

IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/ OR BUILDER TO CONFORM TO ALL STANDARDS. PROVISIONS, REQUIREMENTS, METHODS OF CONSTRUCTION AND USES OF MATERIALS, IN BUILDING CODES ANY OTHER LOCAL AGENCIES AND IN ACCORDANCE WITH GOOD ENGINEERING AND CONSTRUCTION PRACTICES.

**Square Footage** 

Existing Residence 1800 Sq Ft Second Floor 1200 Sq Ft 3000 Sq Ft

Unheated

1220 Sq Ft <u>Garage</u> 1220 Sq Ft

1 3D View - Front

#### General Notes:

#### 1. Design Loads: Local

Materials A. Brick

Face Brick Standard: ASTM C216-84, Grade SW.

Brick type and color to be chosen by owner. ASTM C270, Type S. Mortar style and color consult owner

Do not use calcium chloride in mortar.

C. Brick Ties ASTM A82 steel wire, hot dip galvanized after fabrication to ASTM A 153/A 153M, Class B

D. Insulation ASTM C665; pre-formed glass fiber batt (R-19)

E. Wood Framing No. 2 Southern Pine

F. Waterproofing #15 asphalt felt

G. Roof Shingles Match existing

3. Masonry

- A. Install mortar in accordance with premix mortar instructions or in accordance with ASTM C780.
- B. Clean mortar off exposed finished surfaces immediately following placement.
- C. Conform to the applicable code requirements for masonry construction and guidelines outlined by the Brick Institute of America.
- D. Provide brick ties.
- E. Cut masonry units with motor-driven saws to provide clean, sharp, unchipped edges.
- F. Prepare masonry surfaces so they are smooth and free from projections that could puncture flashing. Place through-wall flashing on sloping bed of mortar and cover with mortar. Seal penetrations in flashing with adhesive/sealant/tape as recommended by flashing manufacturer before covering with mortar.
- G. Install weep holes in the head joints in exterior wythes of the first course of masonry immediately above embedded flashings as follows:
  - Keep head joints free and clear of mortar.
- Space weep holes 24 inches o/c. H. Weep Holes:
- I. After wall construction is complete, clean brick with a non-acidic
- solution recommended by masonry unit manufacturer.
- A. Verify that adjacent materials and insulation materials are dry.
- B. Install insulation per manufacturer's instructions.
- C. Tape seal tears or cuts in vapor retarder.

#### 5. Wood Framing

- A. All field nailing will comply with the North Carolina State Building Code Fastening Schedule Table 2304.9.1 unless noted otherwise. All nails are to be common nails.
- B. Miscellaneous framing not shown on the structural drawings may be required in some areas. Contractor will provide all framing
- required to complete the project. C. Exterior Wall Sheathing:
- a) Sheathing will be 1/2" plywood APA rated sheathing with an exterior exposure 1 durability rating.
- b) Place long dimension of sheathing perpendicular to studs in a staggered arrangement. Fasten to studs with 10d common nails 6"o/c at all panel edges and 12"o/c at intermediate supports. Block all unsupported edges.
- c) Leave 1/4" space at all panel edge joints and 1/8" space at all panel end joints unless otherwise recommended by manufacturer.

#### D. Plywood Roof Sheathing

- a) Roof sheathing is to be APA rated with an exterior exposure 1 rating and a panel span rating of 32/16. Thickness of sheathing is to match existing roof sheathing thickness.
- b) Place long dimension of sheathing perpendicular to outriggers. Remove sections of existing sheathing and stagger every other new plywood sheet back to the 2nd interior roof truss. Fasten to trusses and outriggers with 10d common nails, 6"o/c at all panel edges and 12"o/c at intermediate supports. Block all
- c) Leave 1/4" space at all panel edge joints and 1/8" space at all panel end joints unless otherwise recommended by the manufacturer.
- E. Do not cut or notch new or existing framing unless required on this

#### 6. Miscellaneous

- A. The contractor will be responsible for properly guying and bracing the structure to resist live, dead, wind and construction loads during
- B. Verify all existing building dimensions, elevations and details with the field conditions.

Climate Zone	Zone 3	Zone 4	Zone 5
Fenstration U-Factor	0.35	0.35	0.35
Skylight U-Factor	0.65	0.60	0.60
Glazed Fenstration SHGC	0.30	0.30	0.30
Ceiling R-Value	30	38	38
Wall R-Value	15	15	19
Floor R-Value	19	19	30
*Basement Wall R-Value	10/13	10/13	10/13
**Slab R-Value	0	10	10
**Crawl Space Wall R-Value	5/13	10/13	10/13

\*10/13 means R-10 sheathing insulation or R-13 cavity insulation \*\* Insulation depth with monolithic slab 18" or from inspetion gap to bottom of footing; Insulation dept with stem wall slab 24" or to bottom of foundation wall.

29

32

#### **Design Pressure for Doors and Window** Positive and Negative in PSF Mean Roof Height (FT) 25 35 Velocity (MPH) 15 15 17 19 100 20 23 25

Designed for windspeed of 110 MPH,

Assumed Mean Roof Height 25'-9"

3 Second Gust (95 Fastest Mile) Exposure "B"

25

110

Symbols Legend:				
	STONE CLADDING		WOOD	
	CONCRETE BLOCK		PLYWOOD	
233233	CONCRETE		WOOD ROUGH FRAMING	
	ARCHITECTURAL PRECAST CONCRETE		SHIM	
<i>₽</i> Q &∞ %	POROUS FILL		BATT INSULATION	
	EARTH		RIGID INSULATION	
	METAL		FIRE SAFING	
	GYPSUM WALLBOARD		IMPREGNATED FOAM SEALANT	
	GWB SOFFIT OR CEILING		SEALANT AND BACKER ROD	

#### Air Leakage

#### Section N1102.4

N1102.4.1 Building Thermal Envelop. The building thermal envelope shall be durably sealed with an air barrier system to limit infiltration. The sealing methods between dissimilar materials shall allow for differential expansion and contraction. For all homes, where present, the following shall be caulked, gsketed, weaher stripped or otherwise sealed with an air barrier material or solid material consistent with Appendix E-2.4 of this code:

- 1. Blocking and sealing floor/ceiling systems and under knee walls open to unconditoned or exterior space.
- 2. Capping and sealing shafts or chases, including flue shafts.
- 3. Capping and sealing soffit or dropped ceiling areas.

I CERTIFY THAT THE CONSTRUCTION EXHIBITS FOR (IDENTIFICATION OF THE PROPERTY BY HOUSE TYPE, LOT, LOCK, SUBDIVISION NAME, AND SO ON) MEET ALL LOCAL CODE REQUIREMENTS AND ARE IN SUBSTANTIAL CONFORMITY WITH BOTH SAH AND VA MINIMUM PROPERTY REQUIREMENTS. ALL BUILDING STANDARDS AS SET FORTH BY THE INTERNATIONAL CODE COUNCIL (ICC) AND FEDERAL SAFE DRINKING WATER PLUMBING STANDARD.

