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DATE	DATE COMMENTS				
7/29/2024	MID-POINT REVIEW	AJH			
8/2/2024	RE-ISSUE MID-POINT w/ UPDATED WIDTH & SQ. FTG.	AJH			
8/30/2024	BID SET FOR WAKE COUNTY, NC	AJH			
9/16/2024	CLIENT REVIEW & COMMENTS	AJH			
9/30/2024	CLIENT REVIEW & COMMENTS / ADDED OPT. DECK	AJH			
10/2/2024	ADDED ROOF HEIGHTS & ELECTRIC FOR MISC. OPTIONS	AJH			
11/7/2024	CLIENT COMMENTS: UPDATED OPTIONS & MISC.	AJH			
11/11/2024	CLIENT COMMENTS: UPD. COVERED PORCH & MISC.	AJH			
11/19/2024	REMOVD GRILLS FROM SIDE & REAR ELEVATONS	AJH			
2/19/2025	STRUCTURAL COORDINATION	RC			
4/24/2025	STRUCTURAL COORDINATION	RC			
6/9/2025	UPDATED FOUNDATIONS & PLANS PER ENGINEERING	AJH			
9/4/2025	SPECIFIC LOT - MAGNOLIA ACRES LOT #14	TPF			

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"JORDAN - MAGNOLIA ACRES LOT #14"

Garbarino Residence 766 Magnolia Acres Lane Fuquay-Varina, NC 27526

	'Jordan' Square Footages	
	Area	Square Footage
	First Floor	1457 SF
	Second Floor	1807 SF
FINISHED		
≝	Total	3264 SF
_		
	3rd Floor Loft	806 SF
	3-Car Courtyard Garage	704 SF

BUILDING CODE COMPLIANCE: 2018 NORTH CAROLINA STATE BUILDING CODE / 2015 INTERNATIONAL RESIDENTIAL CODE FLOOR FRAMING TO BE 14" ENGINEERED FLOOR SYSTEM (DESIGNED BY TRUSS MANUFACTURER)

" THE LOCAL JURISDICTION SHALL FILL IN THIS TABLE WITH LOCAL CLIMATIC AND GEOGRAPHIC CRITERIA "

2015	2015 CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA: Wake County, NC							10		
ROOF LOAD	WIND SPEED	SEISMIC DESIGN		SUBJECT TO DAMAGE FROM		WINTER DESIGN	ICE BARRIER UNDERLAYMENT	FLOOD HAZARDS	AIR FREEZING	MEAN ANNUAL
LOAD	(IIIPII)	CATAGORY	Weathering	Frost Line Depth	Termite	TEMP.	REQUIRED		INDEX	TEMP
20	115	A/B	MODERATE	12"	MODERATE TO HEAVY					



1.0

STRUCT. REVIEW	mm-dd-yy
PROJECT REVIEW	mm-dd-yy

Architecture Collaborative, Inc. 8334 Main Street Ellicott City, MD 21043 ArchitectureCollaborative.com

Tel.: (410) 465-7500

9/9/2025 10:23:45 AM, Architecture Collaborative, Inc.

Fax: (410) 465-0903

GENERAL NOTES

- * ALL WORK SHALL COMPLY TO ALL APPLICABLE LOCAL CODES.
- All construction shall be classified as One- and Two-Family Dwelling and comply to the 2015 INTERNATIONAL RESIDENTIAL CODE w/ 2018 NORTH CAROLINA STATE BUILDING CODE amendments
- · All construction shall comply to the 2018 NORTH CAROLINA ENERGY CONSERVATION CODE - RESIDENTIAL PROVISIONS (or as required
- These plans and notes are the property of Architecture Collaborative, Inc. Use of these plans without the written consent of Architecture Collaborative Inc. is prohibited
- * These are conceptual plans and schematic in nature. Their purpose is to develop a proto-tupe house.
- * These plans are subject to modification as necessary to meet code requirements or to facilitate mechanical/plumbing installations or to incorporate design improvements. The Architect reserves the right to make any changes, for any reason, at any time.
- * The Owner shall defend indemnify and save harmless the Architect and Architecture Collaborative, Inc. from and against all suits, action claims, liabilities, losses and/or expenses, including attorney's fees, arising out of or resulting from the performance of any work by the Owner or its employees, subcontractors, agents or representatives, caused in whole or in part by any act or omission, whether negligent or otherwise, on the part of the Owner or its employees, subcontractors, agents or representatives.
- The Contractor shall compare and coordinate all drawings. When a discrepancy or an error/omission exists, he shall comply with the code and contact the Architect and Owner in writing for proper adjustment
- These plans are NOT to be scaled for Construction purposes. Written dimensions and notes supercede all scale references. Contact the Architect and Owner prior to work when any discrepancy arises.
- * In the event certain features of construction are not fully shown on the drawings, their construction shall be of the same character as for
- · Habitable space, hallways, and portions of basements containing these spaces shall have a ceiling height of not less than 7'-0" except as required by code.
- * Beams, girders, ducts or other obstructions in basements containing habitable space shall be permitted to project to within 6'-4" of the
- · Integral garages in dwelling units shall be separated from all adjacent living space w/ fire separation as required by local code.
- These drawings do not include structural details.

DESIGN LIVE LOADS

RECOMMENDED MINIMUMS:

ROO!	26 L2L
Sleeping Floors	3Ø PSF
Living Floors	40 PSF
Attic Floors:	
Habitable	3Ø PSF
Uninhabitable (without Storage)	10 PSF
Uninhabitable (with limited Storage)	20 PSF
Garage Slabs	50 PSF
Exterior Balcony's	40 PSF
Fut aut au Danks	AM DCE

For decks attached to exterior walls, refer to APPENDIX M. 40 PSF

Individual treads designed for uniformly distributed live load or 300-bound concentrated load over a 4 square inch area. whichever produces greatest stress.

A single concentrated load applied in any direction at any point along the top.

SITE

- GENERAL: These drawings do NOT cover sitework, grading, landscapina or zonina.
- Building foundations have been designed based on an assumed soil bearing capacity of 2000 PSF (or as noted). Additional engineering may be required if soil bearing capacity is less than 2,000 P9F (or as noted), or if no Geotechnical report is available
- In lieu of a complete geotechnical evaluation, load-bearing values per Table R401.4.1 shall be assumed
- Provide continuous perimeter foundation drainage in accordance with local code requirements. Where both interior and exterior drains are required, provide minimum 1-1/2" dia. bleeder pipes through mid-line of footing at 8' o.c. (max.). Typically, drains shall be lead to sump pits or to positive daylight discharge points.
- Slope all stoops, porches, walks and garage slabs away from building 1/8" minimum per foot.
- * All work shall comply with local codes

STAIR NOTES

- INTERIOR and EXTERIOR STAIRS:
- . All stairs shall comply with the code and all local amendments. = Minimum finish width: $36\,^{\circ}$
- Minimum finished headroom height: 6'-8"
 Maximum riser height to be 13/4" or per local code.
- : Minimum tread depth to be 10" or per local code.
- Maximum space between ballisters to be 4" or per local code.
- = Handrail height shall NOT be less than 34" or greater than 38" and may not project more than 3 1/2" into stair width
- · Stair winders shall have a minimum inside width of 6" and a minimum tread (10") or as per code, when measured 12" from the inside corner
- * Stair landings shall be a minimum of 36" x 36" finished.
- · Stairways with (3) or more risers are required to have a handrail.
- Porches, balcony's or raised floor surfaces located more than 30" above the floor or grade below shall have guard rails not less than 36" in height. Guard rail spacing shall be designed not to allow passage of an object of 4" or more in diameter
- · The stair manufacturer is responsible for the design and construction of the stair. All work shall comply with local code

CONCRETE

- Bottom of footings shall be located at minimum frost line below finished grade, as per local code. Steps or depth of footing/ foundation may vary according to local site or frost conditions
- · All interior concrete slabs 30'-0" or greater in any direction shall have 6"x6"x#10 welded wire mesh or control joints. Monolithic turned down slabs for Townhouses shall have a control joint between units when required by local code.
- · Concrete used in exposed areas implicit to freezing and thawing (both during construction and service life) shall be air-entrained in accordance with local code. Exterior flat-work shall be coated with an approved curing compound.
- Foundation walls of habitable space located below grade shall be water-proofed or damp-proofed using materials and methods approved by the local building jurisdiction.

Construction:	Minimum Specified Compressive Strength:
Footings	2,500 PSI
Interior Basement Slabs	2.500 PSI

The concrete contractor is responsible for the design and construction of all concrete work. All work shall comply with local

3,000 PSI

MASONRY

Foundation Walls

Garage / Exterior Slabs

 The maximum vertical distance of unbalanced fill measured from the top of the lower level floor slab to outside finished grade shall not exceed the following for un-reinforced walls where unstable soil or ground water conditions do not exist:

Type of Wall:

8" C.M.U.	4'-Ø"
12" CM.U. (hollow)	5'-Ø"
12" CM.U. (solid)	6'-0"
8" Poured Concrete	5'-Ø"
10" Poured Concrete	7'-Ø"

- Presumptive Load-Bearing Values of Foundation Materials shall not be less than 1,500 PSF or greater than 60 PCF lateral pressure. Additional engineering may be required if lateral pressure or load-bearing values are not within the above values.
- All backfill shall consist of sand and/or gravel.
- Top courses of CMU, foundation walls shall be filled solid, including the courses under any steel beam or corbelled CMU as per local
- Stone and Masonry veneer shall be attached and anchored in accordance with Section 703 (with Amendments)
- The masonry contractor is responsible for the design and construction of all masonry work. All work shall comply with local

METAL

- · Straps/bolts shall be per code and building inspector approved:
- Min. (2) straps/bolts per section of plating 12" max, from each end with intermediate straps/bolts at:
- 1/2" bolts spaced per code
- Straps spaced per code or per manuf.'s spec.'s
- · Galvanized metal brick ties shall be installed as per local codes
- · Gutters, downspouts, and bleeders shall be installed by the contractor as required by local codes.
- All structural steel shall be detailed, fabricated and erected in accordance with the latest edition of AISC (American Institute of Steel Construction) "Specification for Structural Steel Buildings -Allowable Stress Design and Plastic Design" and AISC code of standard practice, shall be of domestic origin and conform to:
 - Wideflange = ASTM A992, Fy = 50 ksi

 - Plates and Angles = ASTM A36 HSS Round ASTM A53, Grade B Fy = 35 ksi

SPECIALTIES

- Pre-Built fireplace units shall be UL approved and installed according to code and manufacturers specifications and
- · Wood burning fireplaces shall have tight-fitting flue dampers and outdoor combustion air.
- · Chimneus shall extend a minimum of 2'-0" above any roof structure
- Provide overflow pans and drains for met appliances when located
- Provide a 22"x30" (Min.) attic access with switched light or 22"x48" pull down stair. Seal and insulate as per local code
- · Kitchen and Bath plans are approximate. See manufacturers plans
- The drywall contractor is responsible for the design and construction of the party walls, fire walls and fire separation assemblies. All work shall comply with local codes.
- The fire suppression contractor is responsible for the design and construction of the suppression systems. All work shall comply with

THERM. PROTECTION

	R-Value:	Thickness:	_ocation:
	R-4.6		Duct insulation in uncond. sp.
ı	R-6		Duct Insulation in uncond. sp.
ı	R-6		Duct Insul. below conc. slab.
ı	R-8		Duct Insulation in Attic. sp.
	R-10	2"	Slab Insulation at Perimeter
ı	R-10 (blanket)		Crawl Space - Conditioned
ı	R-10 (blanket)	3.5"	Basement Walls - Unfinished
ı	R-15	3.5"	Basement Walls - 2x4 Finished
ı	R-13 + 2.5	3.5"	2x4 Walls - Exterior
ı	R-15	5.5"	2x6 Walls - Exterior
ı	R-19	6.25"	Floors exposed to
ı			unconditioned space
	R-38 C	1025"	Vaulted Ceiling
	R-38	12"	Ceiling (w/ Energy heel)

- · When using blown insulation, the manufacturer's settled R-value shall be used and the blown insulation shall be installed per manuf, speci
- The building thermal envelope shall meet the requirements of the
- Prescriptive R-values in IECC Table R402.1.2 are shown above.
- Per IECC Section R402.1.4, Alternate U-values of an assembly may be substituted as the U-factor Alternative method to meet building thermal envelope requirements.
- Per IECC Section R402.15, the Total UA Alternative method may be used to meet the building thermal envelope requirements
- Insulation for slab-on-grade construction shall begin at the inside intersection of the slab and foundation wall and shall extend for a minimum distance of 24" down the inside face of the foundation wall and horizontally under the slab.
- Provide continuous soffit vents and ridge vents as shown on drawings and as per code. Install insulation baffles in accordance with local code, in each truss/rafter bay to maintain free air flow.
- Flashing shall be of pre-finished aluminum (or equal), installed at all roof offsets, chimneys, roof openings, hips, valleys, ridges, dormers and where roof intersects wall (as per local code)
- Contractor shall maintain, in all instances, proper fire, sound and insul ratings when penetrating through walls, floors, ceilings and roofs.

WINDOWS and DOORS

- Provide safety glazing as required by local code.
- All doors and windows shall be sealed and flashed on all sides and installed in accordance with manufacturers specifications and per
- Garage door into duelling shall have a minimum fire rating of 20 minutes (or per local code). The threshold of the door opening between the garage and adjacent interior space shall not be less than 4" above the garage floor (or per local code).
- Every sleeping room shall have at least one operable window or exterior door approved for emergency egress or rescue. The sill height shall not be more than 44" above the floor. Egress windows must have a minimum net clear opening of 5.7 ft2, or per local code.
- * Window sill height shall be a minimum 24" above finished floor at all sills greater than 72" above finished grade, or per local code.

WOOD

- Wall bracing shall be installed as per local code
- · All roof trusses and floor systems shall be engineered by others
- * All roof trusses and floor systems shall be braced and installed pe manufacturers specifications and per local code. See manufacturers plans for exact layout and construction.
- Fire-stopping shall be provided to cut off concealed draft openings and to form an effective fire barrier between stories, as per local code:
 - At the intersection of Kitchen bulkhead and wall.
 - At the top of all heat chases,
 - At bathtub trap openings - 2x fire-stopping / blocking at every floor or 8'-0" o.c. vert.
- * LVL Beams: 1-3/4" wide 19E Microlam LVL
- * LSL Beams: 3-1/2" wide 1.55E Timberstrand LSL
- PSL Beams: 3-1/2" wide 2,0E Parallam PSL PSL Columns: (as noted) - 1.8E Parallam PSL Columns
- * All walls to be 16" o.c. (stud thickness per plan), minimum SPF stud grade unless otherwise noted. Interior non-load bearing partitions may be 2x4 studs at 24" o.c.
- · All interior and exterior load bearing walls shall have lapping top plates where walls intersect.
- * All wood less than 8" from grade shall be treated lumber. All sole plates on slabs and foundations shall be treated lumber. Provide bearing at all structural members as required by code.
- Provide floor and wall blocking as shown on framing plans as required by local codes.
- See drawings for type of floor construction.
 Tongue and groove floor decking, glued and fastened on floor joists shall meet the American Plywood Assoc. Sturd-I Floor System
- * All materials shall be installed per manufacturers specifications and per applicable local codes.

MECH. PLUMB. ELEC.

- Mechanical contractor is responsible for the design and installation of the mechanical systems including duct sizes, trunk and register sizes for air conditioning, heating and ventilation. Sustems shall be installed per manufacturers specifications and recommendations and per all applicable codes.
- Mechanical systems shall provide a minimum of (3) air exchanges per hour (or per local code). The building shall be provided with ventilation that meets the requirements of the International Residentia Code or International Mechanical Code, as applicable,
- Per IRC R303.4, when the air infiltration rate of a dwelling unit is 5 air changes per hour or less, the dwelling unit shall be provided with whole-house mechanical ventilation in accordance with IRC section M1507.3. Outdoor air intakes or exhausts shall have automatic or gravity dampers that close when the ventilation system is not
- Mechanical systems in unconditioned space shall have a manufacturer's designation for an air leakage of no more than 2% o the design air flow rate when tested in accordance w/ ASHRAE 193.
- Plumbing contractor is responsible for the design and installation of plumbing and piping. All plumbing, piping and fixtures shall be installed per manufacturers specifications and recommendations and
- · Each Sump shall be sealed and vented as per code, vented through roof with 3" Diameter vent
- · Electrical contractor is responsible for the design and installation of all electrical systems. All electrical work shall meet the requirements of the National Electric Code, the local power company and all applicable codes. Fixtures and apparatus are selected by the builder and shall be UL approved.
- Install programmable thermostats.
- Smoke detectors and Carbon Monoxide detectors:
 - Provide a minimum of (1) ceiling mounted fixture per floor, hard wired to a nearby circuit and interconnected for simultaneous activation with battery backup.
- Provide Smoke detectors at each sleeping room.
- $^{\circ}$ Not less than 75% of the lamps in permanently installed lighting fixtures shall be high efficiency lamps or not less than 75% of permanently installed lighting fixtures shall contain only high-efficiency
- Sprinkler system (when required) shall be NFPA-13D, installed ber manufacturers specifications and recommendations and per all

TABLE 1/02 0 2 1 ALL OHARLE SPANS FOR LINTELS SUPPORTING MASSING VENEER BLOCK

TADLE 100.0.0.1	ALLOWABLE SPAN	5 FOR LINIELS SUPPO	JRING MASONRT VENE	ER -/-/-
SIZE OF STEEL ANGLE (inches) a,c,d	NO STORY ABOVE	ONE STORY ABOVE	TWO STORIES ABOVE	NO. OF 1/2" OR EQUIVALENT REINFORCING BARS C
3 × 3 × 1/4	6'-0"	4'-6"	3'-Ø"	1
4 × 3 × 1/4	8'-0"	6'-0"	4'-6"	1
5 × 3 1/2 × 5/16	10'-0"	8'-0"	6'-0"	2
6 × 3 1/2 × 5/16	14'-0"	9'-6"	7'-Ø"	2
2-6 × 3 1/2 × 5/16	20'-0"	12'-Ø"	9'-6"	4

For SI: I inch = 25.4 mm , I foot = 304.8 mm

- a. Long leg of the angle shall be placed in the vertical position.
- b. Depth of the re-inforced lintels shall not be less than 8" and all cells of hollow masonry lintels shall be grouted solid.
- Re-inforcing bars shall extend not less than 8" into the support. c. Steel members indicated are adequate typical examples: Other steel members meeting structural design requirements may be used.
- d. Either steel angle or re-inforced lintel shall span opening.

