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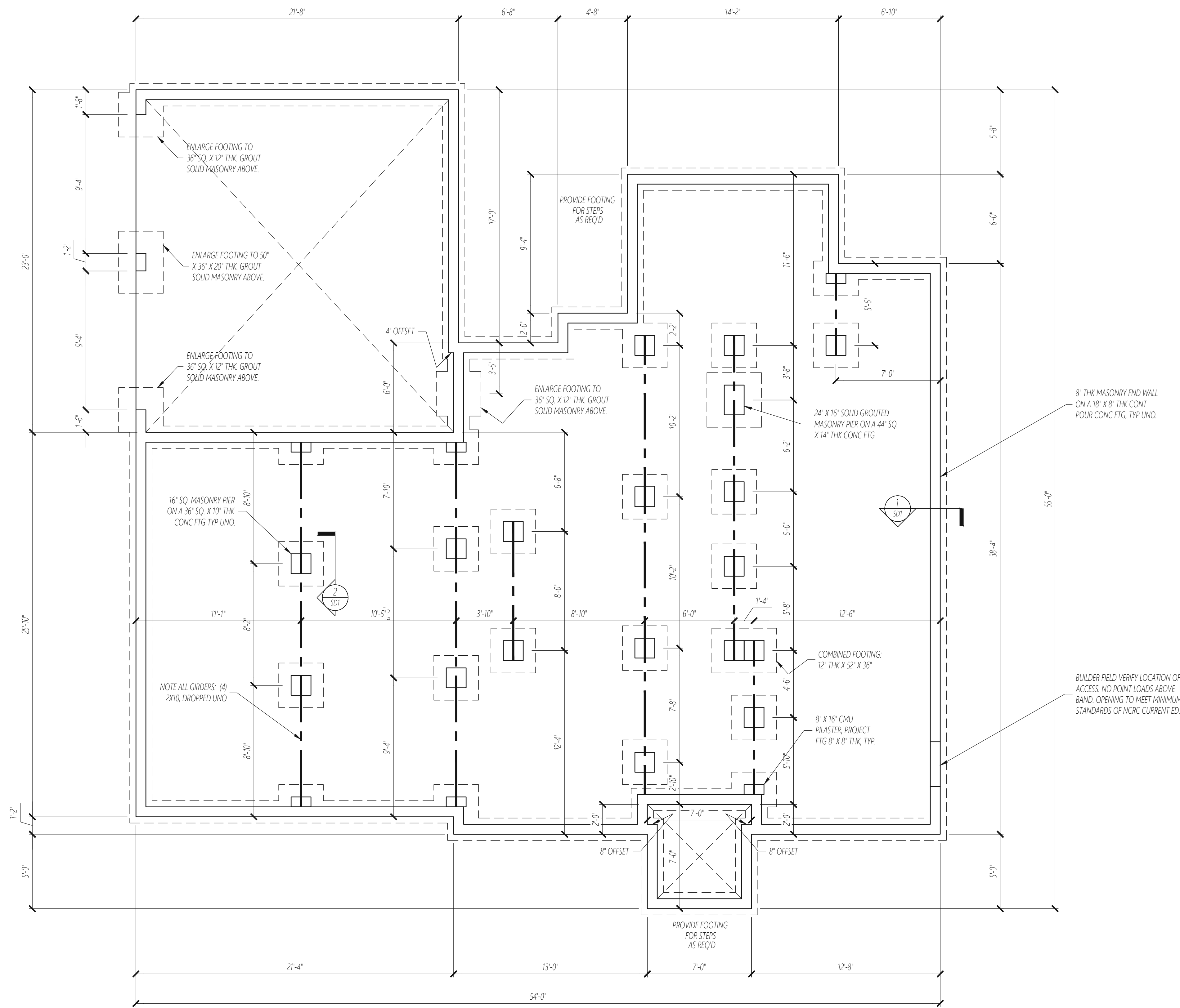
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 Structural Engineering and Consulting
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 (919) 916-3200 License No. C-4754

ATMOS BUILDERS
 STRUCTURAL ADDENDUM
 50 TALBERT DRIVE

ENG: BDO
 DATE: 6-8-2022
 REV:

PROJECT NO.
 2210165

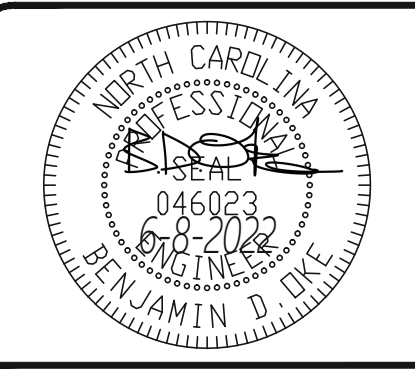
SHEET NO.
 S1
 1 of 6



FOUNDATION PLAN
 1/4" = 1'-0"

COMMON WORD ABBREVIATIONS
 -SEE CONSTRUCTION SPECIFICATION FOR LIST OF COMMON WORD ABBREVIATIONS USED ON STRUCTURAL PLANS.

FOUNDATION NOTES
 - FOUNDATION WALL HEIGHT AND BACKFILL LIMITATIONS ARE TO BE GOVERNED BY THE NCRBC, LATEST EDITION.
 - BUILDER IS TO VERIFY WALL THICKNESS, REBAR SIZE, AND REBAR SPACING IF REQUIRED BY WALL HEIGHT AND BACKFILL CONDITIONS.
 - EXTERIOR PERIMETER DIMENSIONS ARE ASSUMED TO BE OUT TO OUT OF SHEATHING, BUILDER TO OFFSET SILL PLATE AS REQ'D FOR FRAMING ABV.



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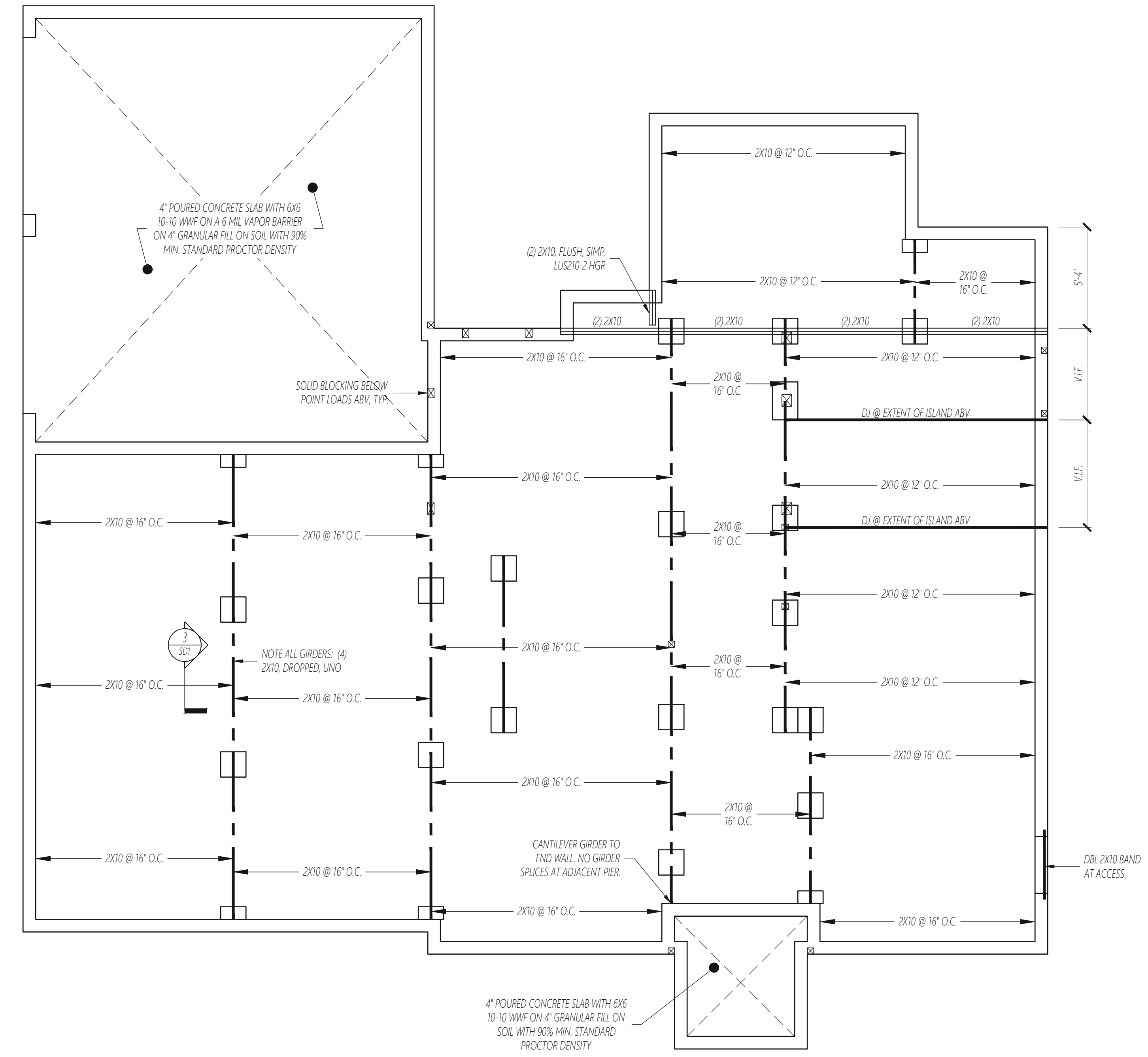
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ATMOS BUILDERS
 STRUCTURAL ADDENDUM
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SHEET NO.
 S2
 2 of 6