#### DESIGNED BY:

TIMOTHY PEPPERS JR. RESIDENTIAL DESIGN CONSULTANT

CAMERON NORTH CAROLINA (910) 644-4587

## PROPERTY OF TPJR

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SCALE: DATE:

Project number

2/26/2021

022620210001

Drawn by TP Checked by TP

#### **Dwelling/Garage Separation**

#### **REFER TO SECTIONS R302.5,R302.6, AND R302.7**

Walls. A minimum 1/2" gypsum board must be installed on all walls supporting floor/ceiling

assemblies used for separation required by this section.

Stairs. A minimum of 1/2" gypsum must be installed on the underside and exposed sides of all

**Ceilings.** A minimum of 1/2" gypsum must be installed on the garage ceiling if there is no habitable room above. If a habitable room is above, a minimum of 5/8" Type X gypsum board must be installed on the the garage ceiling.

**Opening Penetrations**. Openings between the garage and the residence shall be equipped with solid wood doors not less than 1 3/8 inches in thichess, solid or honeycomb core steel doors not less than 1 3/8 inches thich, or 20-minute fire-rated doors.

Duct Penetrations. Ducts in the garage and ducts penetrating the walls or ceilings sparation the dwelling from the garage shall be constructed of a minimum No. 26 gage sheet steel or other approved material and shall have no openings into the garage.

Other Penetrations. Penetrations through the separtion required in Section R302.6 shall be protected as required by Section R302.11, Item 4.

#### **General Notes:**

- 1. All dimensions are given from the exeterior face of the stud to the
- centerline of interior studs unless otherwise noted.
- 2. All work shall be performed in conformance with the 2018 NC Building Code for One and Two Family Dwellings and all referenced standards.
- 3. All finishes, appliances, equipment and fixtures shall be coordinated by Owner
- and G.C.
- 4. G.C. to field verify all existing dimensions and conditions prior to commencing work. 5. Drawings are an instrument to communicate intent of construction. Do not scale drawings.
- 6. All doors and windows to be selected by Owner and provided and installed by G.C.
- 7. All casework to be selected by Owner and provided and installed by G.C.

Door Schedule				
Mark	Count	Door Size	Description	Comments
1	5	36" x 80"	Entry Door	
2	2	36" x 80"	Interior Door	
4	2	32" x 80	Room Door	
5	3	30" x 80"	Room Door	
6	1	30" x 80"	Bi-fold Door	
7	1	Garage	2-Car Garage Door	
8	1	Exist. 36" x 80"	Entry Door	Existing Door
9	1	72" x 80"	French Door	Existing Door
9 Grand to	•	72" x 80"	French Door	Existing Door

Window Schedule				
		Rough	Opening	
Mark	Count	Width	Height	Comments
	3			Existing Window
A	7	6' - 0"	5' - 0"	

30' - 0"

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# Martin a) Jesse Carolina Sanford No or Ш pared

44

Plan

First Floor

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

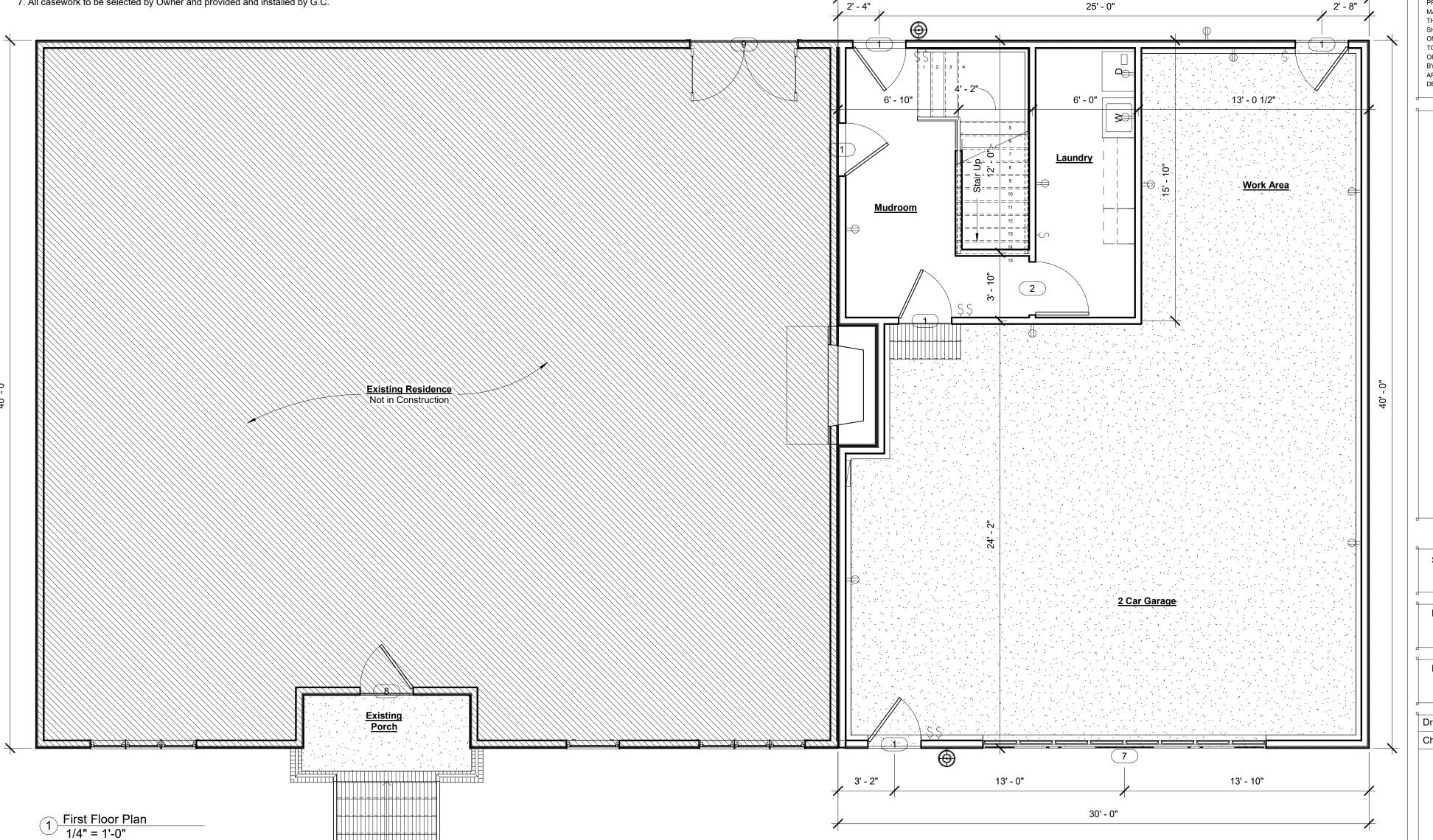
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2/26/2021