2018 NCRC/NCECC - 2015 IRC

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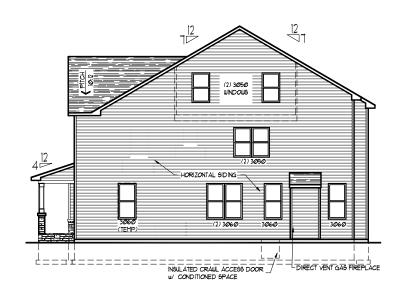
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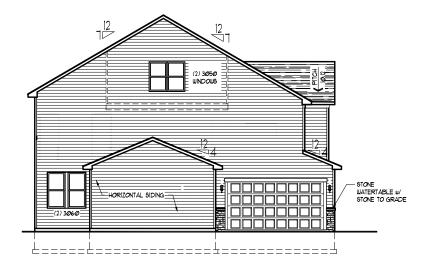
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CARU,







RIGHT SIDE ELEVATION

SCALE (17x11): 1/16" = 1'-0" SCALE (34x22): 1/8" = 1'-0"

REAR ELEVATION

SCALE (17x11): 1/16" = 1'-0' SCALE (34x22): 1/8" = 1'-0"

LEFT SIDE ELEVATION

SCALE (17x11): 1/16" = 1'-0" SCALE (34x22): 1/8" = 1'-0"



FRONT ELEVATION #3

SCALE (17x11): 1/8" = 1'-0" SCALE (34x22): 1/4" = 1'-0"

VERSION: 1.0

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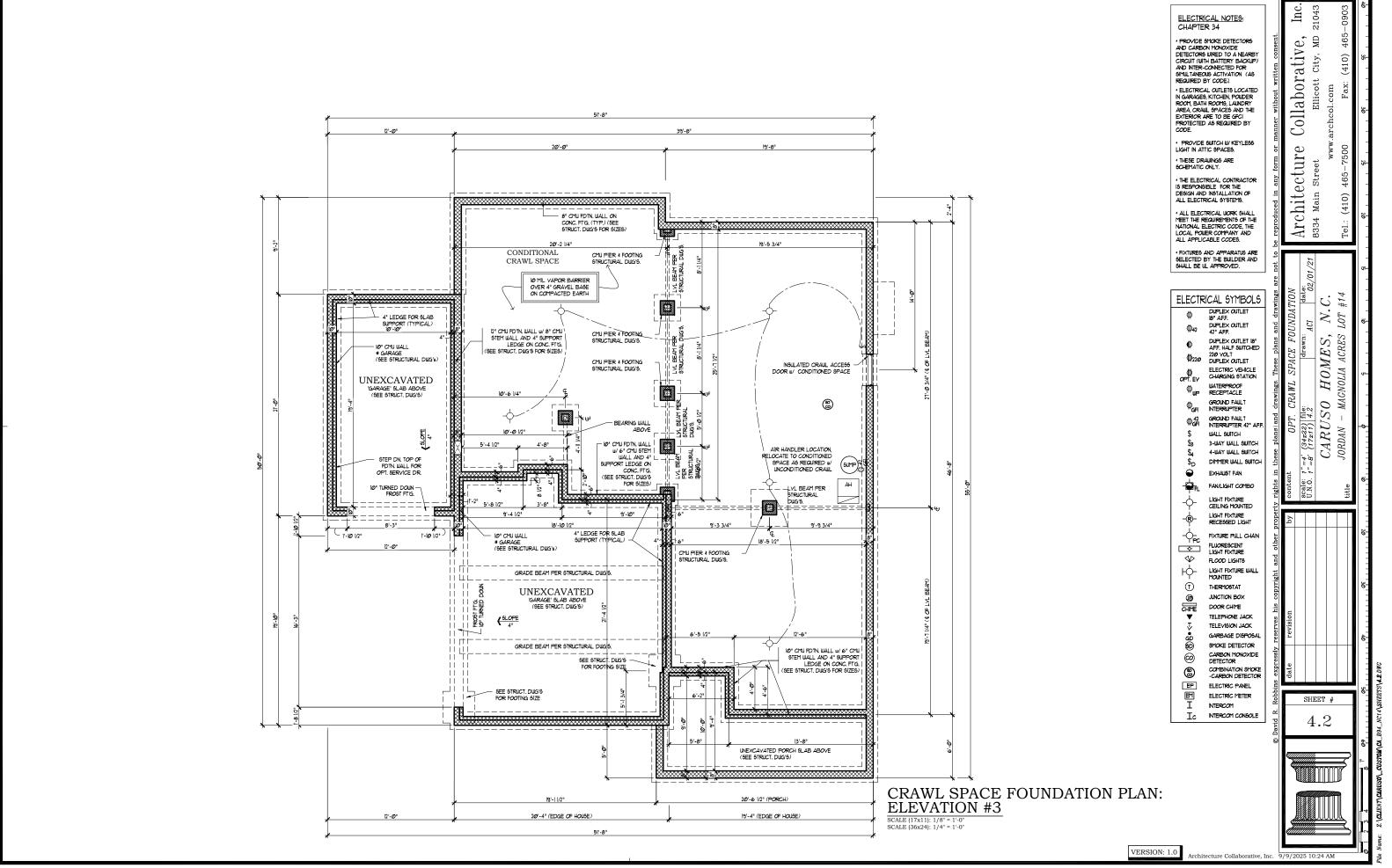
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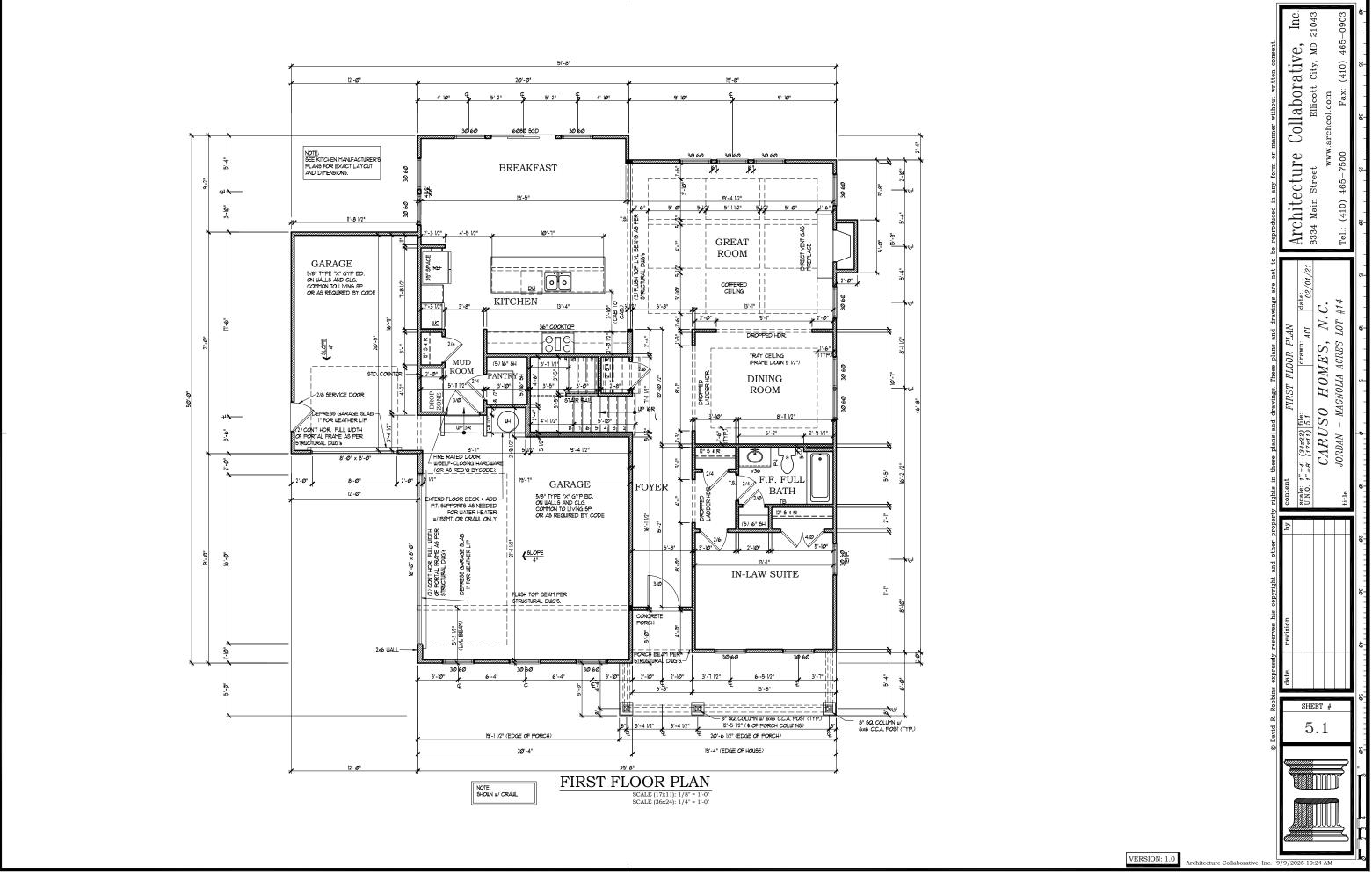
-4' (34z22) file:
-8' (77z17) 3.3

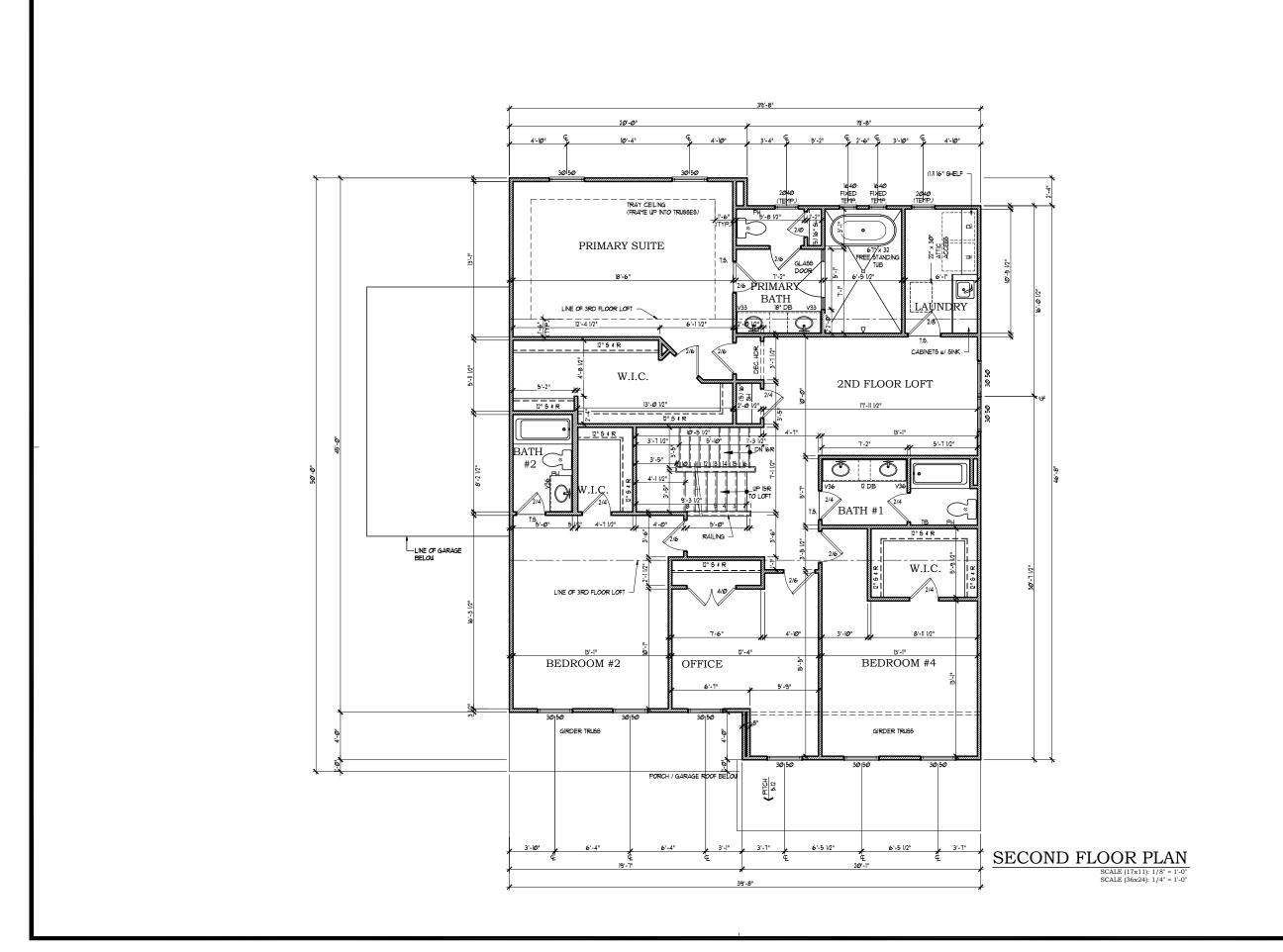
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JORDAN - MACNOLIA A

