

# TABLE OF CONTENTS

(Inside of Frame S.F.)	
A/C Area	Sq. Ft.
FIRST FLOOR	1241
<b>Total A/C Area</b>	<b>1241</b>

[illegible]

**Altis at Serenity - Lot 287 - 5919-01 (Beechwood Springs) -  
Elevation C**


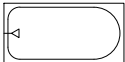



















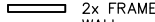




- \*Kitchen Slide in Microwave
- \*Traditional Fireplace at Great Room
- \*Primary Bath 1 Shower Seat
- \*Screened Outdoor Living

STRUCTURAL OPTIONS
GREAT ROOM FIREPLACE
PRIMARY BATH 1
SCREENED OUTDOOR LIVING

NOTE: ALL OPTIONAL SQUARE FOOTAGES LISTED ARE INDEPENDENT OF AND IN ADDITION TO BASE SQUARE FOOTAGES.

BUILDING CODE COMPLIANCE
CONSTRUCTION PLANS DESIGNED TO MEET OR EXCEED MINIMUM CODE REQUIREMENTS OF 2018 I.R.C.
ELECTRICAL PLANS DESIGNED TO MEET OR EXCEED MINIMUM CODE REQUIREMENTS OF 2020 N.E.C.

# SYMBOLS

	ELEVATION KEY OR SECTION KEY		TUB / SHOWER		PLYWOOD
	CENTERLINE		LAVATORY		INSULATING SHEATHING
	CEILING TRANSITION LINE		DBL SINK		BATT INSULATION
	HOSE BIB (FREEZE PROOF)		LAUNDRY SINK		RIGID INSULATION
	GAS LINE STUB		PEDESTAL SINK		CONCRETE
	TOWEL BAR		WATER CLOSET		SAND OR GRAVEL FILL
	PAPER HOLDER				STONE
	TOWEL RING				2x FRAME WALL
	SHOWER HEAD				BRICK VENEER
	SHOWER CONTROLS				STONE VENEER

**tri pointe.**  
**HOMES**

**Business Operations**  
5440 Wade Park Blvd  
Suite 400  
Raleigh, NC 27607

© 2022

COVER SHEET &amp; GENERAL NOTES

SUBDIVISION: ALTIS @ SERENITY  
ADDRESS: 142 SERENE XING

LOT: 287

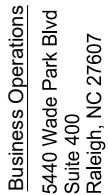
Issue Date: 10-01-24  
Drawn By: ACC

PLAN #:  
5919-01

PLAN NAME:  
**BEECHWOOD  
SPRINGS**

SHEET #:  
G0.01





BASE FOUNDATION PLAN	
SUBDIVISION:	ALTIS @ SERENITY
ADDRESS:	142 SERENE XING
LOT:	287

Issue Date: 10-01-24  
Drawn By: ACC

PLAN #:  
5919-01

PLAN NAME:  
**BEECHWOOD  
SPRINGS**

SHEET #:  
S1.10C

**Business Operations**  
5440 Wade Park Blvd  
Suite 400  
Raleigh, NC 27607

BASE FOUNDATION PLAN	
SUBDIVISION:	ALTIS @ SERENITY
ADDRESS:	142 SERENE XING
LOT:	287

Issue Date: 10-01-24  
Drawn By: ACC

PLAN #:  
5919-01

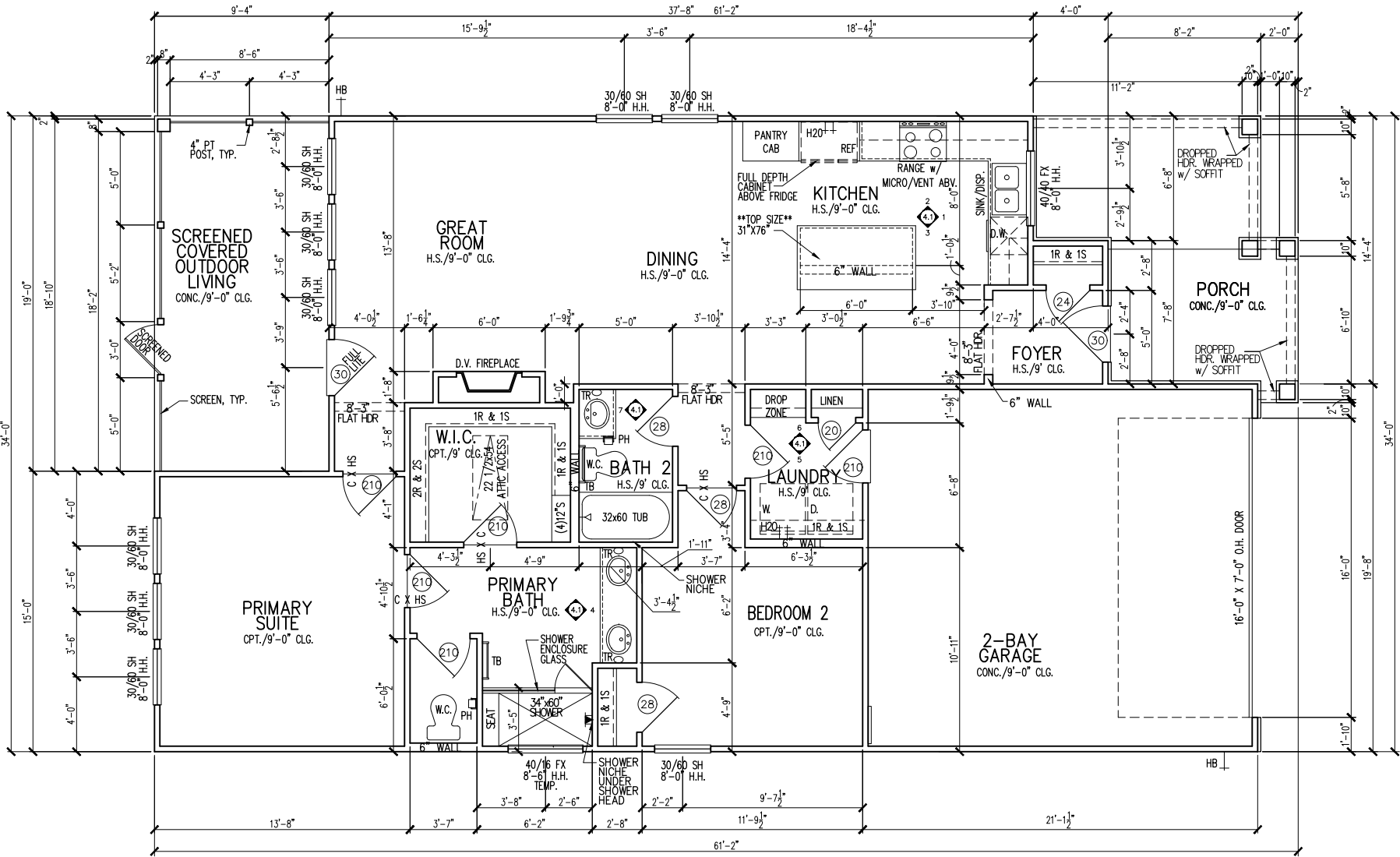
PLAN NAME:  
**BEECHWOOD  
SPRINGS**

SHEET #:  
S1.10C

MAIN FLOOR NOTES	
#	EXPLANATION
1.	ALL NON-DIMENSIONED PARTITIONS ARE 3-1/2" ROUGH
2.	ALL ANGLED PARTITIONS ARE 45 DEGREES UNLESS NOTED OTHERWISE (U.N.O.)
3.	PROVIDE MIN. 2-2x12's w/ 1/2" PLYMD. FLITCH PLATE AT ALL EXTERIOR WALL OPENINGS & INTERIOR BEARING WALL OPENINGS U.N.O.
4.	ALL EXTERIOR DIM'S ARE TO FACE OF STUDS U.N.O.
5.	ALL TRUSSES TO BEAR ON EXTERIOR WALLS AND/OR GIRDER TRUSS U.N.O.
6.	TRUSS MFG. TO SIZE MEMBERS, FASTENERS, HANGERS & SET SPACING FOR ALL TRUSSES
7.	WINDOW SUPPLIER TO VERIFY AT LEAST ONE WINDOW IN ALL BEDROOMS TO HAVE A CLEAR EGRESS OPENING OF 5.7 SQ. FT. w/MIN DIM'S OF 24" IN HT AND 20" IN WIDTH; SILL HT NOT TO EXCEED 44" AFF
8.	ALL BALUSTER TO BE SPACED SUCH THAT A 4" SPHERE CANNOT PASS BETWEEN BALUSTER
9.	ALL ELEC. & MECH. EQUIPMENT & METERS ARE SUBJECT TO RELOCATION DUE TO FIELD CONDITIONS; CONTRACTOR TO VERIFY
10.	FOR ADDITIONAL NOTES, SEE GENERAL NOTES ON TITLE SHEET & DETAILS
11.	ALL TYP. WINDOWS 6'-0" IN HT AND SMALLER, THE HEAD HEIGHT SHALL BE 8'-10" ABOVE FINISHED FLOOR (U.N.O.)
12.	STRUCTURAL ENGINEERING PROVIDED BY OTHERS
13.	REFER TO INTERIOR ELEVATIONS SHEET TO VIEW BUBBLE CALLOUTS
14.	INTERIOR DOOR HEIGHTS ARE AS FOLLOWS - PRIMARY SUITE, PRIMARY BATH, & PRIMARY CLOSET ARE 8' TALL DOORS. ALL OTHER DOORS ARE 6'-8"
15.	BATH ACCESSORY INSTALLATION HEIGHTS ARE MEASURED TO CENTER OF ACCESSORY: TB - 48" A.F.F.                      TR - 20" ABV. VANITY COUNTER-TOP TH - 70" A.F.F.                      TP - 26" A.F.F.
16.	SHUT-OFF VALVE TO BE LOCATED IN GARAGE

1st Floor Options:

- \*Kitchen Slide in Microwave
- \*Traditional Fireplace at Great Room
- \*Primary Bath 1 Shower Seat
- \*Screened Outdoor Living



1st FLOOR PLAN

SUBDIVISION: ALTIS @ SERENITY  
ADDRESS: 142 SERENE XING  
LOT: 287

Issue Date: 10-01-24  
Drawn By: ACC

PLAN #:  
5919-01

PLAN NAME:  
BEECHWOOD  
SPRINGS

SHEET #:  
A1.10C

Business Operations  
5440 Wade Park Blvd  
Suite 400  
Raleigh, NC 27607

tri pointe  
HOMES

5440 WADE PARK BLVD, SUITE 400, RALEIGH, NC 27607

© 2022





## EXTERIOR ELEVATIONS

SUBDIVISION: ALTIS @ SERENITY

ADDRESS: 142 SERENE XING

LOT: 287

Issue Date: 10-01-24  
Drawn By: ACC

PLAN #:  
5919-01

PLAN NAME:  
**BEECHWOOD  
SPRINGS**

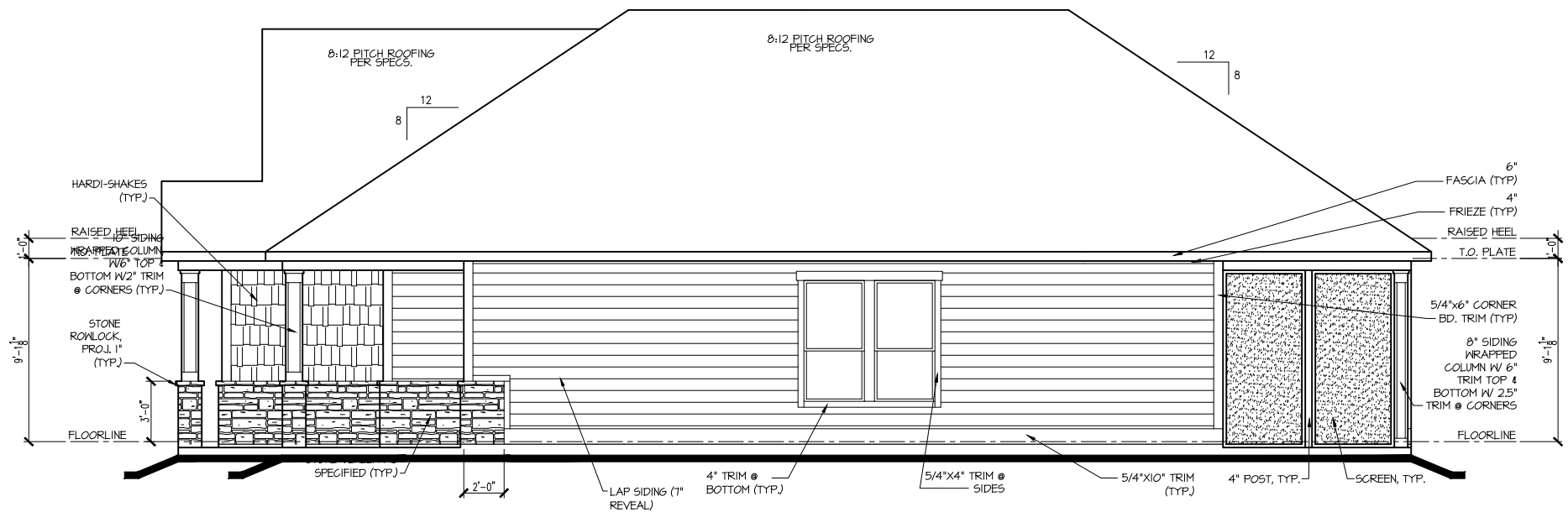
SHEET #:  
**A2.01C**

**Business Operations**  
55440 Wade Park Blvd  
Suite 400  
Raleigh, NC 27607

© 2022

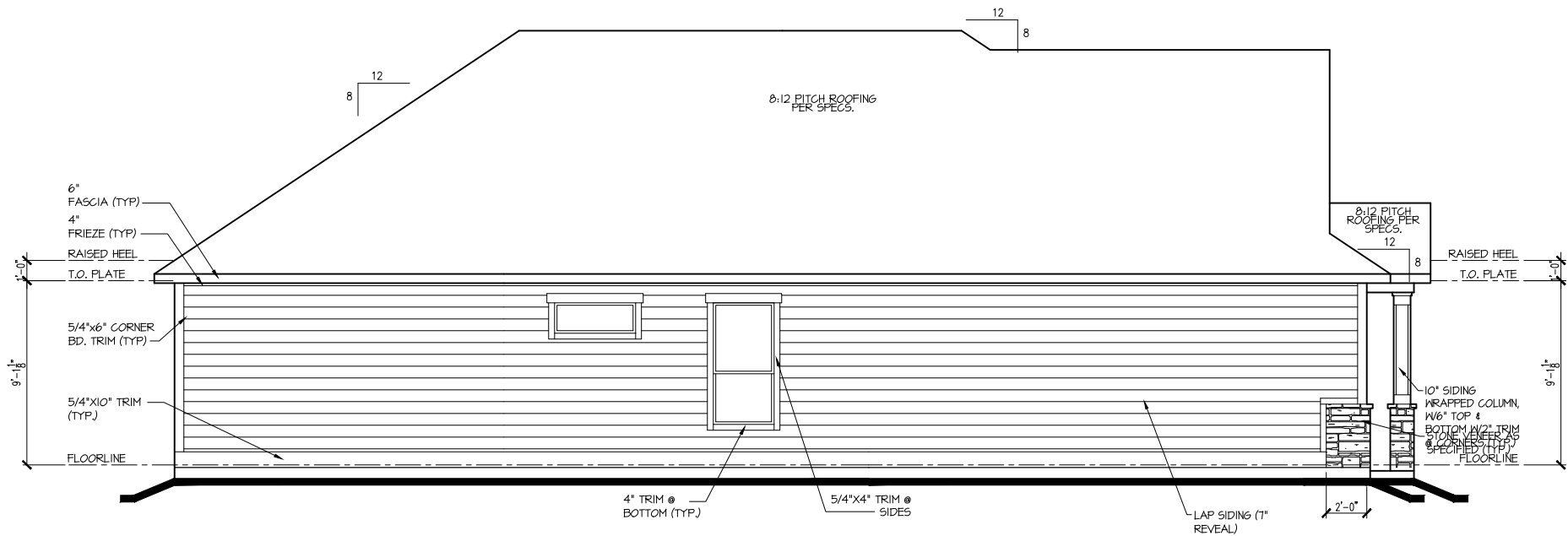
**tri pointe.**  
HOMES

5440 WADE PARK BLVD, SUITE 400, RALEIGH, NC 27607



**RIGHT ELEV. "C"**

1/8"=1'-0"



