

Customer: \_\_

10/24/24 CDs Drawn By: **HOMES**<sub>SM</sub> 8521 Six Forks Road, Suite 500, Raleigh, NC 27615 Phone: [919] 844-9288

Drawina Date:

11.11.2024

Job Number:

House Name:

STY5-0215-00

the ALTON

**RESIDENCE FOR: MARKET** 

**SERENITY** 

Elevation "A"

Series: Plan No.:

G. PIEPER

859.578.4355

# **FOUNDATION NOTES**

### **CRAWL SPACES:**

- SLOPE CONCRETE SLAB 4" MINIMUM TOWARDS GARAGE DOOR
- EXTERIOR FLATWORK/GARAGES SHALL HAVE A MINIMUM CONCRETE SRENGTH OF 4,500 PSI
- FOOTINGS TO A MINIMUM CONCRETE STRENGTH OF 2500 PSI, UNLESS OTHERWISE NOTED
- ASSUMED ALLOWABLE SOIL BEARING PRESSURE: 2.000 p.s.f.
- WATERPROOF FOUNDATION WITH BITUMINOUS SPRAY
- WALL TIES EMBEDDED IN THE HORIZONTAL MORTAR JOINT SHALL BE 16" ON CENTER. TIES IN ALTERNATE COURSES SHALL
- BE STAGGERED. THE MAXIMUM VERTICAL DISTANCE BETWEEN TIES SHALL NOT EXCEED 16" AND THE MAXIMUM
- HORIZONTAL DISTANCE SHALL NOT EXCEED 16" ADDITIONAL TIES SHALL BE PROVIDED AT ALL OPENINGS, AND WITHIN 12" OF THE OPENING.
- CORE FILL ENTIRE BLOCK WALL WHEN THE WALL IS 4'-0" TALL OR HIGHER. INSTALL #4 REBAR IN EACH HOLLOW AREA OF EACH BLOCK FROM FOOTING TO TOP OF WALL, ON THE ENTIRE WALL PRIOR TO CORE FILLING IT.
- TOP COURSE OF BLOCK ON ALL WALLS WILL BE FILLED SOLID WITH MORTAR PLACING THE FOUNDATION STRAPS OR
- BOLTS IN THE MORTAR 6'-0" ON CENTER, AND 12" FROM EACH CORNER.
- 12"x16" PIERS: HOLLOW MASONRY UP TO 48" HIGH, SOLID MASONRY UP TO 9'0" HIGH
- 16"x16" PIERS: HOLLOW MASONRY UP TO 64" HIGH, SOLID MASONRY UP TO 12'0" HIGH
- BLOCK PIERS SHOULD BE PLACED DIRECTLY ON CONCRETE FOOTINGS PER PLAN. THEY SHOULD BE PLUMBED AND SQUARE WITHIN 1/4".
- SILL PLATES TO BE A MINIMUM OF 2x4 NOMINAL LUMBER.

# FRAMING NOTES

DESIGN LOADS:

FLOORS: 40 psf LIVE LOAD + 10 psf DEAD LOAD = 50 psf ROOF:

GARAGE FLOOR: 50 psf LIVE LOAD 18 psf LIVE LOAD + 17psf DEAD LOAD = 35 psf

SEISMIC: "A" & "B" WIND SPEED: 120 MPH

L/240

DESIGN DEFLECTION LIMITS (BASED ON LIVE LOAD, EXCEPT MASONRY):

RAFTERS GREATER THAN 3:12 L/180 CEILINGS MASONRY VENEER 1/600

NOMINAL LUMBER FLOORS: L/360

MANUFACTURED WOOD FLOORS: DESIGNED TO MINIMUM PRO RATING OF 35 (OR EQUIVALENT).

NO MORE THAN 8 POINT DIFFERENCE BETWEEN ADJACENT SPANS.

L/480 FOR SPANS UP TO 16'-0" AND NO GREATER THAN 1/2" DEFLECTION

L/600 FOR SPANS OVER 16'-0" IF SIMPLE SPAN AND NO GREATER THAN 1/2" DEFLECTION L/840 FOR SPANS OVER 16'-0" IF CONTINUOUS SPAN. AND NO GREATER THAN 1/2" DEFLECTION

JOIST SPACING:

19.2" o.c. MAXIMUM SPACING

DOUBLE EVERY OTHER FLOOR JOIST UNDER KITCHEN ISLANDS

INSTALL UNCOUPLING MEMBRANE IN TILE FLOOR AREAS IF 19.2" o.c. FLOOR JOIST SPACING GLUE AND MECHANICALLY FASTEN [SCREWS] WOOD FLOOR IF 19.2" o.c. FLOOR JOIST SPACING

MANUFACTURED WOOD PRODUCTS (INCLUDING, BUT NOT LIMITED TO, STRUCTURAL WOOD BEAMS AND I-JOISTS) SHALL BE FABRICATED, HANDLED, AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

JOISTS ARE NOT TO BE PLACED DIRECTLY OVER INTERIOR PARALLEL WALLS. (TO PREVENT UNEVEN FLOOR DEFLECTION FROM OCCURRING)

ALL WOOD BEAMS/HEADERS: 2x6's TO BE SPF STUD GRADE OR BETTER/ 2x8 OR LARGER TO BE SYP #2 [ PER NDS 2012 ] OR BETTER, U.O.N.

ALL HEADERS SHALL BE SUPPORTED BY (1) 2x JACK STUD AND (1) 2x KING STUD MINIMUM. THE NUMBER OF STUDS SPECIFIED AT A SUPPORT INDICATES THE NUMBER OF JACKS REQUIRED, U.N.O. AT FLUSH OR DROPPED BEAMS, THE NUMBER OF STUDS SPECIFIED INDICATES THE TOTAL NUMBER OF STUDS REQUIRED TO SUPPORT THE BEAM.

- EXTERIOR WALLS TO BE 2x4 SPF STUD GRADE AT 16" O.C. UNLESS OTHERWISE NOTED (10'4-1/2" MAXIMUM WALL HEIGHT)
- . ALL INTERIOR BEARING WALLS AND WALLS AT BASEMENT & FIRST FLOOR STAIRWELLS, KITCHEN, BATH, & GARAGE TO BE 2x4 SPF STUD GRADE @ 16" o.c.; ALL OTHER NON-BEARING INTERIOR WALLS TO BE 2x4 SPF STUD GRADE @ 24" o.c. U.O.N.
- ALL WALLS TO BE 3 1/2" UNLESS OTHERWISE NOTED.
- PROVIDE SOLID BEARING TO FOUNDATION OR BEAM BELOW FOR ALL BEAMS, HEADERS & GIRDER TRUSSES, PROVIDE BLOCKING BETWEEN JOISTS
- SEE SELECTION SHEET FOR SIZE AND STYLE OF FIREPLACE. SEE FIREPLACE ELEVATION DETAIL FOR ADDITIONAL FRAMING REQUIREMENTS, IF ANY, CHECK SELECTION SHEETS FOR FLOOR COVERING AT TOP AND BOTTOM OF STAIR RISERS AND ADJUST RISERS AS REQ'D.
- PROVIDE BLOCKING AT ALL HANDRAIL TERMINATION AND BRACKET LOCATIONS.
- 20-MINUTE FIRE RATED DOOR BETWEEN GARAGE AND LIVING AREA.
- EXTERIOR WALL TO BE 2x4 SPF STUD G AT 16" o.c. UNLESS OTHERWISE NOTED (10'-0" MAXIMUM UNBRACED WALL HEIGHT).
- ALL EXTERIOR WALLS AND INTERIOR BEARING WALLS, FRAMED HIGHER THAN THE STANDARD PLATE HEIGHT, SHALL BE FRAMED WITH CONTINUOUS FULL HEIGHT STUDS TO THE HIGHEST CEILING (I.E. NO INTERMEDIATE BREAKS) TO PREVENT LATERAL HINGE CONDITIONS.
- IN THE GARAGE, PROVIDE 1/2" GYP. BOARD AT ALL WALLS COMMON TO LIVING SPACE AND ALL STRUCTURAL MEMBERS SUPPORTING
- FLOOR/CEILING ASSEMBLY. GARAGE CEILING TO BE 1/2" SAG RESISTANT GYP. BOARD WHEN THERE ARE NO HABITABLE SPACES ABOVE, OR 5/8" TYPE X GYP BOARD WHEN HABITABLE SPACES ARE ABOVE
- ALL EMERGENCY ESCAPE & RESCUE OPENINGS TO BE A MAXIMUM OF 44" OFF OF FINISHED FLOOR AND HAVE MINIMUM OPENING DIMENSIONS OF 24" IN HEIGHT, 20" IN WIDTH, & HAVE A MINIMUM OPENING AREA OF 5.7 S.F.
- ALL DOORS TO BE 6'-8" TALL UNLESS OTHERWISE NOTED.
- ALL GLASS IN INTERIOR AND EXTERIOR DOORS TO BE TEMPERED (INCLUDING SIDELITES AND TRANSOMS)
- ALL LUMBER CONTACTING CONCRETE TO BE PRESSURE TREATED.
- ALL FASTENERS, HANGERS, AND OTHER CONNECTORS TO BE USED WITH PRESSURE TREATED WOOD ARE TO HAVE ZMAX COATING (OR EQUIVALENT) HOT-DIPPED GALVANIZED OR STAINLESS STEEL.
- . AT STAIR HANDRAIL, ON ONE SIDE ONLY, SHALL BE CONTINUOUS FOR THE ENTIRE LENGTH OF THE STAIRWAY, AND ENDS SHALL BE RETURNED TO A WALL OR POST. THE HANDRAIL MAY BE INTERRUPTED AT A NEWEL POST AT A TURN.
- ALL HANDRAIL GRIP PORTIONS SHALL NOT EXCEED 2-1/4" IN CROSS SECTIONAL DIMENSION.
- HANDRAILS SHALL BE INSTALLED ON ALL STAIRS WITH 4 OR MORE RISERS, HANDRAIL HEIGHTS SHALL BE A MINIMUM OF 34" AND A MAXIMUM OF 38".
- ALL STAIRS TO BE CONSTRUCTED SO AS NOT TO ALLOW A 4" SPHERE TO PASS THROUGH THE RISER.
- GUARDRAILS MUST BE A MINIMUM OF 36" HIGH. GUARDRAILS AT THE OPEN SIDES OF STAIRS MUST BE A MINIMUM OF 34" HIGH MEASURED VERTICALLY FROM THE NOSING AT THE TREADS. THE HORIZONTAL SPACING OF THE VERTICAL BALUSTERS SHALL BE 4" O.C.
- GUARDRAIL DESIGN TO RESIST A MINIMUM OF 200 LBS LATERAL FORCE

