
TOWNSEND-RALE

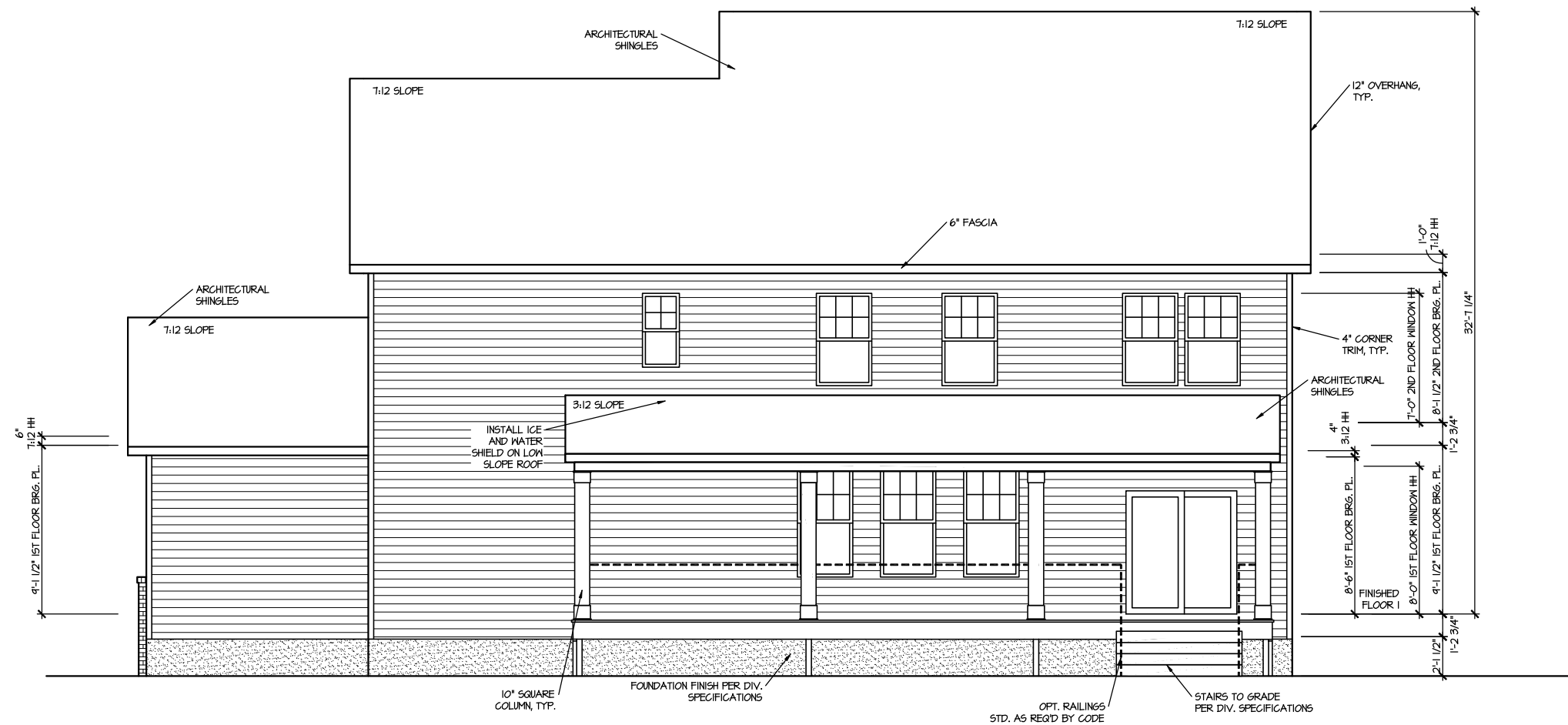
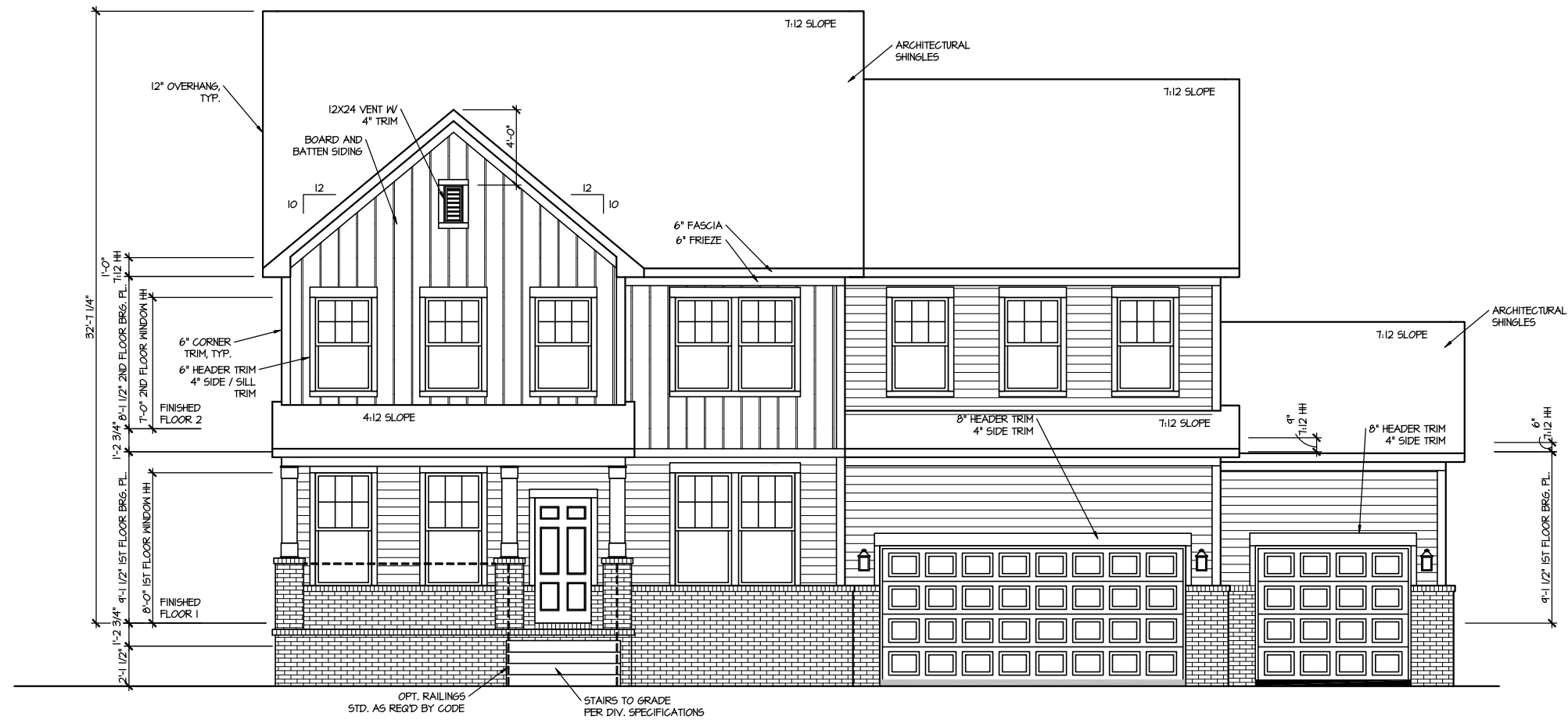
RALEIGH- LOT 00.0117 BLAKE POND SF

(MODEL# 3501)

ELEVATION 5 - GR

34 Celtic Lane

[illegible][illegible][illegible]



MASTER PLAN INFORMATION	
REVISION	DATE
1 - RALE	12-11-2023

DRAWN BY:	ITS
DATE:	05/29/2025
PLAN NO.	3501



HOUSE NAME: **TOWNSEND**

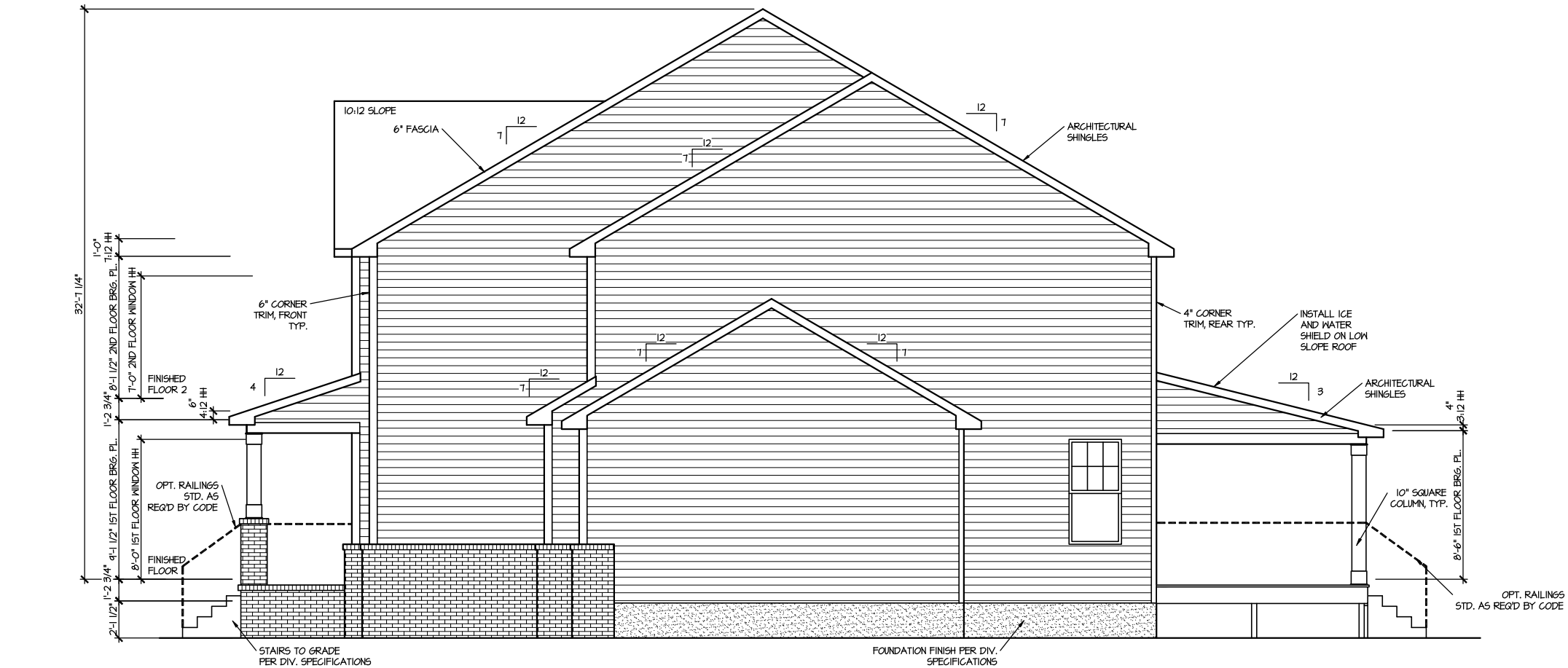
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FRONT & REAR ELEVATIONS

SHEET No.

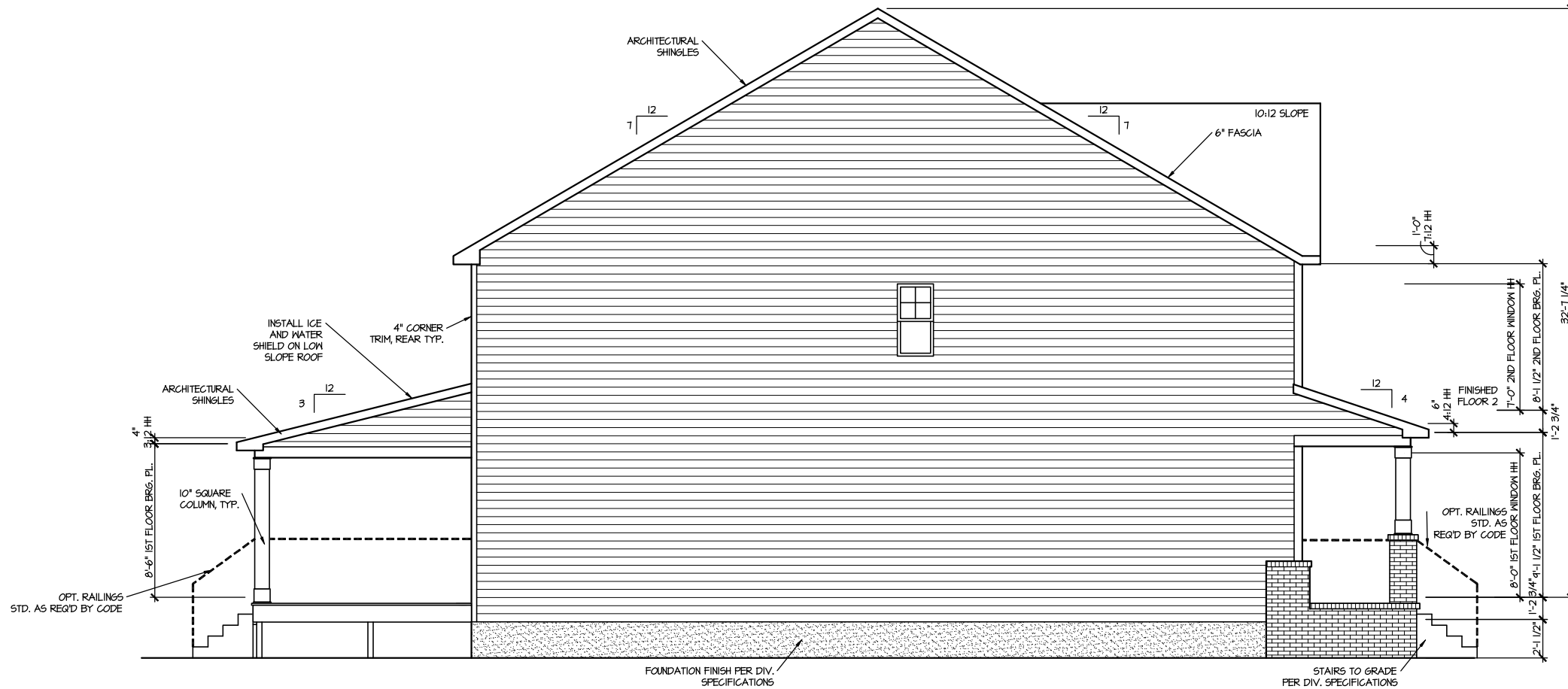
RIGHT ELEVATION 5

SCALE: 1/8" = 1'-0"



LEFT ELEVATION 5

SCALE: 1/8" = 1'-0"



FILE: Lot_00.0117.dwg DATE: 5/29/2025 11:42 AM

UPDATED DATE
07-01-2024

MASTER PLAN INFORMATION

REVISION
1-RALE
12-11-2023

DRAWN BY:
ITS

DATE: 05/29/2025

PLAN NO.
3501

DRB
HOMES

HOUSE NAME:
TOWNSEND

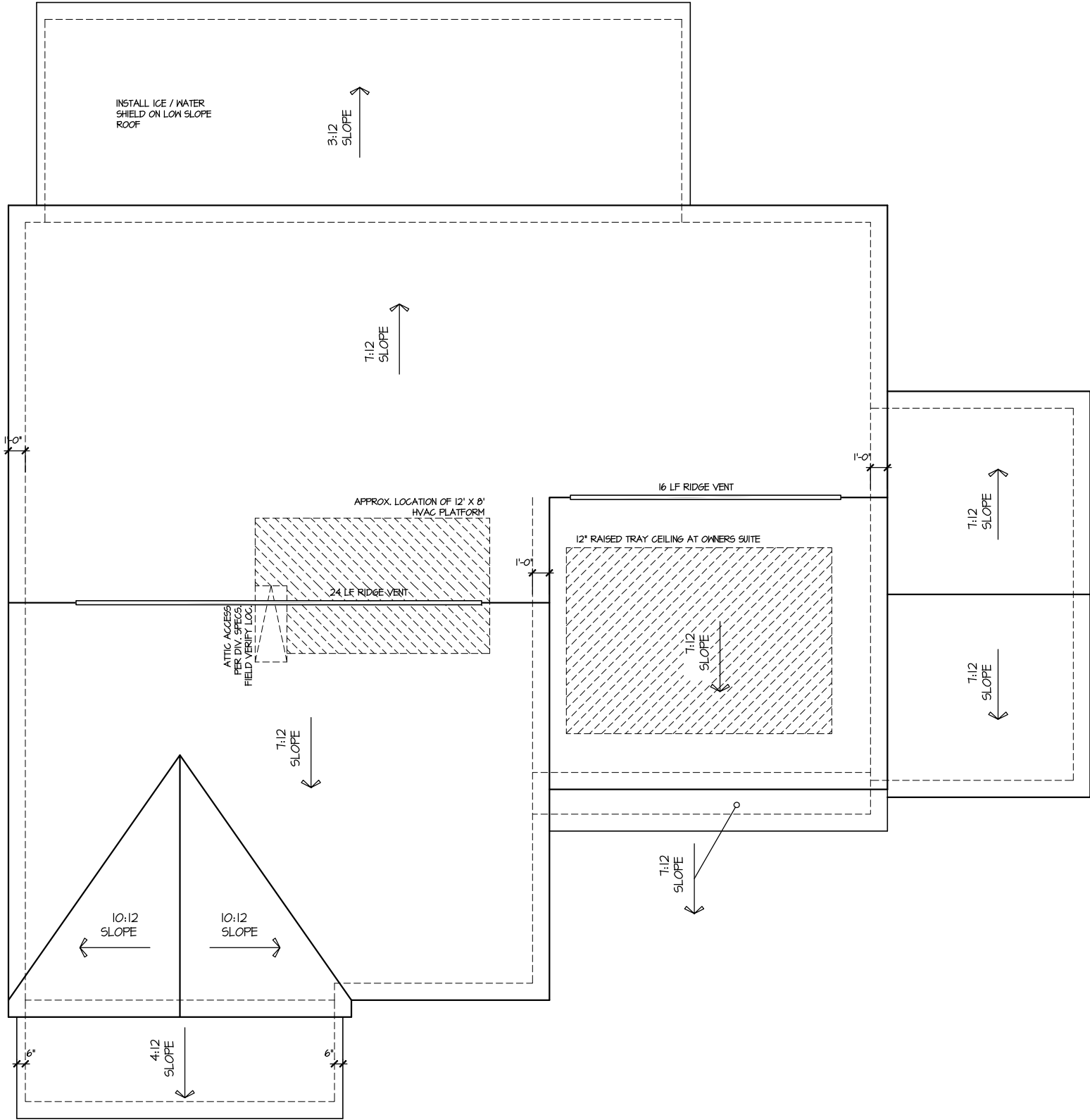
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RIGHT & LEFT ELEVATIONS

SHEET No.

A1.2

UPPER ROOF VENTILATION CALCULATIONS:
ROOF AREA = 2228 SQ. FT.
OVERALL REQUIRED VENTILATION:
1 TO 150 = 14.85 SQ. FT.
1 TO 300 = 7.43 SQ. FT.
50-80% IN TOP THIRD = 3.71 - 5.94 SQ. FT. (1 TO 300)
NET FREE AREA OF VENTED SOFFIT = 5.1 SQ. IN / LINEAR FT.
NET FREE AREA OF RIDGE VENT = 10 SQ. IN / LINEAR FT.
LOWER VENTING (BOTTOM 2/3 RIDG)
100 LINEAR FEET OF SOFFIT X 5.1 SQ. IN = 516 SQ. FT.
UPPER VENTING (TOP 1/3 RIDG)
40 LINEAR FEET OF RIDGE X 10 SQ. IN = 50 SQ. FT.
50 SQ. FT. BETWEEN 50% - 80%
(1 TO 300 ALLOWED)
TOTAL ROOF VENTILATION: 816 SQ. FT. > 7.43 SQ. FT. (REQD)



ROOF PLAN ELEV. 5
SCALE: 1/8" = 1'-0"