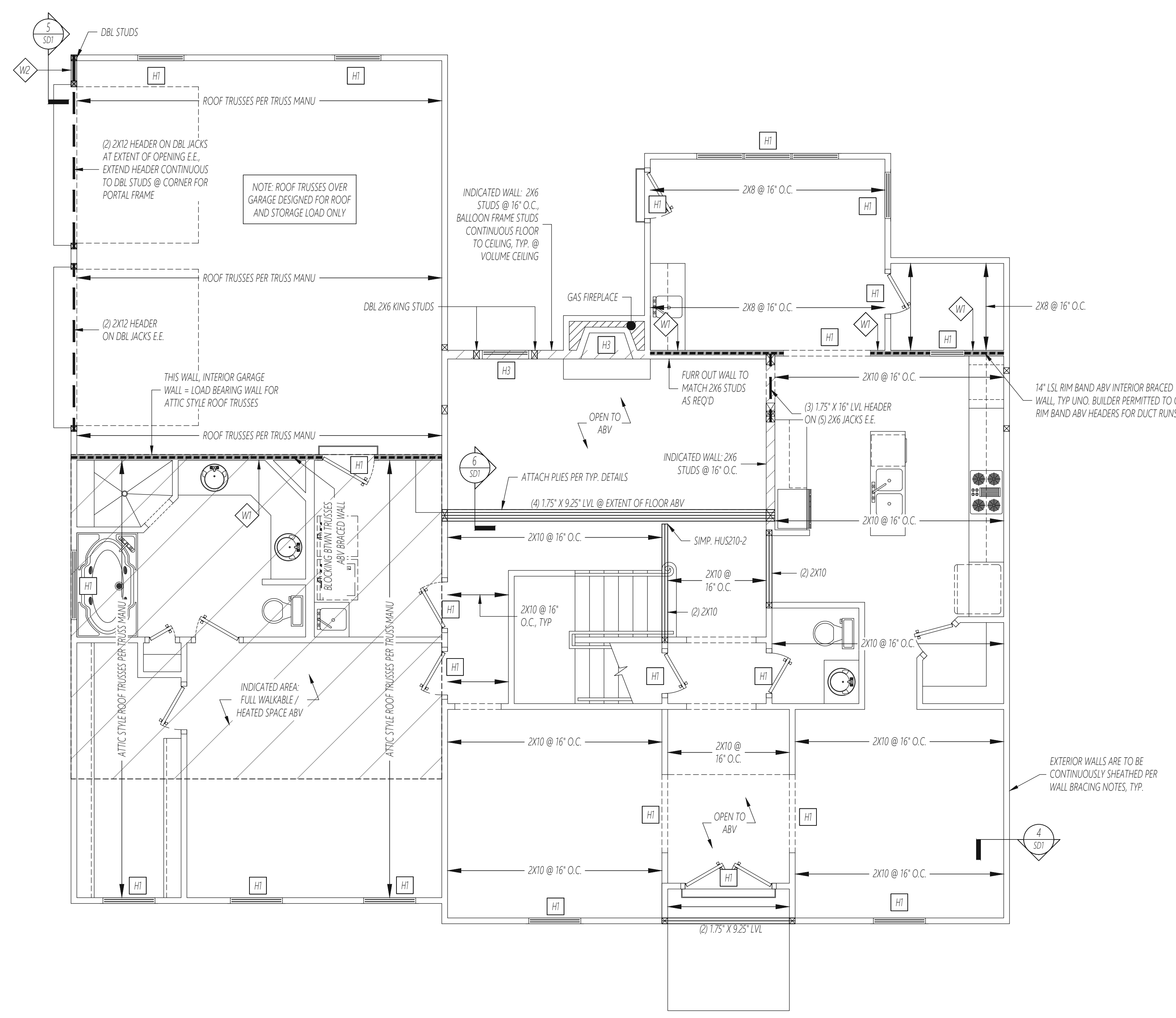


CRAWL SPACE FRAMING PLAN
 1/4" = 1'-0"

COMMON WORD ABBREVIATIONS
 -SEE CONSTRUCTION SPECIFICATION FOR LIST OF COMMON WORD ABBREVIATIONS USED ON STRUCTURAL PLANS.

WOOD FRAMING NOTES
 ALL FLOORS
 -SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 1 /NO. 2 SPRUCE-PINE-FIR FOR RAFTERS, JOISTS, STUDS, WOOD BEAMS, WOOD GIRDERS, ETC., TYP UNO.
 -P.T. SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 2 SOUTHERN YELLOW PINE FOR POSTS, JOISTS, STUDS, WOOD BEAMS, WOOD GIRDERS, ETC., TYP UNO.
 -SOLID SAWN WOOD FRAMING SUBSTITUTION ALLOWED ONLY BY PERMISSION OF ENGINEER OF RECORD.

ADDITIONAL JOISTS
 -NON-LOAD BEARING WALLS, BUILT-INS, AND CABINETS ON THE FLOOR ABOVE THAT ARE PARALLEL TO THE FRAMING SYSTEM ON THIS SHEET SHALL HAVE AN ADDITIONAL JOIST PLACED BELOW, TYP UNO, BUILDER TO INSTALL AS REQUIRED, FIELD VERIFY DIMENSIONS



1ST FLOOR FRAMING PLAN
WALLS AND CEILING
1/4" = 1'-0"

COMMON WORD ABBREVIATIONS

-SEE CONSTRUCTION SPECIFICATION FOR LIST OF COMMON WORD ABBREVIATIONS USED ON STRUCTURAL PLANS.

WOOD FRAMING NOTES

ALL FLOORS
 -SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 1 /NO. 2 SPRUCE-PINE-FIR FOR RAFTERS, JOISTS, STUDS, WOOD BEAMS, WOOD GIRDERS, ETC., TYP UNO.
 - P.T. SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 2 SOUTHERN YELLOW PINE FOR POSTS, JOISTS, STUDS, WOOD BEAMS, WOOD GIRDERS, ETC., TYP UNO.
 -SOLID SAWN WOOD FRAMING SUBSTITUTION ALLOWED ONLY BY PERMISSION OF ENGINEER OF RECORD.

ADDITIONAL JOISTS

-NON-LOAD BEARING WALLS, BUILT-INS, AND CABINERY ON THE FLOOR ABOVE THAT ARE PARALLEL TO THE FRAMING SYSTEM ON THIS SHEET SHALL HAVE AN ADDITIONAL JOIST PLACED BELOW, TYP UNO, BUILDER TO INSTALL AS REQUIRED, FIELD VERIFY DIMENSIONS

NO. OF STUDS FOR BEAM SUPPORT

ALL FLOORS

BEAM TYPE	NO. OF STUDS AT E.E. OF BEAM, TYP UNO
(2)-PLY SAWN BEAM	2
(3)-PLY SAWN BEAM	3
(2)-PLY LVL BEAM	3
(3)-PLY LVL BEAM	4
(4)-PLY LVL BEAM	5

NOTES:
 -SINGLE PLY LVL BEAMS AND JOISTS TO BE SUPPORT BY SINGLE STUD AT EACH END, TYP.
 -WHERE BEAMS BEAR PARALLEL TO WALL, BEARING LENGTH OF BEAM AND NO. OF STUDS TO EXTEND ALONG LENGTH OF WALL IN PARALLEL DIRECTION, TYP UNO.

HEADER SCHEDULE

THIS FLOOR ONLY

H1:	(2) 2X10 ON (1) JACK E.E.
H2:	(2) 1.75" X 9.25" LVL ON (2) JACKS E.E.
H3:	(3) 2X10'S ON (1) 2X6 JACK E.E.
H4:	(3) 1.75" X 9.25" LVL'S ON (2) 2X6 JACKS E.E.

NOTES:
 -HEADERS IN NON LOAD BEARING INTERIOR WALLS ARE NOT LABELED AND SHALL BE FRAMED ACCORDING TO ACCEPTED CONSTRUCTION PRACTICE.

KING STUD SCHEDULE

EXTERIOR WALLS ONLY, ALL FLOORS

MAX OPENING DIMENSION	NO. KING STUDS E.E. 2X4 WALL	NO. KING STUDS E.E. 2X6 WALL
≤3'	1	1
4'	2	1
8'	3	2
12'	5	2
16'	6	3
18'	7	4

NOTES:
 -NO. OF KING STUDS LISTED ABOVE BASED ON A 10' NOMINAL WALL HEIGHT AND 16" O.C. STUD SPACING.
 -SPANS BASED ON ROUGH OPENINGS. FOR SPANS BTWN DIMENSIONS LISTED ABOVE ROUND UP FOR NO. OF KING STUDS UNO.

WALL BRACING

THIS FLOOR ONLY
 ALL EXTERIOR STUD WALLS ARE TO BE BRACED WITH CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANELING (METHOD CS-WSP), 3/8" MINIMUM THICKNESS, NAILED TO STUDS WITH 8d NAILS @ 6" O.C. AT PANEL EDGES, AND 12" O.C. IN PANEL FIELD.

ALL BRACED WALLS SHALL BE SECURED WITH A CONTINUOUS RIM JOIST, ADDITIONAL JOIST, OR FULL HEIGHT BLOCKING ABOVE AND BELOW BRACED WALL PANEL. JOIST / BLOCKING SHALL BE ATTACHED WITH 8d TOENAILS @ 6" O.C. ALONG TOP OF WALL AND (3) 16d NAILS @ 16" O.C. ALONG BOTTOM OF WALL. HORIZONTAL BLOCKING IS REQUIRED AT PANEL JOINTS IN BRACED WALL PANELS.

