Residence for

Garman Homes Lot 0162 Serenity Fuquay Varina, North Carolina

INDEX TO DRAWINGS

COVER SHEET

- 1 FRONT & LEFT SIDE ELEVATIONS
- REAR & RIGHT SIDE ELEVATIONS
- 3 FIRST & SECOND FLOOR PLANS E FIRST & SECOND FLOOR ELECTRICAL PLANS
- M FIRST & SECOND FLOOR MECHANICAL PLANS
- P FIRST FLOOR PLUMBING PLAN
- D CONSTRUCTION DETAILS

- 1 FOUNDATION PLAN & FIRST FLOOR FRAMING PLAN 2 SECOND FLOOR FRAMING PLAN & ROOF FRAMING PLAN
- SD1 STRUCTURAL DETAILS
 SD2 STRUCTURAL DETAILS
 SPEC STRUCTURAL NOTES

GENERAL NOTES

- 1. ALL WORK TO BE DONE IN STRICT ACCORDANCE WITH NORTH CAROLINA STATE RESIDENTIAL BUILDING CODE, 2018 EDITION (HEREWITH SHOWN AS N.C.S.R.B.C.).
- 2. DIMENSIONS SHOWN ON DRAWINGS GOVERN OVER SCALE.
- 3. STUD WALL DESIGN SHALL CONFORM TO ALL N.C.S.R.B.C. REQUIREMENTS
- CONTRACTOR SHALL USE TEMPERED SAFETY GLASS IN ALL LOCATIONS AS REQUIRED BY N.C.S.R.B.C., 2018 EDITION, SECTION B308 4
- ANY HABITABLE ROOM SHALL MEET ALL LIGHT/VENTILATION AND EGRESS AS REQUIRED BY N.C.S.R.B.C. 2018 EDITION, SECTIONS R-303.1 AND R-310.1.
- ALL EXTERIOR WALLS SHOWN ON FLOOR PLANS ARE 2X6 FRAME UNLESS NOTED OTHERWISE. ALL INTERIOR WALLS SHOWN ON FLOOR PLANS ARE 2X4 FRAME UNLESS NOTED OTHERWISE.
- ALL ANGLED WALLS SHOWN ON FLOOR PLANS ARE 45 UNLESS NOTED OTHERWISE.
- 8. ALL WINDOWS SHALL HAVE A MINIMUM DPI RATING OF 25. BUILDER SHALL VERIFY WITH WINDOW MANUFACTURER THAT UNITS INSTALLED MEET THESE REQUIREMENTS AS PER N.C.S.R.B.C., 2018 EDITION, TABLE 301.2(4).
- 9. ENERGY EFFICIENCY REQUIREMENTS FOR THE SPECIFIC CLIMATE ZONE WHERE STRUCTURE IS BEING BUILT SHALL BE IN ACCORDANCE WITH CHAPTER 11 OF THE N.C.S.R.B.C., 2018 EDITION, AS SHOWN IN SECTION N1101.2.

MATERIALS LEGEND

EARTH/COMPACT FILL

2 4 . 4	CONCRETE	ROUGH WOOD
	BRICK	BLOCKING
	CONCRETE BLOCK/STONE	PLYWOOD
	STEEL	BATT INSULATION
	ALUMINUM	RIGID INSULATION

ATTIC VENTILATION REQUIREMENTS

NATURAL ROOF VENTILATION CALCULATIONS

1124 SQ. FT. 150 = 7.49 SQ. FT. VENT REQ'D

BUILDER TO PROVIDE APPROPRIATE VENTILATING AS REQUIRED PER CODE MECHANICAL ROOF VENTILATION CALCULATIONS

/ FINISH WOOD

1124 SQ. FT. = 3.75 SQ. FT. VENT REQ'D

BUILDER TO PROVIDE APPROPRIATE VENTILATING AS REQUIRED PER CODE

RESIDENTIAL BUILDING CODE SUMMARY

- 1. PLANS ARE DESIGNED TO THE 2018 N.C.S.R.B.C.
- 2. HOUSE IS DESIGNED FOR 115 MPH ULTIMATE DESIGN WIND SPEED (89 MPH NOMINAL DESIGN WIND SPEED), EXPOSURE B.
- 3. ANCHOR BOLTS SHALL BE MIN. 1/2" DIAMETER AND SHALL EXTEND 7" MIN. INTO MASONRY OR CONCRETE. BOLTS TO BE NO MORE THAN 6" O.C. AND WITHIN 12" FROM THE CORNER.
- 4. MEAN ROOF HEIGHT: 29'-2"
- 5. COMPONENT & CLADDING DESIGNED FOR THE FOLLOWING LOADS:

MEAN ROOF HGT:	UP TO 30'	30'-1" TO 35'	35'-1" TO 40'	40'-1" TO 45'
ZONE 1	16.5,-18.0	17.3,-18.9	17.3,-18.9	17.3,-18.9
ZONE 2	16.5,-21.0	17.3,-22.1	17.3,-22.1	17.3,-22.1
ZONE 3	16.5,-21.0	17.3,-22.1	17.3,-22.1	17.3,-22.1
ZONE 4	18.0,-19.5	18.9,-20.5	18.9,-20.5	18.9,-20.5
ZONE 5	18.0,-24.1	18.9,-25.3	18.9,-25.3	18.9,-25.3

- 6. MINIMUM VALUES FOR ENERGY COMPLIANCE: Zone 4
- 7. MAXIMUM GLAZING U-FACTOR: .35
- 8. INSULATING VALUES: CEILING: R-49 / WALLS: R-15 / FLOOR: R-19 SLABS: R-10. CODE REFERENCE: TABLE N1102.1