**LEFT ELEV. "C"**

1/8"=1'-0"

**tri pointe**  
HOMES

5440 WADE PARK BLVD, SUITE 400, RALEIGH, NC 27607

Business Operations  
5440 Wade Park Blvd  
Suite 400  
Raleigh, NC 27607

© 2022

EXTERIOR ELEVATIONS

SUBDIVISION: ALTIS @ SERENITY  
ADDRESS: 142 SERENE XING  
LOT: 287

Issue Date: 10-01-24  
Drawn By: ACC

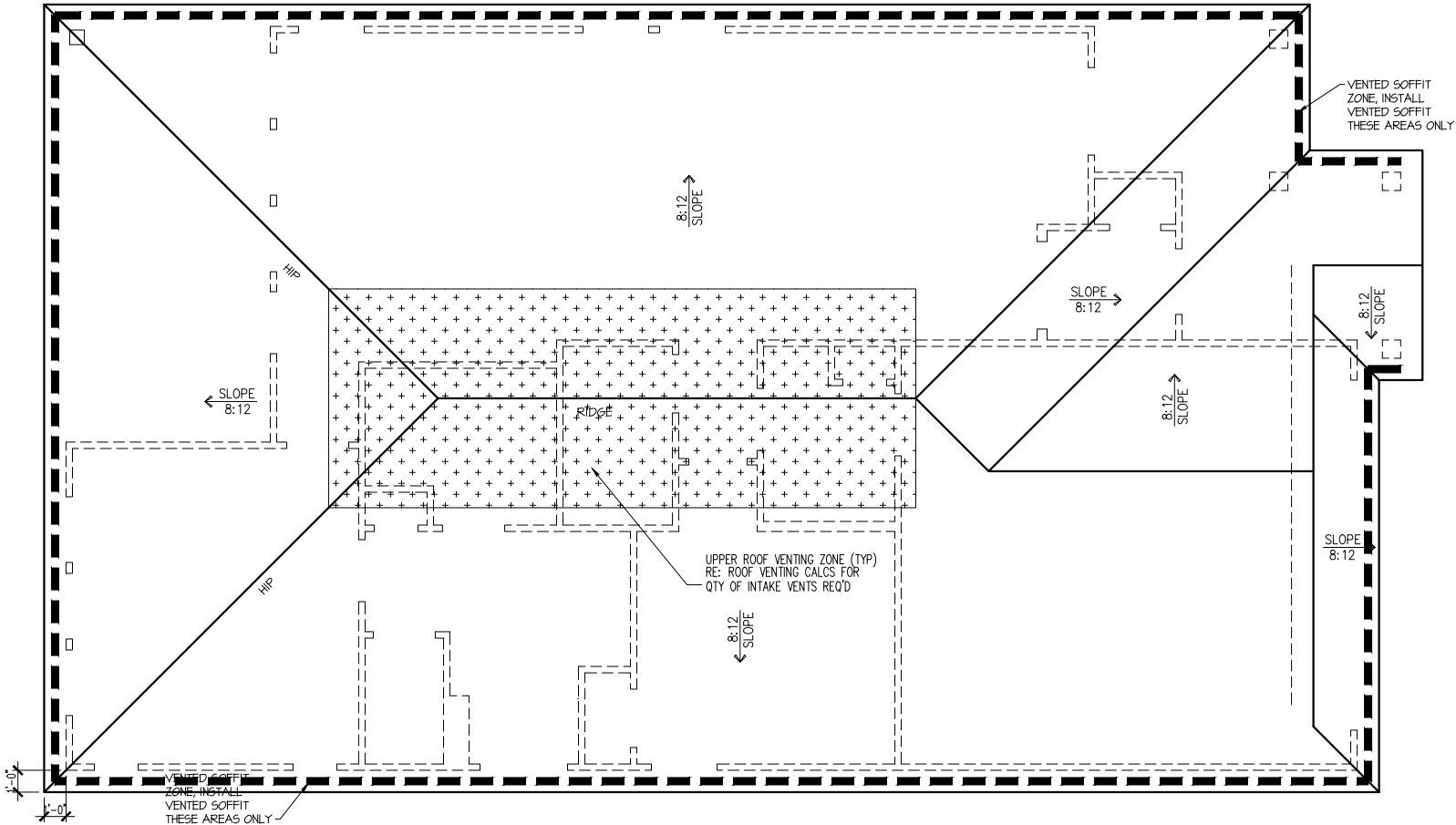
PLAN #:  
5919-01

PLAN NAME:  
BEECHWOOD  
SPRINGS

SHEET #:  
A2.02C

Attic Venting Calculations Elev. "C"	
ROOF INFORMATION	BASE
TOTAL SF ROOF AREA	2196
AVAILABLE L.F. ROOF SOFFIT	183
AVAILABLE L.F. ROOF RIDGE	30
VENT TYPES	QTY VENTS REQ'D
LOWER VENTS CONTINUOUS SOFFIT VENTING @ 5 S/LF	105 LF
UPPER VENTS SLANT 150 VENTS @ 150 S/LVENT	4
UPPER VENTS RIDGE VENTS @ 72 S/LVENT	7

NOTE:  
QTY OF UPPER VENTS SHOWN COVERS 100% OF UPPER VENTING. NO MIXING  
OF VENT TYPES FOR UPPER VENTING IS FIGURED FOR IN THIS TABLE.



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

**ROOF PLAN**

SUBDIVISION: ALTIS @ SERENITY  
ADDRESS: 142 SERENE XING  
LOT: 287

Issue Date: 10-01-24  
Drawn By: ACC

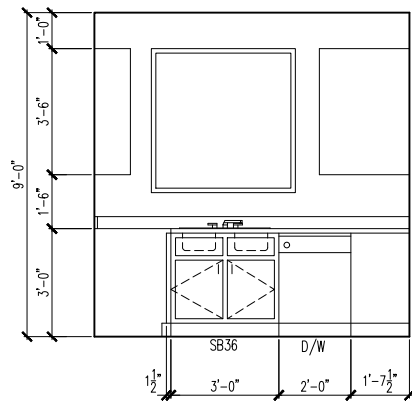
PLAN #:  
5919-01

PLAN NAME:  
BEECHWOOD  
SPRINGS

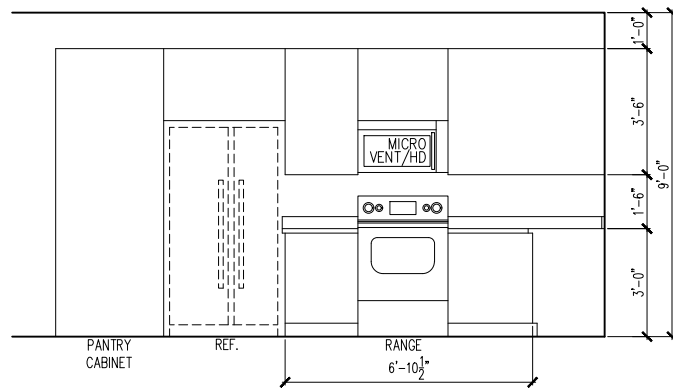
SHEET #:  
A3.01C

Business Operations  
5440 Wade Park Blvd  
Suite 400  
Raleigh, NC 27607  
© 2022

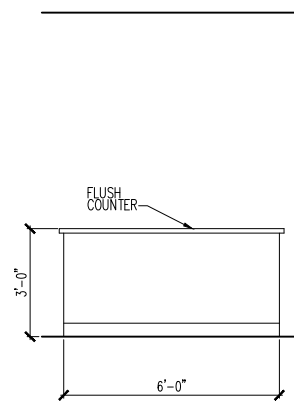
**tri pointe**  
H O M E S  
5440 WADE PARK BLVD, SUITE 400, RALEIGH, NC 27607



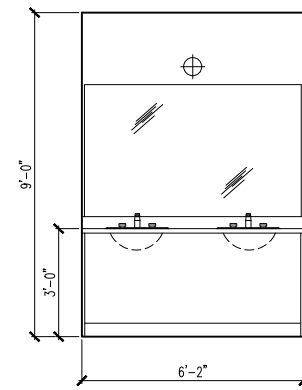
1 KITCHEN



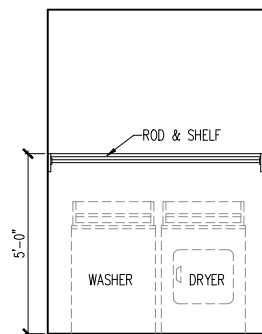
2 KITCHEN



3 KITCHEN ISLAND

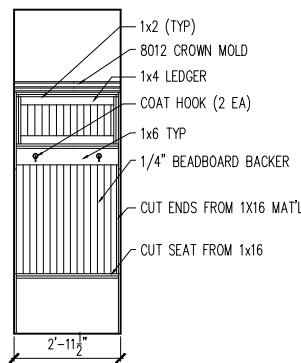


4 PRIMARY BATH



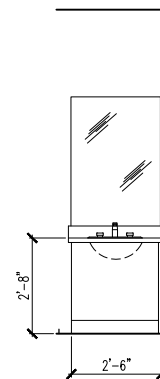
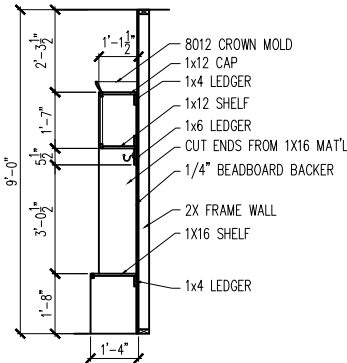
5 LAUNDRY ROOM

FRONT VIEW



6 TYPICAL BENCH DETAIL (DROP ZONE)

SIDE VIEW



7 BATH 2

INTERIOR DETAIL SHEET

SUBDIVISION: ALTIS @ SERENITY  
ADDRESS: 142 SERENE XING  
LOT: 287

Issue Date: 10-01-24  
Drawn By: ACC

PLAN #:  
5919-01

PLAN NAME:  
BEECHWOOD  
SPRINGS

SHEET #:  
A4.01

Business Operations  
5440 Wade Park Blvd  
Suite 400  
Raleigh, NC 27607

tri pointe  
H O M E S  
5440 WADE PARK BLVD, SUITE 400, RALEIGH, NC 27607

© 2022

ELECTRICAL FIXTURE SCHEDULE	
DESCRIPTION	SYMBOL
110V OUTLET	⌀
220V OUTLET	⌀ 220
1/2 HOT OUTLET	⌀
GFI OUTLET	⌀ GFI
WP GFI OUTLET	⌀ WP/GFI
GARAGE DOOR OPENER OUTLET	⌀ GDO
SECURITY SYSTEM	⌀ SEC SYS
DISHWASHER	● DW
JUNCTION BOX	⌀
CEILING MOUNTED LIGHT	⌀
CEILING FAN w/ LIGHT KIT	⌀ PROVIDE BRACING
RECESSED CEILING LIGHT	⌀
RECESSED WATER PROOF LIGHT	⌀ WP
WALL MOUNTED LIGHT	⌀
WALL MOUNTED PUSH BUTTON	⌀ PB
TWO WAY SWITCH	⌀
THREE WAY SWITCH	⌀
FOUR WAY SWITCH	⌀
DIMMER SWITCH	⌀ DIM
EXHAUST VENTS	⌀ VENT TO EXT
LOW VOLTAGE PANEL	⌀
PHONE OUTLET	⌀ PH
TV OUTLET	⌀ TV
DATA & RG6 COMBO BOX	⌀
SMOKE DETECTOR	⌀
CARBON MONOXIDE SMOKE DETECTOR COMBO	⌀ CM/SD
DOOR CHIMES	CHIMES
ELECTRICAL PANEL	⌀ EP
SURFACE MOUNT LED	⌀
EXTERIOR WALL MOUNT UPLIGHT	⌀
SOFFIT MOUNT FLOOD LIGHT	⌀
UNDER COUNTER LIGHTING	⌀ UCL
SMURF TUBE	.....