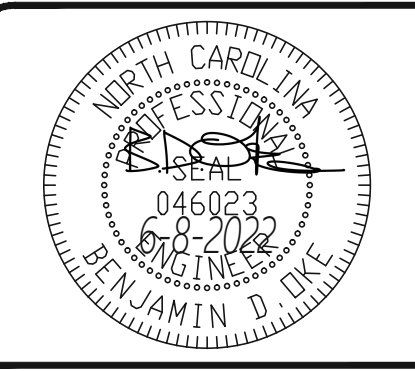
EXTERIOR BRACED WALLS:
 -CONTINUOUS PERIMETER SHEATHING = 234'

SHADED WALLS = INTERIOR BRACED WALLS AND EXTERIOR WALLS WITH ALTERNATIVE BRACING METHODS

W1 - INTERIOR BRACED WALL WITH GYPSUM BOARD, 1/2" GB BOTH SIDES OF WALL ATTACHED TO PANEL EDGES, INCLUDING TOP AND BOTTOM PLATES, AT 7" O.C.

W2 - PORTAL FRAME WHERE INDICATED. SEE DETAILS FOR CONSTRUCTION SPECIFICATIONS. SHATH WALLS @ PORTAL FRAME WITH 7/16" MIN. THICKNESS WOOD STRUCTURAL PANELING.

NOTES:
 -WALL BRACING SHALL BE INSTALLED TO BE IN ACCORDANCE WITH SECT. R602.10.3 OF THE 2018 NRC.
 -WHERE A BUILDING OR PORTIONS THEREOF DOES NOT COMPLY WITH SECT. R602.10.3, ALTERNATIVE METHODS OF BRACING HAVE BEEN DESIGNED IN ACCORDANCE TO ENGINEERING DESIGN PER SECT. R602.10.5 OF THE 2018 NRC.



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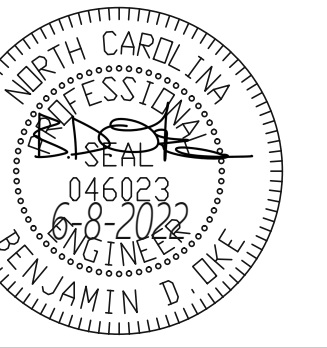
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ATMOS BUILDERS
STRUCTURAL ADDENDUM
50 TALBERT DRIVE

ENG:	BDO
DATE:	6-8-2022
REV:	

PROJECT NO.	2210165
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SHEET NO.	S3
	3 of 6



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ATMOS BUILDERS
 STRUCTURAL ADDENDUM
 50 TALBERT DRIVE

ENG: BDO
 DATE: 6-8-2022
 REV:

PROJECT NO.
 2210165

SHEET NO.
 S4
 4 of 6

COMMON WORD ABBREVIATIONS

-SEE CONSTRUCTION SPECIFICATION FOR LIST OF COMMON WORD ABBREVIATIONS USED ON STRUCTURAL PLANS.

WOOD FRAMING NOTES

ALL FLOORS
 -SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 1 / NO. 2 SPRUCE-PINE-FIR FOR RAFTERS, JOISTS, STUDS, WOOD BEAMS, WOOD GIRDERS, ETC., TYP UNO.
 -P.T. SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 2 SOUTHERN YELLOW PINE FOR POSTS, JOISTS, STUDS, WOOD BEAMS, WOOD GIRDERS, ETC., TYP UNO.
 -SOLID SAWN WOOD FRAMING SUBSTITUTION ALLOWED ONLY BY PERMISSION OF ENGINEER OF RECORD.

NO. OF STUDS FOR BEAM SUPPORT

ALL FLOORS

BEAM TYPE	NO. OF STUDS AT E.E. OF BEAM, TYP UNO
SAWN (2)-PLY SAWN BEAM	2
(3)-PLY SAWN BEAM	3
(2)-PLY LVL BEAM	3
(3)-PLY LVL BEAM	4
(4)-PLY LVL BEAM	5

NOTES:
 -SINGLE PLY LVL BEAMS AND XIS TO BE SUPPORT BY SINGLE STUD AT EACH END, TYP.
 -WHERE BEAMS BEAR PARALLEL TO WALL, BEARING LENGTH OF BEAM AND NO. OF STUDS TO EXTEND ALONG LENGTH OF WALL IN PARALLEL DIRECTION, TYP UNO.

HEADER SCHEDULE

THIS FLOOR ONLY

H1: (2) 2X10 ON (1) JACK E.E.
 H2: (2) 1.75" X 9.25" LVL ON (2) JACKS E.E.
 H3: (3) 2X10'S ON (1) 2X6 JACK E.E.
 H4: (3) 1.75" X 9.25" LVL'S ON (2) 2X6 JACKS E.E.

NOTES:
 -HEADERS IN NON LOAD BEARING INTERIOR WALLS ARE NOT LABELED AND SHALL BE FRAMED ACCORDING TO ACCEPTED CONSTRUCTION PRACTICE.

KING STUD SCHEDULE

EXTERIOR WALLS ONLY, ALL FLOORS

MAX OPENING DIMENSION	NO. KING STUDS E.E. 2X4 WALL	NO. KING STUDS E.E. 2X6 WALL
≤3'	1	1
4'	2	1
8'	3	2
12'	5	2
16'	6	3
18'	7	4

NOTES:
 -NO. OF KING STUDS LISTED ABOVE BASED ON A 10' NOMINAL WALL HEIGHT AND 16" O.C. STUD SPACING.
 -SPANS BASED ON ROUGH OPENINGS. FOR SPANS BTWN DIMENSIONS LISTED ABOVE ROUND UP FOR NO. OF KING STUDS UNO.

WALL BRACING

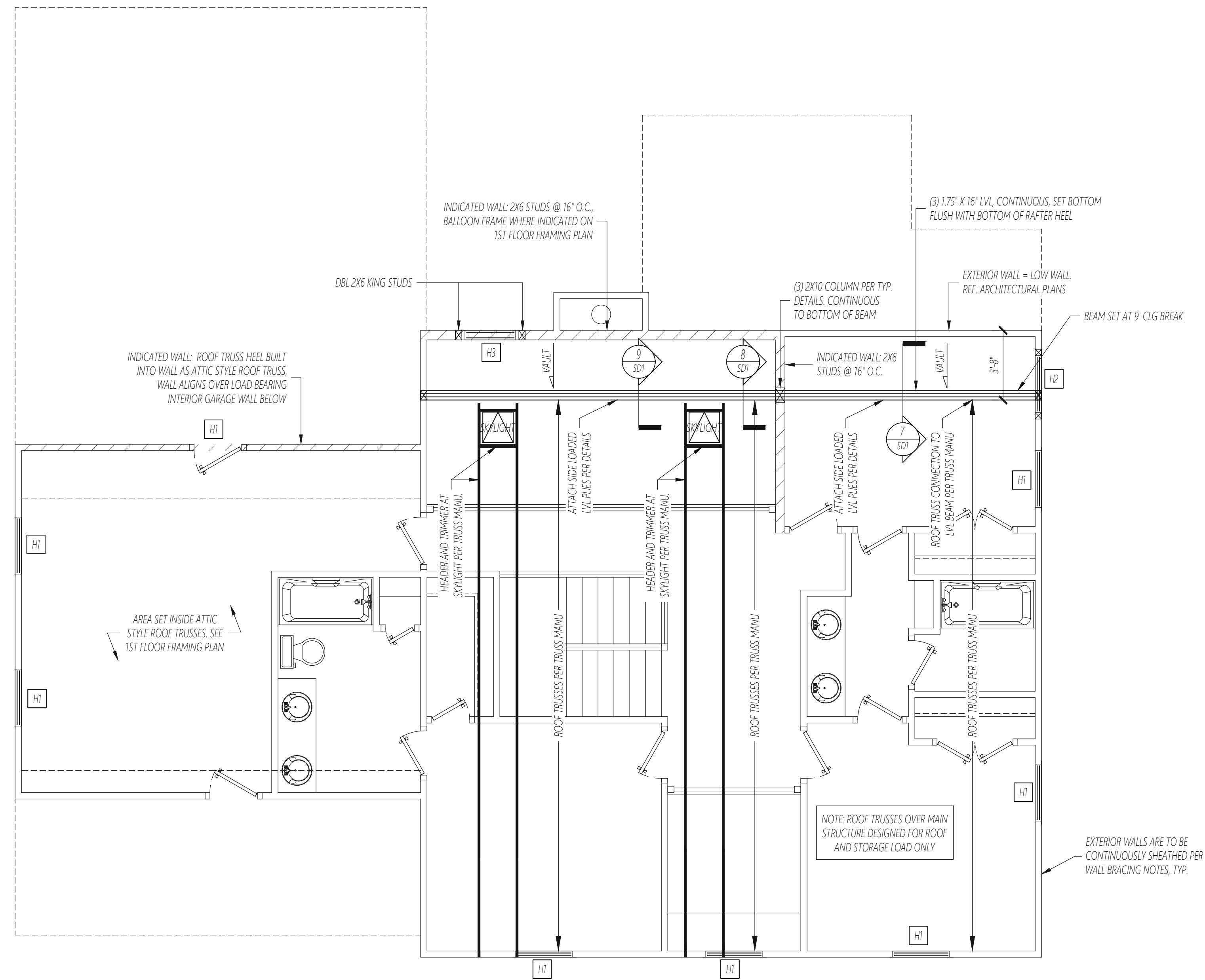
THIS FLOOR ONLY

ALL EXTERIOR STUD WALLS ARE TO BE BRACED WITH CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANELING (METHOD CS-HSP), 3/8" MINIMUM THICKNESS, NAILED TO STUDS WITH 8d NAILS @ 6" O.C. AT PANEL EDGES, AND 12" O.C. IN PANEL FIELD.