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PLAN NO.		3501

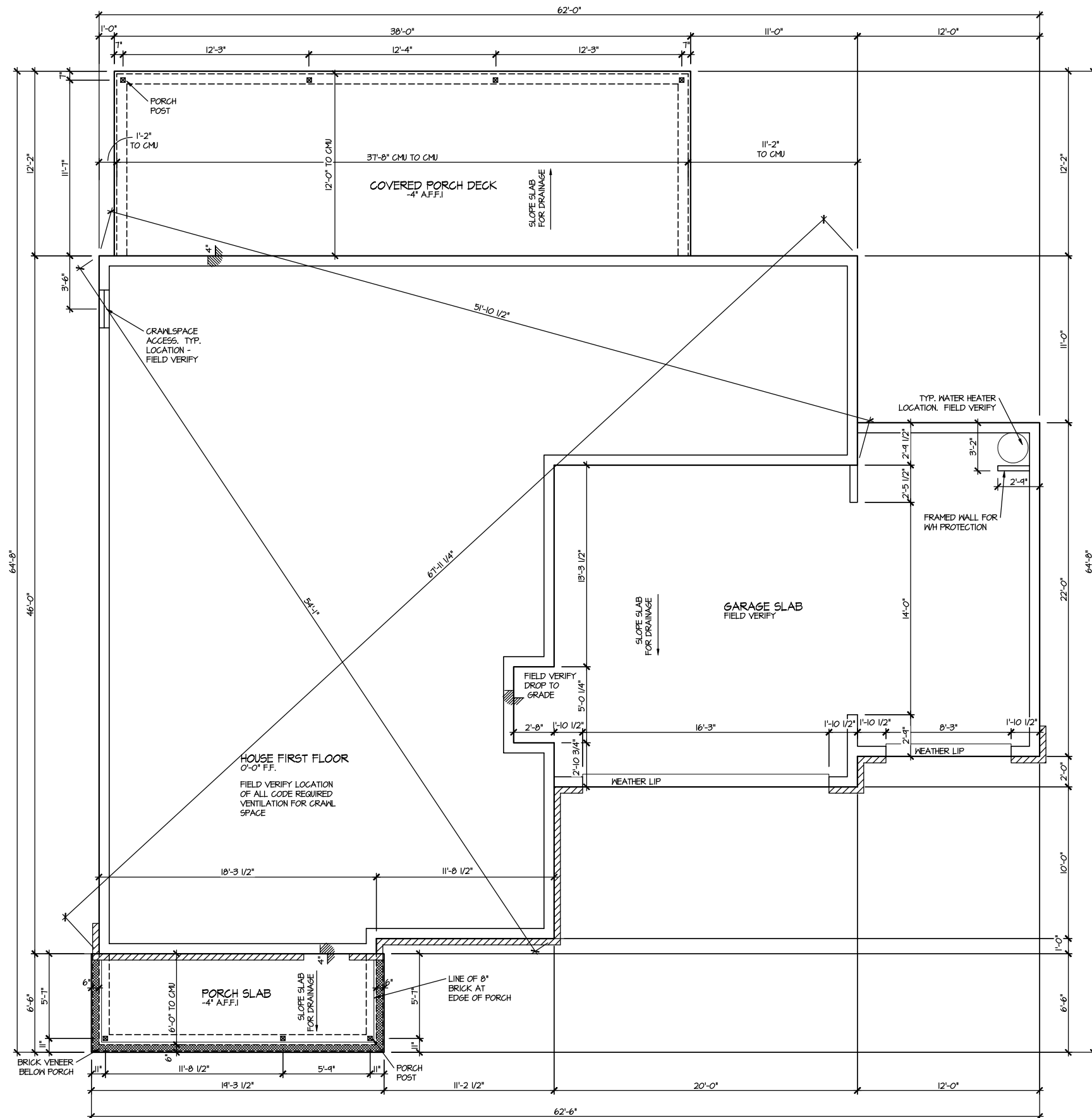


HOUSE NAME:
TOWNSEND
DRAWING TITLE
ROOF PLAN

SHEET No.
A.3

MASTER PLAN INFORMATION	
REVISION	DATE
1-RALE	12-11-2023

UPDATED DATE
07-01-2024



MASTER PLAN INFORMATION		
REVISION	DATE	UPDATED DATE
1-RALE	12-11-2023	07-01-2024

DRAWN BY:	ITS
DATE:	05/29/2025
PLAN NO.	3501



HOUSE NAME: **TOWNSEND**

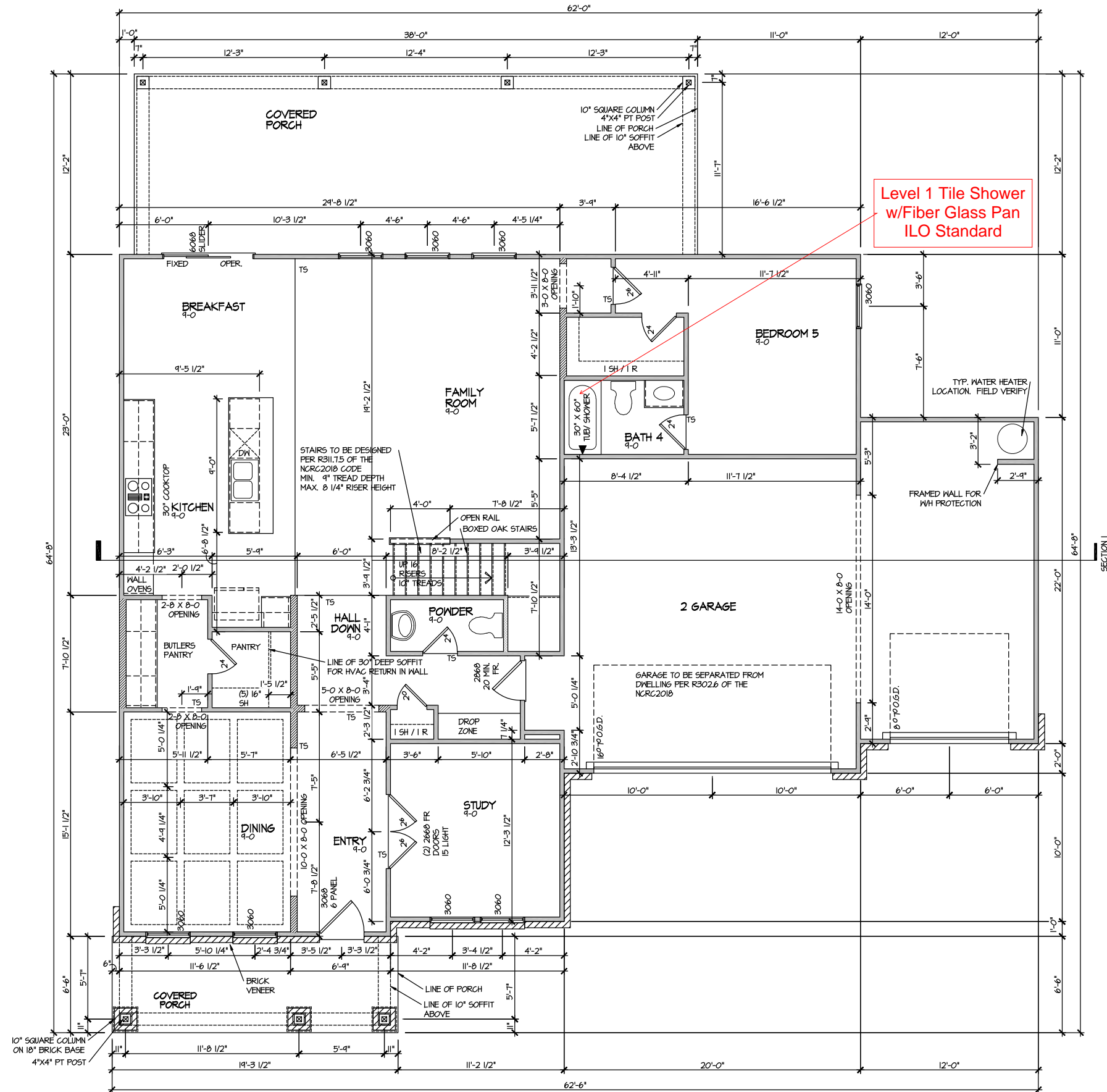
DRAWING TITLE: **CRAWL SPACE PLAN**

SHEET No. A2.1

FILE: Lot_00.0117.dwg DATE: 5/29/2025 11:42 AM

ELEVATION 5 FIRST FLOOR PLAN

SCALE: 1/8" = 1'-0"



MASTER PLAN INFORMATION			UPDATED DATE
REVISION	DATE	1-RALE	07-01-2024
12-11-2023			

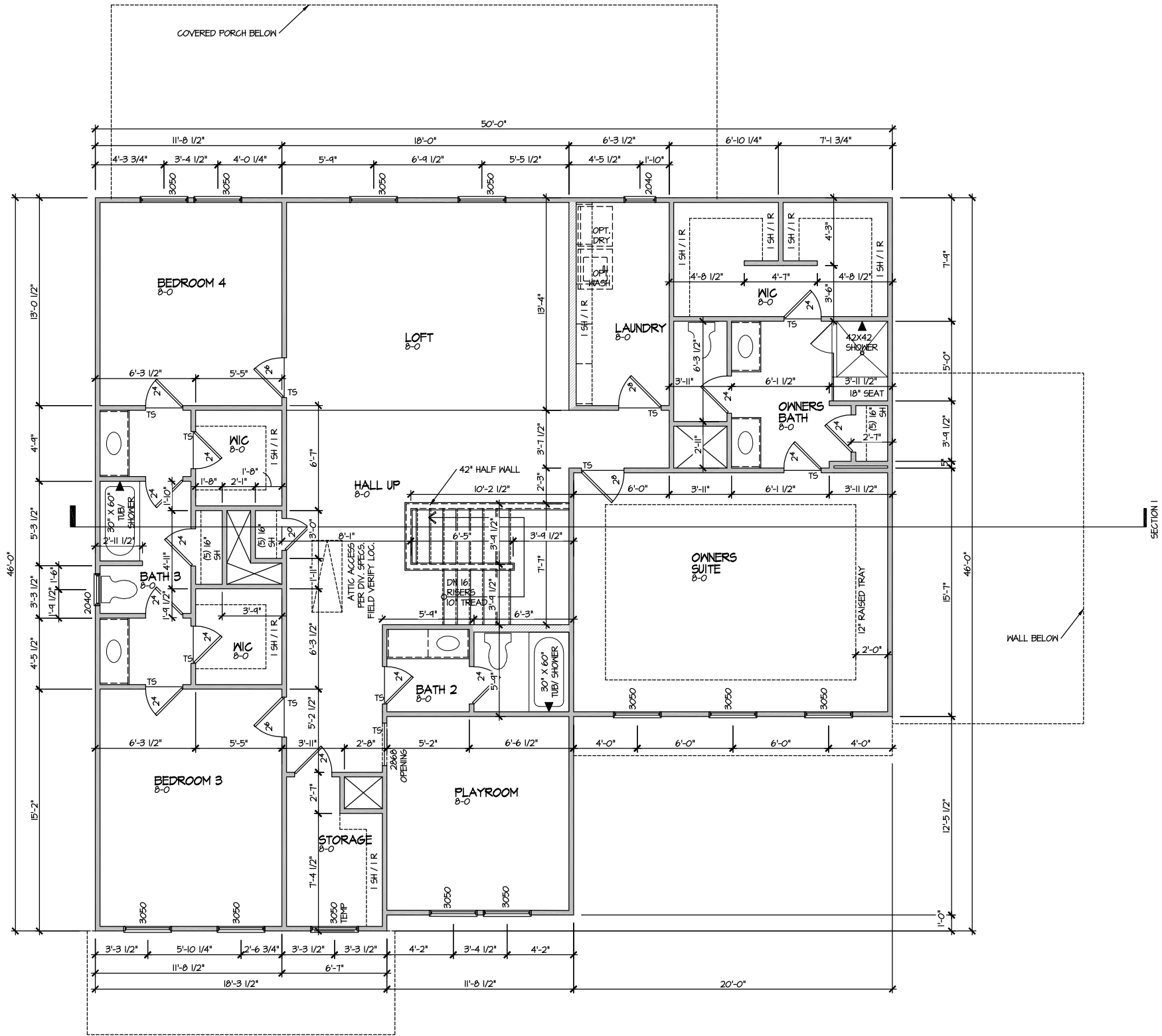
DRAWN BY:	ITS
DATE:	05/29/2025
PLAN NO.	3501



HOUSE NAME:	TOWNSEND
DRAWING TITLE	FIRST FLOOR PLAN

SHEET No.	A3.1
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ELEVATION 5
SECOND FLOOR PLAN
SCALE: 1/8" = 1'-0"



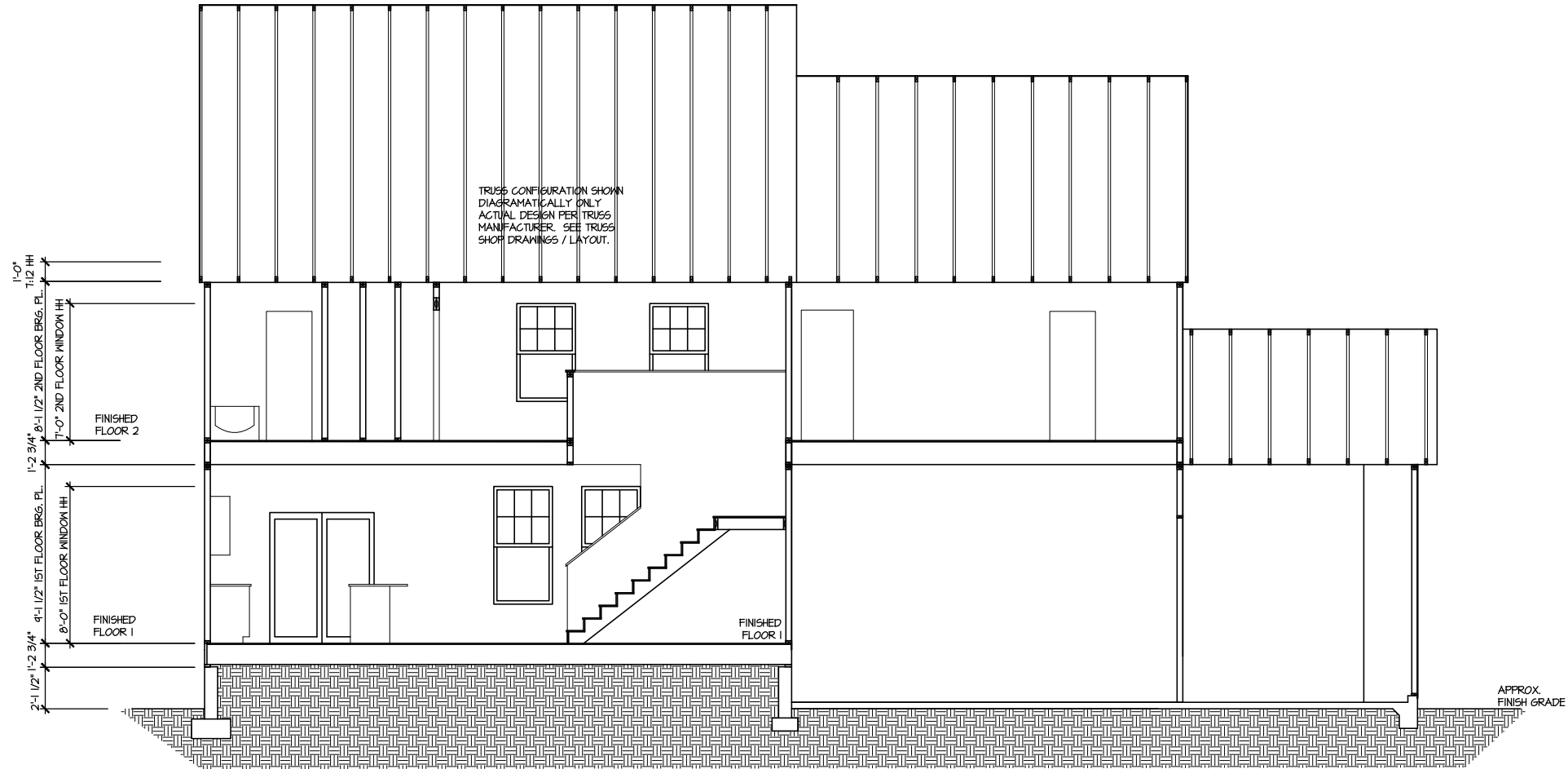
DRAWN BY:	ITS
DATE:	05/29/2025
PLAN NO.	3501

MASTER PLAN INFORMATION	
REVISION	DATE
1 - RALE	12-11-2023



HOUSE NAME: TOWNSEND	DRAWING TITLE SECOND FLOOR PLAN
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SHEET No.
A3.2



SECTION I
SCALE: 1/8" = 1'-0"

DRAWN BY:
ITS
DATE: 05/29/2025
PLAN NO.
3501

DRB
HOMES

HOUSE NAME:
TOWNSEND
DRAWING TITLE
BUILDING SECTION

SHEET No.
A4.1

MASTER PLAN INFORMATION
REVISION
1-RALE

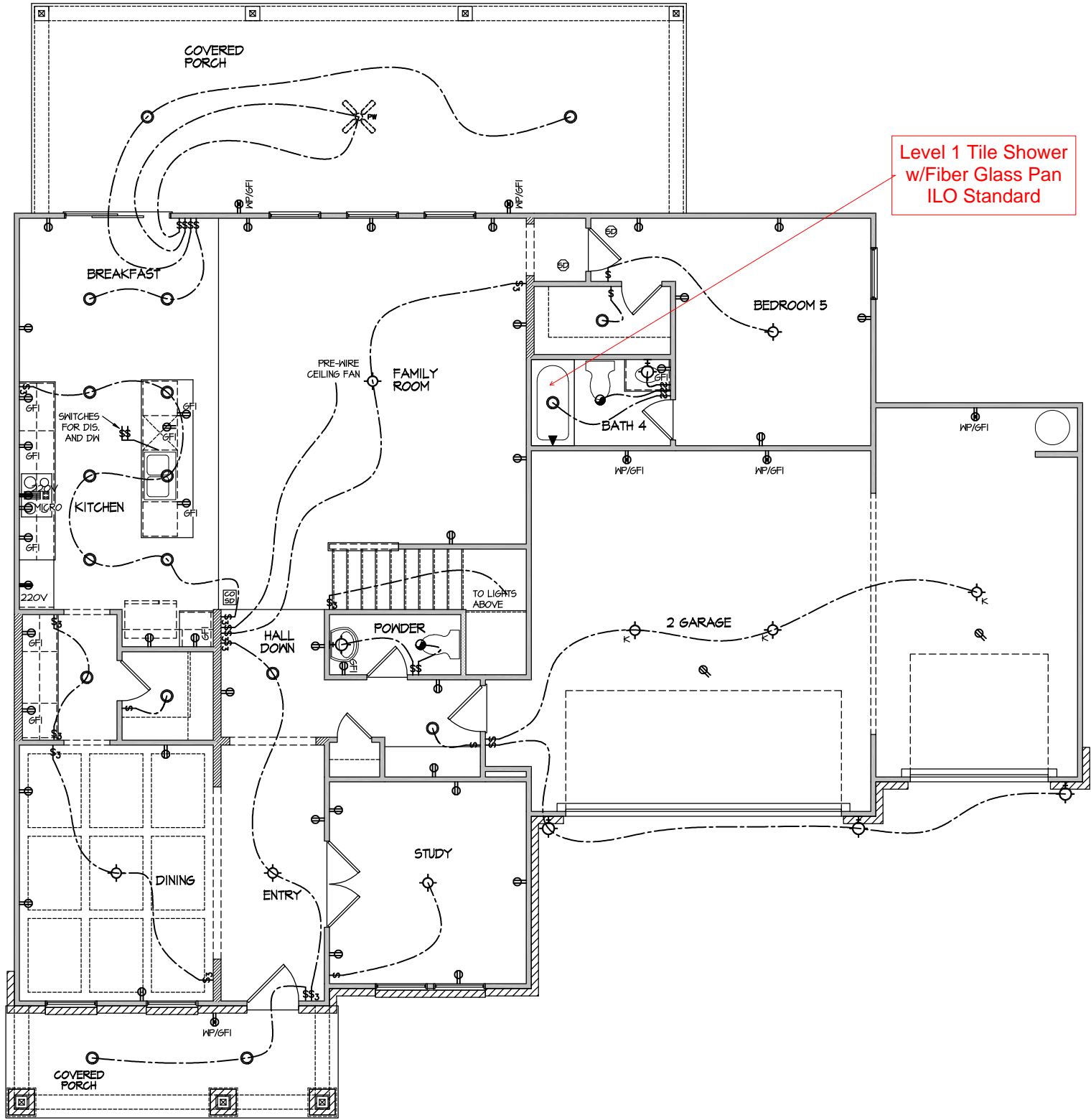
DATE
12-11-2023

UPDATED DATE
07-01-2024

ELECTRICAL LEGEND

- ⌚ SINGLE POLE SWITCH
- ⌚₃ THREE WAY SWITCH
- ⌚₄ FOUR WAY SWITCH
- ⊕ DUPLEX AFCI RECEPTACLE
- ⊕₃ DUPLEX AFCI RECEPTACLE - BOTTOM HALF SWITCHED
- ⊕₄ DUPLEX AFCI RECEPTACLE - FLOOR MOUNTED
- 220V ⊕ RECEPTACLE - 220V
- GFI ⊕ DUPLEX AFCI RECEPTACLE - GFI
- WP/GFI ⊕ DUPLEX AFCI RECEPTACLE - WATERPROOF GFI
- ⊕ SMOKE DETECTOR - WIRED IN SERIES
- ⊕ EXHAUST FAN MOTOR
- TV JACK
- ⊕ TV JACK
- ⊕ CO / SMOKE DETECTOR
- ⊕ DOOR CHIME
- ⊕ LIGHT FIXTURE - WALL MOUNTED
- ⊕ LIGHT FIXTURE - CEILING MOUNTED
- ⊕ LIGHT FIXTURE - SURFACE MOUNTED LED
- ⊕_P FULLCHAIN LAMPHOLDER
- ⊕_K KEYLESS LAMPHOLDER
- ⊕ MOTION SENSOR FLOOD LIGHT

NOTE: ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE ADOPTED VERSION OF THE NATIONAL ELECTRICAL CODE, THE LOCAL POWER COMPANY AND TO ALL APPLICABLE LOCAL REGULATIONS.



Level 1 Tile Shower
w/Fiber Glass Pan
ILO Standard

ELECTRICAL PLAN
FIRST FLOOR - ELEV. 5

SCALE: 1/8" = 1'-0"

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1-RALE	12-11-2023	07-01-2024

DRAWN BY:	ITS
DATE:	05/29/2025
PLAN NO.	3501

DRB
HOMES

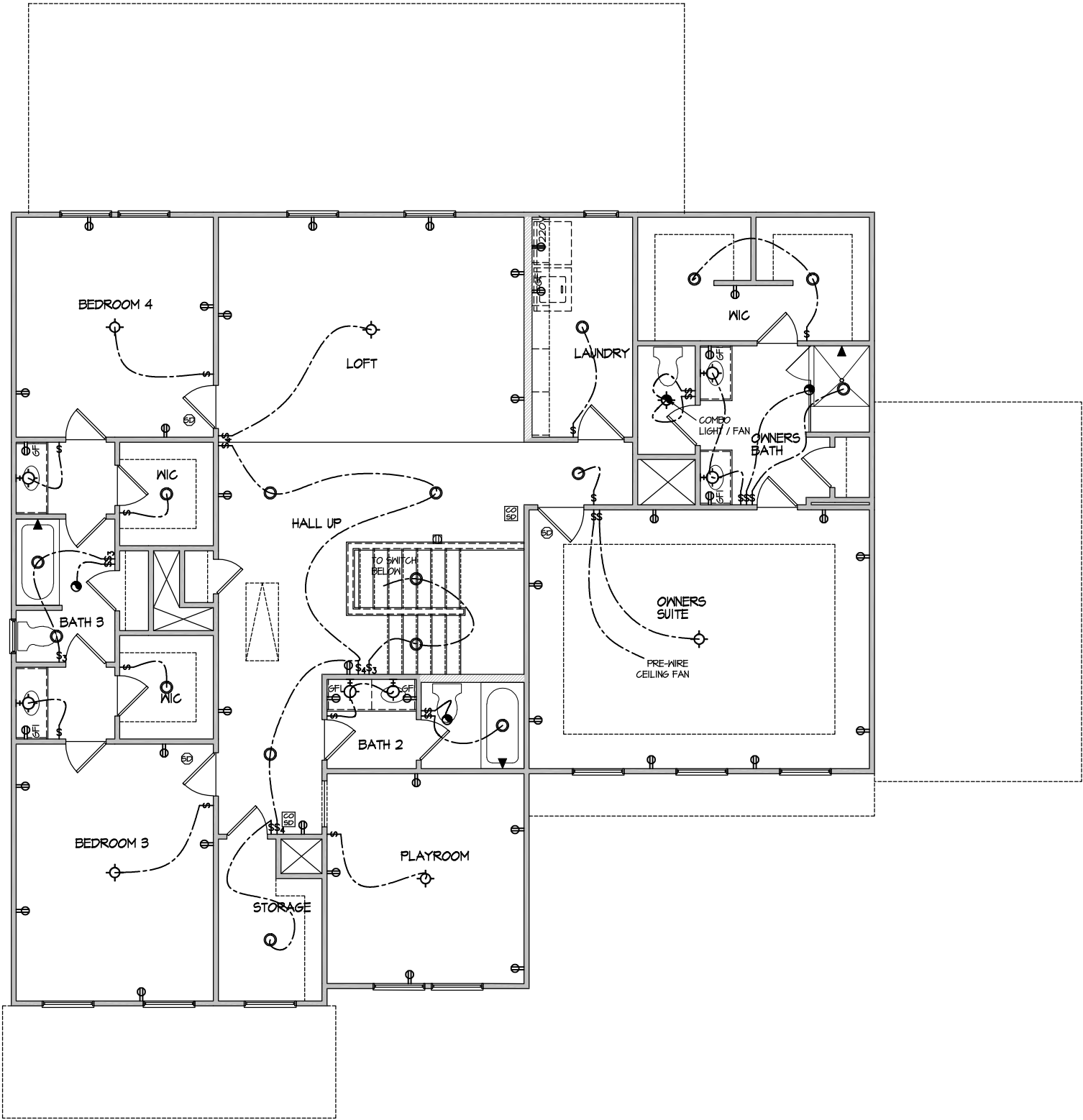
HOUSE NAME:	TOWNSEND
DRAWING TITLE	FIRST FLOOR ELECTRICAL

SHEET No.
11

ELECTRICAL LEGEND

- SINGLE POLE SWITCH
- THREE WAY SWITCH
- FOUR WAY SWITCH
- DUPLEX AFCI RECEPTACLE
- DUPLEX AFCI RECEPTACLE - BOTTOM HALF SWITCHED
- DUPLEX AFCI RECEPTACLE - FLOOR MOUNTED
- RECEPTACLE - 220V
- DUPLEX AFCI RECEPTACLE - GFI
- DUPLEX AFCI RECEPTACLE - WATERPROOF GFI
- SMOKE DETECTOR - WIRED IN SERIES
- EXHAUST FAN MOTOR
- TV JACK
- TV JACK
- CO / SMOKE DETECTOR
- DOOR CHIME
- LIGHT FIXTURE - WALL MOUNTED
- LIGHT FIXTURE - CEILING MOUNTED
- LIGHT FIXTURE - SURFACE MOUNTED LED
- FULLCHAIN LAMPHOLDER
- KEYLESS LAMPHOLDER
- MOTION SENSOR FLOOD LIGHT

NOTE: ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE ADOPTED VERSION OF THE NATIONAL ELECTRICAL CODE, THE LOCAL POWER COMPANY AND TO ALL APPLICABLE LOCAL REGULATIONS.