Project number 022620210001

TP Drawn by Checked by TP



#### Floor Plan Notes:

- 1. All structural information shown is for reference purposes only. Contractor shall have licensed structural engineer review and design all structural elements such as all framing walls, beams, connections, headers,
- 2. All dimensions are from center line of stud to face of exterior stud unless noted otherwise.
- 3. Window sizes indicated on plans are noted by approximate rough opening size. Refer to plans and exterior elevations for window types.
- 4. Coordinate location of utility meters with site plan and locate away from public view visual impact shall be minimized, i.e. mount as low as possible.
- 5. Prefabricated fireplace construction shall meet or exceed all applicable codes regarding use of fire separations, clearances, etc. It is all items and contractor's responsibility to ensure that all items and construction meet or exceed the applicable code. Overall flue height shall be coordinated to match height shown on plans and shall not exceed the top of chimney chase as constructed.
- 6. Constractor shall coordinate all closet shelving requirements.
- 7. Do not scale drawings. Follow dimensions only.
- 8. Contractor shall field verify all cabinet dimensions before fabrication.
- 9. Bedroom windows shall have a minimum net clear opening of 5.7 sq. ft. A minimum net clear openable width of 20". A minimum net clear openable height of 24" and have a maximum finish sill height of 43" from
- 10. All glass located within 18" of floor, 12" of a door of located within 60" of floor at bathtubs, whirlpools, showers, saunas, steam rooms or hot tubs shall be tempered.
- 11. All exposed insulation shall have a flame spread rating of less than 25 and a smoke density rating of
- 12. Provide combustion air vents, with screen and back damper, for fireplaces, wood stoves and any appliance with an open flame.
- 13. Bathrooms and utility rooms shall be vented to the outside with a minimum of a 90 cfm fan. Range hoods shall also be vented to outside.
- 14. Attic HVAC units shall be located within 20'-0" of its service opening. Return air grilles shall not be located within 10'-0" of a gas fired appliance.
- 15. All walls and ceilings in garage and garage storage areas to have 5/8" Type-X gyp. brd. with 1-Hour fire rating. All exterior doors in garage to be metal or solid core doors including doors entering heat/cooled portion of residence.
- . 16. All fireplace chase walls shall be insulated inside and outside. Provide horizontal "Draft Stops" at each floor level by packing 6" (R-19) insulation between 2X4 joists.
- 17. All interior walls shall be covered with 1/2" gyp. brd., with metal corner reinforcing, tape float and sand. (3 coats) use 5/8" gyp. brd. on ceilings when supporting members are 24" O.C. or greater. Use 1/2" gyp. brd. on ceiling members less than 24" O.C.
- 18. All bath and toilet area walls and ceiling shall have water resistant gyp. brd.

## **Smoke Alarms**

Section R314

R314.1 Smoke Detection and Notification. All smoke alarms shall be listed in accordance with UL 217 and installed in accordance with provisons of this code and the household fire warning equipment provisons fo NFPA 72.

R314.2 Smoke Detection Systems. Household fire alarm systems installled in accordance with NFPA 72 that include smoke alarms, or a combination of smoke detector and audible ntificaition device installed as required by this section for smoke alarms, shall be permitted. The household fire alarm system shall provide the same level of smoke detection and alarm as required by this section for smoke alarms. Where a houshold fire warning system is installed using a combination of smoke detector and audible notification device(s), it shall become a permanent fixture of the occupancy and owned by the homeowner. The system shall be monitored by and approved supervising station and be maintained in accordance with NFPA72.

#### **Exception:**

Where smoke alarms are provided meeting the requirements of Section R314.4. R314.3 Location. Smoke alarms shall be installed in the following locations.

- 1. In each sleeping room.
- 2. Outside each separate sleeping area in the immediate vicinity of the bedrooms.
- 3. On each additional story of the dwelling, including basements and habitable attics (finished) but not including crawl spaces, unihabitable (unfinished) attics and unianhabitable (unfinished) attic-stories. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less thatn one full story below the upper level.

When more than one smoke alarm is required to be installed within an individual dwelling unit the alarm devices shll be interconnected in such a manner that that the actuation of one alarm will activate all of the alarms in the individual unit. R314.4 Power Source. Smoke alarms shall receive their primary power from the building wiring when such wiring is served from a commercial source, and when primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnection switch other than those required for overcurrent protection. Smoke alarms shall be interconnected.

#### **Carbon Monoxide Alarms**

#### Section R315

R315.1 Carbon Monoxide Alarms. Inn new contsruction, dwelling units shall be provided with an approved carbon monoxide alarm installed outside of each separate sleeeping area in the immediate vicinity of the bedroom(s) as directed by the alarm manufacturer.

R315.2 Where Required In Existing Dwellings. In existing dwellings, where interior alterations, reparis, fuel-fired appliance replacements, or additions requiring a permit occures, or where one or more sleeping rooms are added ot created, carbon monoxide alarms shall be provided in acccordance with Section R315.1.

R315.3 Alarm Requirements. The required carbon monoxide alarms shall be audible in all bedrooms over background noise levels with all intervening doors closed. Single station carbon monoxide alarms shall be listed as complying with UL2034 and shall be installed in accordance with this code and the manufacturer's installation instructions.

#### Attic Access

#### Section R807

R807.1 Attic Access. An attic access opeing shall be provided to attic areas that exceed 400 square feet and have a vertical height of 60 inches or greater. The net clear opening shall not be less than 20 inches by 30 inches and shall be located in the hallway or other unobstructed area. Headroom in the attic space shall be provided at some point above the access opening. See Sectio M1305.1.3 for access requirements where mechanical equipmentis located above attics.

#### **Exceptions:**

1.Concealed areas not located over the main structure including porches, areas behind knee walls, dormers, bay windows, etc. are not required to have access.

2. Pull down stair treads, stringers, handrails, and hardware may protrude into the net clear area

#### **FINISHES**

- SEAL AROUND WINDOW AND DOOR OPENINGS WITH PAINT GRADE SEALANT. WHERE COUNTERTOPS AND BACK SPLASHES BUTT WALLS, PROVIDE A BEAD OF CLEAR SILICONE CAULK. AT PLUMBING FIXTURES, PROVIDE ANTI-FUNGAL CAULK.
- ALL GYPSUM BOARD TO BE 1/2" TYPE X
- CEILINGS THROUGHOUT TO BE GYPSUM BOARD. PATCH CEILING WHERE AFFECTED BY DEMOLITION AND MATCH FINISH, TEXTURE, AND PAINT OF ADJOINING CEILING.
- PRIOR TO ORDERING FINISHES, VERIFY/CONSULT WITH OWNER, CONFIRM COLOR & STYLE.
- ALL METAL TO RECEIVE BASE COAT AND 2 COATS SEMI-GLOSS LATEX PAINT. GWB TO RECEIVE ONE COAT PRIMER & TWO COATS PAINT. WOOD DOORS TO BE FACTORY STAINED.
- . ALL CABINETRY TO BE PLASTIC LAMINATE FACED, FLUSH OVERLAY DESIGN. ALL HARDWARE TO BE INTERMEDIATE DUT. FIELD VERIFY ROOM DIMENSIONS AND APPLIANCE SIZES PRIOR TO FABRICATION. GC TO PROVIDE BLOCKING IN WALLS.

