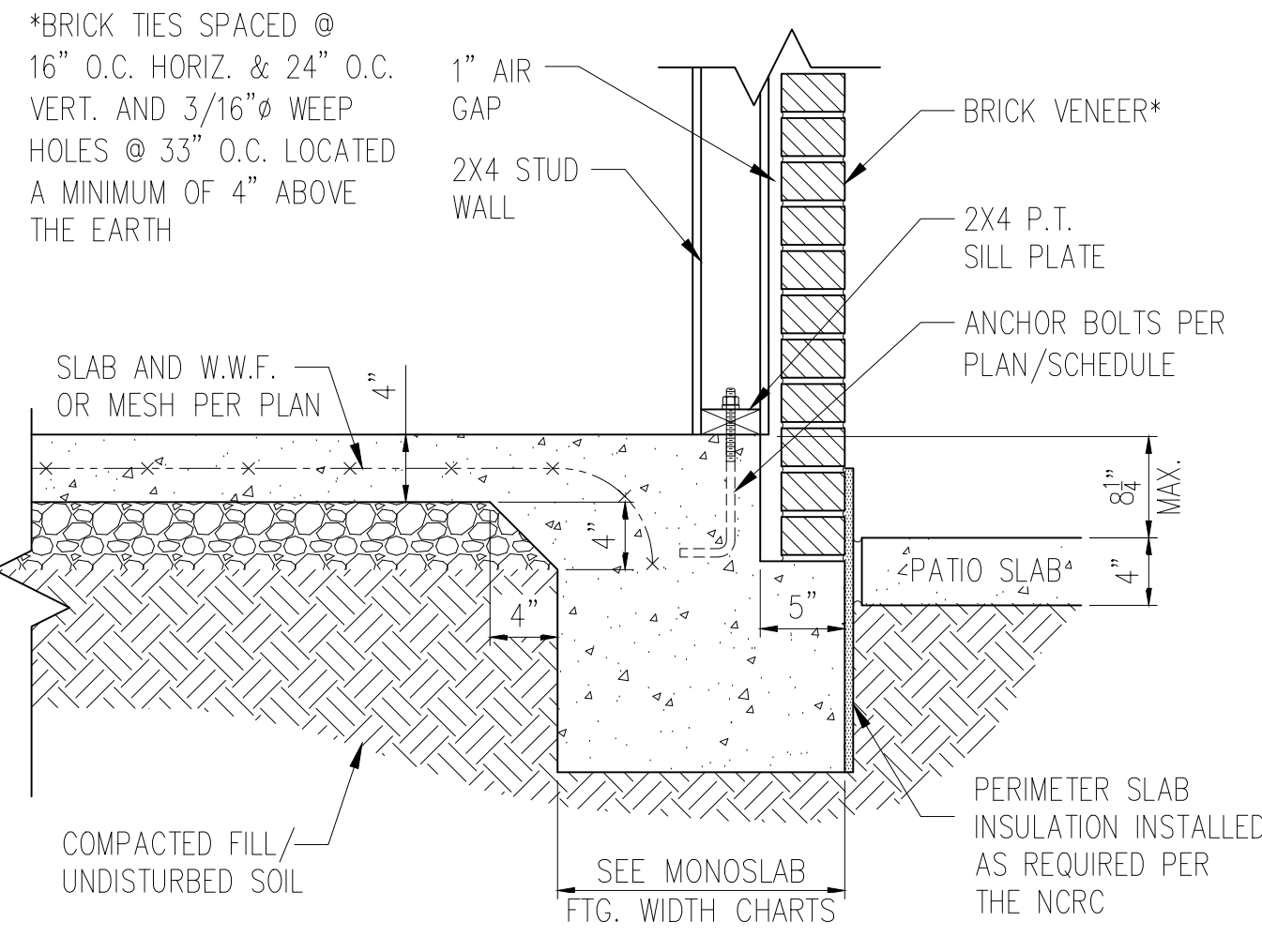
NOTE: 1. INSTALL ALL ANCHORS 12" MAX. FROM ALL BOTTOM PLATE ENDS AND JOINTS.
2. EXPANSION ANCHORS MAY BE INSTALLED ONLY AS ALLOWED PER MANUFACTURE SPECIFICATIONS.

- NOTES:
- REFER TO GENERAL NOTES & SPECIFICATIONS ON COVERSHEET FOR ADDITIONAL INFORMATION.
 - PROVIDE 6 MIL VAPOR BARRIER UNDER ALL SLABS-ON-GRADE.
 - SEE ARCH. DWGS. FOR ALL TOP OF THE SLAB ELEVATIONS, SLOPES AND DEPRESSIONS.
 - REFER TO STRUCTURAL PLANS AND FRAMING DETAILS FOR BRACED WALL PANEL LAYOUT, DIMENSIONS, ATTACHMENT AND CONNECTIONS
 - REFER TO LOCAL AND STATEWIDE CODES FOR ADDITIONAL AMENDMENTS AND REQUIREMENTS NOT SHOWN
 - PERIMETER INSULATION SHOWN AS REQUIRED BY LOCAL CLIMATE ZONE. INSTALL PER TABLE N1102.1.2 OF THE 2018 NCRC

6A COVERED PATIO DETAIL
D1m N.T.S.



STANDARD – SIDING

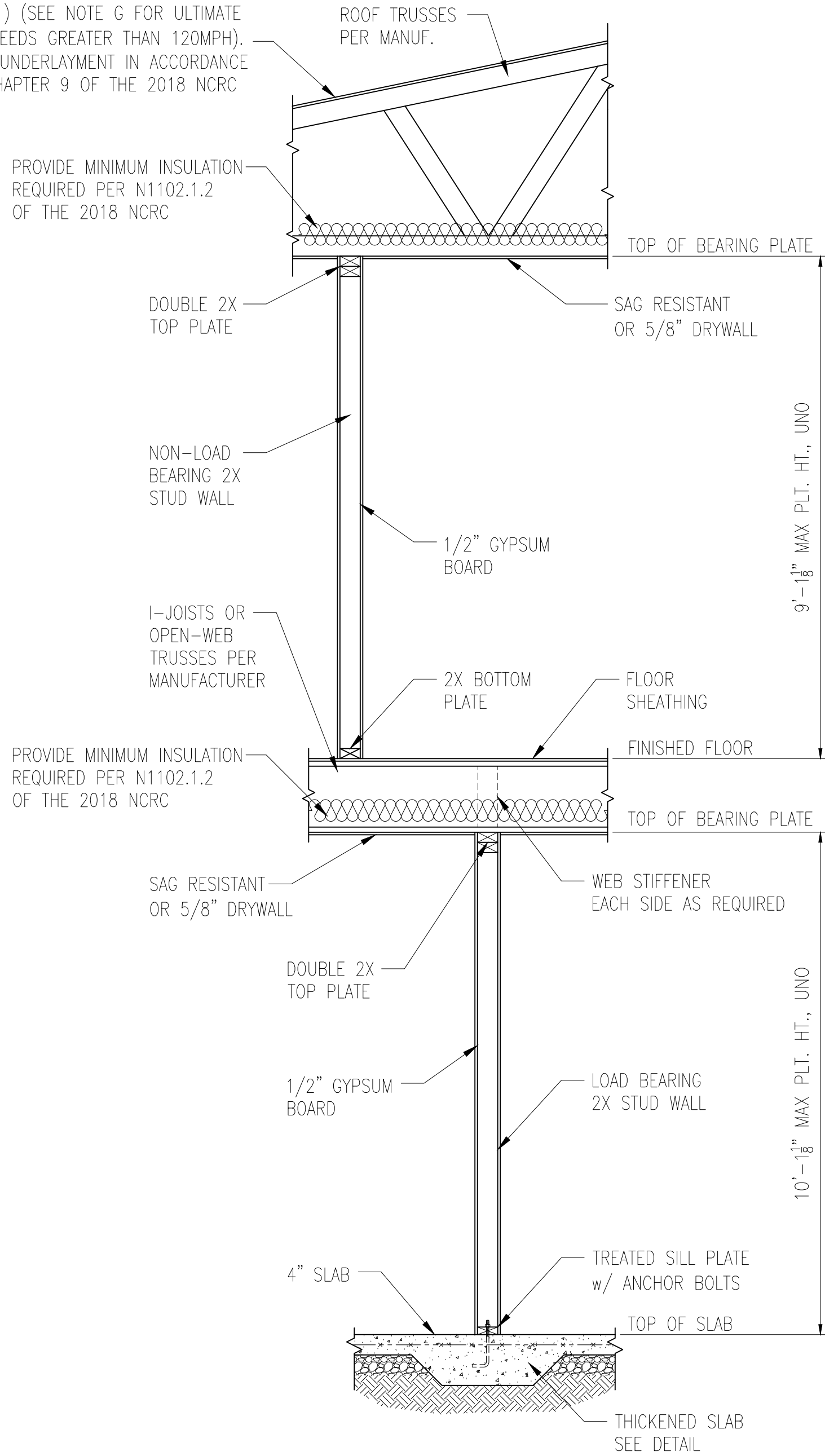


STANDARD – BRICK

6 PATIO SLAB DETAIL
D1m N.T.S.

MIN. 3/8" ROOF SHEATHING SECURED IN ACCORDANCE WITH FIGURE TABLE R602.3(1) (SEE NOTE G FOR ULTIMATE WIND SPEEDS GREATER THAN 120MPH). PROVIDE UNDERLAYMENT IN ACCORDANCE WITH CHAPTER 9 OF THE 2018 NCRC

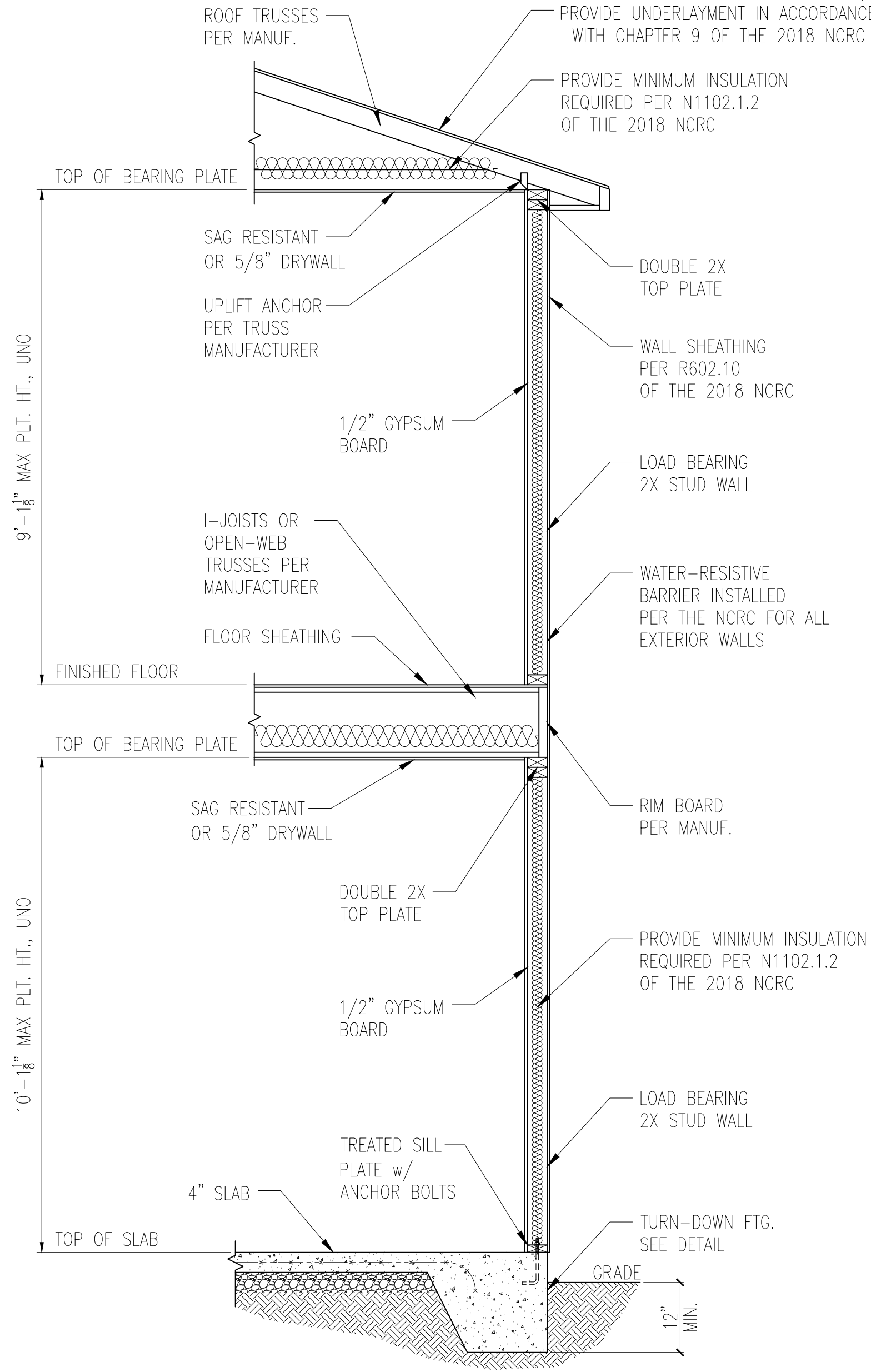
PROVIDE MINIMUM INSULATION REQUIRED PER N1102.1.2 OF THE 2018 NCRC



1 TYP. INTERIOR LOAD BEARING WALL SECTION
D2m N.T.S.

MIN. 3/8" ROOF SHEATHING SECURED IN ACCORDANCE WITH FIGURE TABLE R602.3(1) (SEE NOTE G FOR ULTIMATE WIND SPEEDS GREATER THAN 120MPH). PROVIDE UNDERLAYMENT IN ACCORDANCE WITH CHAPTER 9 OF THE 2018 NCRC