ELECTRICAL PLAN
SECOND FLOOR - ELEV. 5
SCALE: 1/8" = 1'-0"

FILE: Lot_00.0117.dwg DATE: 5/29/2025 11:42 AM

MASTER PLAN INFORMATION			UPDATED DATE
REVISION	DATE		
1-RALE	12-11-2023		07-01-2024

DRAWN BY:	ITS
DATE:	05/29/2025
PLAN NO.	3501




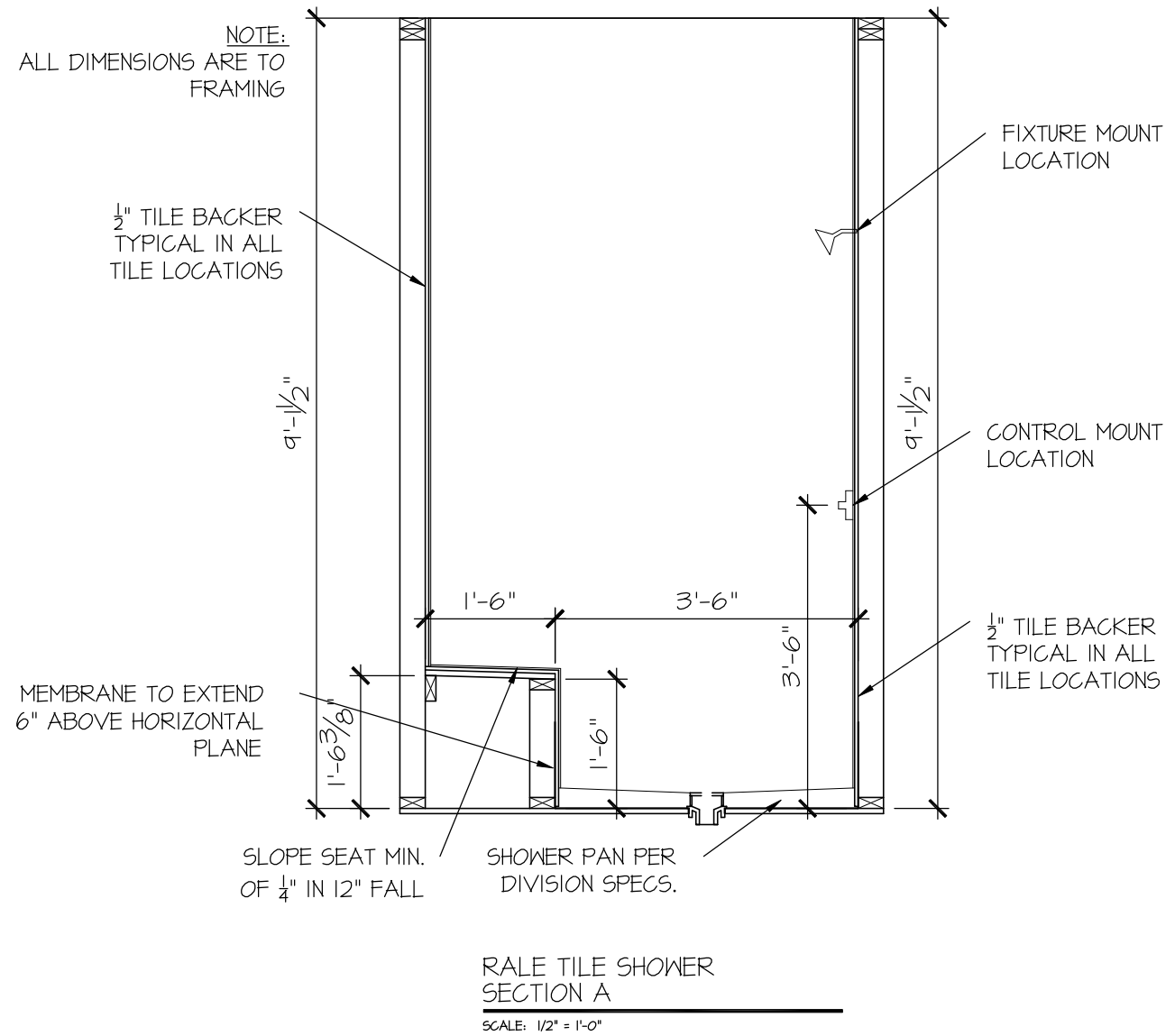
HOUSE NAME:	TOWNSEND
DRAWING TITLE	SECOND FLOOR ELECTRICAL

SHEET No.	1.2
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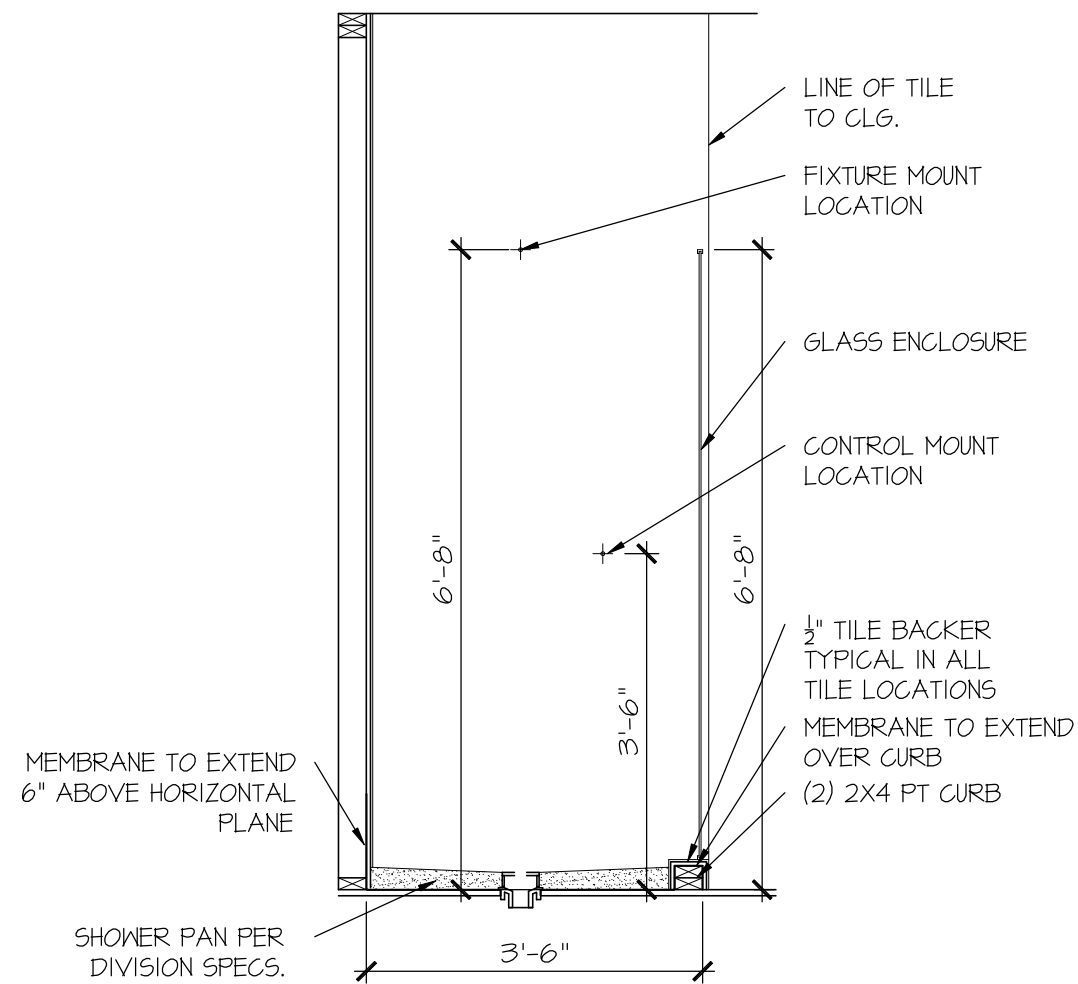


SHEET No.



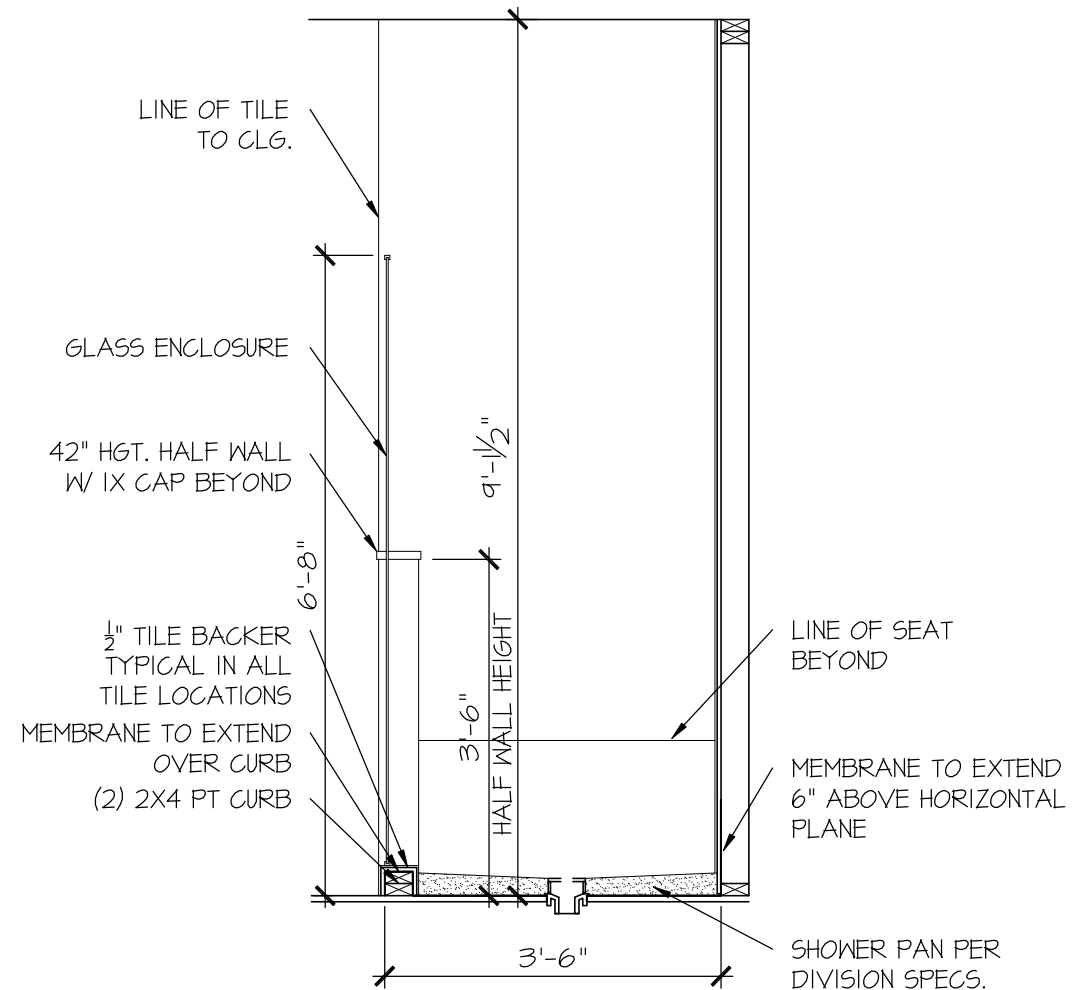


FILE: RALE TILE SHOWER DETAIL 8-2022.dwg DATE: 09-19-2022



RALE TILE SHOWER
SECTION B

SCALE: 1/2" = 1'-0"



RALE TILE SHOWER
SECTION C

SCALE: 1/2" = 1'-0"

CONSULTANT LOGO

SEAL

DRAWN BY:
L. BEAVERS
DATE: 9/1/22
PLAN NO.
11 X 17 SCALE
24 X 36 SCALE

DRB
HOMES

HOUSE NAME:
DRAWING TITLE
RALE TILE SHOWER DETAIL

SHEET No.

01.12

GENERAL STRUCTURAL NOTES

FOUNDATION

- DESIGN IS BASED ON 2018 NORTH CAROLINA STATE BUILDING CODE, RESIDENTIAL CODE.
- FOOTING DESIGN - 2,000 PSF ALLOWABLE SOIL BEARING PRESSURE IS ASSUMED. BUILDER/CONTRACTOR MUST VERIFY.
- FASTEN 2x4/6 SILL PLATES TO FND WITH A MINIMUM OF 2 ANCHORS PER PLATE, 12" MAX. FROM PLATE ENDS - UTILIZING:
 - 1/2" DIA. ANCHOR BOLTS @ 6'-0" O.C., 1" MIN. EMBEDMENT (CONC.), 15" MIN. EMBEDMENT (CMU)
 - SIMPSON MASA ANCHOR STRAPS @ 6'-0" O.C. (CONC.)
 - SIMPSON MAB23 ANCHOR STRAPS @ 2'-8" O.C. (CMU)
 (REFER TO DETAILS FOR 10' TALL WALL ANCHOR REQUIREMENTS)
- ALL LUMBER EXPOSED TO WEATHER OR IN CONTACT W/ CONCRETE OR CMU SHALL BE PRESERVATIVE TREATED SOUTHERN PINE #2.

- BUILDER TO VERIFY CORROSION-RESISTANCE COMPATIBILITY OF HARDWARE & FASTENERS IN CONTACT W/ PRESERVATIVE-TREATED WOOD. CONTACT LUMBER & HARDWARE SUPPLIERS TO COORD.

- BASEMENT INTERIOR BEARING WALLS & EXTERIOR WALK-OUT BASEMENT WALLS SHALL BE 2x6 @ 16" O.C. SFF OR STP, "STUD" GRADE OR BETTER.

- CONCRETE DESIGN BASED ON ACI 318. CONCRETE SHALL ATTAIN THE FOLLOWING MIN. COMPRESSIVE STRENGTHS IN 28 DAYS, UNO.:
 - F_c = 4,000 psi FOUNDATION WALLS
 - 2,500 psi FOOTINGS & INTERIOR SLABS ON GRADE
 - 3,000 psi GARAGE & EXTERIOR SLABS ON GRADE
 - f_y = 60,000 psi

- BASEMENT FOUNDATION WALL DESIGN BASED ON:
 - 9' OR 10' HEIGHT (AS NOTED ON PLANS)
 - TALLER WALLS MUST BE ENGINEERED.
 - NOMINAL WIDTH (1/2" FOR 10" THICK WALL).

- BASEMENT WALL DESIGN IS BASED ON 60 PCF BACKFILL SOIL TYPE CLASSIFICATIONS (SC, ML-CL, OR CL).

- BASEMENT WALLS SHALL BE BRACED, PRIOR TO BACKFILLING, BY ADEQUATE TEMPORARY BRACING OR INSTALL 1st FLOOR DECK.

- PROVIDE (2) #5 BARS AROUND ALL SIDES OF OPENINGS IN CONCRETE BMNT. FND. WALL WITH 2" CLEAR. REINFORCEMENT SHALL EXTEND 12" PAST CORNER OF OPENING IN ALL DIRECTIONS.
 - FOR OPENINGS UP TO 36", PROVIDE MINIMUM 10" CONCRETE DEPTH OVER OPENING OR (3/2)x10 W/ (2)2x6 JACK STUDS, UNO.
 - LARGER OPENINGS SHALL BE PER PLAN.

- ALL CONCRETE EXPOSED TO THE WEATHER SHALL NOT HAVE LESS THAN 5% OR MORE THAN 1% AIR ENTRAINMENT.

- ALL FOOTINGS SHALL BEAR AT LEAST 12" BELOW FINISH GRADE.

- FOOTINGS AND SLABS ON GRADE SHALL BEAR ON VIRGIN SOIL OR 95% COMPACTED FILL.

- PROVIDE CONTROL JOINTS AT ALL INSIDE CORNERS OF SLAB EDGES, AND OTHER LOCATIONS WHERE SLAB CRACKS ARE LIKELY TO DEVELOP.

- JOINTS SHALL BE LOCATED @ 10'-0" O.C. (RECOMMENDED) OR 15'-0" O.C. (MAXIMUM)
- JOINT GRID PATTERN SHALL BE AS CLOSE TO SQUARES AS POSSIBLE (1:1 RATIO), WITH A MAXIMUM OF 1:1.5 RATIO
- CONTROL JOINTS SHALL NOT BE INSTALLED IN STRUCTURAL SLABS

- CONCRETE MASONRY UNITS (CMU) SHALL BE ASTM C90 WITH A MIN. COMPRESSIVE STRENGTH OF 1900 psi (F_m=1500 psi). MORTAR SHALL BE ASTM C270, TYPE S. CMU DESIGN PER ACI 530 & 530J.

- CMU FOUNDATION WALLS SHALL HAVE "DUR-O-WALL" HORIZONTAL JOINT REINFORCEMENT (OR EQUAL) - 1" GA. MINIMUM @ 16" O.C.

- PROVIDE 2x8 x 16" LONG P.T. PLATE ON TOP OF ALL CRAWL SPACE PIERS. ALL PIERS SHALL BE GROUTED SOLID.

- PROVIDE 2x6 P.T. PLATE ON INTERIOR CRAWL SPACE WALLS, FASTENED PER ANCHORAGE SPECIFICATION NOTED ABOVE.

- DIMENSIONS BY OTHERS, BUILDER TO VERIFY.

- BUILDER TO VERIFY THAT MODEL HAS BEEN ADEQUATELY TREATED BY A LICENSED AND BONDED PEST CONTROL COMPANY FOR SUBTERRANEAN TERMITES. METHOD AND TYPE OF TREATMENT TO BE DETERMINED BY PEST CONTROL COMPANY.

GENERAL STRUCTURAL NOTES

FOUNDATION

- DESIGN IS BASED ON 2018 NORTH CAROLINA STATE BUILDING CODE, RESIDENTIAL CODE.
- WOOD FRAME ENGINEERING IS BASED ON NDS, "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" - LATEST EDITION.

DESIGN LOADS:

ROOF DEAD = 7 PSF T.C., 10 PSF B.C.
LIVE = 16 PSF
LOAD DURATION FACTOR = 1.25

FLOOR LIVE = 40 PSF (30 PSF @ SLEEPING AREAS)
DEAD = 10 PSF (1-JOISTS & SOLID SAMN)
10 PSF T.C., 5 PSF B.C. (TRUSSES)
(ADD'L 10 PSF @ TILE)

LATERAL 120 MPH, EXPOSURE B. SEISMIC A/B.

SOIL 2,000 PSF ASSUMED ALLOWABLE BEARING PRESSURE (TO BE VERIFIED BY BUILDER)

GENERAL FRAMING

- ALL TYP. NAIL FASTENER REQUIREMENTS ARE NOTED IN STANDARD CONNECTIONS TABLE OR ON PLANS. ALL NAILS SPECIFIED ARE MIN DIAMETER AND LENGTH REQUIRED FOR CONNECTION. ALL HANGER NAILS SHALL BE INSTALLED PER MANUFACTURER'S REQUIREMENTS FOR MAX CHARTED CAPACITY. NOTE: HANGERS USE COMMON NAIL DIAMETERS NOT TYPICAL FRAMING GUN NAILS.

- REFER TO FASTENING SCHEDULE TABLE R602.3(1) FOR ALL CONNECTIONS, TYP. UNO.

- EXT. & INT. BRG WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON PLANS) @ 16" O.C. SFF OR STP "STUD" GRADE LUMBER, OR BETTER, UNO.
- WALLS OVER 12' TALL SHALL BE PER PLAN.

- ALL HEADERS, BEAMS & OTHER STRUCTURAL MEMBERS SHALL BE SPRUCE-PINE-FIR #2 (SPF) OR SOUTHERN PINE #2 (SYP) LUMBER, OR BETTER (KILN-DRIED). ALL HEADERS HAVE BEEN DESIGNED BASED ON CALCULATED LOADS & SIZED ACCORDINGLY. CODE TABLES HAVE NOT BEEN USED.

- ALL NON-BEARING INTERIOR STUD WALLS SHALL BE CONSTRUCTED WITH 2x "STUD" GRADE MEMBERS SPACED @ 16" O.C. (MAX., UNO.)
 - HEADERS IN NON-LOAD BEARING WALLS SHALL BE: (1)2x4/6 FLAT @ OPENINGS UP TO 4'; (2)2x4/6 FLAT UP TO 8'.

- ALL FRAMING LUMBER SHALL BE DRIED TO 15% MC (KD-15).

- ENGINEERED LUMBER BEAMS TO MEET OR EXCEED THE FOLLOWING:
 - L₉L₁ - Fb=2325 psi; Fv=310 psi; E=1.55x10⁶ psi
 - L₁V₁L₁ - Fb=2600 psi; Fv=285 psi; E=2.0x10⁶ psi
 - PSL₁ - Fb=2900 psi; Fv=290 psi; E=2.0x10⁶ psi

- M&K SHALL BE FULLY INDEMNIFIED FOR ANY AND ALL ISSUES RESULTING FROM OR RELATED TO ANY BUILDING COMPONENT IF THE OWNER DOES NOT SUBMIT THE COMPONENT SHOP DRAWINGS TO M&K FOR STRUCTURAL REVIEW PRIOR TO FABRICATION, DELIVERY, OR INSTALLATION.