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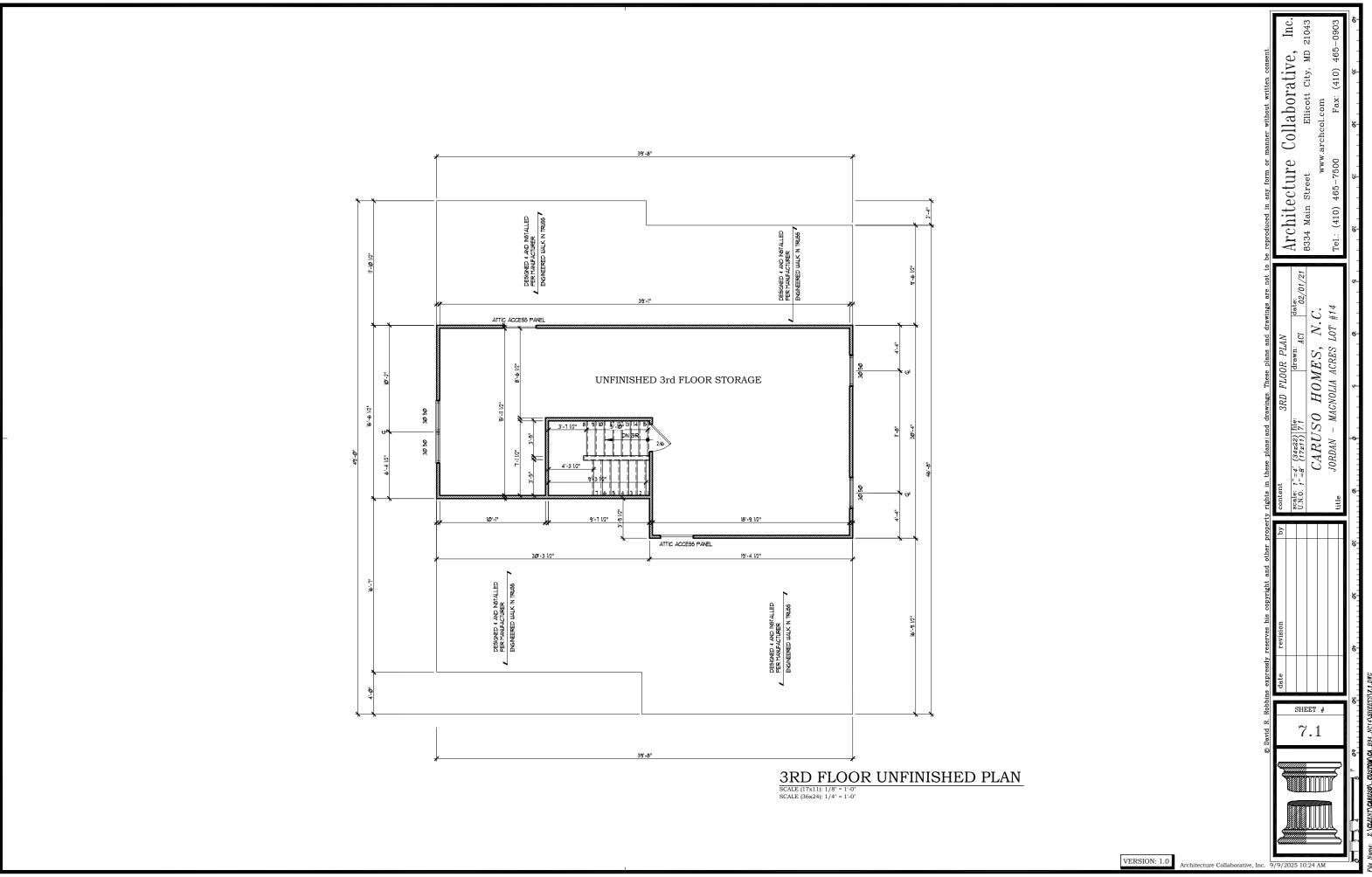
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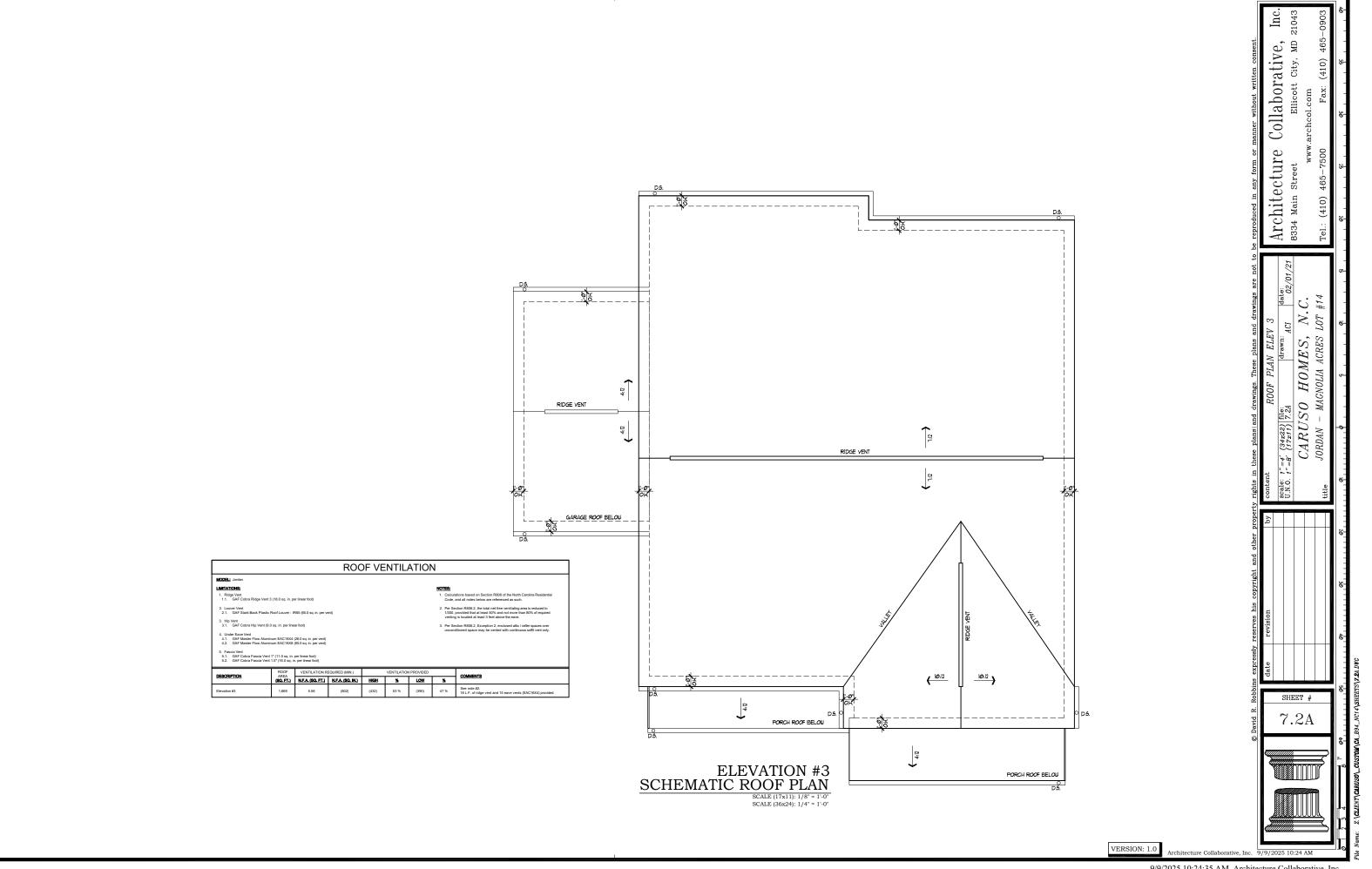


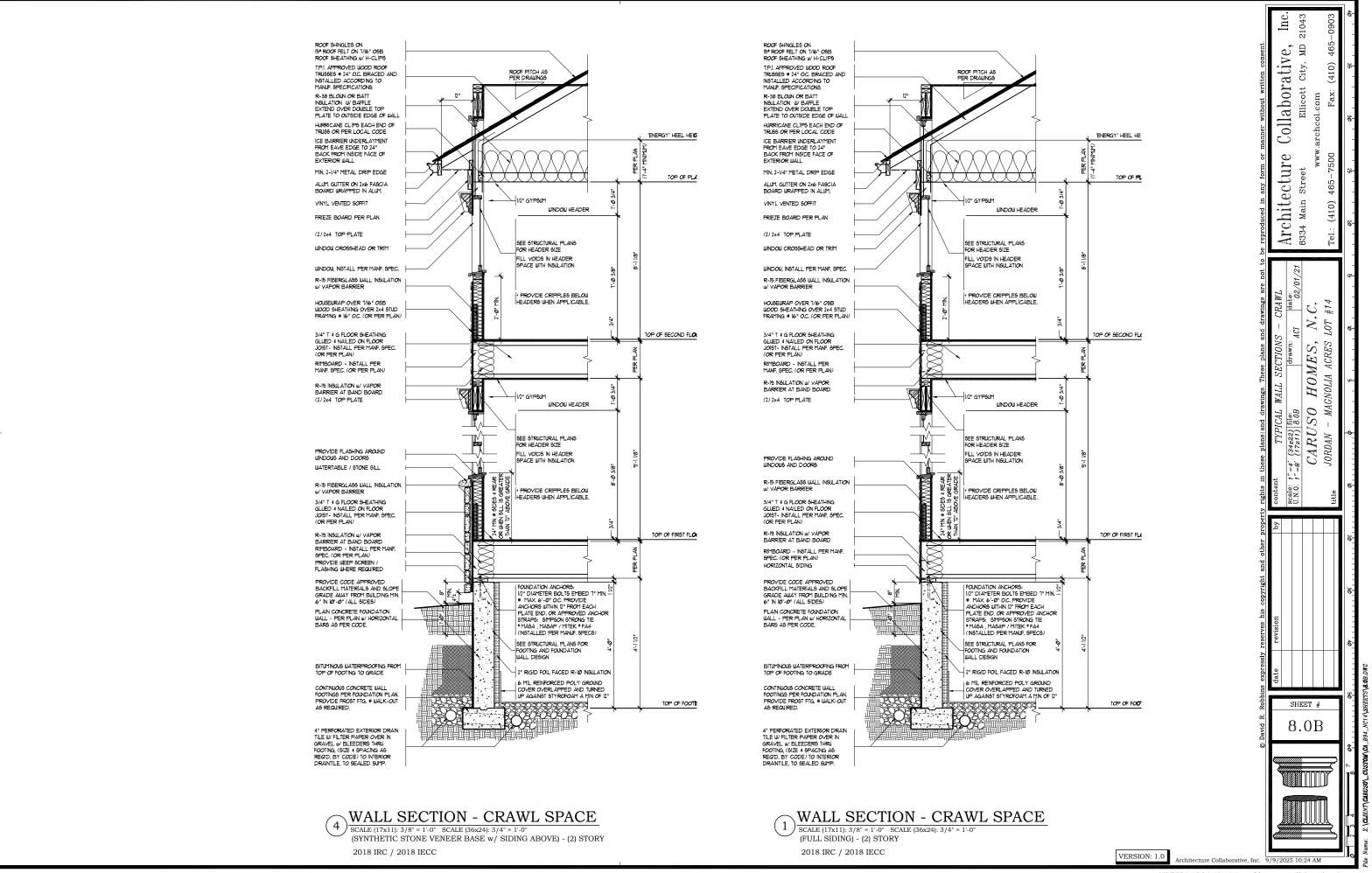


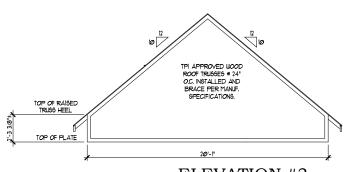


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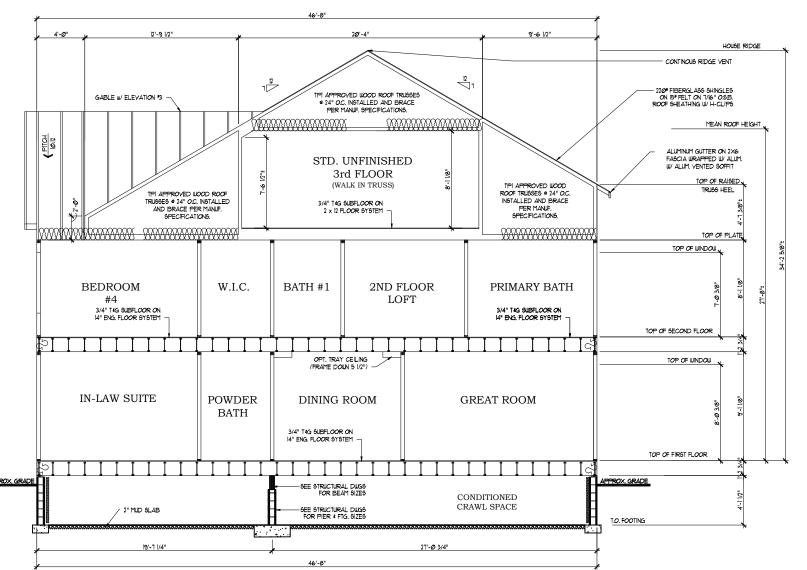






ELEVATION #3 GABLE TRUSS PROFILE

SCALE (17x11): 1/8" = 1'-0" SCALE (36x24): 1/4" = 1'-0"

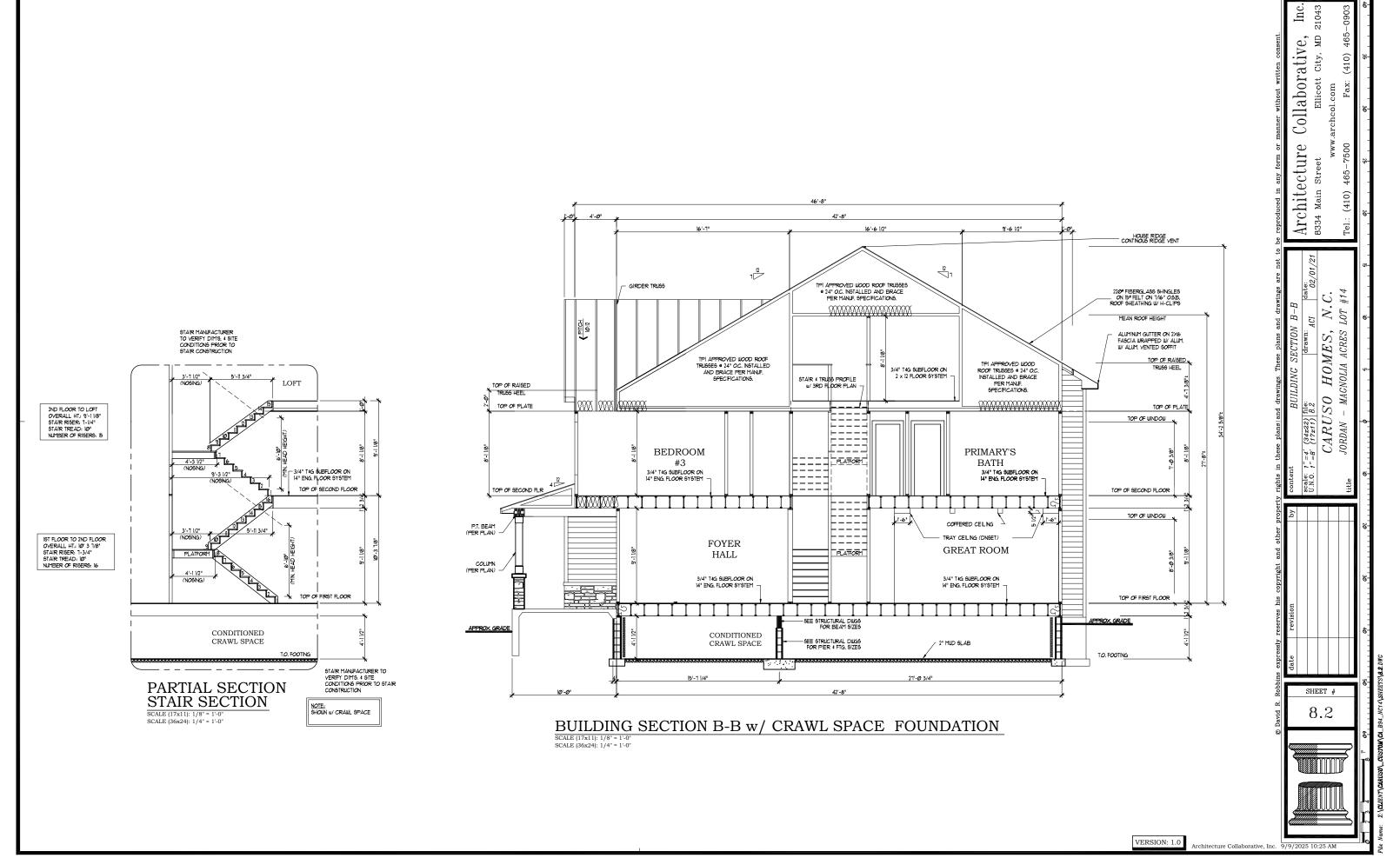


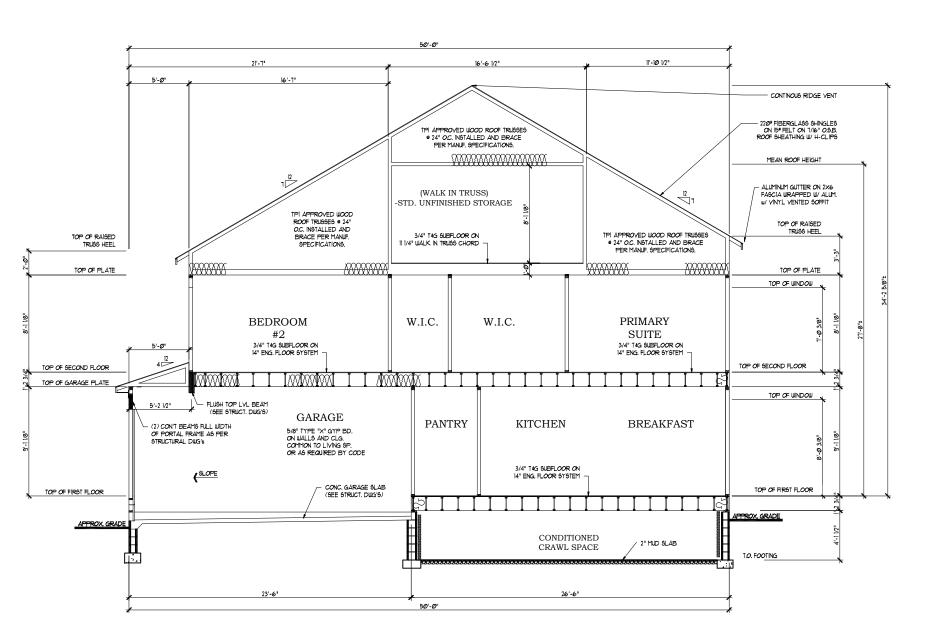
BUILDING SECTION A-A w/ CRAWL SPACE FOUNDATION

SCALE (17x11): 1/8" = 1'-0" SCALE (36x24): 1/4" = 1'-0"

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Architecture



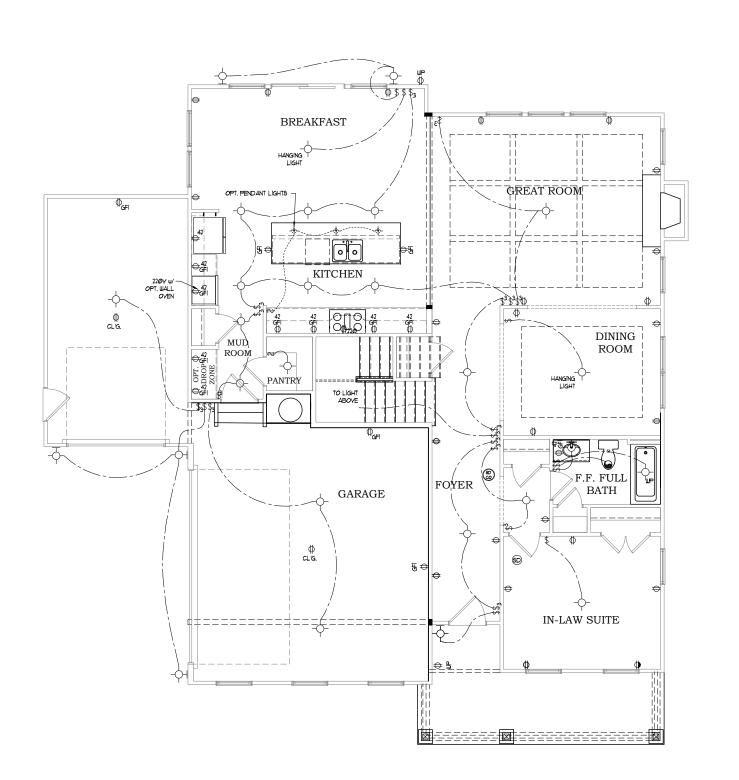


BUILDING SECTION C-C w/ CRAWL SPACE FOUNDATION

SCALE (17x11): 1/8" = 1'-0" SCALE (36x24): 1/4" = 1'-0"

Architecture 8334 Main Street HOMES, content BUILL scale: t'=4' (34x22) file: U.N.O. t'=6' (17x11) 8.3 CARUSO title JORDAN - MAC! SHEET # 8.3

Collaborative, Ellicott City, MD 2



FIRST FLOOR ELECTRICAL PLAN

SCALE (17x11): 1/8" = 1'-0" SCALE (36x24): 1/4" = 1'-0"

ELECTRICAL NOTES: CHAPTER 34

PROVIDE SHOKE DETECTORS
AND CAREBON MONOXIDE
DETECTORS WIRED TO A NEARBY
CIRCUIT GUITH BATTERY BACKUP)
AND NITER-CONNECTED FOR
SHILLTANEOUS ACTIVATION (AS
REQUIRED BY CODE).