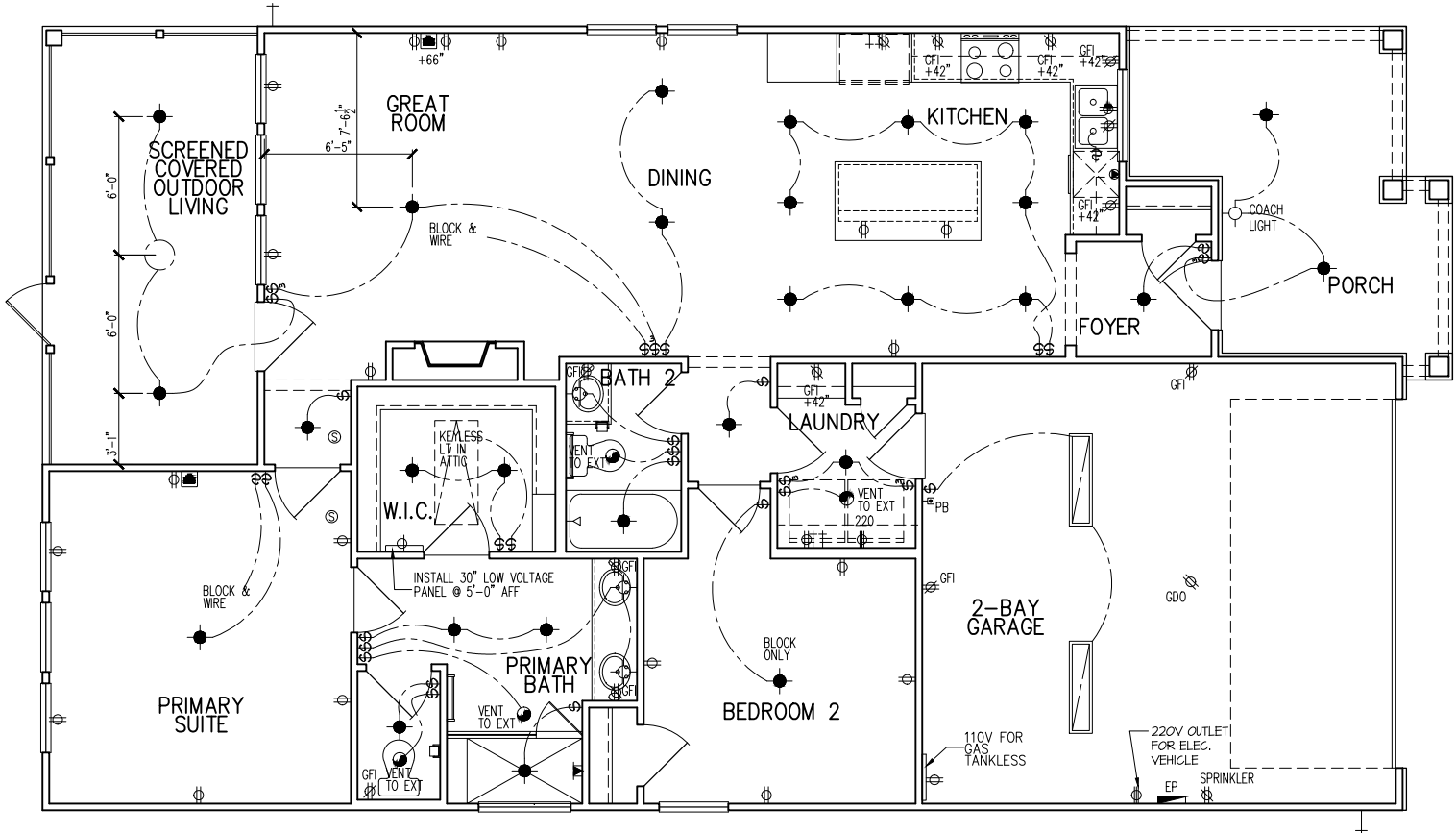
ELECTRICAL NOTES:

1. PROVIDE AND INSTALL LOCALLY CERTIFIED SMOKE AND CARBON MONOXIDE DETECTORS AS REQUIRED BY NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES
2. PROVIDE AND INSTALL GROUND FAULT CIRCUIT-INTERRUPTERS (GFI) AS REQUIRED BY NATIONAL ELECTRIC CODE (NEC) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES.
3. ELECTRICAL CONTRACTOR TO PROVIDE REQUIRED DIRECT HOOK-UPS/CUTOFFS.
4. HVAC CONTRACTOR TO VERIFY THERMOSTAT LOCATIONS.
5. ALL ELECTRICAL AND MECHANICAL EQUIPMENT (I.E. FURNACES, A/C UNITS, ELECTRICAL PANELS, SANITARY SUMP PITS, DRAIN TILE SUMP, AND WATER HEATERS) ARE SUBJECT TO RELOCATION DUE TO FIELD CONDITIONS.

ELECTRICAL DEVICES: ABOVE FINISHED FLOOR:  
SWITCHES OVER COUNTER. . . . . 48". TO CL  
WALL OUTLETS OVER COUNTER. . . . .  
+42" TO BOTTOM OF HORIZONTAL OUTLET(TYP. @ COUNTER)  
REMAINING SWITCHES. . . . . 48". TO CL  
WALL OUTLETS. . . . . 12". TO CL . . .  
BATH VANITY BRACKET OUTLET. . . . . 1.2  
(1" ABOVE TOP OF VANITY)  
WATER SOFTENER AND SUMP OUTLETS. . . . 48" TO CL  
EXTERIOR GFI OUTLETS. . . . . 12". TO CL  
GARAGE GFI (ABOVE GARAGE FLOOR). . . . 48" TO CL  
FRONT DOOR COACH LIGHT. . . . . 80". TO CL  
GARAGE DOOR COACH LIGHT. . . . . 84". TO CL  
(ABOVE GARAGE FLOOR). . . . .  
THERMOSTAT. . . . . 54". TO CL . . .  
DOORBELL CHIMES. . . . . 84". TO CL

LEVEL W/ DR HANDLE  
DOORBELL BUTTON. . . . .  
KITCHEN HOOD FAN "WHIP". . . . . 66". TO CL  
KITCHEN WALL HUNG MICROWAVE OUTLET . . . 72". TO CL  
KITCHEN DISHWASHER RECEPTACLE. . . . UNDER SINK  
KITCHEN RANGE. . . . . 24". TO CL . . .  
KITCHEN REFRIGERATOR. . . . . 48". TO CL  
WASHER/DRYER OUTLET. . . . . 48". TO CL

CL = CENTER LINE  
1 = FIELD VERIFY  
2 = MASTER BATH STANDARD 30" HIGH  
VANITY TO BE RAISED 4"



tri pointe  
H O M E S

5440 WADE PARK BLVD, SUITE 400, RALEIGH, NC 27607

Business Operations  
5440 Wade Park Blvd  
Suite 400  
Raleigh, NC 27607

© 2022

1st FLOOR ELECTRICAL PLAN

SUBDIVISION: ALTIS @ SERENITY  
ADDRESS: 142 SERENE XING  
LOT: 287

Issue Date: 10-01-24  
Drawn By: ACC

PLAN #:  
5919-01

PLAN NAME:  
BEECHWOOD  
SPRINGS

SHEET #:  
E1.10C

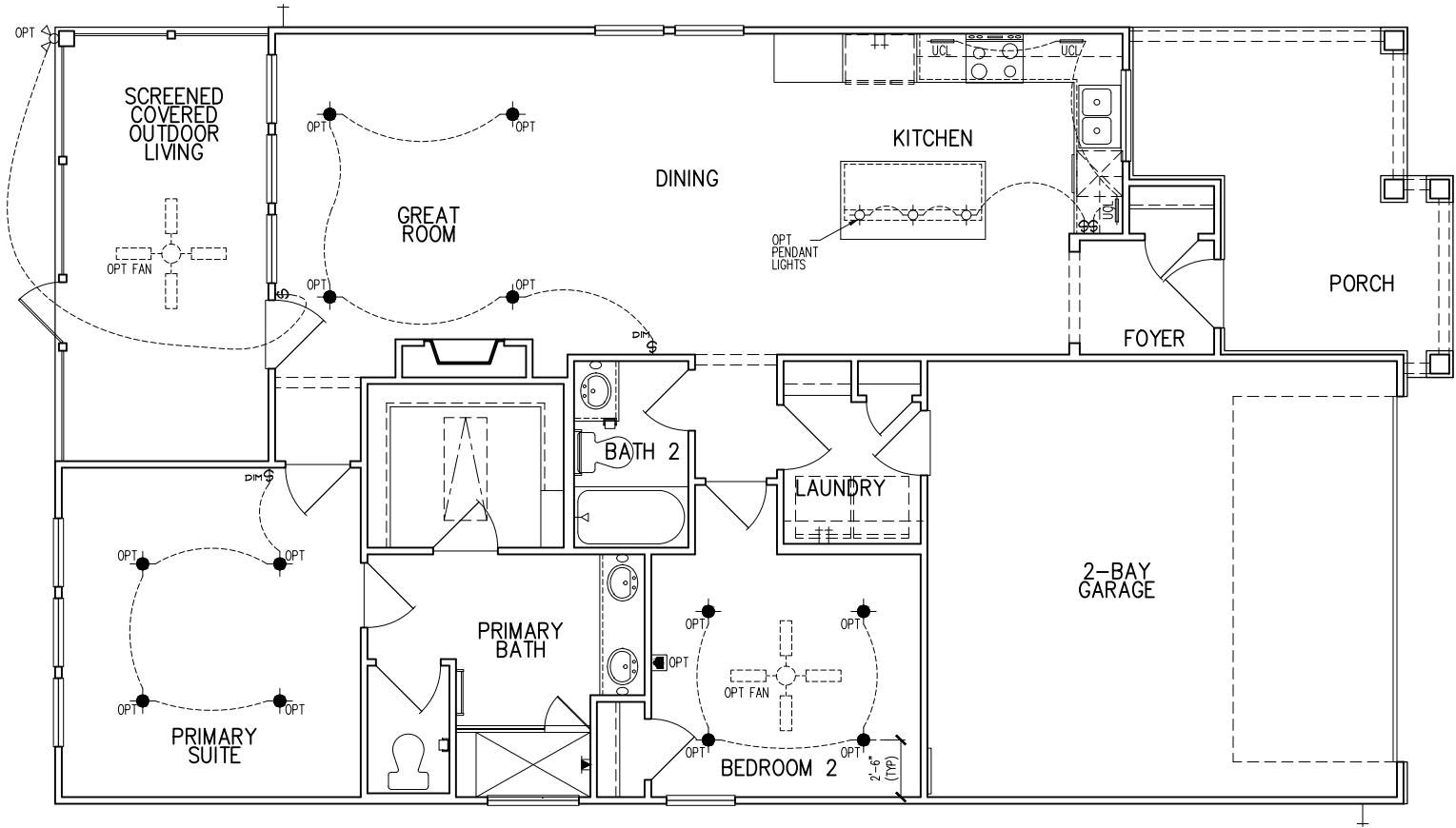
ELECTRICAL FIXTURE SCHEDULE	
DESCRIPTION	SYMBOL
110V OUTLET	⌀
220V OUTLET	⌀ 220
1/2 HOT OUTLET	⌀
GFI OUTLET	⌀ GFI
WP GFI OUTLET	⌀ WP/GFI
GARAGE DOOR OPENER OUTLET	⌀ GDO
SECURITY SYSTEM	⌀ SEC SYS
DISHWASHER	⌀ DW
JUNCTION BOX	⌀
CEILING MOUNTED LIGHT	⌀
CEILING FAN w/ LIGHT KIT	⌀ PROVIDE BRACING
RECESSED CEILING LIGHT	⌀
RECESSED WATER PROOF LIGHT	⌀ WP
WALL MOUNTED LIGHT	⌀
WALL MOUNTED PUSH BUTTON	⌀ PB
TWO WAY SWITCH	⌀
THREE WAY SWITCH	⌀
FOUR WAY SWITCH	⌀
DIMMER SWITCH	⌀ DIM
EXHAUST VENTS	⌀ VENT TO EXT
LOW VOLTAGE PANEL	⌀
PHONE OUTLET	⌀ PH
TV OUTLET	⌀ TV
DATA & RG6 COMBO BOX	⌀
SMOKE DETECTOR	⌀
CARBON MONOXIDE SMOKE DETECTOR COMBO	⌀ CM/SD
DOOR CHIMES	CHIMES
ELECTRICAL PANEL	⌀ EP
SURFACE MOUNT LED	⌀
EXTERIOR WALL MOUNT UP LIGHT	⌀
SOFFIT MOUNT FLOOD LIGHT	⌀
UNDER COUNTER LIGHTING	⌀ UCL
SMURF TUBE	.....

ELECTRICAL NOTES:

1. PROVIDE AND INSTALL LOCALLY CERTIFIED SMOKE AND CARBON MONOXIDE DETECTORS AS REQUIRED BY NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES
2. PROVIDE AND INSTALL GROUND FAULT CIRCUIT-INTERRUPTERS (GFI) AS REQUIRED BY NATIONAL ELECTRIC CODE (NEC) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES.
3. ELECTRICAL CONTRACTOR TO PROVIDE REQUIRED DIRECT HOOK-UPS/CUTOFFS.
4. HVAC CONTRACTOR TO VERIFY THERMOSTAT LOCATIONS.
5. ALL ELECTRICAL AND MECHANICAL EQUIPMENT (I.E. FURNACES, A/C UNITS, ELECTRICAL PANELS, SANITARY SUMP PITS, DRAIN TILE SUMP, AND WATER HEATERS) ARE SUBJECT TO RELOCATION DUE TO FIELD CONDITIONS.