ALL BRACED WALLS SHALL BE SECURED WITH A CONTINUOUS RIM JOIST, ADDITIONAL JOIST, OR FULL HEIGHT BLOCKING ABOVE AND BELOW BRACED WALL PANEL. JOIST / BLOCKING SHALL BE ATTACHED WITH 8d TOENAILS @ 6" O.C. ALONG TOP OF WALL AND (3) 16d NAILS @ 16" O.C. ALONG BOTTOM OF WALL. HORIZONTAL BLOCKING IS REQUIRED AT PANEL JOINTS IN BRACED WALL PANELS.

EXTERIOR BRACED WALLS:
 -CONTINUOUS PERIMETER SHEATHING = 112'

NOTES:
 -WALL BRACING SHALL BE INSTALLED TO BE IN ACCORDANCE WITH SECT. R602.10.3 OF THE 2018 N.C.R.C.
 -WHERE A BUILDING OR PORTIONS THEREOF DOES NOT COMPLY WITH SECT. R602.10.3, ALTERNATIVE METHODS OF BRACING HAVE BEEN DESIGNED IN ACCORDANCE TO ENGINEERING DESIGN PER SECT. R602.10.5 OF THE 2018 N.C.R.C.



2ND FLOOR FRAMING PLAN

WALLS AND CEILING
 1/4" = 1'-0"

CONSTRUCTION SPECIFICATIONS

GENERAL NOTES

- GN01: CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 ED. ALL WORK IS TO BE DONE IN STRICT ACCORDANCE WITH STATE AND LOCAL CODES.
- GN02: METHODS, PROCEDURES AND SEQUENCES OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN AND INSURE THE INTEGRITY OF THE STRUCTURE AT ALL STAGES OF CONSTRUCTION.

DIMENSIONS

DM01: DIMENSIONS SHOWN SHALL GOVERN OVER SCALE ON THESE DRAWINGS.

DESIGN LOADS

DL01: DESIGN LOADS SHALL CONFORM WITH THE TABLE BELOW

USE	LIVE LOAD (PSF)
UNINHABITABLE ATTIC WITHOUT STORAGE, LESS THAN 42" HEADROOM	10
UNINHABITABLE ATTIC WITH LIMITED STORAGE	20
HABITABLE ATTIC / ATTIC WITH FIXED STAIR ACCESS	30
COMMON AREAS / SLEEPING ROOMS	40
EXTERIOR BALCONIES / DECKS	40
FIRE ESCAPES	40
STAIRS	40
ROOF	20
PASSENGER VEHICLE GARAGE	50
GUARDRAILS AND HANDRAILS	200
GUARDRAIL IN-FILL COMPONENTS	50

- * A UNIFORMLY DISTRIBUTED DEAD LOAD OF 10 PSF SHALL BE APPLIED TO USE CATEGORIES LISTED ABOVE UNLESS NOTED OTHERWISE.
- * A UNIFORMLY DISTRIBUTED DEAD LOAD OF 5 PSF SHALL BE APPLIED TO VALUED CEILING AREAS.
- * THE CONTRACTOR IS RESPONSIBLE FOR INDICATING ON PLANS ALL AREAS REQUIRING A DESIGN FOR INCREASED DEAD LOAD SUCH AS TILED FLOOR AREAS OR SLATE ROOF COVERINGS. FOR ALL AREAS NOT INDICATED ON PLANS, THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THE DEAD LOAD DOES NOT EXCEED THE 10 PSF DESIGN LIMITATION.

- DL02: INTERIOR WALLS 5 PSF LATERAL.
- DL03: BASIC WIND DESIGN VELOCITY, $V_{ult}(min)$ OF 115 MPH.
- DL04: LOAD DURATION FACTOR FOR ROOF STRUCTURAL MEMBERS IS 1.15.
- DL05: SOIL BEARING CAPACITY 2000 PSF (PRESUMPTIVE).

WOOD CONSTRUCTION

- WC01: SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 1 / NO. 2 SPRUCE PINE FIR FOR JOISTS, RAFTERS, WOOD GIRDERS / BEAMS, ETC. PRESSURE TREATED WOOD FRAMING DESIGN IS BASED ON NO. 2 SOUTHERN YELLOW PINE FOR POSTS, JOISTS, RAFTERS, WOOD GIRDERS / BEAMS, ETC.
- WC02: STUDS SHALL BE SPRUCE PINE FIR NO.1 / NO. 2 OR EQUAL TYP. UNO.
- WC03: LUMBER IN CONTACT WITH THE GROUND, CONCRETE OR MASONRY SHALL BE PRESSURE TREATED IN ACCORDANCE WITH AWPA STANDARD C-16. ALL OTHER DRYSPED LUMBER SHALL BE TREATED IN ACCORDANCE WITH AWPA STANDARD C-2 OR BY ANY METHOD GIVING EQUAL PROTECTION. THE BUILDING CODE OFFICE MAY ALSO APPROVE A NATURAL DECAY RESISTANT WOOD PER SECTION 19-6A1.
- WC04: LAMINATED VENEER LUMBER (LVL) DESIGN IS BASED ON MICROLAM 1.0E MINIMUM DESIGN STRESS VALUES AS FOLLOWS: E=1966 PSI, Fb=2600 PSI, Fv=285 PSI, Fc=750 PSI.
- WC05: PARALLEL STRAND LUMBER (PSL) DESIGN IS BASED ON PARALAM 1.0E MINIMUM DESIGN STRESS VALUES AS FOLLOWS: E=1866 PSI, Fb=2400 PSI, Fv=190 PSI, Fc=545 PSI.
- WC06: LAMINATED STRAND LUMBER (LSL) DESIGN IS BASED ON TIMBERSTRAND 1.0E MINIMUM DESIGN STRESS VALUES AS FOLLOWS: E=1389 PSI, Fb=1700 PSI, Fv=425 PSI, Fc=710 PSI.
- WC07: SOLID SAWN, LVL, AND PSL BEAMS BEARING ONTO A STUD WALL SHALL BEAR THE FULL WIDTH OF THE SUPPORTING WALL WHEN FRAMED PERPENDICULAR TO THE WALL AND, IN ALL CASES, SHALL BE SUPPORTED ON A GANGED STUD COLUMN SUCH THAT THE GANGED NUMBER OF STUDS IS AT LEAST AS WIDE AS THE BEAM BEING SUPPORTED OR, WHEN FRAMED PARALLEL TO THE WALL, SHALL BEAR ON (2) STUDS MINIMUM FOR SAWN BEAMS AND (3) STUDS MINIMUM FOR LVL AND PSL BEAMS, UNO.
- WC08: SINGLE LVL OR SOLID SAWN MEMBERS OF 1.75" OR LESS WIDTH, BEARING ONTO A STUD WALL SHALL BEAR 2" MINIMUM ONTO THE WALL AND SHALL BE SUPPORTED BY (1) ADDITIONAL STUD.
- WC09: SOLID SAWN LUMBER PILES THAT ARE GANGED TO FORM UP TO A (4) PLY A BEAM SHALL HAVE ADJACENT PILES IN THE BEAM FASTENED TOGETHER WITH (2) ROWS OF 10d NAILS @ 16" O.C. INSTALLED ON (1) OUTER SIDE OF A (2) PLY BEAM AND INSTALLED (1) OUTER SIDE AND ON EACH ADJACENT PLY OF A (3) OR MORE GANGED PLY BEAM, TYP. UNO.
- WC10: LVL PILES THAT ARE GANGED TO FORM UP TO A (3) PLY BEAM, LESS THAN 16" IN DEPTH, SHALL HAVE ADJACENT PILES IN THE BEAM FASTENED TOGETHER WITH (3) ROWS OF 10d NAILS @ 12" O.C. INSTALLED ON (1) OUTER SIDE OF A (2) PLY BEAM AND INSTALLED ON BOTH OUTER SIDES OF A (3) PLY BEAM. LVL BEAMS 16" DEEP OR GREATER OR (4) OR MORE GANGED PILES SHALL BE FASTENED AS INDICATED ON PLANS.
- WC11: TYPICAL STUD WALL FRAMING SHALL BE 2X4 STUDS SPACED AT 16" O.C. OR, OF A WIDTH, OR SPACING AS INDICATED OTHERWISE ON PLANS. STUD WALLS SHALL BE FRAMED CONTINUOUS WITHOUT BREAK ALONG THE HEIGHT OF THE WALL AND SHALL CONSIST OF A SOLE PLATE AT THE BOTTOM OF THE WALL AND A DOUBLE TOP PLATE AT THE TOP OF THE WALL. DISCONTINUITIES IN A STUD WALL SHALL NOT OCCUR EXCEPT AS REQUIRED FOR DOOR OR WINDOW OPENINGS. THE KING STUDS FOR SUCH OPENINGS SHALL BE CONTINUOUS.
- WC12: THE REQUIRED NUMBER OF KING STUDS FOR EXTERIOR HEADERS IN 2X4 STUD WALLS SHALL BE DETERMINED BY NCSCB TABLE 602.3(5)(b) UNLESS NOTED OTHERWISE ON PLANS. FOR 2X6 OR WIDER STUD WALLS THE REQUIRED NUMBER OF KING STUDS FOR EXTERIOR HEADERS WALLS SHALL BE EQUAL TO 1/2 THE AMOUNT OF STUDS AS INDICATED BY THE TABLE LISTED ABOVE.
- WC13: STUDS THAT ARE GANGED TO FORM A LOAD BEARING COLUMN OR A COLUMN TRANSFERRING LOAD FROM ONE FLOOR TO THE NEXT SHALL HAVE ADJACENT STUDS WITHIN THE COLUMN NAILLED TOGETHER WITH (2) ROWS OF 10d NAILS AT 16" O.C. (3) ROWS OF 10d NAILS @ 8" O.C. FOR 2X6 OR 2X10 STUDS). ALL COLUMNS SHALL PROVIDE A CONTINUOUS LOAD PATH DOWN TO THE FOUNDATION OR OTHER ENGINEERED STRUCTURAL ELEMENTS INCLUDING SOLID BLOCKING OF EQUAL WIDTH OF THE COLUMN PROVIDED WITHIN THE DEPTH OF THE FLOOR SYSTEM CAVITY.
- WC14: NAILS SHALL BE COMMON WIRE NAILS TYP. UNO.
- WC15: LAG SCREWS SHALL CONFORM TO ANSI/ASME STANDARD B18.21-1981.
- WC16: PILE HOLES SHALL BE USED FOR LAG SCREW INSTALLATION AND SHALL BE BORED ACCORDING TO MDS SPECIFICATIONS.
- WC17: BOLTS AND LAG SCREWS USED FOR BOLTING WOOD MEMBERS SHALL HAVE STANDARD WASHERS INSTALLED FOR THE NUTS AND BOLT / SCREW HEADS.