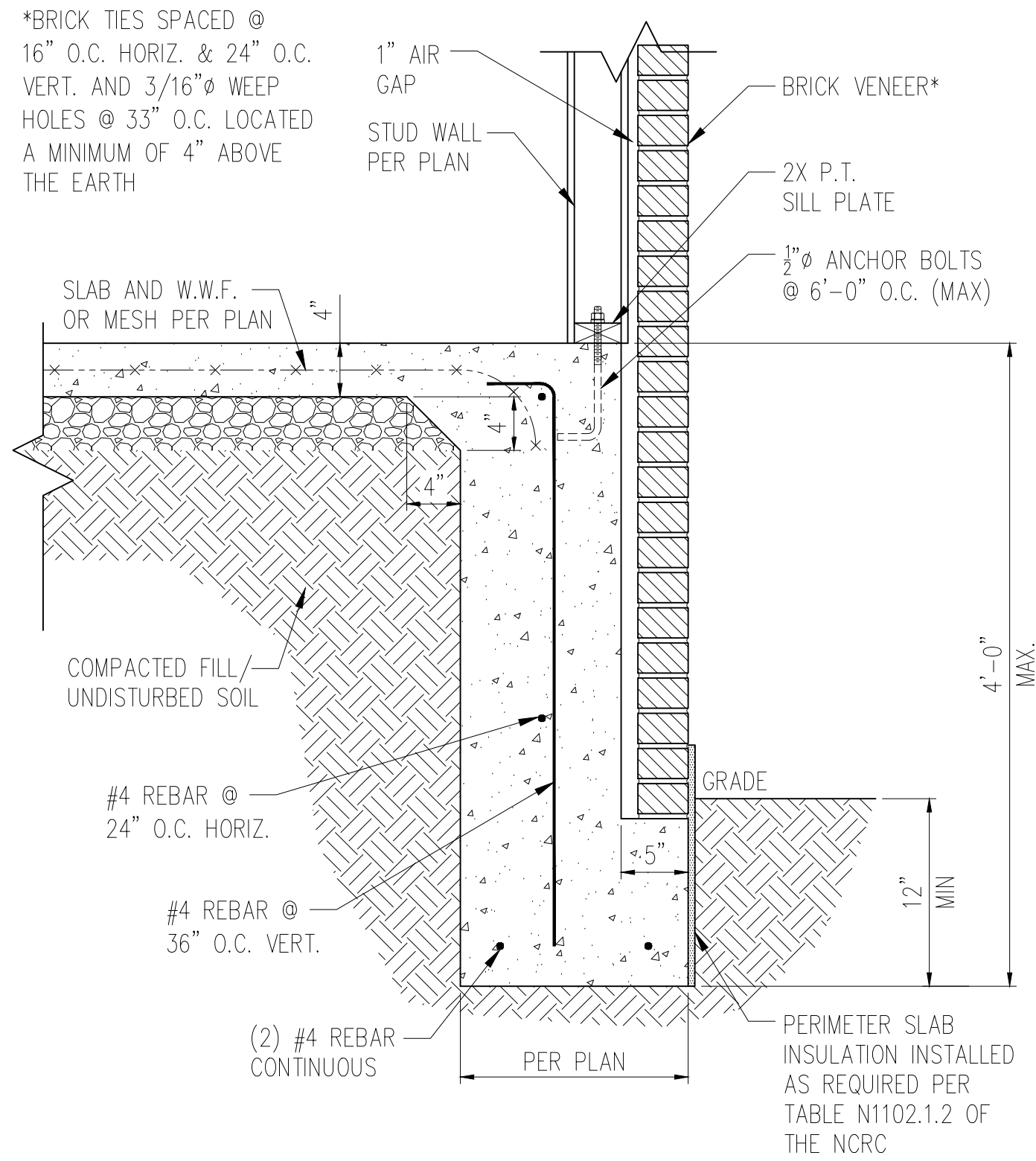
PROVIDE MINIMUM INSULATION REQUIRED PER N1102.1.2 OF THE 2018 NCRC



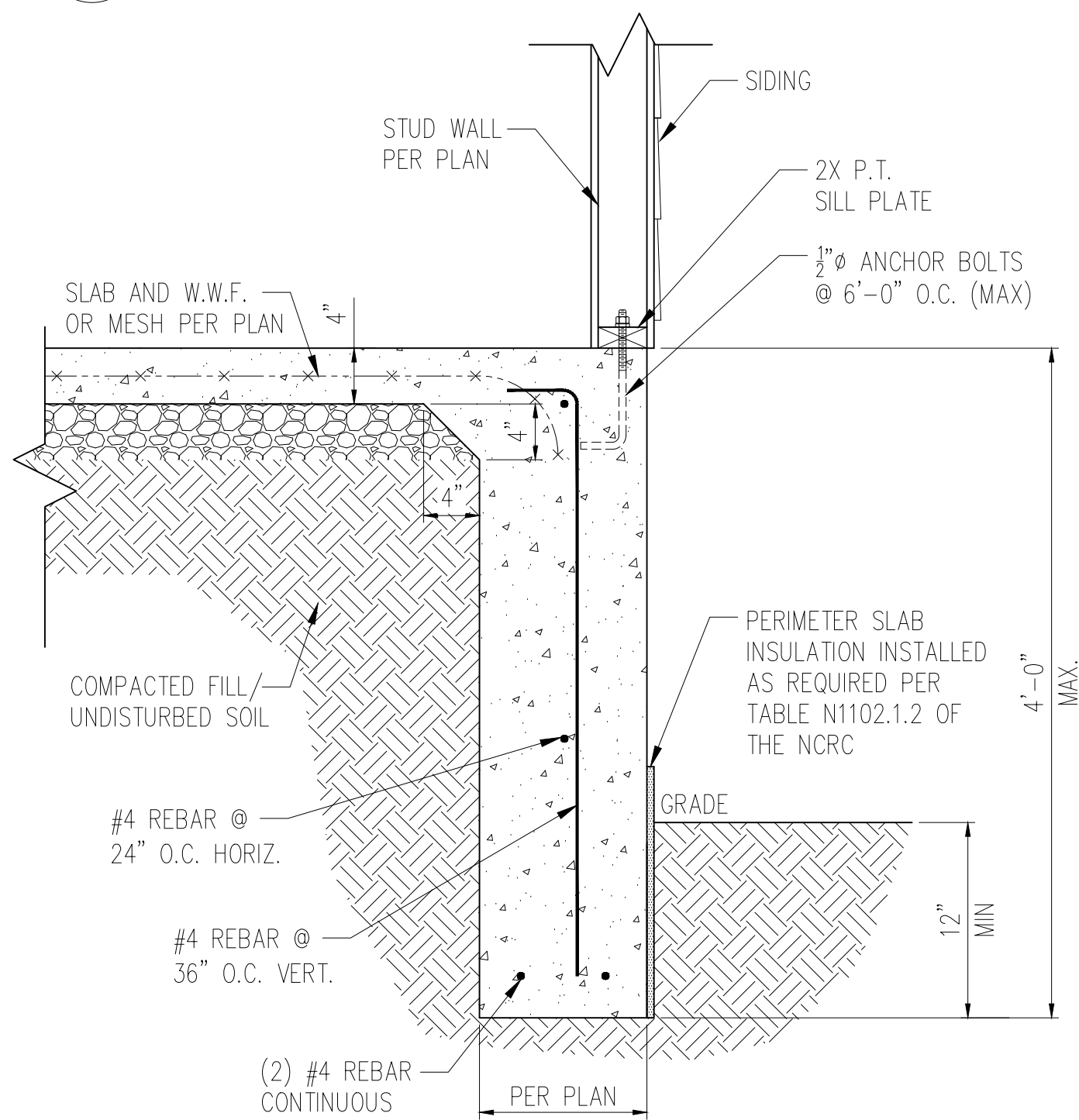
2 TYP. EXTERIOR LOAD BEARING WALL SECTION
D2m N.T.S.

-SIMILAR w/ BRICK AND STONE
-BRICK TIES SPACED @ 16" O.C. HORIZ. & 24" O.C. VERT.
-MIN. 3/16" WEAP HOLES @ 33" O.C.

*BRICK TIES SPACED @ 16" O.C. HORIZ. & 24" O.C. VERT. AND 3/16" WEAP HOLES @ 33" O.C. LOCATED A MINIMUM OF 4" ABOVE THE EARTH



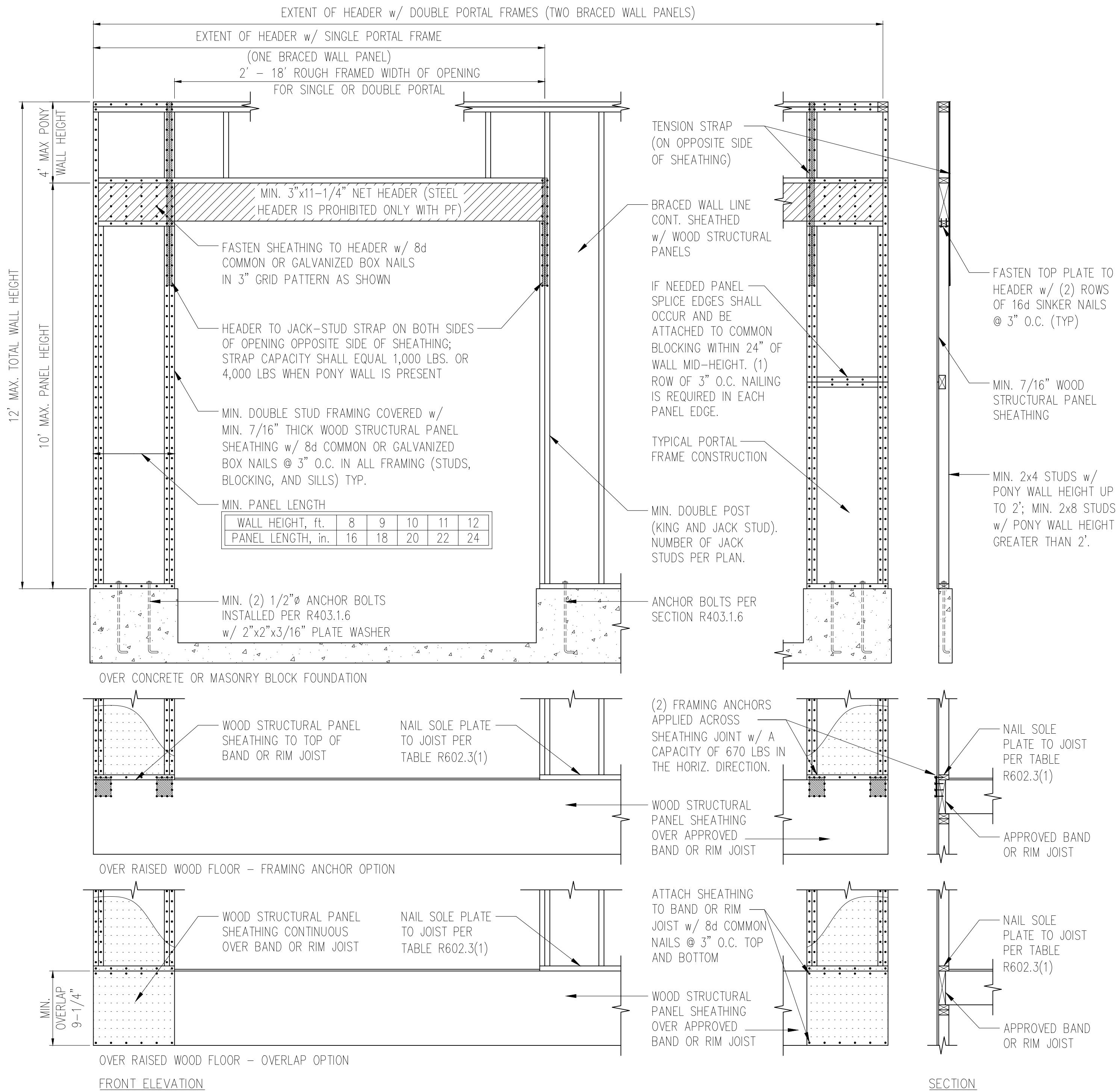
3 TALL SLAB DETAIL w/ BRICK VENEER
D2m N.T.S.



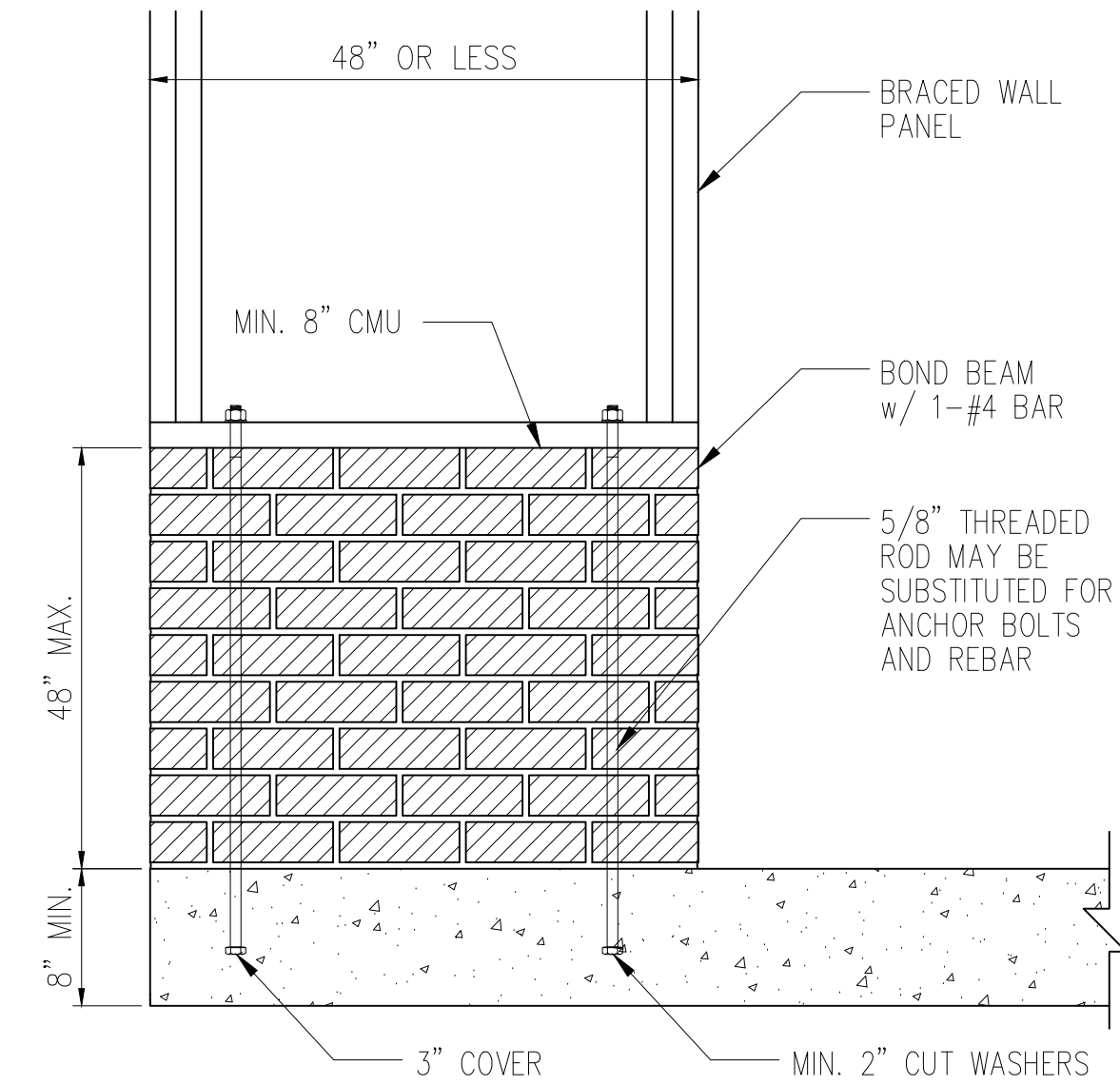
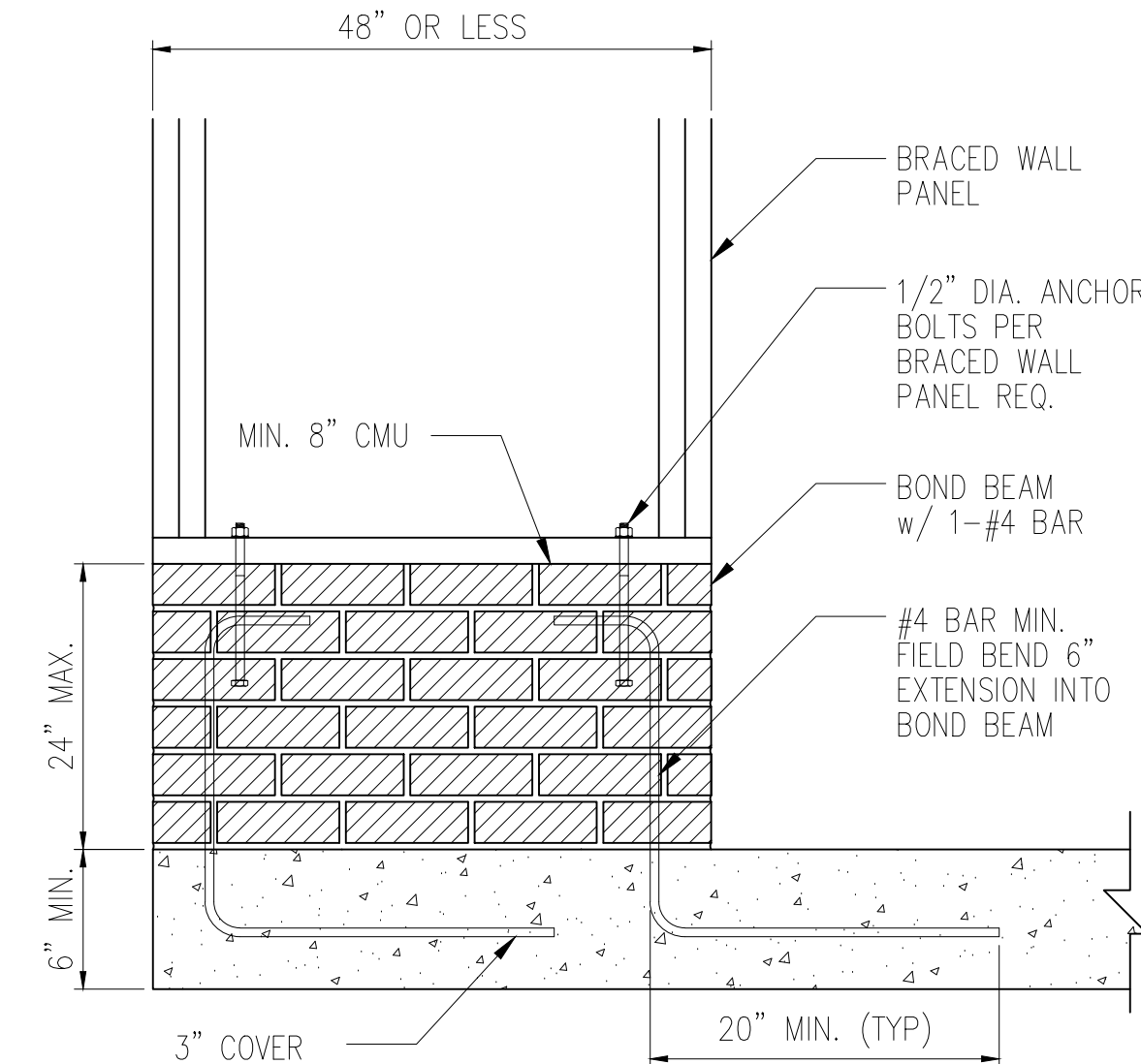
4 TALL SLAB DETAIL w/ SIDING
D2m N.T.S.