REGUIRED BY CODE!

** ELECTRICAL OUTLETS LOCATED

N GARAGES, KITCHEN, POUDER

ROOM, BATH ROOMS, LAINDRY

AREA, CRAILL SPACES AND THE

EXTERIOR ARE TO BE GFC!

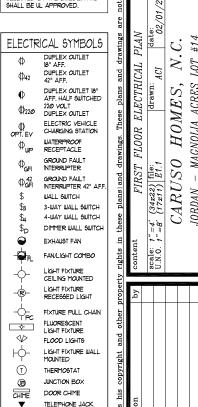
PROTECTED AS REQUIRED BY

CODE.

Collaborative, Ellicott City, MD 2

Architecture 8334 Main Street

- · PROVIDE SWITCH W/ KEYLESS LIGHT IN ATTIC SPACES.
- THESE DRAWINGS ARE SCHEMATIC ONLY.
- THE ELECTRICAL CONTRACTOR
 IS RESPONSIBLE FOR THE
 DESIGN AND INSTALLATION OF
 ALL ELECTRICAL SYSTEMS.
- · ALL ELECTRICAL WORK SHALL MEET THE REQUIREMENTS OF THE NATIONAL ELECTRIC CODE, THE LOCAL POWER COMPANY AND ALL APPLICABLE CODES.
- FIXTURES AND APPARATUS ARE SELECTED BY THE BUILDER AND SHALL BE UL APPROVED.



TELEVISION JACK GARBAGE DISPOSAL SMOKE DETECTOR CARBON MONOXIDE DETECTOR COMBINATION SMOKE -CARBON DETECTOR

ELECTRIC PANEL

ELECTRIC METER

INTERCOM CONSOLE

INTERCOM

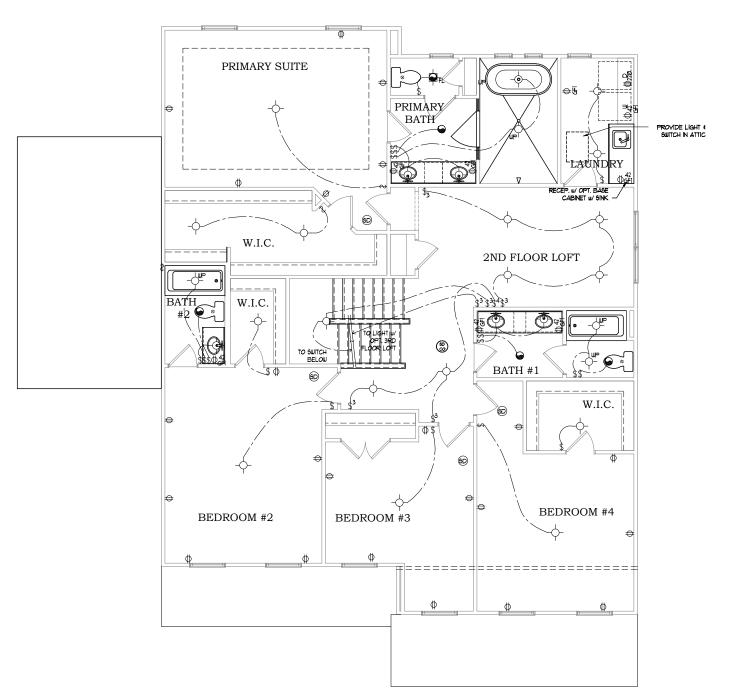
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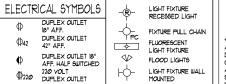
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SECOND FLOOR ELECTRICAL PLAN

SCALE (17x11): 1/8" = 1'-0" SCALE (36x24): 1/4" = 1'-0"



ELECTRIC VEHICLE CHARGING STATION **(T)** (B) CHIME ▼

WATERPROOF RECEPTACLE GROUND FAULT INTERRUPTER GROUND FAULT INTERRUPTER 42" AFF. WALL SWITCH **60** 3-WAY WALL SWITCH 4-WAY WALL SWITCH 8

DIMMER WALL SWITCH EXHAUST FAN FAN/LIGHT COMBO LIGHT FIXTURE CEILING MOUNTED

Φ

Ф42

Ф22**0**

Φωρ

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THERMOSTAT JUNCTION BOX DOOR CHIME TELEPHONE JACK TELEVISION JACK GARBAGE DISPOSAL SMOKE DETECTOR

CARBON MONOXIDE DETECTOR COMBINATION SMOKE -CARBON DETECTOR EP ELECTRIC PANEL MI ELECTRIC METER INTERCOM Ic INTERCOM CONSOLE

ELECTRICAL NOTES:

PROVIDE SHOKE DETECTORS
AND CARBON MONOXIDE
DETECTORS WIRED TO A NEARBY
CIRCUIT (WITH BATTERY BACKUP)
AND NTER-CONNECTED FOR
SIMILITANEOUS ACTIVATION (AS
REQUIRED BY CODE).

REGULED ST CODE.

**ELECTRICAL OUTLETS LOCATED
N GARAGES KITCHEN, POUDER
ROOMS, BATH ROOMS, LANNDRY
AREA, CRAILL SPACES AND THE
EXTERIOR ARE TO BE GFC!
PROTECTED AS REQUIRED BY
CODE.

· PROVIDE SWITCH W/ KEYLESS LIGHT IN ATTIC SPACES.

+ THESE DRAWINGS ARE SCHEMATIC ONLY.

THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF ALL ELECTRICAL SYSTEMS.

* ALL ELECTRICAL WORK SHALL MEET THE REQUIREMENTS OF THE NATIONAL ELECTRIC CODE, THE LOCAL POWER COMPANY AND ALL APPLICABLE CODES.

FIXTURES AND APPARATUS ARE SELECTED BY THE BUILDER AND SHALL BE UL APPROVED.

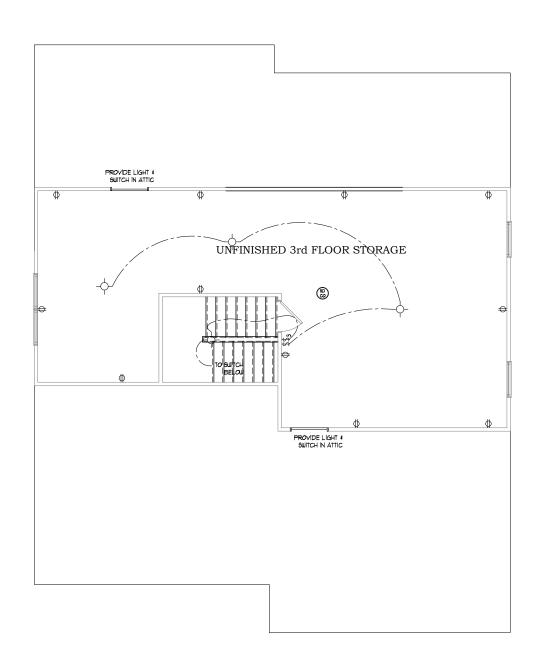
Collaborative, Ellicott City, MD 2 Architecture 8334 Main Street

> HOMES,

SHEET #

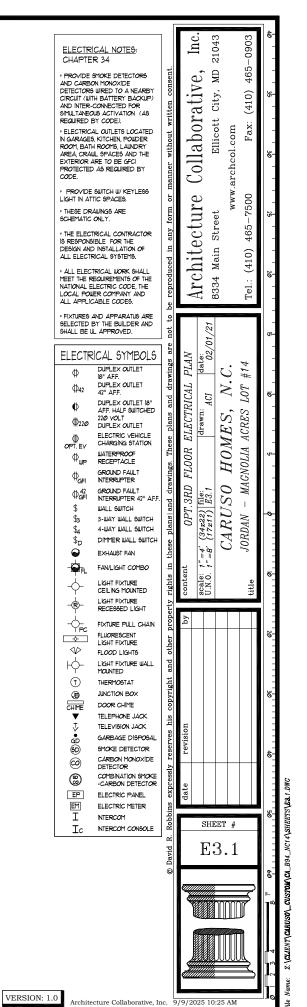
VERSION: 1.0

chitecture Collaborative, Inc.



UNFINISHED 3RD FLOOR ELECTRICAL PLAN

SCALE (17x11): 1/8" = 1'-0" SCALE (36x24): 1/4" = 1'-0"





1900 AM DRIVE, SUITE 201, QUAKERTOWN, PA 18951 (215) 804-4449 www.kse-eng.com

JORDAN MAGNOLIA ACRES LOT 14

RALEIGH, NORTH CAROLINA

THESE DRAWINGS ARE TO BE USED IN CONJUNCTION WITH AND COORDINATED WITH THE ARCHITECTURAL, CIVIL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS. THIS COORDINATION IS NOT THE RESPONSIBILITY OF THE MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS. THIS COURDINATION IS NOT THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER OF RECORD (SER). SHOULD ANY DISCREPANCIES BECOME APPARENT, THE CONTRACTOR SHALL NOTIFY KSE ENGINEERING, P.C. BEFORE CONSTRUCTION BEGINS. IT IS THE INTENT OF THE ENGINEER LISTED ON THESE DOCUMENTS THAT THESE DOCUMENTS BE ACCURATE, PROVIDING LICENSED PROFESSIONALS CLEAR INFORMATION. EVERY ATTEMPT HAS BEEN MADE TO PREVENT ERROR. THE BUILDER AND ALL SUBCONTRACTORS ARE REQUIRED TO REVIEW ALL OF THE INFORMATION CONTAINED IN THESE DOCUMENTS PRIOR TO THE COMMENCEMENT OF ANY WORK. THE ENGINEER IS NOT RESPONSIBLE FOR ANY PLAN ERRORS, OMISSIONS, OR MISINTERPRETATIONS UNDETECTED AND NOT REPORTED TO THE ENGINEER PRIOR TO CONSTRUCTION. ALL CONSTRUCTION MUST BE IN ACCORDANCE TO THE INFORMATION FOUND IN THESE DOCUMENTS.

DESIGN SPECIFICATIONS:

DESIGN BUILDING CODE (REFERRED TO HEREIN AS 'THE BUILDING CODE'):

• 2018 NORTH CAROLINA RESIDENTIAL CODE. WALL BRACING PER INTERNATIONAL RESIDENTIAL

DESIGN LIVE LOADS:

• ROOF = 20 PSF (LOAD DURATION FACTOR=1.25)

- UNINHABITABLE ATTICS WITH LIMITED STORAGE = 20 PSF (WHERE SPECIFIED ON PLANS)
- HABITABLE ATTICS AND ATTICS SERVED WITH FIXED STAIRS = 30 PSF
- FLOOR = 40 PSF
- FLOOR (SLEEPING AREAS) = 30 PSF
- DECK = 40 PSF
- BALCONY = 40 PSF
- STAIRS = 40 PSF

- ROOF TRUSS = 17 PSF (TC=7, BC=10)
- FLOOR TRUSS = 15 PSF (TC=10, BC=5)
- FLOOR JOIST = 10 PSF
- STANDARD BRICK = 40 PSF
- QUEEN ANNE BRICK = 25 PSF
- TILE = 10 PSF (WHERE NOTED ON PLANS)

NOTE: STRUCTURAL FRAMING HAS NOT BEEN DESIGNED FOR GRANITE, MARBLE OR OTHER MATERIALS HEAVIER THAN THE ABOVE LOADING UNLESS SPECIFICALLY NOTED ON PLANS..

- ULTIMATE WIND SPEED = 115 MPH
- EXPOSURE CATEGORY = B

ASSUMED SOIL BEARING CAPACITY = 2000 PSF

ASSUMED LATERAL SOIL PRESSURE = 60 PCF

FROST DEPTH = 12"

SEISMIC DESIGN CATEGORY = B

ENGINEERED LUMBER SHALL HAVE THE FOLLOWING MINIMUM DESIGN VALUES:

- TJI 210 SERIES (SERIES AND SPACING PER PLANS)
- LSL: E=1,550,000 PSI, F_B =2,325 PSI, F_V =310 PSI, F_C =900 PSI
- LVL: E=2,000,000 PSI, F_B=2,600 PSI, F_V=285 PSI, F_C=750 PSI • PSL: E=2,000,000 PSI, F_B=2,900 PSI, F_V=290 PSI, F_C=625 PSI



Lot Magnolia Acres M.P.H. gh, North Jordan 20

Carolina

Raleigh, Cover Project #: 108-24006

Designed By: AAM Checked By: KRK

Issue Date: 9/18/25 Re-Issue: Scale:

Sheet

GENERAL STRUCTURAL NOTES:

- 1. THE DESIGN PROFESSIONAL WHOSE SEAL APPEARS ON THESE DRAWINGS IS THE STRUCTURAL ENCINEER OF RECORD (SER) FOR THIS PROJECT. THE SER BEARS THE RESPONSIBILITY OF THE PRIMARY STRUCTURAL ELEMENTS AND THE PERFORMANCE OF THIS STRUCTURE. NO OTHER PARTY MAY REVISE, ALTER, OR DELETE ANY STRUCTURAL ASPECTS OF THESE CONSTRUCTION DOCUMENTS WITHOUT WRITTEN CONSENT OF KSE ENGINEERING, P.C. OR THE SER. FOR THE PURPOSES OF THESE CONSTRUCTION DOCUMENTS, THE SER AND KSE ENGINEERING SHALL BE CONSIDERED THE SAME ENTITY.
- 2. THE STRUCTURE IS ONLY STABLE IN ITS COMPLETED FORM. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED TEMPORARY BRACING DURING CONSTRUCTION TO STABILIZE THE STRUCTURE.
- 3. THE SER IS NOT RESPONSIBLE FOR CONSTRUCTION SEQUENCES, METHODS, OR TECHNIQUES IN CONNECTION WITH THE CONSTRUCTION OF THIS STRUCTURE. THE SER WILL NOT BE HELD RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CONFORM TO THE CONTRACT DOCUMENTS, SHOULD ANY NON—CONFORMITIES OCCUR.
- 4. THE SER DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT INCLUDING ROOF GEOMETRY. THE SER ASSUMES NO LIABILITY FOR CHANGES MADE TO THESE PLANS BY OTHERS, OR FOR CONSTRUCTION METHODS, OR FOR ANY DEVIATION FROM THE PLANS. THE SER SHALL BE NOTIFIED PRIOR TO CONSTRUCTION IF ANY DISCREPANCIES ARE NOTED ON THE PLANS.
- 5. ANY STRUCTURAL ELEMENTS OR DETAILS NOT FULLY DEVELOPED ON THE CONSTRUCTION DRAWINGS SHALL BE COMPLETED UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. THESE SHOP DRAWINGS SHALL BE SUBMITTED TO KSE ENGINEERING FOR REVIEW BEFORE ANY CONSTRUCTION BEGINS. THE SHOP DRAWINGS WILL BE REVIEWED FOR OVERALL COMPLIANCE AS IT RELATES TO THE STRUCTURAL DESIGN OF THIS PROJECT. VERIFICATION OF THE SHOP DRAWINGS FOR DIMENSIONS, OR FOR ACTUAL FIELD CONDITIONS, IS NOT THE RESPONSIBILITY OF THE SER OR KSE ENGINEERING, P.C.
- VERIFICATION OF ASSUMED FIELD CONDITIONS IS NOT THE RESPONSIBILITY OF THE SER. THE CONTRACTOR SHALL VERIFY THE FIELD CONDITIONS FOR ACCURACY AND REPORT ANY DISCREPANCIES TO KSE ENGINEERING, P.C. BEFORE CONSTRUCTION BEGINS.
- THE SER IS NOT RESPONSIBLE FOR ANY SECONDARY STRUCTURAL ELEMENTS OR NON-STRUCTURAL ELEMENTS, EXCEPT FOR THE ELEMENTS SPECIFICALLY NOTED ON THE STRUCTURAL DRAWINGS.
- THIS STRUCTURE AND ALL CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE SECTIONS OF THE BUILDING CODE AND ANY LOCAL CODES OR RESTRICTIONS.
- DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. ALL DIMENSIONS ARE TO FACE OF STUD OR TO FACE OF FRAMING UNLESS OTHERWISE NOTED.

 OR DROVED MODERNING PROPERTY OF A PROPERTY
- 10. PROVIDE MOISTURE PROTECTION AND FLASHING PER ARCHITECTURAL DETAILS.