ELECTRICAL DEVICES: ABOVE FINISHED FLOOR:  
SWITCHES OVER COUNTER. .... 48". TO CL  
WALL OUTLETS OVER COUNTER. ....  
42" TO BOTTOM OF HORIZONTAL OUTLET(TYP. ⌀ COUNTER)  
REMAINING SWITCHES. .... 48". TO CL  
WALL OUTLETS. .... 12". TO CL ...  
BATH VANITY BRACKET OUTLET. .... 1,2  
(1" ABOVE TOP OF VANITY)  
WATER SOFTENER AND SUMP OUTLETS. .... 48" TO CL  
EXTERIOR GFI OUTLETS. .... 12". TO CL  
GARAGE GFI (ABOVE GARAGE FLOOR). .... 48" TO CL  
FRONT DOOR COACH LIGHT. .... 80". TO CL  
GARAGE DOOR COACH LIGHT,  
(ABOVE GARAGE FLOOR). .... 84". TO CL  
THERMOSTAT. .... 54". TO CL ...  
DOORBELL CHIMES. .... 84". TO CL  
DOORBELL BUTTON. .... LEVEL W/  
DR. HANDLE  
KITCHEN HOOD FAN "WHIP". .... 66". TO CL  
KITCHEN WALL HUNG MICROWAVE OUTLET ... 72" TO CL  
KITCHEN DISHWASHER RECEPTACLE. .... UNDER SINK  
KITCHEN RANGE. .... 24". TO CL ...  
KITCHEN REFRIGERATOR. .... 48". TO CL  
WASHER/DRYER OUTLET. .... 48". TO CL

CL = CENTER LINE  
1 = FIELD VERIFY  
2 = MASTER BATH STANDARD 30" HIGH  
VANITY TO BE RAISED 4"



tri pointe  
H O M E S

5440 WADE PARK BLVD, SUITE 400, RALEIGH, NC 27607

Business Operations  
5440 Wade Park Blvd  
Suite 400  
Raleigh, NC 27607

© 2022

1st FLOOR ELEC. PLAN - OPITONS

SUBDIVISION: ALTIS @ SERENITY  
ADDRESS: 142 SERENE XING  
LOT: 287

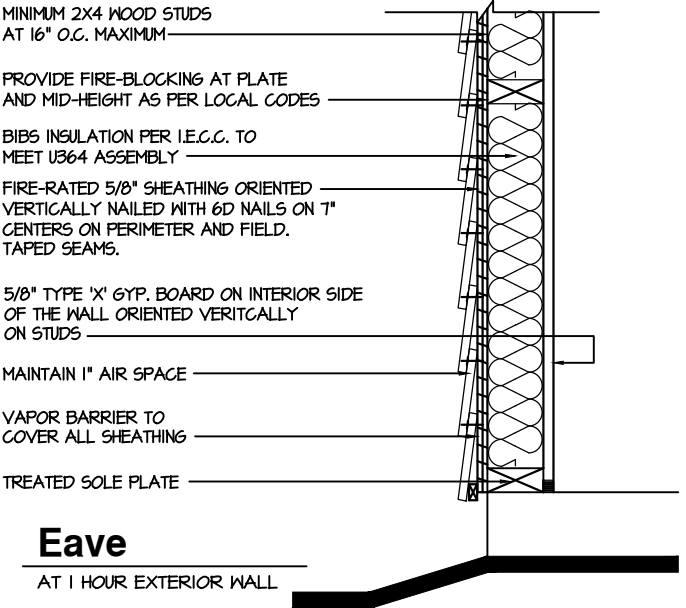
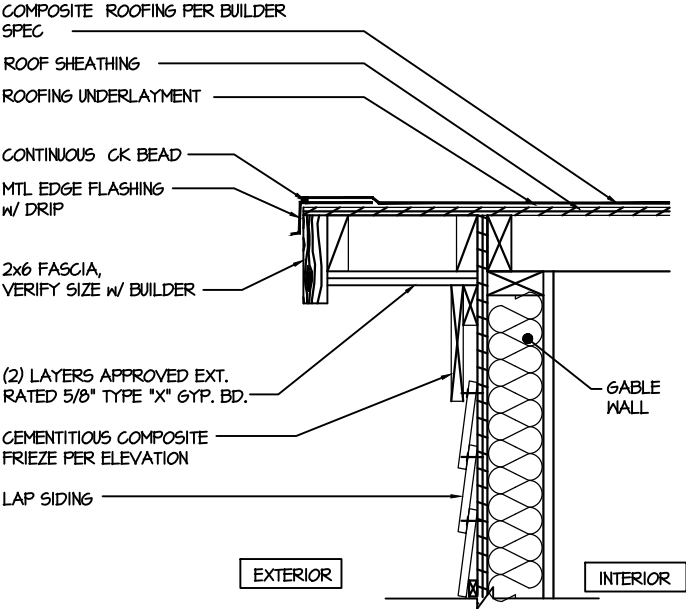
Issue Date: 10-01-24  
Drawn By: ACC

PLAN #:  
5919-01

PLAN NAME:  
BEECHWOOD  
SPRINGS

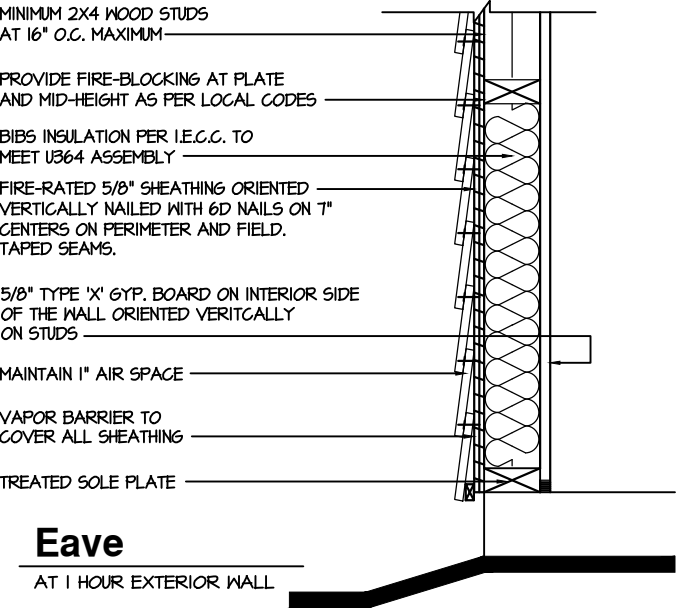
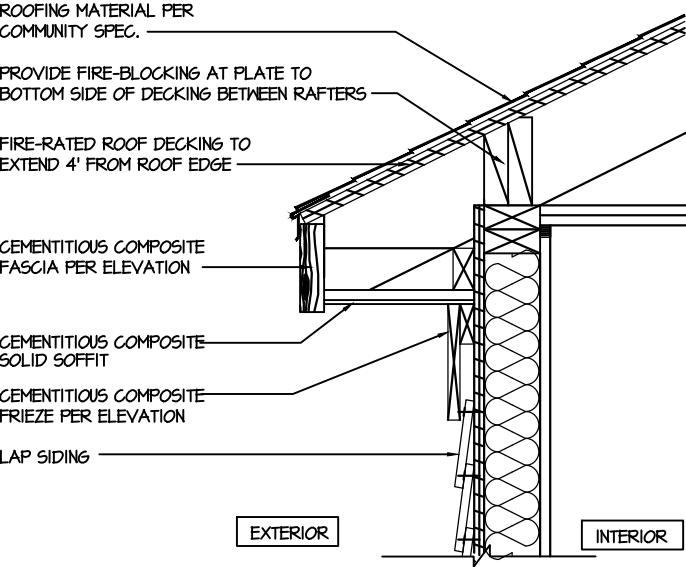
SHEET #:  
E1.11C

NOTE:  
1. FIREWALL COMPIES WITH UL DESIGN #U364 FOR 1 HR. FIREWALL ASSEMBLY  
GLASS BLOCK IS NOT TO EXCEED 100 SQ. FT.  
60 MIN. FIRE-RATED GLASS BLOCK ONLY



**2** 1 Hour Wall  
AT EXTERIOR WALL 1 HOUR FIRE-RESISTIVE CONSTRUCTION (PROPERTY LINE)

NOTE:  
1. FIREWALL COMPIES WITH UL DESIGN #U364 FOR 1 HR. FIREWALL ASSEMBLY  
GLASS BLOCK IS NOT TO EXCEED 100 SQ. FT.  
60 MIN. FIRE-RATED GLASS BLOCK ONLY



**1** 1 Hour Wall  
AT EXTERIOR WALL 1 HOUR FIRE-RESISTIVE CONSTRUCTION (PROPERTY LINE)



GENERAL STRUCTURAL NOTES
FLOOR FRAMING
<ul style="list-style-type: none"><li>• I-JOISTS/TRUSSES SHALL BE DESIGNED BY MANUF. TO MEET OR EXCEED L/480 LIVE LOAD DEFLECTION CRITERIA. (EXCLUDES STONE/MARBLE OR NET BED CONSTRUCTED FLOORS - CONTACT MKK FOR EXCLUDED FLOOR DESIGNS)</li><li>• PER THE GUIDELINES OF THE TILE COUNCIL OF NORTH AMERICA (TCNA HANDBOOK), IT SHALL BE THE FLOOR FINISH INSTALLER'S RESPONSIBILITY TO VERIFY THAT THE FINISHES TO BE INSTALLED MATCH THE DESIGN CRITERIA NOTED ABOVE (UNDER "DESIGN LOADS").</li><li>• FLOOR SYSTEMS &amp; SHEATHING HAVE BEEN DESIGNED TO SUPPORT ADDITIONAL DEAD LOAD FROM CERAMIC TILE (EXCLUDING MARBLE OR STONE). HOWEVER, IT SHALL BE THE FLOOR FINISH INSTALLER'S RESPONSIBILITY TO PROVIDE PROPER UNDERLAYMENT, UNCOUPLING MEMBRANE AND MORTAR/GROUT PER THE ASSEMBLY DESIGNATIONS IN THE TCNA HANDBOOK (TILE COUNCIL OF NORTH AMERICA).</li><li>• AT I-JOIST FLOORS, PROVIDE 1 1/8" MIN. OSB RIM BOARD.</li><li>• METAL HANGERS SHALL BE SPECIFIED BY MANUFACTURER, U.N.O.</li><li>• I-JOIST/TRUSS SHOP DWGS. SHALL BE SUBMITTED TO ARCH. &amp; ENG. FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVERY.</li><li>• FLOOR SHEATHING SHALL BE 23/32" A.P.A. RATED 'STURD-I-FLOOR' 24" O.C. EXPOSURE 1 (OR APPROVED EQUAL) WITH TONGUE AND GROOVE EDGES. FASTEN TO FRAMING MEMBERS W/ GLUE AND:<ul style="list-style-type: none"><li>- 2 1/2" x 0.131" NAILS @ 6" O.C. @ PANEL EDGES @ 12" O.C. FIELD.</li><li>- 2 3/8" x 0.120" NAILS @ 4" O.C. @ PANEL EDGES @ 8" O.C. FIELD.</li><li>- 2 3/8" x 0.113" NAILS @ 3" O.C. @ PANEL EDGES @ 6" O.C. IN FIELD.</li></ul></li></ul>
ROOF FRAMING
<ul style="list-style-type: none"><li>• ROOF SHEATHING SHALL BE 7/16" A.P.A. RATED SHEATHING 24/16 EXPOSURE 1 (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.</li><li>• WITHIN 48" OF ALL ROOF EDGES, RIDGES, &amp; HIPs FASTEN ROOF SHEATHING FIELDS PER EDGE NAILING SPEC.</li><li>• FASTEN EACH ROOF TRUSS TO TOP PLATE W/ SIMPSON H2.5T CLIP (OR APPROVED EQUAL) @ ALL BEARING POINTS. PROVIDE (2) H2.5T CLIPS AT 2-PLY GIRDER TRUSSES, (3) H2.5T CLIPS AT 3-PLY GIRDER TRUSSES &amp; ROOF BEAMS - AT ALL BEARING POINTS.</li><li>• METAL HANGERS SHALL BE SPECIFIED BY THE MANUFACTURER, U.N.O.</li><li>• ROOF TRUSS SHOP DWGS. SHALL BE SUBMITTED TO ARCH. &amp; ENG. FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVERY.</li><li>• ERECT AND INSTALL ROOF TRUSSES PER ITCA &amp; TP1'S BC51 I "GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING &amp; BRACING OF METAL PLATE CONNECTED WOOD TRUSSES."</li><li>• SUPPORT SHORT SPAN ROOF TRUSSES W/2x4 LEDGER FASTENED TO FRAMING W/(2) 3" x 0.120" NAILS @ 16" O.C. (UP TO 1" SPAN).</li></ul>

MMK STD. - MAR 2016

### CONNECTION SPECIFICATIONS (TYP. U.N.O.)

DESCRIPTION OF BLDG. ELEMENT	3"x0.131" NAILS	3"x0.120" NAILS
JOIST TO SOLE PLATE SOLE PL. TO JOIST/RIM OR BLK'G STUD TO PLATE	(3) TOENAILS NAILS @ 4" O.C. (4) TOENAILS/ (3) END NAILS	(3) TOENAILS* NAILS @ 4" O.C. (4) TOENAILS/ (4) END NAILS*
RIM TO TOP PLATE BLK'G, BTWN. JOISTS TO TOP PL.	TOENAILS @ 6" O.C. (3) TOENAILS EA. END	TOENAILS @ 4" O.C.* (3) TOENAILS EA. END*
DOUBLE STUD	NAILS @ 16" O.C.	NAILS @ 16" O.C.
DOUBLE TOP PLATE	NAILS @ 12" O.C.	NAILS @ 8" O.C.
DOUBLE TOP PLATE LAP SPLICE (24" MIN.)	(12) NAILS IN LAPPED AREA	(15) NAILS IN LAPPED AREA
TOP PLATE LAP @ CORNERS & INTERSECTING WALLS	(3) NAILS	(3) NAILS
RAFTER/TRUSS TO TOP PLATE	(4) TOENAILS + (1) SIMPSON H2.5T TOENAILS @ 8" O.C.	(4) TOENAILS + (1) SIMPSON H2.5T TOENAILS @ 6" O.C.
GAB. END TRUSS TO DBL. TOP PL. R.T. W/ HEEL HT. 9 1/4" TO 12"	2x10 BLK EVERY 3RD BAY FASTENED TO DBL. TOP PLATE W/ TOENAILS @ 6" O.C.	2x10 BLK EVERY 3RD BAY FASTENED TO DBL. TOP PLATE W/ TOENAILS @ 4" O.C.
R.T. W/ HEEL HT. 12" TO 16"	2x12 BLK EVERY 3RD BAY FASTENED TO DBL. TOP PLATE W/ TOENAILS @ 6" O.C.	2x12 BLK EVERY 3RD BAY FASTENED TO DBL. TOP PLATE W/ TOENAILS @ 4" O.C.
R.T. W/ HEEL HT. UP TO 24"	LAP WALL SHTG. W/ DBL. TOP PL. & INSTALL ON TRUSS VERT. - FASTEN W/ NAILS @ 6" O.C.	LAP WALL SHTG. W/ DBL. TOP PL. & INSTALL ON TRUSS VERT. - FASTEN W/ NAILS @ 6" O.C.*
R.T. W/ HEEL HT. 24" TO 48"	LAP WALL SHTG. W/ DBL. TOP PL. & INSTALL ON TRUSS VERT. - FASTEN W/ NAILS @ 6" O.C. PROVIDE 2x BLK @ EA. BAY AT TOP OF HEEL	LAP WALL SHTG. W/ DBL. TOP PL. & INSTALL ON TRUSS VERT. - FASTEN W/ NAILS @ 6" O.C. PROVIDE 2x BLK @ EA. BAY AT TOP OF HEEL.*
WALL TO FOUNDATION	WALL SHTG. LAP W/ SILL PL. & FASTENED PER SHEAR WALL FASTENING SPEC.	