### BASEMENTS:

- SLOPE CONCRETE SLAB 4" MINIMUM TOWARDS GARAGE DOOR - EXTERIOR FLATWORK/GARAGES SHALL HAVE A MINIMUM CONCRETE SRENGTH
- OF 4.500 PSI
- FOOTINGS TO A MINIMUM CONCRETE STRENGTH OF 2500 PSI, UNLESS OTHERWISE NOTED- ALL FOUNDATION WALLS TO BE CAST IN PLACE CONCRETE 3000 PSI MIN. UNLESS OTHERWISE NOTED.
- BASEMENT WINDOW LOCATIONS MAY VARY FROM DRAWING DUE TO LOT CONDITIONS
- BACKFILL ADJACENT TO FOUNDATION WALLS SHALL NOT BE PLACED UNTIL THE WALL HAS SUFFICIENT STRENGTH AND HAS BEEN ANCHORED TO THE FLOOR OR HAS BEEN SUFFICIENTLY BRACED TO PREVENT DAMAGE BY THE BACKFILL.
- ASSUMED ALLOWABLE SOIL BEARING PRESSURE: 2,000 p.s.f.
- WATERPROOF FOUNDATION WITH BITUMINOUS SPRAY.
- VERTICAL CONTROL JOINTS IN BASEMENT FOUNDATION WALLS STANDARD LOCATION GUIDELINES:
- 1) PLACE A CONTROL JOINT IN ALL UNBRACED WALLS OVER 30' IN LENGTH. (NOTE: "T" WALLS AND CORNERS COUNT AS A BRACE).
- 2) WINDOWS THAT ARE LARGER THAN THE STANDARD BASEMENT WINDOW REQUIRE A CONTROL JOINT.
- 3) CONTROL JOINTS ARE NOT REQUIRED AT EVERY WINDOW THAT IS STANDARD
- 4) IF THERE IS A STANDARD WINDOW LOCATED IN A WALL SEGMENT THAT REQUIRES A CONTROL JOINT, THEN THE CONTROL JOINT SHOULD BE PLACED ON THE SIDE OF THE WINDOW THAT IS ADJACENT TO THE LONG SIDE OF THE WALL, IF THERE IS MORE THAN ONE WINDOW IN A WALL THEN ONLY ONE WINDOW SHOULD HAVE A CONTROL JOINT.
- 5) DOORS DO NOT GET CONTROL JOINTS.

MECHANICAL/ELECTRICAL NOTES

- ALL KITCHEN CABINET DIMENSIONS ARE CABINET TO CABINET.

- CABINET SIZES MAY VARY WITH FULL-OVERLAY CABINETS.

- MIN. 50 C.F.M. FOR ALL EXHAUST FANS IN BATHROOMS

FLOOR JOIST CAVITY AT STANDARD PERIMETER:

- 6) CONTROL JOINTS SHOULD NOT BE LOCATED WITHIN 3' OF A BEAM POCKET.
- 7) CONTROL JOINTS ARE REQUIRED AT THE FIRST AND LAST STEP DOWN AT STEPPED BASEMENT FOUNDATION WALLS.
- INTERIOR FLATWORK SHALL HAVE A MINIMUM CONCRETE STRENGTH OF 3.000
- ALL VERTICAL STEEL AND ALL STEEL IN STRUCTURAL SLABS TO BE GRADE 60. ALL HORIZONTAL STEEL IN FOUNDATION WALLS AND FOOTERS TO BE GRADE 40 STEEL.

- GROUND FAULT INTERRUPTER (GFCI) OUTLETS TO BE INSTALLED PER NEC 2017, SECT. 210.8

- HOLD THE CENTERLINE OF ALL EXTERIOR LIGHT FIXTURES AT 5'-8" OFF BOTTOM OF DOOR OPENING.

- ANY GAS APPLIANCES MUST BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.

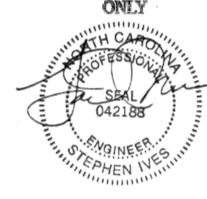
### **SLAB ON GRADE:**

- ALL CONCRETE SLABS ON GRADE SHALL BE THE THICKNESS AS INDICATED ON THE DETAILS OVER MINIMUM 6 MIL. POLYETHYLENE (VISQUEEN) VAPOR BARRIER. SLABS SHALL BE REINFORCED WITH 6x6 W1.4 WWF LAPPED 8" AT EDGES AND ENDS IN
- CONFORMANCE WITH ASTM-A 185, OR FIBERMESS REINFORCEMENT SHALL BE USED WITH A MINIMUM FIBER LENGTH OF  $\frac{1}{0}$ " TO 2  $\frac{1}{2}$ " COMPLYING WITH ASTM C 1116. THE DOSAGE AMOUNT SHALL BE 0.75 TO 3.0 POUNDS PER CUBIC YARD IN ACCORDANCE WITH MANUFA TURER'S RECOMMENDATIONS.
- SLABS ON GRADE SHALL BEAR ON STRUCTURAL FILL WHICH SHALL BE CLEAN SAND FREE OF DEBRIS AND OTHER DELETERIOUS MATERIAL. STRUCTURAL FILL SHALL BE COMPACTED TO A DENSITY OF AT LEAST 95% OF THE MODIFIED PROCTOR MAXIMUMN DRY DENSITY (ASTM D1557). TERMITE PROTECTION SHALL BE PROVIDED IN ACCORDANCE WITH APPLICABLE CODE REQUIREMENTS. IF SOIL TREATMENT IS USED, THE TREATMENT SHALL BE DONE AFTER ALL EXCAVATION, BACKFILLING, AND COMPACTION IS COMPLETED
- FOOTINGS MAY BEAR UPON UNDISTURBED SOIL OR UPON STRUCTURAL FILL. STRUCTURAL FILL SHALL BE COMPACTED TO A DENSITY OF AT LEAST 95% OF THE MODIFIED PROCTOR MAXIMUMN DRY DENSITY (ASTM D1557) FOR A DEPTH OF AT LEAST TWO FEET (2'-0") BELOW THE BOTTOM OF THE FOOTING.
- THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT: 3" CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH

  - 2" CONCRETE EXPOSED TO EARTH AND WEATHER
- L' CONCRETE NOT EXPOSED TO EARTH OR WEATHER - SLOPÉ CONCRETE SLAB 4" MINIMUM TOWARDS GARAGE DOOR
- EXTERIOR FLATWORK/GARAGES SHALL HAVE A MINIMUM CONCRETE SRENGTH OF 4.500 PSI
- ASSUMED ALLOWABLE SOIL BEARING PRESSURE: 2,000 p.s.f.
- INTERIOR FLATWORK SHALL HAVE A MINIMUM CONCRETE STRENGTH OF 3,000 PSI
- ALL STEEL IN STRUCTURAL SLABS TO BE GRADE 60. ALL HORIZONTAL STEEL IN FOUNDATION WALLS AND FOOTERS TO BE GRADE 40 STEEL.

# Space for Architect Seal

# FOR STRUCTURE



2025-01-16

# **RESIDENCE FOR:**

**SERENITY** 

Job Number Drawina Date STY5-0215-00 11.11.2024 House Name

G. PIEPER Drawing Scale: 1/8" = 1'0"

Coord Name:

the ALTON

10/24/24 CDs Drawn Bv

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Born on Date:

Elevation "A"

Coord Phone

Series:

Plan No.:

Contract Drawn B

859.578.4355

# **ELEVATION NOTES**

SEE SHOP DRAWINGS.

INSULATION DETAILS

OVER GARAGE.

EXTERIOR STUD WALL CAVITY:

R-19

FLOOR JOIST CAVITY AT CANTILEVER:

(SLOPED AND VERTICAL SPACE)

- WINDOW STYLE AND MULLIONS MAY VARY FROM ELEVATION DEPENDING UPON MANUFACTURER. STYLE, PATTERN, TYPE, ETC.

R-19

R-19

R-38 BLOWN

- CABINET STYLES MAY VARY FROM INTERIOR ELEVATIONS DEPENDING ON STYLE, MANUFACTURER, ETC. FOR CABINET DETAILS

- PROVIDE HOSE BIBS PER DIVISION SPEC. SHEET. EXACT LOCATION TO BE FIELD DETERMINED UNLESS OTHERWISE NOTED ON THE

R-15

- USE SECONDARY HEAT BARRIER ON ALL DIRECT VENT FIREPLACES 7' OR LESS ABOVE A WALKWAY.
- GRADE AWAY FROM FOUNDATION WALLS SHALL FALL A MINIMUM OF 6" WITHIN THE FIRST 10'. PROVIDE TYVEK OR EQUIVALENT HOUSE WRAP BEHIND BRICK AND STONE VENEER OVER WOOD SHEATHING.
- PROVIDE BRICK WEEP HOLES AT 24" O.C. WITH BRICK VENEER AND MORTER NET BEHIND AND THROUGH WEEP HOLES.
- PROVIDE FLASHING AND WEEP HOLES ABOVE ALL BRICK ANGLE IRONS, BELOW ALL BRICK SILLS AND ABOVE SILL PLATE SEALERS.
- EXTERIOR STEPS TO HAVE A MAXIMUM 8" RISER. WHEN VERTICAL RISE EXCEEDS 30" OR FOUR OR MORE CONTINUOUS RISERS, A HANDRAIL IS REQUIRED

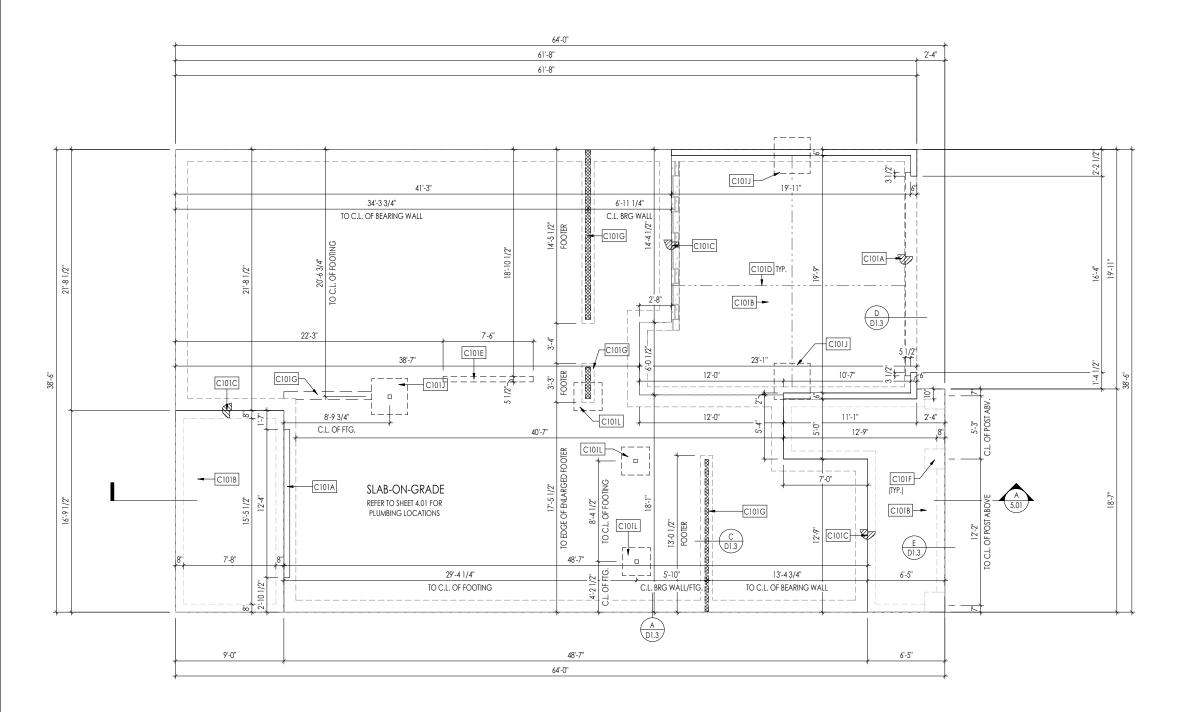
# **ROOF PLAN NOTES**

- ALL OVERHANGS TO HAVE (2) SOFFIT VENTS PER EACH 8' SOFFIT SECTION.

