

AREA CHART

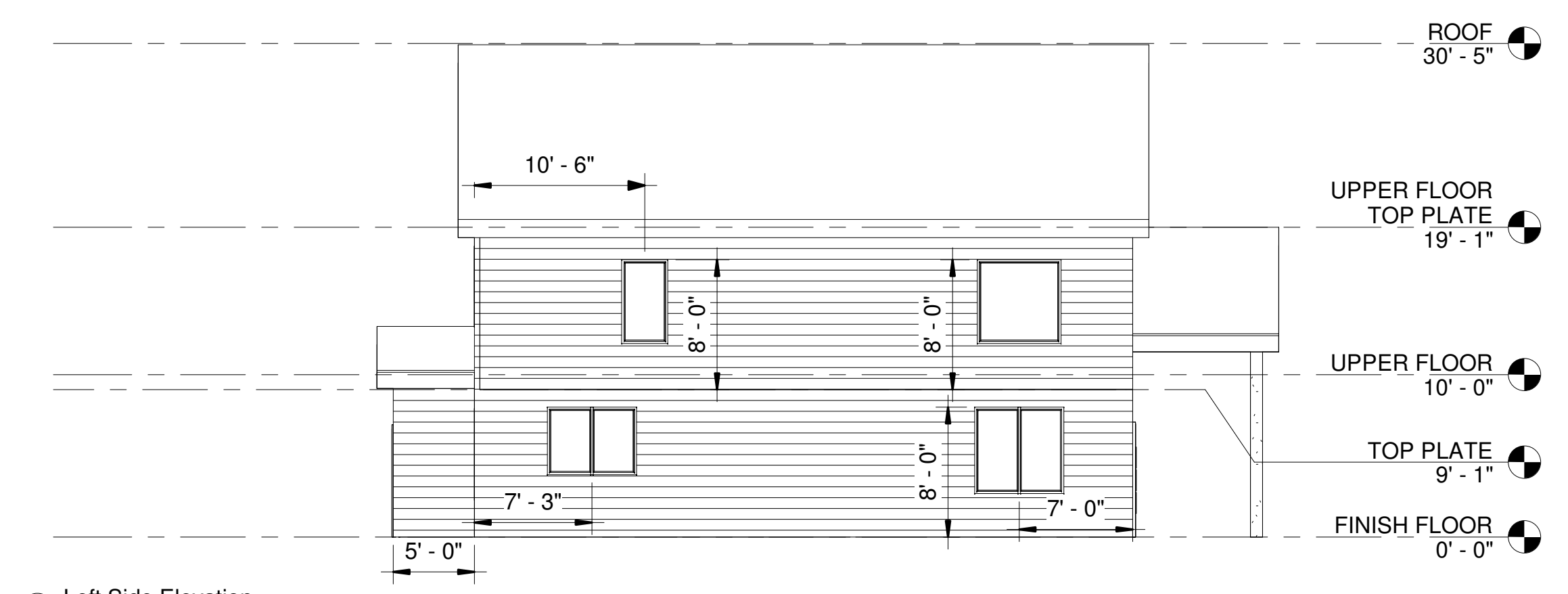
1. MAIN FLOOR HEATED AREA.....	1,245 SQ FT
2. UPPER FLOOR HEATED AREA.....	841 SQ FT
TOTAL HEATED AREA.....	2,084 SQ FT
3. GARAGE AREA.....	475 SQ FT
4. COVERED PORCHES.....	330 SQ FT
5. UNFINISHED AREA.....	328 SQ FT



3 Front Elevation  
1/4" = 1'-0"



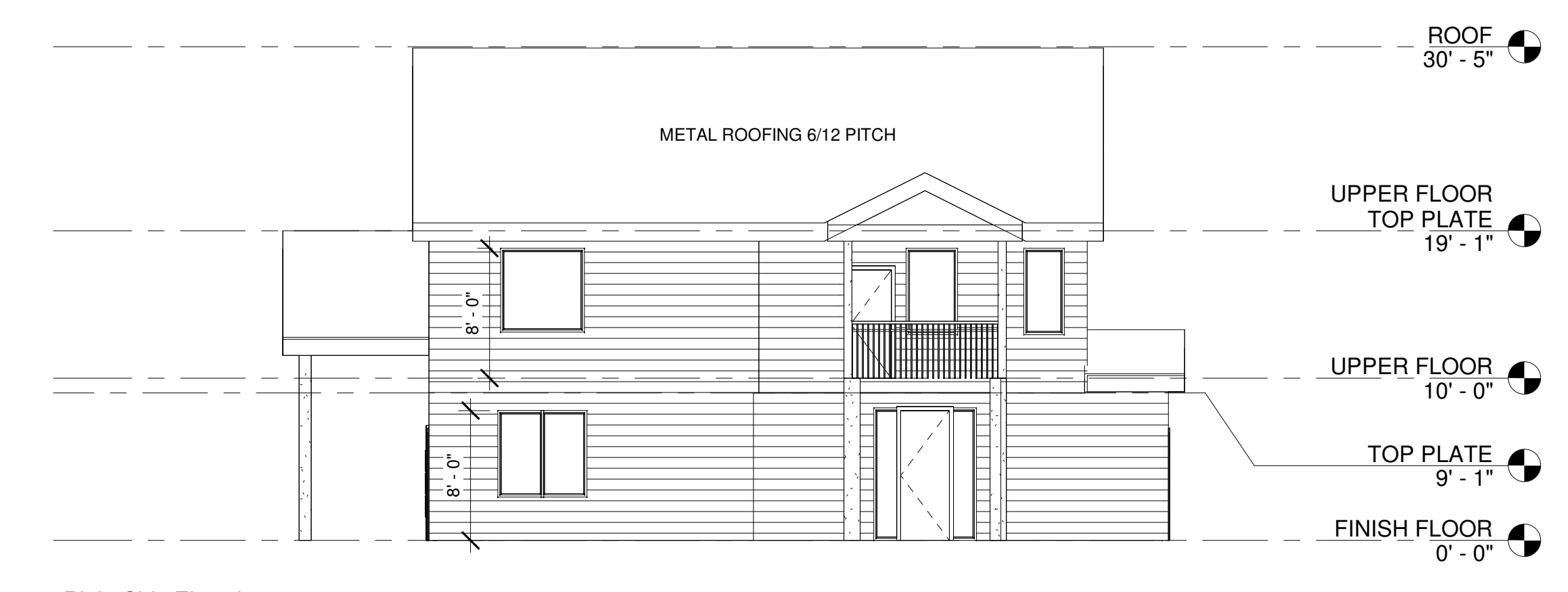
2 Back Elevation  
1/4" = 1'-0"



4 Left Side Elevation  
1/8" = 1'-0"

AREA CHART

1. MAIN FLOOR HEATED AREA.....	1,245 SQ FT
2. UPPER FLOOR HEATED AREA.....	841 SQ FT
TOTAL HEATED AREA.....	2,084 SQ FT
3. GARAGE AREA.....	475 SQ FT
4. COVERED PORCHES.....	330 SQ FT
5. UNFINISHED AREA.....	328 SQ FT



1 Right Side Elevation  
1/8" = 1'-0"

Architectural Layout plans were prepared by others. Civil and Structural Engineering Services, PLLC. provided drafting and structural design services. the professional seal and signature affixed below certify that plans as marked/noted meet load requirements of North Carolina Building Code, Residential 2018

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PROJECT: John Ancheta House  
Raynor-McLamb Drive Harnet  
Bunnlevel NC 28323  
County

REVISION TABLE	REVISION BY	DESCRIPTION
NUMBER	DATE	

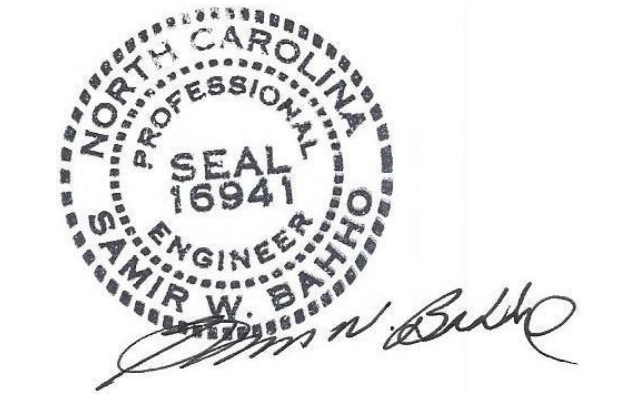
DATE: 7/20/2023

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

SHEET: A-01

Designed by SWB

Drawn by FB



September 04, 2023

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**Plan Notes:**

1. This plan is designed to the 2018 North Carolina Residential Code.
2. House is designed for 115MPH, Exposure B.
3. Anchor bolts shall be minimum 1/2" diameter and shall extend a minimum 7" into masonry or concrete. Anchor bolts are to be no more 6" O.C. and not more than 12" for the corners.
4. Mean roof height less than 35'
5. Components and cladding are designed for the following loads:

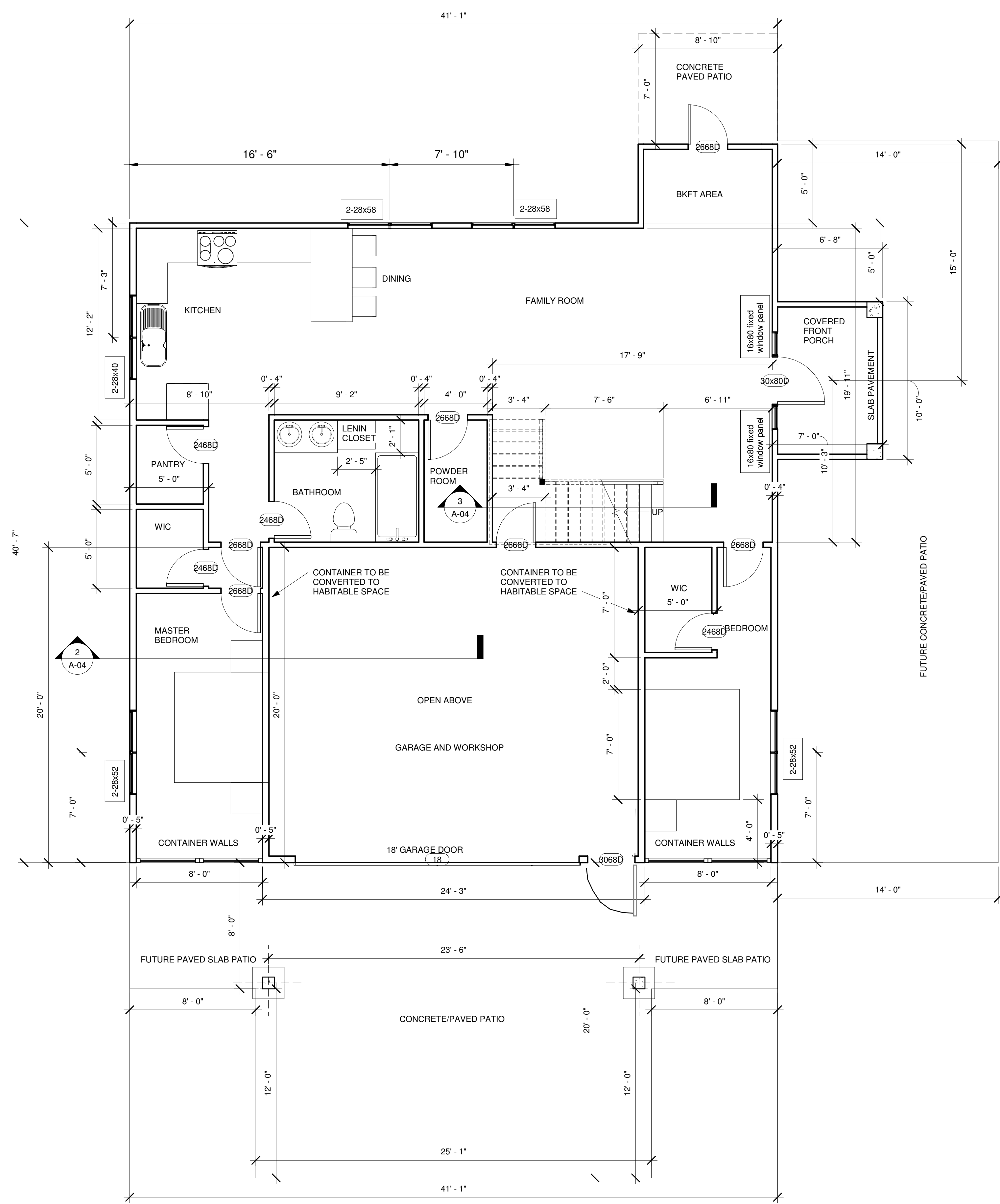
Mean Roof Height	Up to 30'	30' 1" - 35'	35' 1" - 40'
Zone 1	16.5 - 18.00	17.3 - 18.9	18.0 - 19.6
Zone 2	16.5 - 21.0	17.3 - 22.1	18.0 - 22.9
Zone 3	16.5 - 21.0	17.3 - 22.1	18.0 - 22.9
Zone 4	18.0 - 19.5	18.9 - 20.5	19.6 - 21.3
Zone 5	18.0 - 24.1	18.9 - 25.3	19.6 - 26.3