STEEL CONSTRUCTION

- ST01: STRUCTURAL STEEL SHALL MEET THE REQUIREMENTS OF THE AISC SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.
- ST02: HOLLOW STRUCTURAL SECTIONS (HSS) SHALL CONFORM TO ASTM A500 GRADE C.
- ST03: ALL OTHER STRUCTURAL STEEL SHALL CONFORM TO ASTM A992 MINIMUM GRADE TYP. UNO.
- ST04: BOLTS SHALL CONFORM TO ASTM A307 MINIMUM GRADE TYP. UNO.
- ST05: WELDING ELECTRODES SHALL BE E70XX.
- ST06: ALL WELDING SHALL BE PERFORMED BY AN AWS CERTIFIED WELDER.
- ST07: REBAR SHALL BE DEFORMED STEEL CONFORMING TO ASTM A615 GRADE 60 TYP. UNO.
- ST08: STEEL FLITCH PLATE BEAMS SHALL CONSIST OF A CONTINUOUS STEEL PLATE BOLTED BETWEEN TWO PIECES OF CONTINUOUS LUMBER PLATE AND LUMBER AS SIZED PER PLANS. BOLT ASSEMBLY TOGETHER USING 1/2" THROUGH BOLTS SPACED AT 24" O.C. STAGGERED TOP TO BOTTOM OF BEAM. MAINTAIN A 2" EDGE DISTANCE. PLACE TWO BOLTS, ONE ABOVE THE OTHER, 6" FROM EACH END OF THE BEAM.
- ST09: ALL STEEL, HSS, AND STEEL FLITCH PLATE BEAMS BEARING ONTO A STUD WALL SHALL BEAR THE FULL WIDTH OF THE SUPPORTING WALL WHEN FRAMED PERPENDICULAR TO THE WALL AND, IN ALL CASES, SHALL BE SUPPORTED ON A GANGED STUD COLUMN SUCH THAT THE GANGED NUMBER OF STUDS IS AT LEAST AS WIDE AS THE BEAM BEING SUPPORTED OR, WHEN FRAMED PARALLEL TO THE WALL, SHALL BEAR ON (3) STUDS MINIMUM UNO.

MASONRY CONSTRUCTION

- MS01: MASONRY CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS OF ACI 530-95, LATEST EDITION.
- MS02: CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C 90 OR ASTM C 55.
- MS03: MORTAR SHALL BE TYPE M OR S CONFORMING TO ASTM C 476.
- MS04: ALL LOAD BEARING MASONRY UNITS SHALL BE LAID IN A RUNNING BOND, TYP.
- MS05: MASONRY PLASTERS SHALL BE BLOCK BONDED TO THE MASONRY WALL IMMEDIATELY ADJACENT, TYP.
- MS06: THE MAXIMUM HEIGHT OF HOLLOW AND SOLID GROUDED MASONRY UNITS USED IN MASONRY PER CONSTRUCTION SHALL CONFORM WITH THE TABLE BELOW

LEAST PER DIMENSION	MAX HEIGHT FOR HOLLOW UNITS	MAX HEIGHT FOR SOLID UNITS
8"	24"	80"
12"	48"	120"
16"	64"	160"
20"	80"	NA
24"	96"	NA