#### Walls & Thicknesses

All walls are 3 1/2" thick 2x4 nominal studs SYP or SPF #2 @ 16 " O.C. unless otherwise noted.

**Exterior walls** are drawn to actual dimensions to include both interior and exterior finishes. Measurements to exterior walls are to the exterior face

Garage walls are drawn to actual dimensions. Measurements to exterior walls are to the exterior face of wall stud. Measurements to walls between the residence and the garage a to the face of the stud on the garage side. **Interior walls** are drawn to actual dimension. Measurements to interior walls are to the center line of the wall.

#### **General Notes:**

- 1. All dimensions are given from the exeterior face of the stud to the centerline of interior studs unless otherwise noted.
- 2. All work shall be performed in conformance with the 2018 NC Building Code for One and Two Family Dwellings and all referenced standards.
- 3. All finishes, appliances, equipment and fixtures shall be coordinated by Owner
- 4. G.C. to field verify all existing dimensions and conditions prior to commencing work.
- 5. Drawings are an instrument to communicate intent of construction. Do not scale drawings. 6. All doors and windows to be selected by Owner and provided and installed by G.C.

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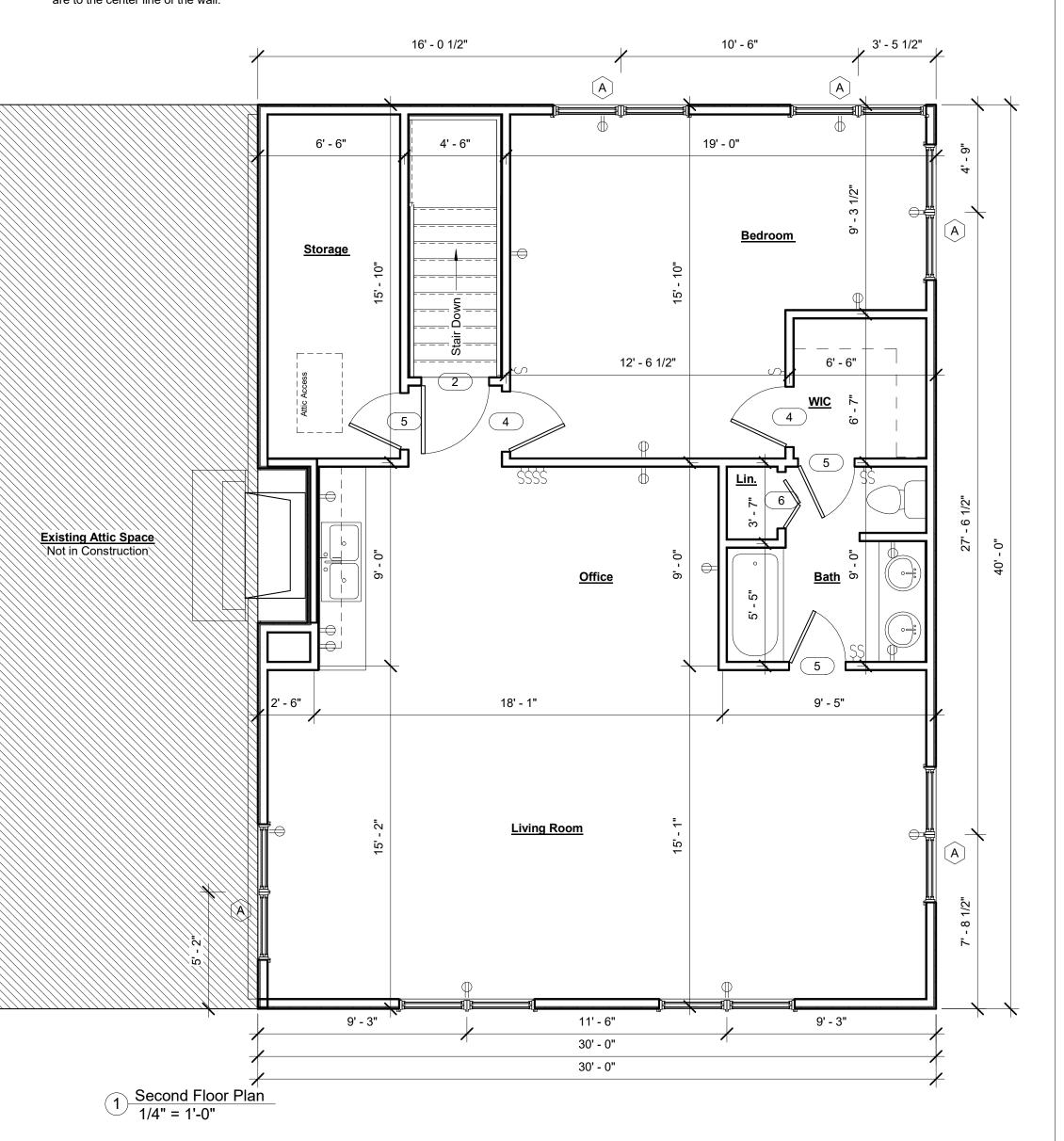
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7. All casework to be selected by Owner and provided and installed by G.C.