NOTES:

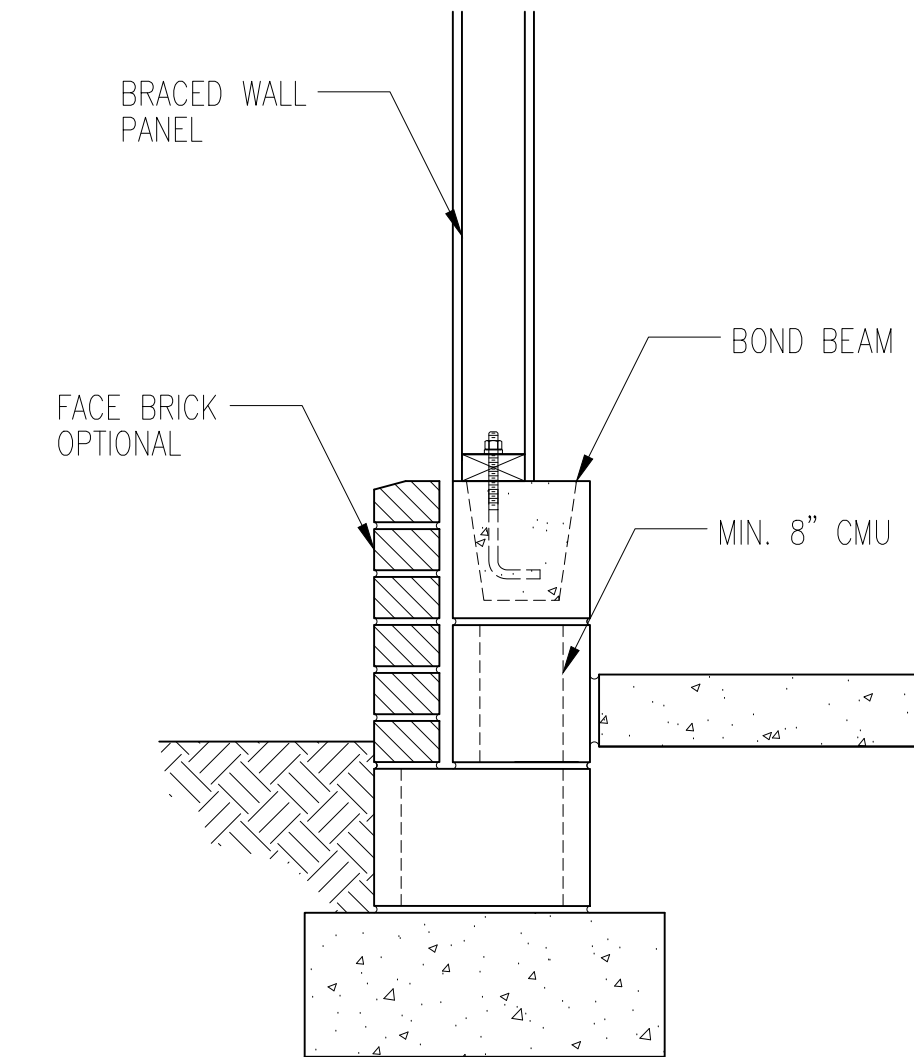
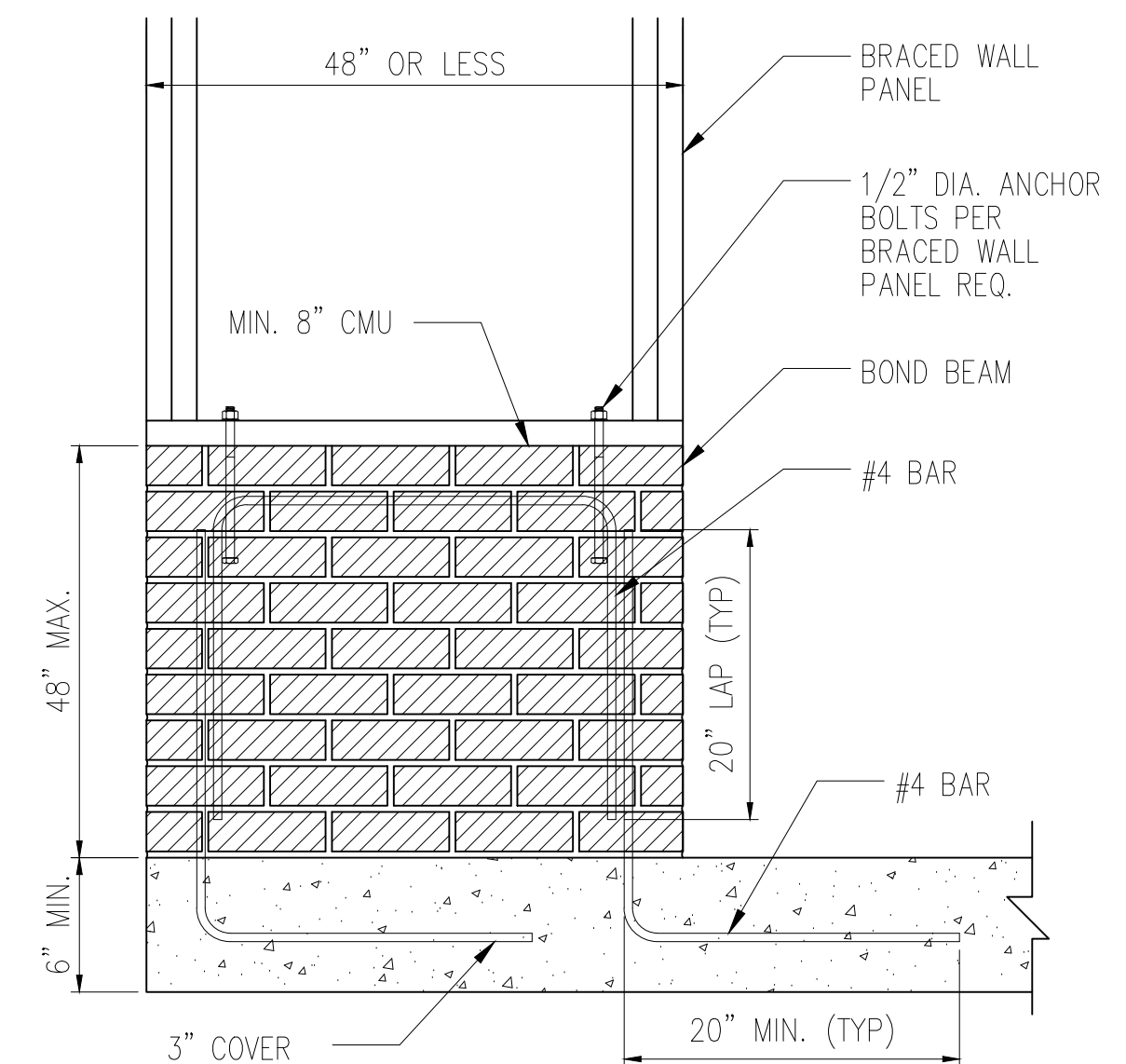
- REFER TO GENERAL NOTES & SPECIFICATIONS ON COVERSHEET FOR ADDITIONAL INFORMATION.
- PROVIDE 6 MIL VAPOR BARRIER UNDER ALL SLABS-ON-GRADE.
- SEE ARCH. DWGS. FOR ALL TOP OF THE SLAB ELEVATIONS, SLOPES AND DEPRESSIONS.
- REFER TO STRUCTURAL PLANS AND FRAMING DETAILS FOR BRACED WALL PANEL LAYOUT, DIMENSIONS, ATTACHMENT AND CONNECTIONS
- REFER TO LOCAL AND STATEWIDE CODES FOR ADDITIONAL AMENDMENTS AND REQUIREMENTS NOT SHOWN
- PERIMETER INSULATION SHOWN AS REQUIRED BY LOCAL CLIMATE ZONE. INSTALL PER TABLE N1102.1.2 OF THE 2018 NCRC