6. Minimum value for energy compliance:

Zone 4A:	
Insulation for ceiling:	Windows U-Factor is 0.35 R38 or R-30 (See table N1102.1.2)
Insulation for walls:	R-15 (See table N1102.1.2)
Insulation for floor:	R-19

**AREA CHART**

1. MAIN FLOOR HEATED AREA	1,245 SQ FT
2. UPPER FLOOR HEATED AREA	841 SQ FT
TOTAL HEATED AREA	2,084 SQ FT
3. GARAGE AREA	475 SQ FT
4. COVERED PORCHES	330 SQ FT
5. UNFINISHED AREA	328 SQ FT



1 MAIN FLOOR ARCHITECTURAL PLAN  
1/4" = 1'-0"

SEPTEMBER 04, 2023



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Bunlevel NC 28323  
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REVISION TABLE	REVISION BY	DESCRIPTION
NUMBER	DATE	

DATE: 7/20/2023

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

SHEET: A-02

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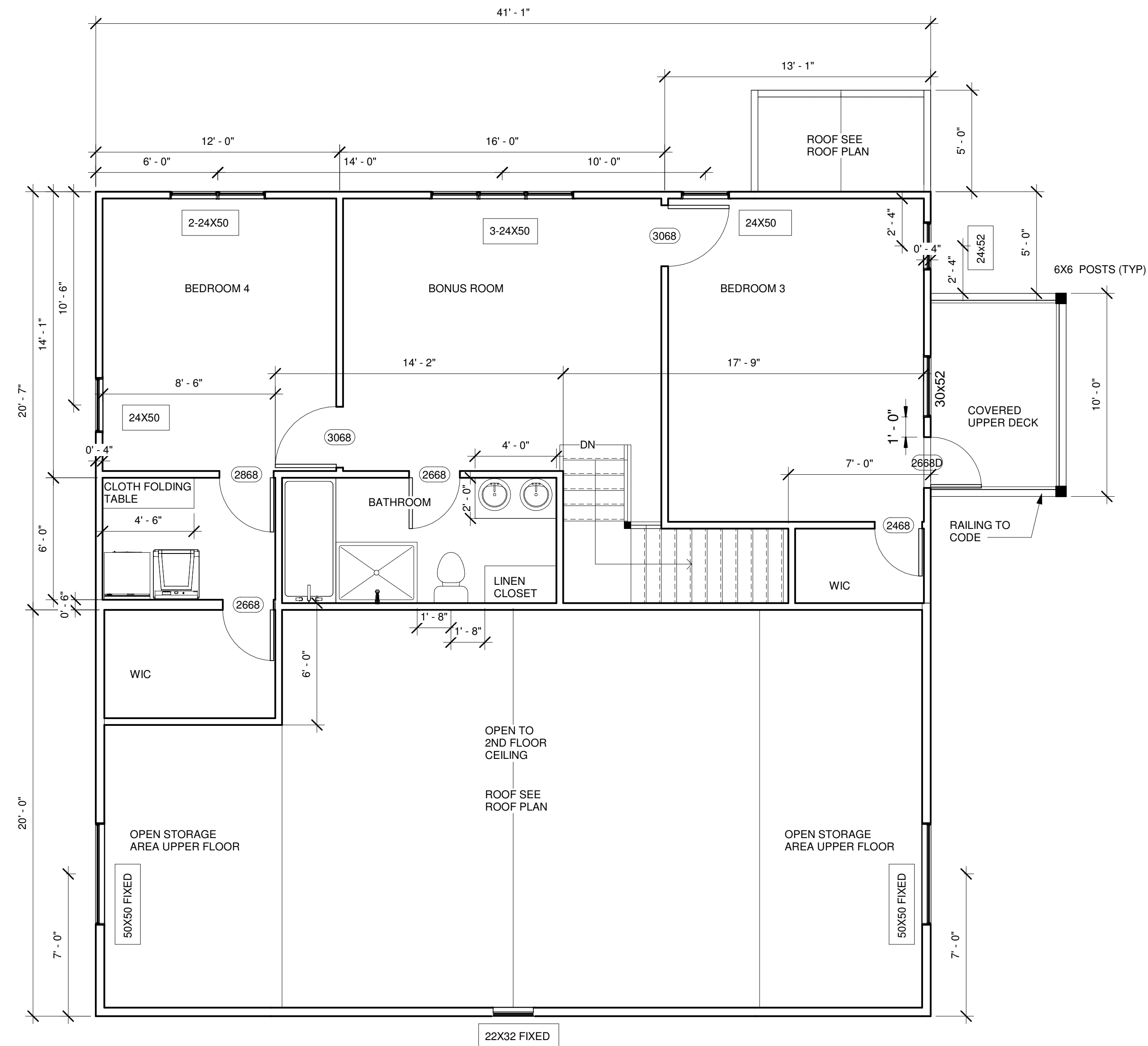
**Plan Notes:**

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- Anchor bolts shall be minimum 1/2" diameter and shall extend a minimum 7" into masonry or concrete. Anchor bolts are to be no more 6' O.C. and not more than 12" for the corners.
- Mean roof height less than 35'
- Components and cladding are designed for the following loads:

Mean Roof Height	Up to 30'	30' 1" -35'	35'1" - 40'
Zone 1	16.5 - 18.00	17.3 - 18.9	18.0 - 19.6
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Zone 3	16.5 - 21.0	17.3 - 22.1	18.0 - 22.9
Zone 4	18.0 - 19.5	18.9 - 20.5	19.6 - 21.3
Zone 5	18.0 - 24.1	18.9 - 25.3	19.6 - 26.3

6. Minimum value for energy compliance:

Zone 4A:	
Insulation for ceiling:	Windows U-Factor is 0.35 R38 or R-30 (See table N1102.1,2)
Insulation for walls:	R-15 (See table N1102.1,2)
Insulation for floor:	R-19



1 UPPER FLOOR ARCHITECTURAL PLAN  
1/4" = 1'-0"

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REVISION TABLE	REVISION BY	DESCRIPTION
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DATE: 7/20/2023