\* 2 1/2"x0.113 IS AN ACCEPTABLE ALTERNATIVE TO A 3"x0.120", SAME SPACING OR NUMBER OF NAILS. (ONLY ACCEPTABLE WHERE \* ARE SHOWN)

GENERAL STRUCTURAL NOTES
DESIGN LOADING
<ul style="list-style-type: none"><li>• DESIGN IS BASED ON 2018 NORTH CAROLINA STATE BUILDING CODE: RESIDENTIAL CODE.</li><li>• WOOD FRAME ENGINEERING IS BASED ON NDS, "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" - LATEST EDITION.</li><li>• DESIGN LOADS:<ul style="list-style-type: none"><li>ROOF SNOW = 15 PSF (12 PSF GROUND SNOW, TRUSSES) LIVE = 20 PSF (REDUCIBLE BASED ON ROOF PITCH) DEAD = 1 PSF T.C., 10 PSF B.C. LOAD DURATION FACTOR = 1.25</li><li>FLOOR LIVE = 40 PSF (30 PSF @ SLEEPING AREAS) DEAD = 10 PSF (1-JOISTS), 15 PSF (FLOOR TRUSSES) ADDL 10 PSF @ CERAMIC TILE IN KITCHEN, SUNROOMS, BATHS, FOYER, LAUND. &amp; MUDRM'S</li><li>SOIL 2,000 PSF ASSUMED ALLOWABLE BEARING PRESSURE (TO BE VERIFIED BY BUILDER)</li><li>WIND 115 MPH, EXPOSURE B</li></ul></li></ul>

### GENERAL FRAMING

- ALL TYP. NAIL FASTENER REQUIREMENTS ARE NOTED IN STANDARD CONNECTIONS TABLE (IRC TABLE R602.3(1)) 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.
- EXT. & INT. BEARING WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON PLANS) @ 16" O.C. SPP/SP #2 GRADE LUMBER, OR BETTER, U.N.O..
  - WALLS OVER 12' TALL SHALL BE PER PLAN.
- ALL INTERIOR BEARING WALLS ARE ASSUMED TO BE SHEATHED W/ GYP WALL BOARD (ONE SIDE MIN.) OR PROVIDE MID HT. BLOCKING.
- ALL HEADERS, BEAMS & OTHER STRUCTURAL MEMBERS SHALL BE SPRUCE-PINE-FIR #2 (SPF) OR SOUTHERN PINE #2 (SP) LUMBER, OR BETTER. SUPPORT ALL HEADERS/ BEAMS W/ (1)2x JACK STUD & (1)2x KING STUD, MINIMUM.
  - THE NUMBER OF STUDS SPECIFIED AT A SUPPORT INDICATES THE NUMBER OF JACK STUDS REQUIRED, U.N.O..
- ALL NON-BEARING INTERIOR STUD WALLS SHALL BE CONSTRUCTED WITH 2x STUD/ GRADE MEMBERS SPACED @ 24" O.C. (MAX., U.N.O.)
  - 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:
  - 'LVL' - Fb=2600 psi; Fv=285 psi; E=2.0x10<sup>6</sup> psi
- ENGINEERED LUMBER POSTS TO MEET OR EXCEED THE FOLLOWING:
  - 'LVL' - Fb=2400 psi; FcII=2500 psi; E=1.8x10<sup>6</sup> psi
- FOR 2 & 3 PLY BEAMS OF EQUAL 1 3/4" MAX. WIDTH, FASTEN PLIES TOGETHER WITH 3 ROWS OF 3"x0.120" NAILS @ 8" O/C OR 2 ROWS 1/2"x3/8" SIMPSON SDS SCREWS (OR 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 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 1 3/4" MAX. WIDTH, FASTEN PLIES TOGETHER WITH 3 ROWS OF 1/2"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 1" BEAM IS ACCEPTABLE.
- PROVIDE SOLID BLOCKING IN FLOOR SYSTEM UNDER ALL POSTS CONTINUOUS TO FND/BEARINGS. BLOCKING TO MATCH POST ABOVE.
- ALL EXTERIOR 4x4 WOOD POSTS SHALL HAVE SIMPSON BC52-2/4 CAP & ABW44 BASE, U.N.O.
- CORROSION NOTES:
  - BUILDER RESPONSIBLE TO DETERMINE CORROSION-RESISTANCE REQUIREMENTS AND COMPATIBILITY OF HARDWARE, FASTENERS AND CONNECTORS FOR ENVIRONMENTAL EXPOSURE AND IN CONTACT W/ PRESERVATIVE-TREATED WOOD OF ACTUAL FINAL CONDITIONS AND SOURCED MATERIALS. CONTACT LUMBER & HARDWARE SUPPLIERS TO COORD.

### 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 CONC FND WITH A MINIMUM OF 2 ANCHORS PER PLATE, 12" MAX. FROM PLATE ENDS - UTILIZING:
  - 1/2" DIA. ANCHOR BOLTS @ 6'-0" O.C." MIN. EMBEDMENT
  - 1/2" DIA. x 6" LONG SIMPSON TITEN HD @ 6'-0" O.C.
  - SIMPSON MASA ANCHOR STRAPS @ 6'-0" O.C. (CONCRETE)
- ALL LUMBER EXPOSED TO WEATHER OR IN CONTACT W/ PERIMETER FOUNDATION 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.
- FOOTINGS SHALL BE PLAIN CONCRETE, U.N.O.
- CONCRETE DESIGN BASED ON ACI 318. CONCRETE SHALL ATTAIN THE FOLLOWING MIN. COMPRESSIVE STRENGTHS IN 28 DAYS, U.N.O.:
  - Fc = 3,000 psi: ..... FOOTINGS & INTERIOR SLABS ON GRADE
  - 3,500 psi: ..... GARAGE & EXTERIOR SLABS ON GRADE
  - fy = 60,000 psi

- ALL CONCRETE EXPOSED TO THE WEATHER SHALL NOT HAVE LESS THAN 5% OR MORE THAN 1% AIR ENTRAINMENT.
- ALL FOOTINGS SHALL BEAR BELOW FROST LINE (TYP.) OR 12" MIN IN REGIONS WHERE CODE FROST DEPTH IS NOT APPLICABLE. CONSULT SOILS REPORT OR BUILDING DEPT. FOR MINIMUM DEPTH BELOW 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
- DIMENSIONS BY OTHERS, BUILDER TO VERIFY.

MMK STD. - MAY 2002

### 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.

### VENEER LINTEL SCHEDULE

SPAN (MAX)	HEIGHT OF VENEER ABOVE LINTEL	STEEL ANGLE SIZE
3'-0"	20 FT. MAX.	L3"x3"x1/4"
6'-0"	3 FT. MAX.	L3"x3"x1/4"
	12 FT. MAX.	L4"x3"x1/4"
8'-0"	20 FT. MAX.	L5"x3 1/2"x3/8"
	12 FT. MAX.	L4"x4"x1/4" **
9'-6"	12 FT. MAX.	L5"x3 1/2"x3/8"
	16 FT. MAX.	L6"x3 1/2"x3/8"
16'-0"	12 FT. MAX.	L6"x3 1/2"x3/8"
	2 FT. MAX.	L7"x4"x1/2" **
16'-0"	3 FT. MAX.	L8"x4"x1/2" **

ALL LINTELS:  
- SHALL SUPPORT 2 3/8" - 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 LESS VERTICAL  
- WHEN SUPPORTING VENEER < 3" WIDE THE EXTERIOR TOE OF THE HORIZONTAL LEG MAY BE CUT IN THE FIELD TO BE 3 1/2" 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 GREEN VENEER USE 1.4x3/4"  
\*\* FOR 3 1/2" VENEER ONLY, SEE PLAN FOR VENEER SUPPORT IF VENEER < 3/8" THICK.

MMK STD. - MAY 2016

### ADDITIONAL NOTES FOR TRUSS & I-JOIST MANUFACTURER

ROOF TRUSS, FLOOR TRUSS AND ENGINEERED JOISTS SHALL BE DESIGNED TO MEET THE DEFLECTION CRITERIA BELOW, UNLESS NOTED OTHERWISE ON PLAN. MULHERN & KULP CANNOT BE HELD RESPONSIBLE FOR ANY STRUCTURAL ISSUES RELATED TO ANY BUILDING COMPONENT IF COMPONENT SHOP DRAWINGS ARE NOT SUBMITTED TO MKK FOR REVIEW PRIOR TO FABRICATION, DELIVERY, OR INSTALLATION.

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

### FLOOR JOIST NOTES

- ALL FLOOR JOISTS SHALL BE THE DEPTH SPECIFIED ON PLAN
- FLOOR JOISTS SERIES & SPACING IS PER THE FLOOR JOIST MANUF.
  - SPACING SHALL NOT EXCEED 19.2" O.C. (MAX.)
  - @ LOCATION OF TILE: SPACING SHALL NOT EXCEED 16" O.C. (MAX.)

### LATERAL/WALL BRACING & WALL SHEATHING SPECIFICATIONS

THIS MODEL HAS BEEN DESIGNED TO RESIST LATERAL FORCES RESULTING FROM:  
**115 MPH WIND IN 2018 NCSEBG:RC**  
(115 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 1609) & ASCE 7-10, AS PERMITTED BY R301.1.3 OF THE 2018 NCSEBG:RC. 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 NCSEBG: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, U.N.O.)
- ALL SHEATHING PANELS SHALL BE ORIENTED VERTICALLY (LONG DIRECTION PARALLEL TO STUDS) AND INSTALLED FULL HEIGHT OF SHEAR WALL - OR - 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT ALL UNSUPPORTED PANEL EDGES & EDGE FASTENING.
- ALL EXT. WALLS SHALL BE CONTINUOUSLY SHEATHED AND ARE CONSIDERED SHEAR WALLS.
- ALT. STAPLE CONNECTION SPEC: 1 3/4" 16 GA STAPLES (1/6" CROWN) @ 3" O.C. AT EDGES & @ 6" O.C. IN FIELD.

### 3" O.C. EDGE NAILING

- AT DESIGNATED AREAS - FASTEN PANEL EDGES OF WOOD STRUCTURAL WALL SHEATHING TO FRAMING W/ 2 3/8" x 0.113" NAILS @ 3" O.C. AND 12" O.C. IN THE PANEL FIELD NO STAPLE ALTERNATIVE AVAILABLE AT THIS SPEC. ALL SHEATHING PANELS SHALL BE ORIENTED VERTICALLY (LONG DIRECTION PARALLEL TO STUD) AND INSTALLED FULL HEIGHT OF SHEAR WALL - OR - 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT UNSUPPORTED PANEL EDGES AND 3" O.C. EDGE FASTENING.

### TYP. UNIT SEPARATION WALL SHEATHING SPECIFICATION

- 1/2" OR 5/8" GYPSUM WALL BOARD:  
FASTEN GWB SHEATHING TO FRAMING W/ 1 5/8"x0.086" COOLER NAILS OR 1 1/4" DRYWALL SCREWS @ 1" O.C. TO PANEL EDGES & PANEL FIELD (INCLUDING T&B PLATES).

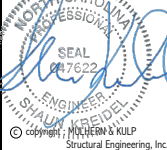
### NOTES

- 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, U.N.O.
- 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, BLOCKED PANEL EDGES, AND/OR 3" O.C. EDGE NAILING  
▶ INDICATES HOLDOWN

MMK STD. - MAR 2016

seal: 5/12/25



**MULHERN+KULP**  
RESIDENTIAL STRUCTURAL ENGINEERING  
300 Brookside Ave. Building 4 - Jambler, PA 19022  
P 215-945-8881 - mulhern@mkp.com



Mulhern+Kulp project number:

243-24027

project mgr: SMK  
drawn by: SMM  
issue date: 11-07-2024

#### REVISIONS:

date: 05/02/2025 initial: FC  
desc: ARCH UPDATE

tri pointe  
HOMES

GENERAL NOTES

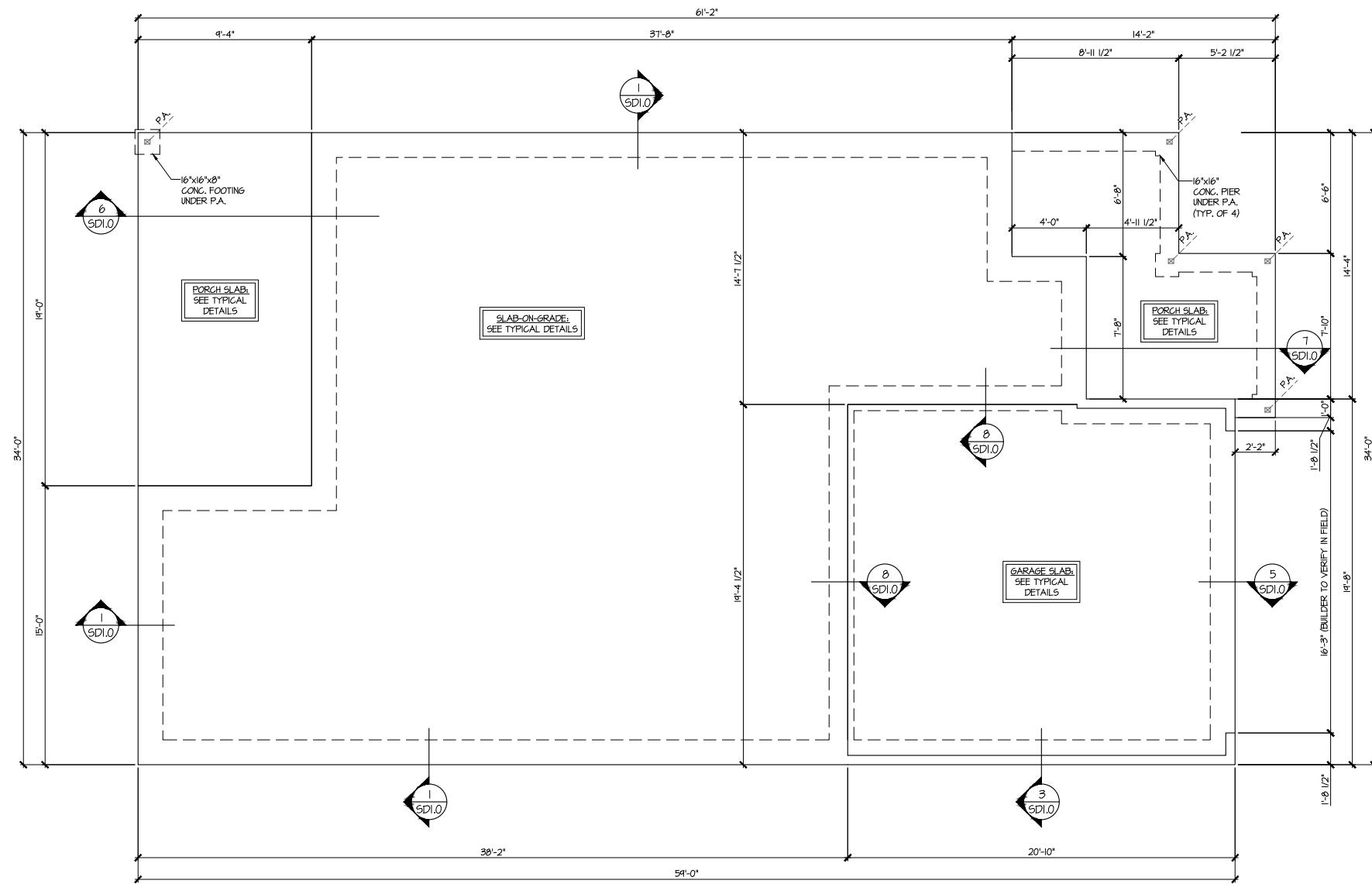
5919-01 MODEL

SERENITY  
MASTER SET  
RALEIGH, NC

sheet:

S0.0

NC LICENSE # C-38825



**1 SLAB FOUNDATION PLAN**  
SCALE: 1/4"=1'-0" (22x24 SHEET)  
1/8"=1'-0" (11x17 SHEET)  
ELEV. C

**LEGEND**

- INTERIOR BEARING WALL
- BEARING WALL ABOVE (B.W.A.)
- BEAM / HEADER
- INDICATES EXTENT OF INT. OSB SHEARWALL AND/OR 3" O.C. EDGE NAILING
- EXTENT OF VALLEY TRUSS OVERFRAMING @ 24" O.C. (MAX.)
- EXTENT OF FLOOR SYSTEM TO BE DESIGNED FOR TILE
- INDICATES HOLDDOWN
- METAL HANGER
- INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

REFER TO S.O. FOR  
TYPICAL STRUCTURAL NOTES  
& SCHEDULES

seal: 5/12/25

**MULHERN+KULP**  
RESIDENTIAL STRUCTURAL ENGINEERING  
300 Brookside Ave., Building 4 • Appler, PA 15002  
P 715-945-8001 • mulhern+kulp.com

NC LICENSE # C-3825

Mulhern+Kulp project number:  
**243-24027**

project mgr: **SMK**  
drawn by: **SMM**  
issue date: **11-07-2024**

REVISIONS:

date:	initial:
05/02/2025	FC
MISC. ARCH UPDATE	

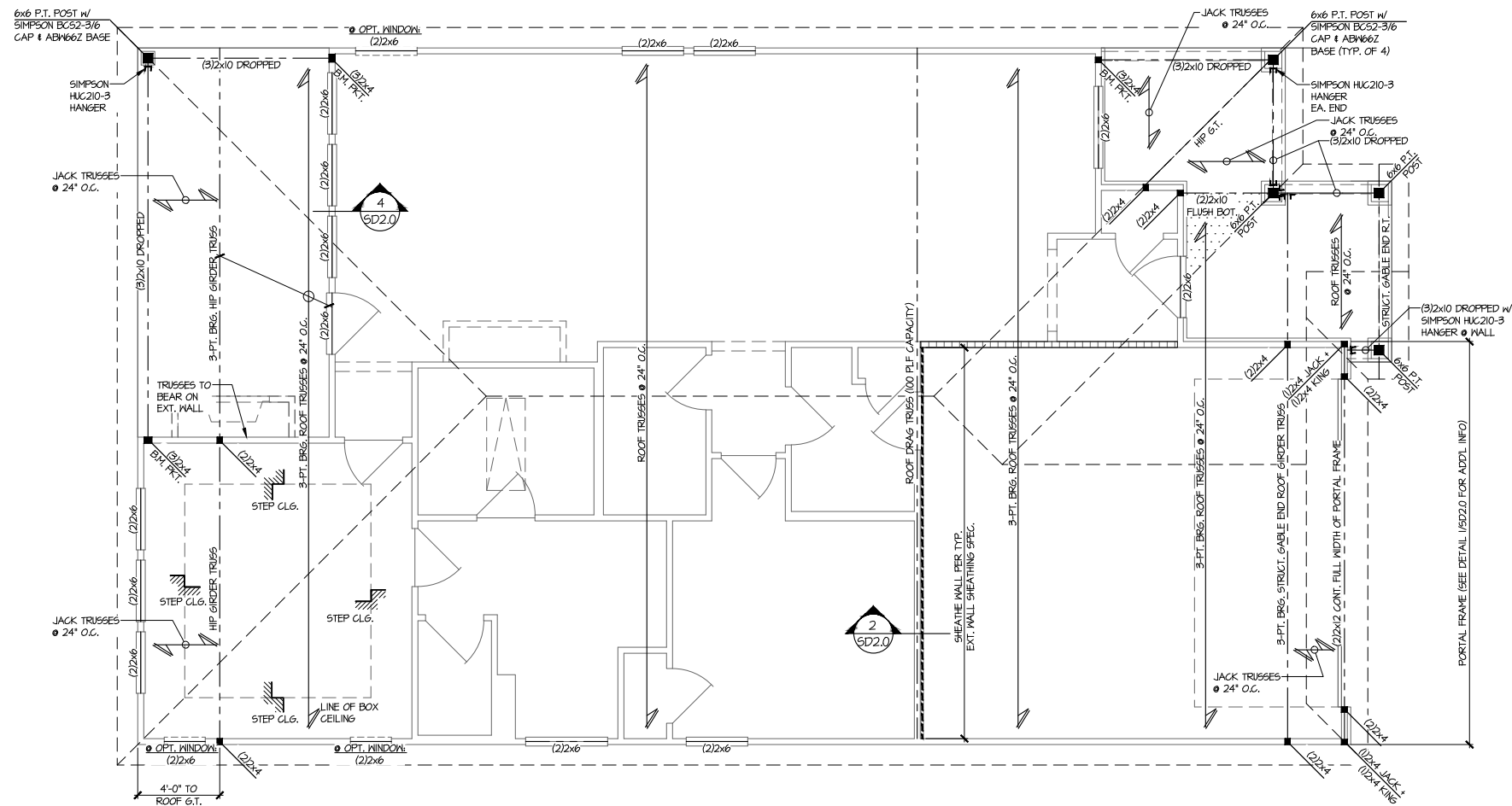
**tri pointe**  
HOMES

**FOUNDATION PLAN**

**5919-01 MODEL**

SERENITY  
MASTER SET  
RALEIGH, NC

sheet:  
**S1.2M**



**1 ROOF FRAMING PLAN**  
SCALE: 1/4"=1'-0" (22x24 SHEET)  
1/8"=1'-0" (11x17 SHEET)  
ELEV. C

THIS LEVEL HAS BEEN DESIGNED  
FOR 9'-1" PLATE HEIGHT

LEGEND	
•	INTERIOR BEARING WALL
•	BEARING WALL ABOVE (B.W.A.)
•	BEAM / HEADER
•	INDICATES EXTENT OF INT. OSB SHEARWALL AND/OR 3" O.C. EDGE NAILING
•	EXTENT OF VALLEY TRUSS OVERFRAMING @ 24" O.C. (MAX.)
•	EXTENT OF FLOOR SYSTEM TO BE DESIGNED FOR TILE
▶	INDICATES HOLDDOWN
⊥	METAL HANGER
*	INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

REFER TO S.O. FOR  
TYPICAL STRUCTURAL NOTES  
& SCHEDULES

seal: 5/12/25  
NORTH CAROLINA  
REGISTERED PROFESSIONAL  
SEAL  
017622  
ENGINEER  
STALIN KREIDEL  
© MULHERN + KULP  
Structural Engineering, Inc.

**MULHERN+KULP**  
RESIDENTIAL STRUCTURAL ENGINEERING  
300 Brookside Ave. Building 4 • Ashtabula, PA 16002  
9715-945-8801 • mulhern+kulp.com



Mulhern+Kulp project number:  
**243-24027**  
project mgr: **SMK**  
drawn by: **SMM**  
issue date: **11-07-2024**

REVISIONS:  
date: 05/02/2025 initial: FC  
DESC. ARCH UPDATE

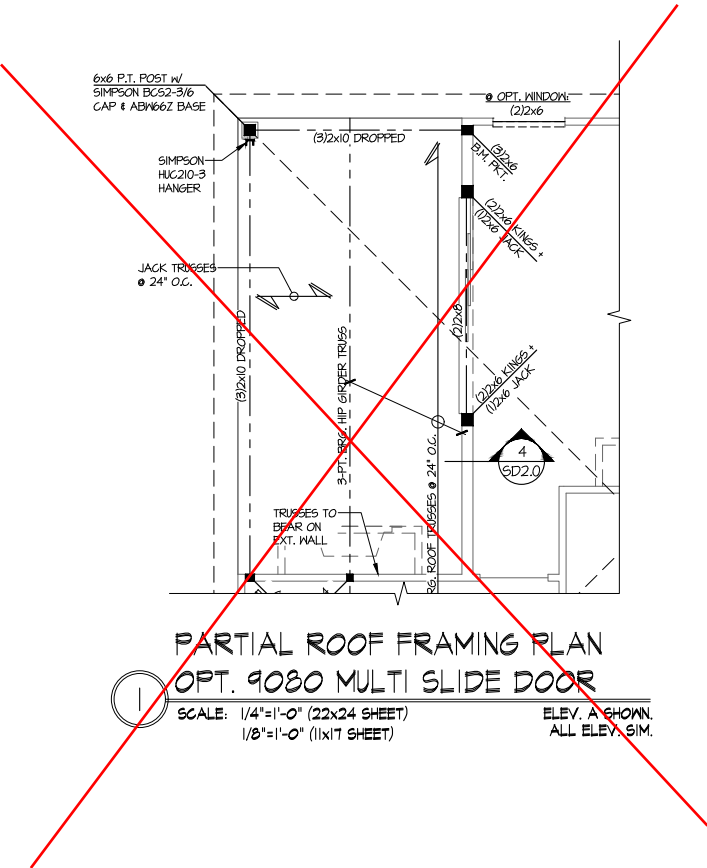
**tri pointe**  
HOMES

ROOF FRAMING PLAN

**5919-01 MODEL**  
SERENITY  
MASTER SET  
RALEIGH, NC

sheet:  
**S2.2M**

NC LICENSE # C-3825



**PARTIAL ROOF FRAMING PLAN**  
**OPT. 9080 MULTI SLIDE DOOR**  
SCALE: 1/4"=1'-0" (22x24 SHEET)  
1/8"=1'-0" (11x17 SHEET)  
ELEV. A SHOWN.  
ALL ELEV. SIM.

LEGEND

- [Symbol] INTERIOR BEARING WALL
- [Symbol] BEARING WALL ABOVE (B.W.A.)
- [Symbol] BEAM / HEADER
- [Symbol] INDICATES EXTENT OF INT. OSB SHEARWALL AND/OR 3" O.C. EDGE NAILING
- [Symbol] EXTENT OF VALLEY TRUSS OVERFRAMING @ 24" O.C. (MAX.)
- [Symbol] EXTENT OF FLOOR SYSTEM TO BE DESIGNED FOR TILE
- ▶ INDICATES HOLDOWN
- ⌈⌋ METAL HANGER
- \* INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

REFER TO S.O. FOR  
TYPICAL STRUCTURAL NOTES  
& SCHEDULES

seal: 5/12/25  
[Professional Engineer Seal]  
SEAL 017622  
STALIN KREIDEL  
ENGINEER  
© MULHERN + KULP  
Structural Engineering, Inc.

**MULHERN+KULP**  
RESIDENTIAL STRUCTURAL ENGINEERING  
300 Brookside Ave. Building 4 • Jupiter, FL 33402  
978-548-8801 • mulhern+kulp.com

NC LICENSE # C-3825

Mulhern+Kulp project number:  
243-24027

project mgr: SMK  
drawn by: SMM  
issue date: 11-07-2024

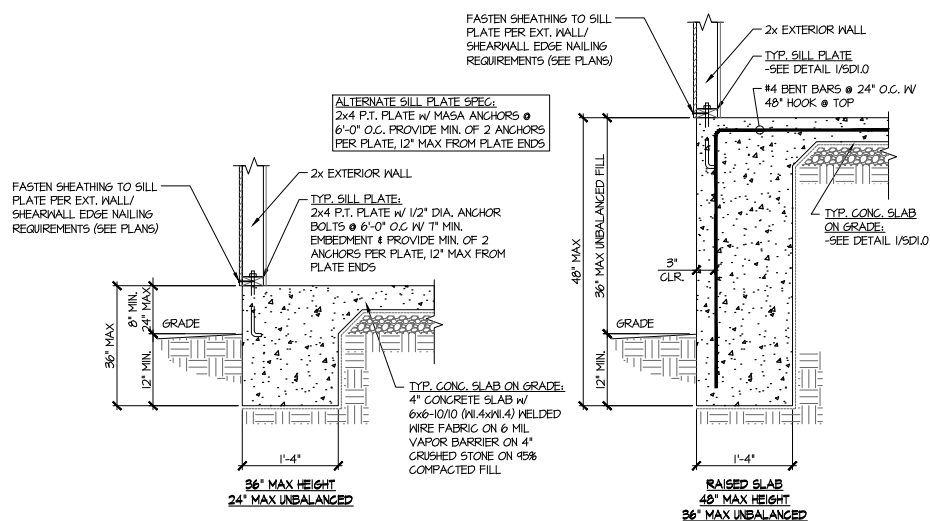
REVISIONS:  
date: 05/02/2025 initial: FC  
DESC. ARCH UPDATE

tri pointe  
HOMES

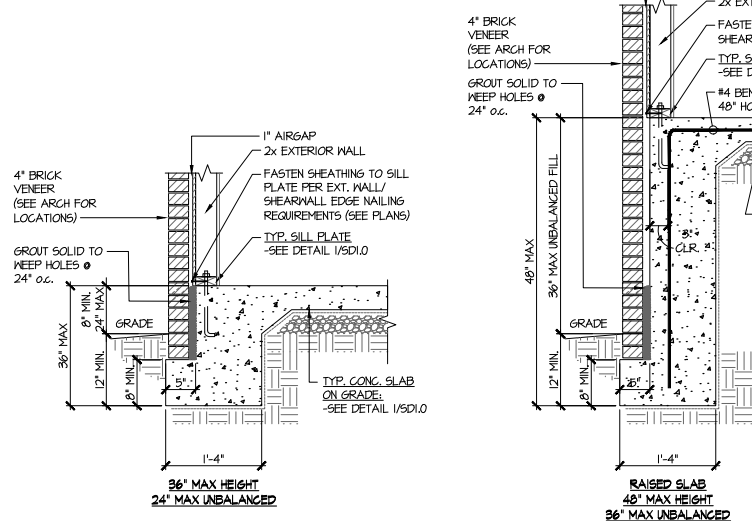
ROOF FRAMING PLAN  
5919-01 MODEL  
SERENITY  
MASTER SET  
RALEIGH, NC

sheet:  
**S3.0M**

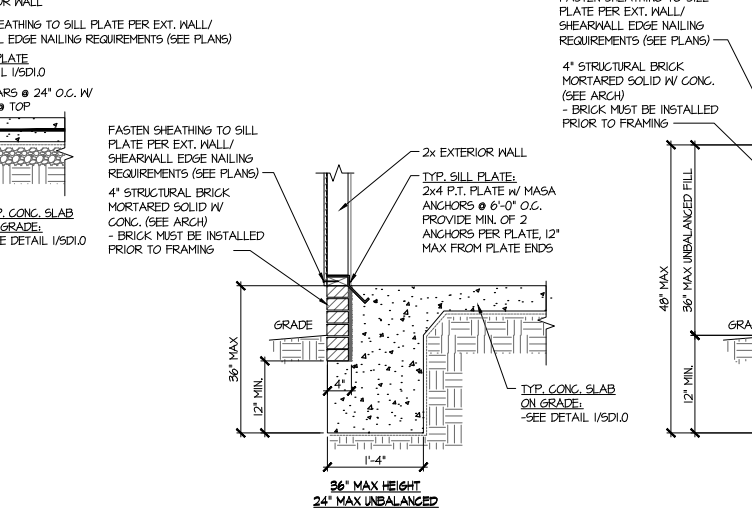




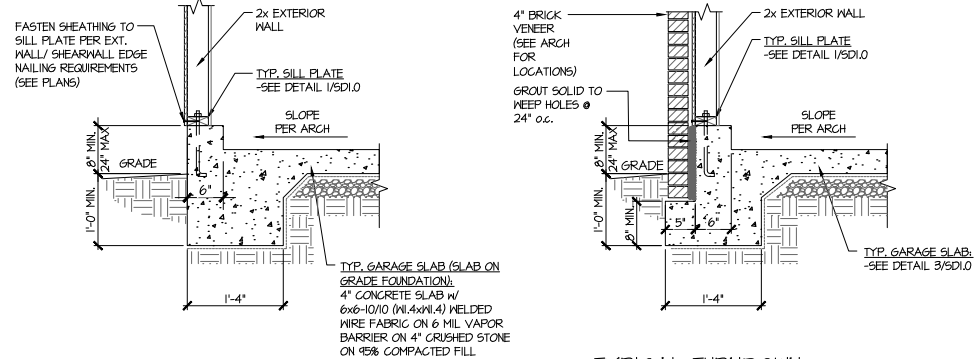
1 TYPICAL TURNDOWN @ EXT. WALL  
SCALE: 3/4"=1'-0" (22x34 SHEETS)  
SCALE: 3/8"=1'-0" (11x7 SHEETS)