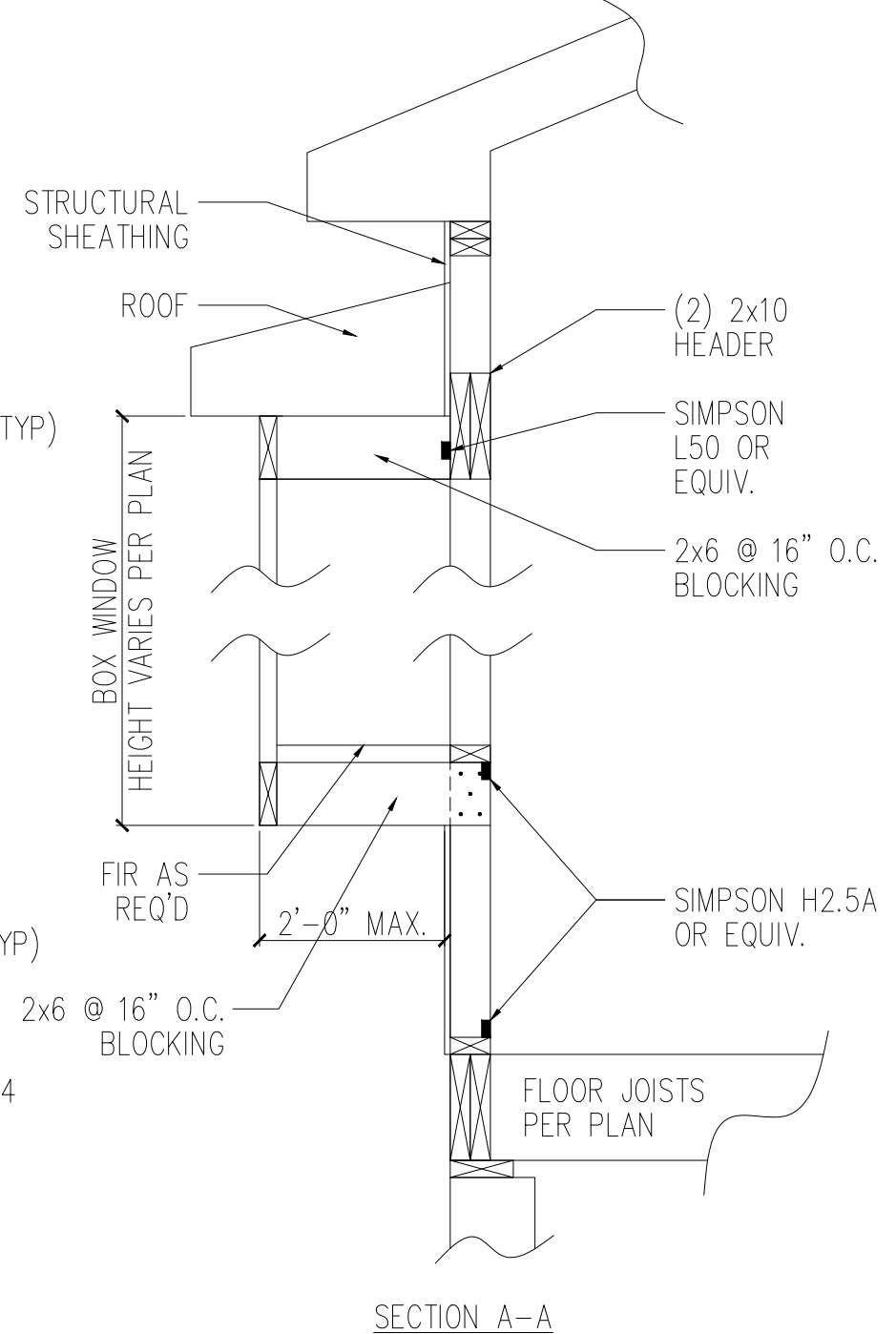
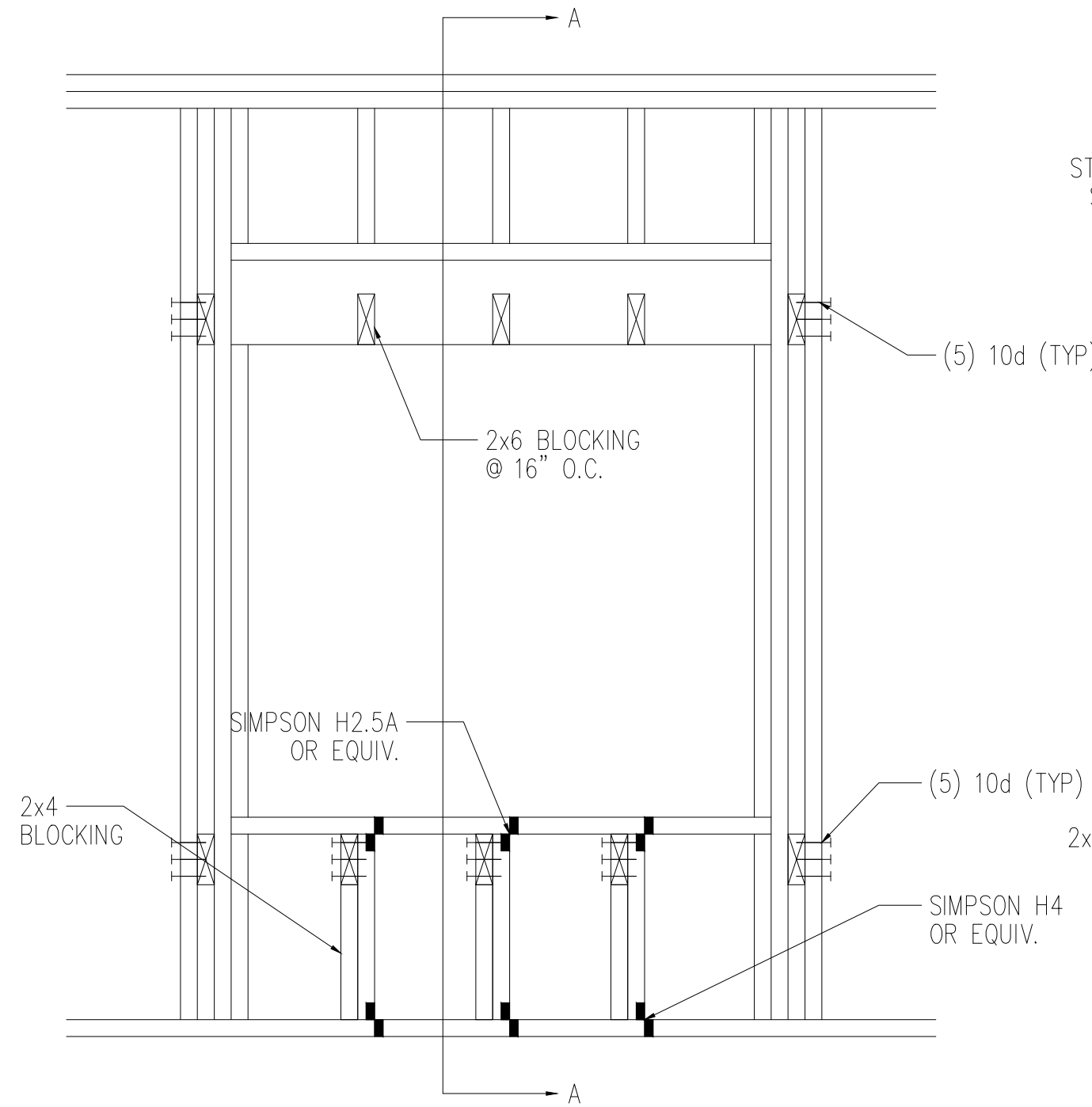
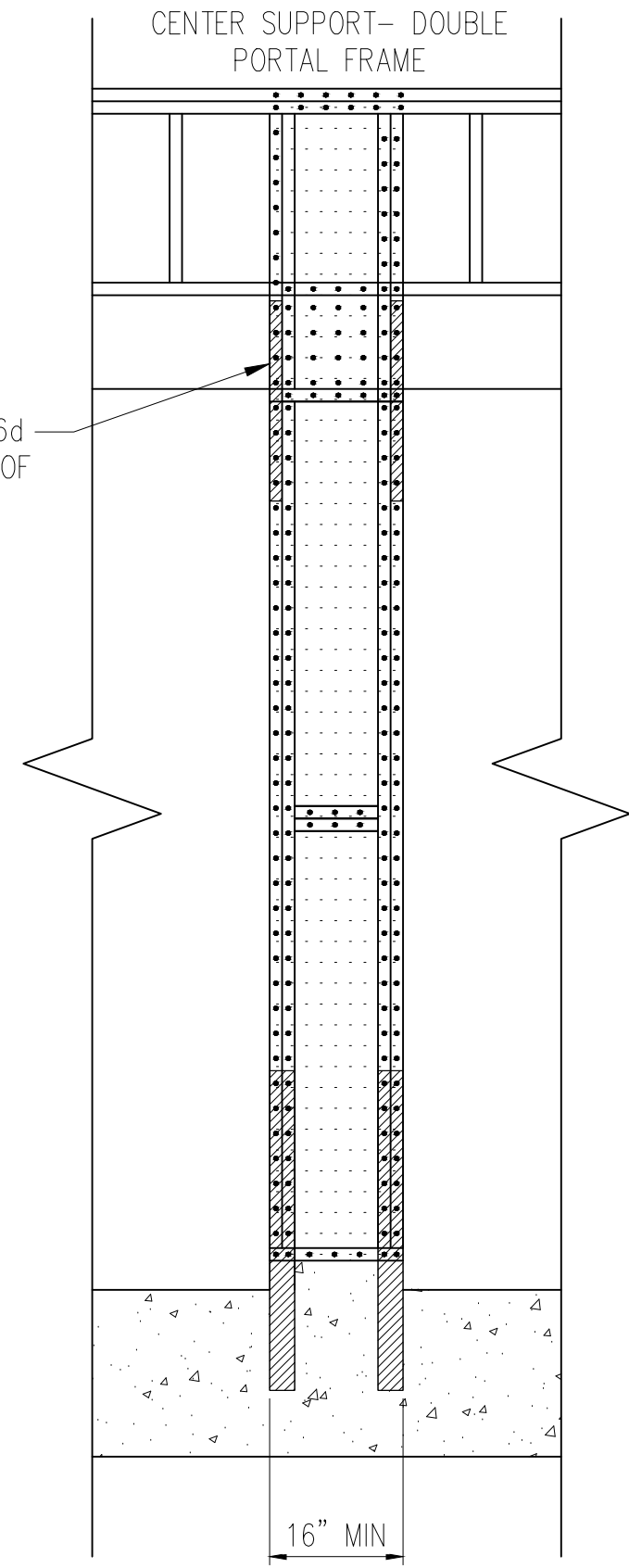
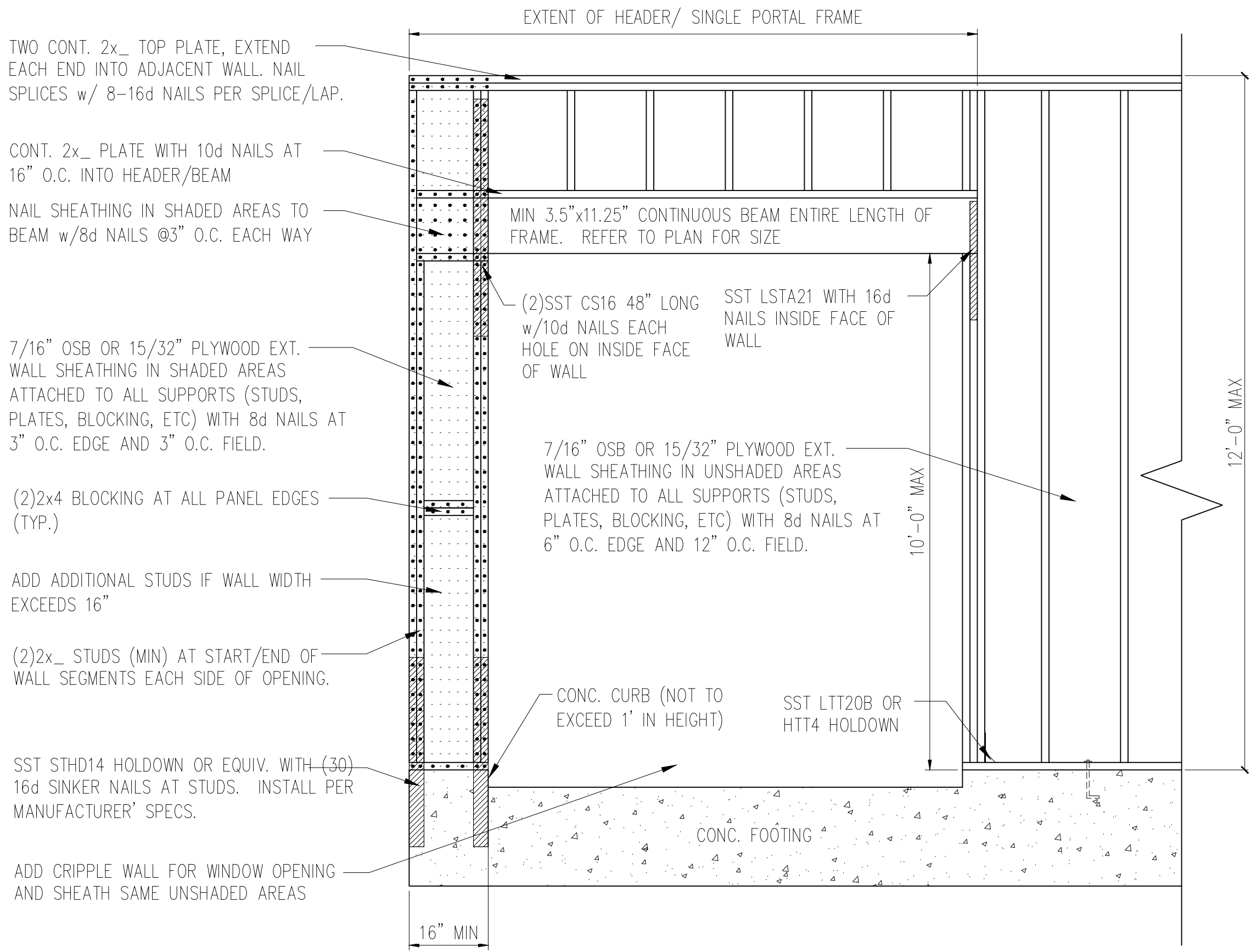
1 METHOD PF: PORTAL FRAME DETAIL
3/8" = 1'-0"