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Plan

Floor

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

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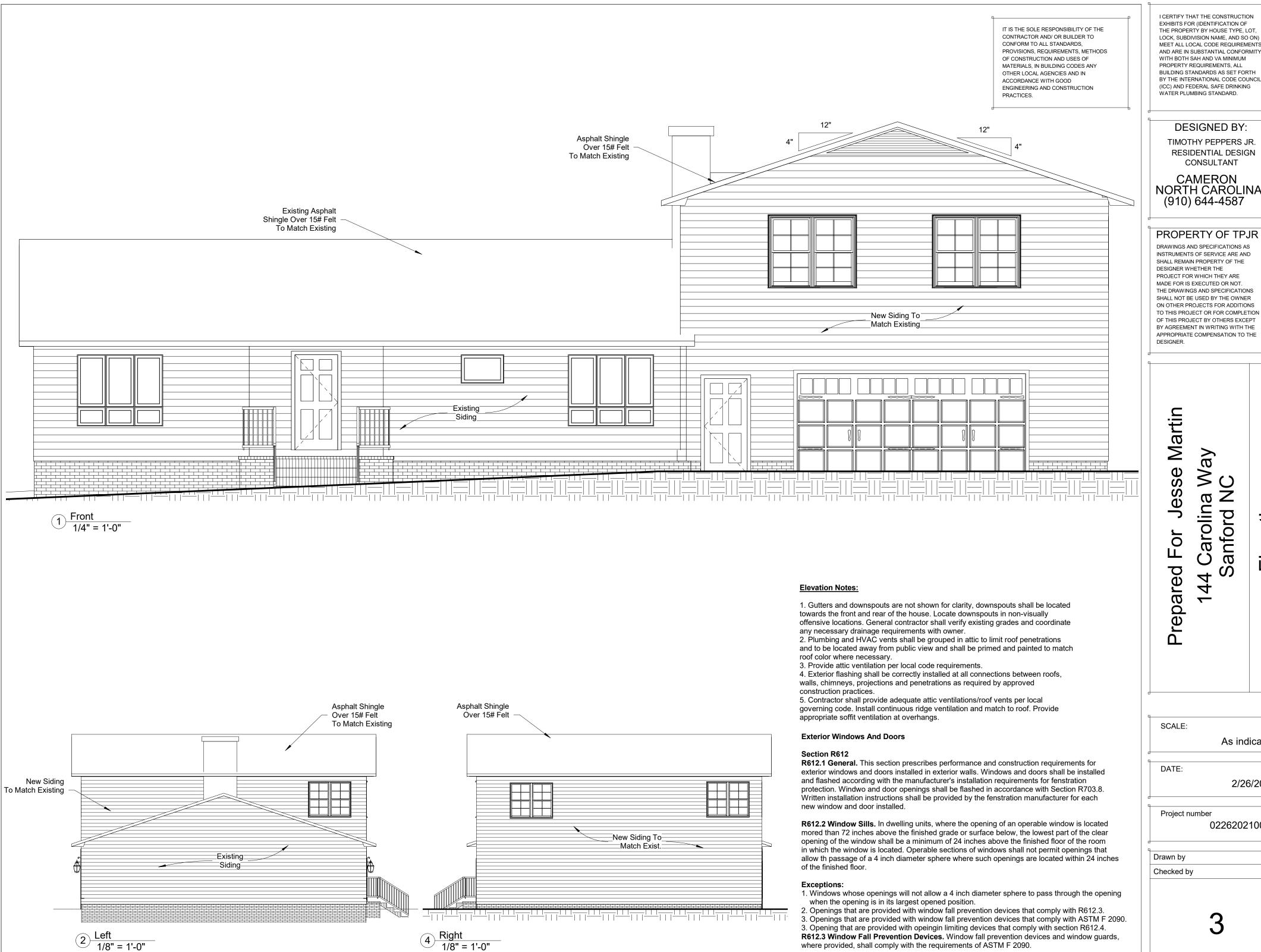
Project number