2 TYPICAL TURNDOWN @ EXT. WALL (BRICK)  
SCALE: 3/4"=1'-0" (22x34 SHEETS)  
SCALE: 3/8"=1'-0" (11x7 SHEETS)

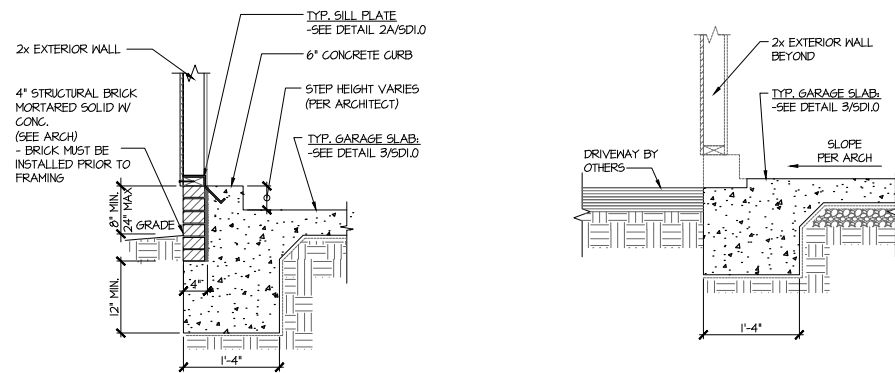


2A TYPICAL TURNDOWN @ EXT. WALL (FLUSH BRICK)  
SCALE: 3/4"=1'-0" (22x34 SHEETS)  
SCALE: 3/8"=1'-0" (11x7 SHEETS)



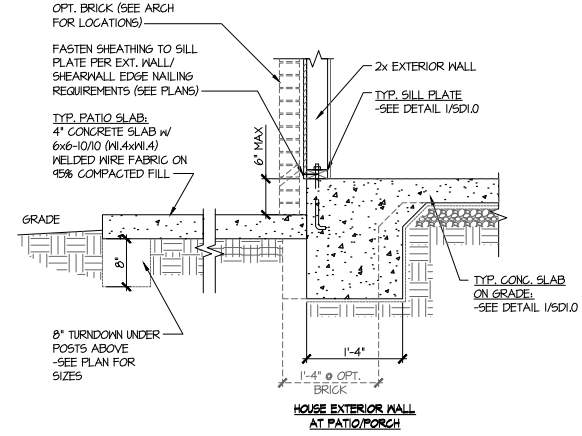
3 TYPICAL TURNDOWN @ EXT. GARAGE WALL  
SCALE: 3/4"=1'-0" (22x34 SHEETS)  
SCALE: 3/8"=1'-0" (11x7 SHEETS)

4 TYPICAL TURNDOWN @ EXT. GARAGE WALL (BRICK)  
SCALE: 3/4"=1'-0" (22x34 SHEETS)  
SCALE: 3/8"=1'-0" (11x7 SHEETS)

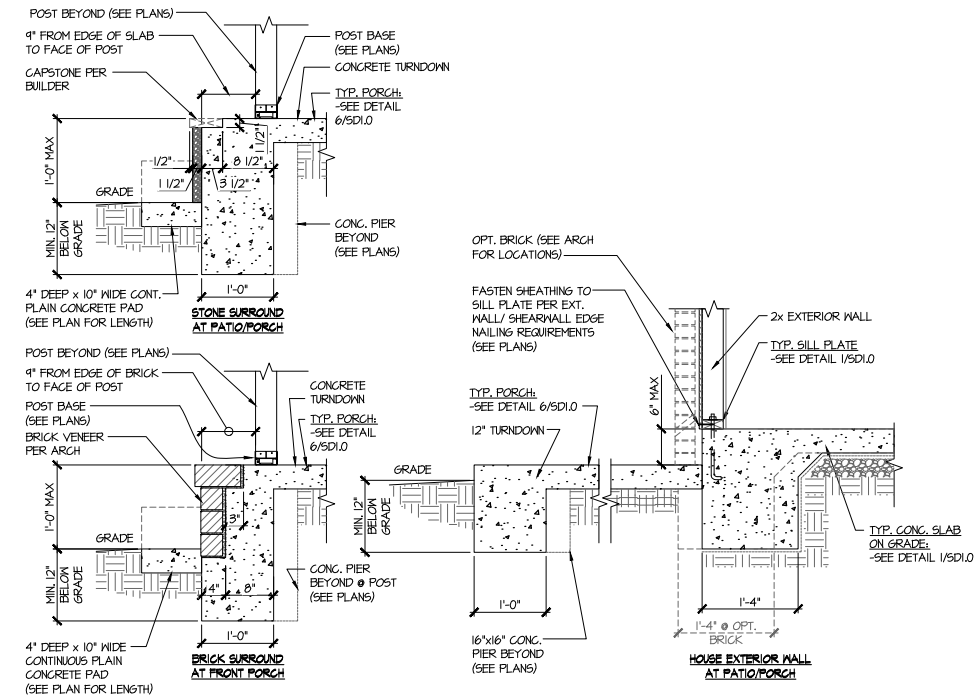


4A TYPICAL TURNDOWN @ EXT. GARAGE WALL (FLUSH BRICK)  
SCALE: 3/4"=1'-0" (22x34 SHEETS)  
SCALE: 3/8"=1'-0" (11x7 SHEETS)

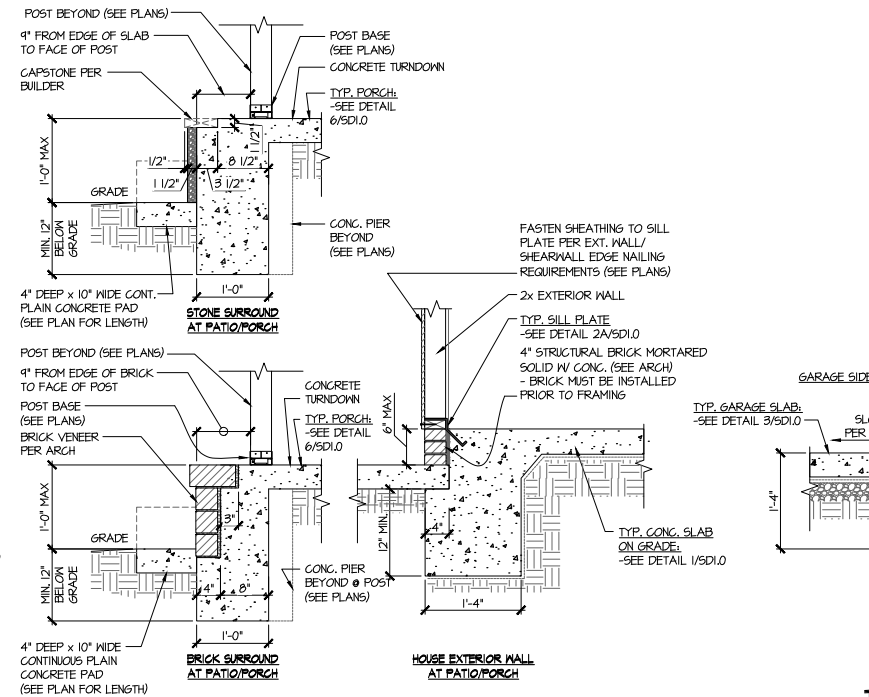
5 GARAGE OPENING  
SCALE: 3/4"=1'-0" (22x34 SHEETS)  
SCALE: 3/8"=1'-0" (11x7 SHEETS)



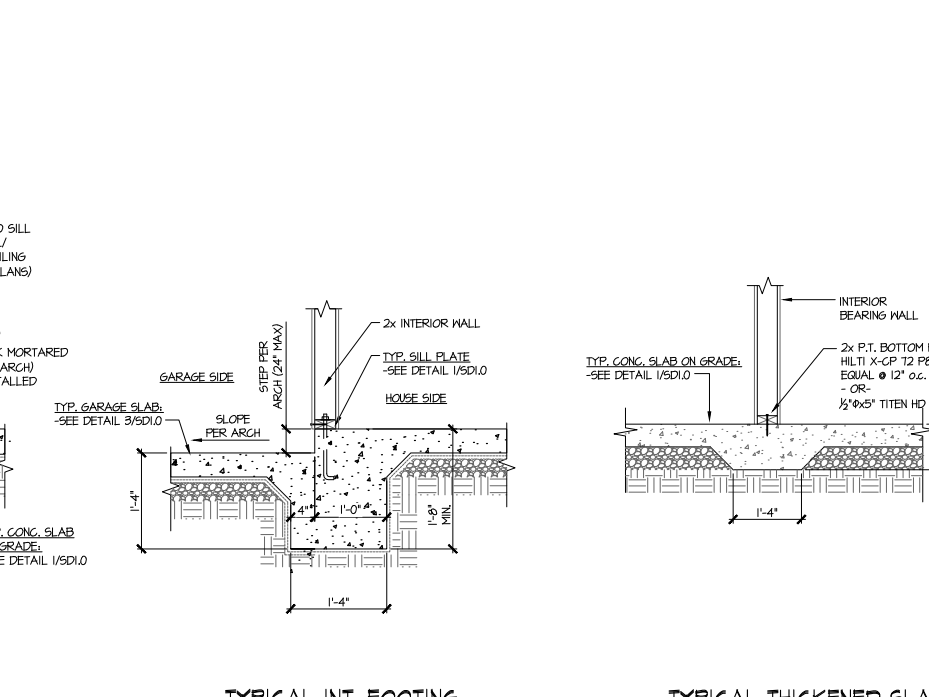
6 TYPICAL TURNDOWN @ REAR PATIO  
SCALE: 3/4"=1'-0" (22x34 SHEETS)  
SCALE: 3/8"=1'-0" (11x7 SHEETS)



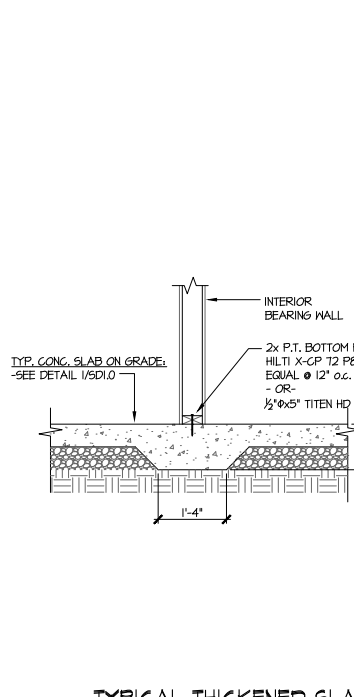
7 TYPICAL TURNDOWN @ FRONT PORCH  
SCALE: 3/4"=1'-0" (22x34 SHEETS)  
SCALE: 3/8"=1'-0" (11x7 SHEETS)