2 MASONRY STEM WALLS SUPPORTING BRACED WALL PANELS
D1f NTS

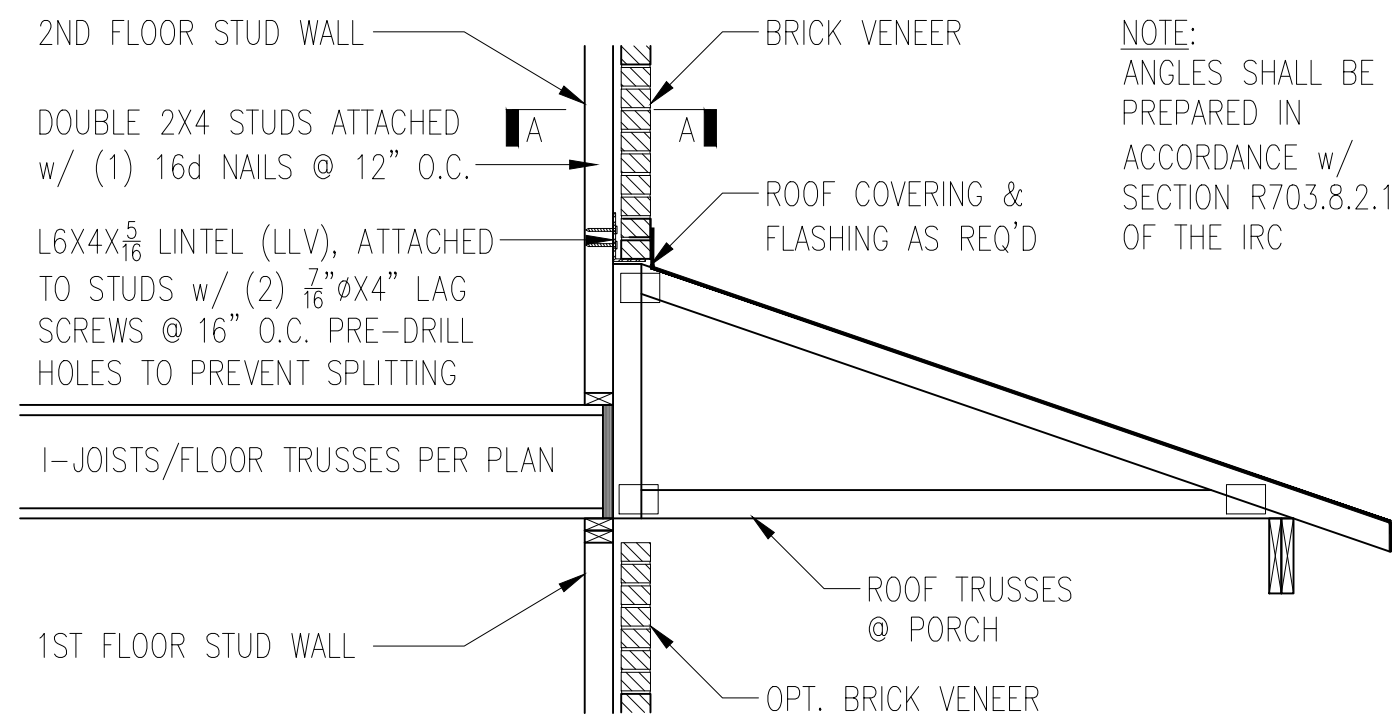


NOTE: GROUT BOND BEAMS AND ALL CELLS WHICH CONTAIN REBAR, THREADED RODS AND ANCHOR BOLTS

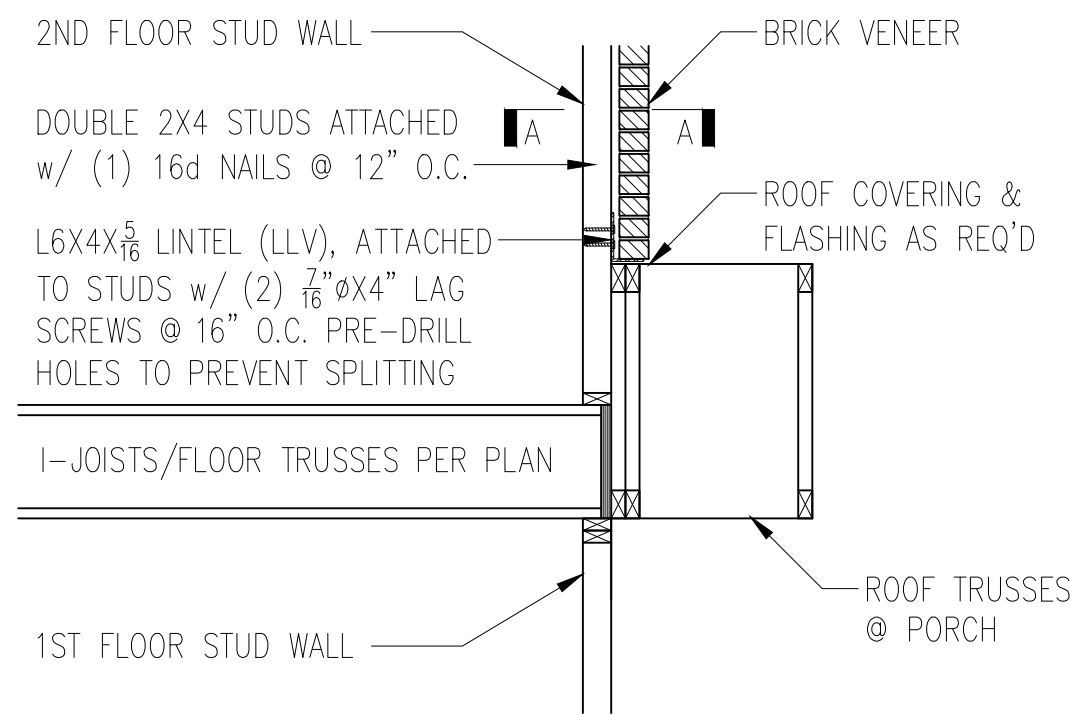


1 METHOD PF: PORTAL FRAME DETAIL w/ HOLD-DOWNS
D2f 3/4" = 1'-0"

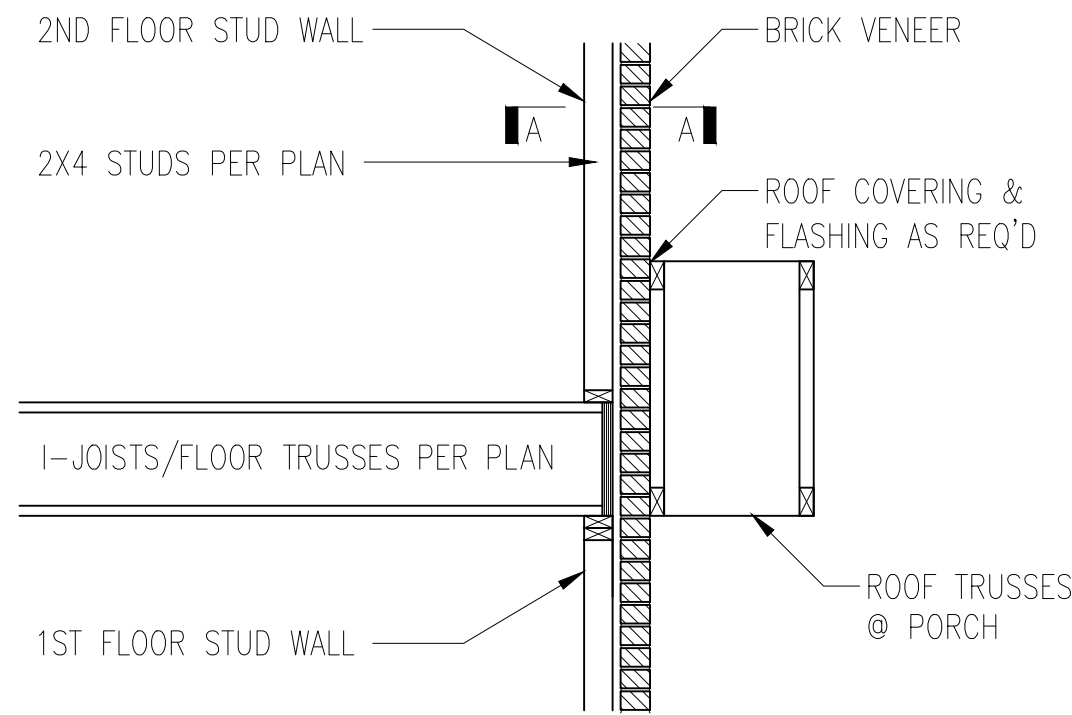
2 BOX WINDOW DETAIL
D2f N.T.S



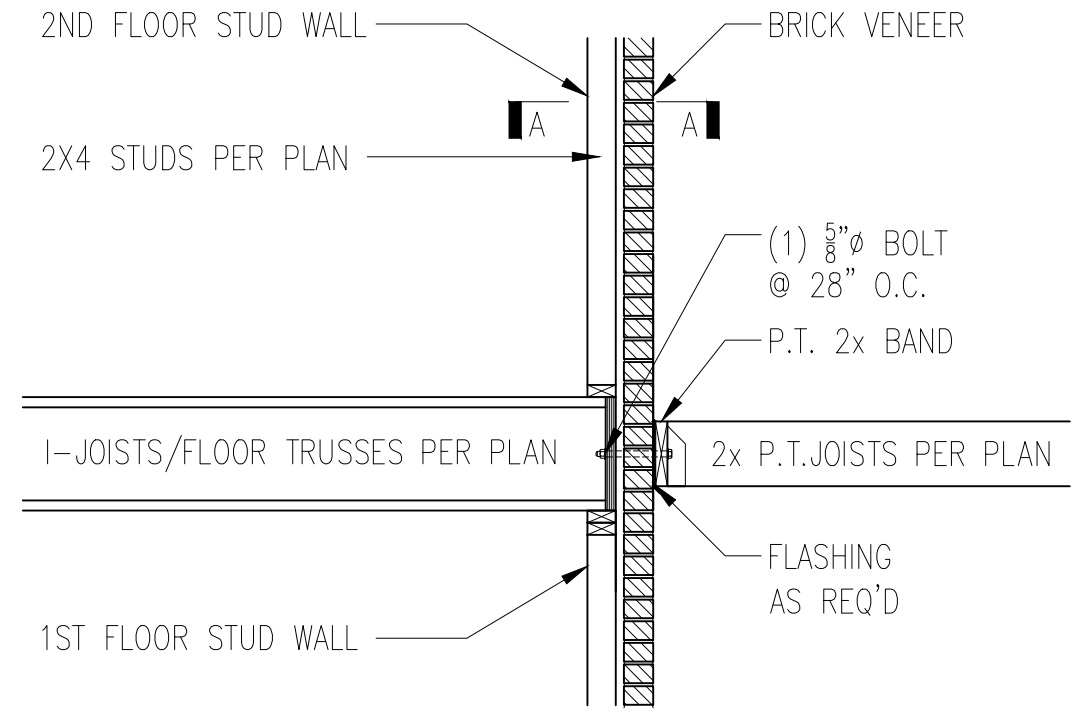
TRUSSES PERPENDICULAR TO STUD WALL



TRUSSES PARALLEL TO STUD WALL

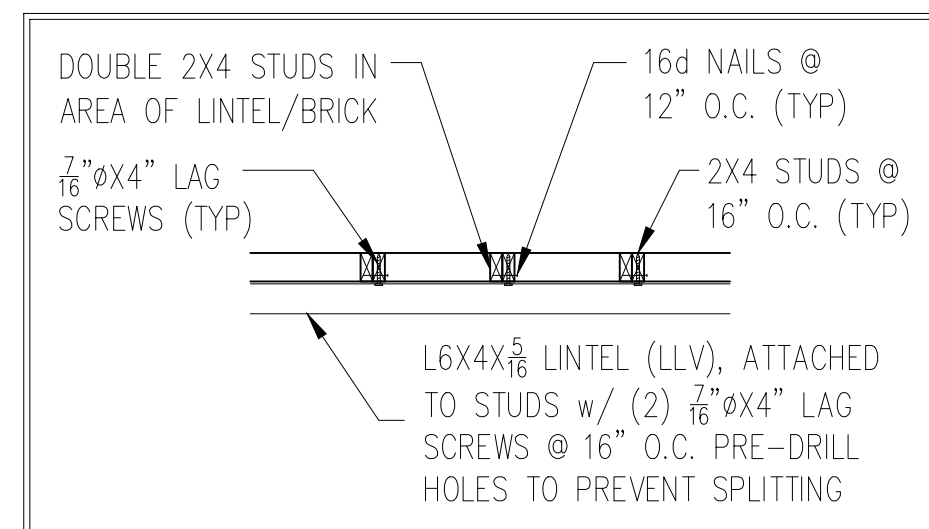


TRUSSES PARALLEL TO STUD WALL w/ CONTINUOUS BRICK VENEER



4 BALCONY JOIST ATTACHMENT
D2f NTS

3 BRICK SUPPORT ABOVE STORAGE/PORCH ROOF DETAIL
D2f NTS

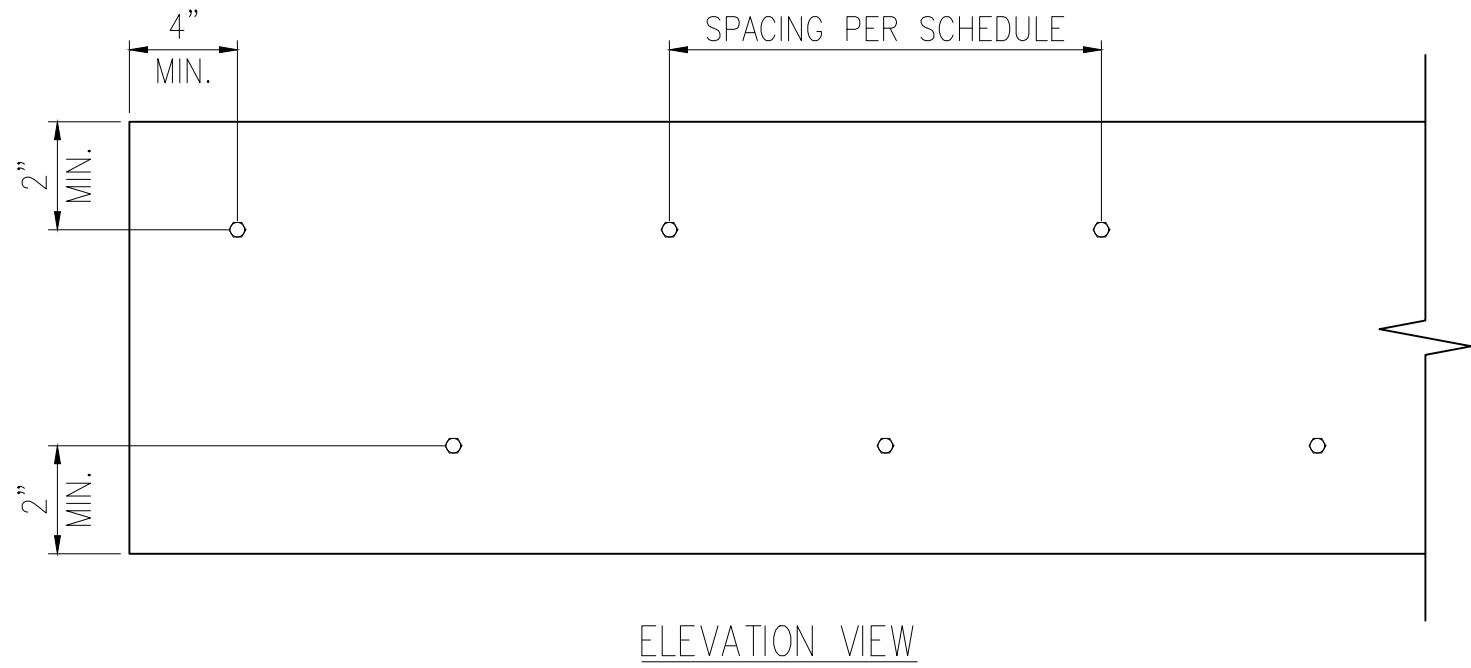


SECTION A-A
NTS

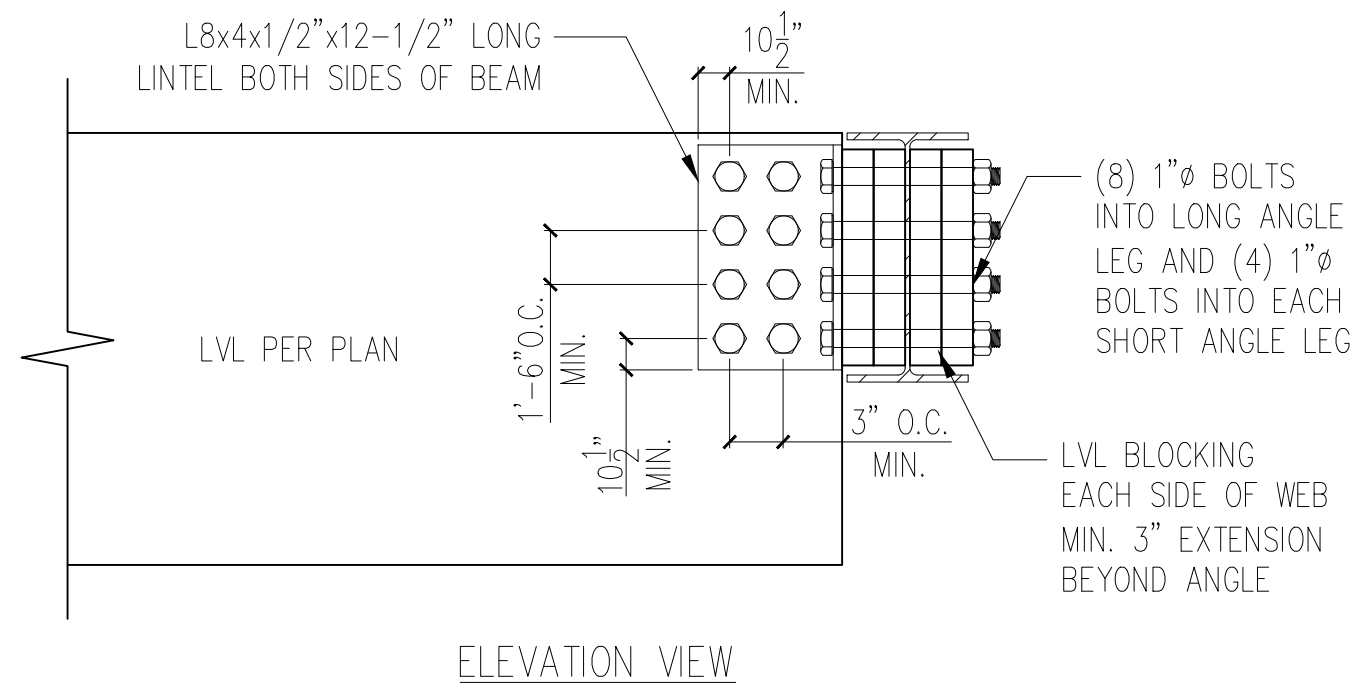
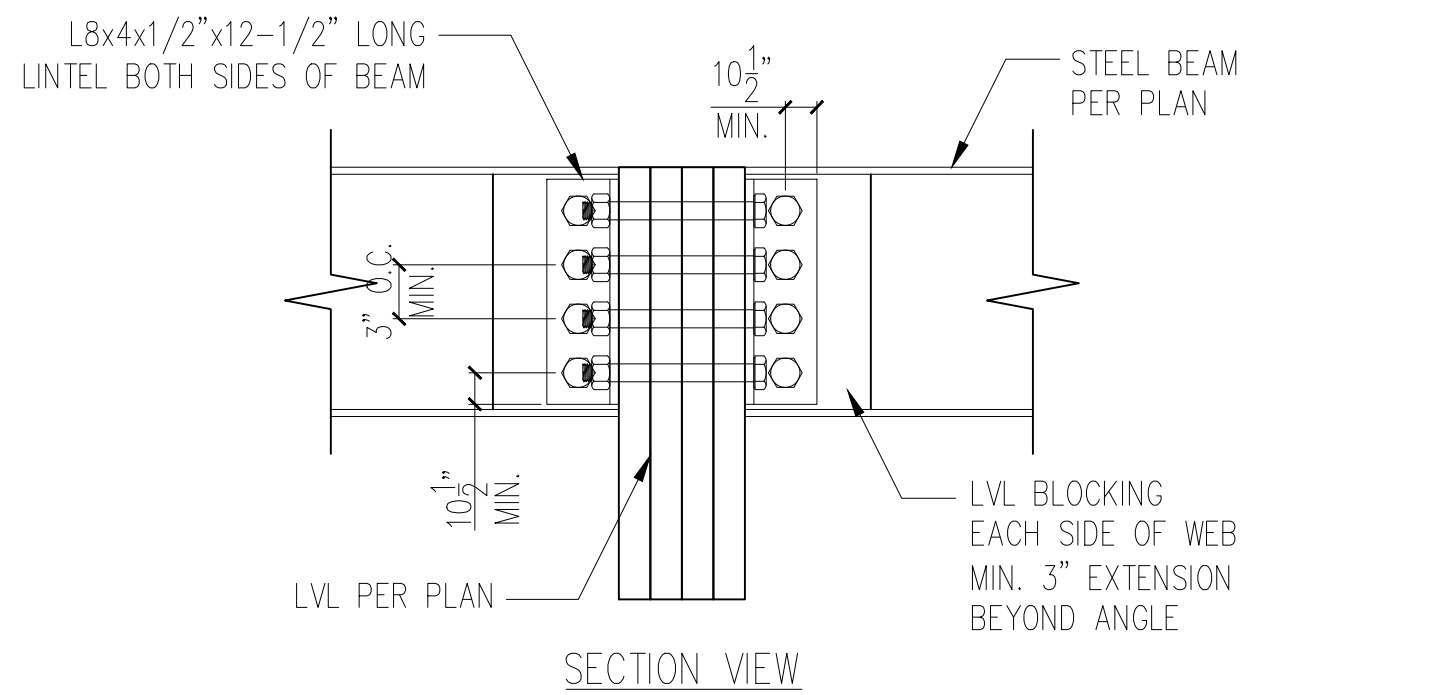
MINIMUM FASTENING
REQUIREMENTS FOR
TOP- AND SIDE-LOADED
MEMBERS

FASTENER TYPE	LVL DEPTH	3 1/2" WIDE	5 1/4" WIDE		7" WIDE		
10d (0.128" x 3") Nails	7/4" ≤ d < 14"	3 rows @ 12" o.c.	3 rows @ 12" o.c. (ES)	3 rows @ 12" o.c.	-	3 rows @ 12" o.c. (ES)	-
	d ≥ 14"	4 rows @ 12" o.c.	4 rows @ 12" o.c. (ES)	4 rows @ 12" o.c.	-	4 rows @ 12" o.c. (ES)	-
16d (0.162" x 3 1/2") Nails	7/4" ≤ d < 14"	2 rows @ 12" o.c.	2 rows @ 12" o.c. (ES)	2 rows @ 12" o.c.	-	2 rows @ 12" o.c. (ES)	-
	d ≥ 14"	3 rows @ 12" o.c. (ES)	3 rows @ 12" o.c. (ES)	3 rows @ 12" o.c.	-	3 rows @ 12" o.c. (ES)	-
1/2" Through Bolts	d ≥ 7 1/4"	2 rows @ 24" o.c.		2 rows @ 24" o.c.		2 rows @ 24" o.c.	
SDS 1/4" x 3 1/2", WS35, 3 3/8" TrussLok		2 rows @ 24" o.c.	2 rows @ 24" o.c. (ES)	2 rows @ 24" o.c.	-	2 rows @ 24" o.c. (ES)	-
SDS 1/4" x 6", WS6		-	-	-	2 rows @ 24" o.c. (ES)		
5" TrussLok		-	2 rows @ 24" o.c.		-		
6 3/4" TrussLok		-	-	-	2 rows @ 24" o.c.		