CONCRETE CONSTRUCTION

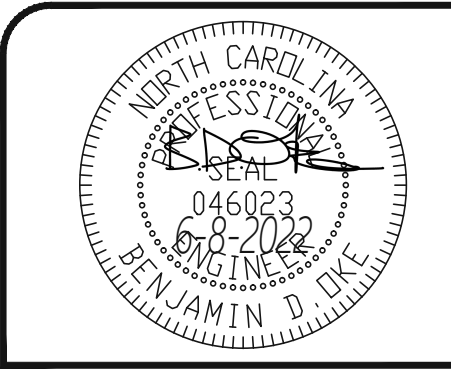
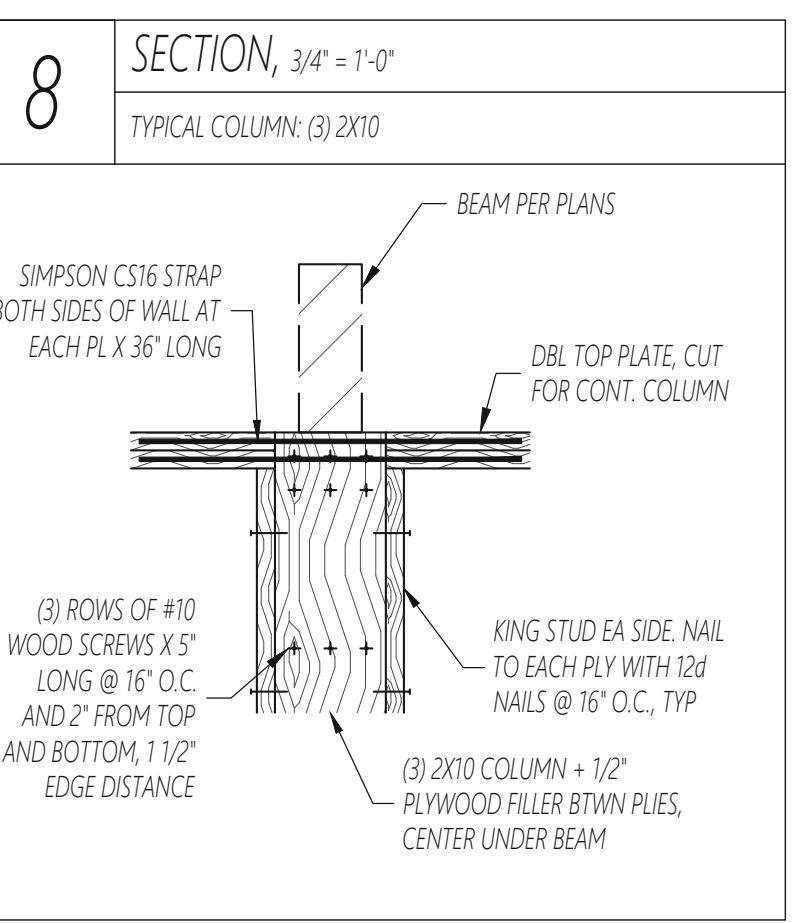
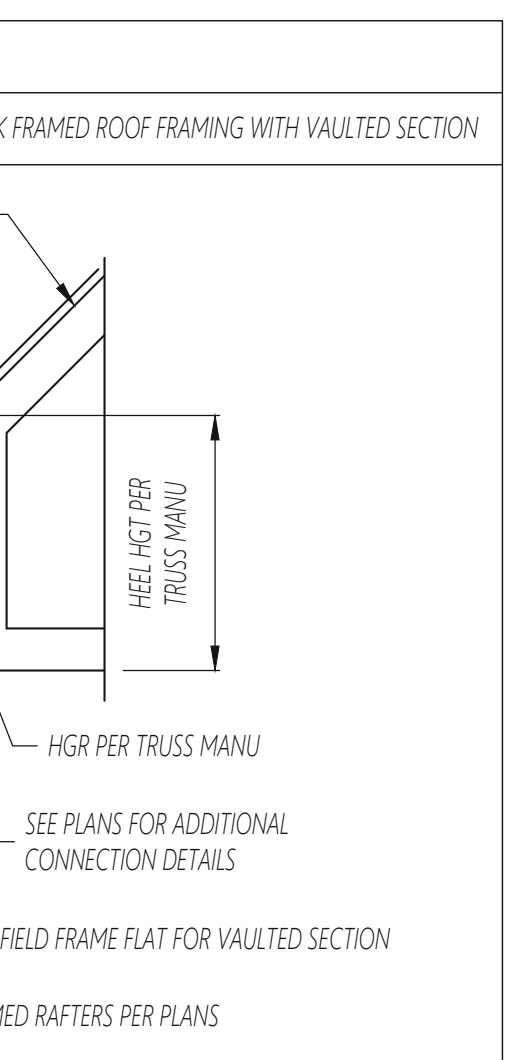
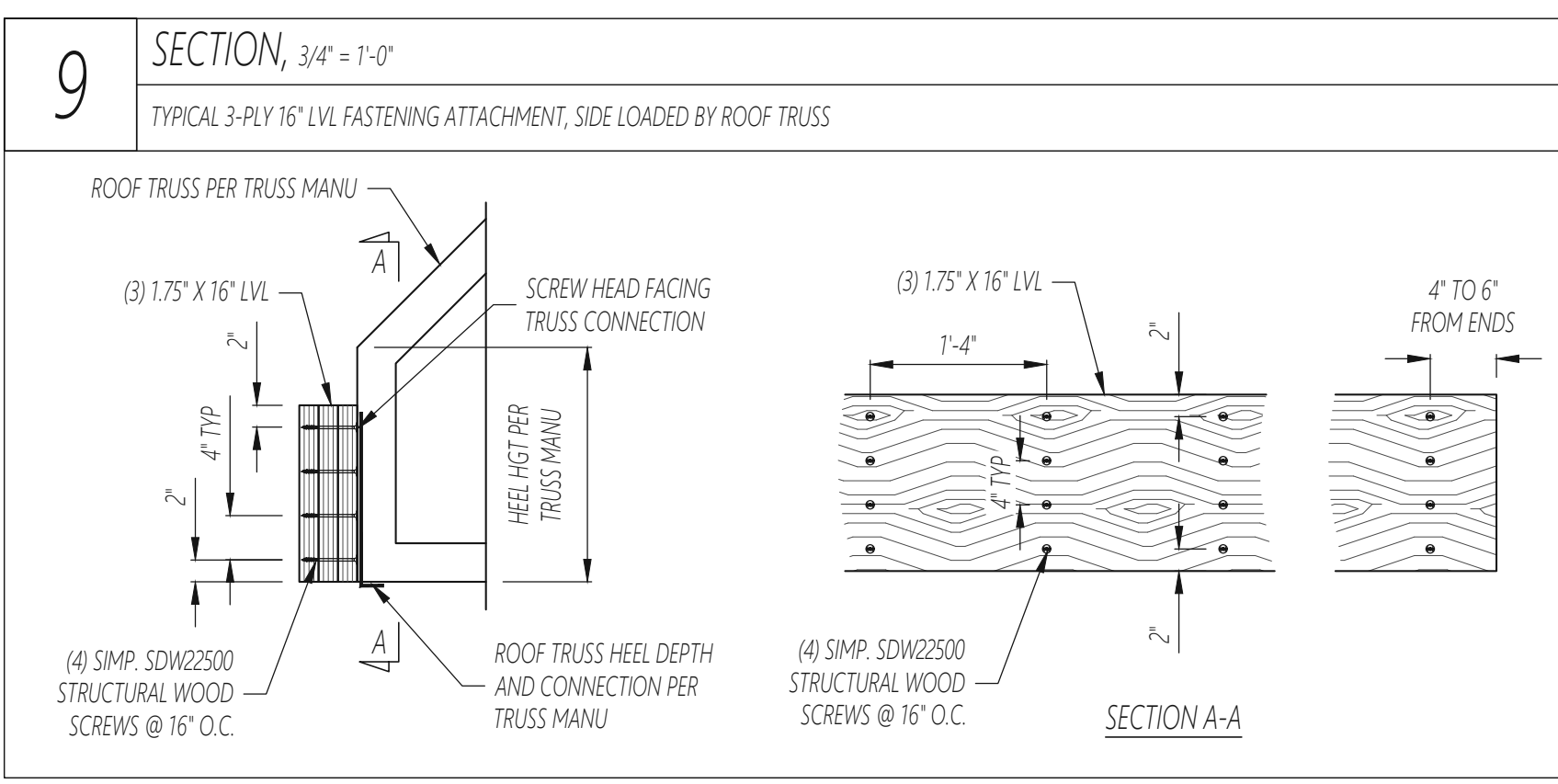
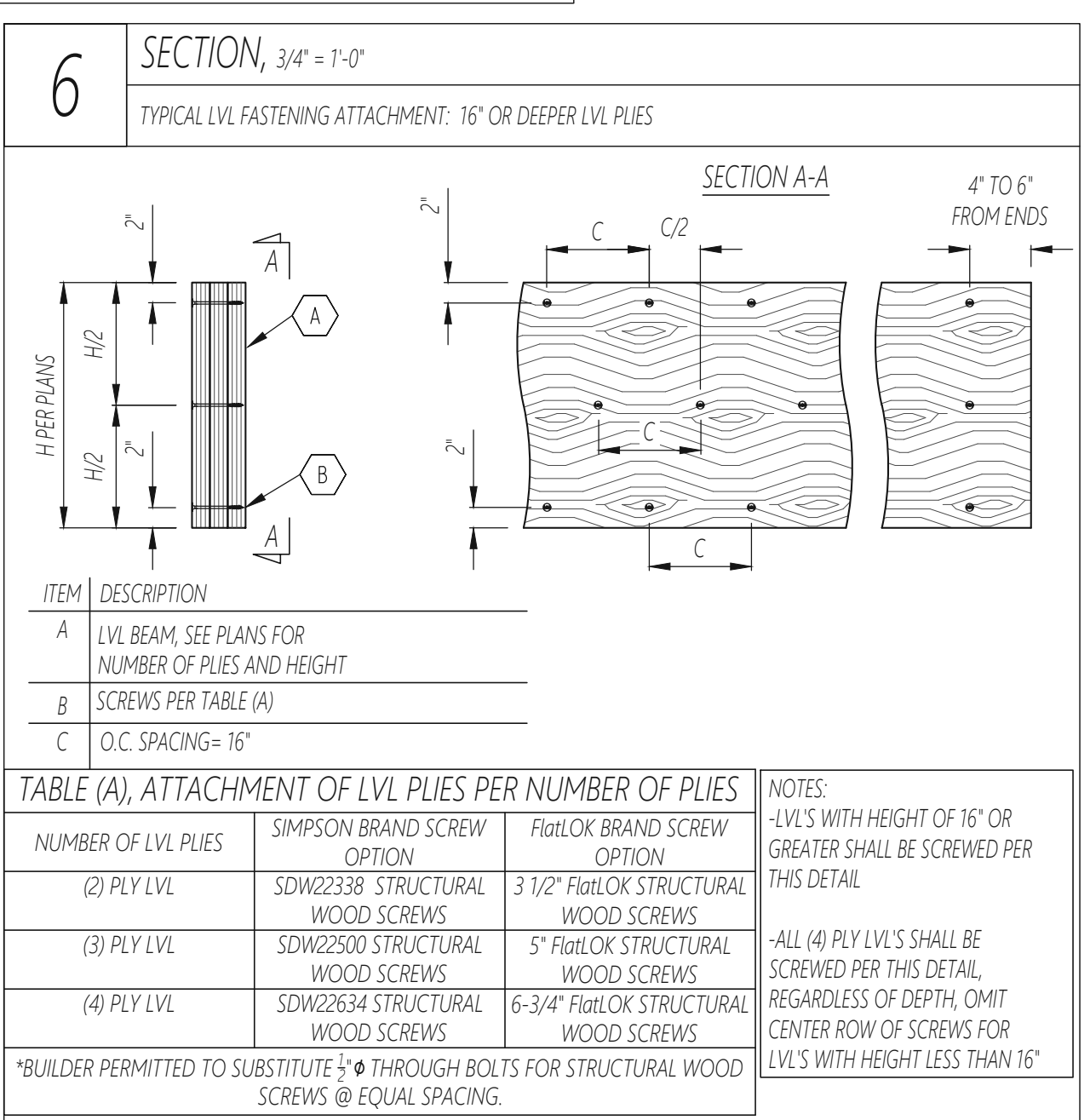
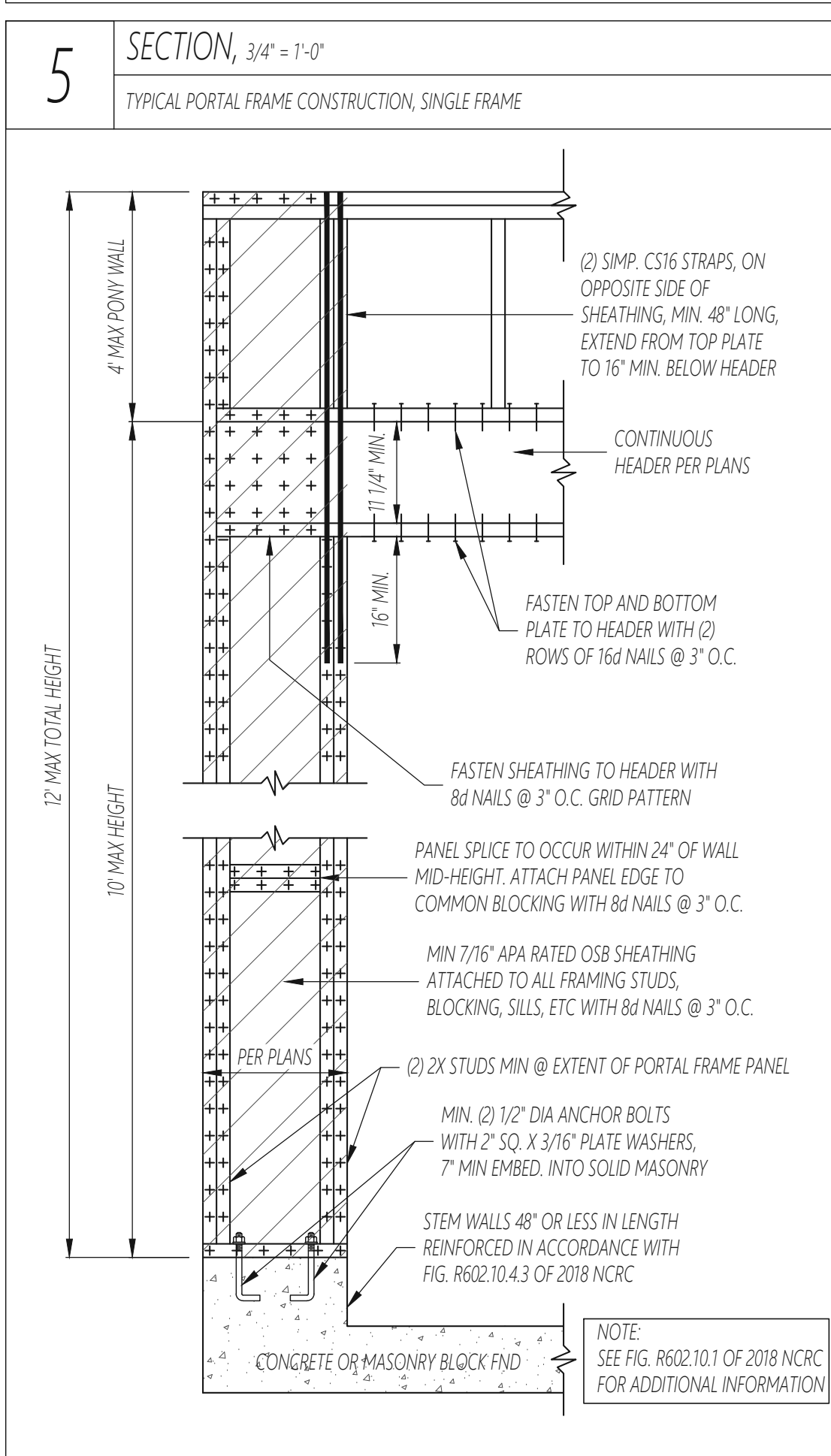
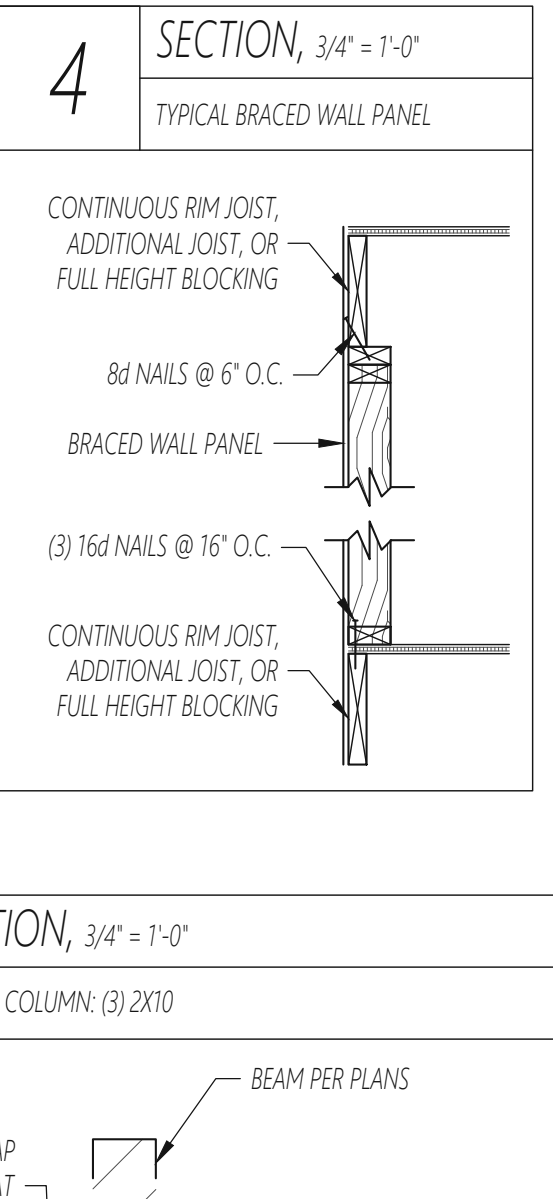
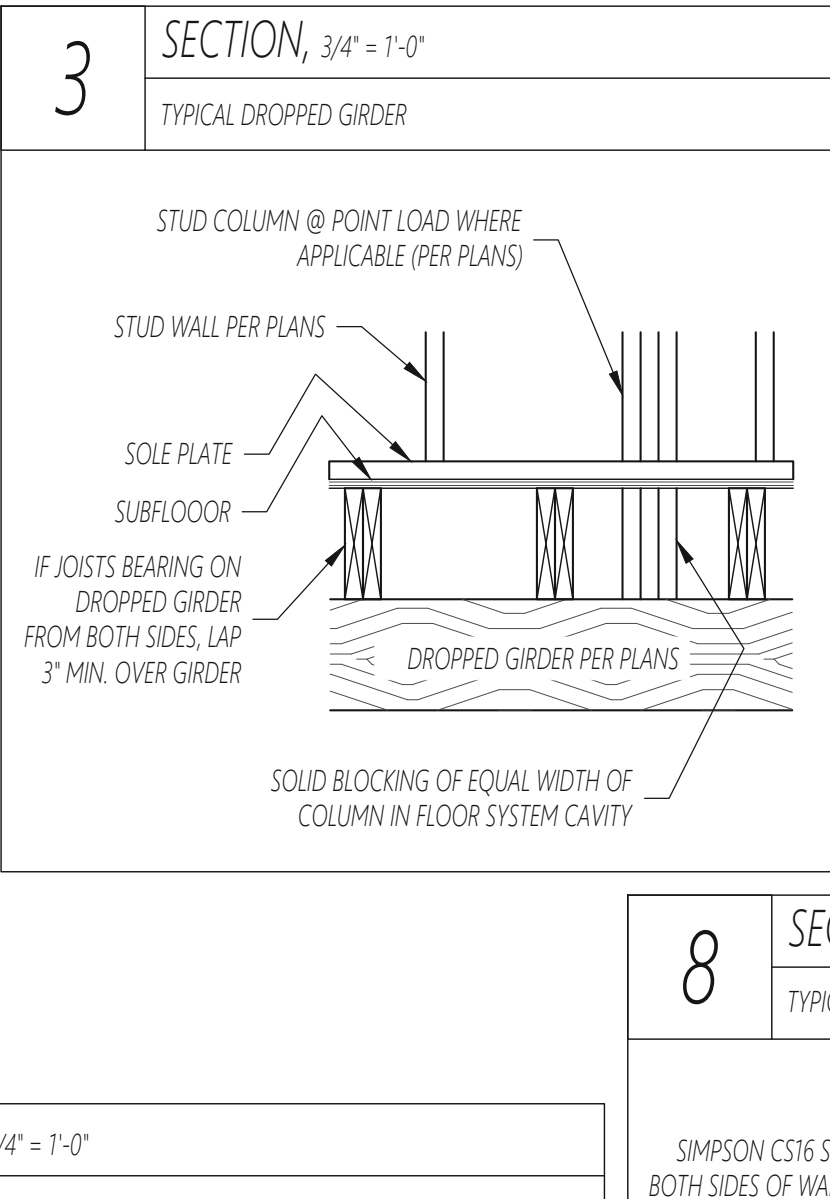
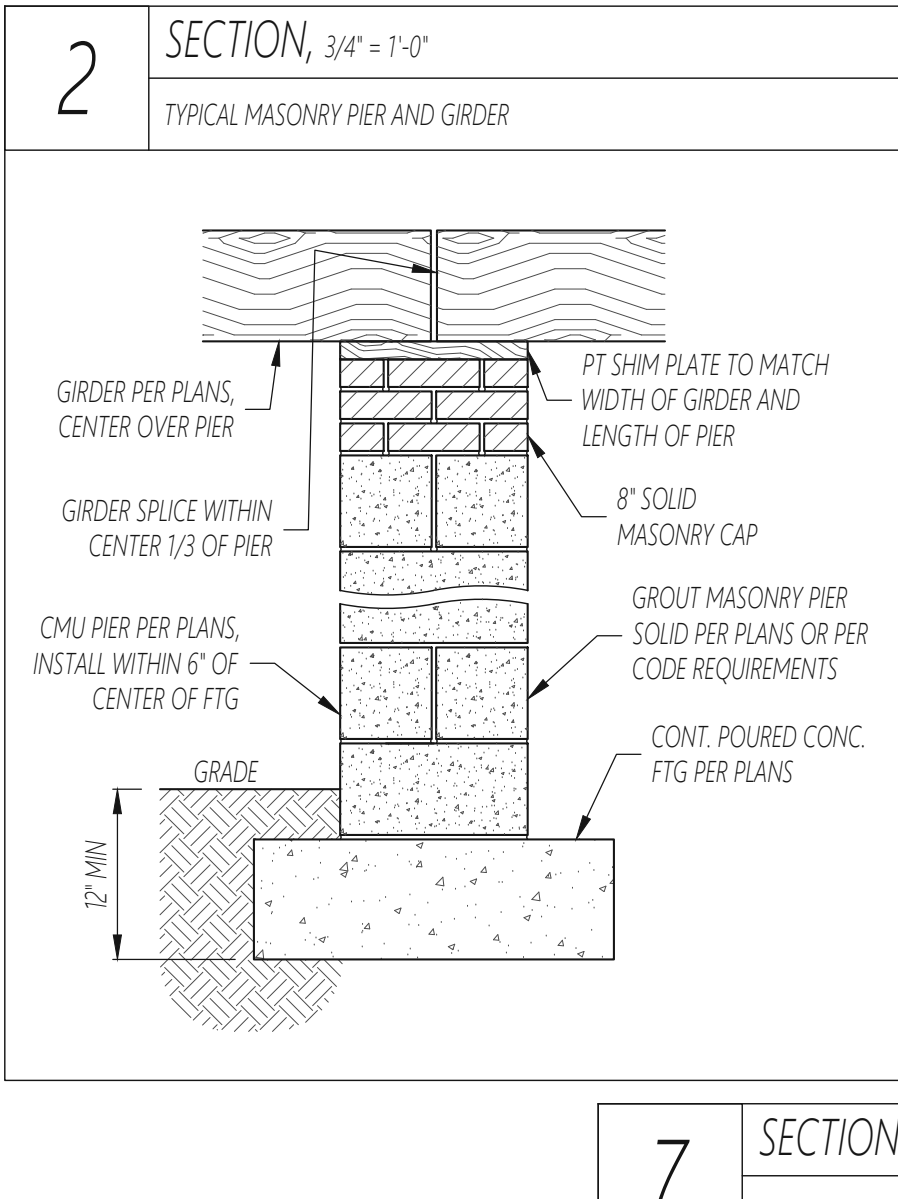
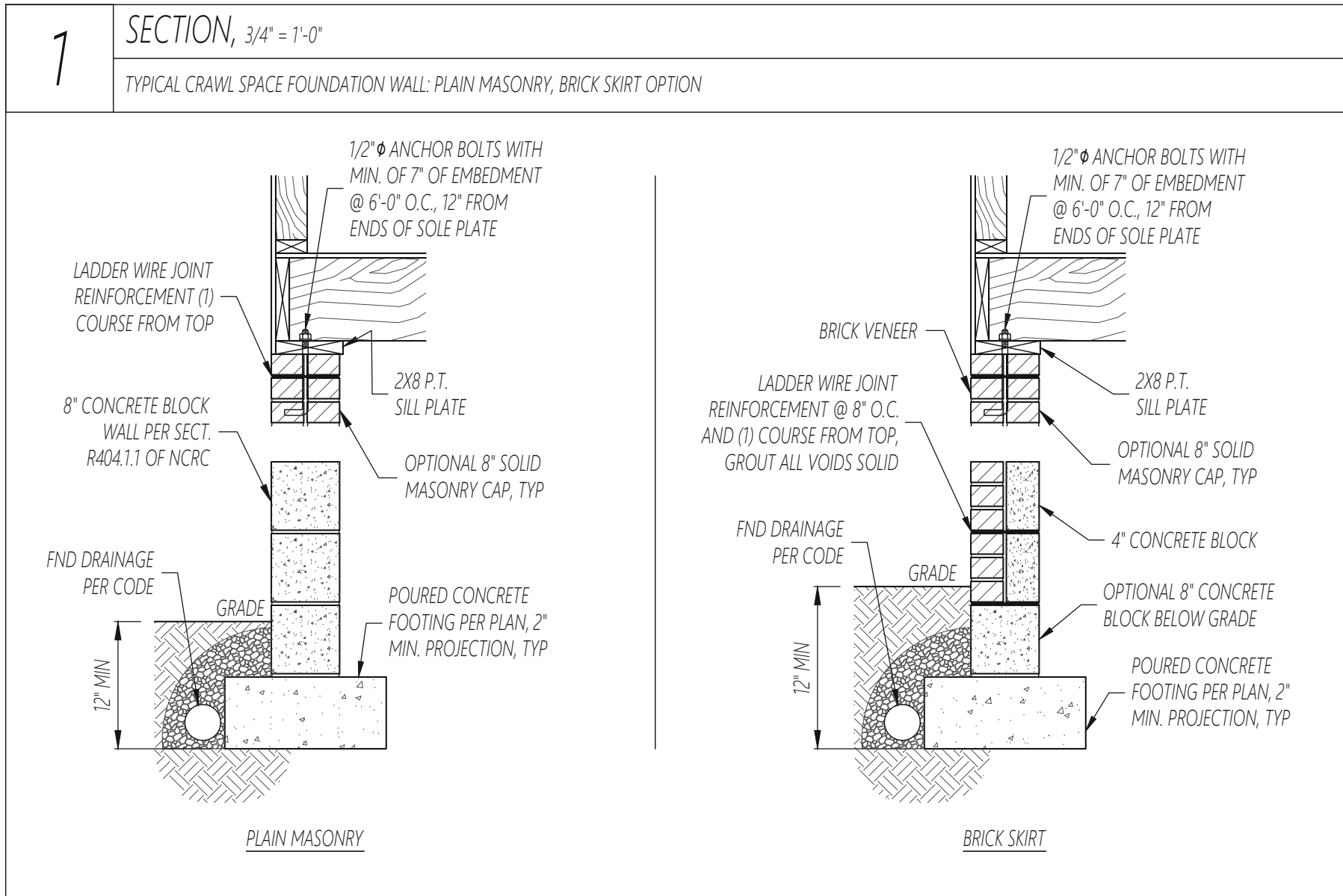
- CN01: REINFORCED CAST IN PLACE CONCRETE SHALL BE PROPORTIONED, MIXED AND PLACED IN ACCORDANCE WITH THE SPECIFICATIONS OF ACI 318, LATEST EDITION.
- CN02: ALL CONCRETE, INCLUDING CONCRETE FOR FOOTINGS, IS TO BE CAST IN PLACE, TYP. UNO.
- CN03: CAST IN PLACE CONCRETE SHALL BE NORMAL WEIGHT CONCRETE AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS TYP. UNO.
- CN04: WHERE CAST IN PLACE CONCRETE WALLS RETAIN 4 FEET OR MORE OF UNBALANCED FILL, THEY SHALL BE LATERALLY SUPPORTED AT THE TOP AND BOTTOM BEFORE BACKFILLING.