- FOR 2 & 3 PLY BEAMS OF EQUAL WIDTH, FASTEN PLIES TOGETHER WITH 3 ROWS OF 3"x0.120" NAILS @ 8" O/C OR 2 ROWS 1/4"x3/8" SIMPSON SDS SCREWS (OR 3/8" TRUSSLOK SCREWS) @ 16" O/C. USE A MINIMUM OF 3 ROWS FOR BEAM DEPTHS OF 14" OR GREATER. APPLY FASTENING AT BOTH FACES FOR 3-PLY CONDITION. LOCATE TOP & BOTTOM NAILS/SCREWS 2" FROM EDGE. SOLID 3 1/2" OR 5 1/4" BEAMS ARE ACCEPTABLE. USE 2 ROWS OF NAILS FOR 2x6 & 2x8 MEMBERS.

- FOR 4 PLY BEAMS OF EQUAL WIDTH, FASTEN PLIES TOGETHER WITH 3 ROWS OF 1/4"x6" SIMPSON SDS SCREWS (OR 6 3/4" TRUSSLOK SCREWS) @ 16" O/C. USE A MINIMUM OF 4 ROWS FOR BEAM DEPTHS OF 14" OR GREATER. APPLY FASTENING AT BOTH FACES (ONE SIDE ONLY FOR TRUSSLOK SCREWS). LOCATE TOP AND BOTTOM SCREWS 2" FROM EDGE. A SOLID 7" BEAM IS ACCEPTABLE.

- ALL HEADERS SHALL BE SUPPORTED BY (1)2x JACK STUD @ (1)2x KING STUD, MINIMUM.
 - THE NUMBER OF STUDS SPECIFIED AT A SUPPORT INDICATES THE NUMBER OF JACK STUDS REQUIRED, UNO..

- ALL MULTI-PLY STUDS TO BE FASTENED TOGETHER W/ 3"x0.131" NAILS @ 24" O.C. (MIN.), EACH PLY.

- PROVIDE SOLID BLOCKING IN FLOOR SYSTEM UNDER ALL POSTS CONTINUOUS TO FND/BEARING. BLOCKING TO MATCH POST ABOVE.

- FASTEN 2x WOOD PLATES TO TOP FLANGE OF STEEL BEAMS WITH P.A.F.'s (HILTI' X-CF FINS OR EQUAL) @ 16" O.C. STAGGERED, OR 1/2" DIA. BOLTS @ 48" O.C. STAGGERED.

- ALL EXTERIOR 4x4 WOOD POSTS SHALL HAVE SIMPSON BC52-2/4 CAP & ABW44Z BASE, UNO.

FLOOR FRAMING

- 1-JOISTS/TRUSSES SHALL BE DESIGNED BY MANUF. TO MEET OR EXCEED L/480 LIVE LOAD DEFLECTION CRITERIA. (EXCLUDES MARBLE FLOORS - CONTACT M&K FOR MARBLE FLOOR DESIGNS)
- AT 1-JOIST FLOORS, PROVIDE 1/8" MIN. OSB RIM BOARD.
- METAL HANGERS SHALL BE SPECIFIED BY MANUFACTURER, UNO.

- FLOOR SHEATHING SHALL BE 23/32" A.P.A. RATED 'STURD-I-FLOOR' 24" O.C. EXPOSURE I (OR APPROVED EQUAL) WITH TONGUE AND GROOVE EDGES. FASTEN TO FRAMING MEMBERS W/ GLUE AND
 - 2 1/2" x 0.131" NAILS @ 6" O.C. @ PANEL EDGES @ 12" O.C. FIELD.
 - 2 3/8" x 0.120" NAILS @ 4" O.C. @ PANEL EDGES @ 8" O.C. FIELD.
 - 2 3/8" x 0.113" NAILS @ 3" O.C. @ PANEL EDGES @ 6" O.C. IN FIELD.
 - 6 x 2" MIN. SCREWS @ 6" O.C. @ PANEL EDGES @ 12" O.C. FIELD.

ROOF FRAMING

- BAY WINDOWS & SHED ROOFS (UP TO 6' SPAN) CAN BE 2x4 OR 2x6 RAFTERS & CEILING JOISTS @ 16/24" O.C.

- FASTEN EACH ROOF TRUSS TO TOP PLATE W/ SIMPSON H25T CLIP (OR APPROVED EQUAL) @ ALL BEARING POINTS. PROVIDE (2) H25T CLIPS AT 2-PLY GIRDER TRUSSES, (3) H25T CLIPS AT 3-PLY GIRDER TRUSSES & ROOF BEAMS - AT ALL BEARING POINTS.

- METAL HANGERS SHALL BE SPECIFIED BY THE MANUFACTURER, UNO.

- ERECT AND INSTALL ROOF TRUSSES PER MTGA & TPI'S BC51 1-08 "GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES."

- SUPPORT PORCH & SHORT SPAN ROOF TRUSSES (MAX 7' SPAN) W/ 2x4 LEDGER FASTENED TO:
 - RIM BOARD W/ (2) 3"x0.131" NAILS @ 16" O.C. MAX. (1-JOISTS)
 - TRUSS VERTICALS W/ (3) 3"x0.131" NAILS @ 14/2" O.C. MAX. (FLOOR TRUSSES)

- ROOF SHEATHING SHALL BE 7/16" A.P.A. RATED SHEATHING 24/16 EXPOSURE I (OR APPROVED EQUAL). FASTEN TO FRAMING MEMBERS
 - W/ 2 1/2" x 0.131" NAILS @ 6" O.C. @ PANEL EDGES @ 12" O.C. FIELD.
 - W/ 2 3/8" x 0.120" NAILS @ 4" O.C. @ PANEL EDGES @ 8" O.C. FIELD.
 - W/ 2 3/8" x 0.113" NAILS @ 3" O.C. @ PANEL EDGES @ 6" O.C. FIELD.

HOLD-DOWN SCHEDULE

SYMBOL	SPECIFICATION
▶ HD-1	SIMPSON HIT4 HOLD-DOWN * (3/8" DIA. ANCHOR)
▶ HD-2	SIMPSON M5TC66 STRAP TIE (CENTER STRAP ON FLOOR SYSTEM UNO.) OR M5TC66B8 ALTERNATE
▶ HD-3	SIMPSON STDH14/STDH14RJ

- UTILIZE THE 56TB24 ANCHOR BOLT @ ALL MONOSLAB & INTERIOR RAISED SLAB (I.E. THICKENED SLABS, FOOTINGS) CONDITIONS. MINIMUM 24" MIN. FOOTING THICKNESS REQUIRED.
- EPOXY-SET ALTERNATE FOR MONOSLAB & INTERIOR RAISED SLAB CONDITIONS ONLY: UTILIZE SIMPSON SET' EPOXY SYSTEM TO FASTEN THREADED ROD INTO CONCRETE FOUNDATION. PROVIDE 10" (FOR 5/8" DIA) OR 15" (FOR 7/8" DIA) MIN. EMBEDMENT INTO CONCRETE. INSTALL PER MANUF. INSTRUCTIONS. MINIMUM 16" FOOTING THICKNESS REQ'D. DO NOT LOCATE ANCHORS WITHIN 1/34" OF EDGE OF CONCRETE.

LEGEND

- Interior BEARING WALL
- BEARING WALL ABOVE
- BEAM / HEADER
- INDICATES SHEAR WALL & EXTENT
- EXTENT OF OVERFRAMING
- 1L METAL HANGER
 - INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
- INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE.

NON-BEARING HEADER SCHEDULE

SPAN	2x4 NON-BEARING PARTITION WALL	2x6 NON-BEARING PARTITION WALL
UP TO 3'-0"	(1)2x4 FLAT	(1)2x6 FLAT
UP TO 6'-0"	(2)2x4	(3)2x4
UP TO 8'-0"	(2)2x6	(3)2x6
UP TO 12'-0"	(2)2x8	(3)2x8

NOTES:

- ALL NON-BEARING INTERIOR STUD WALLS SHALL BE CONSTRUCTED WITH 2x "STUD" GRADE MEMBERS SPACED @ 24" O.C. (MAX.)

LATERAL BRACING & SHEAR WALL SHEATHING SPECIFICATIONS

THIS MODEL HAS BEEN DESIGNED TO RESIST LATERAL FORCES RESULTING FROM:

120 MPH WIND IN 2018 NCSEBC:RC

(120 MPH WIND SPEED IN ASCE 7-10 WIND MAP, PER IRC R301.2.1.1) EXP. B, RISK CAT. 2 & SEISMIC CAT. A/B.

THE DESIGN WAS COMPLETED PER 2015 IBC (SECTION 1604) & ASCE 7-10, AS PERMITTED BY R301.1.3 OF THE 2018 NCSEBC:RC, OR THE SIMPLIFIED PRESCRIPTIVE PROCEDURE IN ACCORDANCE WITH THE 2015 IRC IF THE PARAMETERS OF SECTION R602.12 COMPLY. ACCORDINGLY, THIS MODEL, AS DOCUMENTED AND DETAILED HEREIN, IS ADEQUATE TO RESIST THE CODE REQUIRED LATERAL FORCES.

DESIGN WIND UPLIFT LOADS HAVE BEEN CALCULATED UTILIZING ASCE 7-10 (ACCEPTED ENGINEERING PRACTICE) AS ALLOWED PER 2018 NCSEBC:RC SECTION R802.11.1.1. THIS MODEL HAS BEEN DETAILED WHERE REQUIRED & ENGINEERED TO RESIST THE WIND UPLIFT LOAD PATH PER SECTIONS R602.3.5 & R802.11.

EXT. WALL SHEATHING SPECIFICATION

- 7/16" OSB OR 15/32" PLYWOOD:
 - FASTEN SHEATHING W/ 2 3/8"x0.113" NAILS @ 6" O.C. AT EDGES @ 12" O.C. IN THE PANEL FIELD. TYP. UNO.

- HORIZONTAL BLOCKING OF EXT. WALL/SHEAR WALL EDGES IS NOT REQUIRED BY THIS DESIGN EXCEPT FOR THOSE AREAS SPECIFICALLY NOTED.

- ALL EXT. WALLS SHALL BE CONTINUOUSLY SHEATHED AND ARE CONSIDERED SHEAR WALLS.

- ALT. STAPLE CONNECTION SPEC: 1 1/2" 16 GA STAPLES (1/8" CROWN) @ 3" O.C. AT EDGES @ 6" O.C. IN FIELD.

BLOCKED PANEL EDGES

- AT DESIGNATED AREAS - FASTEN SHEATHING W/ 2 3/8" x 0.113" NAILS @ 6" O.C. AT ALL PANEL EDGES AND 12" O.C. IN THE PANEL FIELD OR 1 1/2" 16 GA STAPLES (1/8" CROWN) @ 3" O.C. AT EDGES @ 6" O.C. IN FIELD. ALL SHEATHING PANELS SHALL BE ORIENTED AND INSTALLED FULL HEIGHT OF SHEAR WALL OR 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT ALL UNSUPPORTED PANEL EDGES & EDGE FASTENINGS.

3" O.C. EDGE NAILING

- AT DESIGNATED AREAS - FASTEN PANEL EDGES OF WOOD STRUCTURAL WALL SHEATHING TO FRAMING W/ 8d NAILS @ 3" O.C. NO STAPLE ALTERNATIVE AVAILABLE AT THIS SPEC. ALL SHEATHING PANELS SHALL BE ORIENTED AND INSTALLED FULL HEIGHT OF SHEAR WALL OR 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT UNSUPPORTED PANEL EDGES AND 3" O.C. EDGE FASTENINGS.

NOTES

- SEE CONNECTION SPECIFICATIONS CHART FOR STANDARD SHEAR TRANSFER DETAILING. IF ADDITIONAL CAPACITY IS REQUIRED BY DESIGN, IT WILL BE SPECIFICALLY NOTED ON PLAN.

- DESIGN ASSUMES 16" O.C. MAX. STUD SPACING, UNO.

- ALL STRUCTURAL PANELS ARE TO BE DIRECTLY APPLIED TO STUD FRAMING.

- PRE-MANUFACTURED PANELIZED WALLS: FASTEN TOGETHER END STUDS OF WALL PANELS SHEATHED W/ OSB OR PLYWOOD W/ 3" x 0.120" NAILS @ 4" O.C. (THRU ONE SIDE ONLY)

- INDICATES EXTENT OF INT. OSB SHEARWALL OR 3" O.C. OSB SHEARWALL.

- INDICATES HOLD-DOWN BELOW

MEANS & METHODS NOTES

THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS FINISHED AND ALL PLAN, DETAIL, AND NOTE SPECIFICATIONS HAVE BEEN COMPLETED. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE THE ERECTION PROCEDURES AND SEQUENCE TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING CONSTRUCTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS, AND TIE-DOWNS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHORING AND BRACING REQUIRED TO STABILIZE AND PROTECT EXISTING AND ADJACENT STRUCTURES AND SYSTEMS DURING COURSE OF DEMOLITION AND CONSTRUCTION OF THE PROJECT.

STRUCTURAL DESIGN AND SPECIFICATIONS ASSUME THAT ALL SUPPORTING AND NON-SUPPORTING ELEMENTS IN CONTACT WITH FLOOR FRAMING ARE LEVEL, INCLUDING, BUT NOT LIMITED TO: FOUNDATIONS, SLABS ON GRADE, BEAMS, WALLS, AND NON-BEARING ELEMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LEVELNESS AND MAKE ADJUSTMENTS AS NECESSARY, INCLUDING CONSIDERATION OF THOSE AREAS THAT MAY BE WITHIN CONTRACTUAL, INDUSTRY, OR WARRANTY TOLERANCES.

ADDITIONAL NOTES FOR TRUSS & I-JOIST MANUFACTURER

ROOF TRUSS, FLOOR TRUSS AND ENGINEERED JOISTS SHALL BE DESIGNED TO MEET THE DIFFERENTIAL DEFLECTION CRITERIA BELOW, UNLESS NOTED OTHERWISE ON PLAN.

- TRUSSES/JOISTS SHALL BE DESIGNED SO THAT DIFFERENTIAL DEFLECTION BETWEEN ADJACENT PARALLEL TRUSSES/JOISTS OR GIRDER TRUSSES/FLUSH BEAMS DO NOT EXCEED THE FOLLOWING:
- ROOF TRUSSES:
 - 1/4" DEAD LOAD
 - FLOOR TRUSSES, ATTIC TRUSSES, & I-JOISTS:
 - 1/8" DEAD LOAD
 - FLOOR TRUSSES & ATTIC TRUSSES ADJACENT TO FLOOR FRAMING BY OTHERS:
 - LIMIT ABSOLUTE TRUSS DEFLECTION TO 3/16" DEAD LOAD. (NOT DIFFERENTIAL DEFLECTION)

VENEER LINTEL SCHEDULE

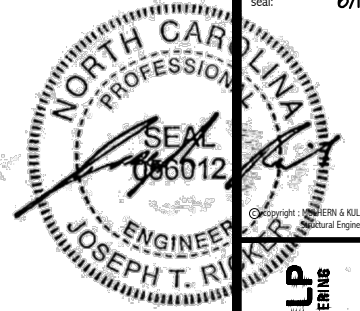
SPAN (MAX)	HEIGHT OF VENEER ABOVE LINTEL	STEEL ANGLE SIZE
3'-0"	20 FT. MAX	L3"x3"x1/4"
	3 FT. MAX	L3"x3"x1/4"
6'-0"	12 FT. MAX	L4"x3"x1/4"
	20 FT. MAX	L5"x3"x1/4"
	3 FT. MAX	L4"x4"x1/4" *
8'-0"	12 FT. MAX	L5"x3"x3/8"
	16 FT. MAX	L6"x3"x3/8"
9'-6"	12 FT. MAX	L6"x3"x3/8"
	2 FT. MAX	L7"x4"x1/2" **
16'-0"	3 FT. MAX	L8"x4"x1/2" **

- ALL LINTELS:
- SHALL SUPPORT 2 3/4" - 3 1/2" VENEER W/ 40 psf MAXIMUM HEIGHT.
 - < 16" SHALL HAVE 4" MIN. BEARING
 - > 16" SHALL HAVE 8" MIN. BEARING
 - < 16" SHALL NOT BE FASTENED BACK TO HEADER.
 - > 16" SHALL BE FASTENED BACK TO WOOD HEADER IN WALL @48" O.C.
 - W/ 1/2" DIA. x 3 1/2" LONG LAG SCREWS IN 2" LONG VERTICALLY SLOTTED HOLES.
 - MAX. VENEER HT. APPLIES TO ANY PORTION OF BRICK OVER THE OPENING.
 - ALL LINTELS SHALL BE LONG LEG VERTICAL.
 - WHEN SUPPORTING VENEER < 3" WIDE THE EXTERIOR TOE OF THE HORIZONTAL LEG MAY BE CUT IN THE FIELD TO BE 3/4" WIDE OVER THE BEARING LENGTH ONLY. THIS IS TO ALLOW FOR MORTAR JOINT FINISHING.
 - SEE STRUCTURAL PLANS FOR ANY LINTEL CONDITION NOT ENCOMPASSED BY THE ABOVE PARAMETERS. FOR ANY LINTEL FASTENED BACK TO BEAM, FASTENERS SHALL MAINTAIN A 2" MINIMUM CLEAR DISTANCE FROM BOTTOM OF BEAM.
 - * FOR GREEN VENEER USE L4x3x1/4".
 - ** FOR 3" VENEER ONLY. SEE PLAN FOR VENEER SUPPORT IF VENEER < 3/4" THICK.

SD2.I REFERS TO SD2.IA FOR LVL/PSL/LSL BEAMS OR SD2.IB FOR FLITCH BEAMS OR SD2.IC FOR STEEL BEAMS

ENGINEERED BEAM MATERIAL SCHEDULE

BEAM NUMBER	LVL OPTION	PSL OPTION	LSL OPTION	FLITCH OPTION	STEEL OPTION
001	(2)3/4"x9" - H	3 1/2"x9" - H	(2)3/4"x9" - F	(2)2x10 + (1) 1/2"x11 1/2" STEEL FLITCH PLATE - H	N/A
002	(2)3/4"x14" - F	3 1/2"x14" - F	(3)3/4"x14" - F	(2)2x12 + (1) 3/8"x11 1/2" STEEL FLITCH PLATES - F	M2x14
003	(3)3/4"x18" - FT	5 1/4"x18" - FT	N/A	(3)2x12 + (2) 3/8"x11 1/2" STEEL FLITCH PLATES - F	M2x26 - F
004	N/A	N/A	N/A	N/A	N/A
005	(2)3/4"x14" - F	3 1/2"x14" - F	(2)3/4"x14" - F	(2)2x10 + (1) 1/2"x11 1/2" STEEL FLITCH PLATE - F	N/A
006	(2)3/4"x14" - F	3 1/2"x14" - F	N/A	(2)2x12 + (1) 3/8"x11 1/2" STEEL FLITCH PLATES - F	N/A
007	(3)3/4"x14" - F	5 1/4"x14" - F	(4)3/4"x14" - F	(3)2x12 + (2) 1/2"x11 1/2" STEEL FLITCH PLATES - F	M2x14 - F
008	(2)3/4"x14" - F	3 1/2"x14" - F	(3)3/4"x14" - F	(2)2x12 + (1) 3/8"x11 1/2" STEEL FLITCH PLATES - F	M2x14 - F
009	(2)3/4"x14" - F	3 1/2"x14" - F	N/A	N/A	N/A
010	(2)3/4"x9" - H	3 1/2"x9" - H	(2)3/4"x9" - H	(2)2x10 + (1) 1/2"x11 1/2" STEEL FLITCH PLATE - H	N/A
011	(2)3/4"x9" - H	3 1/2"x9" - H	(2)3/4"x9" - H	(2)2x10 + (1) 1/2"x11 1/2" STEEL FLITCH PLATE - H	N/A
012	(2)3/4"x14" - H	3 1/2"x14" - H	N/A	N/A	N/A
013	(3)3/4"x9" - H	3 1/2"x9" - H	N/A	N/A	N/A
014	(3)3/4"x16" - FB	5 1/4"x16" - FB	N/A	N/A	N/A
015	(2)3/4"x14" - F	3 1/2"x14" - F	(2)3/4"x14" - F	N/A	N/A
016	(3)3/4"x18" - FT	5 1/4"x18" - FT	N/A	N/A	N/A
017	(2)3/4"x14" - F	3 1/2"x14" - F	(2)3/4"x14" - F	N/A	N/A
018	(3)3/4"x11 1/2" - D	5 1/4"x11 1/2" - D	(3)3/4"x11 1/2" - D	N/A	N/A
019	(4)3/4"x14" - F	7"x14" - F	N/A	N/A	N/A
020	(2)3/4"x14" - F	3 1/2"x14" - F	(2)3/4"x14" - F	N/A	N/A



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p 215-248-5051 • mulhern@mkp.com
NC LIC. #C-3825

project number:
1 26-2306 1

ct mgr: JTR
n by: JAD
date: 06-12-25

initial:

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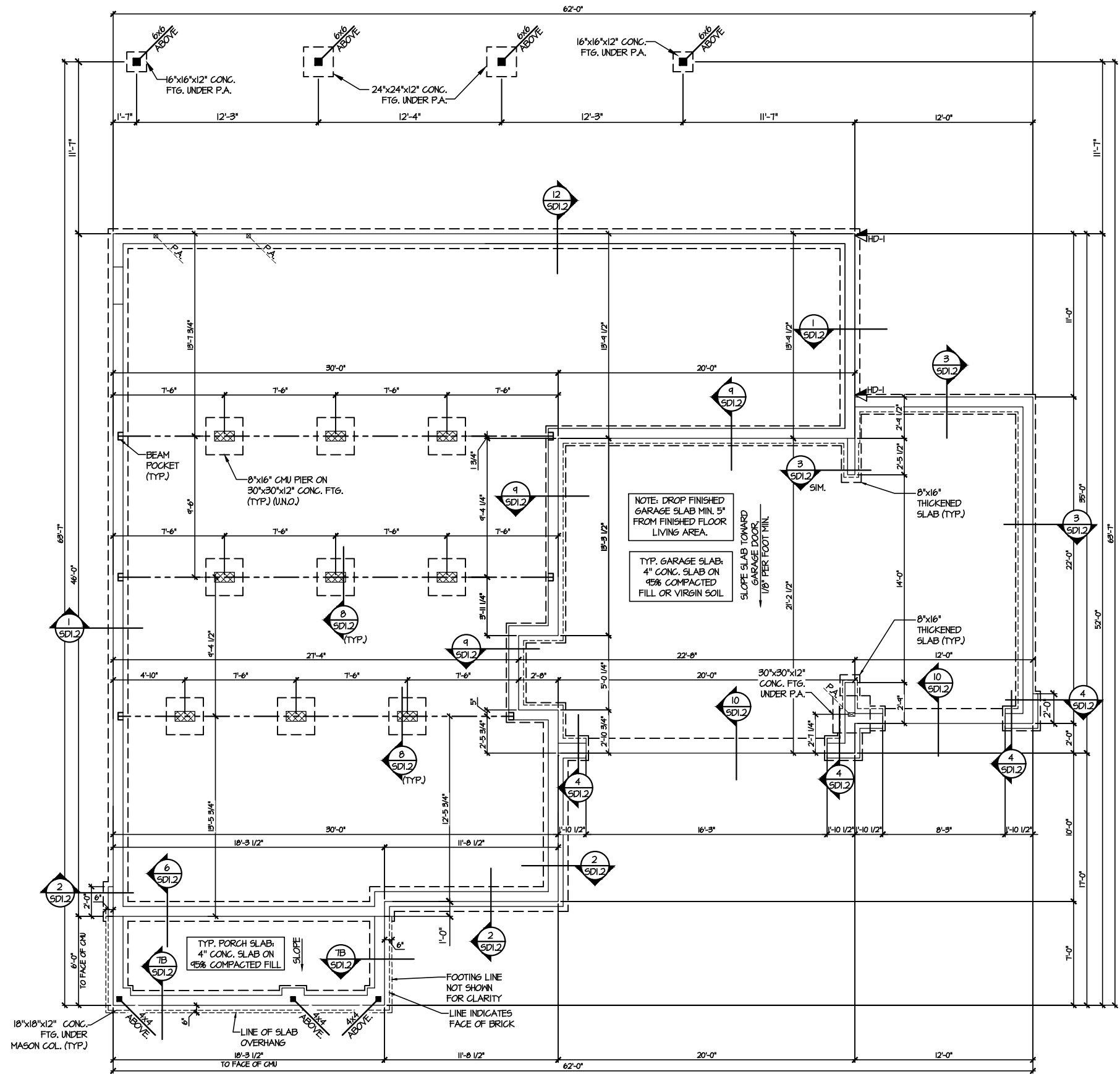
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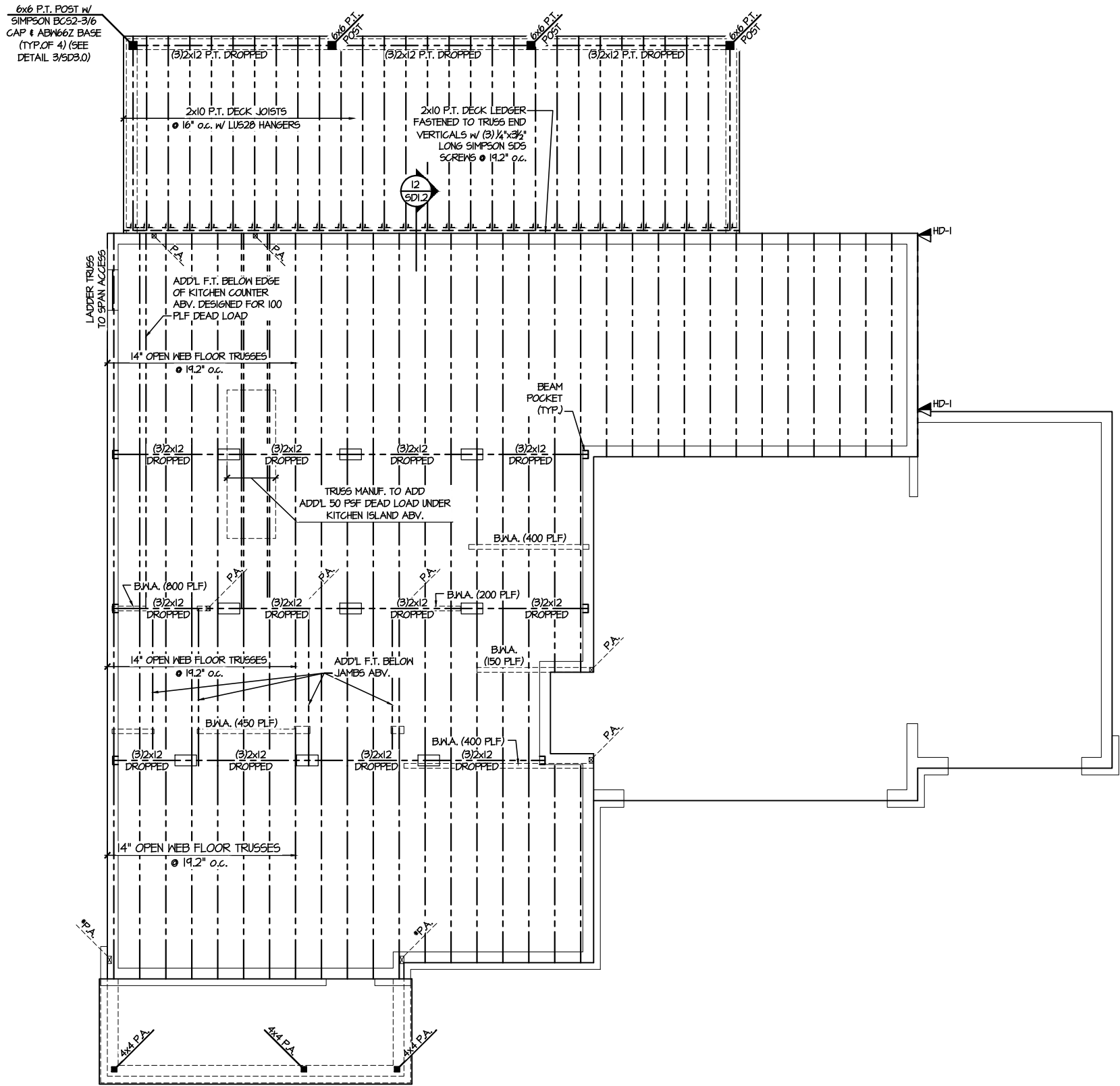
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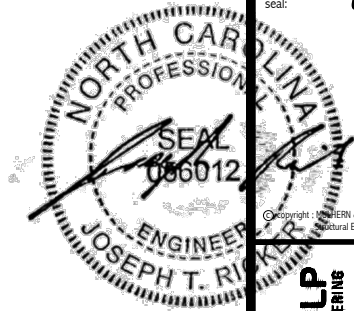
CRAWL SPACE FOUNDATION PLAN
SCALE: 1/8"=1'-0"

REFER TO SO.0 FOR
TYPICAL STRUCTURAL NOTES
& SCHEDULES

S1.0



1 1ST FLOOR FRAMING PLAN
SCALE: 1/8"=1'-0"



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M&K project number:
126-23061

project mgr: JTR
drawn by: JAD
issue date: 06-12-25

REVISIONS:	
date:	initial:



FLOOR FRAMING PLANS
BLAKE POND COMMUNITY
LOT 117 - TOWNSEND 5
RALEIGH, NC

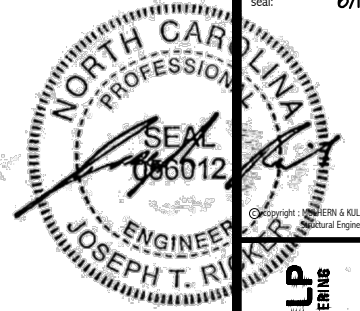
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SEE 50.0 FOR BEAM SCHEDULE

LEGEND

- INTERIOR BEARING WALL
- BEARING WALL ABOVE
- BEAM / HEADER
- INDICATES SHEAR WALL & EXTENT
- EXTENT OF OVERFRAMING
- J.L. METAL HANGER
- * INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
- INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE.

REFER TO 50.0 FOR
TYPICAL STRUCTURAL NOTES
& SCHEDULES



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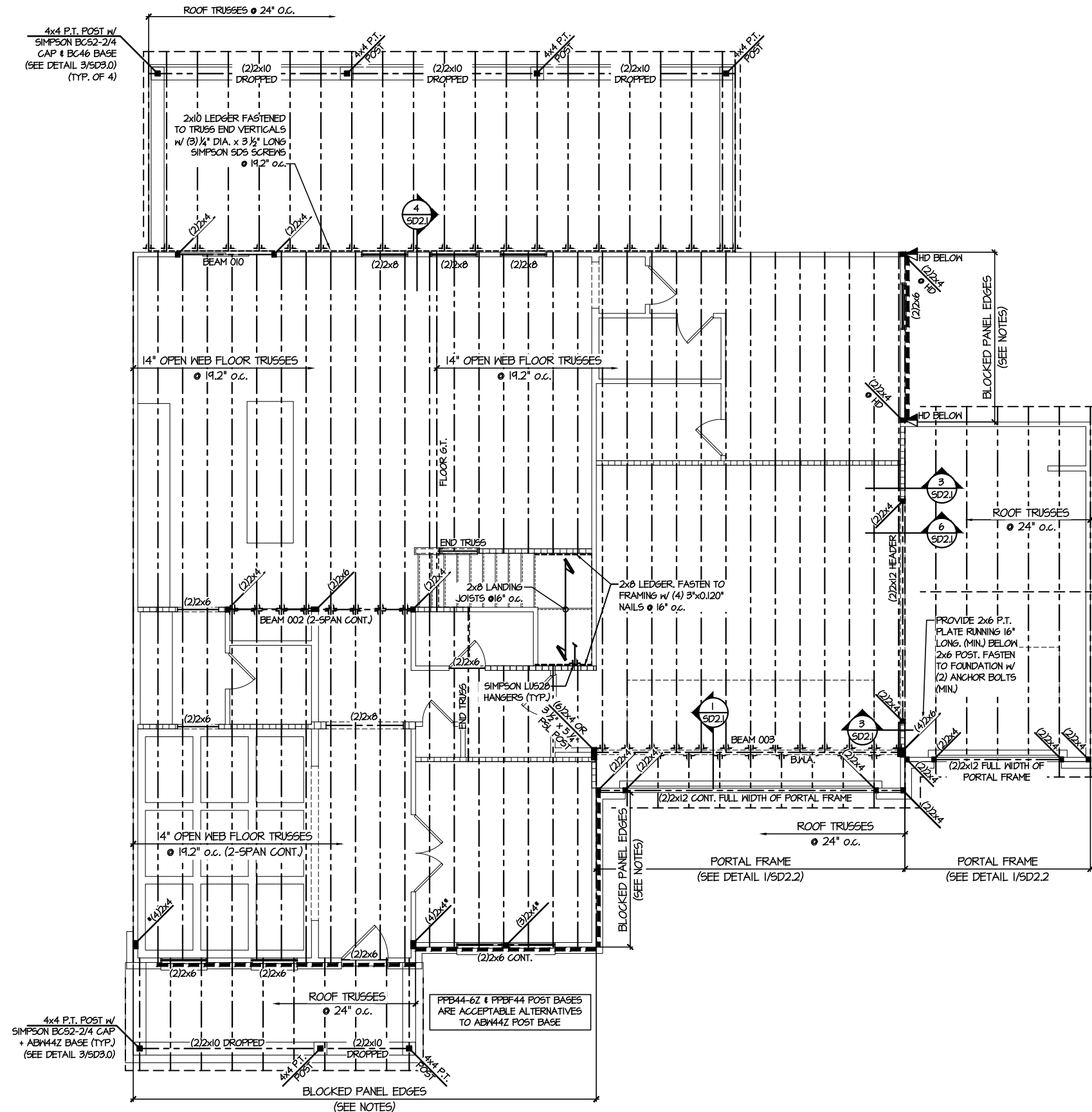
ct mgr: JTR
n by: JAD
date: 06-12-25

initial:



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RALEIGH, NC

S3.0










2ND FLOOR FRAMING PLAN
SCALE: 1/8"=1'-0"

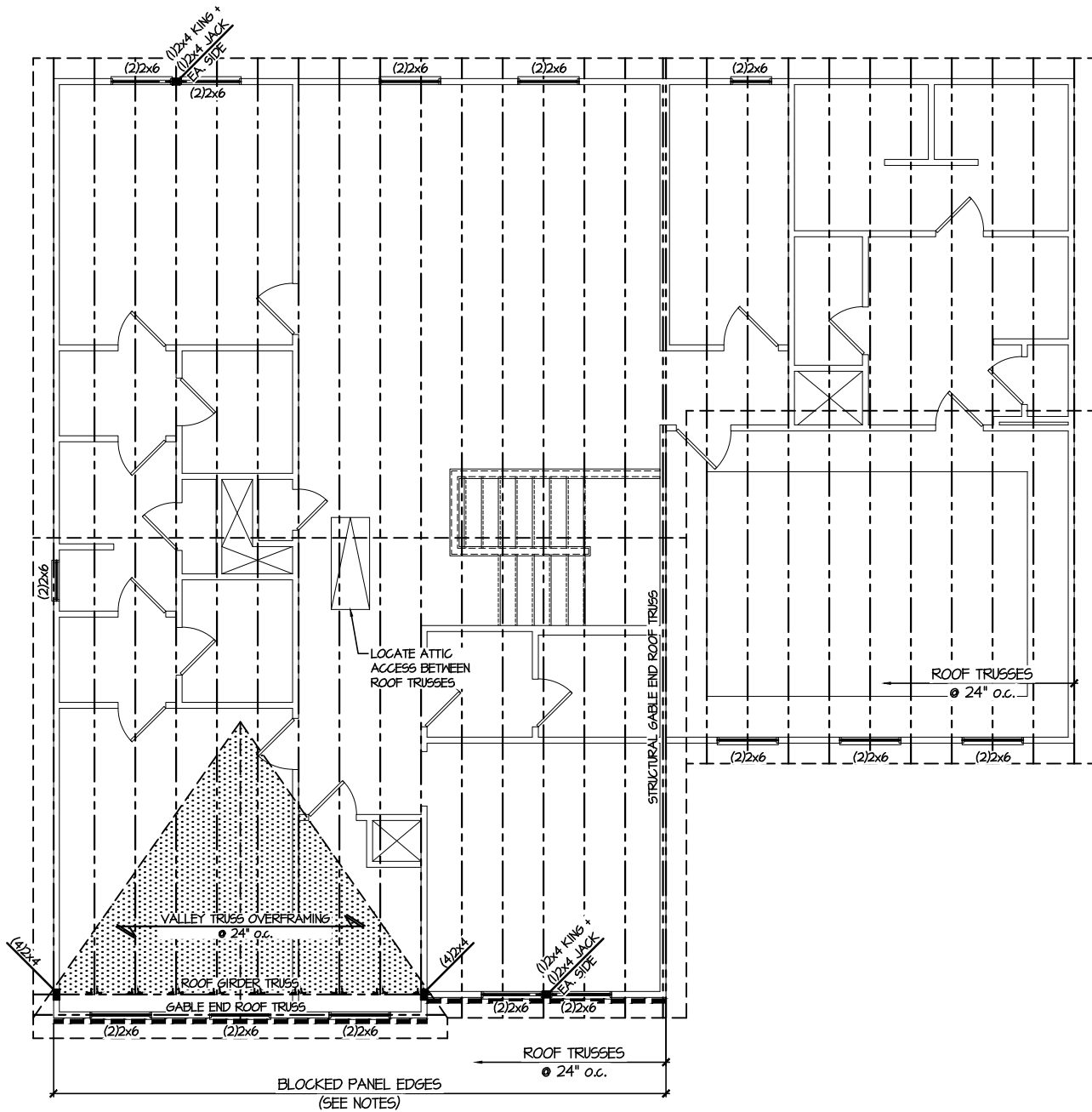
SEE 50.0 FOR BEAM SCHEDULE

SD2.I REFERS TO SD2.IA FOR
LVL/PSL/LSL BEAMS OR SD2.IB
FOR FLITCH BEAMS OR SD2.IC
FOR STEEL BEAMS

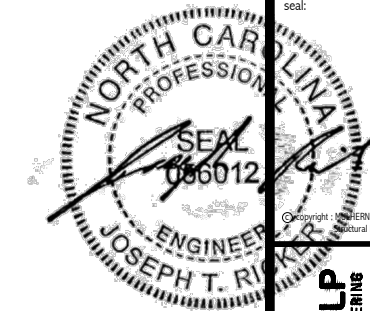
LEGEND

-  INTERIOR BEARING WALL
 -  BEARING WALL ABOVE
 -  BEAM / HEADER
 -  INDICATES SHEAR WALL & EXTENT
 -  EXTENT OF OVERFRAMING
- JL METAL HANGER
-  INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
-  INDICATES HOLD-DOWN OR STRAP.
REFER TO SCHEDULE.

REFER TO 50.0 FOR
TYPICAL STRUCTURAL NOTES
& SCHEDULES



1 ROOF FRAMING PLAN
SCALE: 1/8"=1'-0"



M&K project number:
126-23061
project mgr: JTR
drawn by: JAD
issue date: 06-12-25

REVISIONS:
date: initial:



ROOF FRAMING PLANS
BLAKE POND COMMUNITY
LOT 117 - TOWNSEND 5
RALEIGH, NC

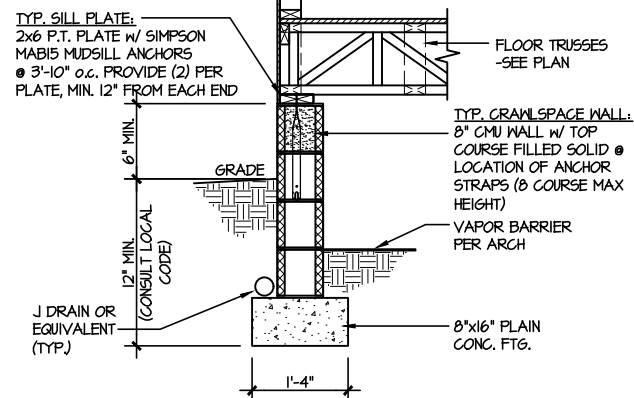
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LEGEND

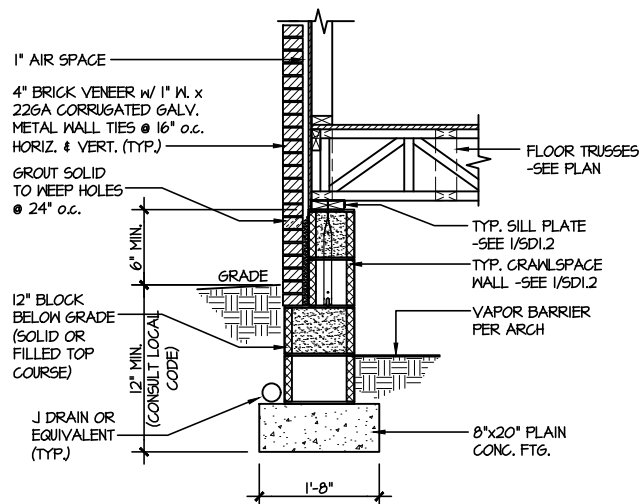
- INTERIOR BEARING WALL
- BEARING WALL ABOVE
- BEAM / HEADER
- INDICATES SHEAR WALL & EXTENT
- EXTENT OF OVERFRAMING
- 1L METAL HANGER
- INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
- ▶ INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE.

**REFER TO 50.0 FOR
TYPICAL STRUCTURAL NOTES
& SCHEDULES**

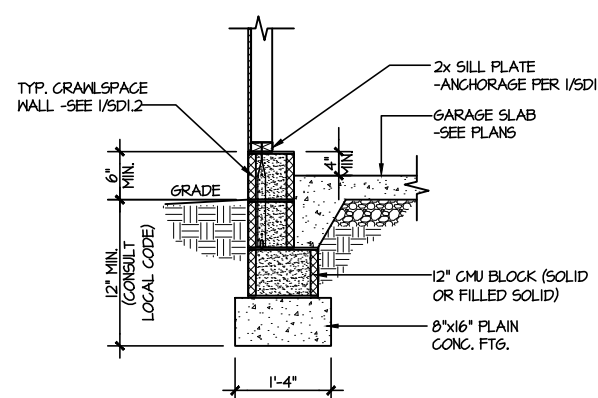
ALT. TO MUDSILL ANCHORS:
1/2" DIA. x 10" LONG A.B. @ 6'-0" o.c.



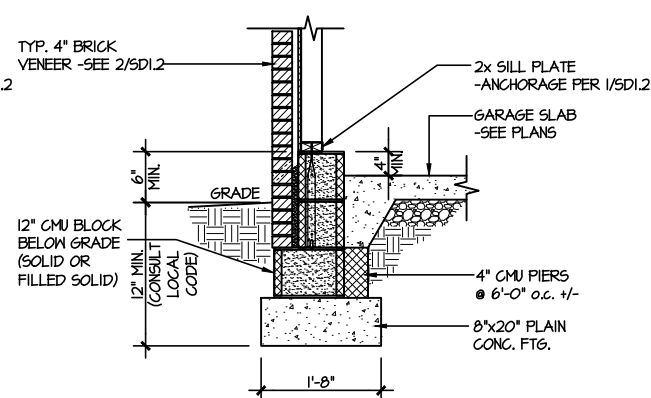
1 TYPICAL CRAWLSPACE FOUNDATION
SCALE: 3/8"=1'-0"



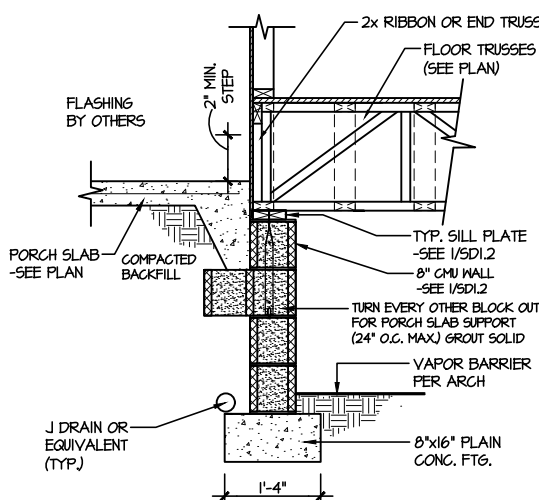
2 TYPICAL CRAWLSPACE FOUNDATION
SCALE: 3/8"=1'-0" w/ BRICK VENEER



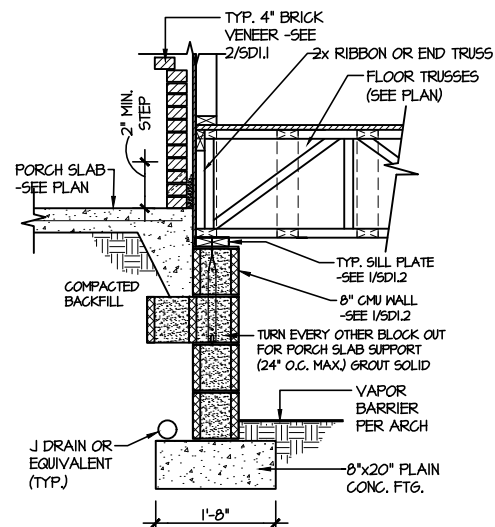
3 TYPICAL GARAGE FOUNDATION
SCALE: 3/8"=1'-0"



4 TYPICAL GARAGE FOUNDATION
SCALE: 3/8"=1'-0" w/ BRICK VENEER

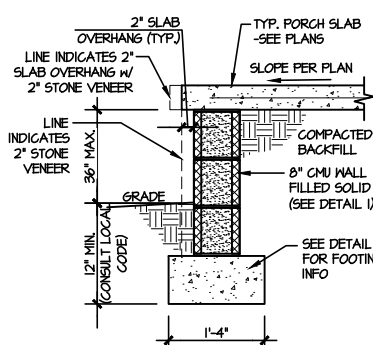


5 TYPICAL CRAWLSPACE FOUNDATION @ PORCH/PATIO SLAB
SCALE: 3/8"=1'-0"
(REFER TO DETAIL 12 FOR WOOD PORCH OPTION)

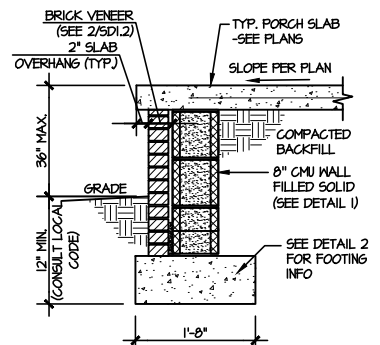


6 TYPICAL CRAWLSPACE FOUNDATION @ PORCH/PATIO SLAB
SCALE: 3/8"=1'-0" w/ BRICK VENEER

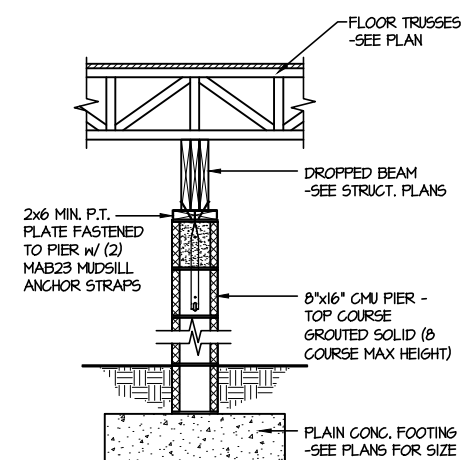
PLAIN CONC. FOOTINGS AS DIMENSIONED & SHOWN ARE MINIMUM SIZES REQUIRED & HAVE BEEN ENGINEERED. ADDITION OF CONTINUOUS REBAR OR LARGER FOOTINGS MAY BE PROVIDED AT THE DISCRETION OF THE BUILDER.