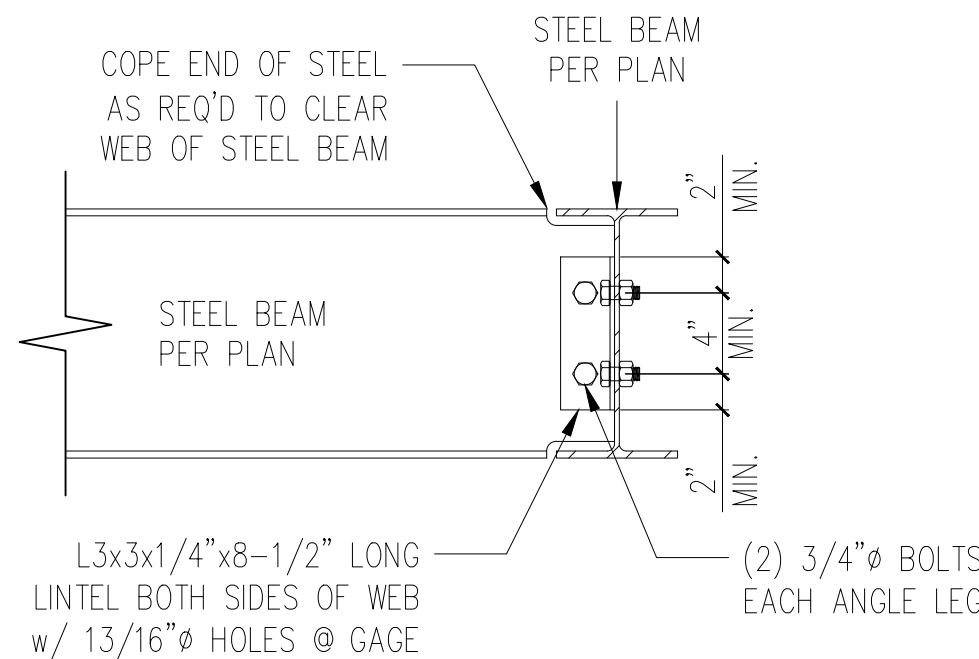
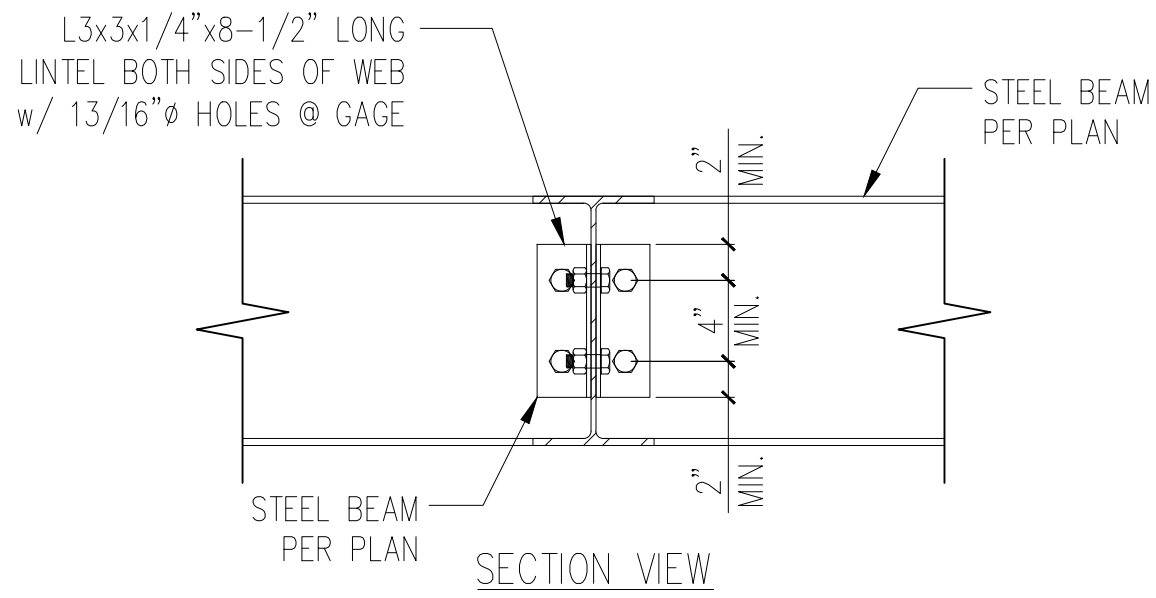
- NOTES:**
- All fasteners must meet the minimum requirements in the table above. Side-loaded multiple-ply members must meet the minimum fastening and side-loading capacity requirements given on page 48.
 - Minimum fastening requirements for depths less than 7 1/4" require special consideration. Please contact your technical representative.
 - Three general rules for staggering or offsetting for a certain fastener schedule:
(1) if staggering or offsetting is not referenced, then none is required;
(2) if staggering is referenced, then fasteners installed in adjacent rows on the front side are to be staggered up to one-half the o.c. spacing, but maintaining the fastener clearances above; and
(3) if "ES" is referenced, then the fastener schedule must be repeated on each side, with the fasteners on the back side offset up to one-half the o.c. spacing of the front side (whether or not it is staggered).



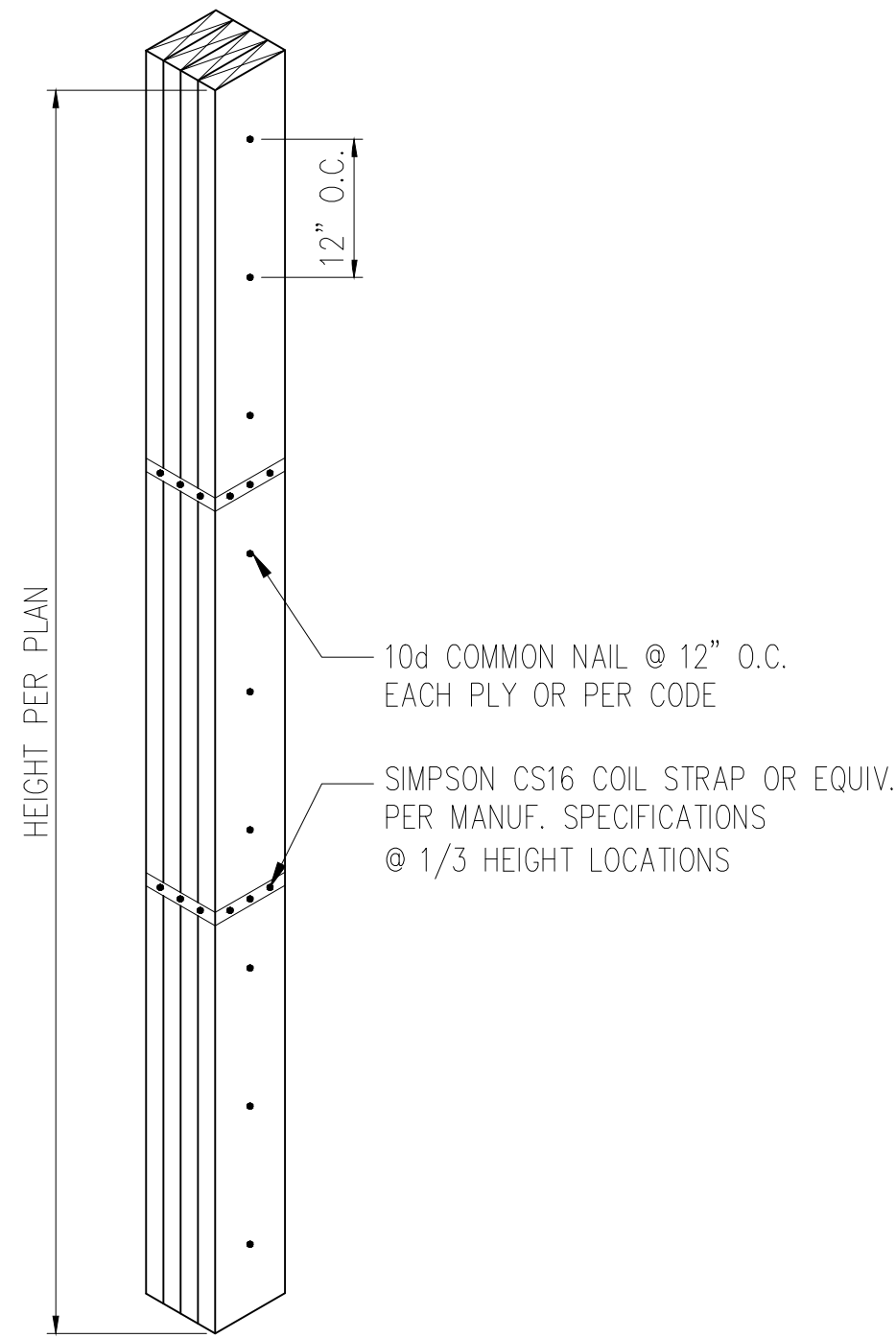
1 MULTI-PLY BEAM CONNECTION DETAIL
D3f N.T.S.



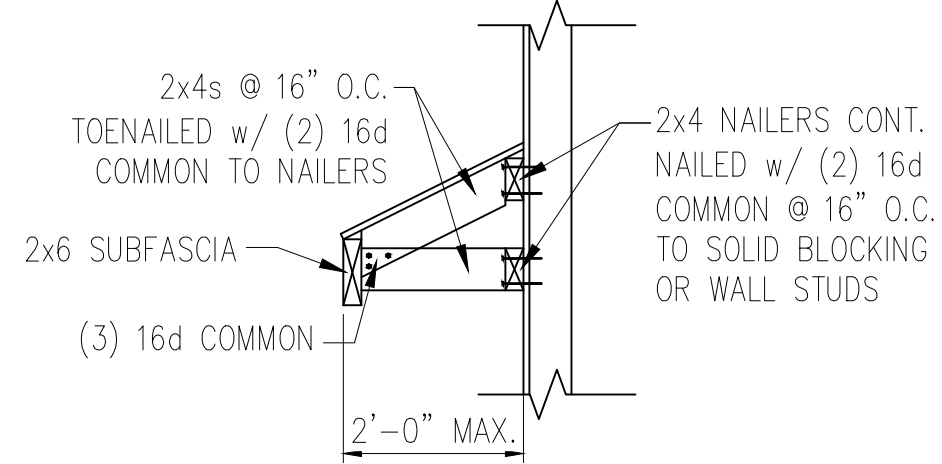
3 LVL TO STEEL DETAIL
D3f N.T.S.



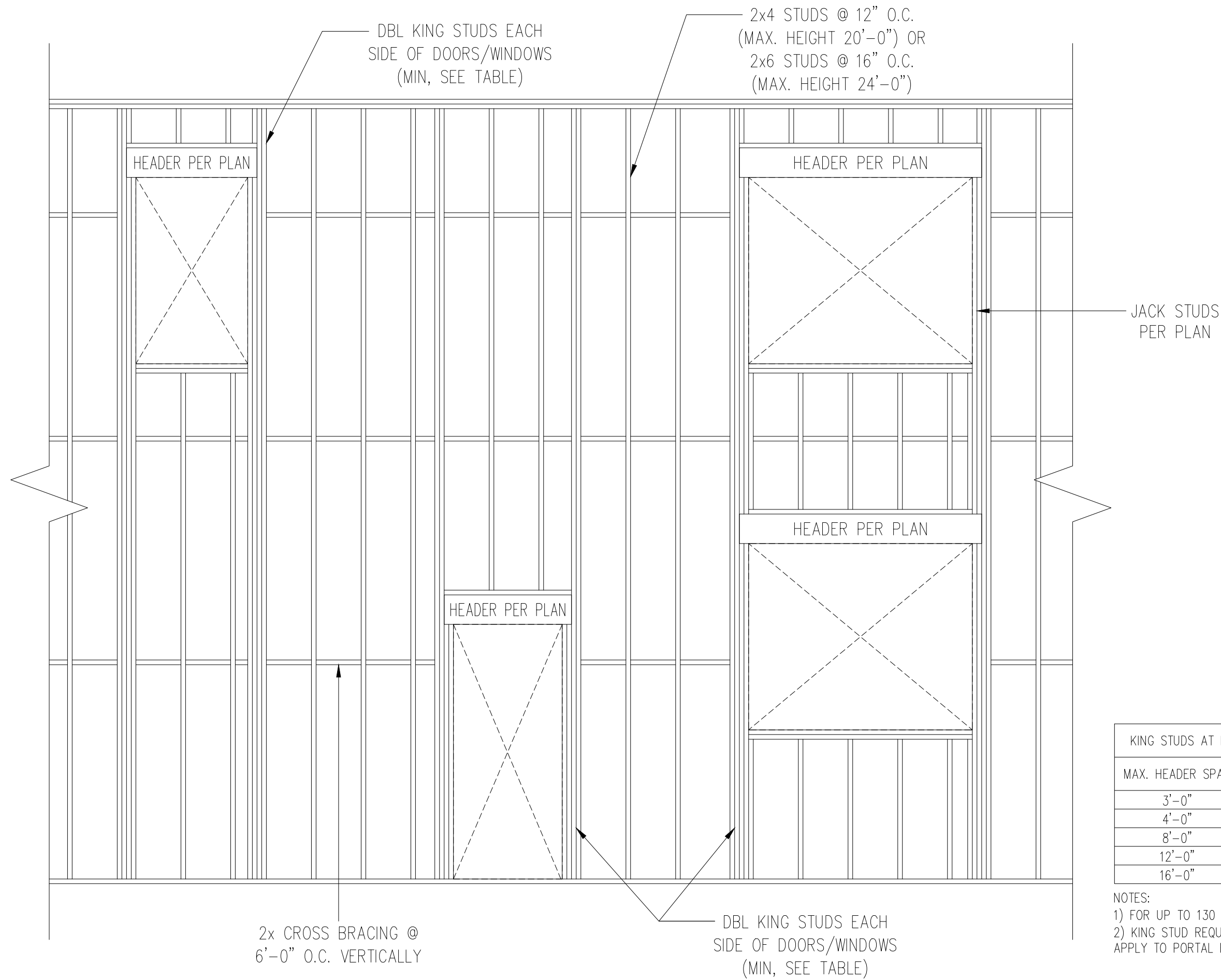
4 STEEL TO STEEL DETAIL
D3f N.T.S.