- SC01: SYNTHETIC POLYPROPYLENE FIBRILLATED MICRO FIBERS, FIBER SIZE AND DOSAGE RATE PER MANUFACTURER SPECIFICATION, MAY BE USED IN LIEU OF WELDED WIRE FABRIC IN GROUND SUPPORTED SLAB CONSTRUCTION.
- SC02: SOLID SAWN LUMBER SPECIES AND GRADE SUBSTITUTION IS ALLOWED ONLY BY WRITTEN AUTHORIZATION OF SUBSTITUTION BY ENGINEER OR RECORD.
- SC03: ENGINEERED WOOD BEAM AND JOIST SUBSTITUTION IS ALLOWED PROVIDED THAT THE CONTRACTOR OR THE LUMBER SUPPLIER RESPONSIBLE FOR THE SUBSTITUTION PROVIDES DOCUMENTATION AT THE TIME OF INSPECTION DEMONSTRATING THAT THE MATERIAL SUBSTITUTION MEETS OR EXCEEDS THE MINIMUM DESIGN SPECIFICATIONS OF THE ENGINEERED WOOD BEAMS OR JOISTS NOTED ON THE SEALED SET OF ENGINEERED PLANS. IN ALL CASES, THE JOIST SPACING NOTED ON THE SEALED SET OF PLANS IS TO REMAIN THE SAME.
- SC04: ALL OTHER UNAUTHORIZED SUBSTITUTIONS AND / OR DEVIATIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. FAILURE OF THE CONTRACTOR TO CONFORM TO THE STRUCTURAL DRAWINGS SHALL VOID THE ENGINEER'S SEAL AND THE ENGINEER'S LIABILITY UNLESS CHANGES TO THE STRUCTURAL PLANS ARE APPROVED BY THE ENGINEER OF RECORD.