FOUNDATIONS:

- FOUNDATIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 4 OF THE BUILDING CODE.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFYING THE SUITABILITY
 OF THE SITE SOIL CONDITIONS AT THE TIME OF CONSTRUCTION. THE
 BUILDER SHALL FURNISH ANY AND ALL REPORTS RECEIVED FROM
 THE GEOTECHNICAL ENGINEER ON THE STUDY OF THE PROPOSED
 SITE TO THE DESIGNER, STRUCTURAL ENGINEER, AND GENERAL
 CONTRACTOR.
- 3. MAXIMUM DEPTH OF UNBALANCED FILL AGAINST MASONRY WALLS TO BE AS SPECIFIED IN THE BUILDING CODE.
- 4. THE SER HAS NOT PERFORMED A SUBSURFACE INVESTIGATION. VERIFICATION OF THE ASSUMED VALUE IS THE RESPONSIBILITY OF THE OWNER OR THE CONTRACTOR. SHOULD ANY ADVERSE SOIL CONDITION BE ENCOUNTERED, THE SER MUST BE CONTACTED BEFORE PROCEEDING.
- 5. THE BOTTOM OF ALL FOOTINGS SHALL EXTEND BELOW THE FROST LINE FOR THE REGION IN WHICH THE STRUCTURE IS TO BE CONSTRUCTED, BUT NOT LESS THAN A MINIMUM OF 12" BELOW GRADE. ALL FOOTINGS TO HAVE A MINIMUM PROJECTION OF 2" ON EACH SIDE OF FOUNDATION WALLS. MAXIMUM FOOTING PROJECTION SHALL NOT EXCEED THE THICKNESS OF THE FOOTING.
- 6. WOOD SILL PLATES SHALL BE ANCHORED TO THE FOUNDATION WITH
 ½" ANCHOR BOLTS WITH MINIMUM 7" EMBEDMENT, SPACED A MAXIMUM
 OF 6'-0" O.C. INSTALL MINIMUM 2 ANCHOR BOLTS PER SECTION, 12"
 MAXIMUM FROM CORNERS. ½" DIAMETER x 8" LONG SIMPSON TITEN
 HD OR USP SCREW-BOLT+ SCREWS MAY BE SUBSTITUTED ON A 1
 FOR 1 BASIS.
- ANY FILL SHALL BE PLACED UNDER THE DIRECTION OR RECOMMENDATION OF A LICENSED PROFESSIONAL ENGINEER. THE RESULTING SOIL SHALL BE COMPACTED TO A MINIMUM OF 95% MAXIMUM DRY DENSITY.
- 8. EXCAVATIONS OF FOOTINGS SHALL BE LINED TEMPORARILY WITH A 6 MIL POLYETHYLENE MEMBRANE IF PLACEMENT OF CONCRETE DOES NOT OCCUR WITHIN 24 HOURS OF EXCAVATION.
- NO CONCRETE SHALL BE PLACED AGAINST ANY SUBGRADE CONTAINING WATER, ICE, FROST, OR LOOSE MATERIAL.
- PROVIDE FOUNDATION WATERPROOFING AND DRAIN WITH POSITIVE SLOPE TO OUTLET AS REQUIRED BY SITE CONDITIONS (SEE ARCHITECTURAL PLANS AND DETAILS).
- NONE OF THE FOUNDATION DESIGNS IN THESE DOCUMENTS ARE SUITABLE FOR INSTALLATION IN SHRINK/SWELL CONDITIONS. REFER TO GEOTECHNICAL ENGINEER FOR APPROPRIATE DESIGN.
- 12. LOTS SHALL BE GRADED TO DRAIN SURFACE WATER AWAY FROM FOUNDATION WALLS. THE GRADE SHALL FALL A MINIMUM OF 6 INCHES WITHIN THE FIRST TEN FEET.
- CRAWL SPACE TO BE GRADED LEVEL AND CLEAR OF ALL DEBRIS.
 PROVIDE MINIMUM 6 MIL APPROVED VAPOR BARRIER. ALL JOINTS TO BE LAPPED MINIMUM 12" AND SEALED.

CONCRETE & REINFORCING

- CONCRETE DESIGN BASED ON ACI 318 AND ACI 318.1 OR ACI 332. CONCRETE SHALL HAVE A NORMAL WEIGHT AGGREGATE AND A MINIMUM COMPRESSIVE STRENGTH (f'c) = 3,000 PSI MINIMUM AT 28 DAYS PER CODE (VARIES W/ WEATHER), UNLESS OTHERWISE NOTED ON THE PLAN.
- CONCRÈTE SHALL BE PROPÓRTIONED, MIXED, AND PLACED IN ACCORDANCE WITH THE LATEST EDITIONS OF ACI 318: "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" AND ACI 301: "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS".
- 3. AIR ENTRAINED CONCRETE MUST BE USED FOR ALL STRUCTURAL ELEMENTS EXPOSED TO FREEZE/THAW CYCLES AND DEICING CHEMICALS. AIR ENTRAINMENT AMOUNTS (IN PERCENT) SHALL BE WITHIN -1% TO +2% OF 5% FOR FOOTINGS AND EXTERIOR SLABS.
- NO ADMIXTURES SHALL BE ADDED TO ANY STRUCTURAL CONCRETE WITHOUT WRITTEN PERMISSION OF THE SER. WATER ADDED TO CONCRETE ON SITE SHALL NOT EXCEED THAT ALLOWED BY THE MIX DESIGN.
- 5. CONCRETE SLABS-ON-GRADE SHALL BE CONSTRUCTED IN ACCORDANCE WITH ACI 302.1R: "GUIDE FOR CONCRETE SLAB AND SLAB CONSTRUCTION".
- 6. CONTROL OR SAW CUT JOINTS (CUT OR TOOLED) SHALL BE SPACED IN INTERIOR SLABS-ON-GRADE AT A MAXIMUM OF 15'-0" O.C. AND IN EXTERIOR SLABS-ON-GRADE AT A MAXIMUM OF 10'-0" UNLESS OTHERWISE NOTED. CARE SHALL BE TAKEN TO AVOID RE-ENTRANT CORNERS
- CONTROL OR SAW CUT JOINTS SHALL BE PRODUCED USING CONVENTIONAL CUT OR TOOLED PROCESSES WITHIN 4 TO 12 HOURS AFTER THE SLAB HAS BEEN FINISHED.
- 8. ALL WELDED WIRE FABRIC (W.W.F.) FOR CONCRETE SLABS—ON—GRADE SHALL BE PLACED AT MID—DEPTH OF SLAB. THE W.W.F. SHALL BE SECURELY SUPPORTED DURING THE CONCRETE POUR. FIBROUS CONCRETE REINFORCEMENT, OR POLYPROPYLENE FIBERS MAY BE USED IN LIEU OF W.W.F. APPLICATION OF POLYPROPYLENE FIBERS PER CUBIC YARD OF CONCRETE SHALL BE PER MANUFACTURER AND COMPLY WITH ASTM C11116, ANY LOCAL BUILDING CODE REQUIREMENTS AND SHALL MEET OR EXCEED CURRENT INDUSTRY STANDARD.
- POLYPROPYLENE REINFORCING TO BE 100% VIRGIN, CONTAINING NO REPROCESSED OLEFIN MATERIALS AND SPECIFICALLY MANUFACTURED FOR USE AS CONCRETE SECONDARY REINFORCEMENT.
- STEEL REINFORCING BARS SHALL BE NEW BILLET STEEL CONFORMING TO ASTM A615, GRADE 60.
- DETAILING, FABRICATION, AND PLACEMENT OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ACI 315: "MANUAL OF STANDARD PRACTICE FOR DETAILING CONCRETE STRUCTURES".
 HORIZONTAL FOOTING AND WALL REINFORCEMENT SHALL BE
- CONTINUOUS AND SHALL HAVE 90° BENDS, OR CORNER BARS WITH THE SAME SIZE/SPACING AS THE HORIZONTAL REINFORCEMENT.
- 13. PROVIDE REINFORCEMENT LAP AS NOTED BELOW, UNLESS NOTED OTHERWISE.

#4 BARS - 30" LENGTH #5 BARS - 38" LENGTH

#6 BARS - 45" LENGTH

- 14. WHERE REINFORCING DOWELS ARE REQUIRED, THEY SHALL BE EQUIVALENT IN SIZE AND SPACING TO THE VERTICAL REINFORCEMENT. THE DOWEL SHALL EXTEND 48 BAR DIAMETERS VERTICALLY AND 20 BAR DIAMETERS INTO THE FOOTING. SEE KSF FOUNDATION DETAILS.
- WHERE FOOTING BOTTOMS ARE TO BE STEPPED AT SLOPING GRADE CONDITIONS, PROVIDE CONTINUOUS REINFORCING WITH Z BARS (TO MATCH FOOTING REINFORCING) AS REQUIRED.
- 16. BAR SUPPORT ACCESSORIES SHALL BE PROVIDED IN ACCORDANCE WITH THE LATEST ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES, EXCEPT THAT REINFORCING SHALL BE CHAIRED ON THE BOTTOM AND/OR THE SIDES ON BOLSTERS SPACED NOT MORE THAN 4 FEET ON CENTER. NO ROCKS, CMU, CLAY TILE, OR BRICK SHALL BE USED TO SUPPORT REINFORCING.
- 17. FOR GRADE SUPPORTED SLABS, SLAB REINFORCING SHALL BE HELD IN PLACE BY BAR SUPPORTS AND ACCESSORIES AS DESCRIBED IN THE CRSI MANUAL OF STANDARD PRACTICE. BAR SUPPORTS SHALL BE SPACED A MAXIMUM OF 4'-0" O.C. BOTH WAYS IN STRAIGHT LINES ON THE MESH GRID.

MASONRY

- I. ALL MASONRY SHALL CONFORM TO ASTM C-90, F'm=1500 PSI. ALL BRICK SHALL CONFORM TO ASTM C-216, F'm=1500 PSI. ALL MORTAR SHALL BE TYPE 'S' (TYPE 'M' BELOW GRADE) AND CONFORM TO ASTM C-270. COARSE GROUT SHALL CONFORM TO ASTM C-476 WITH A MAXIMUM AGGREGATE SIZE OF %" AND A MINIMUM COMPRESSIVE STRENGTH OF 2,000
- ALL MASONRY WORK SHALL BE IN ACCORDANCE WITH "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" ACI 530/ASCE 5/TMS 402 AND "SPECIFICATIONS FOR MASONRY STRUCTURES" ACI 530.1/ ASCE 6/TMS 602.
- THE UNSUPPORTED HEIGHT OF SOLID MASONRY PIER'S SHALL NOT EXCEED TEN TIMES THEIR LEAST DIMENSION. UNFILLED HOLLOW PIERS MAY BE USED IF THE UNSUPPORTED HEIGHT IS NOT MORE THAN FOUR TIMES THEIR LEAST DIMENSION.
- EACH CRAWL SPACE PIER SHALL BEAR IN THE MIDDLE THIRD OF ITS
 RESPECTIVE FOOTING AND EACH GIRDER SHALL BEAR IN THE MIDDLE
 THIRD OF THE PIERS. PILASTERS TO BE BONDED TO PERIMETER
 FOUNDATION WALL.
- TOP COURSE OF MASONRY SHALL BE GROUTED SOLID.
 HORIZONTAL WALL JOINT REINFORCEMENT SHALL BE STANDARD 9 GAGE GALVANIZED LADDER OR TRUSS TYPE SPACED AT 16" O.C., UNLESS SHOWN OTHERWISE ON THE DRAWINGS.
- SPLICED WIRE REINFORCEMENT SHALL BE LAPPED AT LEAST 6" AND CONTAIN AT LEAST ONE CROSS WIRE OF EACH PIECE OF REINFORCEMENT WITHIN THE 6". LAP WITH STANDARD 'T' AND 'L' SHAPED PIECES AT INTERSECTIONS AND CORNERS.

WOOD FRAMING:

- SOLID SAWN WOOD FRAMING MEMBERS SHALL CONFORM TO THE SPECIFICATIONS LISTED IN THE LATEST EDITION OF THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION": (NDS). UNLESS OTHERWISE NOTED, ALL WOOD FRAMING MEMBERS ARE DESIGNED TO BE:
- SPRUCE-PINE-FIR (SPF) WITH THE FOLLOWING MINIMUM DESIGN VALUES:
- E=1,400,000 PSI, $F_b=875$ PSI, $F_v=135$ PSI 1.1. FRAMING: SPF #2.
- 1.1. FRAMING: SPF #2 1.2. PLATES: SPF #2.
- 1.3. STUDS: SPF STUD GRADE.
- WALL STUD SPACING, (MAXIMUM 10' NOMINAL PLATE HEIGHT):

 1 & 2 STORY EXTERIOR AND INTERIOR BEARING:
- 2x4 @ 16" O.C. OR 2x6 @ 24" O.C., U.N.O. BOTTOM OF 3 STORIES EXTERIOR AND INTERIOR BEARING: 2x6 @ 16" O.C., U.N.O.
- INTERIOR NON-BEARING: 2x @ 24" O.C., U.N.O.
- ALL LUMBER EXPOSED TO WEATHER OR IN CONTACT WITH CONCRETE SHALL BE PRESERVATIVE TREATED SOUTHERN YELLOW PINE #2 OR
- 4. ANCHOR SILL PLATES IN ACCORDANCE W/ GENERAL STRUCTURAL NOTES.
 5. ALL BEAMS SPECIFIED ARE MINIMUM SIZES ONLY, LARGER MEMBERS MAY BE SUBSTITUTED AS NEEDED FOR EASE OF CONSTRUCTION.
- BE SUBSTITUTED AS NEEDED FOR EASE OF CONSTRUCTION.
 6. NAILS SHALL BE COMMON WIRE NAILS UNLESS OTHERWISE NOTED.
- NAILS SHALL BE COMMON WIRE NAILS UNLESS OTHERWISE NOTED
 BOLT HOLES AND LEAD HOLES FOR LAG SCREWS SHALL BE IN
- ACCORDANCE WITH NDS SPECIFICATIONS.

 8. INDIVIDUAL STUDS FORMING A COLUMN SHALL BE ATTACHED WITH (2)
 ROWS 10d NAILS @ 6" O.C. STAGGERED. THE STUD COLUMN SHALL BE
 FULLY BLOCKED AT ALL FLOOR LEVELS TO ENSURE PROPER LOAD
 TRANSFER. WALL SHEATHING SHALL BE NAILED TO EDGE OF EACH STUD.
- 9. FACE NAIL ALL MULTI-PLY BEAMS AND HEADERS WITH (2) ROWS 16d COMMON NAILS @ 16" O.C., STAGGERED, OR PER MANUFACTURER'S SPECIFICATIONS FOR ENGINEERED LUMBER. APPLY NAILING FROM BOTH FACES FOR (3) OR MORE PLIES.
- 10. FASTEN 4-PLY BEAMS WITH (1) ½" DIAMETER THROUGH BOLT W/ NUTS AND WASHERS AT 12" O.C. STAGGERED TOP AND BOTTOM, 1½" MINIMUM EDGE DISTANCE. (UNLESS OTHERWISE NOTED)
- 11. ALL BEAMS AND HEADERS SHALL HAVE (1)2x JACK STUD & (1)2x KING STUD UNLESS OTHERWISE NOTED. THE NUMBER OF STUDS INDICATED ON PLANS ARE THE TOTAL NUMBER OF JACK STUDS REQUIRED, UNLESS OTHERWISE NOTED.
- 12. PROVIDE KING STUDS AT EACH END OF HEADERS AS NOTED BELOW.
- (1) STUD UP TO 6' OPENING
- (2) STUDS UP TO 8' OPENING
 (3) STUDS UP TO 9' OPENING
- 13. ALL BEAMS TO BE CONTINUOUSLY SUPPORTED LATERALLY AND SHALL BEAR FULL WIDTH ON THE SUPPORTING WALLS OR COLUMNS INDICATED WITH A MINIMUM OF TWO STUDS, UNLESS OTHERWISE NOTED. ALL BEAM SPICES SHALL OCCUR OVER SUPPORTS.
- 14. SOLID BLOCKING TO BE PROVIDED AT ALL POINT LOADS THROUGH FLOOR
- LEVELS TO THE FOUNDATION OR TO OTHER STRUCTURAL COMPONENTS.

 15. ALL LUMBER SPECIFIED ON DRAWINGS IS INTENDED FOR DRY USE ONLY (MOISTURE CONTENT <19%) UNLESS OTHERWISE NOTED.
- 16. ALL WATERPROOFING AND FIRE SAFETY SYSTEMS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE TO BE DESIGNED AND DETAILED BY OTHERS.
- 17. ANY WOOD FRAME INTERIOR BEARING WALL STUDS THAT HAVE HOLES IN THE CENTER OF THE STUD UP TO 1" DIAMETER SHALL HAVE STUD PROTECTION SHIELDS. ALL HOLES OVER 1" IN DIAMETER FOR PLUMBING LINES, ETC. SHALL BE REPAIRED WITH SIMPSON HSS2 OR USP STS1 STUD SHOES, TYPICAL, UNLESS OTHERWISE NOTED.
- 18. BEARING WALLS SHALL BE SHEATHED ON NOT LESS THAN ONE SIDE WITH OSB OR GYPSUM BOARD. BRIDGING SHALL BE INSTALLED NOT GREATER THAN 4 FEET APART MEASURED VERTICALLY FROM EITHER END OF THE STUD IN LIEU OF SHEATHING.
- DIAGONAL BRACING SHALL BE INSTALLED AT EACH END OF BASEMENT BEARING WALLS AND NOT MORE THAN 20' ON CENTER.