2 MULTI-PLY STUD CONNECTION DETAIL
D3f N.T.S. 4+ PLIES



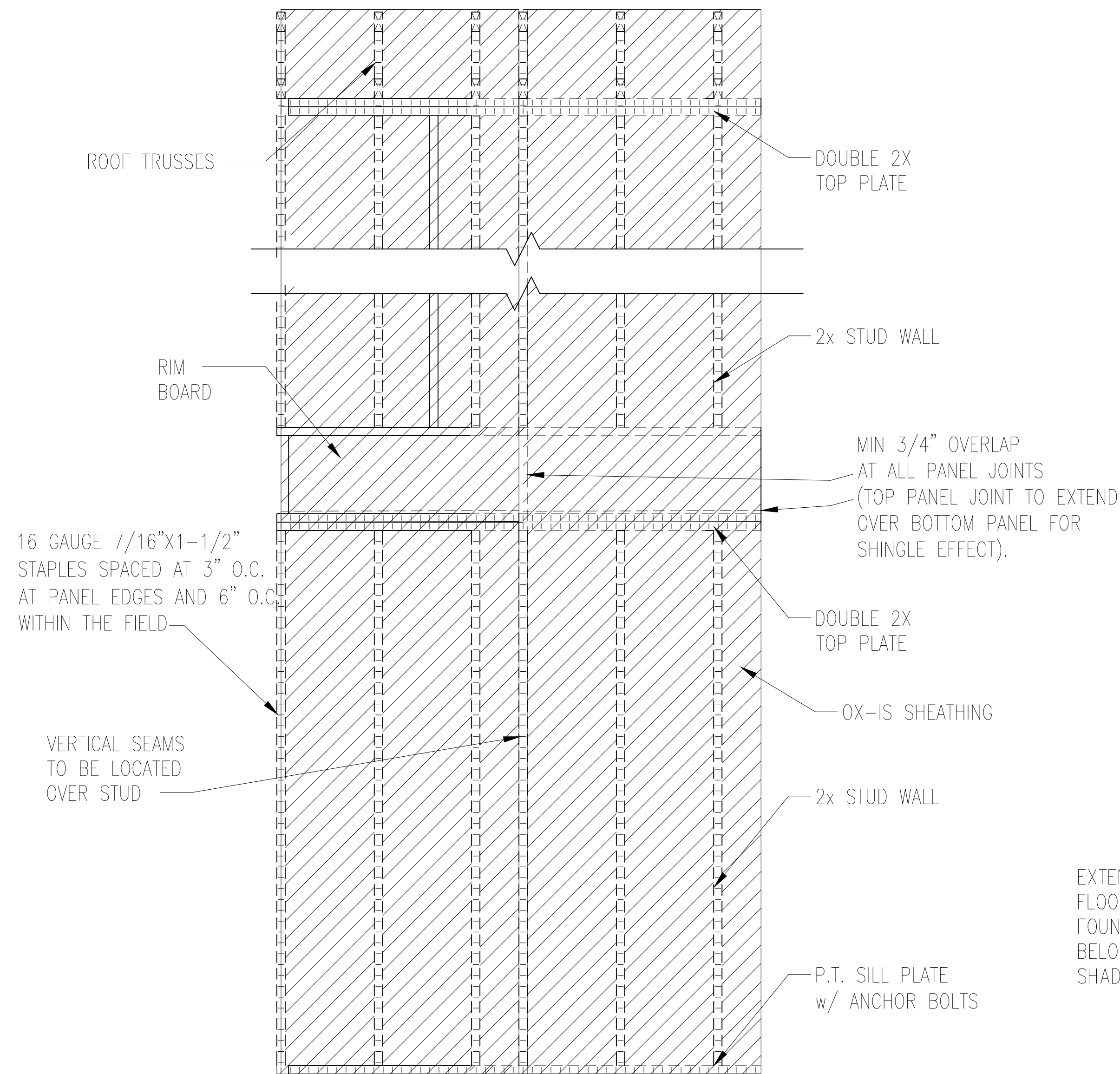
5 GABLE ROOF RETURN
D3f N.T.S.



KING STUDS AT EACH END OF HEADERS	
MAX. HEADER SPAN	STUDS (MIN.)
3'-0"	1
4'-0"	2
8'-0"	3
12'-0"	5
16'-0"	6

- NOTES:
- FOR UP TO 130 MPH, EXPOSURE B
 - KING STUD REQUIREMENTS DO NOT APPLY TO PORTAL FRAMED OPENINGS

6 TYP. BALLOON FRAMING DETAIL
D3f N.T.S.



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/BEAM

OX-IS EXT. WALL SHEATHING IN SHADED AREAS ATTACHED TO ALL SUPPORTS (STUDS, PLATES, BLOCKING, ETC) WITH 16 GA. STAPLES AT 3" O.C. EDGE AND 3" O.C. FIELD 1" MIN. EMBEDMENT.

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

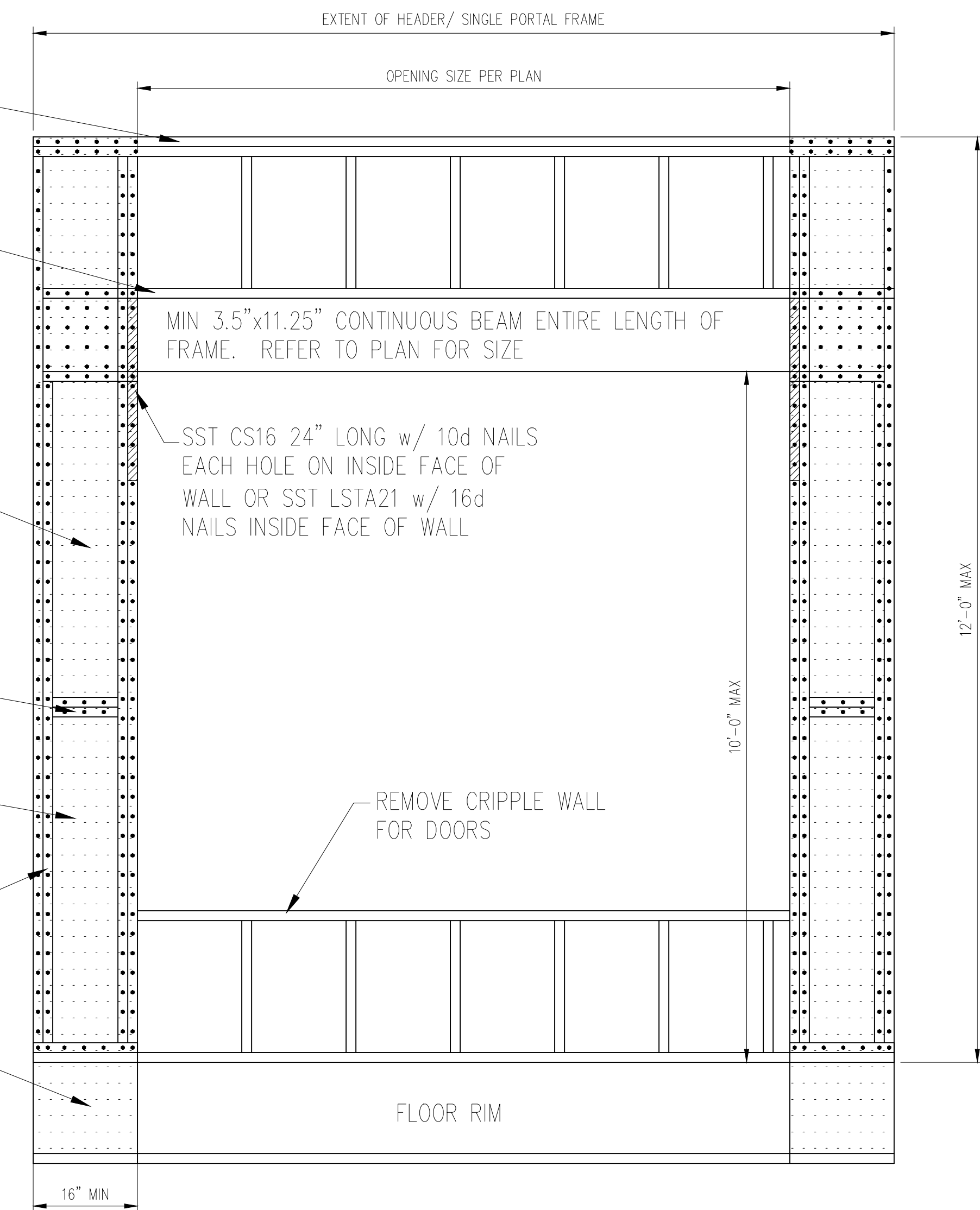
ADD ADDITIONAL STUDS IF WALL WIDTH EXCEEDS 16"

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

EXTEND OX-IS SHEATHING TO COVER FLOOR RIM AND ATTACH TO SILL PLATE ON FOUNDATION OR TOP PLATE OF WALL BELOW. SAME ATTACHMENT AS ALL OTHER SHADED AREAS.

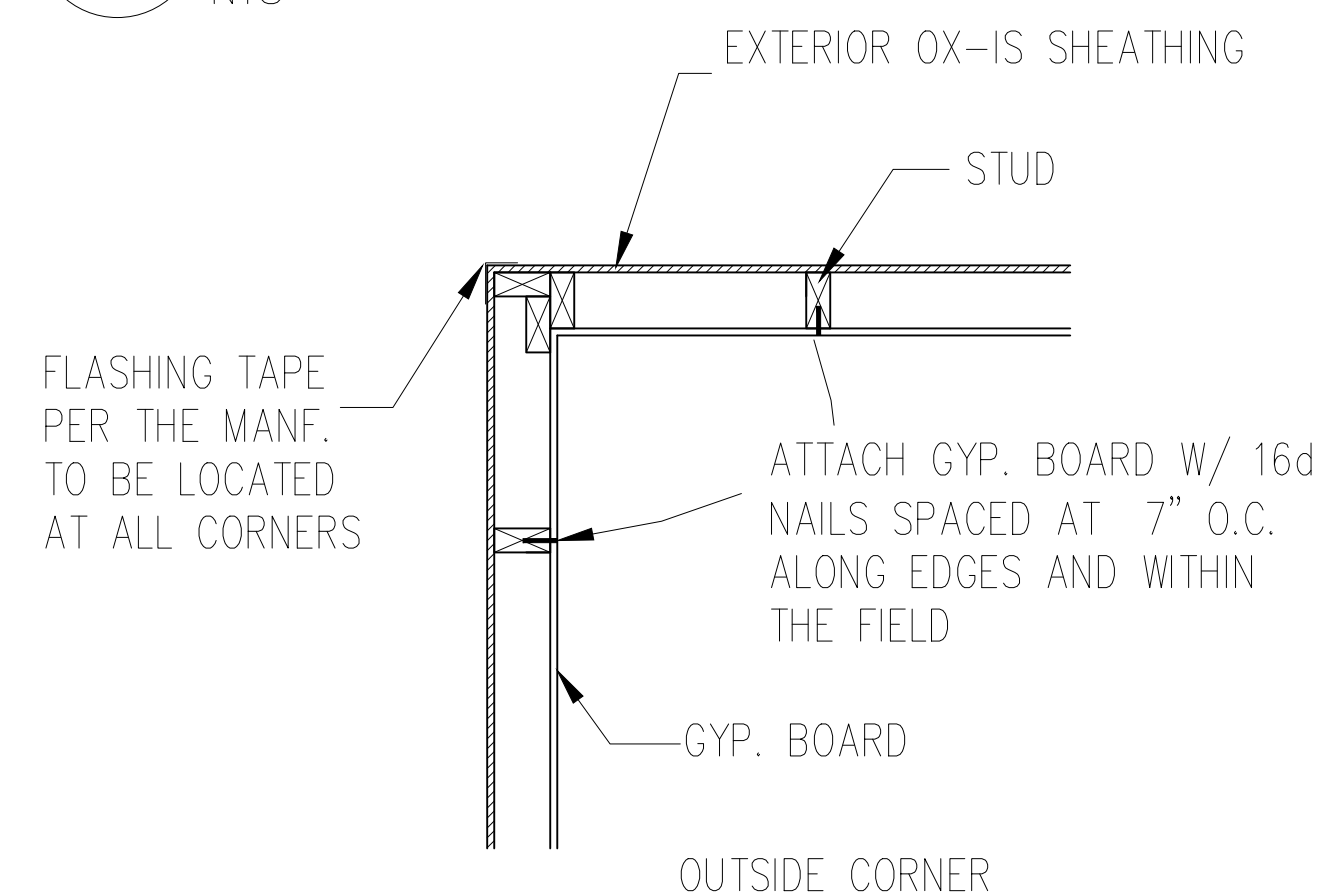
2x4 P.T. PLATE WITH (2)1/2" DIA ANCHOR BOLTS EMBEDDED IN CONC. 7" MIN. WITH 3/16"x2"x2" PLATE WASHERS

NOTES:
 -OX-IS MAY BE INSTALLED IN LIEU OF OSB FOR CS-WSP AND CS-PF BRACING METHODS SHOWN ON THE BRACING PLAN.
 BRACED WALLS SHALL BE INSTALLED PER LENGTHS SHOWN ON THE SEALED PLANS.
 -16 GA. STAPLES MAY BE SUBSTITUTED WITH 0.113-INCH DIAMETER (3/8" HEAD OR 2" CAP) NAILS WITH MINIMUM 1" EMBEDMENT.
 -STAPLES MAY RUN PARALLEL WITH WOOD GRAIN OF FRAMING STUDS AT SHEATHING SEAMS.
 -WHERE 3/4" OVERLAP IS NOT INSTALLED, CONTRACTOR MAY COVER SEAM WITH 5" BUTYL FLASHING TAPE.
 -FLASH WINDOWS AND DOORS PER MANF.
 -THE DETAILS ABOVE ARE LIMITED TO 130 MPH WIND ZONES.



3 METHOD PF: PORTAL FRAME DETAIL
D4f NTS

1 TYP. WALL BRACING
D4f NTS



2 TYP. EXTERIOR CORNER ATTACHMENT
D4f NTS

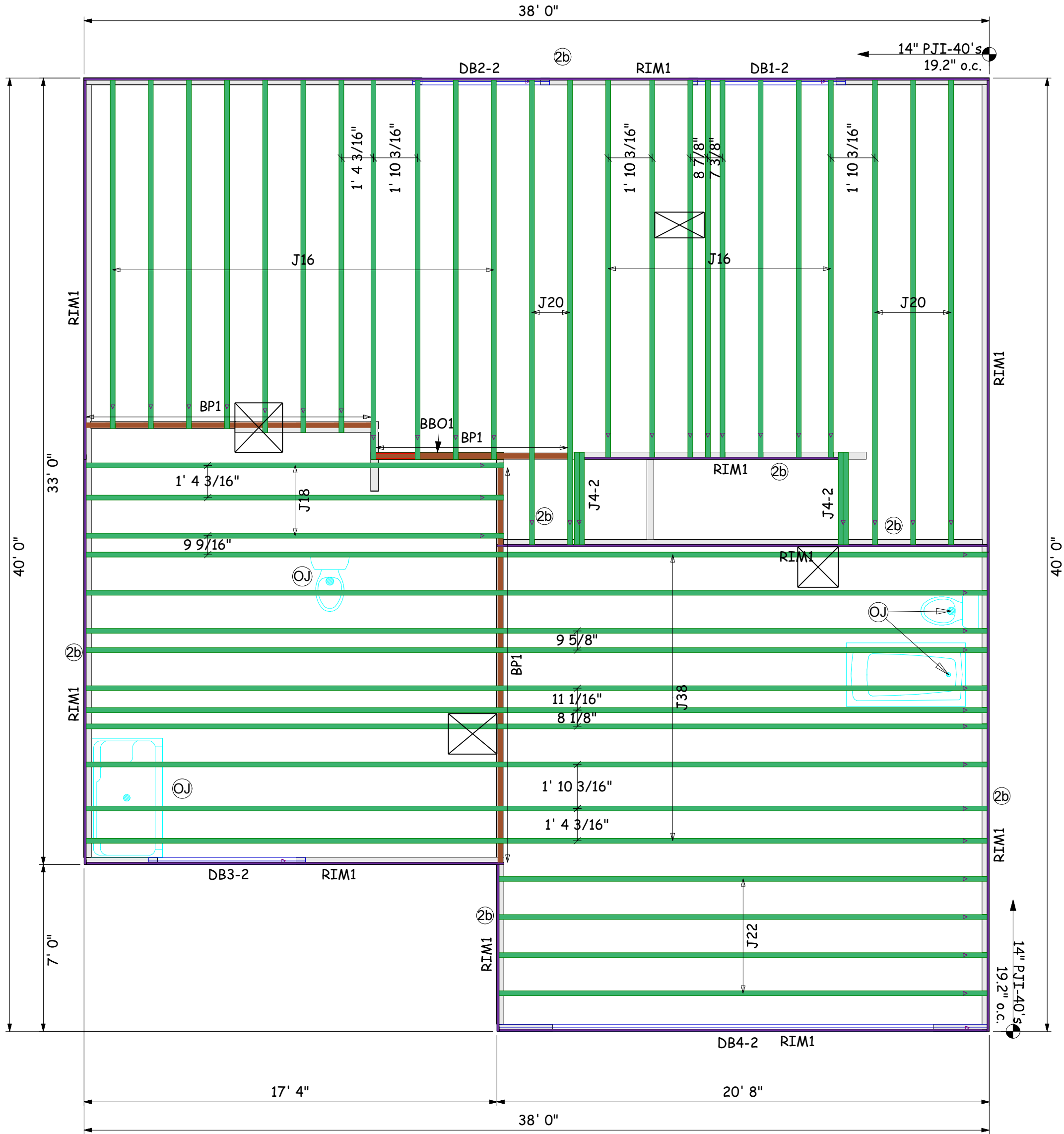
General Notes: ** CUTTING OR DRILLING OF COMPONENTS SHOULD NOT BE DONE WITHOUT CONTACTING COMPONENT SUPPLIER FIRST. CUSTOMER TAKES FULL RESPONSIBILITY FOR COMPONENTS IF CUT BEFORE AUTHORIZATION.