(OVER HORIZONTAL SPACE)

R-38 BATT

- PROVIDE BAFFLES AT EXTERIOR TRUSS BEARING FOR VENTILATION.
- PROVIDE 15# FELT PAPER LINDER SHINGLES



General Notes:

- . REFER TO SHEET ON.1 FOR GENERAL NOTES.
- 2. REFER TO SHEET S-0 FOR ENGINEERING NOTES.
  3. ALL FOUNDATION WALLS TO BE 8" THICK UNLESS OTHERWISE NOTED.

Key Notes:

101A 3/4" WEATHER LIP (1-1/2" @ SLIDING GLASS DOOR)

C101B SLOPE SLAB 1/8" PER FOOT

C101C DROP SLAB 3-1/2" 101D SLAB CONTROL JOINT

101E PROVIDE CONDUIT FOR ELECTRIC TO KITCHEN ISLAND

PAD FOOTING UNDER PORCH COLUMN ABOVE - SEE DETAIL F/D1.3

8"x16" THICKENED PLAIN CONCRETE FOOTING UNDER BEARING WALL ABOVE

36"x36"x12" ENLARGED CONCRETE FOOTING UNDER POST ABOVE 101L 28"x28"x12" PLAIN CONCRETE FOOTING UNDER POST ABOVE

Space for Architect Seal

# FOR STRUCTURE ONLY

2025-01-16

**RESIDENCE FOR:** 

# **MARKET**

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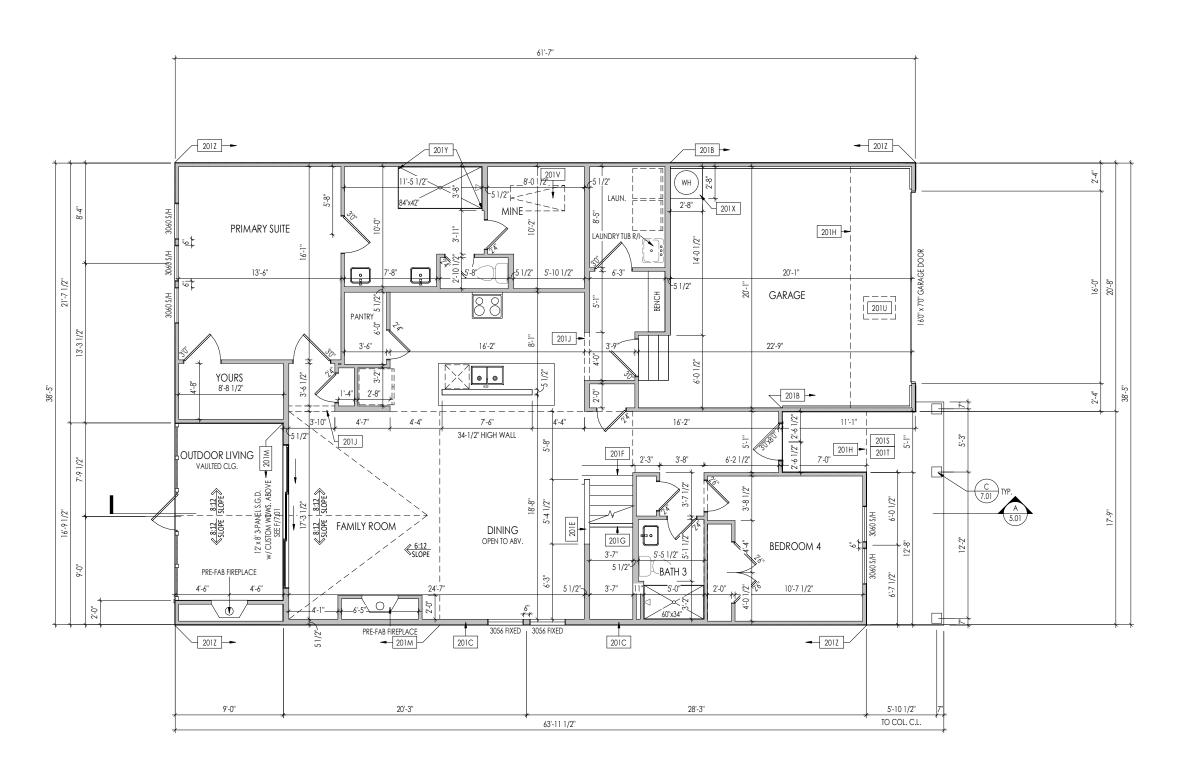
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10/24/24 CDs Drawn By:

PROVIDE 8' TALL DOORS THROUGHOUT FIRST FLOOR, U.N.O.



# General Notes:

- . REFER TO SHEET ON.1 FOR GENERAL NOTES.
- 2. ALL FIRST FLOOR CEILINGS TO BE 10"-1" ABOVE SUBFLOOR UNLESS OTHERWISE NOTED.

  3. FRAME TOP OF ALL WINDOWS AT 1"-10" BELOW TOP OF PLATE UNLESS OTHERWISE NOTED.
- 4. ALL DROPPED, INTERIOR HEADERS (FALSE AND BEARING) ARE DROPPED 1'-3" FROM CEILING.
- 5. REFER TO SELECTION SHEETS FOR FLOORING MATERIAL PRIOR TO CONSTRUCTING STAIRS TO DETERMINE
  - 6. REFER TO SHEET 2.01S FOR STRUCTURAL INFORMATION.

### Key Notes:

- 201B FRAME GARAGE WALL FULL HEIGHT STUDS AT 11'-3 1/8" WITH 2x4 STUDS AT 16" O.C. FROM TOP OF
- 201C 2x6 BALLOON FRAMED WALL SEE SHEET 2.01S FOR MORE INFO
- 201E SLOPE WALL EVEN WITH TOP OF STAIR STRINGER, RAILING ABOVE
- 201F SEE DETAIL B/5.01 FOR STAIR FRAMING DETAILS
- APPROX, LOCATION OF 36" HIGH WALL UNDER STAIRS (FIELD VERIFY)
- DUTLINE OF SECOND FLOOR ABOVE
- FRAME TOP OF OPENING AT HEIGHT SPECIFIED IN GENERAL NOTES ON THIS SHEET
- BALLOON FRAME WALL TO UNDERSIDE OF SCISSER TRUSS
- DO NOT CENTER FLOOR JOIST OVER FRONT DOOR TO ALLOW FOR CAN LIGHT INSTALLATION
- CARPENTER TO DROP ELECTRICAL WIRE THROUGH PORCH CEILING FOR LIGHTS
- 22-1/2" x 32" ATTIC ACCESS
- 201V PULL DOWN ATTIC ACCESS STAIRS (25-1/2" x 54") WITH LIGHT AND OUTLET
- 201X 18" HIGH WATER HEATER PLATFORM
- 201Y PROVIDE BLOCKING FOR SHOWER DOOR/ENCLOSURE
- 201Z PROVIDE 1/2" FIRE RATED PLYWOOD ON SIDE ELEVATIONS