AREA CALCULATIONS

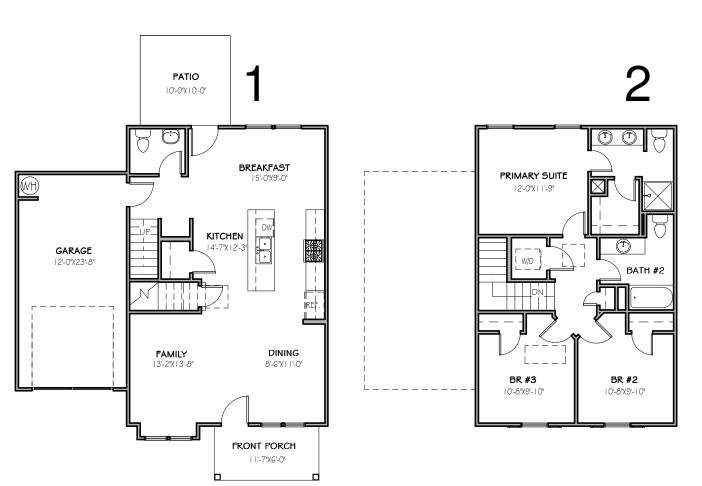
HEATED (SQ.	FT.)	UNHEATED (S	Q. FT.)	UNFINISHED	(SQ. FT.)
IST FLOOR: 2ND FLOOR:	755 701	FRONT PORCH: PATIO: GARAGE:	69 100 300	1ST FLOOR: 2ND FLOOR:	N/A N/A
ΓΟΤΑL:	1456	TOTAL:	469	TOTAL:	N/A
				OVERALL DIMEN	ISIONS
				WIDTH: DEPTH:	34'-8" 49'-4"

FOUNDATION VENTILATION CALCULATIONS

REFERENCE: N.C.S.R.B.C. 2018 EDITION SECTION R408)

NOT APPLICABLE WITH SLAB FOUNDATIONS







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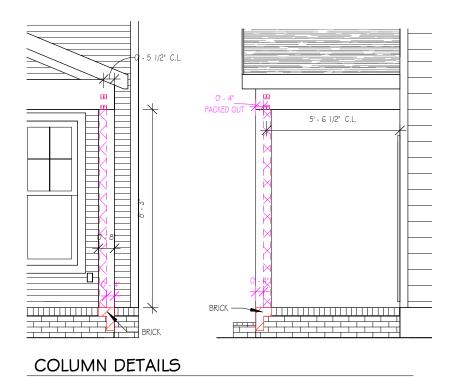
Project Number Project Number Plan Number FP-1456

SER ELEVATION A LOT 0162 SERENITY

Drawn By

MMH
Checked By
CM
Date Drawn
2/16/20
Revision Date
7/1/20
4/5/22
1/24/23

C



1/4" = 1'-0"

FIBERGLASS SHINGLE ROOF -(CLASS 'C' MIN.) 4" FRIEZE BOARD AS SPEC TRUSS BRIDGE - 8" TRIM W/ DRIP CAP - 4" TRIM AS SPEC @ WINDOWS WINDOWS AND DOORS RIDGE VENT - CEMENTITIOUS SIDING - CORNER TRIM AS SPEC 2ND FIN. FLR WINDOWS PROVIDE RAILS @ - 8" SQ. COL. PORCH ONLY IF REQUIRED BY CODE 15" MIN. HGT. FOUNDATION FRONT GRADE TO FINISHED - BRICK FND. WALL FRONT PORCH STEPS TO GRADE AS PER SITE

FRONT ELEVATION

1/8" = 1'-O" NOTE - SLOPE ALL GRADE AWAY FROM HOUSE FOR POSITIVE DRAINAGE

RIDGE VENT

PIBERGLASS SHINGLE ROOF
(CLASS C MN.)

TRUSS BRIDGE

RIDGE VENT

PIBERGLASS SHINGLE ROOF
(CLASS C MN.)

OVERHANG (TP.)

RIGHT SIDE ELEVATION

1/8" = 1'-0"

THE PURPOSE OF THESE DRAWINGS IS TO SHOW THE INTENT OF THE DESIGN AND CONSTRUCTION OF THIS HOME. CONTRACTOR SHOULD VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION. ONCE A PERMIT HAS BEEN ISSUED, CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY TO THE ACCURACY OF THE PLANS AND ANY CHANGES MADE DURING CONSTRUCTION.



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Project Number
Project Number
Plan Number
FP-1850

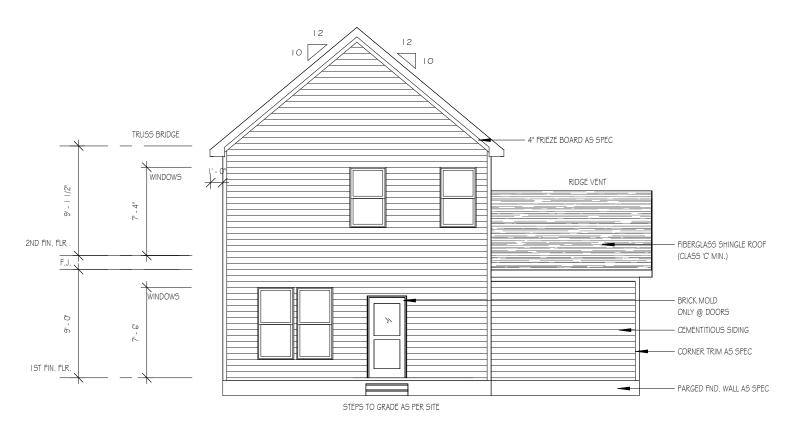
BUTTERCUP SER ELEVATION A LOT 0162 SERENITY