EXTERIOR WOOD FRAMED DECKS

- DECKS ARE TO BE FRAMED IN ACCORDANCE WITH APPLICABLE
 BUILDING CODES AND AS REFERENCED ON THE STRUCTURAL PLANS,
 EITHER THROUGH CODE REFERENCES OR CONSTRUCTION DETAILS.
- PRESERVATIVE TREATED WOOD FRAMING TO BE SOUTHERN YELLOW PINE #2 OR BETTER.
- GUARD RAILS REQUIRED AT DECKS. DESIGN BY OTHERS TO MEET MINIMUM CODE REQUIREMENTS.
- PROVIDE DECK LATERAL LOAD AND BRACING CONNECTIONS PER BUILDING CODE.

RAFTER FRAMED ROOF CONSTRUCTION:

- PROVIDE 2x4x4'-0" RAFTER TIES AT 48" O.C.
 RAFTERS SHALL BE SUPPORTED BY PURLINS AND PURLIN BRACES
 AS SHOWN ON THE PLAN. PURLIN BRACES SHALL NOT BEAR ON
 ANY CEILING JOIST, STRONGBACK OR HEADER UNLESS SPECIFICALLY
- SHOWN ON PLAN. RAFTERS MAY BE SPLICED AT PURLIN LOCATIONS
 3. CEILING JOISTS SHALL HAVE LATERAL SUPPORT W/ 1x4 FLAT
 BRACING ON TOP EDGE OF JOIST AT LOOSE JOIST ENDS (WHERE
 JOISTS NOT FASTENED TO RAFTERS) OR FULL DEPTH BLOCKING.
 FASTEN END OF BRACING TO RAFTER OR GABLE END FRAMING.
- FASTEN RAFTER AND CEILING JOIST WITH (6) 12d NAILS UNLESS OTHERWISE NOTED.
- 5. PROVIDE VERTICAL 2x6 STRONGBACKS AT CEILING JOISTS ® 8'-0" O.C. TIE STRONGBACK ENDS TO GABLE STUDS OR RAFTERS WHERE POSSIBLE. PROVIDE BLOCKING BETWEEN TOP PLATES AND STRONGBACKS. PROVIDE 2x4 FLAT FASTENED TO EACH JOIST WITH (2) 12d NAILS. FASTEN STRONGBACK TO 2x4 FLAT WITH 12d NAILS @ 12" O.C. AND FASTENED TO EACH JOIST WITH (1) 12d TOENAIL.

WOOD TRUSSES (FLOOR & ROOF):

- THE WOOD TRUSS MANUFACTURER/FABRICATOR IS RESPONSIBLE FOR THE DESIGN OF THE WOOD TRUSSES. SUBMIT SEALED SHOP DRAWINGS AND SUPPORTING CALCULATIONS TO THE SER FOR REVIEW PRIOR TO FABRICATION. THE SER SHALL HAVE A MINIMUM OF (5) DAYS FOR REVIEW. THE REVIEW BY THE SER SHALL BE FOR OVERALL COMPLIANCE OF THE DESIGN DOCUMENTS. THE SER SHALL ASSUME NO RESPONSIBILITY FOR THE CORRECTNESS OF THE STRUCTURAL DESIGN FOR THE WOOD TRUSSES.
- 2. THE WOOD TRUSSES SHALL BE DESIGNED FOR ALL REQUIRED LOADINGS AS SPECIFIED IN THE LOCAL BUILDING CODE, THE ASCE STANDARD "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES." (ASCE 7), AND THE LOADING REQUIREMENTS SHOWN ON THESE SPECIFICATIONS. THE TRUSS DRAWINGS SHALL BE COORDINATED WITH ALL OTHER CONSTRUCTION DOCUMENTS AND PROVISIONS PROVIDED FOR LOADS SHOWN ON THESE DRAWINGS INCLUDING BUT NOT LIMITED TO HVAC EQUIPMENT, PIPING, AND ARCHITECTURAL FIXTURES ATTACHED TO THE TRUSSES.
- THE TRUSSES SHALL BE DESIGNED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE LATEST EDITION OF THE ANSI/TPI 1: "NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION"
- 4. THE TRUSS MANUFACTURER SHALL PROVIDE ADEQUATE BRACING INFORMATION IN ACCORDANCE WITH "BUILDING COMPONENT SAFETY INFORMATION GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING, RESTRAINING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES' (BCSI). THIS BRACINC, BOTH TEMPORARY AND PERMANENT, SHALL BE SHOWN ON THE SHOP DRAWINGS. ALSO, THE SHOP DRAWINGS SHALL SHOW THE REQUIRED ATTACHMENTS FOR THE TRUSSES.
- 5. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING TEMPORARY BRACING AND SHORING FOR THE FLOOR AND ROOF TRUSSES AS REQUIRED DURING CONSTRUCTION. AT A MINIMUM, CONTRACTOR SHALL FOLLOW THE REQUIREMENTS OF THE LATEST BCSI. THE CONTRACTOR SHALL KEEP A COPY OF THE BCSI SUMMARY SHEETS ON SITE.
- . THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING ALL PERMANENT TRUSS BRACING SHOWN IN THE STRUCTURAL DRAWINGS AND IN THE TRUSS DESIGNS. ALL CONTINUOUS LATERAL BRACING OF WEBS REQUIRES BRACES, REFER TO BCSI SUMMARY SHEET B3 FOR TYPES OF DIAGONAL BRACES TO PROVIDE AT EACH CONTINUOUS LATERAL BRACE LINE. SUCH DIAGONAL BRACES SHALL NOT BE SPACED MORE THAN 20 FEET O.C. DIAGONAL BRACES SHALL BE FASTENED TO EACH TRUSS WEB WITH A MINIMUM OF TWO IOD FACE NAILS. WHERE CONTINUOUS LATERAL BRACING CANNOT BE INSTALLED, DUE TO A MINIMUM OF THREE ADJACENT TRUSSES NOT BEING IDENTICAL, THE CONTRACTOR SHALL COORDINATE WITH THE TRUSS SPECIALTY ENGINEER/MANUFACTURER TO DETERMINE WHAT TYPE OF ALTERNATE BRACE (I.E., T OR L BRACE, ETC.) IS REQUIRED.
- ANY CHORDS OR TRUSS WEBS SHOWN ON THESE DRAWINGS HAVE BEEN SHOWN AS A REFERENCE ONLY. THE FINAL DESIGN OF THE TRUSSES SHALL BE PER THE MANUFACTURER.
- 8. TRUSS LAYOUT AND PLACEMENT BY MANUFACTURER TO COINCIDE WITH THE SUPPORT LOCATIONS SHOWN ON THE SEALED STRUCTURAL DRAWINGS. TRUSS PROFILES TO BE SEALED BY THE TRUSS MANUFACTURER. TRUSS PLANS TO BE COORDINATED WITH THE SEALED STRUCTURAL DRAWINGS.
- 9. TRUSS MANUFACTURER TO PROVIDE REQUIRED UPLIFT CONNECTORS FOR ALL TRUSSES.
- PROVIDE SIMPSON H2.5A, USP RT7 OR EQUIVALENT AT EACH TRUSS TO TOP PLATE CONNECTION, UNLESS OTHERWISE NOTED.

WOOD STRUCTURAL PANELS:

- FABRICATION AND PLACEMENT OF STRUCTURAL WOOD SHEATHING SHALL BE IN ACCORDANCE WITH THE APA DESIGN/CONSTRUCTION GUIDE "RESIDENTIAL AND COMMERCIAL," AND ALL OTHER APPLICABLE APA STANDARDS.
- 2. ALL REQUIRED WOOD SHEATHING SHALL BEAR THE MARK OF THE APA
- WOOD WALL SHEATHING SHALL COMPLY WITH THE REQUIREMENTS OF LOCAL BUILDING CODES FOR THE APPROPRIATE STATE AS INDICATED ON THESE DRAWINGS. REFER TO WALL BRACING NOTES IN PLAN SET FOR MORE INFORMATION. EXTERIOR WALLS TO BE FULLY SHEATHED USING %6" OSB OR PLYWOOD MINIMUM. AT BRACED WALL PANELS, PROVIDE BLOCKING AT ALL SHEET EDGES NOT FALLING ON STUDS
- OR PLATES.

 ROOF SHEATHING SHALL BE APA RATED SHEATHING EXPOSURE 1 OR 2. ROOF SHEATHING SHALL BE CONTINUOUS OVER TWO SUPPORTS MINIMUM AND ATTACHED TO ITS SUPPORTING ROOF FRAMING WITH 8d NAILS AT 6" O.C. AT PANEL EDGES AND AT 12" O.C. IN PANEL FIELD UNLESS OTHERWISE NOTED ON THE PLANS. SHEATHING SHALL BE APPLIED WITH THE LONG DIRECTION PERPENDICULAR TO FRAMING SHEATHING SHALL HAVE A SPAN RATING CONSISTENT WITH THE FRAMING SPACING. PROVIDE SUITABLE EDGE SUPPORT BY USE OF PLYWOOD CLIPS OR LUMBER BLOCKING UNLESS OTHERWISE NOTED. PANEL END JOINTS SHALL OCCUR OVER FRAMING, ROOF SHEATHING
- TO BE 7/6" OSB MINIMUM.

 5. WOOD FLOOR SHEATHING SHALL BE APA RATED SHEATHING EXPOSURE 1 OR 2. ATTACH SHEATHING TO ITS SUPPORTING FRAMING WITH (1) 10d NAIL AT 6" O.C. AT PANEL EDGES AND AT 12" O.C. IN PANEL FIELD UNLESS OTHERWISE NOTED ON THE PLANS. SHEATHING SHALL BE APPLIED PERPENDICULAR TO FRAMING SHEATHING SHALL HAVE A SPAN RATING CONSISTENT WITH THE FRAMING SPACING. PROVIDE SUITABLE EDGE SUPPORT BY USE OF T&G PLYWOOD OR LUMBER BLOCKING UNLESS OTHERWISE NOTED. PANEL END JOINTS SHALL OCCUR OVER FRAMING.
- SHEATHING SHALL HAVE A '8" GAP AT PANEL ENDS AND EDGES AS RECOMMENDED IN ACCORDANCE WITH THE APA.

STRUCTURAL FIBERBOARD PANELS:

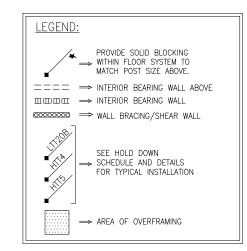
- STRUCTURAL FIBERBOARD SHEATHING SHALL ONLY BE USED WHERE SPECIFICALLY NOTED ON THE STRUCTURAL PLANS.
- 2. FABRICATION AND PLACEMENT OF STRUCTURAL FIBERBOARD SHEATHING SHALL BE IN ACCORDANCE WITH THE APPLICABLE AFA STANDARDS
- 3. IRIBERBOARD WALL SHEATHING SHALL COMPLY WITH THE
 REQUIREMENTS OF LOCAL BUILDING CODES FOR THE APPROPRIATE
 STATE AS INDICATED ON THESE DRAWINGS. REFER TO WALL BRACING
 NOTES IN PLAN SET FOR MORE INFORMATION.
- 4. SHEATHING SHALL HAVE A 1/8" GAP AT PANEL ENDS AND EDGES AS RECOMMENDED IN ACCORDANCE WITH THE AFA.

STRUCTURAL STEEL:

- STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" AND OF THE MANUAL OF STEEL CONSTRUCTION "LOAD RESISTANCE FACTOR DESIGN" LATEST EDITIONS.
- 2. ALL STEEL SHALL HAVE A MINIMUM YIELD STRESS (F_y) OF 50 KSI UNLESS OTHERWISE NOTED.
- 3. WELDING SHALL CONFORM TO THE LATEST EDITION OF THE AMERICAN WELDING SOCIETY'S STRUCTURAL WELDING CODE AWA D1.1. ELECTRODES FOR SHOP AND FIELDING WELDING SHALL BE CLASS E70XX. ALL WELDING SHALL BE PERFORMED BY A CERTIFIED WELDER PER THE ABOVE STANDARDS.
- 4. ALL STEEL BEAMS TO BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3½" AND FULL FLANGE WIDTH UNLESS OTHERWISE NOTED. BEAMS MUST BE ATTACHED AT EACH END WITH A MINIMUM OF FOUR 16d NAILS OR (2) ½" x 4" LAG SCREWS UNLESS OTHERWISE NOTED.
- 5. INSTALL 2x WOOD PLATE ON TOP OF STEEL BEAMS, RIPPED TO MATCH BEAM WIDTH. FASTEN PLATE TO BEAM W/ HILTI X-DNI 52 P8 PINS AT 12" O.C. STAGGERED OR ½" DIAMETER BOLTS AT 24" O.C.

MECHANICAL FASTENERS:

- ALL METAL HARDWARE AND FASTENERS TO BE SIMPSON STRONG—TIE
 OR APPROVED FOUNDALENT.
- ALL HARDWARE AND FASTENERS IN CONTACT WITH PRESERVATIVE PRESSURE TREATED LUMBER SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A 153, G-185.
- 3. MANY OF THE NEW PRESSURE TREATED WOODS USE CHEMICALS THAT ARE CORROSIVE TO STEEL. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE TYPE OF WOOD TREATMENT AND SELECT APPROPRIATE CONNECTORS THAT WILL RESIST THE APPLICABLE CORROSIVE CHEMICALS.



BRICK VENEER LINTEL SCHEDULE					
SPAN	END BEARING				
UP TO 3'-0"	3½"×3½"×¼"	4"			
UP TO 6'-3"	5"x3½"x5√6" L.L.V.	8"			
UP TO 9'-6"	JP TO 9'-6" 6"×3½"×5∕16" L.L.V.				
LINTELS ARE NOT DESIGNED TO BE BOLTED TO HEADERS UNLESS SPECIFIED ON UNIT PLANS. SPANS OVER 4'-0" SHALL BE SHORED UP UNTIL CURED.					



neral Structural Notes

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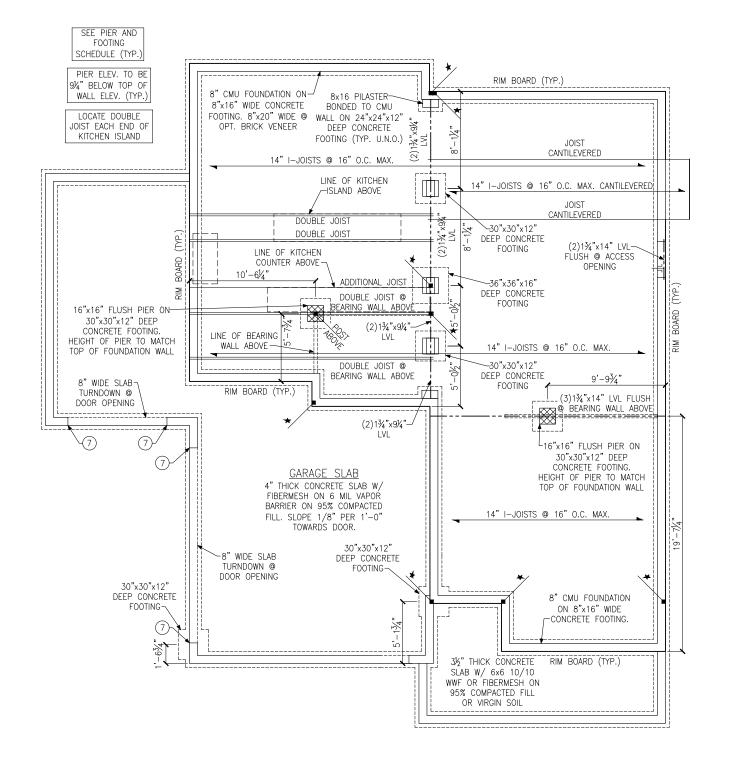
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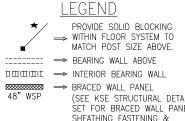
Designed By: KRK
Checked By:
Issue Date: 1/1/20

Re-Issue: Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

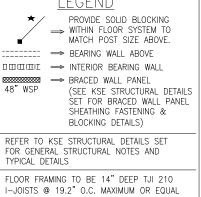
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CRAWL SPACE FOUNDATION PLAN



(7) REINFORCE 8" CMU WALL AND FOOTING UNDER PORTAL FRAME PER DETAIL



NC Firm #C-2101 Re-Issue:

Raleigh, North Magnolia Jordan Crawl Project #: 108-24006

Designed By: AAM

Plan

Foundation

Space

Lot

Acres

Checked By: KRK Issue Date: 9/18/25

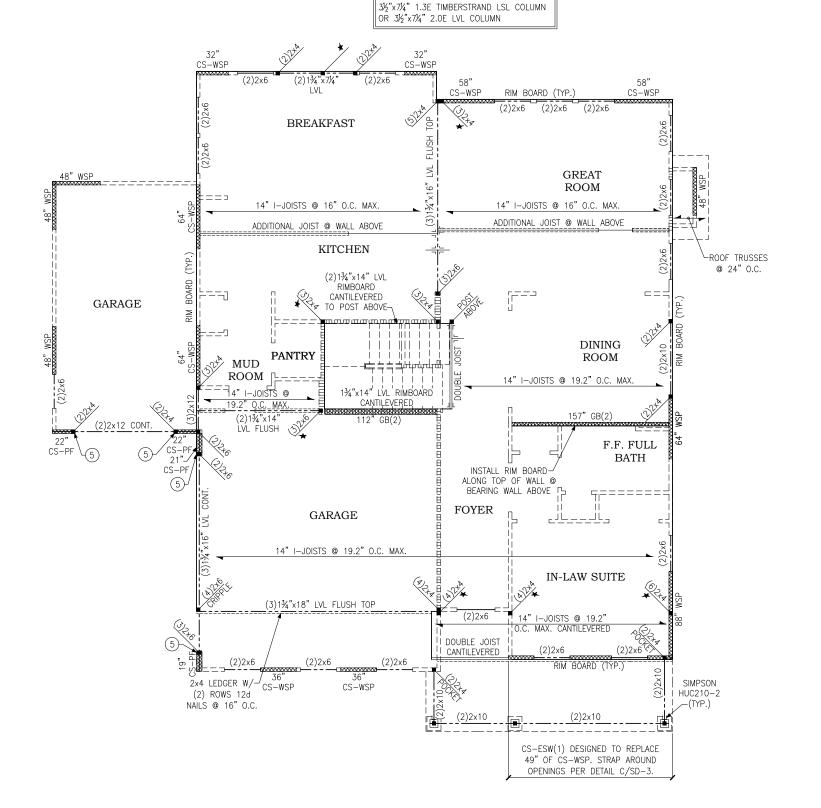
Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

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NOTE 1:

LEGEND

PROVIDE SOLID BLOCKING

→ WITHIN FLOOR SYSTEM TO MATCH POST SIZE ABOVE.