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

SHEET: A-03

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*Samir W. Bahho*

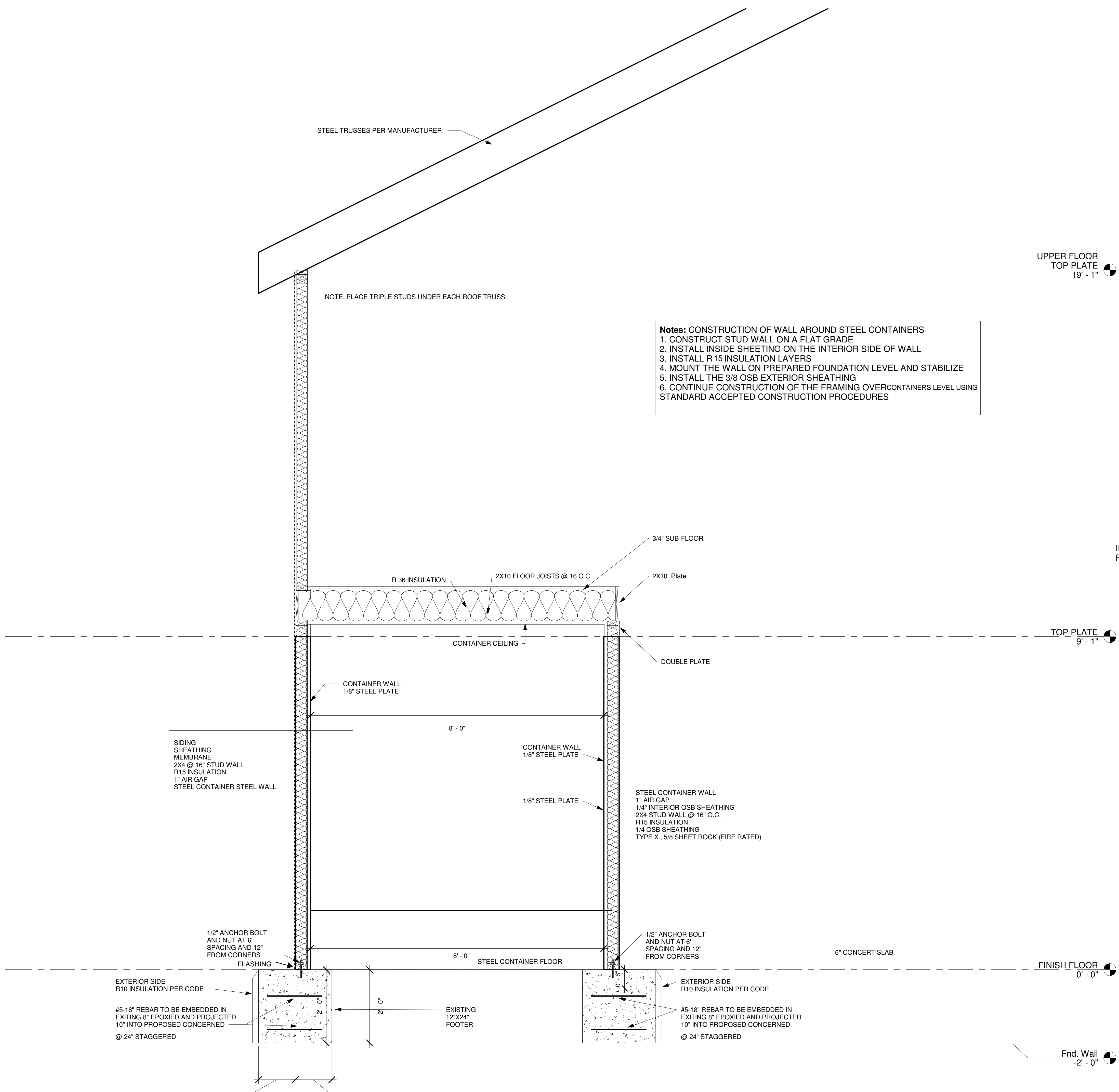
SEPTEMBER 04, 2023



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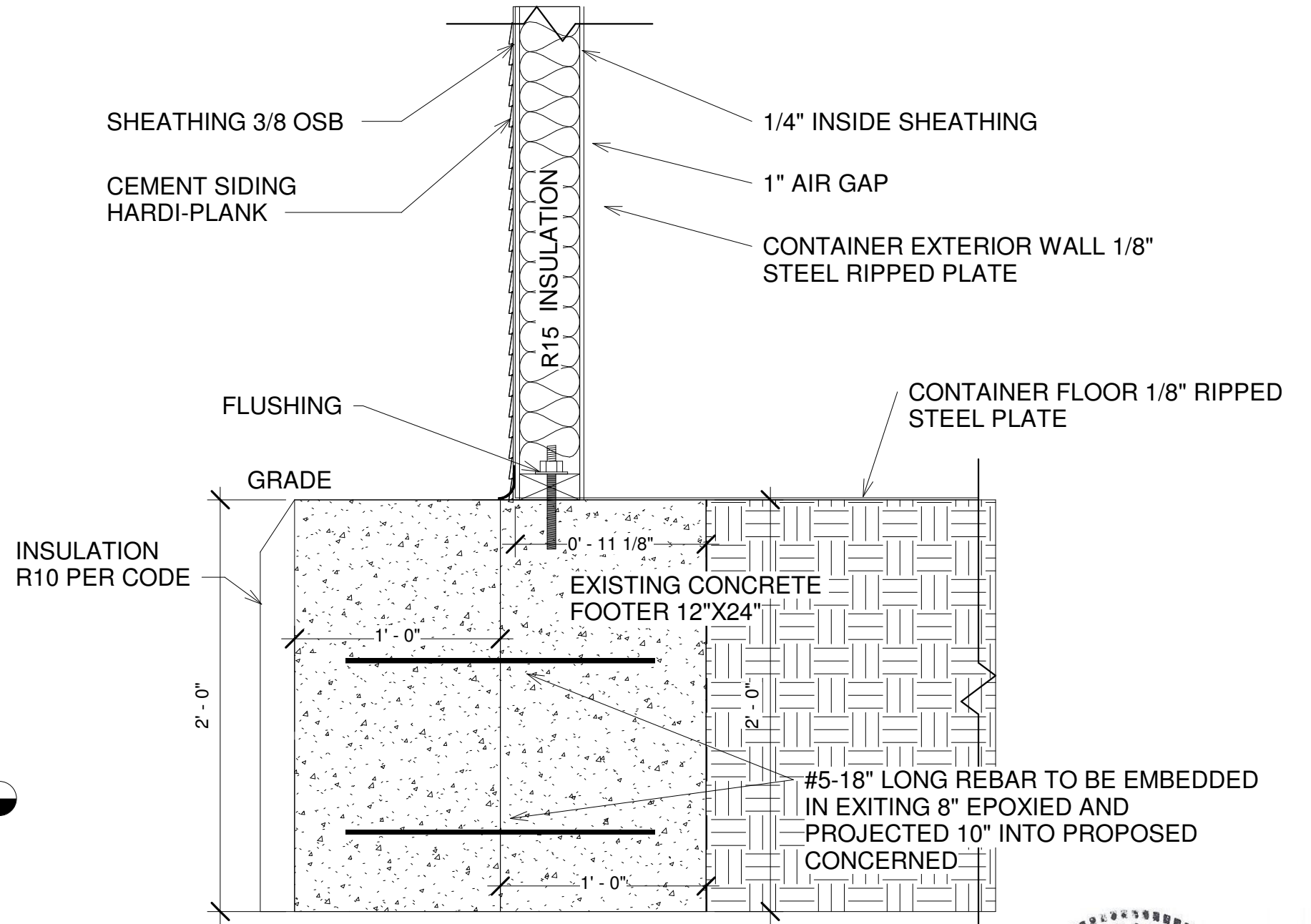
**SAMIR W. BAHHO, PE**  
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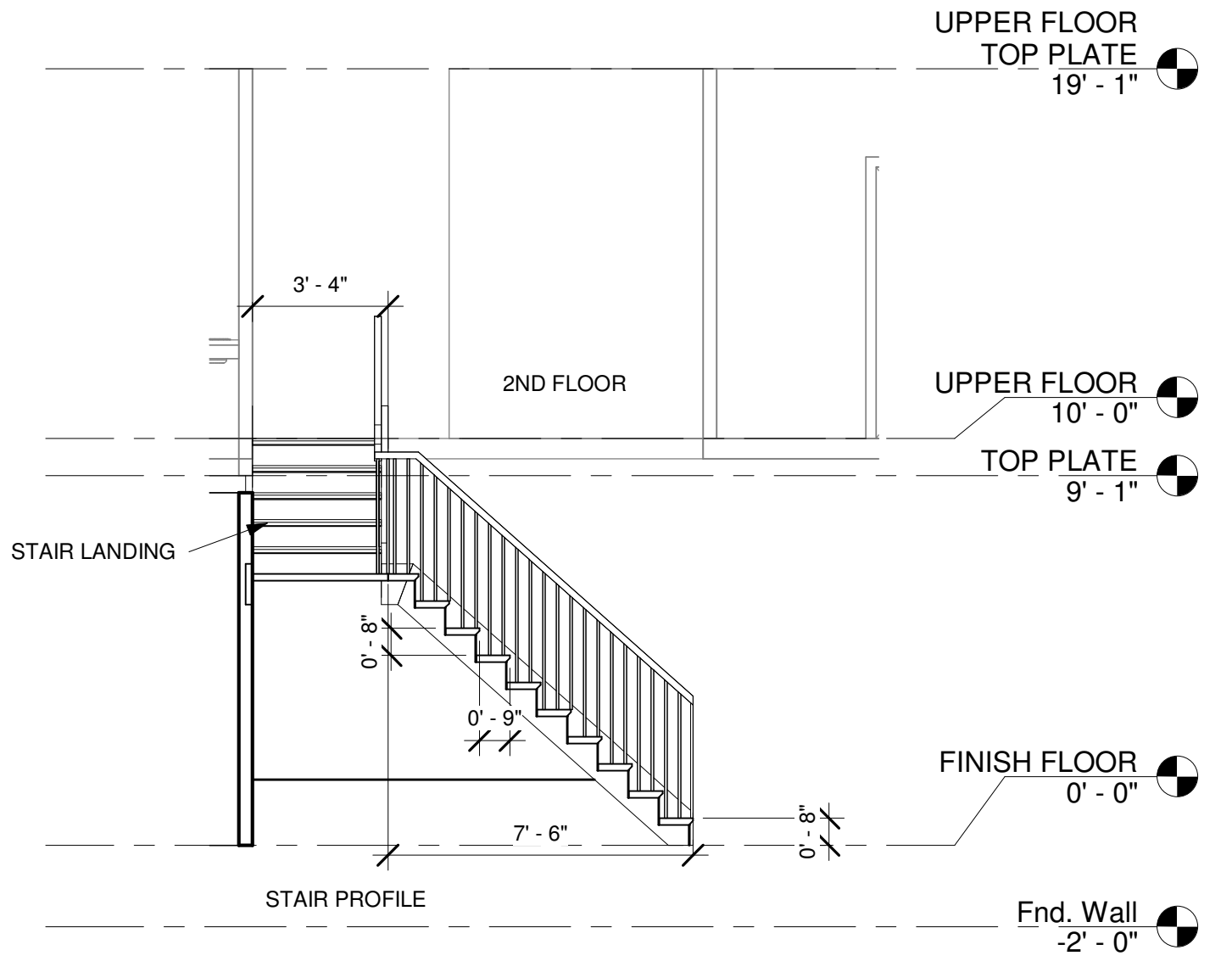
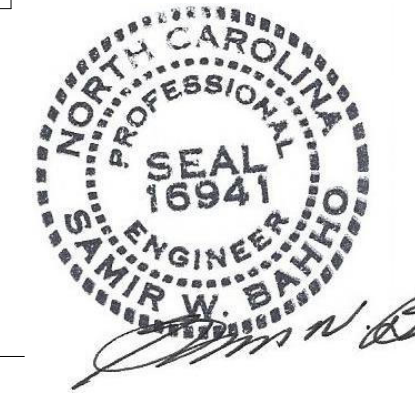
**Notes: CONSTRUCTION OF WALL AROUND STEEL CONTAINERS**  
 1. CONSTRUCT STUD WALL ON A FLAT GRADE  
 2. INSTALL INSIDE SHEETING ON THE INTERIOR SIDE OF WALL  
 3. INSTALL R 15 INSULATION LAYERS  
 4. MOUNT THE WALL ON PREPARED FOUNDATION LEVEL AND STABILIZE  
 5. INSTALL THE 3/8 OSB EXTERIOR SHEATHING  
 6. CONTINUE CONSTRUCTION OF THE FRAMING OVERCONTAINERS LEVEL USING STANDARD ACCEPTED CONSTRUCTION PROCEDURES

**Notes: CONSTRUCTION OF WALL AROUND STEEL CONTAINERS**  
 1. CONSTRUCT STUD WALL ON A FLAT GRADE  
 2. INSTALL INSIDE SHEETING ON THE INTERIOR SIDE OF WALL  
 3. INSTALL R19 INSULATION LAYERS  
 4. MOUNT THE WALL ON PREPARED FOUNDATION LEVEL AND STABILIZE  
 5. INSTALL THE 3/8 OSB EXTERIOR SHEATHING  
 6. CONTINUE CONSTRUCTION OF THE FRAMING OVER THE WALLS USING STANDARD ACCEPTED CONSTRUCTION PROCEDURES



1 Drafting 1  
 1 1/2" = 1'-0"

SEPTEMBER 04, 2023



3 Section 3  
 1/4" = 1'-0"

2 Section 1  
 3/4" = 1'-0"

REVISION TABLE	REVISION BY	DESCRIPTION

DATE: 7/20/2023

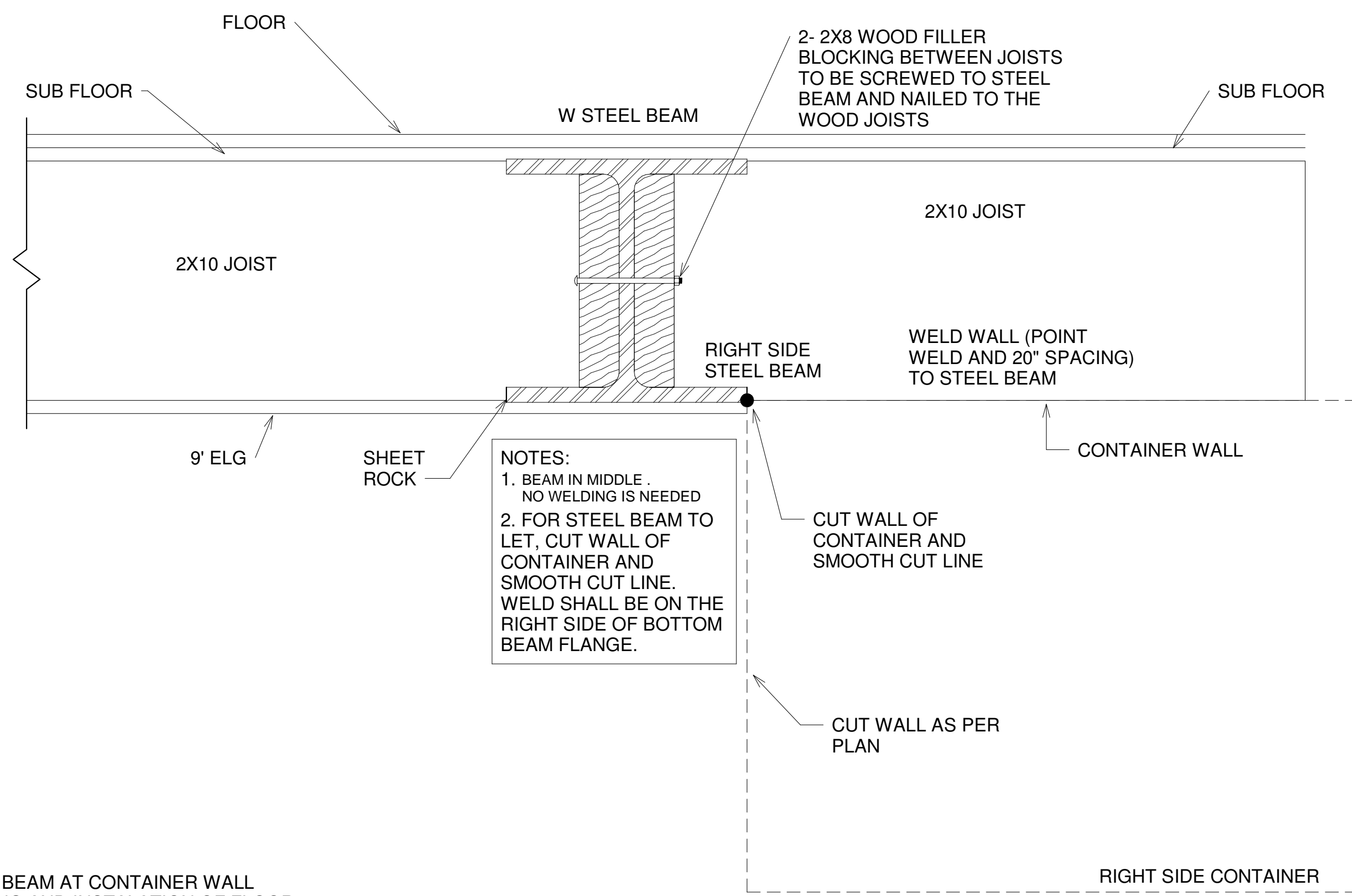
SCALE: 1/4"=1'-0"