022620210001

2/26/2021

Author

Checked by Checker



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RESIDENTIAL DESIGN

CAMERON NORTH CAROLINA

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As indicated

2/26/2021

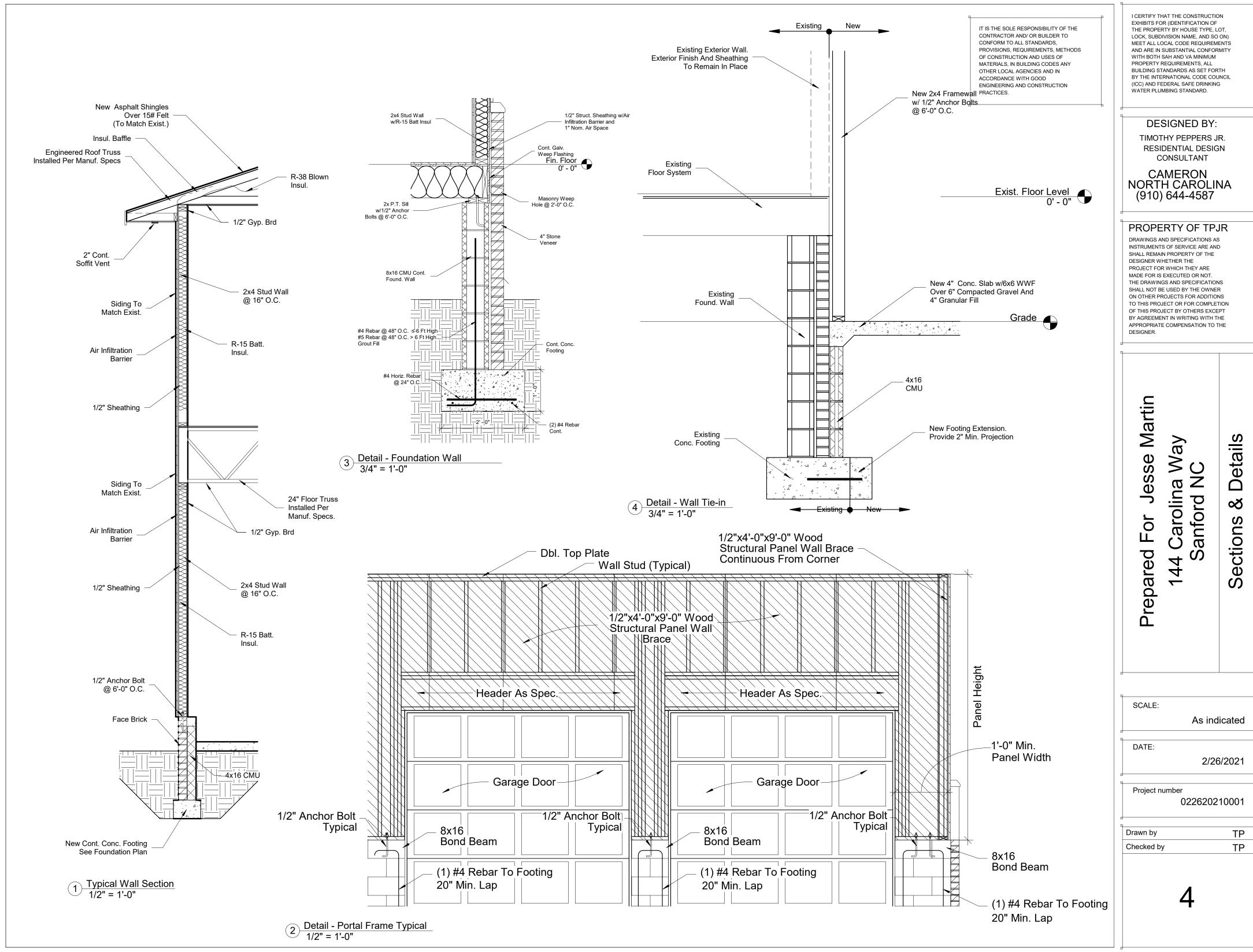
Elevations

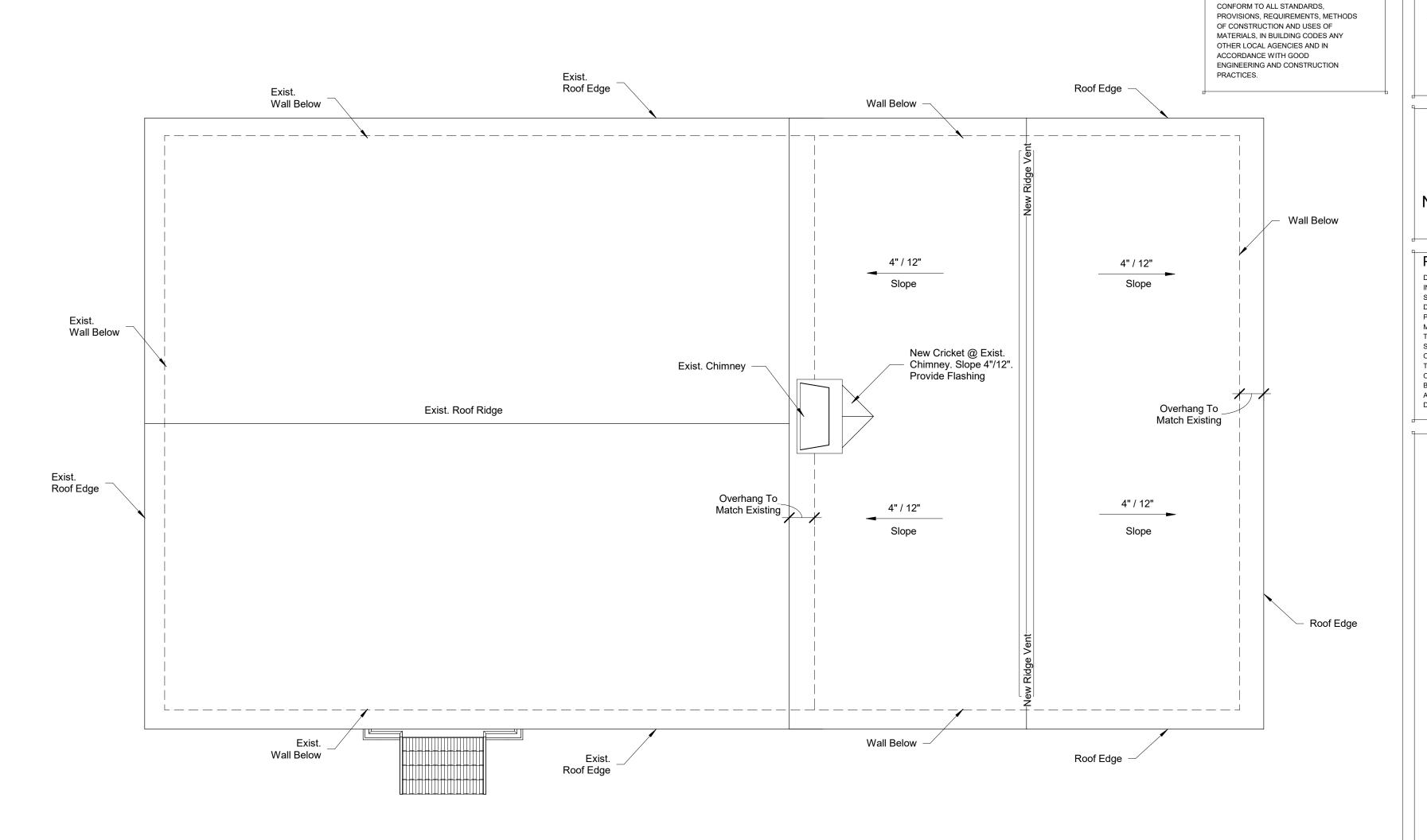
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R612.3 Window Fall Prevention Devices. Window fall prevention devices and window guards,

where provided, shall comply with the requirements of ASTM F 2090.

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(1) Roof Plan

### **Roofing Ventilation**

Section R806

R806.1 Ventilation Required. Enclosed attics and enclosed rafter spaces formed where ceilings are applied directly to the underside of the roof rafters shall have cross ventilation for each separate space by ventilating openings protected against the entrance of rain or snow. Ventilation openings shall have a least dimension of 1/16 inch minimum nad 1/4 inch maximum. Ventilation opening having a least dimension larger than 1/4 inch shall be provided with corosion-resistant wire cloth screening, hardware cloth, or similar material with openings having a least dimension of 1/16 inch minimum and 1/4 inch maximum. Openings in roof framing members shall conform to the requirements of Section 802.7.

R806.2 Minimum Area. The total net free ventilating area shall not be less than 1/150 of the area of the space ventilated except that reduction of the total area to 1/300 is permitted provided that at least 50 percent and not more than 80 percent of the required ventilating area is provided by ventilators located in teh upper portion of the space to be ventilated at least 3 feet above the eave or cornice vents with the balance of the required ventilation provided by eave or cornice vents. As an alternative, the net free cross-ventilation area may be reduced to 1/300 when Class I or Class II vapro retarder is installed on the warm-in-winter side of the ceiling. **Exceptions:** 

- 1. Enclosed attic/rafter spaces requiring less than 1 square foot of ventilation may be vented with continuous soffit ventilation only.
- 2. Enclosed attic/rafter spaces over unconditioned space may be vented with continuous soffit ventilation only.

#### **Square Footage Being Ventilated:**

**Net Free Cross Ventilation Needed:** 

Without 50% to 80% of venting 3'-0" Above Eave:

With 50% to 80% of venting 3'-0" above eave or Class I or ClassII Vapor Retarder:

1,200 Sq. Ft.

8.0 Sq. Ft. 4.0 Sq. Ft

Asphalt Shingle Over 15# Felt R-38 Batt. Insul. Baffle 2x Ceiling Joist w/Gyp. Brd. Fascia Brd. 2x4 Stud Wall w/R-15 Batt. Insul. 2" Cont. Soffit Vent Optional Freize Brd. - 1/2" Gyp. Brd. 1/2" Sheathing w/Air Infiltration Barrier 2 Detail - Cornice Typical Exter. Siding 3/4" = 1'-0"

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# Jesse Martin a) $\geq$ anford NC arolina For Prepared 44

SCALE:

As indicated

Roof Plan

DATE:

2/26/2021

TP

TP

Project number 022620210001

Drawn by Checked by

#### **Structural Notes**

All construction shhall conform to the latest requirements of the 2018 North Carolina Residential Building Code, plus all local codes and regulations. This document in no way shall be construed to superced the code. Job Site Practice and Safety. The designer assumes no liability for contractors practices and procedures or safety plan. The designer takes no responsibility

for failure to carry out construction work in accordance with contract documents. All members shall be framed, anchored, and braced in accordance with good construction safety practices and according to the code.

#### **Roof Truss Requirements**

**Truss Design.** Trusses to be designed and engineered in accordance with these drawings. Any variation with these drawings must be brought to the Designer's attention prior to commencing construction. Knee Wall and Ceiling Heights. All finished knee wall heights and ceiling heights are shown furred down 10" from the decking for the insulation. If for any reason the truss manufacturer fails t meet or exceed designated heel heights, finished knee wall heights of finished ceiling heights shown on these plans the finished square footage may vary. Any discrepancies must be brought to the attention of the designer for a suitable solution prior to commencing construction.