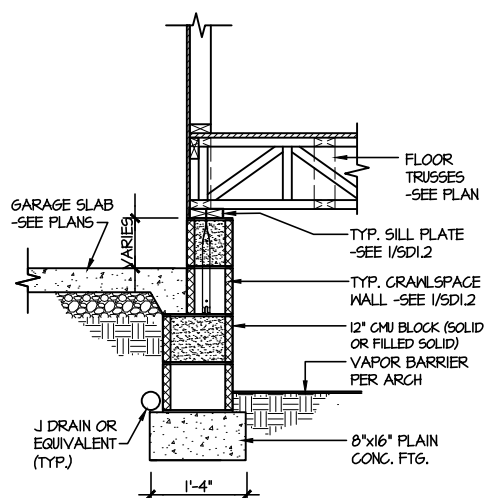
7A TYP. FOOTING @ PORCH SLAB
SCALE: 3/8"=1'-0"



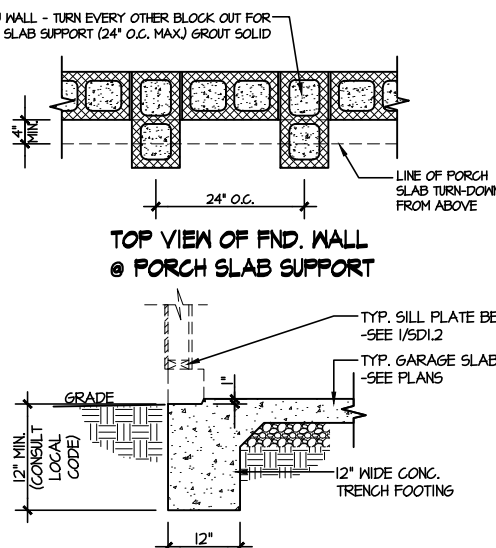
7B TYP. FOOTING @ PORCH SLAB
SCALE: 3/8"=1'-0" w/ BRICK VENEER



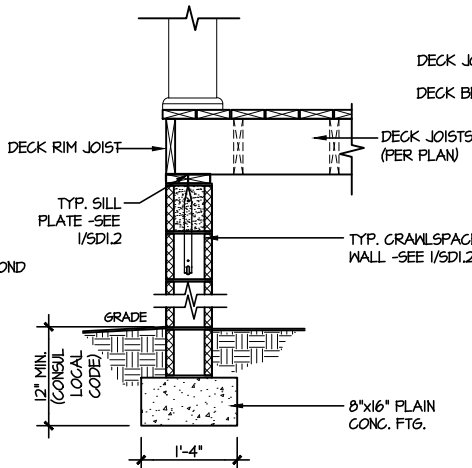
8 TYPICAL CRAWLSPACE FND. @ INTERIOR PIER
SCALE: 3/8"=1'-0"



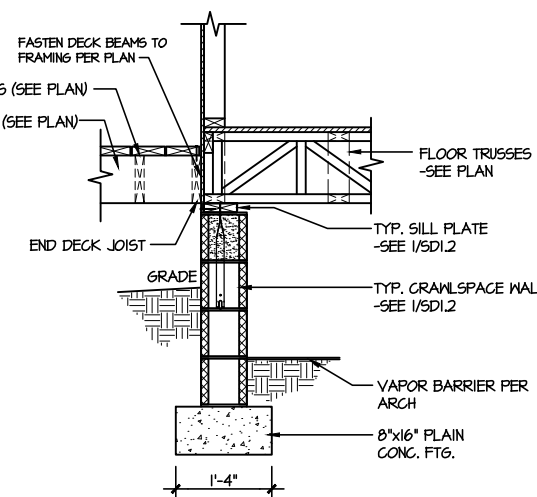
9 TYPICAL CRAWLSPACE FOUNDATION @ GARAGE
SCALE: 3/8"=1'-0"



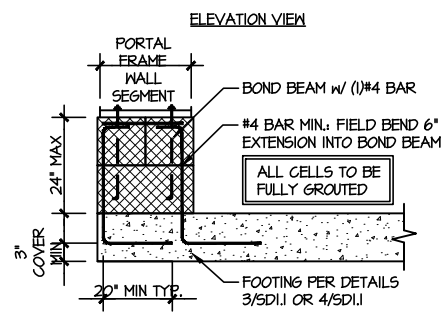
10 TYPICAL SLAB ON GRADE GARAGE ENTRY @ PERIMETER FOOTING
SCALE: 3/8"=1'-0"



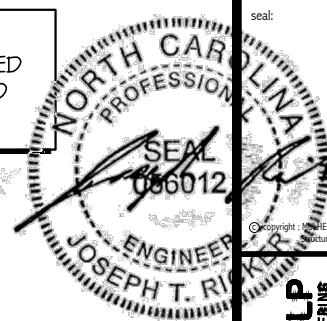
11 TYPICAL CRAWLSPACE FOUNDATION @ WOOD PORCH/DECK PERIMETER
SCALE: 3/8"=1'-0"



12 TYPICAL CRAWLSPACE FOUNDATION @ WOOD PORCH/DECK
SCALE: 3/8"=1'-0"



A GARAGE PORTAL FRAME STEM WALL REINFORCEMENT
SCALE: 3/8"=1'-0"



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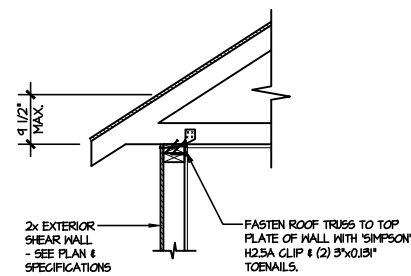
M&K project number:
126-23061
project mgr: JTR
drawn by: JAD
issue date: 06-12-25

REVISIONS:
date: initial:

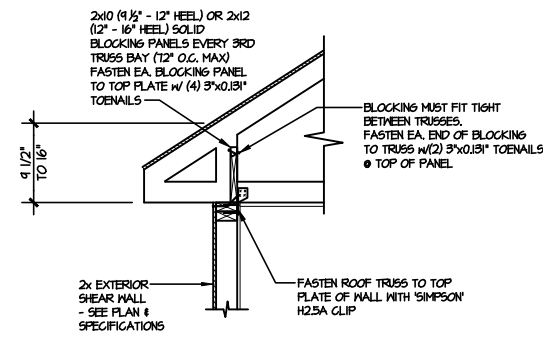
DRB HOMES

FOUNDATION DETAILS
BLAKE POND COMMUNITY
LOT 117 - TOWNSEND 5
RALEIGH, NC

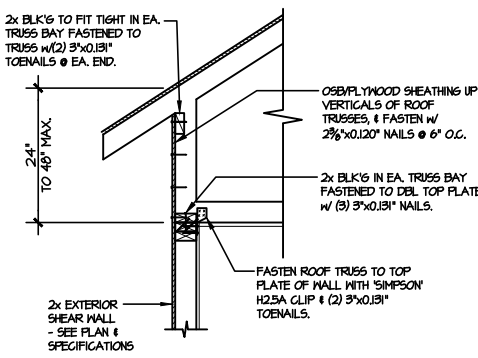
sheet:
SD1.2



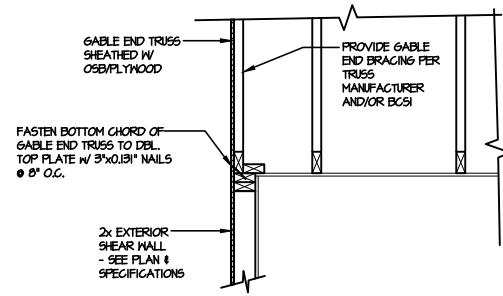
**TYPICAL SHEAR
TRANSFER DETAIL @ ROOF**
SCALE: 3/8"=1'-0"
HEEL HEIGHT LESS THAN 1 1/2"
NO BLOCKING REQ'D



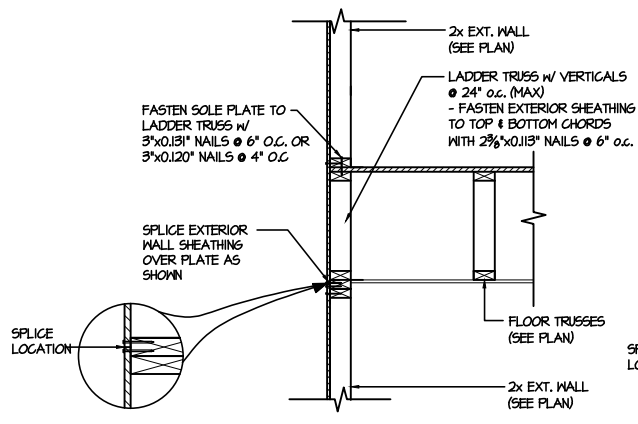
**TYPICAL SHEAR
TRANSFER DETAIL @ ROOF**
SCALE: 3/8"=1'-0"
HEEL HEIGHT BETWEEN 1 1/2" - 16"
BLOCKING REQ'D



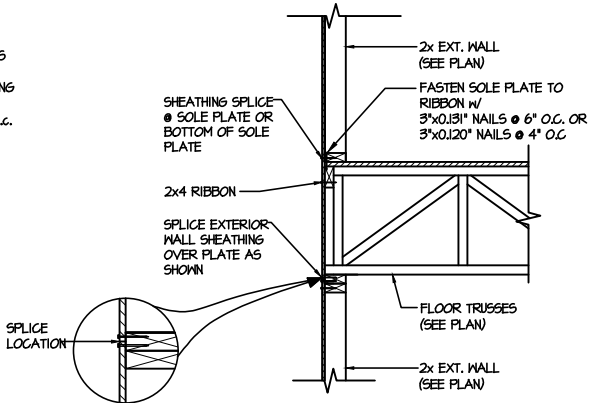
**TYPICAL SHEAR TRANSFER
DETAIL @ RAISED HEEL TRUSS**
SCALE: 3/8"=1'-0"
HEEL HEIGHT UP TO 48" MAX.



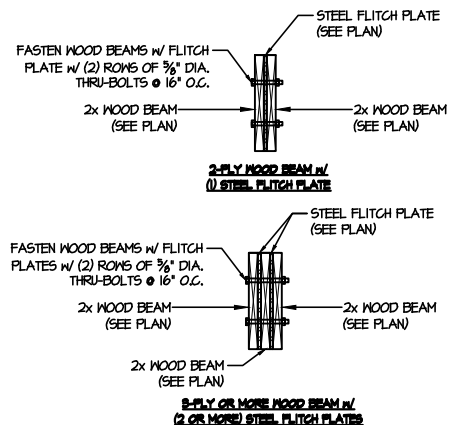
TYPICAL GABLE END DETAIL
SCALE: 3/8"=1'-0"



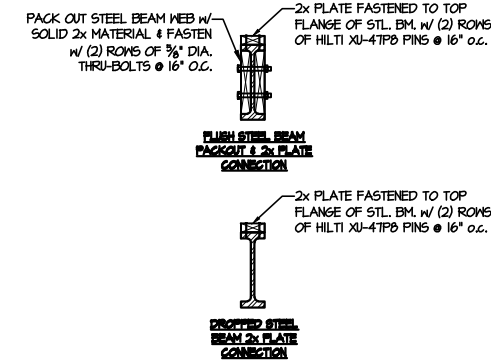
**TYPICAL SHEAR TRANSFER DETAIL
BETWEEN FLOORS @ EXTERIOR WALL**
SCALE: 3/8"=1'-0"
PARALLEL FRMS



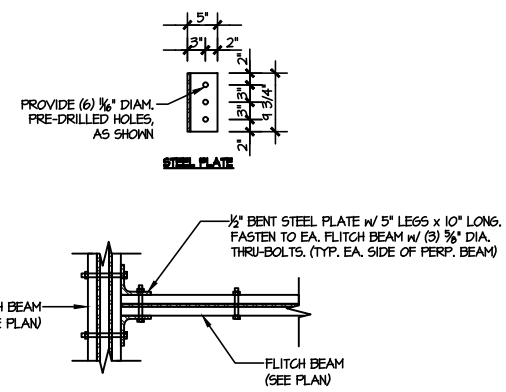
**TYPICAL SHEAR TRANSFER DETAIL
BETWEEN FLOORS @ EXTERIOR WALL**
SCALE: 3/8"=1'-0"
PERPENDICULAR FRMS



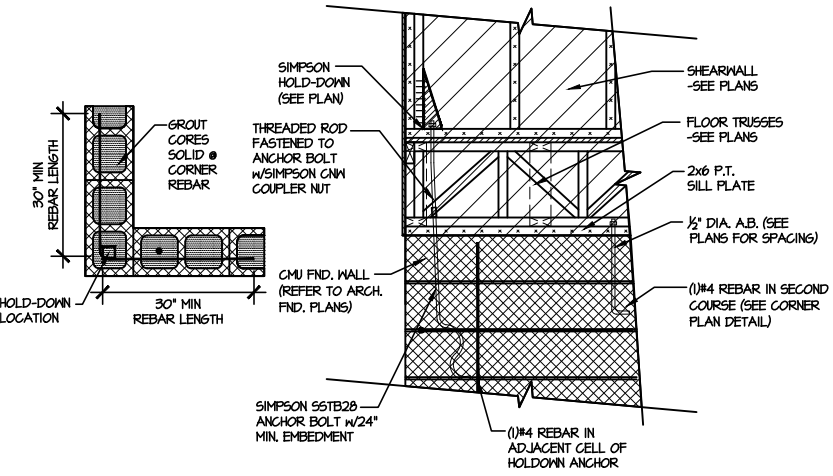
TYPICAL FLITCH BEAM CONNECTION DETAIL
SCALE: 3/4"=1'-0"



TYPICAL STEEL BEAM CONNECTION DETAIL
SCALE: 3/4"=1'-0"



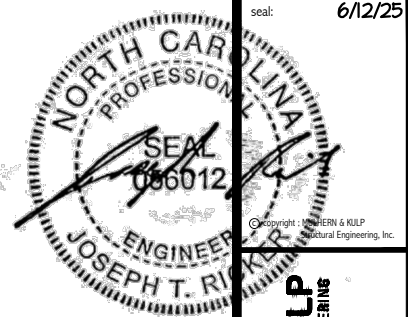
**TYPICAL FLITCH BEAM TO FLITCH BEAM
CONNECTION DETAIL**
SCALE: 3/4"=1'-0"



**TYPICAL CORNER FOUNDATION
HOLD-DOWN INSTALLATION**
SCALE: N.T.S.

LETTERED DETAILS ARE TYPICAL FOR THIS HOME & SHALL BE IMPLEMENTED IN ALL APPLICABLE AREAS. THESE DETAILS ARE NOT "CUT" ON THE PLANS.

NUMBERED DETAILS ARE PLAN SPECIFIC AND ARE ONLY REQUIRED WHERE SPECIFICALLY INDICATED ("CUT") ON THE PLANS.



M&K project number:
126-23061

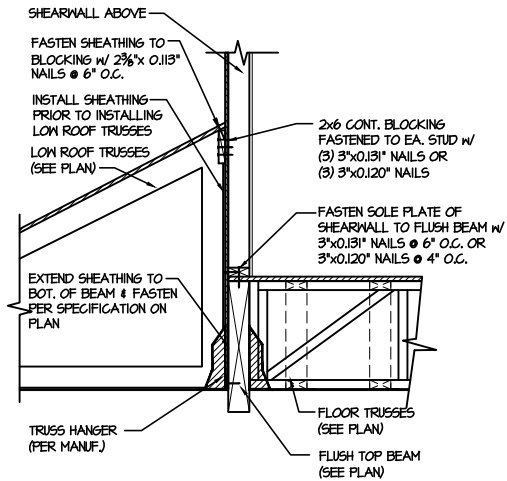
project mgr: JTR
drawn by: JAD
issue date: 06-12-25

REVISIONS:
date: initial:

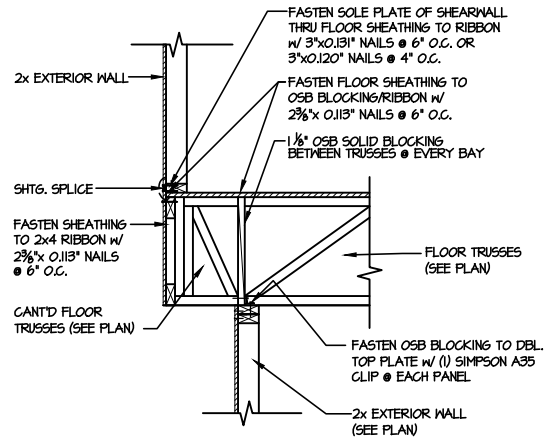


FRAMING DETAILS
BLAKE POND COMMUNITY
LOT 117 - TOWNSEND 5
RALEIGH, NC

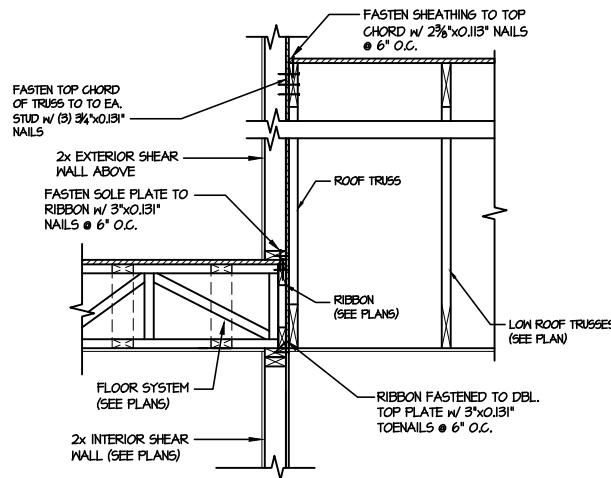
sheet:
SD2.0



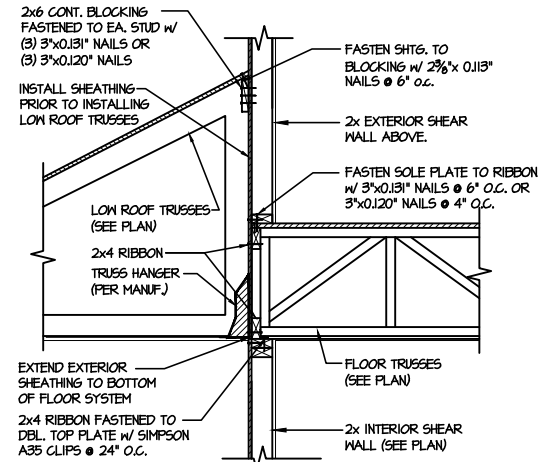
1 SHEAR TRANSFER DETAIL @
EXTERIOR SHEARWALL ABOVE
SCALE: 3/4"=1'-0"



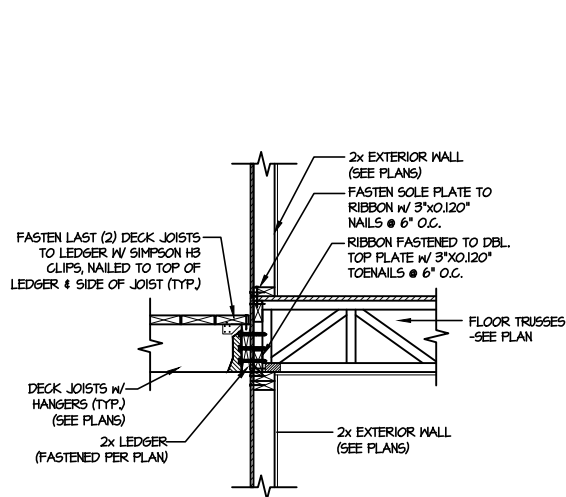
2 SHEAR TRANSFER DETAIL BETWEEN FLOORS @ CANT'D EXT. WALL
SCALE: 3/4"=1'-0"



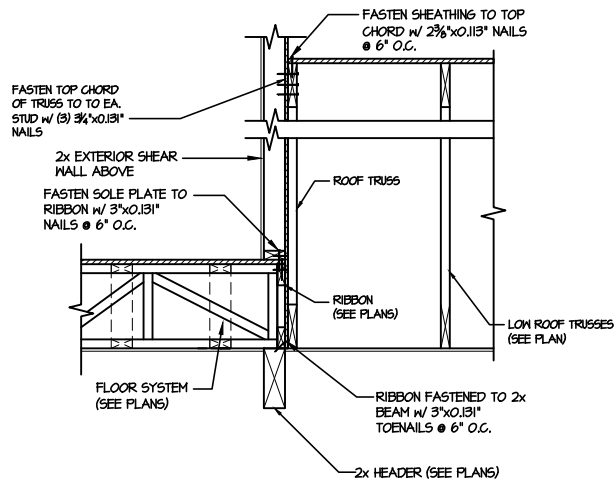
3 TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ INTERIOR WALL
SCALE: 3/4"=1'-0"