SHEET: A-04

Designed by SWB

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STEEL BEAM AT CONTAINER WALL  
 OPENING AND INSTALATION OF FLOOR  
 JOISTS  
 1 1/2" = 1'-0"

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 County

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DATE: 7/20/2023

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

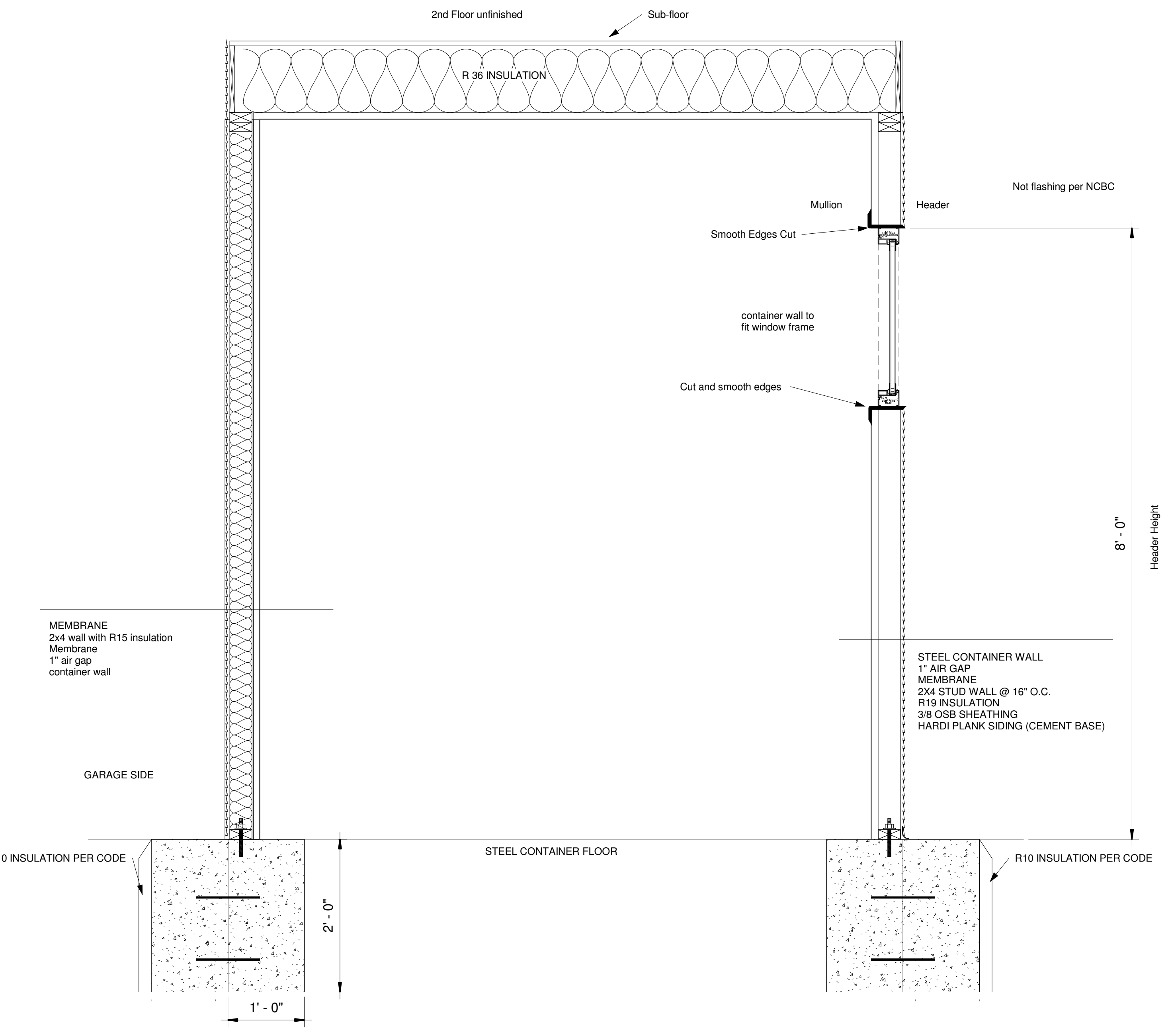
SHEET: A-05

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2 Window Section through steel container  
 1" = 1'-0"





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PROJECT:

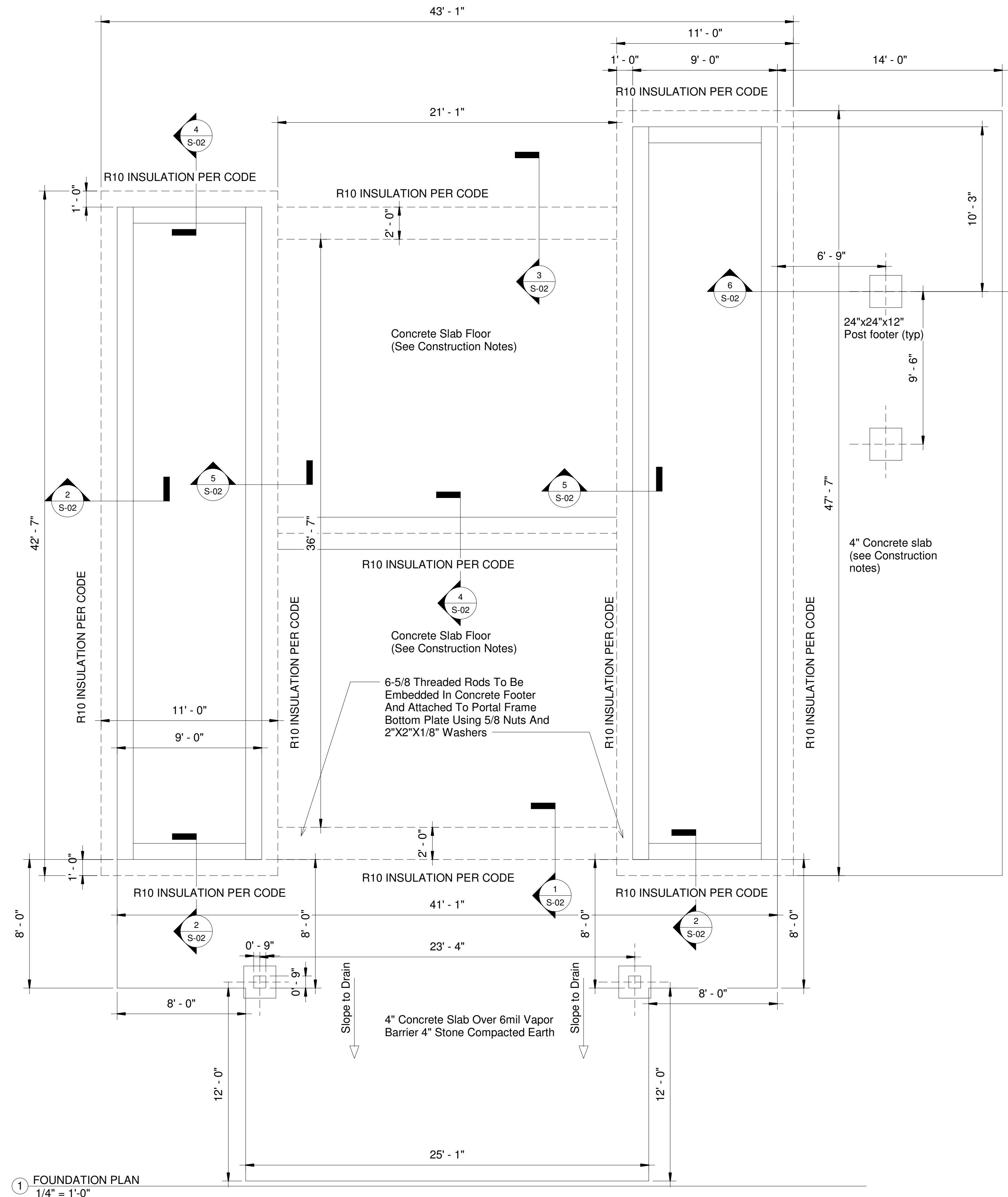
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DATE: 7/20/2023

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

SHEET: S-01

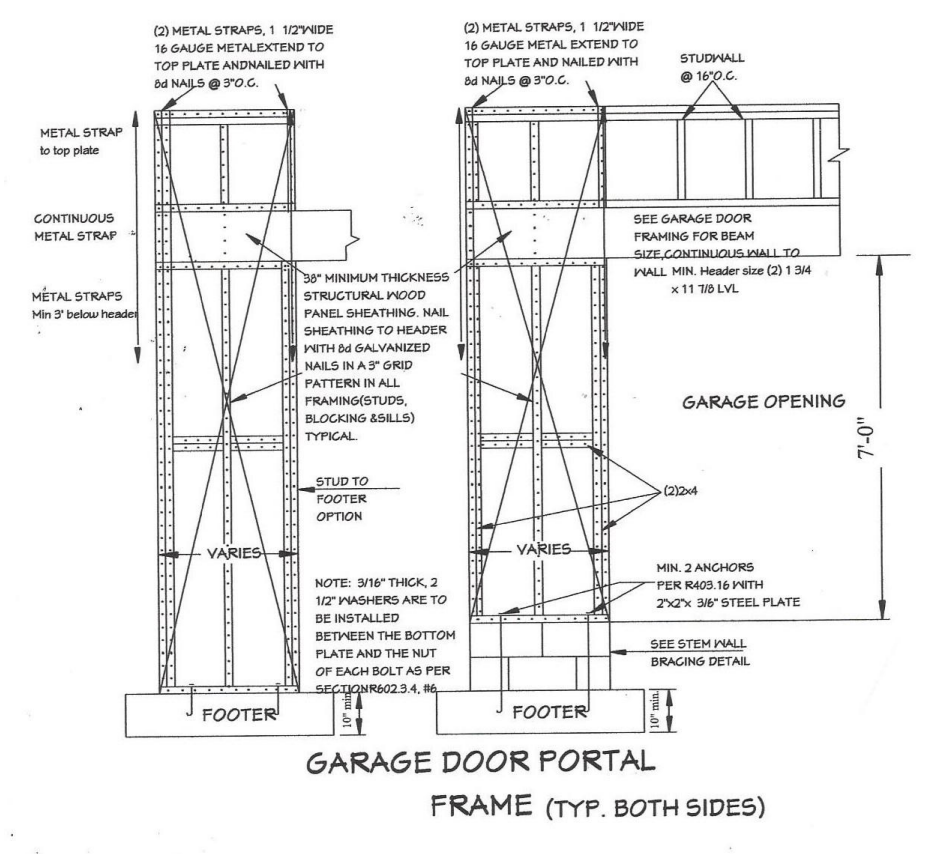
Designed by SWB  
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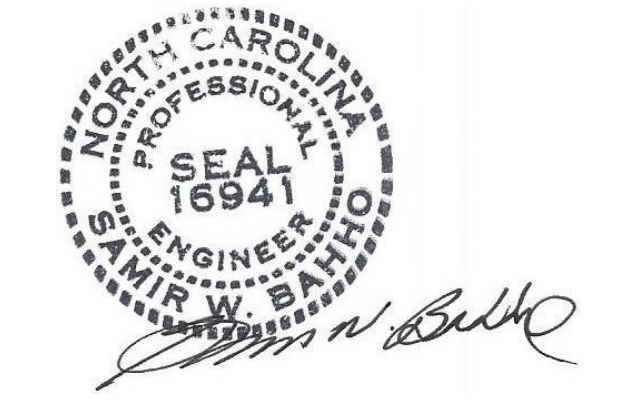
**Design Loads**  
 Floor: 40 lbs/sf Live Load  
 10 lbs/sf Dead Load  
 Bedroom 30 lbs/sf Live Load  
 Ceiling: 20 lbs/sf Live Load  
 10 lbs/sf Dead Load  
 Roof 20 lbs/sf Live Load  
 10 lbs/sf Dead Load  
 7 lbs/sf Dead Load