Space for Architect Seal

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Job Number: STY5-0215-00

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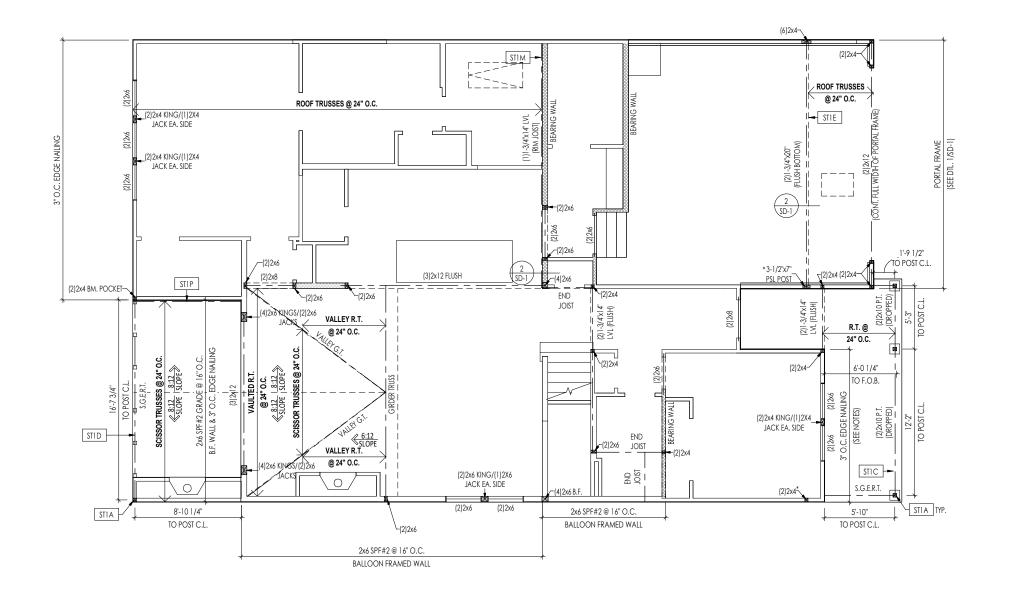
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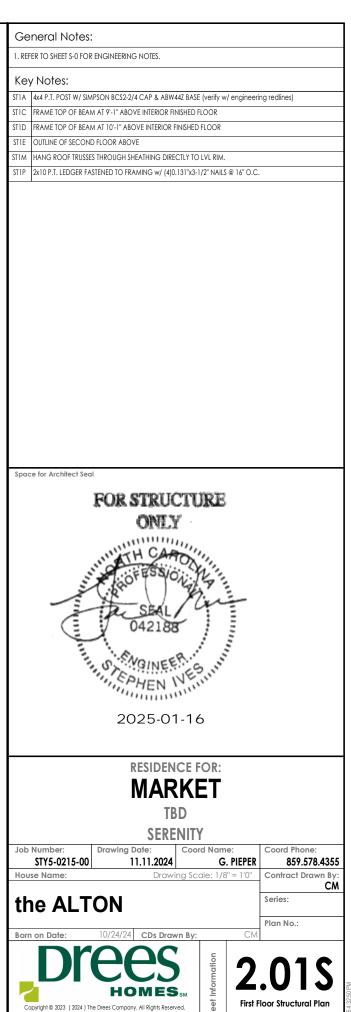
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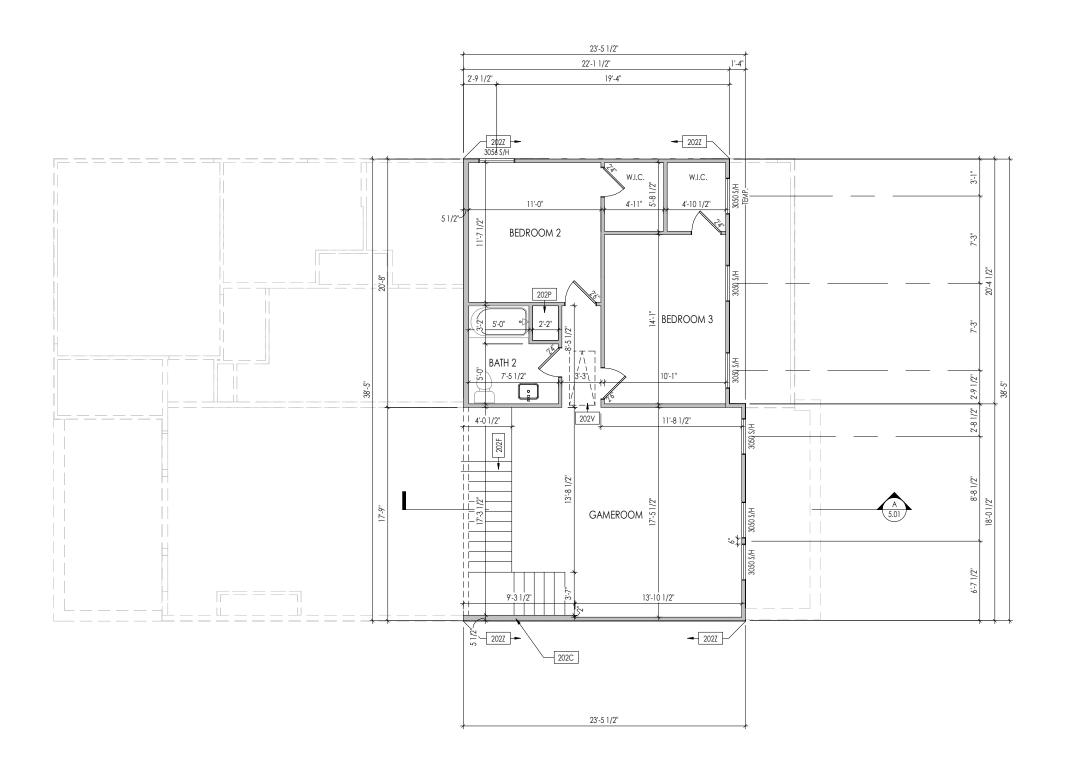


8521 Six Forks Road, Suite 500, Raleigh, NC 27615 Phone: [919] 844-9288 Elevation "A"





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General Notes:

. REFER TO SHEET ON.1 FOR GENERAL NOTES.

1. ACE AND SHEED WITH TO A GENERAL MOTES.
2. ALL SECOND FLOOR CEILINGS TO BE 9'-1" ABOVE SUBFLOOR UNLESS OTHERWISE NOTED.
3. FRAME TOP OF ALL WINDOWS AT 1'-0 1/4" BELOW TOP OF PLATE UNLESS OTHERWISE NOTED.
4. ALL DROPPED, INTERIOR HEADERS (FALSE AND BEARING) ARE DROPPED 1'-0" FROM CEILING.

5. REFER TO SELECTION SHEETS FOR FLOORING MATERIAL PRIOR TO CONSTRUCTING STAIRS TO DETERMINE

RISER HEIGHTS.

6. REFER TO SHEET 2.02S FOR STRUCTURAL INFORMATION.

# Key Notes:

202C 2x6 BALLOON FRAMED WALL - SEE SHEET 2.01S FOR MORE INFO

202F SEE DETAIL B/5.01 FOR STAIR FRAMING DETAILS

202P HVAC CHASE

202V PULL DOWN ATTIC ACCESS STAIRS (25-1/2" x 54") WITH LIGHT AND OUTLET

202Z PROVIDE 1/2" FIRE RATED PLYWOOD ON SIDE ELEVATIONS

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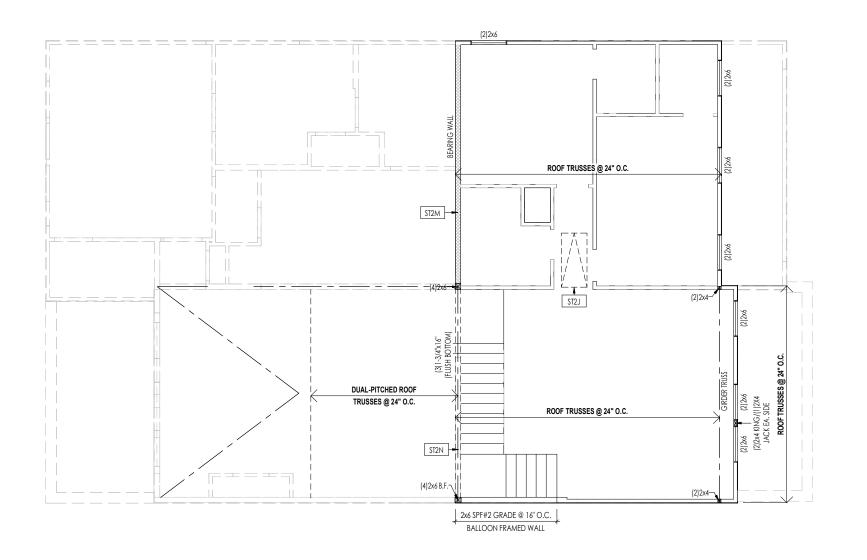
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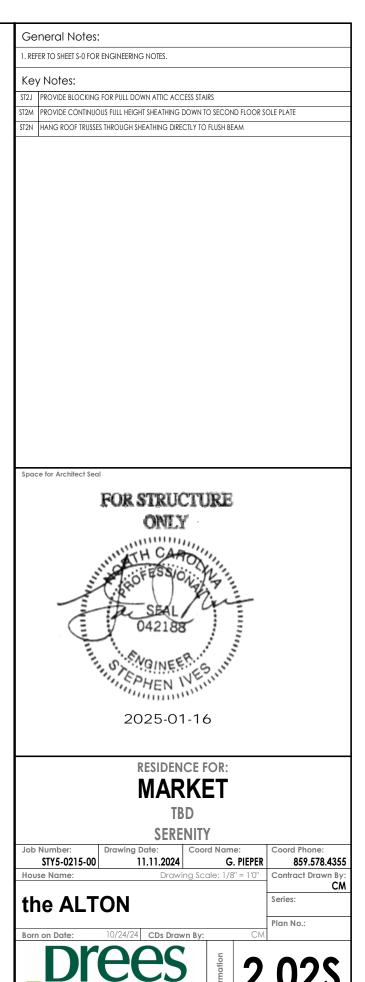
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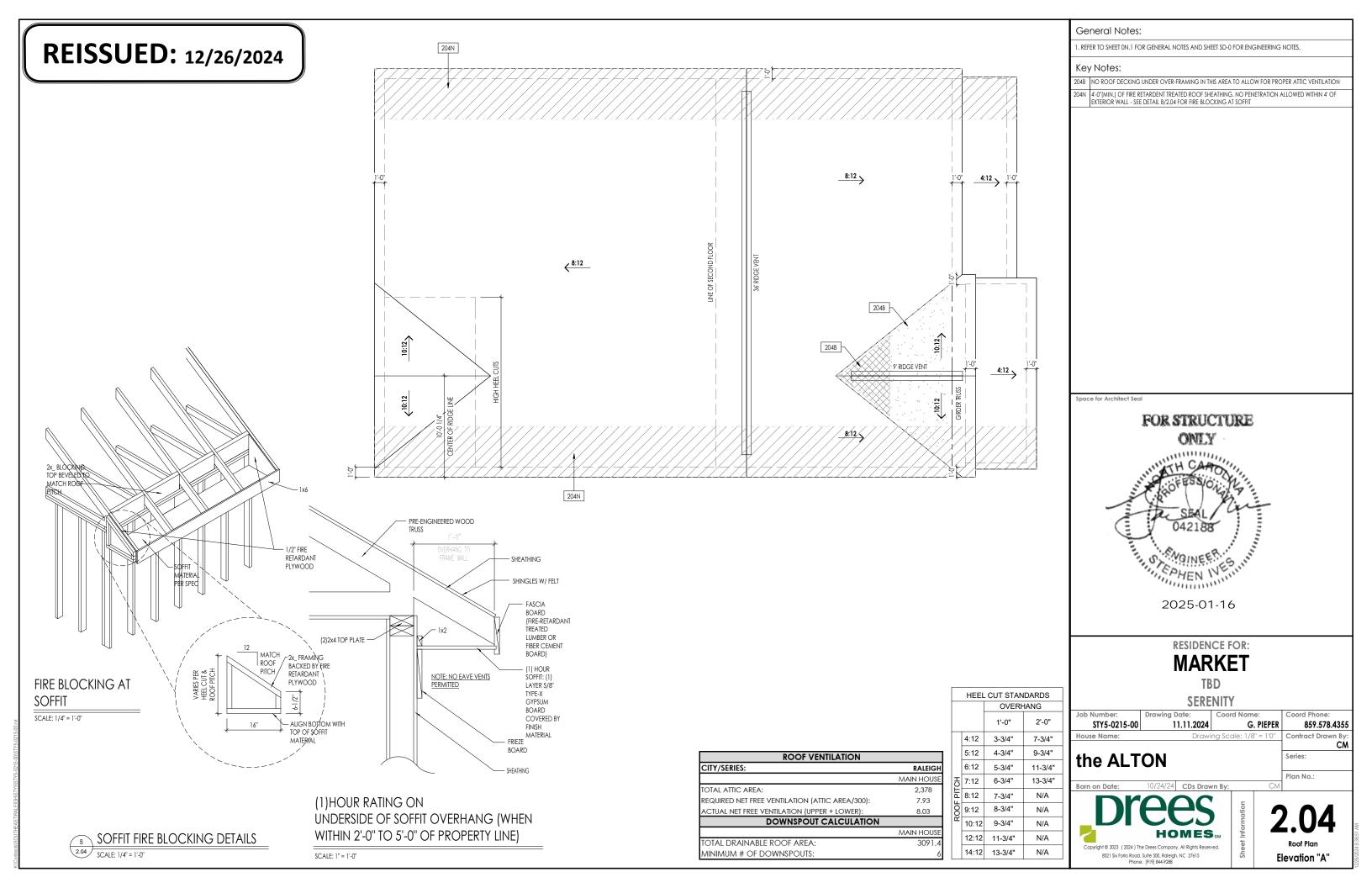
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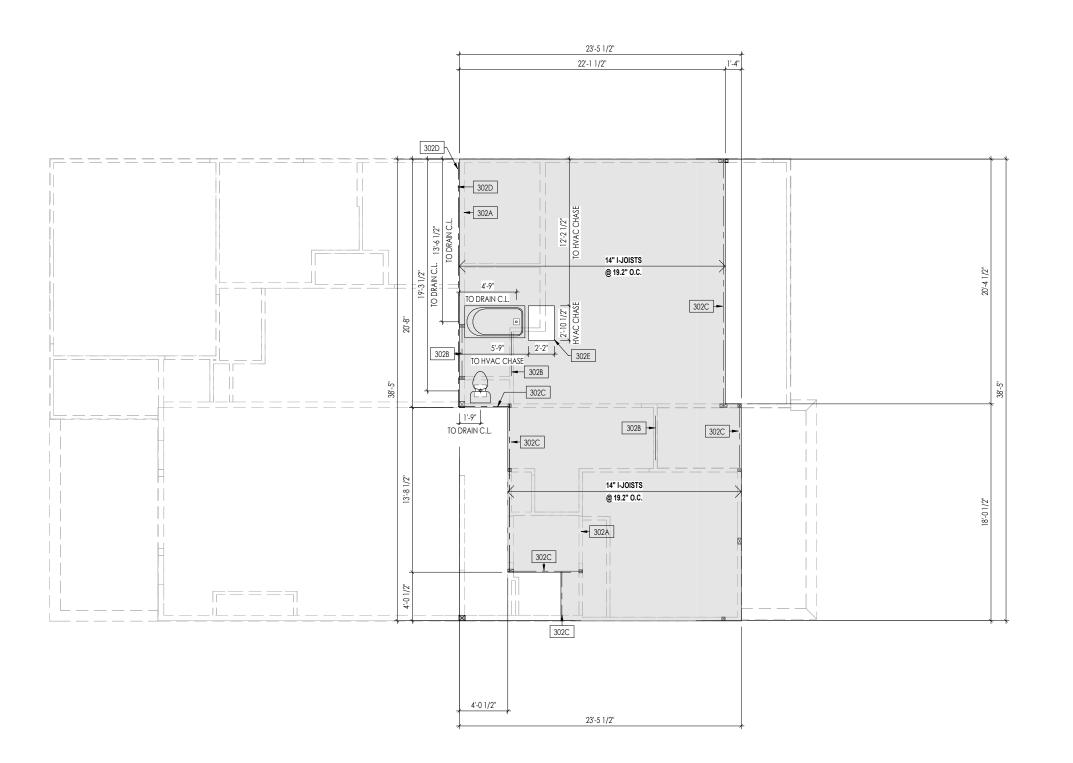
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# General Notes:

- 1. REFER TO SHEET ON.1 FOR GENERAL NOTES.
- 2. FLOOR JOISTS TO BE 14" TJI 210 SERIES, OR EQUAL, @ 19.2" O.C., UNLESS OTHERWISE NOTED.
- 3. JOISTS ARE NOT TO BE PLACE DIRECTLY OVER INTERIOR PARALLEL WALL.
  (TO PREVENT UNEVEN FLOOR DEFLECTION FROM OCCURRING)
- 4. ADDIL JOISTS MAY BE LOCATED UP TO 2" AWAY FROM THE PARTITION WALL ABOVE IN CASES WHERE MECHANICAL PENETRATIONS

# Key Notes:

302A BEARING WALL BELOW

302B BEAM BELOW - SEE SHEET 2.01S FOR MORE INFO

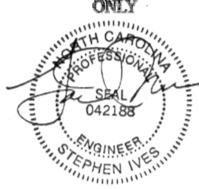
302C FLUSH BEAM - SEE SHEET 2.01S FOR MORE INFO

302D PROVIDE (1)1-3/4"x14" LVL RIM. HANG ROOF TRUSSES THOUGH SHEATHING DIRECTLY TO LVL RIM

302E KEEP THIS SPACE OPEN FOR HVAC CHASE(S) - VERIFY LOCATION WITH TJI MANUFACTURER DRAWINGS

Space for Architect Seal

# FOR STRUCTURE



2025-01-16

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# **MARKET**

SERENITY

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 Drawing Date:
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 11.11.2024
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8" = 1'0" Contract Drawn B

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Series:

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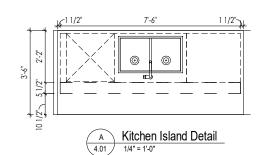
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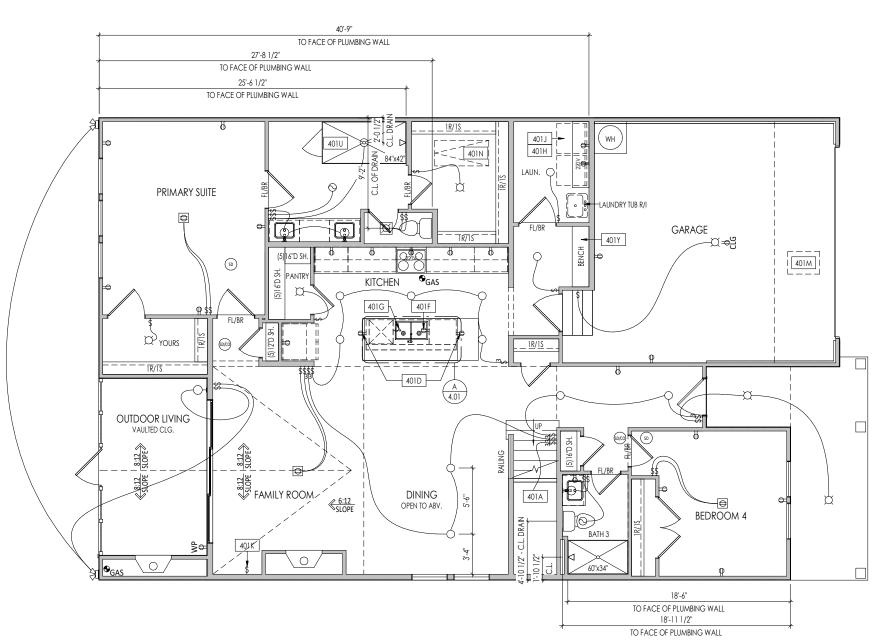
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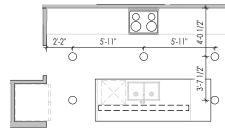
Second Floor Subfloor Plan

Elevation "A"

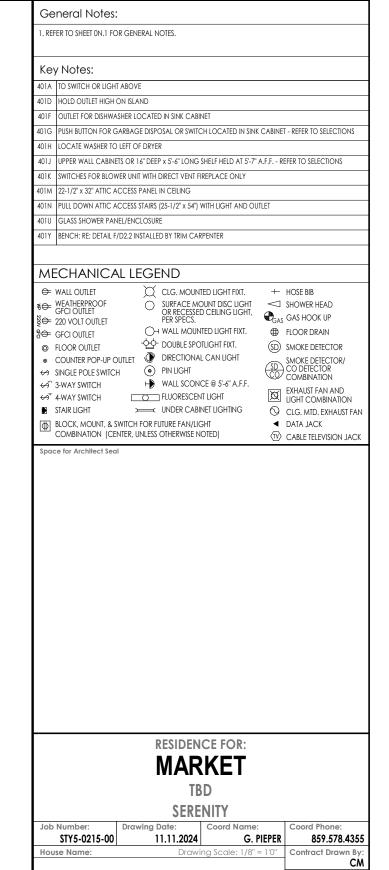
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B Kitchen Lighting Detail



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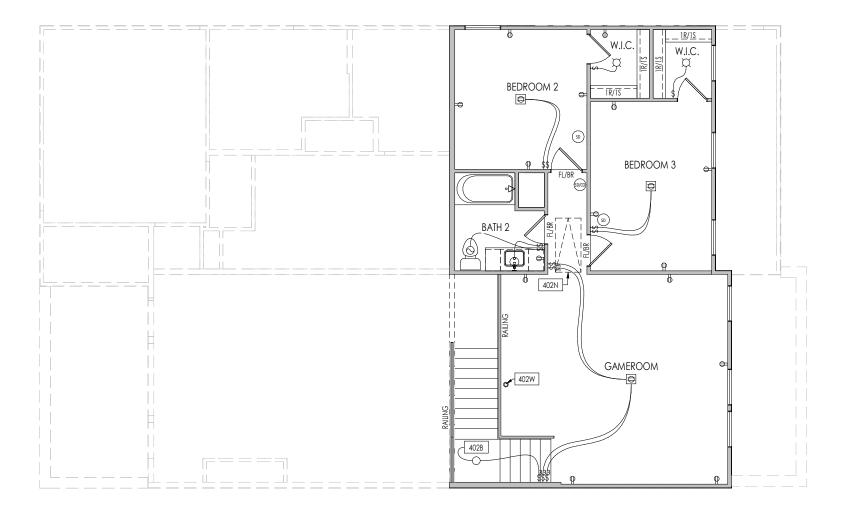
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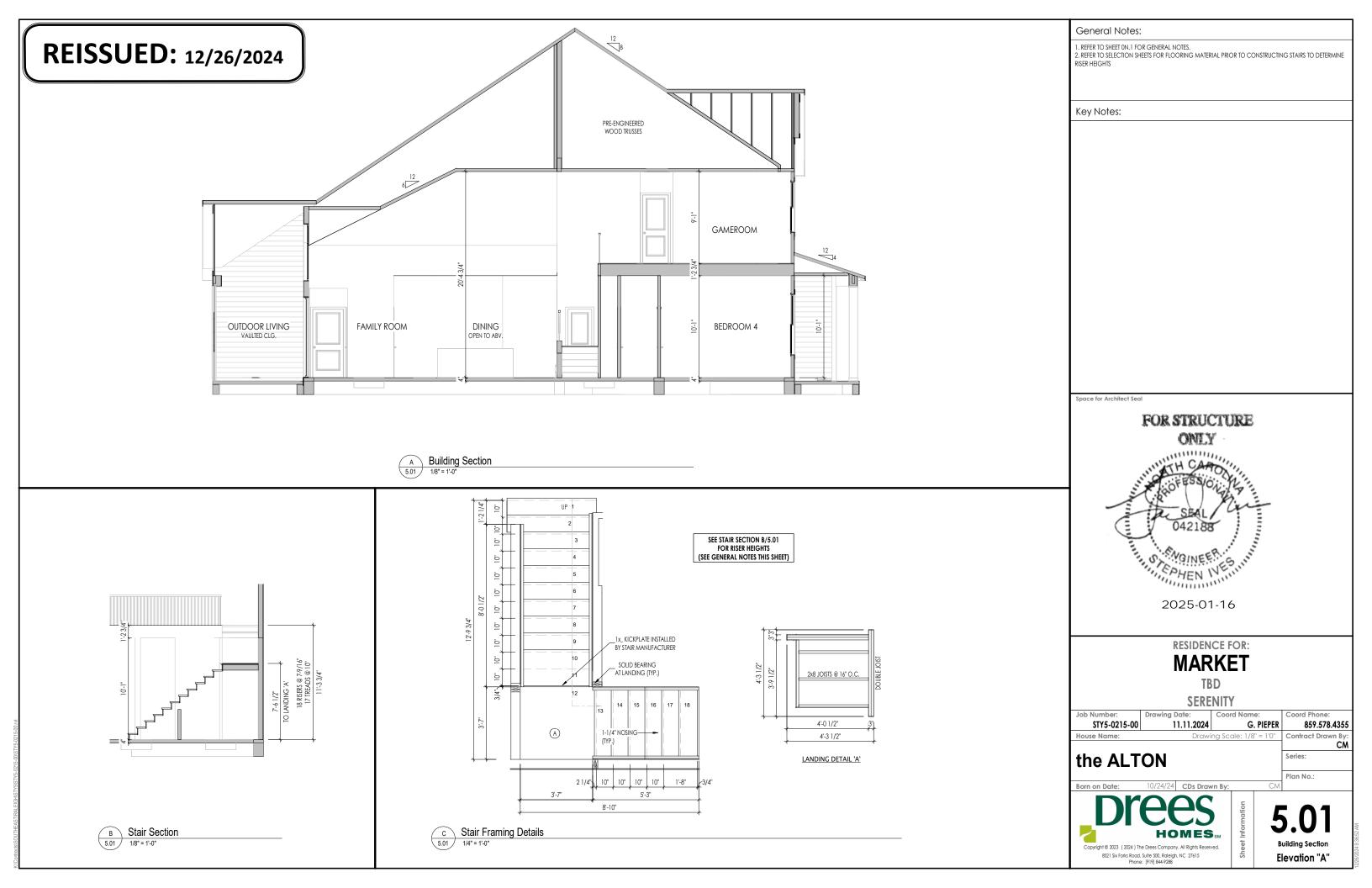
Series: Plan No.:

irst Floor Mechanical Plan
Elevation "A"

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**ELEVATION 'A'** 

# TYPICAL TRIM:

(ALL SIDES)

8" FRIEZE (FRONT ONLY, UNLESS OTHERWISE NOTED)

# General Notes:

- . REFER TO SHEET ON.1 FOR GENERAL NOTES.
  - 2. ROOFING MATERIAL PER SELECTIONS.
    3. REFER TO SHEET S-0 FOR LINTEL SCHEDULE.
- 4. CONTACT M&K ENGINEERING FOR HEADER SIZE/BRICK SUPPORT IF GRADE DROPS AND THE AMOUNT OF BRICK OVER GARAGE DOOR SHOWN ON CURRENT ELEVATION IS NO LONGER ACCURATE (IF APPLICABLE). 5. FRONT AND GARAGE DOORS PER SELECTIONS.

Key Notes:

Space for Architect Seal

RESIDENCE FOR:

# **MARKET**

**SERENITY** 

Job Number: Drawing Date: STY5-0215-00 11.11.2024 House Name:

G. PIEPER

the ALTON

10/24/24 CDs Drawn By:



Elevation "A"

Series: Plan No.:

859.578.4355

TYPICAL TRIM: **REISSUED:** 12/26/2024 (ALL SIDES) 8" FRIEZE (FRONT ONLY, UNLESS OTHERWISE NOTED) HORIZONTAL SIDING-CORNER TRIM-

# General Notes:

- . REFER TO SHEET ON.1 FOR GENERAL NOTES.
- 2. ROOFING MATERIAL PER SELECTIONS.
  3. REFER TO SHEET S-0 FOR LINTEL SCHEDULE.
- 3. ACT NO SHELL SO TO BE THE ADER SIZE/BRICK SUPPORT IF GRADE DROPS AND THE AMOUNT OF BRICK OVER GARAGE DOOR SHOWN ON CURRENT ELEVATION IS NO LONGER ACCURATE (IF APPLICABLE). 5. FRONT AND GARAGE DOORS PER SELECTIONS.

Key Notes:

Space for Architect Seal

RESIDENCE FOR:

# **MARKET**

**SERENITY** 

Job Number: Drawing Date: STY5-0215-00 11.11.2024 House Name:

the ALTON

Series:

G. PIEPER

Plan No.: 10/24/24 CDs Drawn By:

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Elevation "A"

859.578.4355

TYPICAL TRIM: **REISSUED:** 12/26/2024 (ALL SIDES) 8" FRIEZE (FRONT ONLY, UNLESS OTHERWISE NOTED)

# CORNER TRIM-

General Notes:

. REFER TO SHEET ON.1 FOR GENERAL NOTES.

2. ROOFING MATERIAL PER SELECTIONS.
3. REFER TO SHEET S-0 FOR LINTEL SCHEDULE.

3. ACT NO SHELL SO TO KENNING FOR HEADER SIZE/BRICK SUPPORT IF GRADE DROPS AND THE AMOUNT OF BRICK OVER GARAGE DOOR SHOWN ON CURRENT ELEVATION IS NO LONGER ACCURATE (IF APPLICABLE). 5. FRONT AND GARAGE DOORS PER SELECTIONS.

Key Notes:

Space for Architect Seal

RESIDENCE FOR:

# **MARKET**

**SERENITY** 

Job Number: Drawing Date: Coord Name:

STY5-0215-00 11.11.2024 House Name:

G. PIEPER Drawing Scale: 1/8" = 1'0" Contract Drawn By

Series:

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Plan No.:

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Elevation "A"

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# TYPICAL TRIM:

(ALL SIDES)

8" FRIEZE (FRONT ONLY, UNLESS OTHERWISE NOTED)

# General Notes:

- . REFER TO SHEET ON.1 FOR GENERAL NOTES.
- 2. ROOFING MATERIAL PER SELECTIONS.
  3. REFER TO SHEET S-0 FOR LINTEL SCHEDULE.
- 3. ACLE NO SHELL SO LOCK ENTRY AND A CONTACT MAKE ENGINEERING FOR HEADER SIZE/BRICK SUPPORT IF GRADE DROPS AND THE AMOUNT OF BRICK OVER GARAGE DOOR SHOWN ON CURRENT ELEVATION IS NO LONGER ACCURATE (IF APPLICABLE). 5. FRONT AND GARAGE DOORS PER SELECTIONS.

Key Notes:

Space for Architect Seal

RESIDENCE FOR:

# **MARKET**

**SERENITY** 

Job Number: Drawing Date: STY5-0215-00 11.11.2024 G. PIEPER

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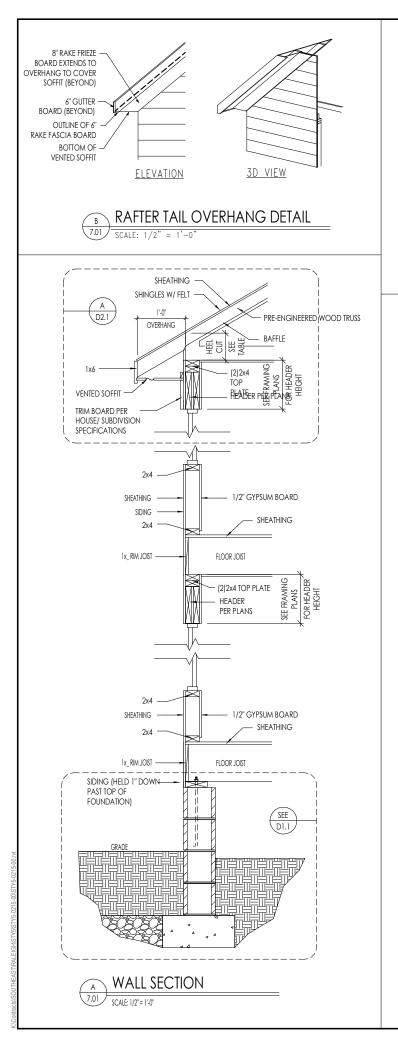
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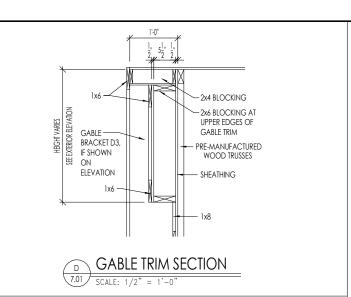
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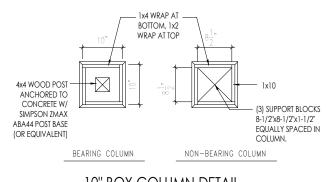
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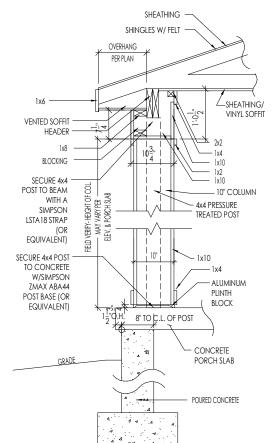
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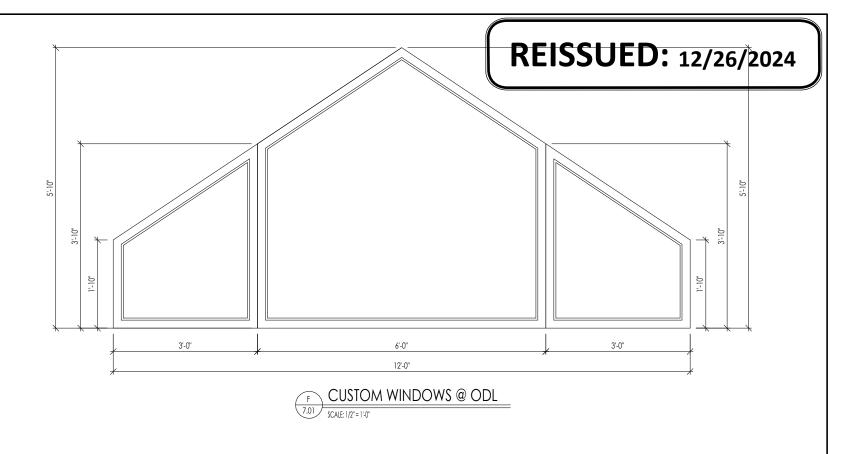