**Anchorage.** All required anchors for trusses due to uplift or bearing shall meet the requirements as specified by the truss manufacturer's schematics. Bearing. All trusses shall be designed for bearing on SPF #2 plates or ledgers unles otherwise noted.

Plate Heights & Floor Systems. See Elevations and Sections for plate heights and floor thicknesses.

Use	Live Load (PSF)	Dead Load (PSF)	Deflection (LL)
Attic Without Storage	10	10	L/240
Attic With Limited Storage	20	10	L/360
Attic With Fixed Stairs	40	10	L/360
Balconies & Decks	40	10	L/360
Fire Escapes	40	10	L/360
Guardrails & Handrails	200	-	
Guardrail Infill Components	50		
Passenger Vehicle Garages	50	10	L/360
Rooms Other Than Sleeping	40	10	L/360
Sleeping Rooms	30	10	L/360
Stairs	40		L/360
Snow	20		

#### Framing Lumber.

All non treated framing lumber shall be SPF #2 or SYP #2 and all treated lumber shall be SYP #2 unless otherwise noted **Engineered Wood Beams.** 

Laminated Veneer Lumber (LVL) = Fb=2600 psi, Fv=285 psi, E=1.9x10<sup>6</sup> psi Parallel Strand Lumber (PSL) = Fb=2900 psi, Fv=295 psi, E=2.0x106 psi Laminated Strand Lumber (LSL) = Fb=2250 psi, Fv=400 psi, E=1.55x10<sup>6</sup> psi Install all connections per manufacturer's specifications.

#### Truss and I-Joist Members.

All roof truss and I-Joist layouts shall be prepared in accordance with this document. Trusses and I-Joists shall be installed according to manufacturer's Lintels.

Brick lintels shall be 3 1/2" x 3 1/2" x 1/4" steel angle for upt to 6'-0" and 6" x 4" x 5/16" steel angle with 6" leg vertical for spans upt to 9'-0" unless

Concrete & Soils. See Foundation Notes

#### **Header Schedule**

Header	Size	Columns
H-1	(2) 2x4	1 Jack 1 King
H-2	(2) 2x6	1 Jack 1 King
H-3	(2) 2x8	1 Jack 1 King
H-4	(2) 2x10	2 Jack 1 King
H-5	(2) 2x12	2 Jack 1 King
H-6	(2) 1.75"x24" LVL	2 Jack 1 King

All non load bearing headers to be ladder framed or (2) 2x4 with 1 Jack and 1 King Stud unless otherwise noted

#### **Braced Wall Panel Notes**

Exterior Walls. All exterior walls shall be sheathed with CS-WSP or CS-SFB in accordance with Section R602.10.3 unless otherwise noted. Gypsum. All interior sides of extrior walls and both sides of interior walls shall have 1/2" gypsum board installed. When not using med GB gypsum to be fastened per table R702.3.5. Method GB to be fastened per R602.10.1. Required Length of Bracing. Required brace wall length for each side of the circumscribed rectangle are interpolated per table R602.10.3. Methods CS-WSP

and SC-SFB contribute their actual length. Method GB contributes 0.5 it;s actual length. Method PF contributes 1.5 times its actual length.

**HD**. 800 bls hold down devices fastened to the edge of the brace wall panel closest to the corner.

Methods Per table R602.10.1

CS-WSP. Shall be a minimum of 3/8" OSB or CDX nailed at 6" O.C. at edges and 12" O.C. at intermediate supports with 6d common nails or 8d (2 1/2" long x 0.113"

CS-SFB. Shall be a minimum 1/2" structural fiber board nailed at 3" O.C. at edges and 3" O.C. at intermediate supports with 1 1/2" x 0.12" diameter galvanized roofing nails.

**GB.** Interior walls shown as GB are to have a minimum 1/2" gypsum board applied to both sides of the wall fastened at 7" O.C. at edges and along intermediate supports with minimum 5d common nails or #6 screws.

PF. Portal Frame per Portal Frame Detail.

#### **Brace Wall Factors**

Max Eave to Ridge	Wind Speed	Exposure	Seismic Category
13'-0"	110	В	A or B

#### Rectangle A

Side	Perp. Distance	Required	Provided
1	40'-0"	18'-2"	24'-8"
2	40'-0"	18'-2"	19'-8"
3	39'-0"	17'-9"	25'-3"
4	39'-0"	17'-9"	34'-2"
Wall Heigh	nt: 9'-0"	Roof +1	Eave: 13'-0"

30' - 0"

IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/ OR BUILDER TO CONFORM TO ALL STANDARDS, PROVISIONS, REQUIREMENTS, METHODS OF CONSTRUCTION AND USES OF MATERIALS, IN BUILDING CODES ANY OTHER LOCAL AGENCIES AND IN ACCORDANCE WITH GOOD ENGINEERING AND CONSTRUCTION PRACTICES.

Upper Story Bracing Not

Shown Per R602.10.3.2 (5)&(6)

I CERTIFY THAT THE CONSTRUCTION EXHIBITS FOR (IDENTIFICATION OF THE PROPERTY BY HOUSE TYPE, LOT, LOCK, SUBDIVISION NAME, AND SO ON MEET ALL LOCAL CODE REQUIREMENTS AND ARE IN SUBSTANTIAL CONFORMITY WITH BOTH SAH AND VA MINIMUM PROPERTY REQUIREMENTS, ALL BUILDING STANDARDS AS SET FORTH BY THE INTERNATIONAL CODE COUNCIL (ICC) AND FEDERAL SAFE DRINKING WATER PLUMBING STANDARD.

#### **DESIGNED BY:**

TIMOTHY PEPPERS JR. RESIDENTIAL DESIGN CONSULTANT

**CAMERON** NORTH CAROLINA (910) 644-4587

#### PROPERTY OF TPJR

DRAWINGS AND SPECIFICATIONS AS INSTRUMENTS OF SERVICE ARE AND SHALL REMAIN PROPERTY OF THE DESIGNER WHETHER THE PROJECT FOR WHICH THEY ARE MADE FOR IS EXECUTED OR NOT. THE DRAWINGS AND SPECIFICATIONS SHALL NOT BE USED BY THE OWNER ON OTHER PROJECTS FOR ADDITIONS TO THIS PROJECT OR FOR COMPLETION OF THIS PROJECT BY OTHERS EXCEPT BY AGREEMENT IN WRITING WITH THE APPROPRIATE COMPENSATION TO THE DESIGNER.

Martin

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DATE:

1' - 0" Conc.