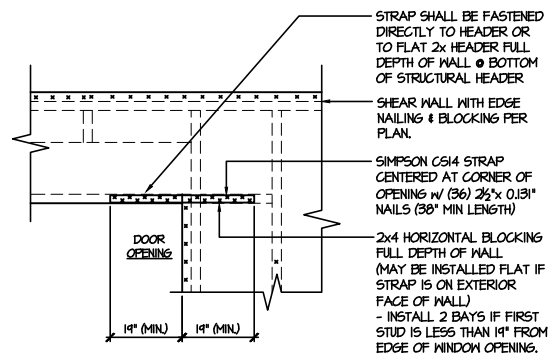
4 TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ INTERIOR WALL
SCALE: 3/4"=1'-0" PERPENDICULAR FRAMING



5 DECK LEDGER CONNECTION DETAIL
SCALE: 3/4"=1'-0"

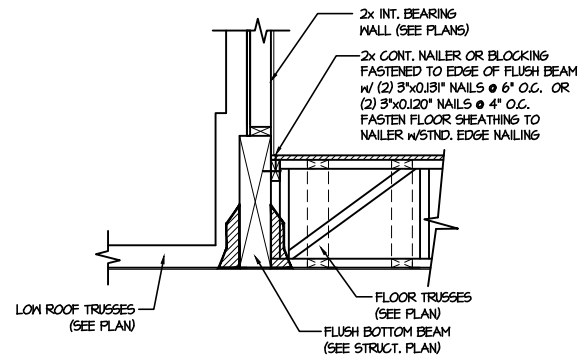


6 TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ INTERIOR WALL
SCALE: 3/4"=1'-0"

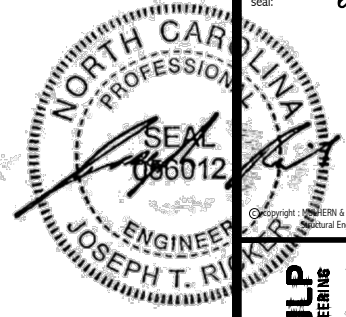


- STRAPS MAY BE INSTALLED ON EXTERIOR OR INTERIOR FACE OF WALL
- WHEN INSTALLED ON THE EXTERIOR FACE OF THE WALL, STRAPS TO BE INSTALLED ON EXTERIOR FACE OF SHTG. & MAY BE MOVED 1/2" FROM EDGE TO ALLOW FOR DOOR NAILING
- REQUIRED ONLY @ OPENINGS WHERE SPECIFIED ON PLAN

7 TYPICAL EXT. WALL & INT. SHEARWALL OPENING ELEVATION
SCALE: NTS



8 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 3/4"=1'-0"



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M&K project number:
126-23061

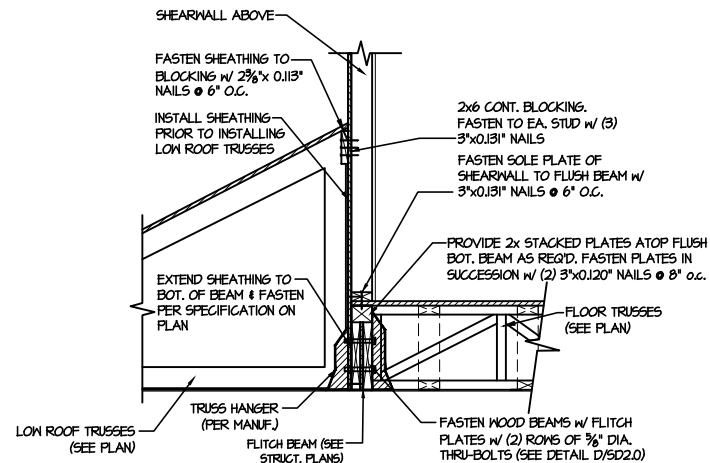
project mgr: JTR
drawn by: JAD
issue date: 06-12-25

REVISIONS:
date: initial:

DRB
HOMES

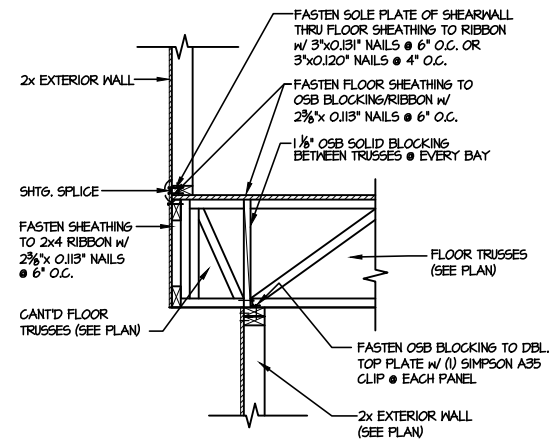
FRAMING DETAILS
BLAKE POND COMMUNITY
LOT 117- TOWNSEND 5
RALEIGH, NC

sheet:
SD2.1A



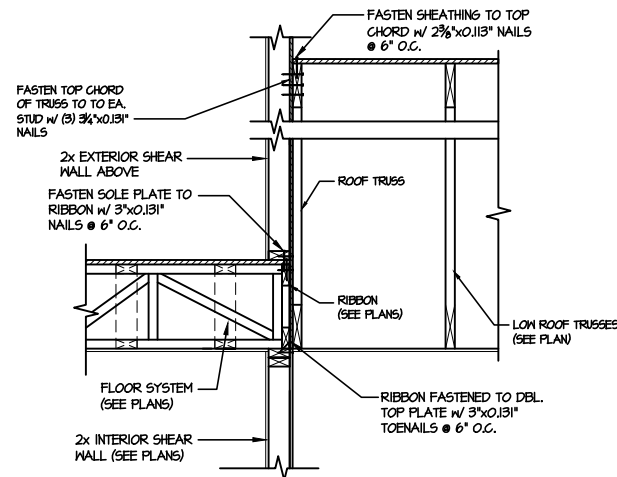
**SHEAR TRANSFER DETAIL @
EXTERIOR SHEARWALL ABOVE**

SCALE: 3/4"=1'-0"



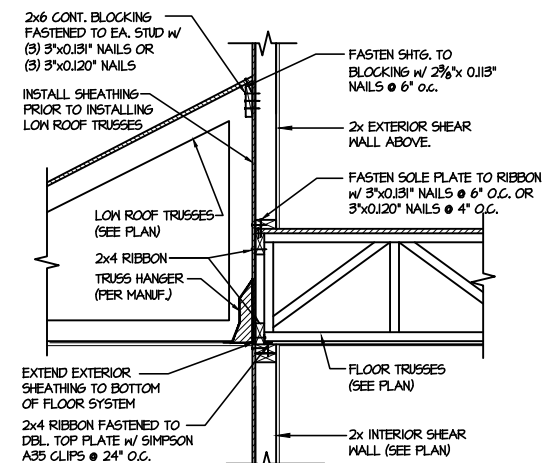
**SHEAR TRANSFER DETAIL BETWEEN
FLOORS @ CANT'D EXT. WALL**

SCALE: 3/4"=1'-0"



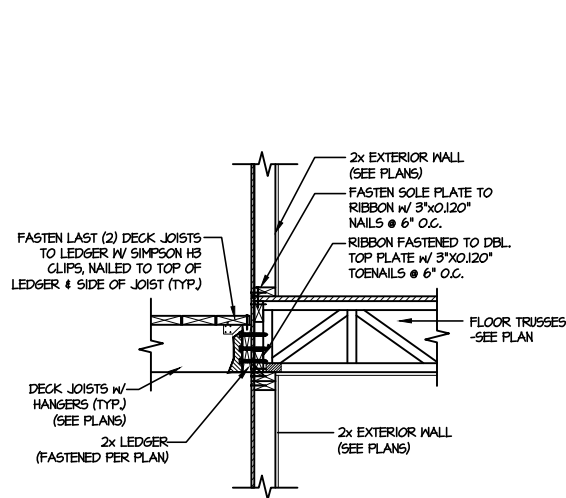
**TYPICAL SHEAR TRANSFER DETAIL
BETWEEN FLOORS @ INTERIOR WALL**

SCALE: 3/4"=1'-0"



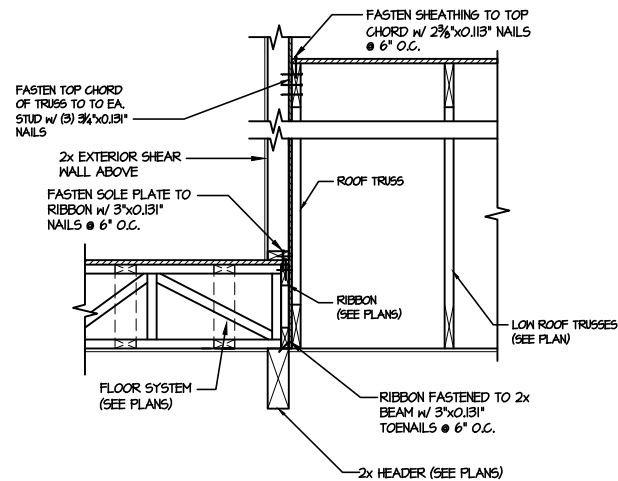
**TYPICAL SHEAR TRANSFER DETAIL
BETWEEN FLOORS @ INTERIOR WALL**

SCALE: 3/4"=1'-0"



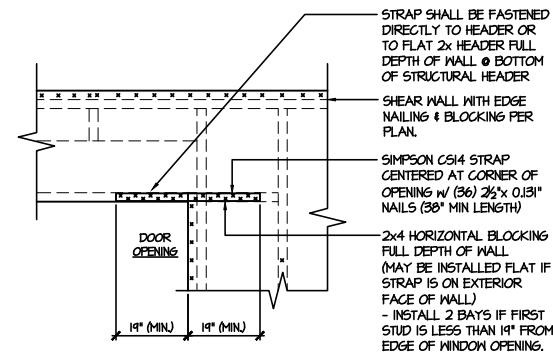
DECK LEDGER CONNECTION DETAIL

SCALE: 3/4"=1'-0"



**TYPICAL SHEAR TRANSFER DETAIL
BETWEEN FLOORS @ INTERIOR WALL**

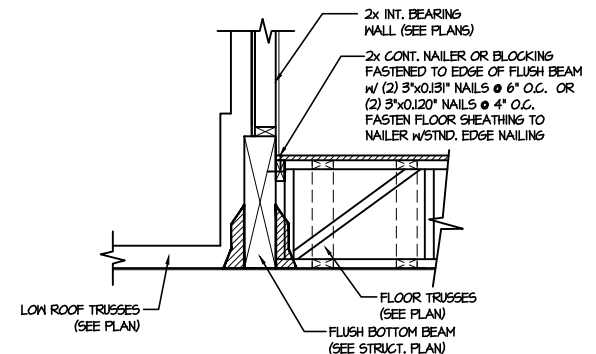
SCALE: 3/4"=1'-0"



- STRAPS MAY BE INSTALLED ON EXTERIOR OR INTERIOR FACE OF WALL.
- WHEN INSTALLED ON THE EXTERIOR FACE OF THE WALL, STRAPS TO BE INSTALLED ON EXTERIOR FACE OF SHTG. & MAY BE MOVED 1/2" FROM EDGE TO ALLOW FOR DOOR NAILING.
- REQUIRED ONLY @ OPENINGS WHERE SPECIFIED ON PLAN.

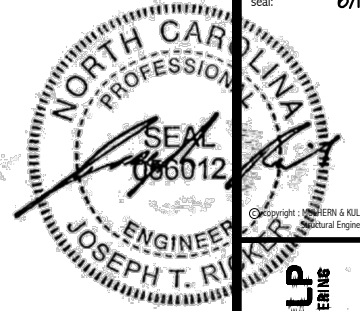
**TYPICAL EXT. WALL & INT.
SHEARWALL OPENING ELEVATION**

SCALE: NTS



**SHEAR TRANSFER DETAIL @
EXTERIOR SHEARWALL ABOVE**

SCALE: 3/4"=1'-0"



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M&K project number:

126-23061

project mgr:

JTR

drawn by:

JAD

issue date:

06-12-25

REVISIONS:

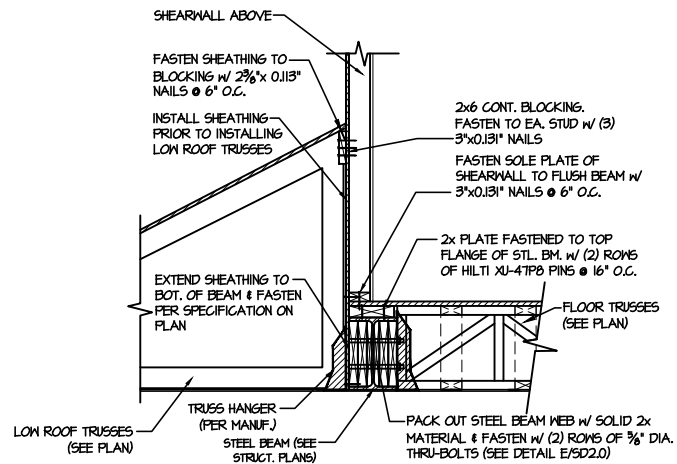
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DRB HOMES

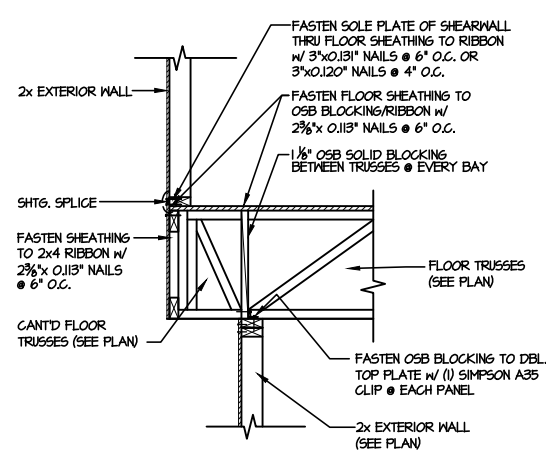
FRAMING DETAILS
BLAKE POND COMMUNITY
LOT 117 - TOWNSEND 5
RALEIGH, NC

sheet:

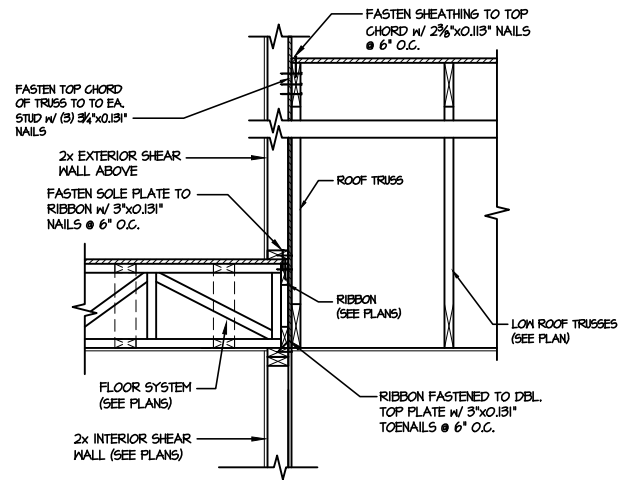
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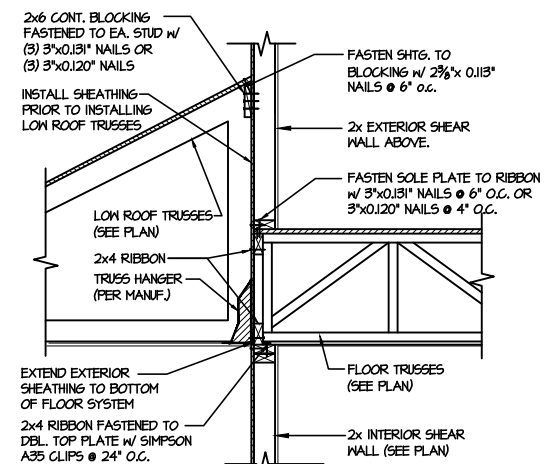
1 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 3/4"=1'-0"



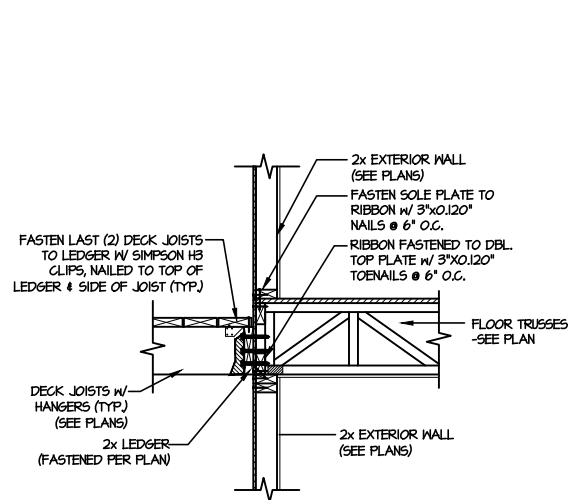
2 SHEAR TRANSFER DETAIL BETWEEN FLOORS @ CANT'D EXT. WALL



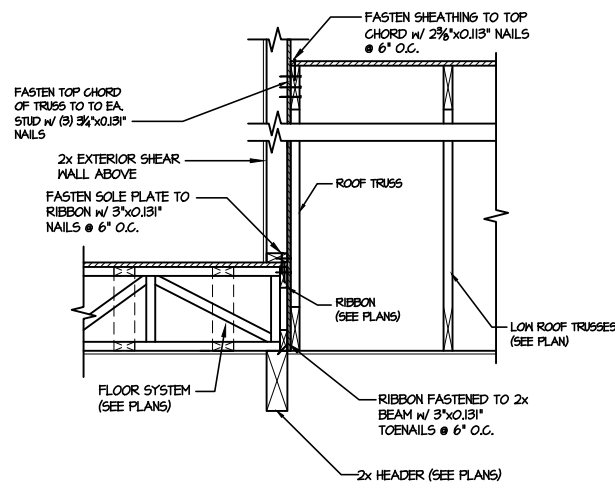
3 TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ INTERIOR WALL
SCALE: 3/4"=1'-0"



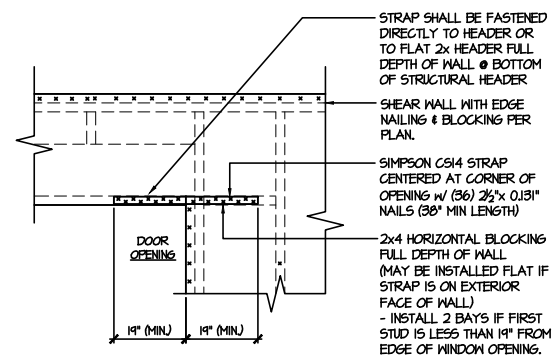
4 TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ INTERIOR WALL
SCALE: 3/4"=1'-0" PERPENDICULAR FRAMING



5 DECK LEDGER CONNECTION DETAIL
SCALE: 3/4"=1'-0"

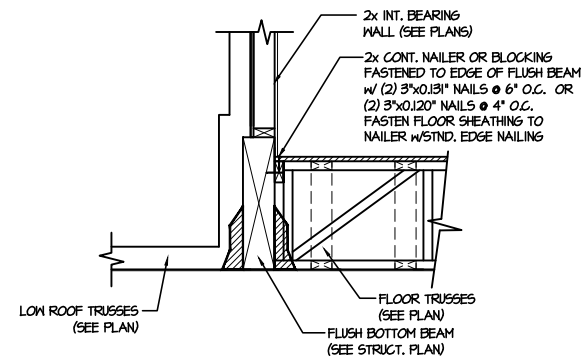


6 TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ INTERIOR WALL
SCALE: 3/4"=1'-0"

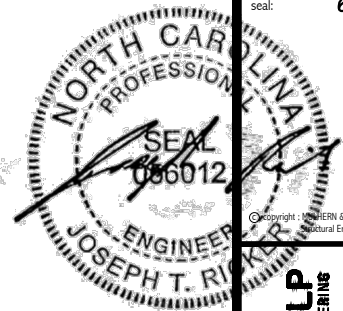


- STRAPS MAY BE INSTALLED ON EXTERIOR OR INTERIOR FACE OF WALL
- WHEN INSTALLED ON THE EXTERIOR FACE OF THE WALL, STRAPS TO BE INSTALLED ON EXTERIOR FACE OF SHEATHING. & MAY BE MOVED 1/2" FROM EDGE TO ALLOW FOR DOOR NAILING
- REQUIRED ONLY @ OPENINGS WHERE SPECIFIED ON PLAN

7 TYPICAL EXT. WALL & INT. SHEARWALL OPENING ELEVATION
SCALE: NTS



8 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 3/4"=1'-0"



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727-246-0000 • mulhern+kulp.com
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M&K project number:
126-23061