**Construction Notes Foundation Plan**  
 1. Points of concentrated loads as shown on foundation plan shall be transferred to foundation wall/pier or girder. To Transfer point of concentrated load to dropped girder, use minimum 4" x 6" wood blocking. See details.  
 2. Continuous foundation shall be of 8" cinder block or brick with the top 8" solid block/brick over 18" x 10" in siding finish and 24"x10" in brick veneer finish. See details.  
 3. In slab foundation design, footers and log footers shall be as shown on plan  
 4. Piers shall be 16" x 16" or 8" x 16" cinder block with top 8" solid block over 24" x 24"x12" concrete footer unless otherwise shown on plans. Minimum concrete strength shall be 3,000 PSI. See details on foundation plan.  
 5. Foundation walls with fill imbalance of 5'-8" shall be 8" wide reinforced with #4 Rebar @ 16" O.C. vertical for the length of wall and 1- #4 horizontal at 24" O.C. Foundation walls of fill imbalance over 8" shall be designed by Structural Engineer.  
 6. Garage, and front porch slabs shall be 4" concrete slab reinforced with 6x6, #10 W.W.M. placed over 6 mil of vapor barrier placed over min. 4" gravel. Earth below gravel level shall be properly compacted. Fiber mesh reinforcement could be used in slab as substitute to steel wire mesh. Concrete joints shall be 10' x 10'.  
 7. In slab foundation design, floor slabs shall be 4" concrete slab reinforced with Fiber Mesh placed over 6 mil of vapor barrier placed over min. 4" gravel. Earth below gravel level shall be properly compacted. Slab control joints shall be installed at 25' x 25' Max.  
 8. For masonry construction, Fill enclosure in the front and rear porches with compacted stone. Tamp fill properly, install 4" of stone and 6 mill vapor barrier before pouring 4" concrete slab. Use 3000 PSI mix. Provide 10'x10' control joints.  
 9. In Crawl Space Design, girders, floor joists and beams shall be in size and spacing as shown on foundation plan.  
 10. In Crawl Space Design, place double joists under walls running the same direction of joists. 11. Dimensions are as shown on the plan. (Do not scale dimensions)  
 12. Points of concentrated loads are shown with "S" symbols

**Bracing and sheathing of walls**  
 1. All braced walls shall be constructed using NCBC 2018, R602.10.3, Continuous Sheathing, WSP Method unless otherwise shown on plans.  
 2. All braced wall panels on continuous foundation shall be anchored as per Section R403.1.6, Nort Carolina Building Code, Edition 2018 unless otherwise shown on plans.  
 3. See details on plans for special wall bracing, sheathing, and anchoring



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



SEPTEMBER 04, 2023



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 County

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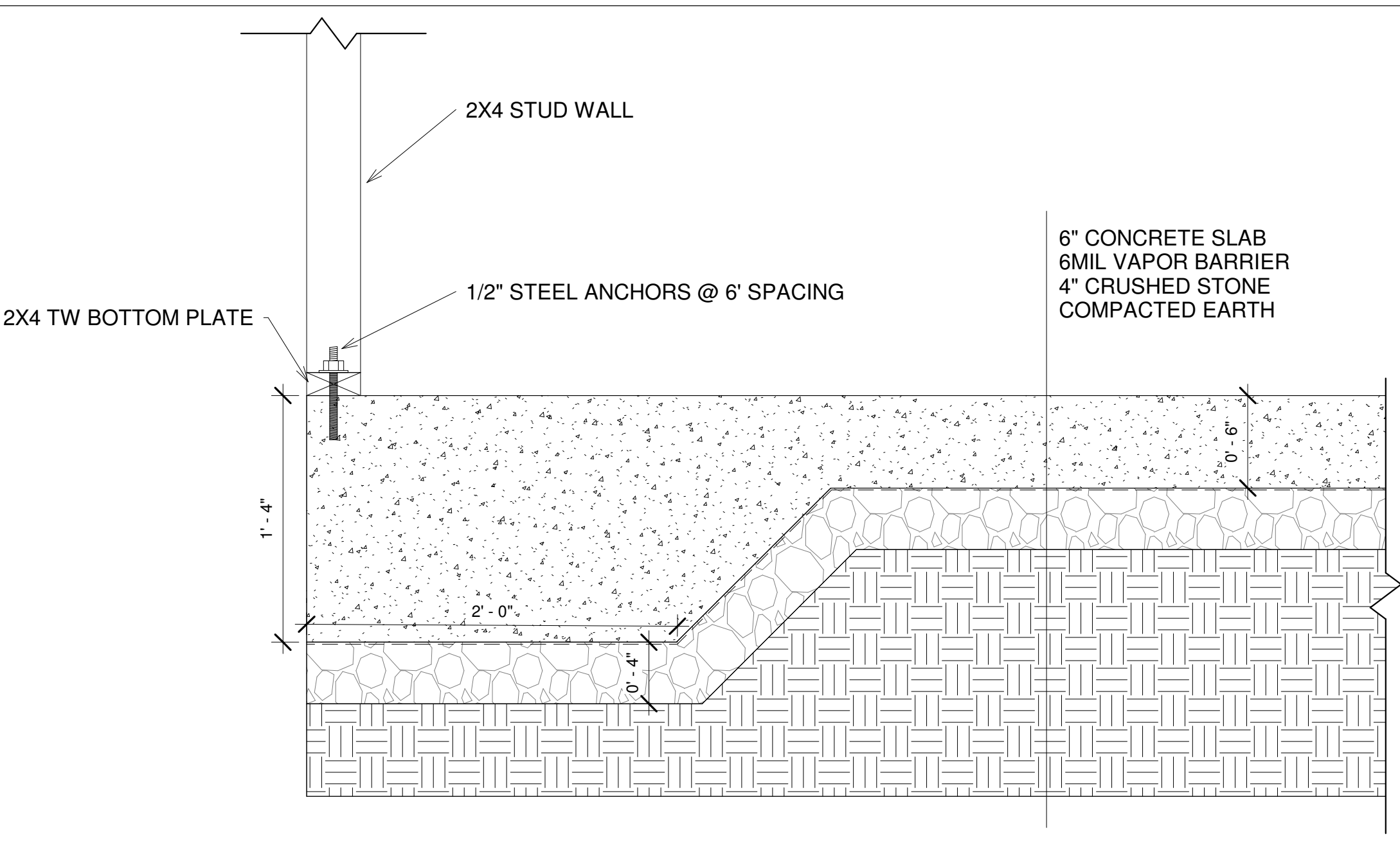
DATE: 7/20/2023

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

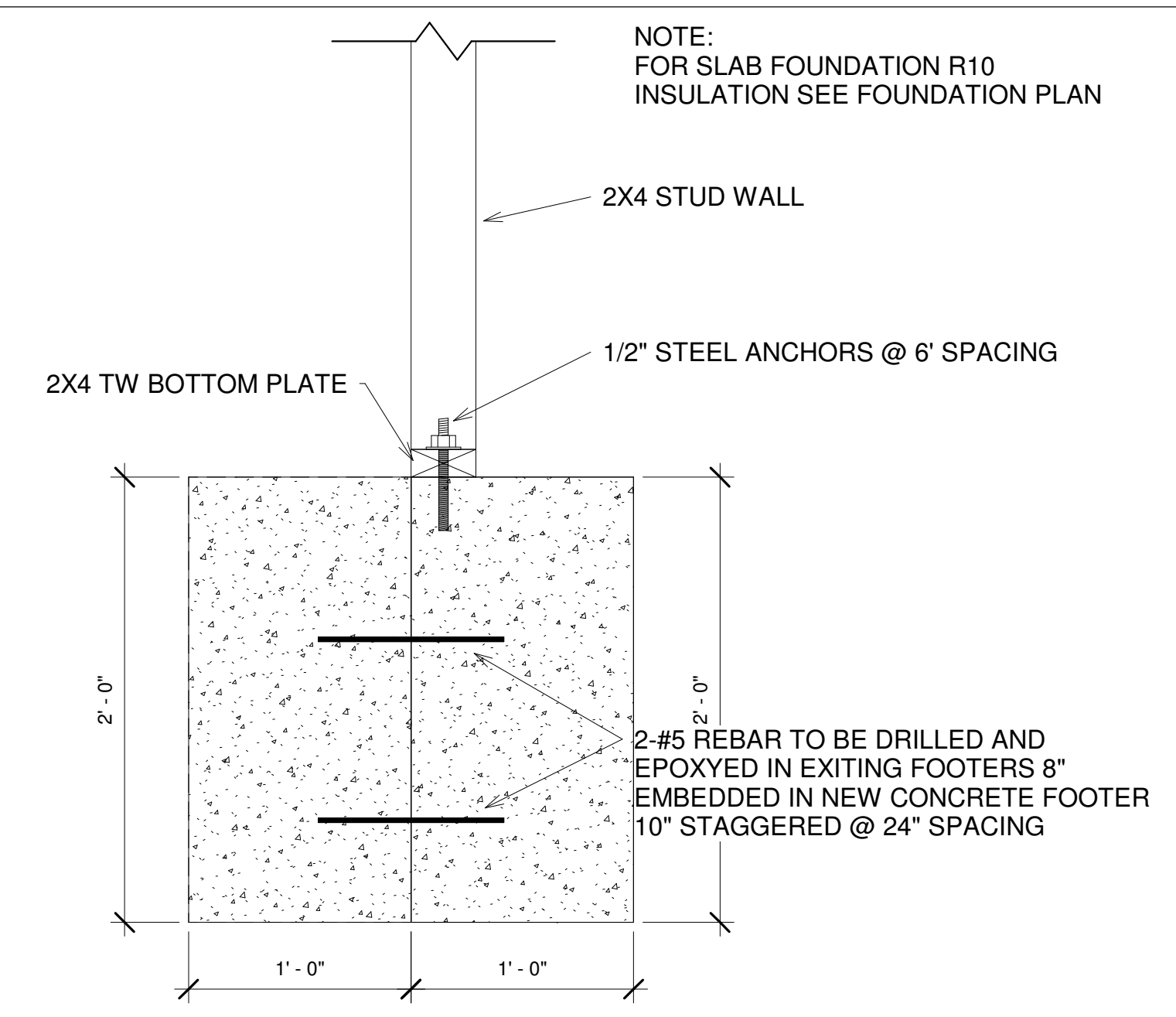
SHEET: S-02

Designed by SWB  
 Drawn by FB

NOTE:  
 FOR SLAB FOUNDATION R10  
 INSULATION SEE FOUNDATION PLAN



SECTION A  
 1 1/2" = 1'-0"



SECTION B  
 1 1/2" = 1'-0"