Drawn By

MH
Checked By
CM
Date Drawn
4/8/20

Revision Date
7/1/20
4/5/22
1/24/23

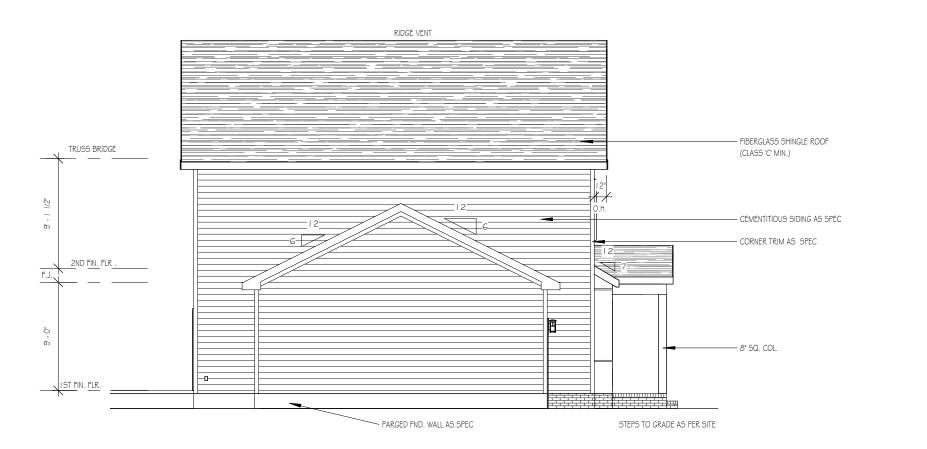
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REAR ELEVATION

1/8" - 110

NOTE - SLOPE ALL GRADES AWAY FROM HOUSE FOR POSITIVE DRAINAGE



LEFT SIDE ELEVATION

1/8" = 1'-0"

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Project Number
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Plan Number
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BUTTERCUP SER ELEVATION A LOT 0162 SERENITY

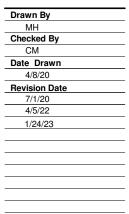
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Project Number Project Number Plan Number FP-1850



TTERCUP SER ELEVATION A LOT 0162 SERENITY

Sheet

9'-0" CLG. HGT. U.N.O. SET WINDOWS @ 7'-4" U.N.O.

SPECIAL FIRE SPECIAL FIRE 2' - 9" 7' - 6" 12' - 1" RATED WALL RATED WALL -3/0X5/0 SH 3/0X5/0 SH 12' - 6" PRIMARY SUITE — ACCENT WALL W/D BATH #2 33. 8X8' ATTIC PLATFORM BR #3 BR #2 11' - 0" 11' - 4" 3/0X5/0 SH 3/0X5/0 SH 6' - 7" 9' - 2" 6' - 7" 22' - 4"

SECOND FLOOR

1/8" = 1'-0"

22' - 4"

SPECIAL FIRE

RATED WALL

ROUGH FRAME ALL CASED OPENINGS 2" BIGGER THAN FINISHED OPENING CALLS FOR

ROUGH FRAME ALL WINDOW OPENINGS 1/2" LARGER THAN FINISHED WINDOW CALLS FOR, WHEN PAIRED WITH ANOTHER WINDOW THAT CALLS FOR DSP, ADD EXTRA TO OUTSIDE MEASUREMENT OF WINDOW

FRAME ALL INTERIOR DOOR HEADERS AT 84" A.F.F.

ALL EXTERIOR WALLS 2X4

TOP OF ALL WINDOWS SILLS SHALL BE 24" MINIMUM ABOVE THE FINISHED FLOOR OR A FALL PREVENTION DEVICE SHALL BE INSTALLED IN ACCORDANCE WITH SECTION R312.2 OF N.C.S.R.B.C., 2018 EDITION

GBG (GRILL BETWEEN GRILL) TO BE ADDED TO CORNER LOT WINDOWS

FIRST FLOOR

1/8" = 1'-0"

9'-0" CLG. HGT. U.N.O. SET WINDOWS @ 7'-6" U.N.O. CASED OPENINGS 8'-0" TALL

11' - 7"

34' - 8"

10' - 0"

PATIO

IKITCHEN

8' - 8"

FAMILY

DSP

2-2/6X5/0 SH

6' - 11"

34' - 8"

22' - 4"

10' - 10"

3' - 3"

3/0x6/0 SH 3/0x6/0 SH

, ADD 2X8

BLOCKING BETWEEN

STUDS IN THE AREA 36" A.F.F.

- 2x6 WALL

5' - 6 1/2"

0' - 5 1/2"

BEAM C.L.

15' - 6"

BREAKFAST

ACCENT WALL

DINING

TEMPERED

4' - 0"

12' - 4"

12' - 4"

20" HGT.