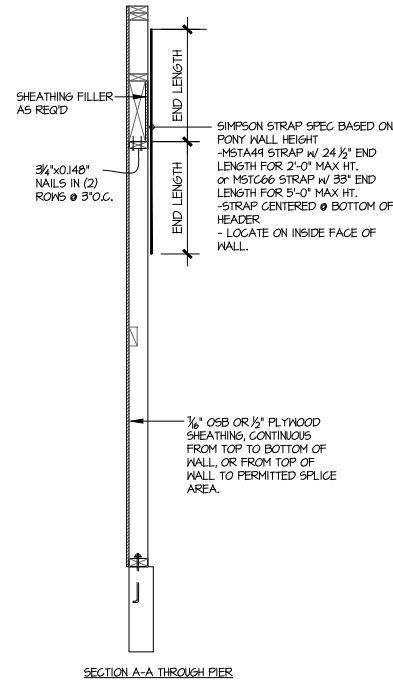
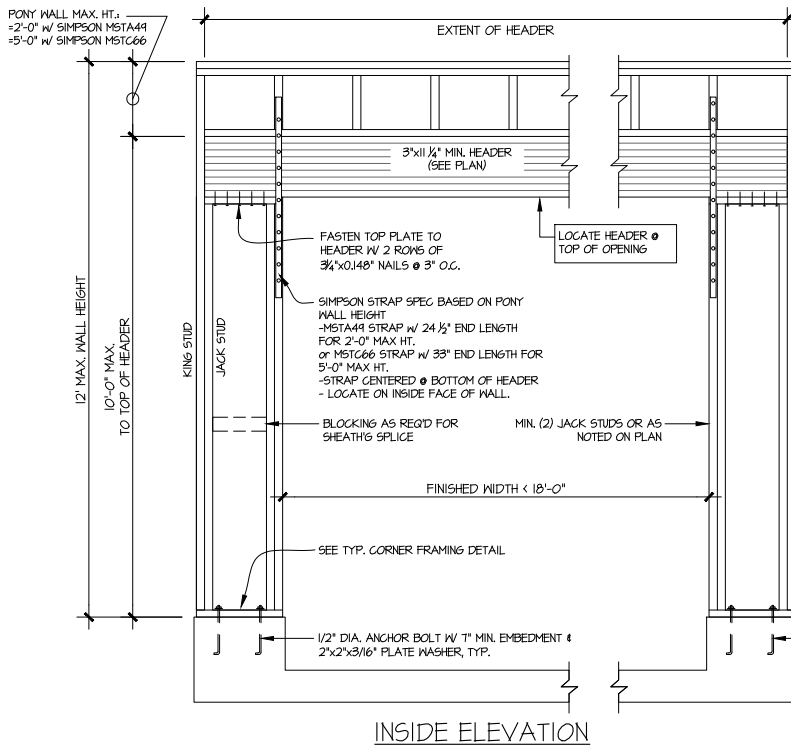
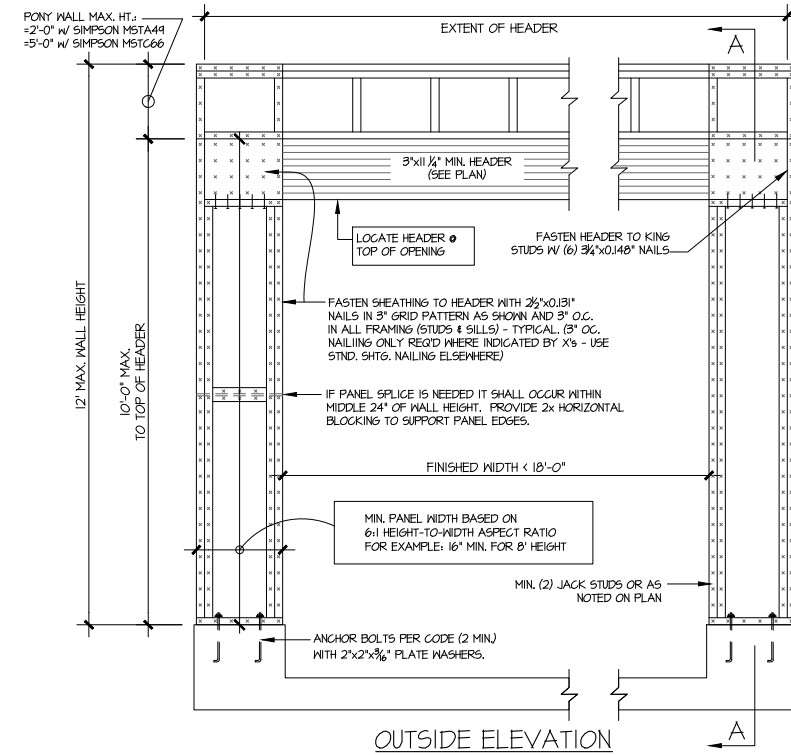
7A TYPICAL TURNDOWN @ FRONT PORCH (FLUSH BRICK)  
SCALE: 3/4"=1'-0" (22x34 SHEETS)  
SCALE: 3/8"=1'-0" (11x7 SHEETS)



8 TYPICAL INT. FOOTING BETWEEN HOUSE & GARAGE  
SCALE: 3/4"=1'-0" (22x34 SHEETS)  
SCALE: 3/8"=1'-0" (11x7 SHEETS)

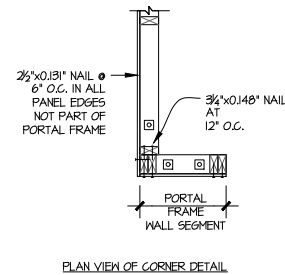


9 TYPICAL THICKENED SLAB @ INTERIOR BEARING WALL  
SCALE: 3/4"=1'-0" (22x34 SHEETS)  
SCALE: 3/8"=1'-0" (11x7 SHEETS)

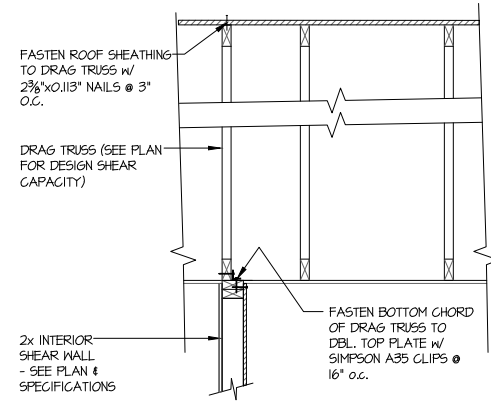


NOTE: ALL SHEATHABLE AREAS OF EXTERIOR WALL SHALL BE FULLY SHEATHED WITH 1/2" PLYWOOD OR 3/8" OSB

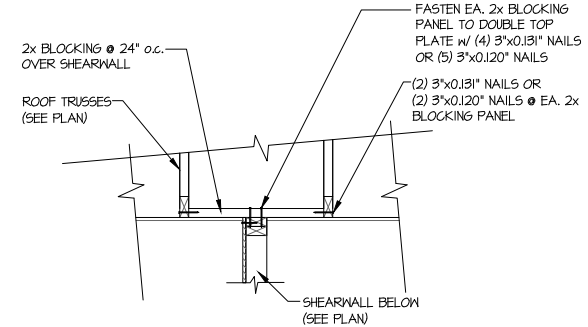
WALL FRAMING SPECIFICATION: USE SPP/SYP STUD GRADE STUDS (OR BETTER)



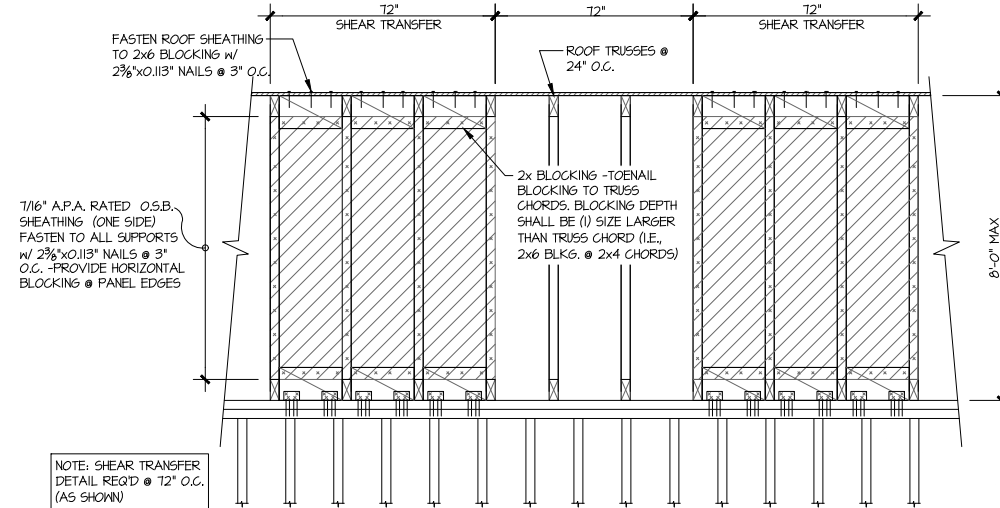
ALTERNATIVES TO 1/2" DIA. ANCHOR BOLT:  
1) 1/2" DIA. x 6" LONG SIMPSON TITEN HD  
2) 1/2" DIA. THREADED ROD EPOXY SET w/4 1/2" EMBED.  
(MIN UTILIZING HILTI HY200 EPOXY ANCHORING SYSTEM  
(OR EQUAL)



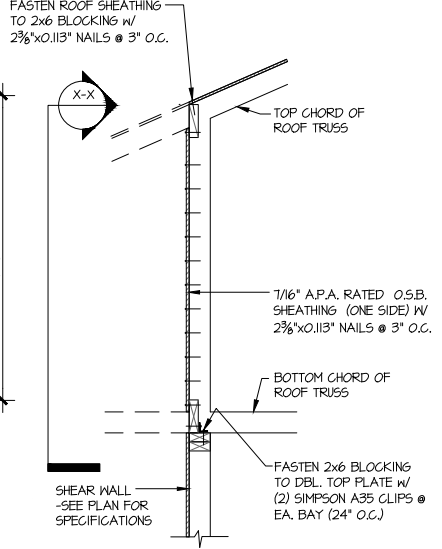
2 INTERIOR DRAG TRUSS DETAIL  
SCALE: 3/4"=1'-0"



4 SHEAR TRANSFER DETAIL @ INTERIOR SHEARWALL BELOW  
SCALE: 3/4"=1'-0" PARALLEL FRAMING



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



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

# GARAGE PORTAL FRAME BRACING ELEVATION

SCALE: N.T.S.

BOTH SIDES OF GARAGE DOOR  
115 MPH WIND SPEED (ULT)

5/12/25  
SEAL  
MULHERN+KULP  
RESIDENTIAL STRUCTURAL ENGINEERING  
303 Brookside Ave. Building 4 - Jupiter, FL 33402  
7715-945-8801 - mulhern+kulp.com

MULHERN+KULP  
RESIDENTIAL STRUCTURAL ENGINEERING  
303 Brookside Ave. Building 4 - Jupiter, FL 33402  
7715-945-8801 - mulhern+kulp.com

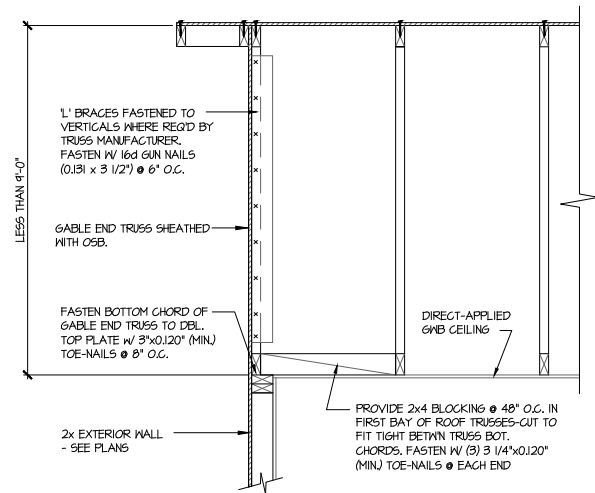
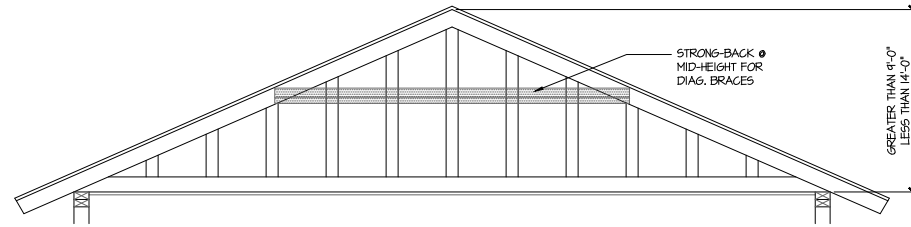
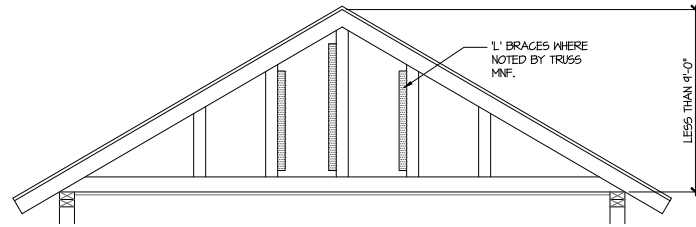
Mulhern+Kulp project number:  
243-24027  
project mgr: SMK  
drawn by: SMM  
issue date: 11-07-2024

REVISIONS:  
date: 05/02/2025 initial: FC  
DESC: ARCH UPDATE

tri pointe  
HOMES

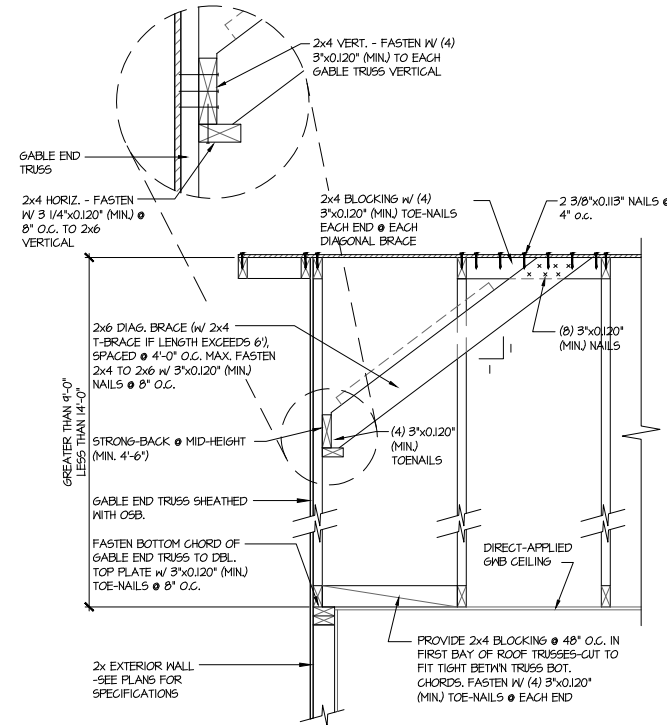
FRAMING DETAILS  
5919-01 MODEL  
SERENITY  
MASTER SET  
RALEIGH, NC

SD2.0



**A** TYPICAL GABLE END BRACING DETAIL  
SCALE: NONE  
REQ'D @ GABLE END TRUSS  
HEIGHT UP TO 9'-0"

BRACE GABLE END TRUSSES PER ABOVE DETAIL WHEN GABLE HEIGHT IS LESS THAN 9'-0". 1" BRACES REQUIRED WHERE NOTED BY TRUSS MANUFACTURER.



**B** TYPICAL GABLE END BRACING DETAIL  
SCALE: NONE  
REQ'D @ GABLE END TRUSS  
HEIGHT BETWEEN 9'-0" TO 14'-0"

BRACE GABLE END TRUSSES PER ABOVE DETAIL WHEN GABLE HEIGHT EXCEEDS 9'-0". 1" BRACES NOT REQUIRED.

seal: 5/12/25  
NORTH CAROLINA  
PROFESSIONAL  
SEAL  
017622  
ENGINEER  
STALIN KREIDEL  
© MULHERN + KULP  
Structural Engineering, Inc.

**MULHERN+KULP**  
RESIDENTIAL STRUCTURAL ENGINEERING  
300 Brookside Ave. Building 4 - Asheville, PA 18002  
717-546-8801 • mulhern+kulp.com

NC LICENSE # C-3825

Mulhern+Kulp project number:  
243-24027  
project mgr: SMK  
drawn by: SMM  
issue date: 11-07-2024

REVISIONS:  
date: 05/02/2025 initial: FC  
DESC: ARCH UPDATE

**tri pointe**  
HOMES

FRAMING DETAILS  
5919-01 MODEL  
SERENITY  
MASTER SET  
RALEIGH, NC

sheet:  
**SD2.1**