**Design Loads**

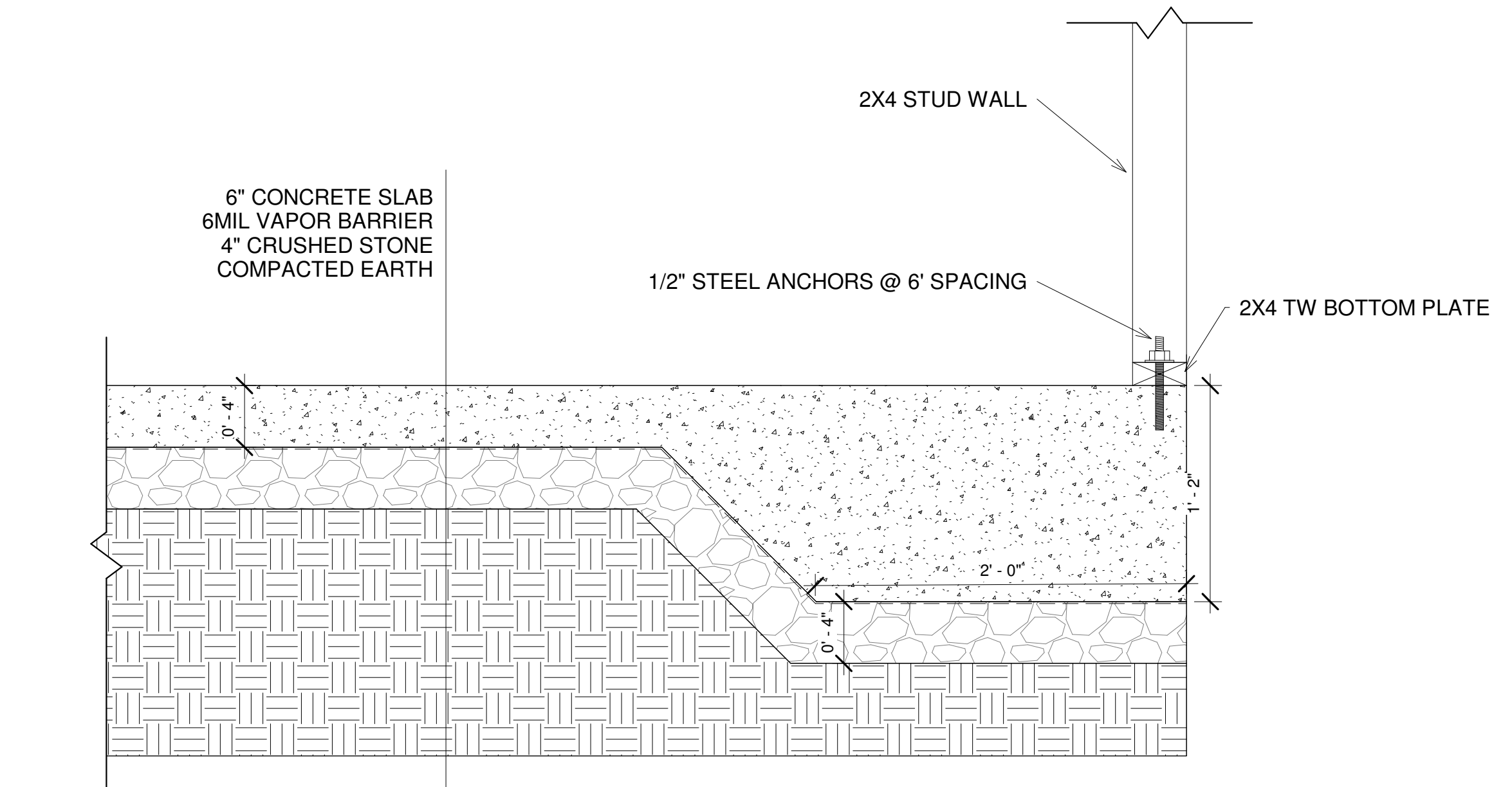
- Floor: 40 lbs/sf Live Load
- 10 lbs/sf Dead Load
- Bedroom 30 lbs/sf Live Load
- Ceiling: 20 lbs/sf Live Load
- 10 lbs/sf Dead Load
- Roof 20 lbs/sf Live Load
- 10 lbs/sf Dead Load
- 7 lbs/sf Dead Load

**Construction Notes Foundation Plan**

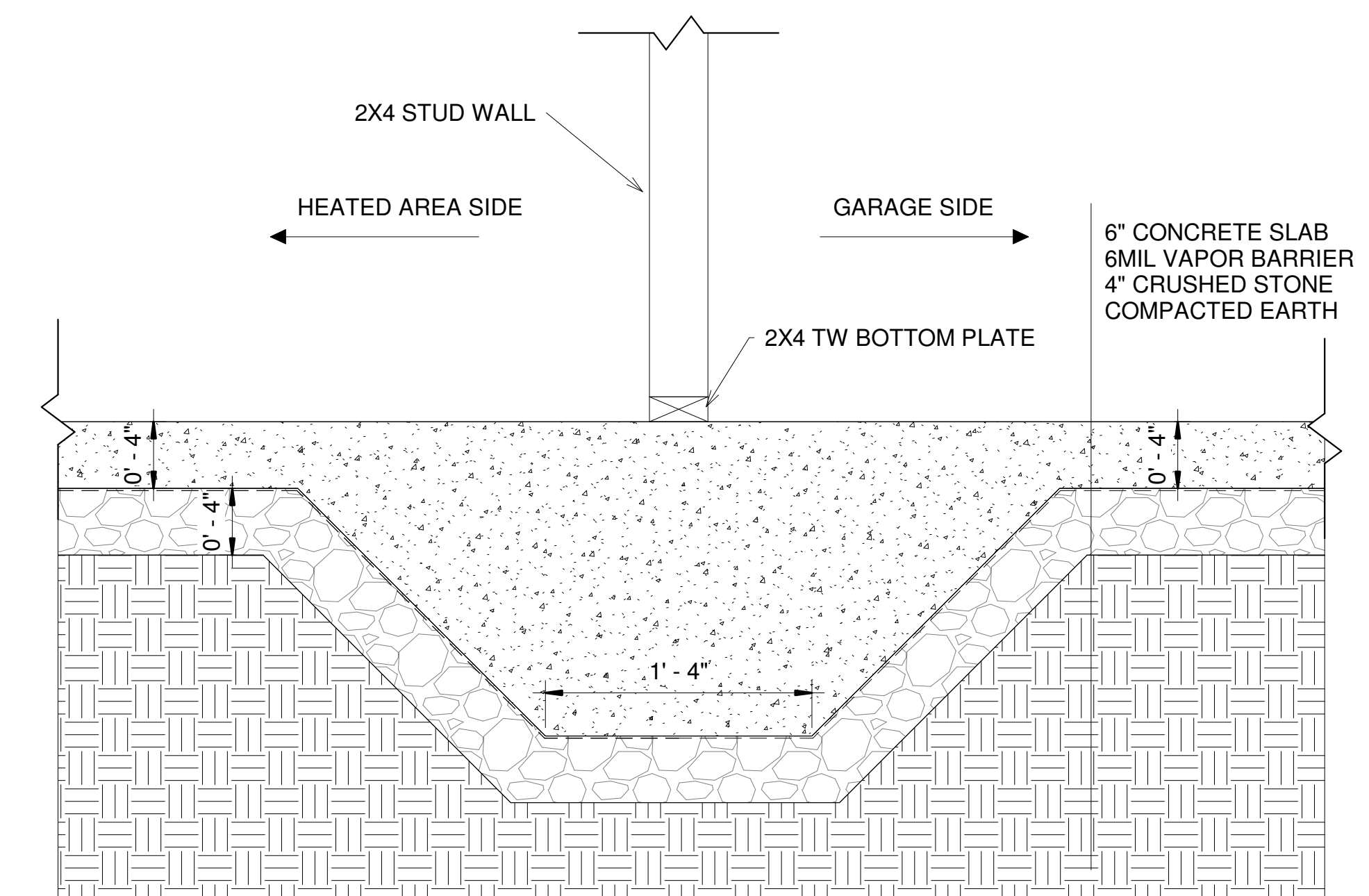
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- In slab foundation design, footers and log footers shall be as shown on plan
- Piers shall be 16" x16" or 8" x 16" cinder block with top 8" solid block over 24" x24"x12" concrete footer unless otherwise shown on plans. Minimum concrete strength shall be 3,000 PSI. See details on foundation plan.
- Foundation walls with fill imbalance of 5'-8" shall be 8" wide reinforced with #4 Rebar @ 16" O.C. vertical for the length of wall and 1- #4 horizontal at 24" O.C. Foundation walls of fill imbalance over 8" shall be designed by Structural Engineer.
- Garage, and front porch slabs shall be 4" concrete slab reinforced with 6x6, #10 W.W.M. placed over 6 mil of vapor barrier placed over min. 4" gravel. Earth below gravel level shall be properly compacted. Fiber mesh reinforcement could be used in slab as substitute to steel wire mesh. Concrete joints shall be 10' x10'.
- In slab foundation design, floor slabs shall be 4" concrete slab reinforced with Fiber Mesh placed over 6 mil of vapor barrier placed over min. 4" gravel. Earth below gravel level shall be properly compacted. Slab control joints shall be installed at 25' x 25' Max.
- For masonry construction, Fill enclosure in the front and rear porches with compacted stone. Tamp fill properly, install 4" of stone and 6 mil vapor barrier before pouring 4" concrete slab. Use 3000 PSI mix. Provide 10'x10' control joints.
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- In Crawl Space Design, place double joists under walls running the same direction of joists. 11. Dimensions are as shown on the plan. (Do not scale dimensions)
- Points of concentrated loads are shown with "" symbols

**Bracing and sheathing of walls**

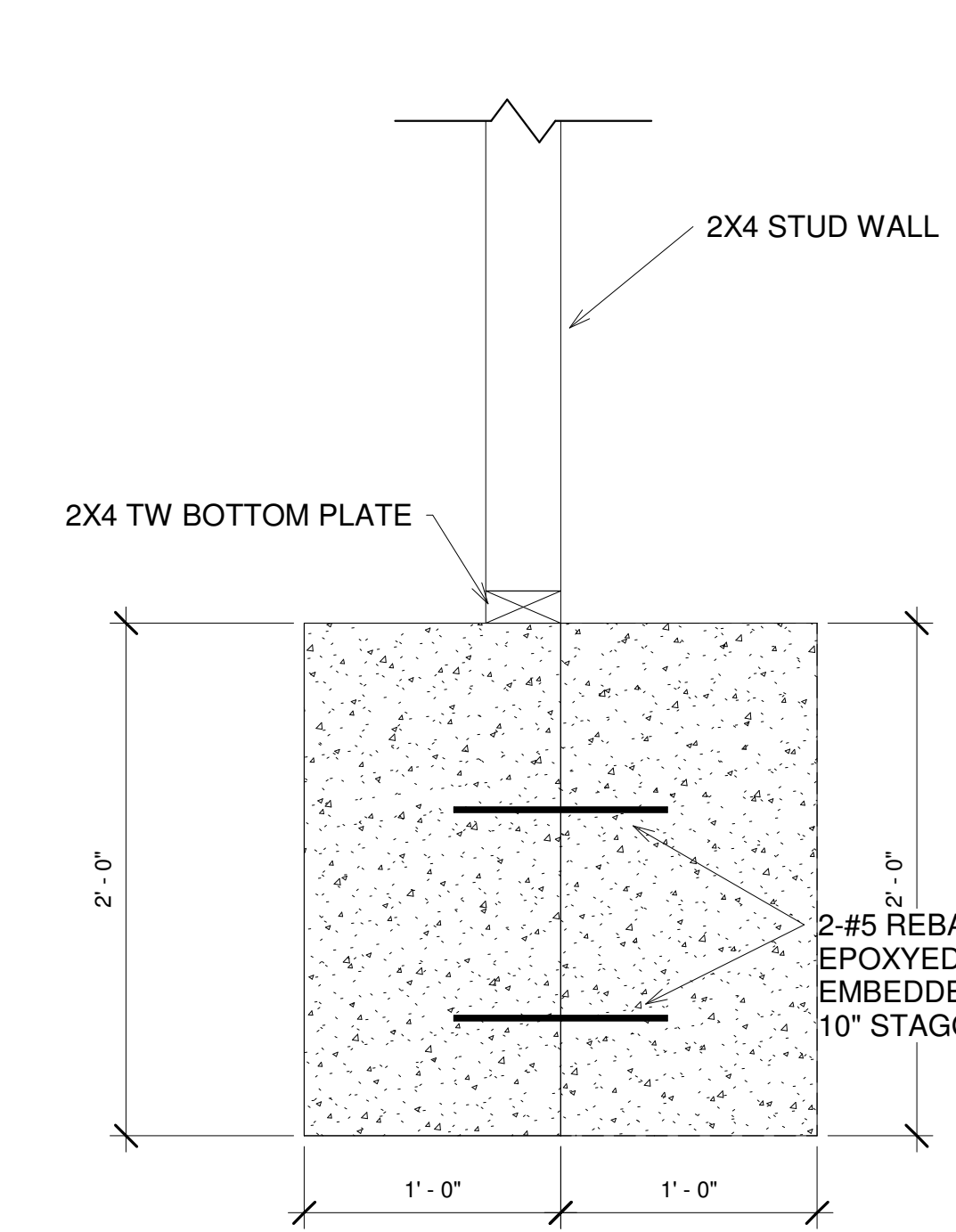
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- All braced wall panels on continuous foundation shall be anchored as per Section R403.1.6, North Carolina Building Code, Edition 2018 unless otherwise shown on plans.
- See details on plans for special wall bracing, sheathing, and anchoring