GARAGE

2x10 PLATE ON 2X4 WALL- SEE DETAIL IC

6' - 0"

9/0x7/0 DOOR

12' - 4"

AC UNIT

PLATFORM -32"X32" OUTSIDE TO OUTSIDE

SPECIAL FIRE

RATED WALL -

- FLUSH MOUNT/PENDANT LIGHT

-- LED DISK LIGHT

-(C)- KEYLESS LIGHT

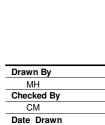
RECESSED CAN LIGHT



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Project Number Project Number Plan Number FP-1850

> BUTTERCUP SER ELEVATION A LOT 0162 SERENITY



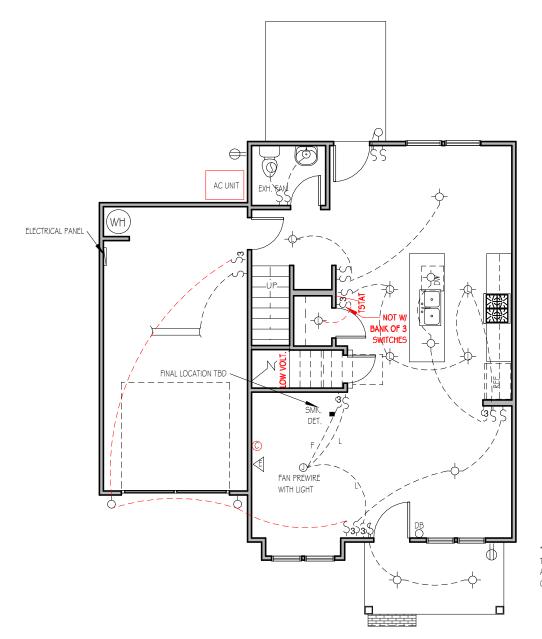
4/8/20 Revision Date 7/1/20

4/5/22

1/24/23

WALL SCONCE 8/23/23: LED ◆ FLOOD LIGHT LIGHT ADDED ── FLUORESCENT LIGHT

■ The state of t CEILING FAN Õ T THERMOSTAT EXHAUST FAN € ETHERNET OUTLET D.B. O DOORBELL \bigcirc CABLE OUTLET FAN PREWIRE SMOKE DETECTOR WITH LIGHT (1) FLOOR RECEPTACLE DUPLEX RECEPTACLE GFCI RECEPTACLE 220 VOLT RECEPTACLE TO IST FLR ELECTRICAL PANEL 3 SD DIMMER SWITCH





FIRST FLOOR ELECTRICAL PLAN

NOTE - ELECTRICAL RECEPTACLE AND SWITCH QUANTITIES AND LOCATIONS SHOWN ON PLAN ARE FOR ILLUSTRATION PURPOSES ONLY. ACTUAL NUMBER AN D LOCATIONS SHALL BE FIELD DETERMINED AS PER CLIENT AND BUILDER EXCEPT WHERE CODE REQUIREMENTS APPLY.

SECOND FLOOR ELECTRICAL PLAN

NOTE - ELECTRICAL RECEPTACLE AND SWITCH QUANTITIES AND LOCATIONS SHOWN ON PLAN ARE FOR ILLUSTRATION PURPOSES ONLY. ACTUAL NUMBER AN D LOCATIONS SHALL BE FIELD DETERMINED AS PER CLIENT AND BUILDER EXCEPT WHERE CODE REQUIREMENTS APPLY.

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Project Number

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FP-1850

BUTTERCUP SER ELEVATION A LOT 0162 SERENITY

Drawn By	_
MH	
Checked By	
CM	
Date Drawn	
4/8/20	
Revision Date	
7/1/20	
4/5/22	
1/24/23	

S

8'X8' HVAC ATTIC PLATFORM

SECOND FLOOR MECHANICAL

FIRST FLOOR MECHANICAL PLAN

AC UNIT

WATER

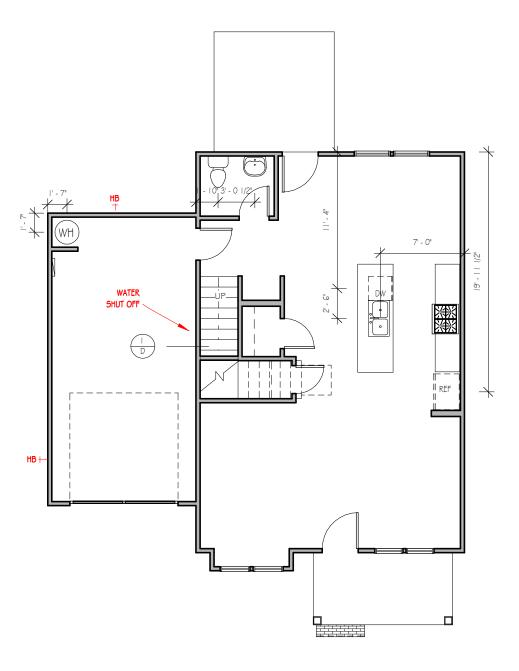
PLAN

1/8" = 1'-0"

1/8" = 1'-0"

(WH)

M



FIRST FLOOR PLUMBING

1/8" = 1'-0"

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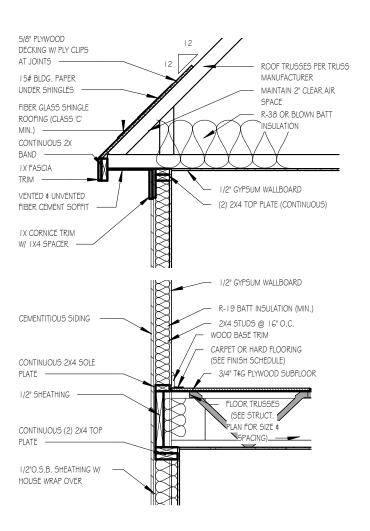
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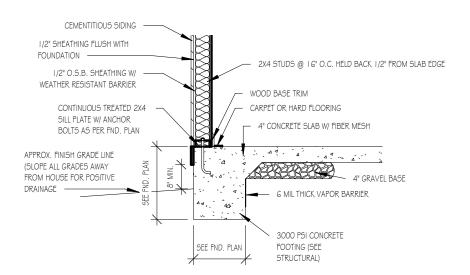
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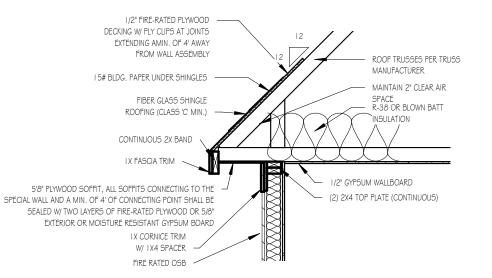
TWO-STORY WALL SECTION