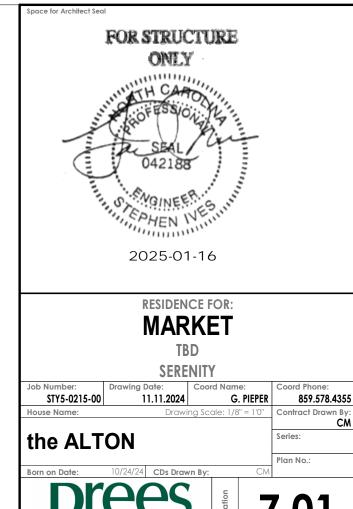


# 10" BOX COLUMN DETAIL



COLUMN SECTION / 10" BOX COLUMN





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ouse Specific Details
Elevation "A"

### CONNECTION SPECIFICATIONS (TYP. U.N.O.) NOTE: IOd NAIL = 3" x 0.131" GUN NAIL 3)10d toenails DIST TO SOLE PLATE TIID TO SOLE PLATE (3)IOd TOFNAII S OP OR SOLE PLATE TO STUD BLK'G, BTWN, JOISTS TO TOP PL. (3)10d TOENAILS AFTER/TRUSS TO TOP PLATE (3)10d toenails + SAB. END TRUSS TO DBL. TOP PL. T. w/ HEEL HT. 9 ½" TO 12" 2xIO BLK EVERY 3RD B ASTENED TO DBL. TOP PLATE / IOd TOENAILS @ 6" O.C. R.T. w/ HEEL HT. 12" TO 16' 2xI2 BLK EVERY 3RD BAY w/ lod toenails a 6" O.C. R.T. w/ HEEL HT. UP TO 24" LAP WALL SHTG, w/ DBL, TOP PL INSTALL ON TRUSS VERT ASTEN w/ 8d NAILS @ 6" O.C R.T. w/ HEEL HT. 24" TO 48" LAP WALL SHTG, w/ DBL, TOP PL. ASTEN w/ 8d NAILS @ 6" O.C. PROVIDE 2x BLK @ EA. BAY AT TOP OF HEEL **COUBLE STUD** 10d NAILS @ 24" o.c OUBLE TOP PLAT OUBLE TOP PLATE LAP SPLICE (IO)IOd NAII S IN LAPPED AREA OP PLATE LAP @ CORNERS & 2)IOd NAILS VALL TO FOUNDATION WALL SHTG. LAP w/ SILL PL. & ASTENED PER SHEAR WALL

# GARAGE SLAB

4" CONC. SI AB w/ 6x6-WI.4xWI.4 WWF ON 6 MIL VAPOR BARRIER ON 4" MIN GRANULAR FILL ON 95% COMPACTED FILL VIRGIN SOIL

# PORCH SLAB

4" CONC. SLAB W/ 6x6-WL4xWL4 WWF ON 95% COMPACTED FILL VIRGIN SOIL

### BASEMENT SLAB 4" CONG. SLAB ON 6 MIL VAPOR BARRIER

ON 4" MIN. GRANULAR FILL ON 95% COMPACTED FILL/VIRGIN SOIL

# SLAB ON GRADE

4" CONC. SLAB w/ 6x6-WI.4xWI.4 WWF ON 6 MIL VAPOR BARRIFR ON 4" MIN. GRANULAR FILL ON 95% COMPACTED FILL/VIRGIN SOIL

### VENEER LINTEL SCHEDULE

SPAN (MAX)	HEIGHT OF VENEER ABOVE LINTEL	STEEL ANGLE SIZE
3'-0"	20 FT. MAX	L4"x3"x/4"
6'-0"	3 FT. MAX	L4"x3"x/4"
	I6 FT. MAX	L5"x3"x%;"
8'-0"	6 FT. MAX	L5"x3"x%;"
q'-6 <b>"</b>	3 FT. MAX	L5"x3"x%;"
12'-0"	2 FT. MAX	L5"x3"x%;"

ILL SUPPORT 2 %" - 3 ½" VENEER w/ 40 psf MAXIMUM MEIGH SHALL HAVE 4" MIN, BEARING

- ' SHALL HAVE 8" MIN. BEARING ' SHALL NOT BE FASTENED BACK TO HEADER.
- 2 SMALL BUT BE PASTENED BACK TO MOOD HEADER IN MALL @48°06. W ½° DIA. x 3).
  ONG LAG SCRENG IN 2° LONG VERTICALLY SLOTTED HOLES.
  AX VENEER HT. APPLIES TO ANY PORTION OF BRICK OVER THE OPENING.
- "MAX YORSER HT. APPLES TO ANY PORTION OF BRICK OVER THE OPENNIS,
  LL LIMITES SHALL BE LAVIS LES VERTICAL.
  LL LIMITES SHALL BE MADE OF "86 KS) SISTEL
  MAY BE COUNTY OVERSET S" PIOTE THE EXTREMOR TOE OF THE HORIZONTAL LES
  MAY BE CUT IN THE FIELD TO BE 3 M" MICE OVER THE BEARING LIBIGHT ONLY.
  THIS BE TO ALLON FOR MORTICA DUTIN FINISHING.
  EE STRUCTURAL PLANS FOR ANY LIMITEL CONDITION NOT BYCOMPOSED BY THE
  SOME PARAMETERS.

# LEGEND

- INTERIOR BEARING WALL
- BEARING WALL ABOVE
- BEAM / HEADER
  - EXTENT OF OVERFRAMING
- 44
- METAL HANGER
- NDICATES EXTENT OF INT. OSB SHEARWALL, BLOCKED PANEL EDGES
- INDICATES HOLDOWN
- INDICATES POST ABOVE (P.A.) PROVIDE SOLID BLOCKING UNDER POST OR JAMB

# 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 O M&K 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/FLUS BEAMS DO NOT EXCEED THE FOLLOWING: ROOF TRUSSES:

- I/4" DEAD LOAD
- B. FLOOR TRUSSES, ATTIC TRUSSES, & I-JOISTS 1/8" DEAD LOAD

ABSOLUTE DEAD LOAD DEFECTION OF FLOOR TRUSSES/ATTIC TRUSSES WHEN AD JACENT TO FLOOR FRAMING BY OTHERS SHALL BE LIMITED TO 3/16". (NO DIFFERENTIAL DEFLECTION)

# GENERAL STRUCTURAL NOTES

### **FOUNDATION**

- DESIGN IS BASED ON 2018 NORTH CAROLINA RESIDENTIAL CODE.
- FOOTING DESIGN 1500 PSF NET ALLOWABLE SOIL BEARING PRESSURE IS ASSUMED, BUILDER/CONTRACTOR MUST VERIFY
- FASTEN 2x SILL PLATES TO CONC END WITH A MINIMUM OF 2
- ANCHORS PER PLATE, 12" MAX. FROM PLATE ENDS UTILIZING: • I/2" DIA. ANCHOR BOLTS @ 6'-0" O.C,7" MIN. EMBEDMENT
- SIMPSON MASA ANCHOR STRAPS @ 6'-0" O.C.
- 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.
- FOUNDATION WALLS & 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. f'c = 4,000 psi: ...... FOUNDATION WALLS
- 3,000 psi: ...... FOOTINGS & INTERIOR SLABS ON GRADE 3,500 psi: ...... GARAGE & EXTERIOR SLABS ON GRADE = 60,000 psi
- BASEMENT FOUNDATION WALL DESIGN BASED ON
- . 8' OR 9' HEIGHT (AS NOTED ON PLANS) - TALLER WALLS MUST BE ENGINEERED
- NOMINAL WIDTH (8" FOR 8' WALL, IO" FOR IO' WALL).
- BASEMENT WALL DESIGN IS BASED ON 30 OR 45 PCF BACKFILL SOIL TYPE CLASSIFICATIONS:
  - 30 PCF TYPE (GW, GP, SW, SP) 45 PCF TYPE (GM, GC, SM, SM-SC, ML)
- IMPORTANT IF 60 PCF SOIL TYPE (SC, ML-CL, OR CL) IS UTILIZED FOR BACKFILL, CONTACT MULHERN & KULP FOR THER EVALUATION OF FOUNDATION DESIGN.
- 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 BSMT, FND, WALL WITH 2" CLEAR, REINFORCEMENT SHALL EXTEND I2" PAST CORNER OF OPENING IN ALL DIRECTIONS
  • FOR OPENINGS UP TO 36", PROVIDE MINIMUM IO" CONCRETE
- DEPTH OVER OPENING OR (3)2x10 w/(2)2x6 JACK STUDS, U.N.C LARGER OPENINGS SHALL BE PER PLAN.
- ALL CONCRETE EXPOSED TO THE WEATHER SHALL NOT HAVE LESS THAN 5% OR MORE THAN 7% AIR ENTRAINMENT
- ALL FOOTINGS SHALL BEAR BELOW FROST LINE (TYP.) OR 12" MIN II REGIONS WHERE CODE FROST DEPTH IS NOT APPLICABLE. CONSULT SOILS REPORT OR BUILDING DEPT. FOR MINIMUM DEPTH BELOW
- 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
- JOINTS SHALL BE LOCATED @ 10'-0" O.C. (RECOMMENDED) OR 15'-0" O.C. (MAXIMM)

  • JOINT GRID PATTERN SHALL BE AS CLOSE TO SQUARES AS
- POSSIBLE (I:I RATIO), WITH A MAXIMUM OF I:1.5 RATIO · CONTROL JOINTS SHALL NOT BE INSTALLED IN STRUCTURAL
- TYPICAL REINFORCEMENT DETAILS: PROVIDE 3" MIN. CLEAR COVER WHERE CAST AGAINST EARTH, I 1/2" MIN. CLEAR COVER AGAINST FORMS. LAP ALL REBAR 48 BAR DIAMETERS MIN. (24" FOR #4 BARS) & BEND BARS AND LAP AT CORNERS. PROVIDE 6" HOOK INTO SUPPORTING FOOTINGS WHEN FOOTINGS INTERSECT
- DIMENSIONS BY OTHERS, BUILDER TO VERIFY.

# LATERAL/WALL BRACING & WALL SHEATHING SPECIFICATIONS

THIS MODEL HAS BEEN DESIGNED TO RESIST LATERAL FORCES RESULTING FROM: 20 MPH WIND IN 2018 NCSRC

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

### EXT. WALL SHEATHING SPECIFICATION

- 7/16" OSB OR 15/32" PLYWOOD FASTEN SHEATHING W/ 2 3"x0.II3 NAILS @ 6" O.C. AT EDGES & O 12" O.C. IN THE PANEL FIELD. (TYP, UN.C.
- 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 (1/4" 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 g" 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 BILL HEIGHT OF SHEAR WALL - OR - 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT UNSUPPORTED PANEL EDGES AND 3" O.C. EDGE FASTENING.