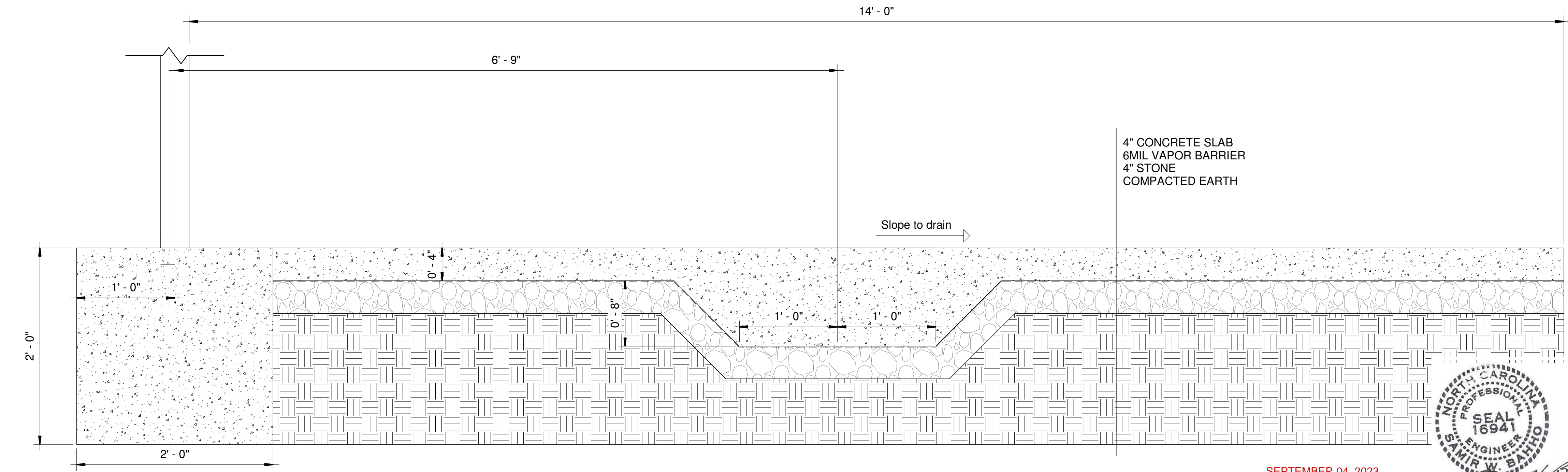
SECTION C  
 1 1/2" = 1'-0"



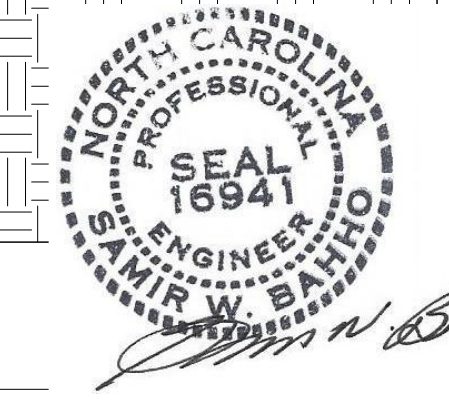
SECTION D  
 1 1/2" = 1'-0"



SECTION E  
 1 1/2" = 1'-0"



SECTION F  
 1 1/2" = 1'-0"



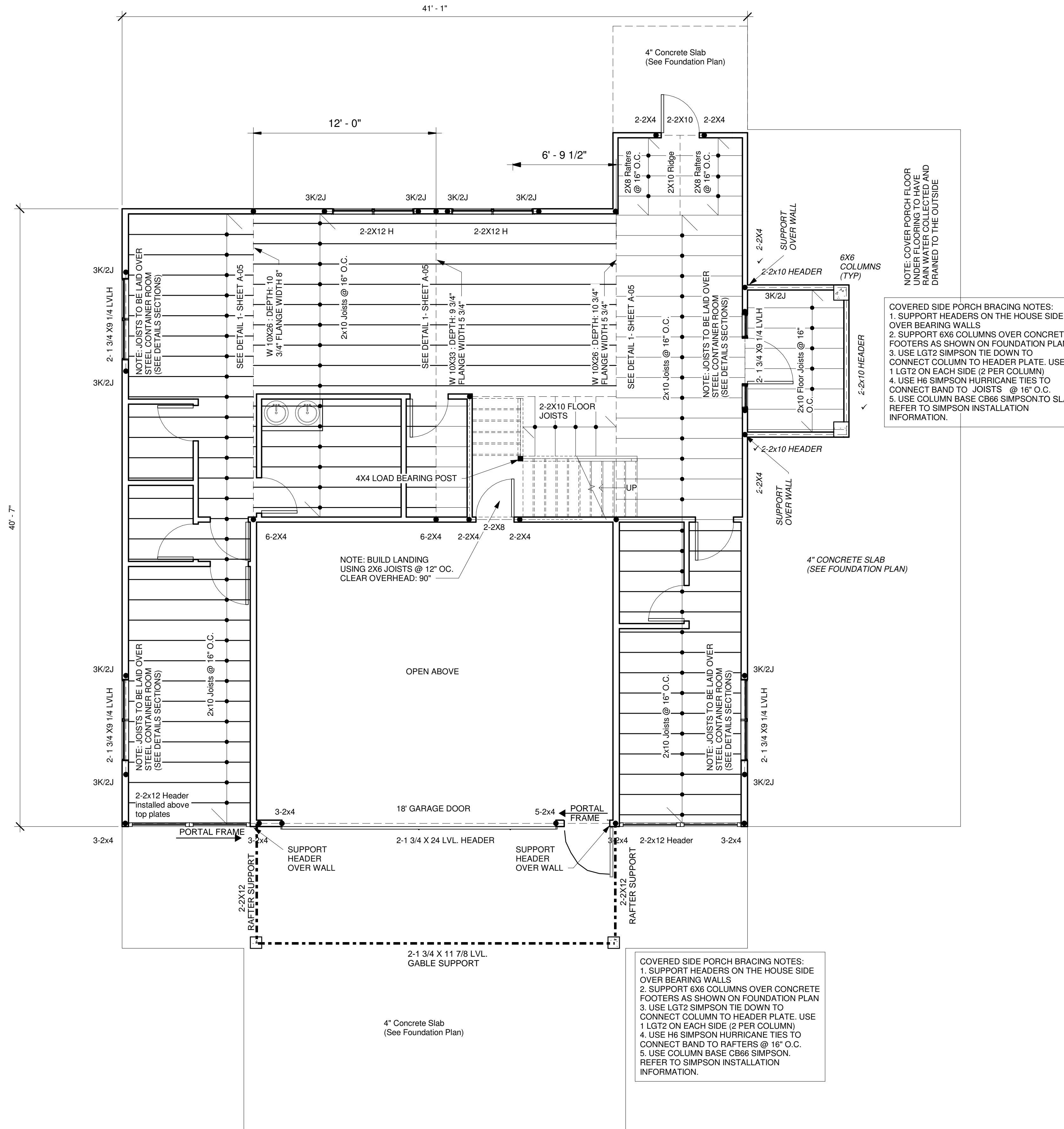
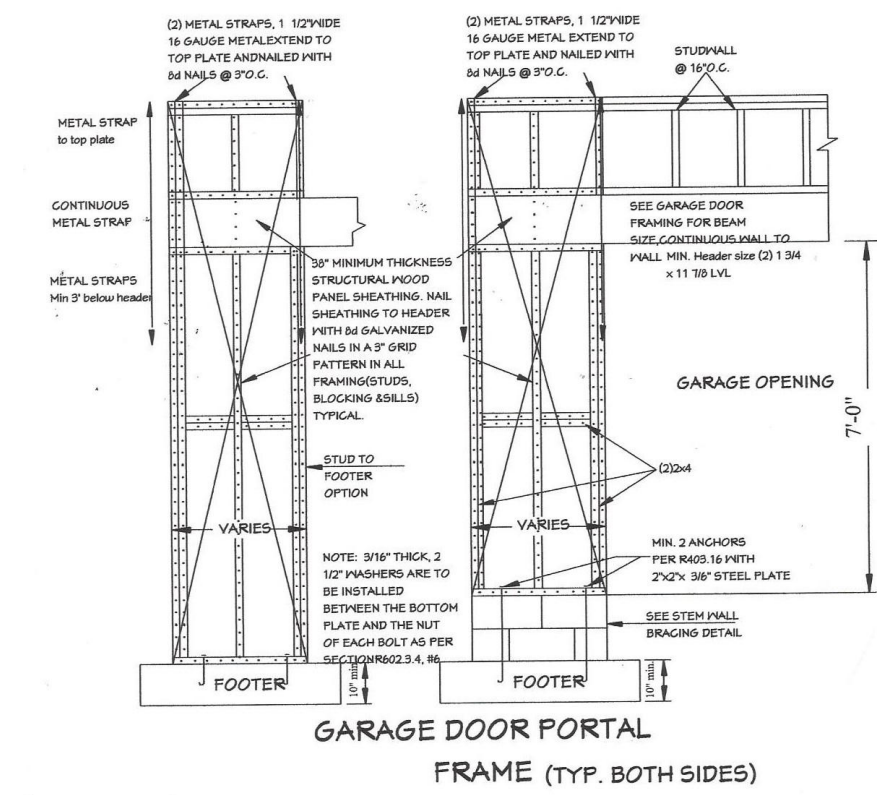
SEPTEMBER 04, 2023



Design Loads		
Floor:	40 lbs/sf	Live Load
	10 lbs/sf	Dead Load
Bedroom	30 lbs/sf	Live Load
	10 lbs/sf	Dead Load
Ceiling:	20 lbs/sf	Live Load
	10 lbs/sf	Dead Load
Roof	20 lbs/sf	Live Load
	7 lbs/sf	Dead Load

- Construction Notes, First Floor Framing**
- All ceiling joists are 2x, #2 SPF @ 16" O.C. unless otherwise indicate on the first floor plans
  - Install double joists under walls running parallel to floor joists (Typical).
  - For headers over windows, doors and other openings see Headers over windows and Doors and Openings Notes
  - Install beams in size as shown on first floor plan
  - All walls shall be 2x4 stud walls at 16" O.C. unless otherwise shown on plan
  - Install beam supports as specified on floor plan with a symbol. If not indicated on plan, install min. 2- 2 x 4 Studs.
  - Dimensions are as shown on the plan. (Do not scale dimensions)

- Headers over windows, doors and opening**
- \* For headers over windows, doors and other openings up to 6'-0" use 2-2x8 unless otherwise as shown on plan.
  - \* Headers between 6'-1" and 10'-0" use 2-2x10
  - \* Over 10' to 15' use 2-1 3/4" x 9 1/4" LVL.
  - \* Over 15' shall be designed and specified on the plan
- Brick Lintels:**
- \* Up to 6' opening use 3 1/2" x 3 1/2" x 1 1/4"
  - \* From 6'-1" to 10'-0" opening use 5" x 3 1/2" x 1/2"
  - \* Over 10' shall be designed and specified on plans with d8 at 6" spacing



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NUMBER	DATE	REVISION	DESCRIPTION

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SHEET: S-03

Designed by SWB

Drawn by FB



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Design Loads		
Living area	40 lbs/sf	Live Load
	10 lbs/sf	Dead Load
Bedroom	30 lbs/sf	Live Load
	10 lbs/sf	Dead Load
Ceiling	20 lbs/sf	Live Load
	10 lbs/sf	Dead Load
Roof	20 lbs/sf	Live Load
	7 lbs/sf	Dead Load