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- OKE NICHOLS ENGINEERING, INC DOES NOT PERFORM FENESTRATION, ROOF VENT, OR ATTIC CALCULATIONS OR ANY OTHER AREA CALCULATIONS THAT ARE NOT RELATED TO STRUCTURAL ENGINEERING.
- TRUSSES ARE TO BE DESIGNED BY OTHERS AS AN ENGINEER REGISTERED IN NORTH CAROLINA. FINAL TRUSS DRAWING SHOULD BE SUBMITTED TO OKE NICHOLS ENGINEERING, INC FOR REVIEW PRIOR TO CONSTRUCTION.
- REVIEW SETS SHALL BE PROVIDED TO THE CLIENT TO ENSURE THAT THE SCOPE OF WORK HAS BEEN COMPLETED IN CONFORMANCE WITH THE CLIENT'S PREFERENCES. CLIENT APPROVAL OF REVIEW SETS SHALL INDICATE THAT THE CLIENT HAS ADEQUATELY REVIEWED THE SET OF DRAWINGS AND ACKNOWLEDGES THAT THE SCOPE OF WORK HAS BEEN COMPLETED TO THE CLIENT'S SATISFACTION. UPON APPROVAL OF REVIEW SETS, THE SEALED SET OF PLANS ARE ISSUED AND SHALL BE CONSIDERED FINALIZED CONSTRUCTION DOCUMENTS.
- THE BUILDER IS RESPONSIBLE FOR REVIEWING ALL PLANS PRIOR TO CONSTRUCTION, AND IN THE CASE OF EXISTING CONSTRUCTION, VERIFYING ALL EXISTING CONDITIONS DURING DEMOLITION PRIOR TO CONSTRUCTION.

COMMON ABBREVIATIONS

ABV	ABOVE	FND	FOUNDATION	THK	THICK
BE	BOTH ENDS	FTG	FOOTING	TYP	TYPICAL
BTWN	BETWEEN	HGC	HOT DIPPED GALVANIZED	TRPL	TRIPLE
CJ	CEILING JOIST	HGR	HANGER	TRP	TRIPLE STUD POCKET
CMC	CONCRETE	LVL	LAMINATED VENEER LUMBER	UNO	UNLESS NOTED OTHERWISE
CONT	CONTINUOUS	NO	NUMBER	V.F.	VERIFY IN FIELD
CS	CONTINUOUS SHEATHING	NTS	NOT TO SCALE	WF	WIDE FLANGE BEAM
DN	DIAMETER	O.C.	ON CENTER	XI	EXTRA JOIST
DBL	DOUBLE	PSL	PARALLEL STRAND LUMBER		
DI	DOUBLE JOIST	PT	PRESSURE TREATED		
DSP	DOUBLE STUD POCKET	RFR	REFERENCE		
E.E.	EACH END	SMS	SIMPSON		
FLR	FLOOR	SQ	SQUARE		



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ATMOS BUILDERS
STRUCTURAL ADDENDUM
50 TALBERT DRIVE

ENG: BDO
DATE: 6-8-2022
REV:

PROJECT NO.
2210165

SHEET NO.
SD1
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