### 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/ IOd 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

INDICATES POST ABOVE (P.A.) PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

MIK STND. - SEPT. 201

# GENERAL STRUCTURAL NOTES

### FLOOR FRAMING

- I-JOISTS/TRUSSES SHALL BE DESIGNED BY MANUF. TO MEET OR EXCEED L/480 LIVE LOAD DEFLECTION CRITERIA. (EXCLUDES STONE/MARBLE OR WET BED CONSTRUCTED FLOORS - CONTACT M&K FOR EXCLUDED FLOOR DESIGNS)
- 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
- AT I-JOIST FLOORS, PROVIDE I I/8" MIN. OSB RIM BOARD.
- METAL HANGERS SHALL BE SPECIFIED BY MANUFACTURER, U.N.O.
- 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 ½" × 0.131" NAILS @ 6"0.c. @ PANEL EDGES \$ @ 12"0.c. FIELD.
- 2 3 × 0.120 NAILS @ 4" O.C. @ PANEL EDGES \$ @ 8" O.C. FIELD. - 2 3" x 0.113" NAILS @ 3" O.C. @ PANEL EDGES & @ 6" O.C. IN FIELD

## **ROOF FRAMING**

- ROOF SHEATHING SHALL BE 1/16" A.P.A. RATED SHEATHING 24/16 EXPOSURE I (OR APPROVED EQUAL). FASTEN TO FRAMING MEMBERS - W/ 2 ½" × 0.131" NAILS @ 6"o.c. @ PANEL EDGES & @ 12" O.C. FIELD. - w/ 2 ( × 0.120" NAILS @ 4"o.c. @ PANEL EDGES \$ @ 8" O.C. FIELD.
- w/ 2 🖁 × 0.113" NAILS @ 3"o.c. @ PANEL EDGES & @ 6" O.C. FIELD. WITHIN 48" OF ALL ROOF EDGES, RIDGES, & HIPS FASTEN ROOF
- SHEATHING FIELDS PER EDGE NAILING SPEC FASTEN FACH ROOF TRUSS TO TOP PLATE W/ SIMPSON H2.5A CLIP (OR APPROVED EQUAL) @ ALL BEARING POINTS. PROVIDE (2) H2.5A CLIPS AT 2-PLY GIRDER TRUSSES, (3) H2.5A CLIPS AT 3-PLY
- GIRDER TRUSSES & ROOF BEAMS AT ALL BEARING POINTS METAL HANGERS SHALL BE SPECIFIED BY THE MANUFACTURER, U.N.O
- ERECT AND INSTALL ROOF TRUSSES PER WTCA & TPI'S BCSI "GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING & BRACING
- OF METAL PLATE CONNECTED WOOD TRUSSES." SUPPORT SHORT SPAN ROOF TRUSSES w/2x4 LEDGER FASTENED TO

FRAMING w/(2) 3" x 0.120" NAILS @ 16" O.C. (UP TO 7' SPAN).

# MULHERN+KULP **BESIDENTIAL STRUCTURAL ENGINEERING**

300 Brookside Ave, Building 4 > Ambler, PA 19002 p 215-848-9001 > muthemkulp.com

GENERAL STRUCTURAL NOTES

• DESIGN IS BASED ON 2018 NORTH CAROLINA RESIDENTIAL CODE.

• WOOD FRAME ENGINEERING IS BASED ON NDS, "NATIONAL DESIGN

SPECIFICATION FOR WOOD CONSTRUCTION" - LATEST EDITION.

LIVE = 20 PSF (18 PSF REDUCED)

DEAD = 7 PSF T.C., IO PSF B.C

LOAD DURATION FACTOR = 1.15

(TO BE VERIFIED BY BUILDER)

GENERAL FRAMING

ALL TYP, NAIL FASTENER REQUIREMENTS ARE NOTED IN STANDARI

NAILS SPECIFIED ARE MIN DIAMETER AND LENGTH REQUIRED FOR

MANUFACTURER'S REQUIREMENTS FOR MAX CHARTED CAPACITY.

EXT. & INT. BEARING WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON

PLANS) @ 16" O.C. SPF "STUD" GRADE LUMBER, OR BETTER, U.N.O.

ALL INTERIOR BEARING WALLS ARE ASSUMED TO BE SHEATHED W

GYP WALL BOARD (ONE SIDE MIN.) OR PROVIDE MID HT. BLOCKING

ALL 2x8, 2x10, \$ 2x12 HEADERS, BEAMS \$ OTHER STRUCTURAL

• WALLS OVER 10' TALL SHALL BE PER PLAN.

MEMBERS SHALL BE S.Y.P. #2 LUMBER, OR BETTER

CONNECTIONS TABLE (IRC. TABLE 86023(I)) OR ON PLANS ALL

CONNECTION ALL HANGER NAILS SHALL BE INSTALLED PER

NOTE: HANGERS USE COMMON NAIL DIAMETERS NOT TYPICAL

FLOOR LIVE = 40 PSF (30 PSF @ SLEEPING AREAS)

DEAD = 10 PSF (1-JOISTS & SOLID SAWN)

BATHS, SUNROOM, & LAUND.

1,500 PSF ASSUMED ALLOWABLE BEARING PRESSURE

ADD'L IO PSF @ CERAMIC TILE IN KITCHEN,

DESIGN LOADS

ROOF





lulhern+Kulp project number:

ALL 2x6 HEADERS, BEAMS & OTHER STRUCTURAL MEMBERS SHALL

BE SPF "STUD" GRADE LUMBER, OR BETTER. SUPPORT ALL HEADERS/ BEAMS W/(1)2x JACK STUD & (1)2x KING

- 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:
- (I)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). FINGINFERED LUMBER BEAMS TO MEET OR EXCEED THE FOLLOWING
- LSL' Fb=2325 psi; Fv=310 psi; E=1.55x10^6 psi • 'LVL' - Fb=2600 psi; Fv=285 psi; E=2.0xl0^6 psi ENGINEERED LUMBER POSTS TO MEET OR EXCEED THE FOLLOWING
- 'LVL' Fb=2400 psi; FcII=2500 psi; E=I.8xI0^6 psi FOR 2 & 3 PLY BEAMS OF EQUAL 13/4" MAX. WIDTH, FASTEN PLIES TOGETHER WITH 3 ROWS OF 3"YO 120" NAILS @ 8" O/C, OR 2 ROWS 16" X4"X31/6" SIMPSON SDS SCREWS (OR 31/6" 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 13/4" MAX. WIDTH, FASTEN PLIES TOGETHER WITH 3 ROWS OF 1/4"x6" SIMPSON SDS SCREWS (OR 6 3/4" TRUSSLOK SCREMS) • 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
- 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' XU PINS OR EQUAL) @ 16" O.C. STAGGERED OR I/2" DIA. BOLTS € 48" O.C. STAGGERED.
- STEEL PIPE COLUMN "ASD CAPACITIES" SHALL MEET OR EXCEED THE LOADS PROVIDED AT EACH STEEL PIPE COLUMN LOCATION ON N. COLUMNS ARE TO BE INSTALLED PER THE MANUFACTURER'S REQUIREMENT THAT ACHIEVES THE RATED CAPACITY USED. INCLUDING BUT NOT LIMITED TO POSITIVE CONNECTIONS AT THE TOP AND BOTTOM OF THE COLUMN, TWO COLUMNS MAY BE USED UNDER CONTINUOUS BEAMS TO ACHIEVE THE FULL PLAN SPECIFIED REQUIRED CAPACITY IF INSTALLED CENTERED ON THE EXISTING FOOTING/ PLAN SPECIFIED SINGLE COLUMN LOCATION

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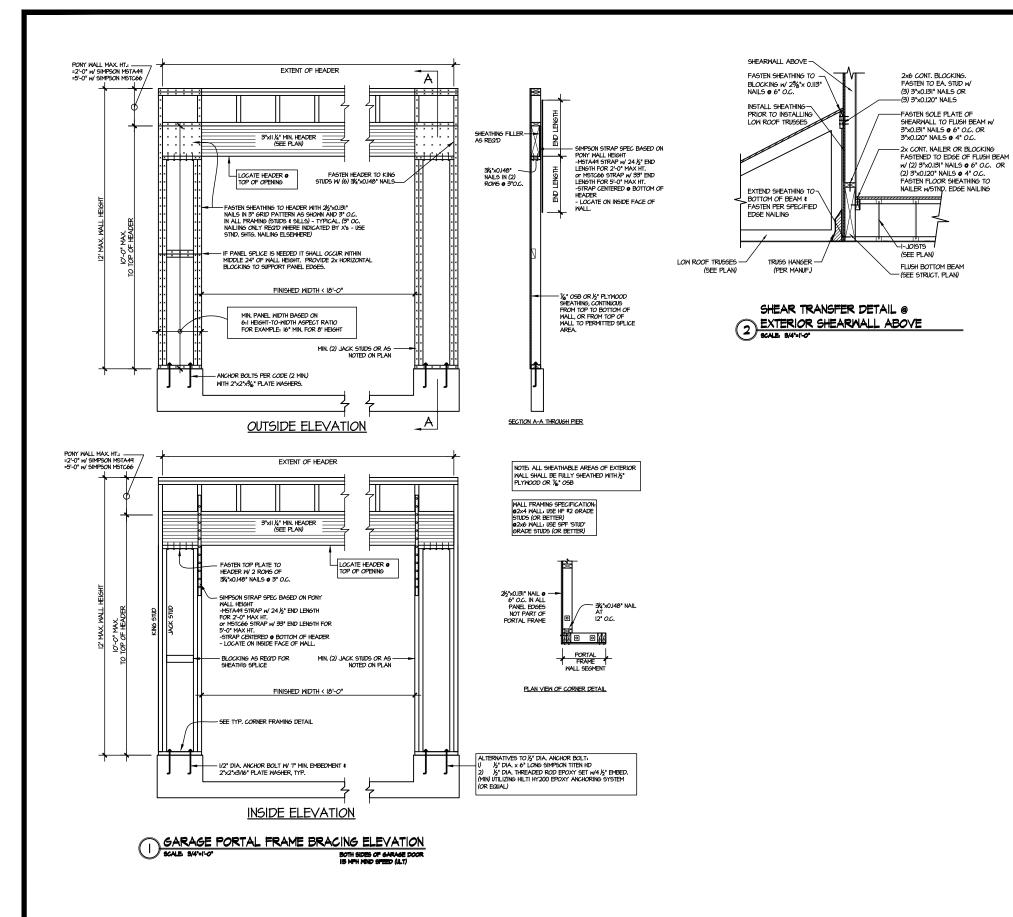
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SEAL

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Mulhern+Kulp project number: 085-24018

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MULHERN+KULP medicentral stanctural enemienne strenetry medicinal enemienne

MULT

STRUCTURAL NOTES
ALTON MODEL

ALEIGH, NC

sheet:

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