**Construction Notes, Upper level Floor Framing**

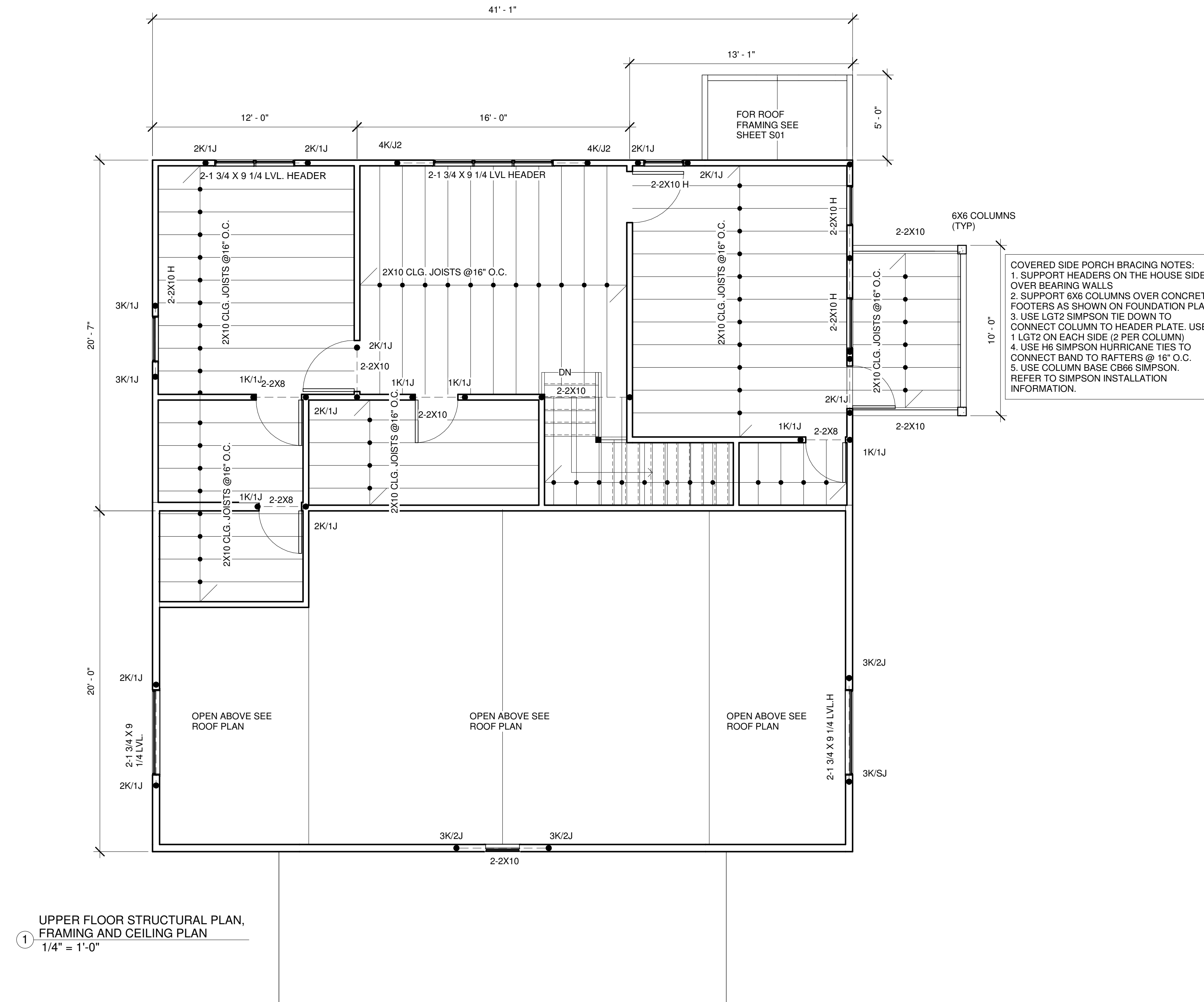
- All ceiling joists are 2x-, #2 SPF @ 16" O.C. unless otherwise indicate on the first floor plans
- Install double joists under walls running parallel to floor joists (Typical).
- For headers over windows, doors and other openings see Headers over windows and Doors and Openings Notes
- Install beams in size as shown on first floor plan
- All walls shall be 2x4 stud walls at 16" O.C. unless otherwise shown on plan
- Install beam supports as specified on floor plan with a symbol. If not indicated on plan, install min. 2-2 x 4 Studs.
- Dimensions are as shown on the plan. (Do not scale dimensions)

**Headers over windows, doors and opening**

- Headers over windows, doors and other openings up to 6'-0" use 2-2x8 unless otherwise as shown on plan.  
 Headers between 6'-1" and 10'-0" use 2-2x10  
 Over 10' to 12' use 2-1 3/4" x 9 1/4" LVL  
 Over 12' shall be designed and specified on the plan

**Brick Lintels:**

- Up to 6' opening use 3 1/2" x 3 1/2" x 1/4"  
 From 6'-1" to 10'-0" opening use 5" x 3 1/2" x 1/2"  
 Over 10' shall be designed and specified on plans with d8 at 6" spacing



1 UPPER FLOOR STRUCTURAL PLAN, FRAMING AND CEILING PLAN  
1/4" = 1'-0"

**SAMIR W. BAHHO, PE**  
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PROJECT: John Ancheta House  
 Raynor-McLamb Drive Harnet  
 Bunnlevel NC 28323  
 County

REVISION TABLE	REVISION BY	DESCRIPTION
NUMBER	DATE	

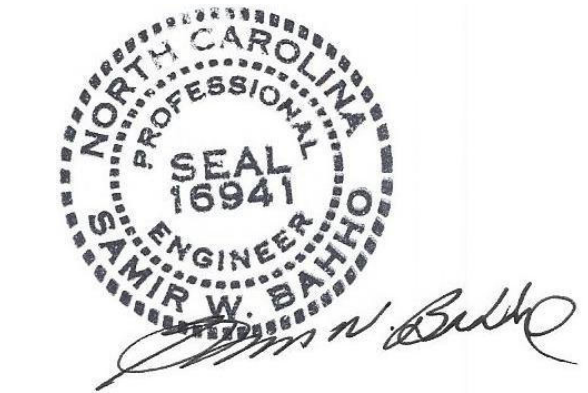
DATE: 7/20/2023

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

SHEET: S-04

Designed by SWB  
 Drawn by FB

SEPTEMBER 04, 2023





Architectural Layout plans were prepared by others. Civil and Structural Engineering Services, PLLC. provided drafting and structural design services. the professional seal and signature affixed below certify that plans as marked/noted meet load requirements of North Carolina Building Code, Residential 2018

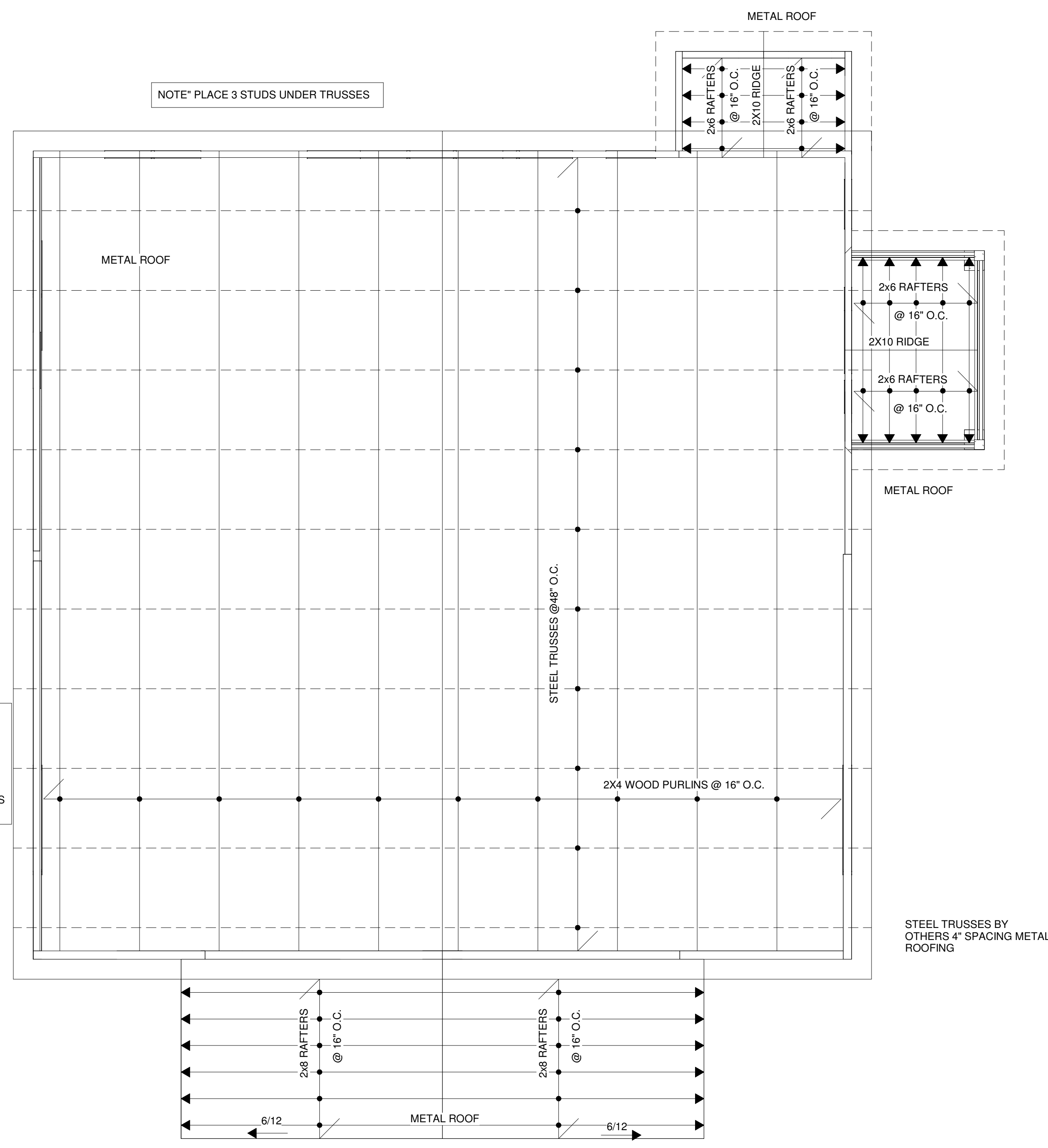
Design Loads		
Floor:	40 lbs/sf	Live Load
	10 lbs/sf	Dead Load
Bedroom	30 lbs/sf	Live Load
	10 lbs/sf	Dead Load

Ceiling:	20 lbs/sf	Live Load
	10 lbs/sf	Dead Load
Roof	20 lbs/sf	Live Load
	7 lbs/sf	Dead Load

**Construction Notes Roof Framing Plan**

- All ridges, Hips and Valleys are #2 SPF or L.V.L as indicated on roof plan.
- Areas of concentrated load indicated on roof plan shall be supported by minimum 2-2x4 studs unless otherwise shown on plan.
- All rafters on roof plan are 2x8, #2 SPF unless otherwise shown on roof plan.
- Install kick back, 2x4 to tie rafters to ceiling joists @ 32" O.C. where rafters are running in the same direction. when roof rafters are running perpendicular to ceiling joists, connect minimum of 3 joists together with 2x4 continuous runners and install 2x4 kick back @ 32" between runner and rafter.
- Install 2x8 bracing tie rafter to rafter at the ridge @ 32" O.C.
- All inside roof supports shall be min. 2-2x4 and shall transfer support to bearing walls. Roof support load symbol is ( ).
- Attic Access shall be provided as per Section R807.0 of NCBC, Edition 2018.
- Dimensions are as shown on the plan. (Do not scale dimensions)

**ROOFING LAYERS STRUCTURE:**  
 METAL ROOFING  
 BLACK FELT  
 ROOFING PLYWOOD 1/2"  
 2X4 PURLINS @ 16" O.C. TO BE SCREWED TO TRUSSES  
 ROOF TRUSSES  
 R36 INSULATION OVER LEAVING/HEATED SPACES



1 ROOF  
 1/4" = 1'-0"

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