⇒ BEARING WALL ABOVE

□□□□□□ ⇒ INTERIOR BEARING WALL ⇒ BRACED WALL PANEL 48" WSP (SEE KSE STRUCTURAL DETAILS

SET FOR BRACED WALL PANEL SHEATHING FASTENING & BLOCKING DETAILS) REFER TO KSE STRUCTURAL DETAILS SET

FOR GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS

PLAN DESIGNED WITH 9' WALL PLATES

FLOOR FRAMING TO BE 14" DEEP TJI 210 I-JOISTS @ 19.2" O.C. MAXIMUM OR EQUAL

KEYNOTES:

(5) INSTALL TWO PANEL CS-PF PORTAL FRAME PER DETAIL A OR B/SD-4.

Project #: 108-24006 Designed By: AAM Checked By: KRK Issue Date: 9/18/25 Re-Issue: Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

SECOND FLOOR FRAMING PLAN

Framing s Lot 14

Floor

Second

Lot

Acres

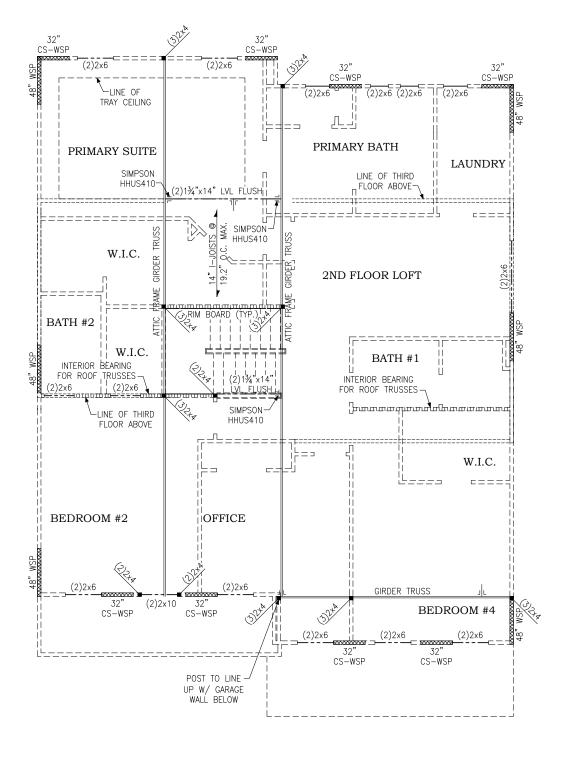
Magnolia

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Raleigh, North

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THIRD FLOOR FRAMING PLAN



PROVIDE SOLID BLOCKING

WITHIN FLOOR SYSTEM TO
MATCH POST SIZE ABOVE.

⇒ BEARING WALL ABOVE ⇒ INTERIOR BEARING WALL

₩₩ 48" WSP ⇒ BRACED WALL PANEL (SEE KSE STRUCTURAL DETAILS SET FOR BRACED WALL PANEL SHEATHING FASTENING & BLOCKING DETAILS)

REFER TO KSE STRUCTURAL DETAILS SET FOR GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS

PLAN DESIGNED WITH 8' WALL PLATES

FLOOR FRAMING TO BE 14" DEEP TJI 210 I-JOISTS @ 19.2" O.C. MAXIMUM OR EQUAL

NC Firm #C-2101

Magnolia Jordan Project #: 108-24006 Designed By: AAM

Checked By: KRK Issue Date: 9/18/25

Plan

Framing

Floor

Third

Lot

Acres

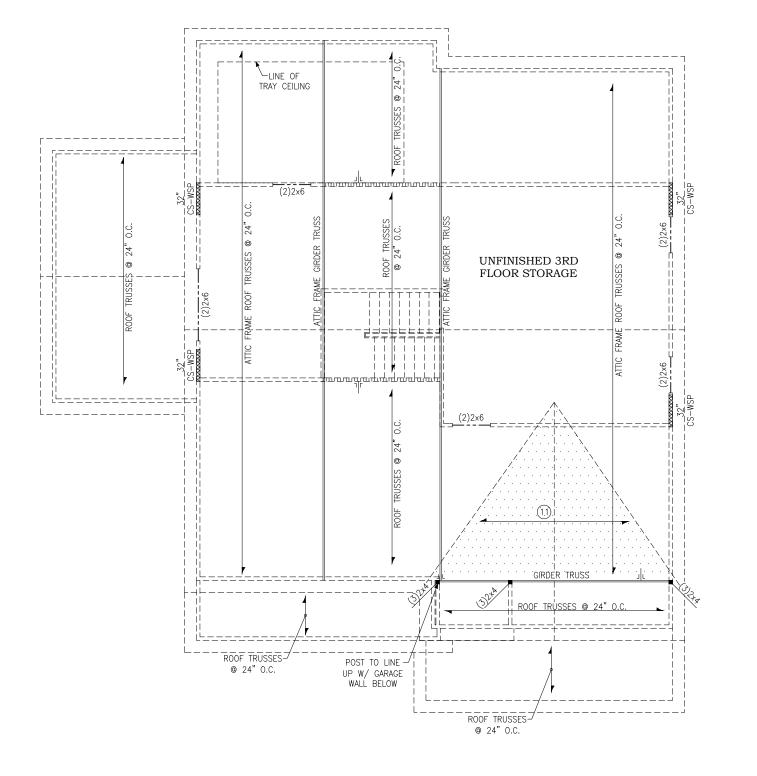
Re-Issue: Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

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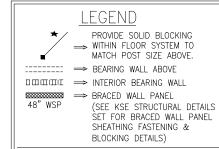
Raleigh, North

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ROOF FRAMING PLAN



REFER TO KSE STRUCTURAL DETAILS SET FOR GENERAL STRUCTURAL NOTES AND

PLAN DESIGNED WITH 8' WALL PLATES

KEYNOTES:

(11) VALLEY SET TRUSSES @ 24" O.C. OR 2x6 OVERFRAMING @ 24" O.C. W/ 2x8 RIDGE & VALLEY PLATES



120 M.P.H. Raleigh, North Magnolia Jordan Roof Project #: 108-24006

Plan Lot

Framing P Iolia Acres

Designed By: AAM Checked By: KRK Issue Date: 9/18/25

Re-Issue: Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

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- 8d NAIL @ 6" O.C. AT ALL EDGES AND 12" O.C. TYPICAL AT ALL OTHER

MEMBERS

—16d NAII

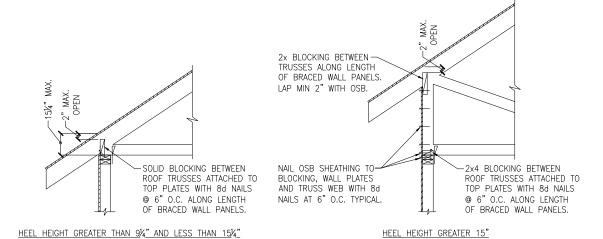
OUTSIDE CORNER PLAN VIEW

@ 12" O.C.

GYPSUM BOARD

-CONTINUOUS RIM -LSL/LVL BLOCKING ALONG BOARD BRÁCED WALL PANEL -8d TOENAILS AT 6" O.C. ALONG BRACED WALL -8d TOENAILS AT 6" O.C. ALONG BRACED WALL PANEL -BRACED WALL -BRACED WALL PANEL PANEL -(3)16d NAILS EACH -(3)16d NAILS AT BLOCK ALONG 16" O.C. ALONG BRACED WALL PANEL BRACED WALL PANEL -CONTINUOUS RIM BOARD -8d TOENAILS AT 6" O.C. -LSL/LVL BLOCKING ALONG BRACED WALL ALONG BRACED PANEL WALL PANEL

TYPICAL BRACED WALL PANEL TO FLOOR/CEILING CONNECTION BRACED WALL PANELS PERPENDICULAR TO 1-JOISTS



TYPICAL EXTERIOR CORNER WALL FRAMING

SHEATHING

INSIDE CORNER PLAN VIEW

GYPSUM BOARD-

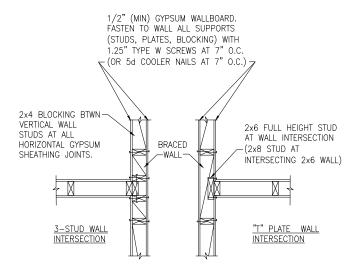
16d NAIL

EXTERIOR :

SHEATHING

@ 12" O.C.

ROOF TRUSS BEARING/BLOCKING AT BRACED WALL PANELS ONLY REQUIRED AT BRACED WALL PANELS



BRACED WALL INTERSECTIONS MAY BE FRAMED USING EITHER THE 3-STUD OR THE T-PLATE METHOD.

METHOD GB(1) AND GB(2) INTERSECTION DETAILS





Details Wall Braced

115 M.P. Raleigh, Project #: 108-20000

Designed By:KRK Checked By: Issue Date: 1/1/20

Re-Issue: Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

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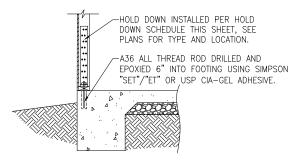
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STUD W/ 10d NAILS PLANS FOR TYPE AND LOCATION. @ 6" O.C. EACH PLY

B TYPICAL HOLD DOWN DETAIL

-HOLD DOWN INSTALLED PER HOLD DOWN SCHEDULE THIS SHEET, SEE PLANS FOR TYPE AND LOCATION. -A36 ALL THREAD ROD DRILLED AND EPOXIED 6" INTO FOOTING USING SIMPSON "SET"/"ET" OR USP CIA-GEL ADHESIVE.

C HOLD DOWN AT STEMWALL SLAB FOUNDATION



DHOLD DOWN AT MONOLITHIC SLAB FOUNDATION



-(2) 2x FULL HEIGHT STUD W/ 10d NAILS

@ 6" O.C. EACH PLY

2x FULL HEIGHT STUDS

W/ 16d NAILS @ 6" O.C.

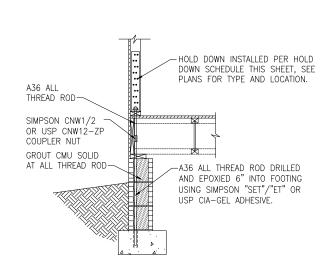
SHEAR WALL, SEE SCHEDULE AND PLANS FOR LOCATION -

AND LOCATION.

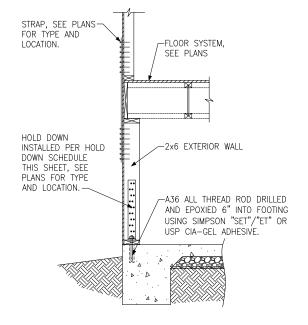
HOLD DOWN INSTALLED PER -

HOLD DOWN SCHEDULE THIS

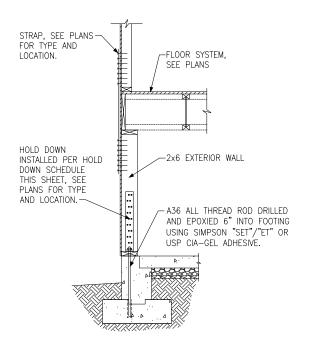
SHEET, SEE PLANS FOR TYPE



(E)HOLD DOWN AT CRAWL SPACE FOUNDATION



HOLD DOWN AT BASEMENT FOUNDATION MONOLITHIC TURN-DOWN



G HOLD DOWN AT BASEMENT FOUNDATION STEM WALL

HOLD DOWN SCHEDULE					
HOLD DOWN SIMPSON USP ALL THREAD ROD FASTENERS					
LTT20B	LTS20B	½" DIA.	(10)10d NAILS		
HTT4	HTT16	%" DIA.	(18)16dx2½" LONG NAILS		
HTT5	HTT45	%" DIA.	(26)16dx2½" LONG NAILS		



Carolina 115 M.P.H. Raleigh, North

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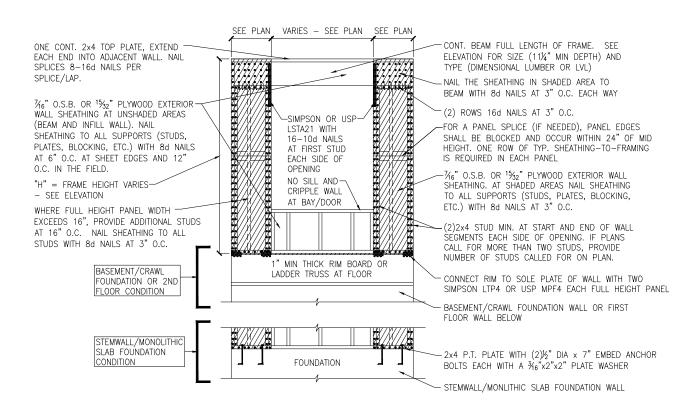
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Project #: 108-20000 Designed By: KRK Checked By: Issue Date: 1/1/20 Re-Issue:

Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

ONE BRACED WALL SEGMENT

TWO BRACED WALL SEGMENTS

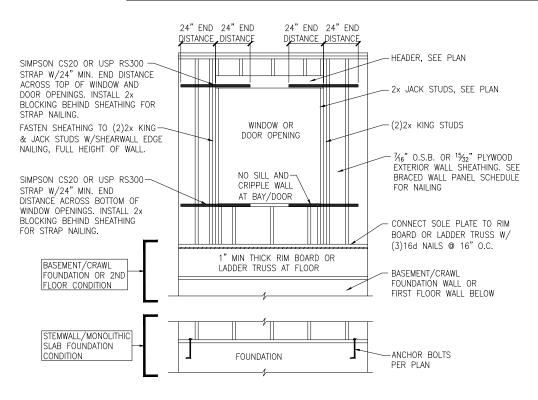


METHOD CS-PF: CONTINUOUS PORTAL FRAME PANEL CONSTRUCTION

BRACED WALL PANEL AND ENGINEERED SHEAR WALL SCHEDULE PANEL TYPES PANEL TYPE MATERIAL FASTENERS 6D OR 8D COMMON NAILS AT 6" O.C. AT SHEFT EDGES AND 12" O.C. AT NTERMITTENT WOOD WSE 7/16" OSB INTERMEDIATE SUPPORTS. ENGINEERED ALTERNATIVE: 16 GAGE BY 1.75" LONG STRUCTURAL PANEL STAPLES AT 3" O.C. AT SHEET EDGES AND 6" O.C. AT INTERMEDIATE SUPPORTS INTERMITTENT GYPSUM 1.5" LONG GALV. ROOFING NAILS, 6d COMMON NAILS, OR 1.25" LONG TYPE W 1/2" GYPSUM GB(1) BOARD (SHEATHING ONE DRYWALL SCREWS AT 7" O.C. AT SHEET EDGES AND INTERMEDIATE SUPPORTS. FACE OF WALL) INTERMITTENT GYPSUM 1.5" LONG GALV. ROOFING NAILS, 6d COMMON NAILS, OR 1.25" LONG TYPE W 1/2" GYPSUM GB(1)-4BOARD (SHEATHING ONE DRYWALL SCREWS AT 4" O.C. AT SHEET EDGES AND INTERMEDIATE SUPPORTS. FACE OF WALL) INTERMITTENT GYPSUM 1.5" LONG GALV. ROOFING NAILS, 6d COMMON NAILS, OR 1.25" LONG TYPE W 1/2" GYPSUM GB(2) BOARD (SHEATHING BOTH DRYWALL SCREWS AT 7" O.C. AT SHEET EDGES AND INTERMEDIATE SUPPORTS FACES OF WALL) 6D OR 8D COMMON NAILS AT 6" O.C. AT SHEET EDGES AND 12" O.C. AT CONTINUOUS SHEATHED CS-WSP INTERMEDIATE SUPPORTS. ENGINEERED ALTERNATIVE: 16 GAGE BY 1.75" LONG 7/16" OSB WOOD STRUCTURAL PANFI STAPLES AT 3" O.C. AT SHEET EDGES AND 6" O.C. AT INTERMEDIATE SUPPORTS 7/16" OSB CONTINUOUS SHEATHED NAILING PER DETAIL CS-PF PORTAL FRAME PORTAL FRAME WITH 7/16" OSE NAILING PER DETAIL PFH HOLD DOWNS 8D COMMON NAILS AT 6" O.C. AT SHEET EDGES AND 12" O.C. AT 7/16" OSB ENGINEERED SHEAR CS-ESW(1) INTERMEDIATE SUPPORTS. CONTINUOUS OSB AROUND DOOR/WINDOW OPENINGS WALL, TYPE 1 8D COMMON NAILS AT 4" O.C. AT SHEET EDGES AND 12" O.C. AT ENGINEERED SHEAR 7/16" OSB CS-ESW(2) WALL, TYPE 2 INTERMEDIATE SUPPORTS. CONTINUOUS OSB AROUND DOOR/WINDOW OPENINGS ENGINEERED SHEAR 7/16" OSB 8D COMMON NAILS AT 3" O.C. AT SHEET EDGES AND 12" O.C. AT CS-ESW(3) WALL, TYPE 3 INTERMEDIATE SUPPORTS. CONTINUOUS OSB AROUND DOOR/WINDOW OPENINGS

BRACED WALL PANEL NOTES:

- 1. ALL BRACED WALL PANELS, EXCEPT GB(1) & GB(2), SHALL HAVE 2x BLOCKING BETWEEN WALL STUDS AT ALL HORIZONTAL SHEET EDGES.
- PROVIDE NAILING/BLOCKING ABOVE AND BELOW ALL BRACED WALL PANELS PER KSE BRACED WALL DETAILS.
- SHEATH ALL EXTERIOR WALLS OF THE HOUSE WITH 1/6" O.S.B., OR 15/2" PLYWOOD, FASTENED PER IRC. AT EXTERIOR CORNERS, SHEATHING SHALL BE FASTENED PER KSE BRACED WALL DETAILS. AT INTERIOR WALL INTERSECTIONS, FASTEN STUDS & WALL BRACING PER KSE BRACED WALL DETAILS
- BRACED WALL PANELS AND ENGINEERED SHEAR WALLS ARE PROVIDED PER IRC. PANEL LENGTHS SHOWN ON PLANS ARE THE MINIMUM LENGTH REQUIRED.