1/2" = 1'-0"



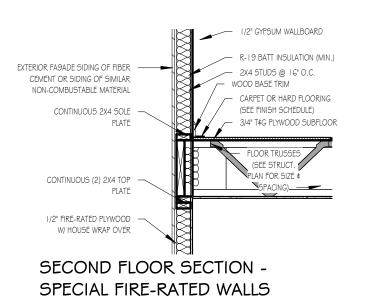
FOUNDATION DETAIL - SLAB

1/2" = 1'-0"

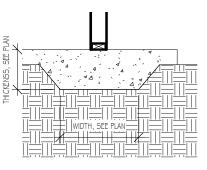


ROOF DETAIL SPECIAL FIRE-RATED WALLS

1/2" = 1'-0"



1/2" = 1'-0"



LUG FOOTING

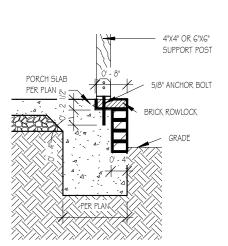
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Project Number Project Number Plan Number

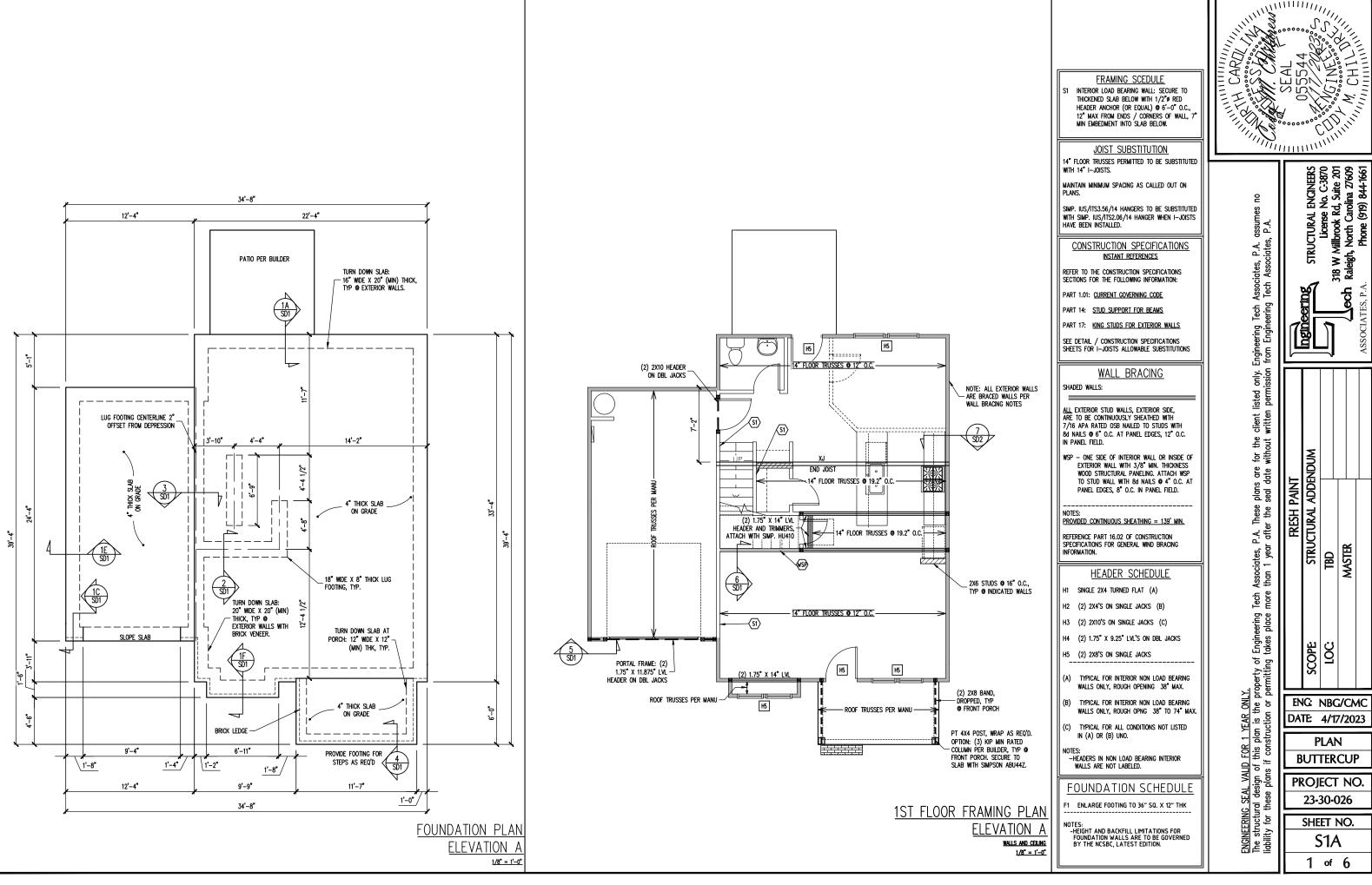
SERENITY COLLECTION



FRONT PORCH COLUMNS SUPPORT ATTACHMENT

Drawn By MMH Checked By JM Date Drawn 10/28/20 **Revision Date** 9/14/22 9/20/22

1/2" = 1'-0"



PROJECT NO. 23-30-026

SHEET NO.