** LVL AND JOISTS MUST BE FULLY CONNECTED TOGETHER PRIOR TO ADDING ANY LOADS.

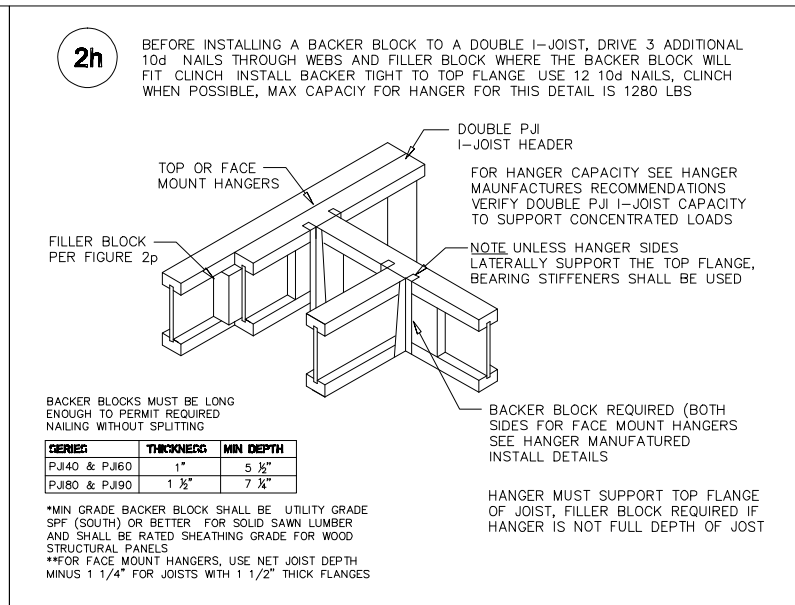
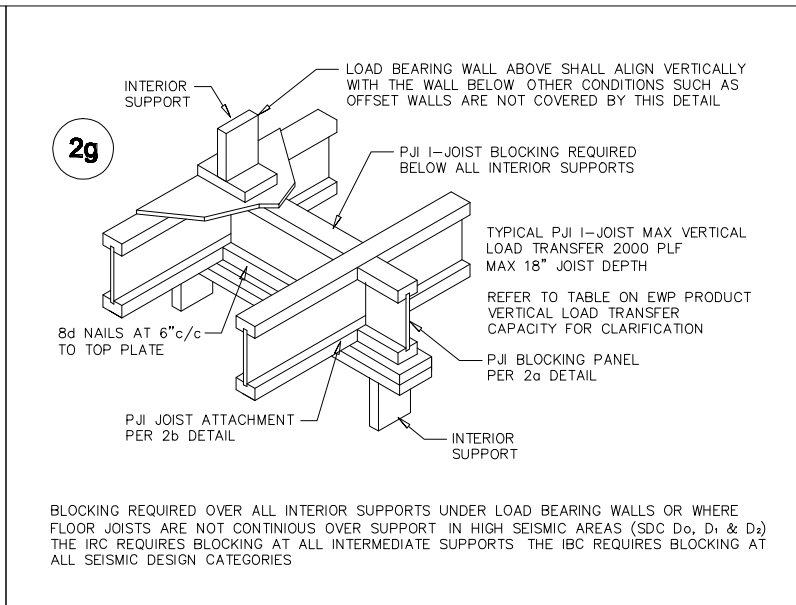
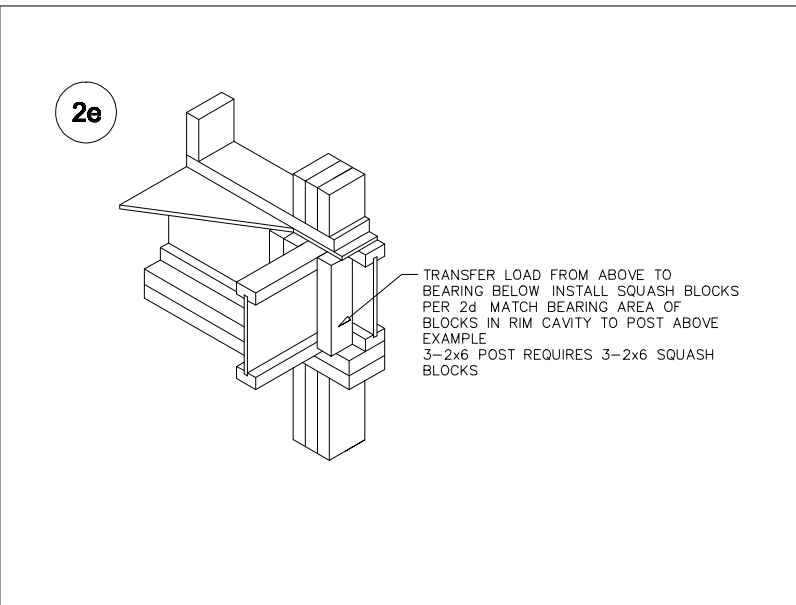
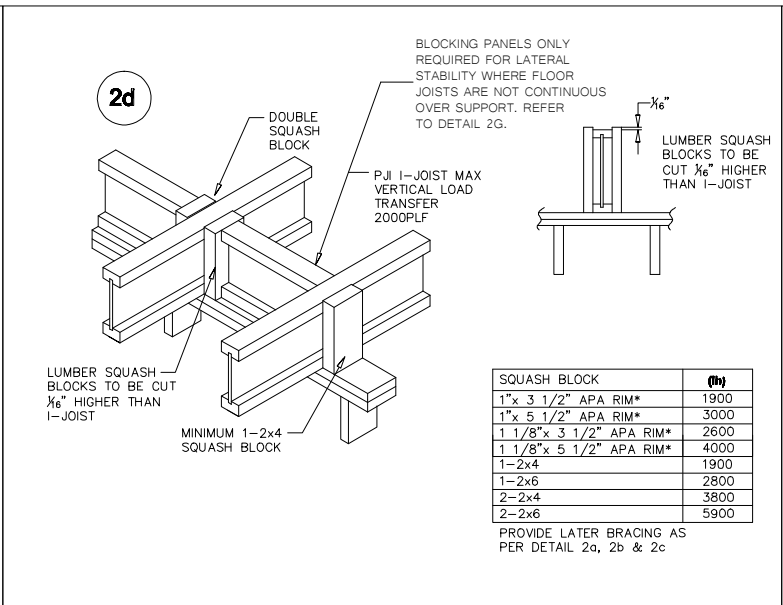
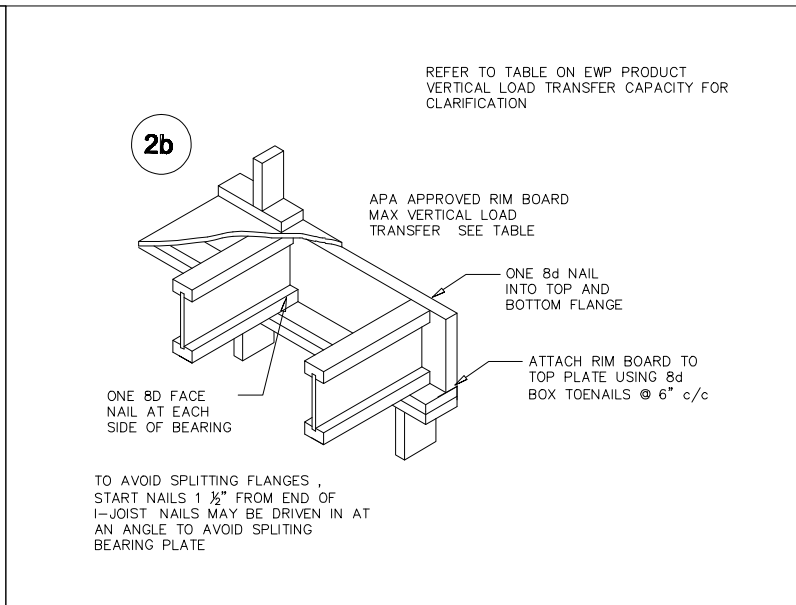
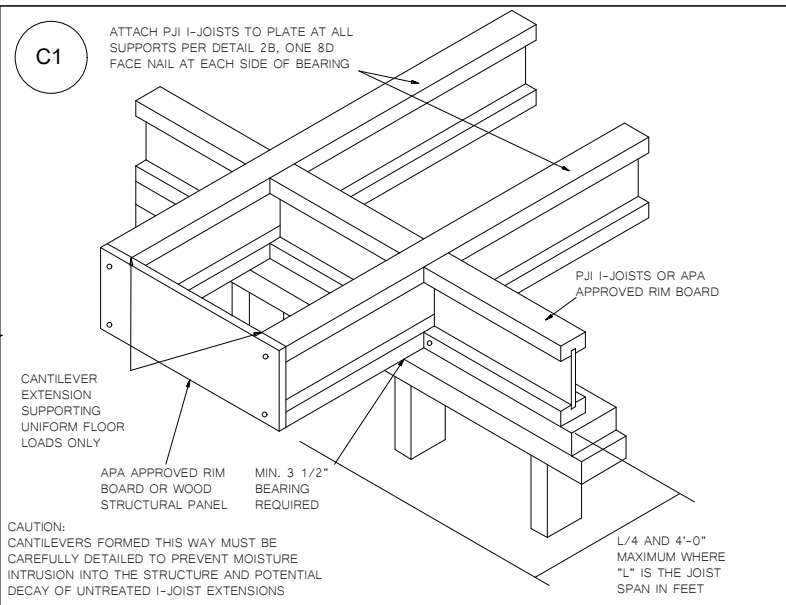
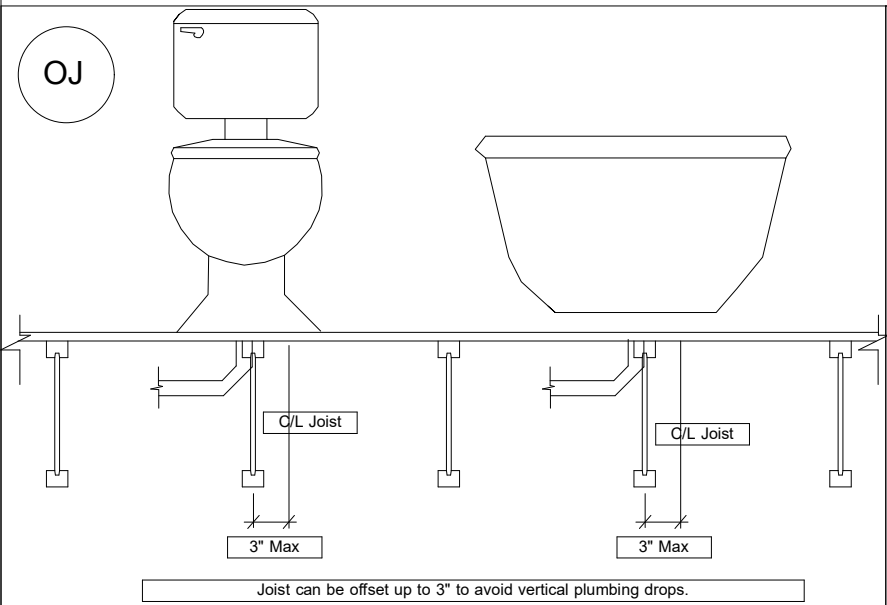
Products				
Net Qty	Plies	Product	Length	PlotID
10	1	14" PJI-40	38' 0"	J38
4	1	14" PJI-40	22' 0"	J22
5	1	14" PJI-40	20' 0"	J20
3	1	14" PJI-40	18' 0"	J18
19	1	14" PJI-40	16' 0"	J16
4	2	14" PJI-40	4' 0"	J4-2
2	2	2.1 RigidLam SP LVL 1-3/4 x 9-1/4	8' 0"	DB1-2
2	2	2.1 RigidLam SP LVL 1-3/4 x 9-1/4	8' 0"	DB3-2
2	2	2.1 RigidLam SP LVL 1-3/4 x 9-1/4	6' 0"	DB2-2
2	2	2.1 RigidLam SP LVL 1-3/4 x 11-7/8	22' 0"	DB4-2
16	1	1 1/8" x 14" APA Rim Board	12' 0"	RIM1
16	1	14" PJI-40	2' 0"	BP1

Accessories				
Net Qty	Plies	Product	Length	PlotID
43	1	3/4" 4x8 OSB		

KEMPSTVILLE BUILDING MATERIALS IS NOT RESPONSIBLE FOR THE DESIGN OR CALCULATION OF ANY AND ALL I-JOIST AND LVL/PSL BEAM MATERIAL. ALL ENGINEERING AND INFORMATION FOR THIS MATERIAL IS TO BE PROVIDED BY THE ENGINEER OF RECORD MARKED ON APPROVED SET OF PLANS. ALL BEAM PLACEMENTS ARE PER THE ENGINEERING RECEIVED. ALL CONNECTION DETAILS TO BE PROVIDED BY ENGINEER OF RECORD. REFER TO ENGINEER OR RECORD FOR ALL MULTI-PLY LVL/ I-JOIST CONNECTION PATTERNS. BUILDER TO VERIFY ALL MATERIAL LENGTHS, QUANTITIES, AND SIZES PRIOR TO ORDERING.



2ND FLOOR LAYOUT



LABEL LEGEND		
BBO	= Beam by Others	
PBO	= Post by Others	
GBO	= Girder by Others	
J	= I-Joist	
FB	= Flush Beam	
DB	= Dropped Beam	
RB	= Roof Beam	
BP	= Blocking Panels	
SB	= Squash Blocks	

** PLUMBING DROPS NOTED ARE IN APPROXIMATE LOCATIONS PER PLAN. BUILDER MUST VERY LOCATIONS BEFORE SETTING JOISTS.

** ALL POINT LOADS FROM ABOVE MUST BE TRANSFERRED TO BEARING FROM UNDER SIDE OF SHEATHING.

** REFER TO INSTALLATION GUIDE FOR PLY TO PLY CONNECTIONS.

** DAMAGED FLOOR JOISTS SHOULD NOT BE INSTALLED UNLESS APPROVED BY COMPONENT PLANT.

** DIMENSIONS ARE READ AS: FOOT-INCH-SIXTEENTH.

** FRAMER MUST REFER TO PLANS WHILE SETTING COMPONENTS.

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

Date: // 10/01/25

Designer: DW

Project #: 25090186

Sheet Number:

1 / 1

DR Horton

5 Cross Creek

Galen F

FLOOR JOIST LAYOUT



This is an I-Joist Placement Plan Only. All designs of I-Joist follow the ISC/IPC Code Requirements along with Manufacturer's guidelines. This is NOT an engineered placement plan. This placement plan is created from plans provided by the customer using Manufacturer's guidelines. It is the responsibility of the EOR, or builder to review, product all bearing conditions, connections, spans, loading, product usage, and quantities. Do not notch or drill holes in beams or flanges on joists without prior approval from the manufacturing Representative unless following hole guidelines in the installation guide of product. Builder takes full responsibility for doing so and NO Back charge will be accepted.

Revisions	
00/00/00	Name
00/00/00	Name
00/00/00	Name
00/00/00	Name
00/00/00	Name