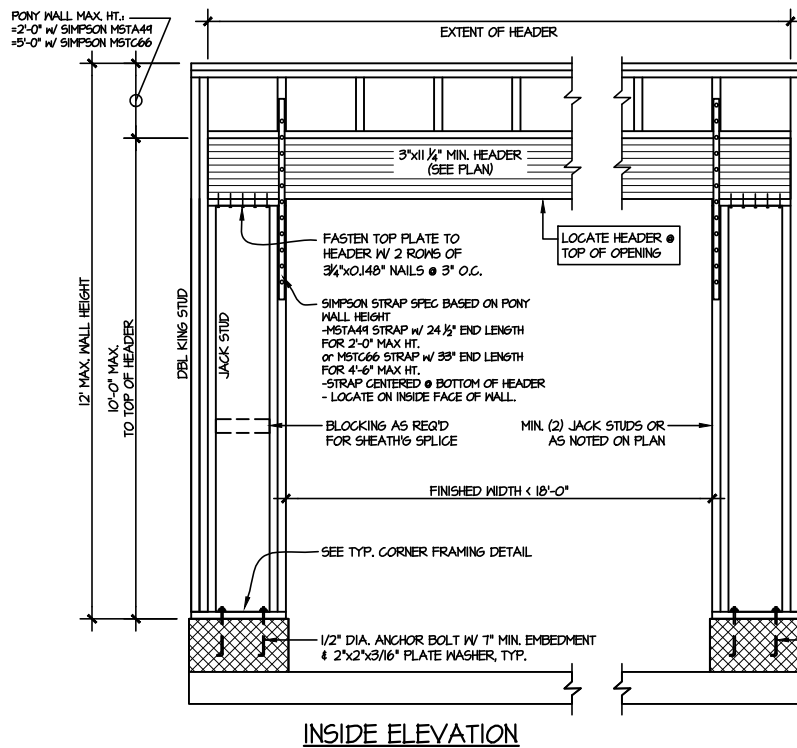
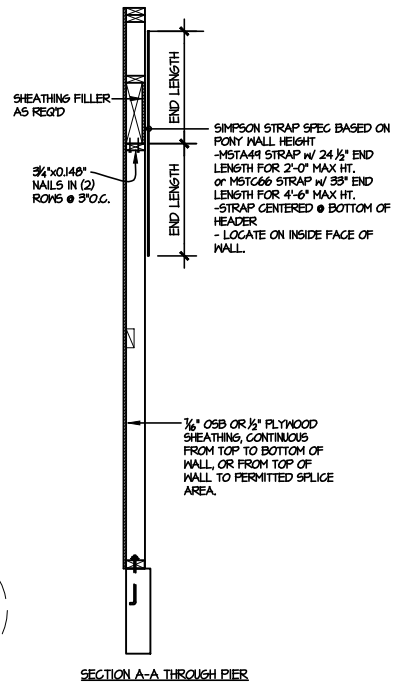
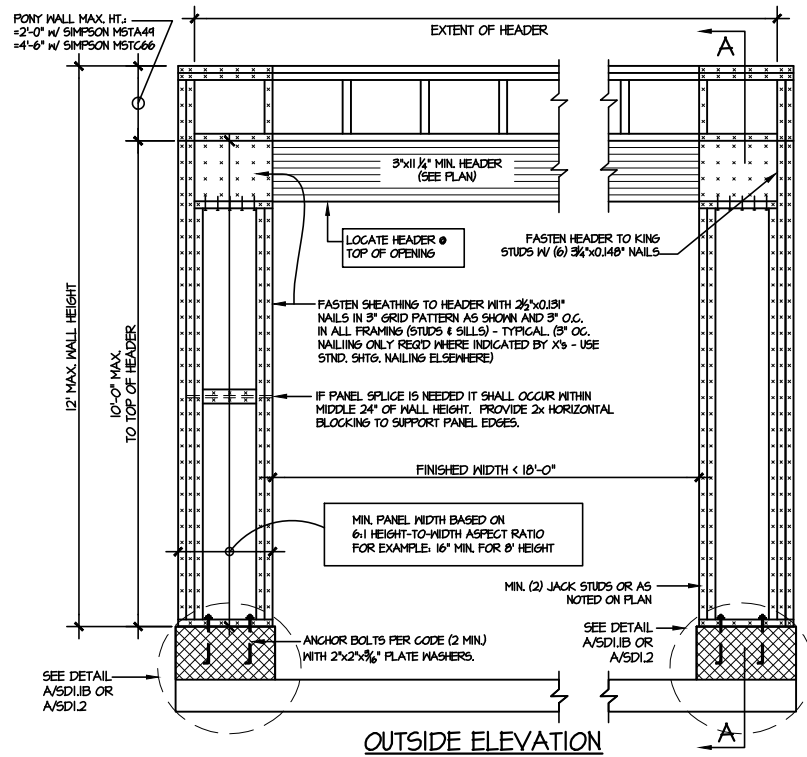
project mgr: JTR
drawn by: JAD
issue date: 06-12-25

REVISIONS:
date: initial:

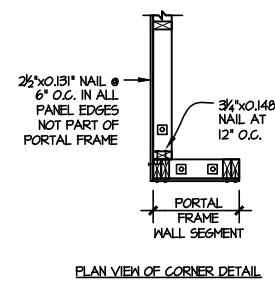
DRB HOMES

FRAMING DETAILS
BLAKE POND COMMUNITY
LOT 117 - TOWNSEND 5
RALEIGH, NC

sheet:
SD2.1C

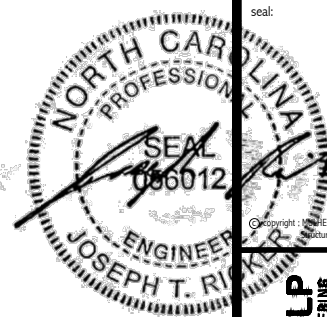


NOTE: ALL SHEATHABLE AREAS OF EXTERIOR WALL SHALL BE FULLY SHEATHED WITH 1/2" PLYWOOD OR 1/4" OSB



ALTERNATIVE TO 1/2" DIA. ANCHOR BOLT:
1) 1/2" DIA. THREADED ROD EPOXY SET w/ 4 1/2" EMBED. (MIN UTILIZING HILTI HY200 EPOXY ANCHORING SYSTEM (OR EQUAL))

TWO SIDED GARAGE PORTAL FRAME BRACING
ELEVATION ON CMU STEM
SCALE: N.T.S.



6/12/25

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3800 Bechtel Ave. Suite 400 - Asheville, NC 28802
P: 728-686-8881 • m+k@mulhernkulp.com



M&K project number:
126-23061

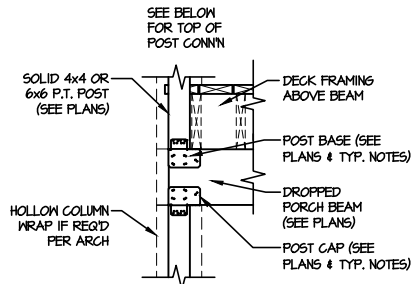
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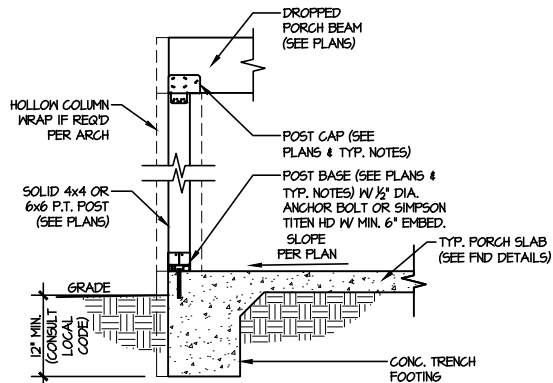
DRB
HOMES

FRAMING DETAILS
BLAKE POND COMMUNITY
LOT 117 - TOWNSEND 5
RALEIGH, NC

sheet:
SD2.2



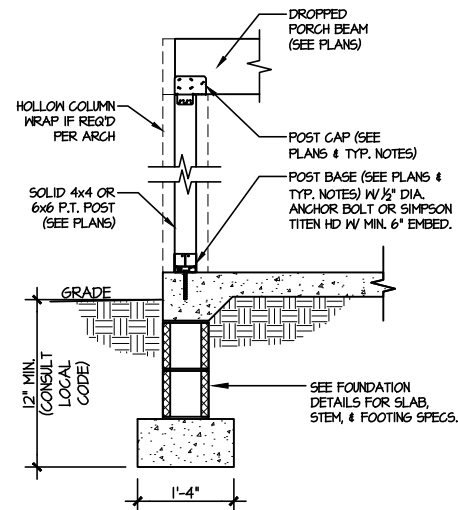
**TYPICAL CONNECTION
DETAIL @ 2nd FLOOR DECK**



**TYPICAL PORCH
POST CONNECTION DETAIL**

SCALE: NONE

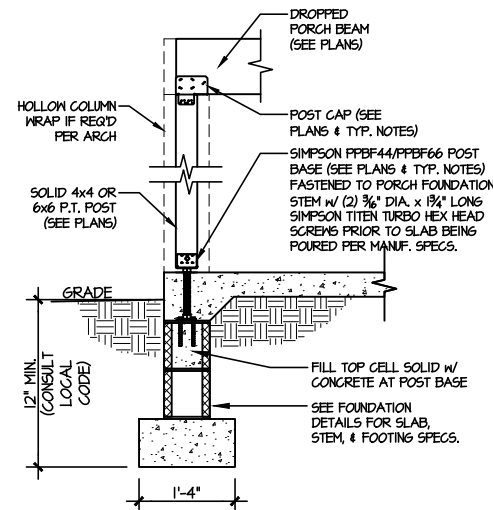
SLAB ON GRADE SHOWN
(RAISED SLAB SIM.)



**TYPICAL PORCH POST CONNECTION
DETAIL INSTALLED AFTER SLAB POUR**

SCALE: NONE

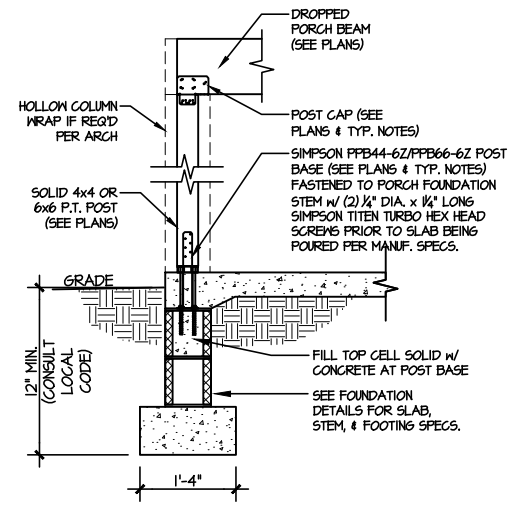
GRAVSPACE FOUNDATION



**TYPICAL PORCH POST CONNECTION
DETAIL INSTALLED PRIOR TO SLAB POUR**

SCALE: NONE

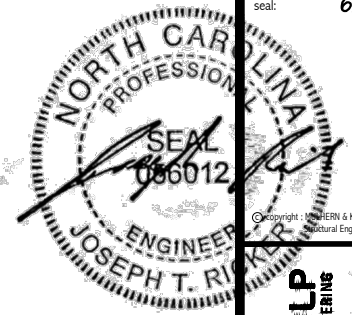
GRAVSPACE FOUNDATION



**TYPICAL PORCH POST CONNECTION
DETAIL INSTALLED PRIOR TO SLAB POUR**

SCALE: NONE

GRAVSPACE FOUNDATION



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P: 252-696-0883 • mulhern+kulp.com



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126-23061

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REVISIONS:
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DRB
HOMES

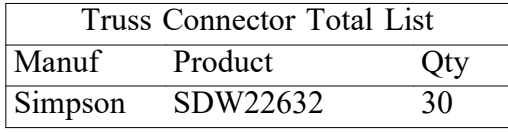
FRAMING DETAILS
BLAKE POND COMMUNITY
LOT 117 - TOWNSEND 5
RALEIGH, NC

sheet:
SD3.0


6/12/25

TPQ
Third-Party Quality Assurance Licensee
TPQ Plant W974

Structural, LLC
201 Poplar Avenue
Thurmont, MD 21788
Phone: 301-271-7591
Fax: 301-271-5441



MUTLI-PLY TRUSS PLY-TO-PLY
CONNECTION
EACH 1F2A: SDW22632 SCREWS IN
ALL TOP CHORD @ 24" OC

Job #:	2505-7940	WARNING: CONVENTIONAL FRAMING, ERECTION AND/OR PERMANENT BRACING IS NOT THE RESPONSIBILITY OF THE TRUSS DESIGNER, PLATE MANUFACTURER, OR THE TRUSS MANUFACTURER. PERSONS ERECTING TRUSSES ARE CAUTIONED TO SEEK PROFESSIONAL ADVICE REGARDING THE ERECTION BRACING WHICH IS ALWAYS REQUIRED TO PREVENT TOPPLING AND DOMINIONS DURING ERECTION; AND PERMANENT BRACING WHICH MAY BE REQUIRED IN SPECIFIC APPLICATIONS. SEE "BRACING WOOD TRUSSES COMMENTARY AND RECOMMENDATIONS" (BCSI 1) FOR FURTHER INFORMATION. TRUSSES SHALL BE INSTALLED IN A STRAIGHT AND PLUMB POSITION WHERE NO SHEATHING IS APPLIED DIRECTLY TO TOP AND/OR BOTTOM CHORDS, THEY SHALL BE BRACED AS SPECIFIED ON THE ENGINEERED DESIGN. TRUSSES SHALL BE HANDLED WITH REASONABLE CARE DURING ERECTION TO PREVENT DAMAGE OR PERSONAL INJURY.	NOTE: IT IS THE RESPONSIBILITY OF THE BUILDING DESIGNER OR ARCHITECT TO PROVIDE AN APPROPRIATE CONNECTION FOR TRUSSES TO SUPPORTING STRUCTURE PER REACTIONS SHOWN ON TRUSS ENGINEERING. SPECIAL CONSIDERATIONS FOR MECHANICAL EQUIPMENT AND/OR PLUMBING (AND THEIR CONNECTIONS) IN TRUSS SPACE MUST BE DIAGRAMMED BY BUILDER ON APPROVED TRUSS LAYOUT PRIOR TO FABRICATION. THIS COMPANY IS A TRUSS MANUFACTURER WHOSE RESPONSIBILITIES ARE LIMITED TO THOSE DESCRIBED IN WYCA 1-1995 "DESIGN RESPONSIBILITIES". ACCORDINGLY, IT DISCLAIMS ANY RESPONSIBILITIES AND/OR LIABILITY FOR THE CONSTRUCTION DESIGN, DRAWINGS, DOCUMENTS INCLUDING THE INSTALLATION, AND BRACING OF TRUSSES MANUFACTURED BY THIS COMPANY.	Customer: DRB RALEIGH	<div> Third-Party Quality Assurance Licensee TPI Plant W974</div> <div>Structural, LLC 201 Poplar Avenue Thurmont, MD 21788 Phone: 301-271-7591 Fax: 301-271-5441</div> <div></div>
Job Path:				Job Name: Blake Pond	
Designer:				Lot #: 117	
Abhijit Bera				Model Name: Townsend	
Sales Rep:	Robbie Zarobinski				

Third-Party Quality Assurance Licensee
TPI Plant W974

Structural, LLC
201 Poplar Avenue
Thurmont, MD 21788
Phone: 301-271-7591
Fax: 301-271-5441

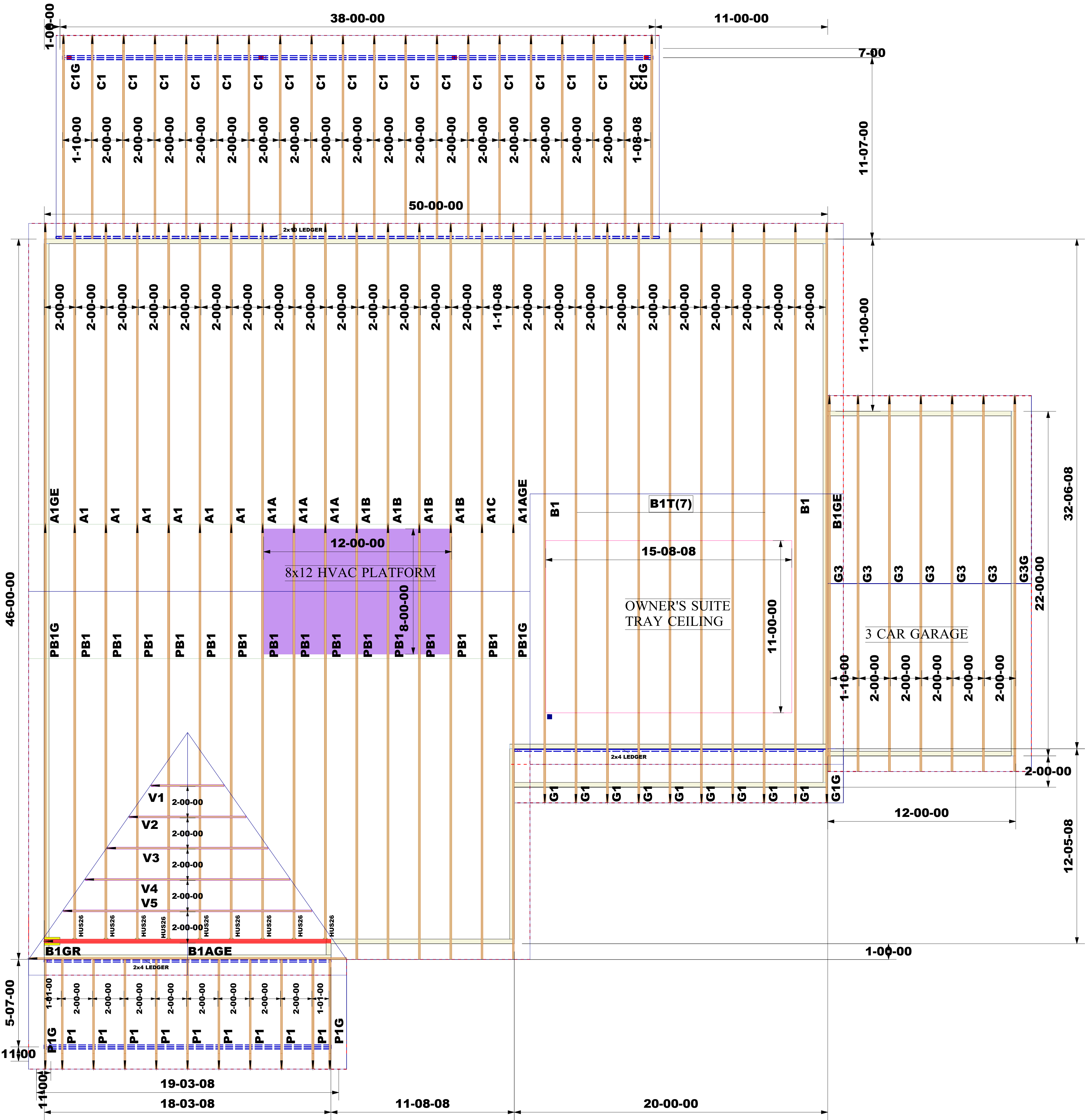


Truss Connector Total List		
Manuf	Product	Qty
Simpson	IUS3.56/14	30
Simpson	THA422	3
Simpson	HGUS5.50/14*	1
Simpson	SDW22632	30

Products					
PlotID	Length	Product		Plies	Net Qty
DB8	8-00-00	1 3/4" x 9 1/2" (2.0E 3100)	LV L	2	2
FB12	14-00-00	1 3/4" x 14" (2.0E 3100)	LV L	2	2
FB22	20-00-00	1 3/4" x 18" (2.0E 3100)	LV L	3	3
FB8	8-00-00	1 3/4" x 18" (2.0E 3100)	LV L	2	2

Job #:	WARNING:	NOTE:
2505-7940	CONVENTIONAL FRAMING, ERECTION AND/OR PERMANENT BRACING IS NOT THE RESPONSIBILITY OF THE TRUSS DESIGNER, PLATE MANUFACTURER, OR THE TRUSS MANUFACTURER. PERSONS ERECTING TRUSSES ARE CAUTIONED TO SEEK PROFESSIONAL ADVICE REGARDING THE ERECTION, BRACING WHICH IS ALWAYS REQUIRED TO PREVENT TOPPING AND DOMINIONING DURING ERECTION; AND PERMANENT BRACING WHICH MAY BE REQUIRED IN SPECIFIC APPLICATIONS. SEE "BRACING WORK TRUSSES COMMENTARY AND RECOMMENDATIONS" (BCG1) FOR FURTHER INFORMATION.	IT IS THE RESPONSIBILITY OF THE BUILDING DESIGNER OR ARCHITECT TO PROVIDE AN APPROPRIATE CONNECTION FOR TRUSSES TO SUPPORTING STRUCTURE PER REACHINGS SHOWN ON TRUSS ENGINEERING. SPECIAL CONSIDERATIONS FOR MECHANICAL EQUIPMENT AND PLUMBING (AND THEIR CONNECTIONS) IN TRUSS SPACE MUST BE DIAGRAMMED BY BUILDER ON APPROVED TRUSS LAYOUT PRIOR TO FABRICATION.
Job Path:	TRUSSES SHALL BE INSTALLED IN A STRAIGHT AND PLUMB POSITION WHERE NO SHEATHING IS APPLIED DIRECTLY TO TOP OR BOTTOM CHORDS, THEY SHALL BE BRACED AS SPECIFIED ON THE ENGINEERED DESIGN. TRUSSES SHALL BE HANDLED WITH REASONABLE CARE DURING ERECTION TO PREVENT DAMAGE OR PERSONAL INJURY.	THIS COMPANY IS A TRUSS MANUFACTURER WHOSE RESPONSIBILITIES ARE LIMITED TO THOSE DESCRIBED IN WYCA 1-1995 "DESIGN RESPONSIBILITIES". ACCORDINGLY, IT DISCLAIMS ANY RESPONSIBILITIES AND/OR LIABILITY FOR THE CONSTRUCTION DESIGN, DRAWINGS, DOCUMENTS INCLUDING THE INSTALLATION, BRACING OF TRUSSES MANUFACTURED BY THIS COMPANY.
Designer:		
Abhijit Bera		
Sales Rep:		
Robbie Zarobinski		

ROOF TRUSS LAYOUT
SCALE: NTS



Truss Connector Total List		
Manuf	Product	Qty
Simpson	HUS26	10
Simpson	One H2.5A	160

* INSTALL H2.5A ANCHOR
* DIMENSIONS ARE FACE OF STUD

Black Pond SF (NC)(RAL)
Lot 117 Phase
Model 3501RALE-1 - Townsend
Garage Right
OPT Covered Porch
OPT Tray Ceiling Owner's Bedroom
OPT Garage 3 Car Front Entry
Elevation 5

Job #:

2505-7941

Designer:

Abhijit Bera

Sales Rep:

Robbie Zarobinski

WARNING:
CONVENTIONAL FRAMING, ERECTION AND/OR PERMANENT BRACING IS NOT THE RESPONSIBILITY OF THE TRUSS DESIGNER, PLATE MANUFACTURER, OR THE TRUSS MANUFACTURER. PERSONS ERECTING TRUSSES ARE CAUTIONED TO SEEK PROFESSIONAL ADVICE REGARDING THE ERECTION BRACING WHICH IS ALWAYS REQUIRED TO PREVENT TOPPLING AND DOMINIONS DURING ERECTION, AND PERMANENT BRACING WHICH MAY BE REQUIRED IN SPECIFIC APPLICATIONS. SEE "BRACING WOOD TRUSSES COMMENTARY AND RECOMMENDATIONS" (BCSI 1) FOR FURTHER INFORMATION.
TRUSSES SHALL BE INSTALLED IN A STRAIGHT AND PLUMB POSITION WHERE NO SHEATHING IS APPLIED DIRECTLY TO TOP AND/OR BOTTOM CHORDS, THEY SHALL BE BRACED AS SPECIFIED ON THE ENGINEERED DESIGN. TRUSSES SHALL BE HANDLED WITH REASONABLE CARE DURING ERECTION TO PREVENT DAMAGE OR PERSONAL INJURY.

NOTE:
IT IS THE RESPONSIBILITY OF THE BUILDING DESIGNER OR ARCHITECT TO PROVIDE AN APPROPRIATE CONNECTION FOR TRUSSES TO SUPPORTING STRUCTURE PER REACTIONS SHOWN ON TRUSS ENGINEERING. SPECIAL CONSIDERATIONS FOR MECHANICAL EQUIPMENT AND/OR PLUMBING (AND THEIR CONNECTIONS) IN TRUSS SPACE MUST BE DIAGRAMMED BY BUILDER ON APPROVED TRUSS LAYOUT PRIOR TO FABRICATION.
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Customer: DRB Raleigh

Job Name: Blake Pond Lot 00.0117 Roof

Lot #: 00.0117

Model Name: Townsend



Structural, LLC
201 Poplar Avenue
Thurmont, MD 21788
Phone: 301-271-7591