## a Plan $\geq$ anford N arolina Structural 44

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

2/26/2021

Project number 022620210001

Drawn by Author Checked by Checker

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#### **MASONRY NOTES:**

Founation Slab 3000 psi

- 1. Concrete dimensions are typically to face of wall.
- 2. All concrete slabs shall be minimum 4" thick, with 6 x 6 1.4/1.4 W.W.M welded wire fabric placed over 6 mil poly vapor barrier over a minimum 6" bed of compacted gravel
- 3. Provide Anchor Bolts sizes as indicated (min. 1/2"dia) on these drawings, at top of concrete foundation walls at a minimum of 1'-0" from corners and maximum 6'-0" O.C. for balance of perimeter walls, two per plate minimum.
- 4. All concrete footings shall bear on undisturbed virgin soil with presumptive bearing capacity of 4000 psf.
- 5. All concrete frost walls to have bottom of footing at minimum 1'-6" below finished grade.
- 6.Concrete foundation walls that exceed 8'-0" in height must be reinforced with steel designed by a licensed Structural Engineer.
- 7. All Concrete shall have the minimum 28 day strength: Garage Slab 3500 psi Basement Slab 3000 psi Crawl Space Slab 3000 psi Exterior Slab 3500 psi

# Exist. Chimney

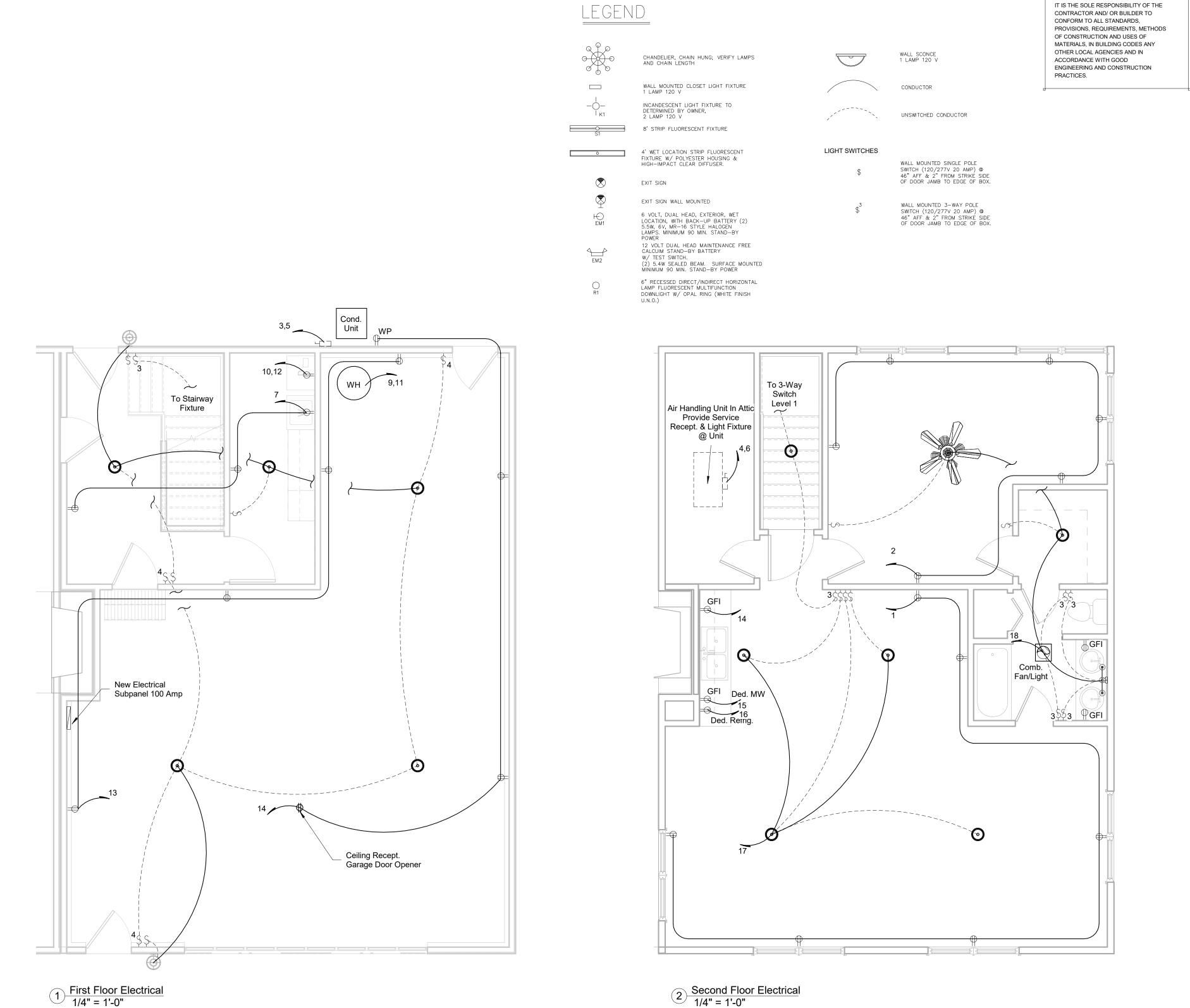
(H-2) H-2 New Found. Wall Typical 4" Brick w/4" CMU 2x12 Floor Joist 2x12 Floor Joist Brick To Match Exist. (2) 2x8 @ 16" O.C. @ 16" O.C. 12' - 2" Stair Opening Conc. Slab Dimension Above Manuf. Floor Truss Manuf. Floor Truss (Above) (Above) 8x16 Pier w/1'-4x2'-0"x8" Conc. Footing 7' - 10 1/2" 7' - 10 1/2" Manuf. Floor Truss (Above) Footing (Typical) Manuf. Floor Truss (Above) 26' - 8" Conc. Slab Dimension Exist. Found. Wall 1' - 0" Conc. Footing (Typical) Manuf. Floor Truss (Above): New Foundation Wall To Be Built Parallel To Exist. Foundation Wall 28' - 6 1/2" Conc. Slab Dimension

(H-6)

(2) 1.75" x 24" LVL/Truss

First Floor Structural Plan 1/4" = 1'-0"

H-2



EXHIBITS FOR (IDENTIFICATION OF THE PROPERTY BY HOUSE TYPE, LOT, LOCK, SUBDIVISION NAME, AND SO ON) MEET ALL LOCAL CODE REQUIREMENTS AND ARE IN SUBSTANTIAL CONFORMITY WITH BOTH SAH AND VA MINIMUM PROPERTY REQUIREMENTS, ALL BUILDING STANDARDS AS SET FORTH BY THE INTERNATIONAL CODE COUNCIL (ICC) AND FEDERAL SAFE DRINKING WATER PLUMBING STANDARD.

#### **DESIGNED BY:**

I CERTIFY THAT THE CONSTRUCTION

TIMOTHY PEPPERS JR. RESIDENTIAL DESIGN CONSULTANT

**CAMERON** NORTH CAROLINA (910) 644-4587

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## Jesse Martin āý Plan $\geq$ arolina anford N Electrical or ared

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Pre

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

DATE: 2/26/2021

Project number 022620210001

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