NOTE: ALL EXTERIOR WALLS ARE BRACED WALLS PER — WALL BRACING NOTES 2X6 STUDS @ 16" O.C., TYP @ INDICATED WALLS LOCATE PDS BÉTWEEN TRUSSES-ROOF TRUSSES PER MANU H5 H5

2ND FLOOR FRAMING PLAN

WALLS AND CEILING

1/8" = 1'-0"

TRUSS UPLIFT CONNECTORS

TRUSSES SHALL BE ATTACHED TO SUPPORT WALL FOR UPLIFT
RESISTANCE. CONTINUOUS OSB WALL SHEATHING BELOW PROVIDES
CONTINUOUS UPLIFT RESISTANCE TO FOUNDATION. ALL TRUSSES
SUPPORTED BY INTERMEDIATE SUPPORT WALLS, KNEEWALLS OR
BEAMS SHALL BE ATTACHED TO SUPPORTING MEMBER PER SCHEDULE
BELOW.

ROOF SPAN IS MEASURED HORIZONTALLY BETWEEN FURTHEST SUPPORT POINTS.

OVER 28'

(1) SIMPSON H2.5A HURRICANE CLIP TO DBL TOP PLATE OR BEAM

OR (1) SIMPSON H3 CLIP TO SINGLE 2X4 PLATE

- OPTIONAL SCREENED PORCH ■ DN 4:12 DN 4:12 DN 10:12 DN 10:12 ■ DN 5:12 DN 5:12

ROOF FRAMING PLAN **ELEVATION A** 1/8" = 1'-0"

(2) 2X10'S ON SINGLE JACKS (C)

WALLS ONLY, ROUGH OPENING 38" MAX.

TYPICAL FOR ALL CONDITIONS NOT LISTED

-HEADERS IN NON LOAD BEARING INTERIOR

STRUCTURAL ENGINEERS
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318 W Millbrook Rd, Suite 201
A Raleigh, North Carolina 27609
A. Phone (919) 844-1661 2

Engineering Tech A from Engineering

only. E

client listed or written permis

FRAMING NOTES

ROOF ONLY -ROOF TRUSSES PER MANU. TYPICAL U.N.O. -VERIFY ALL KNEEWALL HEIGHTS, ROOF PITCHES, AND ARCHITECTURAL OVERHANGS PRIOR TO CONSTRUCTION

CONSTRUCTION SPECIFICATIONS INSTANT REFERENCES

REFER TO THE CONSTRUCTION SPECIFICATIONS SECTIONS FOR THE FOLLOWING INFORMATION:

PART 1.01: CURRENT GOVERNING CODE

PART 14: STUD SUPPORT FOR BEAMS

PART 17: KING STUDS FOR EXTERIOR WALLS

WALL BRACING

SHADED WALLS:

ALL EXTERIOR STUD WALLS, EXTERIOR SIDE, ARE TO BE CONTINUOUSLY SHEATHED WITH 7/16 APA RATED OSB NAILED TO STUDS WITH 8d NAILS @ 6" O.C. AT PANEL EDGES, 12" O.C. IN PANEL FIELD.

PROVIDED CONTINUOUS SHEATHING = 111' MIN.

REFERENCE PART 16.02 OF CONSTRUCTION SPECIFICATIONS FOR GENERAL WIND BRACING INFORMATION.

HEADER SCHEDULE

- SINGLE 2X4 TURNED FLAT (A)
- (2) 2X4'S ON SINGLE JACKS (B)
- H4 (2) 1.75" X 9.25" LVL'S ON DBL JACKS
- H5 (2) 2X8'S ON SINGLE JACKS
- TYPICAL FOR INTERIOR NON LOAD BEARING
- TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPNG 38" TO 74" MAX.
- IN (A) OR (B) UNO.

WALLS ARE NOT LABELED.

property of Engineering Tech Associates, P.A. These plans are for the permitting takes place more than 1 year after the seal date without 1 FRESH PAINT STRUCTURAL ADDENDUM DATE: 4/17/2023

ENGINEERING SEAL VALID FOR 1 YEAR ONLY. The structural design of this plan is the pro liability for these plans if construction or pe

PROJECT NO. 23-30-026 SHEET NO.