WINDOW OR DOOR REINFORCEMENT IN ENGINEERED SHEAR WALL ONLY REQUIRED WHERE SPECIFED ON PLANS





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Project #: 108-20000

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Issue Date: 1/1/20

Re-Issue: Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34



Details Frame

Portal 115 Rale Project #: 108-20000

Designed By:KRK

Checked By:

Issue Date: 1/1/20

Re-Issue: Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

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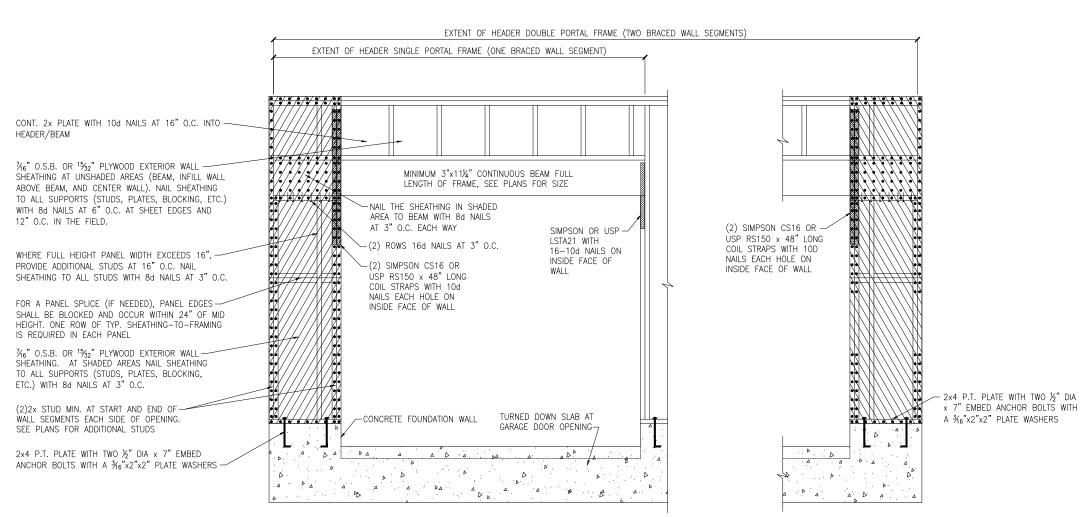
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METHOD PFH: PORTAL FRAME WITH HOLD-DOWNS MONOLITHIC SLAB OR BASEMENT FOUNDATION



METHOD CS-PF: CONTINUOUS PORTAL FRAME PANEL CONSTRUCTION MONOLITHIC SLAB OR BASEMENT FOUNDATION

#4 VERTICAL DOWEL EACH END OF WALL HOOKED -INTO TOP COURSE OF WALL. HORIZ. LEG TO EXTEND FULL LENGTH OF WALL (OR LAP MIN 24" WITH DOWEL FROM OTHER END OF WALL. VERT. LEG TO EXTEND FULL HEIGHT OF WALL

#4 VERTICAL DOWEL FULL HEIGHT OF WALL, WITH -STD HOOK IN FOOTING, IN CELL EACH END OF WALL. IN LIEU OF CAST-IN-PLACE DOWEL VERT. #4 CAN BE DRILLED AND EPOXIED 5" INTO FOOTING USING SIMPSON "SET"/"ET" OR USP CIA-GEL ADHESIVE.

(2)2x STUD MIN. AT START AND END OF-

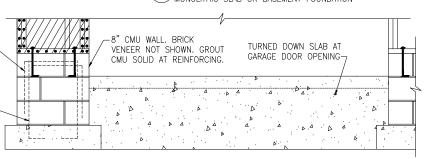
WALL SEGMENTS EACH SIDE OF OPENING.

SIMPSON STHD14 OR USP STAD14 STRAP-TIE HOLD -

DOWN WITH (30)16d SINKERS AT STUDS. INSTALL PER

SEE PLANS FOR ADDITIONAL STUDS

MANUFACTURÈR'S SPECS.



- 2x4 P.T. PLATE WITH TWO 1/2" DIA x 7" EMBED ANCHOR BOLTS WITH 8" CMU WALL. BRICK A 3/6"x2"x2" PLATE WASHERS VENEER NOT SHOWN, GROUT CMU SOLID AT REINFORCING. REFER TO OPPOSITE SIDE FOR REINFORCING REQUIREMENTS

DOUBLE 2x4 P.T. PLATE WITH ONE

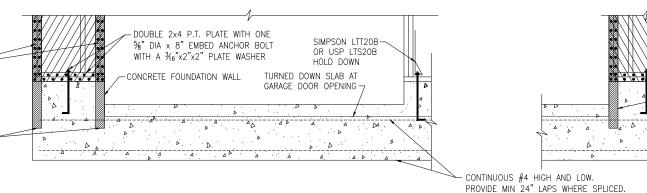
5%" DIA x 7" EMBED ANCHOR BOLT

SIMPSON STHD14 OR USP STAD14

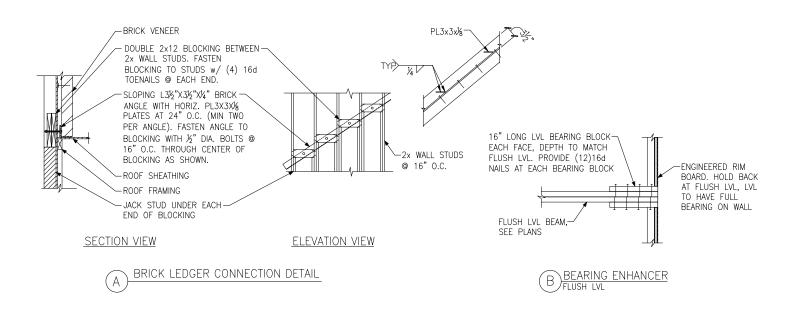
STRAP-TIE HOLD DOWN WITH (30)16d SINKERS AT STUDS. INSTALL PER MANUFACTURER'S SPECS.

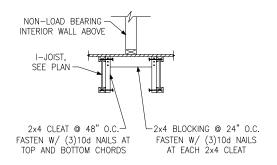
WITH A 3/16"x2"x2" PLATE WASHER

METHOD CS-PF: CONTINUOUS PORTAL FRAME PANEL CONSTRUCTION STEMWALL SLAB OR CRAWL SPACE FOUNDATION

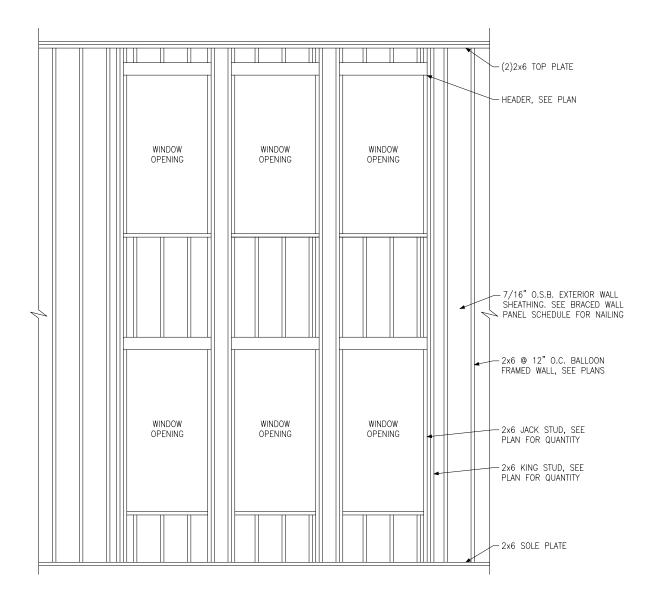


NC Firm #C-2101





I-JOIST LADDER BLOCKING
AS REQUIRED @ PARALLEL WALLS





Details Framing Miscellaneous

115 M.P.H. Raleigh, North Project #: 108-20000

Designed By: KRK

Checked By: Issue Date: 1/1/20

Re-Issue: Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

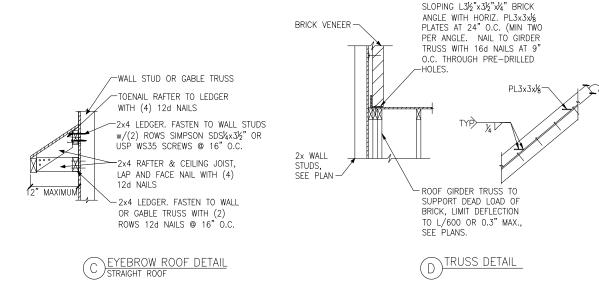
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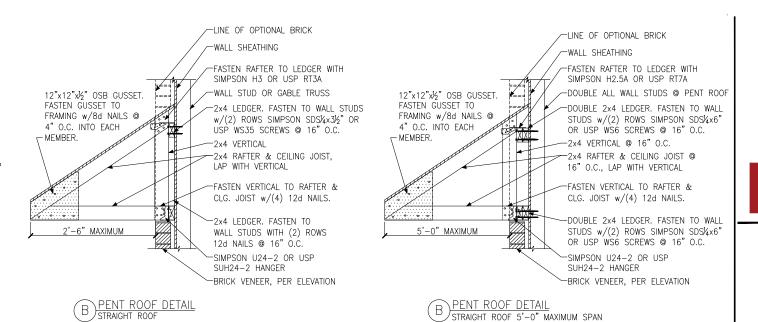
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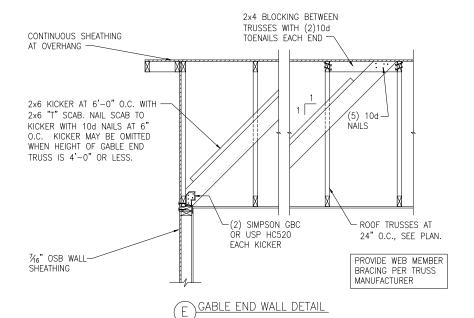
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Miscellaneous Framing Details

Project #: 108-20000

Designed By: KRK

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Checked By:

Issue Date: 1/1/20 Re-Issue: Scale: 1/8"=1'-0" @ 11x17

SD-6

1/4"=1'-0" @ 22x34

-FLOOR JOIST. SFF PLAN →INSTALL ½" DIA. ANCHOR BOLTS, SEE FOUNDATION NOTES. P.T. PLATE -8" CMU WALL TOP TURN DOWN PORCH COURSE GROUTED SOLID SLAB TO BELOW TOP OF FOUNDATION WALL -CONCRETE FOOTING, SEE PLAN. SEE ARCHITECTURAL DETAILS FOR WATERPROOFING AT PORCH

SLAB/WOOD FRAMING.

-2x STUD WALL W/

-ENGINEERED RIM BOARD

PLATE, SEE PLAN.

FOUNDATION SECTION EXTERIOR WALL AT PORCH

FOUNDATION SECTION EXTERIOR WALL AT PORCH W/ MASONRY

LIVING SPACE

-2x STUD WALL W/

-ENGINEERED RIM BOARD

INSTALL ½" DIA. ANCHOR BOLTS, SEE FOUNDATION

B" CMU WALL TOP COURSE GROUTED SOLID

-CONCRETE FOOTING,

SEE PLAN.

PLATE, SEE PLAN.

FLOOR JOIST.

SEE PLAN

NOTES.

-2x STUD WALL W/ P.T. PLATE, SEE PLAN. -8" CMU WALL TOP INSTALL 1/2" DIA. ANCHOR -COURSE GROUTED SOLID BOLTS, SEE FOUNDATION NOTES. STEP VARIES EXTERIOR GRADE -4" GRAVEL FILL OR GROUP 1 CLASSIFIED SOIL -COMPACTED SOIL 12" MINIMUM CONCRETE FOOTING, BELOW GRADE SEE PLAN.

FOUNDATION SECTION

EXTERIOR WALL

-2x STUD WALL W/

ENGINEERED RIM BOARD

PLATE, SEE PLAN.

-FLOOR JOIST.

8" CMU WALL TOP

-CONCRETE FOOTING,

SEE PLAN

COURSE GROUTED SOLID

SEE PLAN

P.T. PLATE -

EXTERIOR GRADE-

12" MINIMUM

BELOW GRADE

INSTALL ½" DIA. ANCHOR BOLTS, SEE FOUNDATION

FOUNDATION SECTION EXTERIOR GARAGE WALL

FLOOR JOIST, SEE PLAN

FOUNDATION SECTION

INTERIOR PIER

2x8 PT BEARING BLOCK, FULL LENGTH OF PIER

CONCRETE FOOTING,

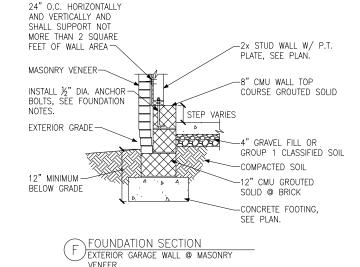
SEE PLAN.

GIRDER PER-

LIMITS

CMU PIER GROUTED

SOLID, SEE SCHEDULE FOR SIZE AND HEIGHT



FOUNDATION SECTION

EXTERIOR WALL @ MASONRY

VENEER

VENEER TIES SHALL BE

SPACED NOT MORE THAN

-2x STUD WALL W/

PLATE, SEE PLAN.

-FLOOR JOIST.

P.T. PLATE

SEE PLAN

-ENGINEERED RIM BOARD

8" CMU WALL, TOP

12" CMU GROUTED

-CONCRETE FOOTING,

SOLID @ BRICK

SEE PLAN.

COURSE GROUTED SOLID

VENEER TIES SHALL BE

24" O.C. HORIZONTALLY

AND VERTICALLY AND

SHALL SUPPORT NOT

FEET OF WALL AREA-

MASONRY VENEER

EXTERIOR GRADE

12" MINIMUM -

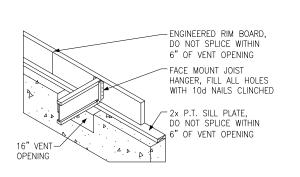
BELOW GRADE

NOTES.

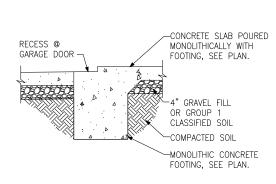
MORE THAN 2 SQUARE

INSTALL ½" DIA. ANCHOR-BOLTS, SEE FOUNDATION

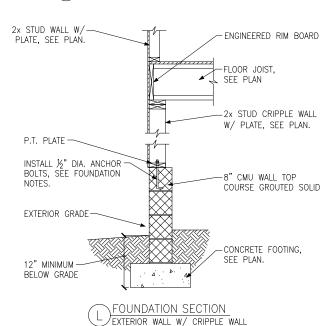
SPACED NOT MORE THAN



CRAWL SPACE VENT DETAIL



FOUNDATION SECTION GARAGE DOOR



FOUNDATION SECTION INTERIOR GARAGE WALL

P.T. PLATE -

\$ 2 2 5 2

GARAGE SPACE

PIER AND	FOOT	ING	SCH	Εſ	DUL	.E
PIER HEIGHT PIER SIZE		MIN. FOOTING SIZE				
	16"					
UP TO 5'-4" 16" :	< 16" :	24" ×	: 24"	х	12"	U.N.O.
UP TO 8'-0" 16" :	× 16" ;	30" x	: 30"	Х	12"	U.N.O.
NOTE: PIERS SHALL BE C MASONRY OR CON' SOLID WITH CONCE PIERS OVER 5'-4" WITH CONCRETE OI FOR PIERS OVER 8 ENGINEERING FOR	CRETE ETE/MI SHALL R TYPE 3'-0" (OR T ORTAF BE M C CONTA	OP CO R. BE FI DR S ACT K	LLI MC SE	RSE ED S ORTAI	FILLED SOLIDLY R.



O W **S** 2

EERING KERTOWN, PA 18951 (215) 804-4449

ENGIN

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Details Foundation Space Crawl

Raj Project #: 108-20000

Carolina

North

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Д. Н.

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Designed By: KRK

Checked By: Issue Date: 1/1/20 Re-Issue:

Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34