S2A 2 of 6

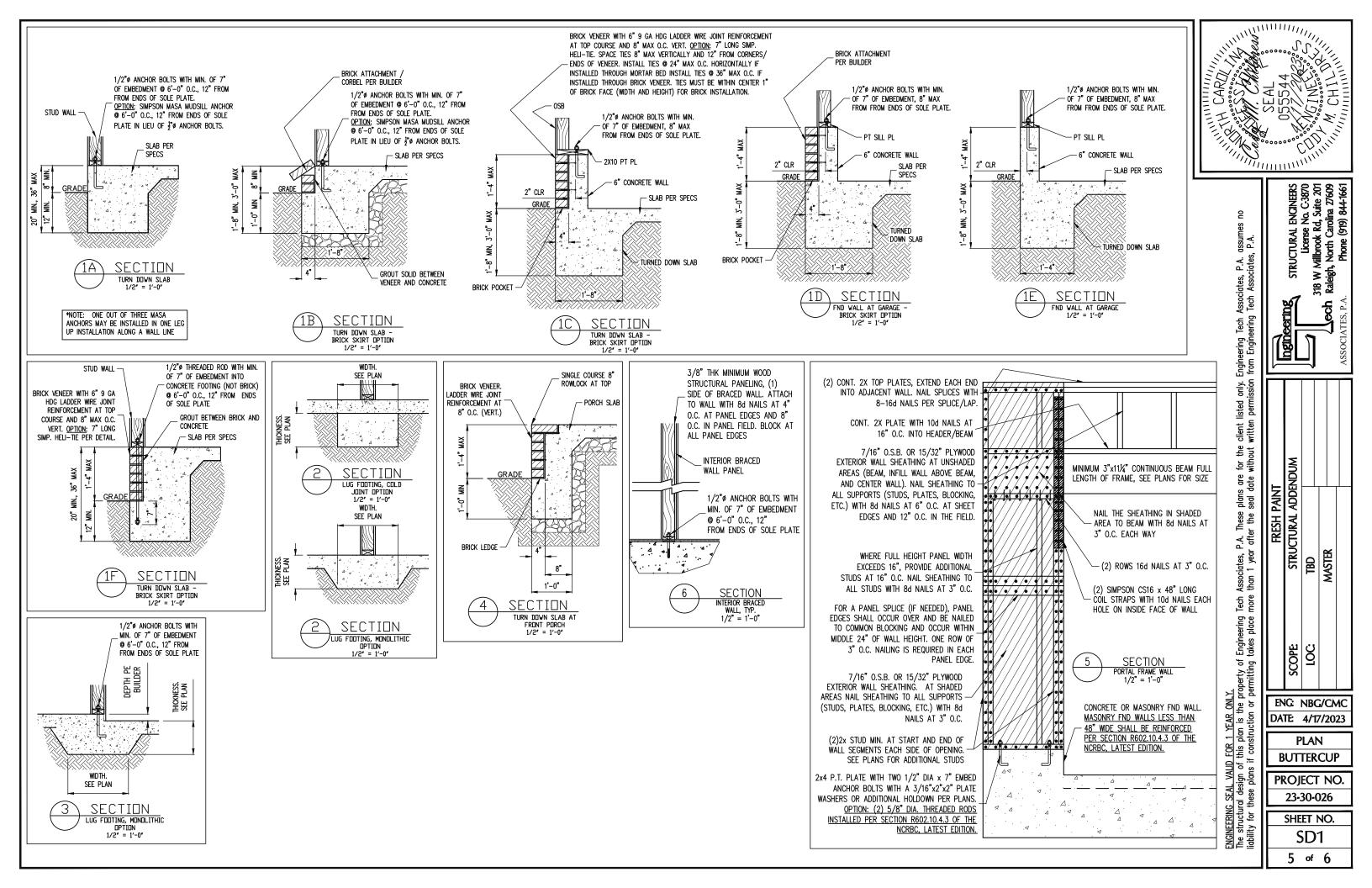
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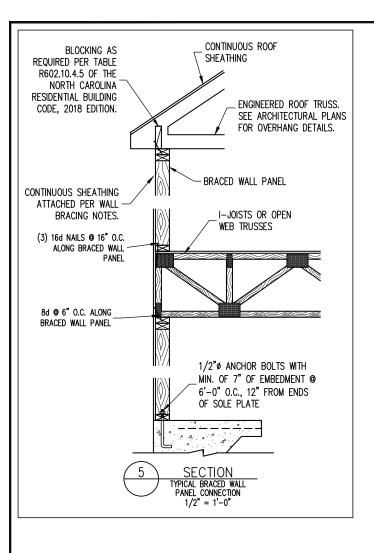
TBD

ENG: NBG/CMC

PLAN

BUTTERCUP





CONSTRUCTION SPECIFICATIONS

LIVE LOAD (PSF) DEAD LOAD (PSF)

1.01 CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE. 2018 EDITION.

1.02 DIMENSIONS SHOWN SHALL GOVERN OVER SCALE ON THESE DRAWINGS.

METHODS, PROCEDURES AND SEQUENCES OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR, WHO SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN AND INSURE THE INTEGRITY OF THE STRUCTURE AT ALL STAGES OF CONSTRUCTION.

ANCHOR RODS AND BOLTS SHALL CONFORM TO ASTM F1554—15 GRADE 36 UNO. BENT ANCHOR BOLTS SHALL HAVE A 2° MIN HOOK UNO 1.05

PART 2: DESIGN LOADS

PART 1: GENERAL

2.01 DESIGN LOADS SHALL CONFORM WITH THE TABLE BELOW: USF

> BALCONIES, DECKS, ATTICS WITH FIXED STAIR ACCESS, DWELLING UNITS INCLUDING ATTICS WITH FIXED STAIR ACCESS, STAIRS, FIRE ESCAPES 10 GARAGES (PASSENGER CARS ONLY) 50 ATTICS (NO STORAGE, LESS THAN 5' HEADROOM) 10 10 ATTICS (WITH STORAGE) 20 ROOF 20 10 (15 FOR VAULTS)

Notes: — individual stair treads are to be designed for the uniformly distributed Live Load of 40 psf or a 300 lb. concentrated Load acting over an area of 4 sq. whichever produces the greater stress. — builder to verify dead Load Does Not exceed 10 psf when heavy floor or

ROOF FINISHES SUCH AS TILE OR SLATE ARE UTILIZED. NOTIFY ENGINEERING UNDER

2.02 INTERIOR WALLS: 5 PSF LATERAL.

2.03 BASIC WIND DESIGN VELOCITY OF 120 MPH.

2.04 SOIL BEARING CAPACITY 2000 PSF (PRESUMPTIVE).

PART 5: CONCRETE AND SLABS ON GRADE

CAST IN PLACE CONCRETE SHALL BE OF NORMAL WEIGHT, 6% AIR ENTRAINMENT, AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS TYP UNO. ALL CONCRETE, INCLUDING CONCRETE FOR FOOTINGS, IS TO BE CAST IN PLACE, TYP

5.02 REINFORCED CAST IN PLACE CONCRETE SHALL BE PROPORTIONED, MIXED AND PLACED I ACCORDANCE WITH THE SPECIFICATIONS OF ACI 318, LATEST EDITION.

5.03 SLABS ON GRADE, IF ANY, SHALL CONTAIN SYNTHETIC POLYPROPYLENE FIBRILLATED MICRO FIBERS, FIBER LENGTH 1 1/2", DOSAGE RATE 1 1/2 LBS/CU YD. SLAB TO BE PLACED ON A 6 MIL VAPOR BARRIER ON 2" MIN GRANULAR FILL ON SOIL WITH 90% MIN STANDARD PROCTOR DENSITY. VAPOR BARRIER MAY BE OMITTED FOR SLABS NOT

PART 6: REBAR AND WIRE REINFORCEMENT

REBAR SHALL BE DEFORMED STEEL CONFORMING TO ASTM A615 GRADE 60 TYP UNO

6.02 LAP SPLICES SHALL BE CLASS B AS DEFINED BY ACI 318, TYP UNO

6.03 WIRE REINFORCEMENT SHALL BE 9 GA AND SHALL CONFORM TO ASTM A1064.

7.01 CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90 AND C55, NORMAL WEIGHT,

7.02 CLAY MASONRY UNITS SHALL CONFORM TO ASTM C62-17 GRADE SW

7.03 MORTAR SHALL BE TYPE S. MORTAR AND GROUT SHALL CONFORM TO ASTM C476, MIN COMPRESSIVE STRENGTH OF 2000 PSI.

NOTES

7.04 MASONRY CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS OF ACI 530 7.05 LADDER WIRE REINFORCEMENT SHALL CONFORM TO ASTM A951. 6" MIN LAPS FOR CONTINUOUS WALL APPLICATIONS

PART 9: DRIVEN FASTENERS

9.01 NAILS, SPIKES AND STAPLES SHALL CONFORM TO ASTM F 1667- 05. NAILS ARE TO BE COMMON WIRE OR BOX

PART 10: DIMENSIONAL LUMBER

SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 2 SPRUCE PINE FIR $\underline{\text{OR}}$ SYP #2 FOR JOISTS, RAFTERS, GIRDERS, BEAMS, STUDS, ETC. 10.01

PART 11: ENGINEERED LUMBER

LVL OR PSL MINIMUM ALLOWABLE DESIGN STRESSES ARE AS FOLLOWS: E= 1.9 X 10E6 PSl, Fb = 2600 PSl, Fv = 285 PSl, Fc = 750 PSl LSL MINIMUM ALLOWABLE DESIGN STRESSES ARE AS FOLLOWS: E= 1.3 X 10E6 PSl, Fb = 1700 PSl, Fv = 400 PSl, Fc = 680 PSl 11.01

LVL OR PSL MEMBERS MAY BE RIPPED FROM DEEPER MEMBERS TO MATCH THE MEMBER DEPTH SPECIFIED IN THE PLANS 1 02

PART 12: PRESSURE TREATED LUMBER

LUMBER IN CONTACT WITH THE GROUND, CONCRETE OR MASONRY SHALL BE PRESSURE TREATED IN ACCORDANCE WITH AWPA STANDARD C-15. ALL OTHER EXPOSED LUMBER SHALL BE TREATED IN ACCORDANCE WITH AWPA STANDARD C-2 OR BY ANY METHOD GIVING EQUAL PROTECTION. THE BUILDING CODE OFFICE MAY ALSO APPROVE A NATURAL 2.01 DECAY RESISTANT WOOD PER SECTION 19-6(A)

PART 14: STUD SUPPORTS FOR BEAMS

14.01 STEEL, ENGINEERED LUMBER, AND FLITCH PLATE BEAMS BEARING ON A STUD WALL SHALL BEAR AS FOLLOWS:

1-WHEN THE BEAM IS PERPENDICULAR TO, OR SKEWED RELATIVE TO THE WALL, THE BEAM SHALL BEAR FULL WIDTH ON THE SUPPORTING WALL INDICATED AND SHALL BE SUPPORTED BY A MINIMUM OF THREE GANGED STUDS, OR A GANGED STUD COLUMN WITH A NUMBER OF STUDS SUCH THAT THE STUD COLUMN IS AT LEAST AS WIDE AS THE THRE WIDTH OF THE BEAM BEING SUPPORTED, WHICHEVER IS GREATER, TYP UNO, FOR THE SKEWED COLUMN IS AT THE STUD COLUMN IS AT THE STEWED. CONDITION PARTICULAR CARE SHALL BE TAKEN TO ENSURE STUD COLUMN IS CENTERED ON

2-BEAMS BEARING ONTO THE END OF A STUD WALL PARALLEL TO THE BEAM SHALL BEAR A MINIMUM OF 4 1/2" ONTO THE WALL AND BE SUPPORTED BY A TRPL STUD GANGED

4.02 DIMENSIONAL LUMBER BEAMS BEARING ON A STUD WALL SHALL BEAR AS FOLLOWS:

1-when the beam is perpendicular to, or skewed relative to the wall, the beam shall bear full width on the supporting wall indicated (less 1 1/2" to allow FOR A CONTINUOUS RIM JOIST WHERE APPLICABLE) AND SHALL BE SUPPORTED BY A GANGED STUD COLUMN THE SAME WIDTH AS THE BEAM TYP UNO. (E.G. A TRIPLE 2X10 IS TO BE SUPPORTED BY (3) STUDS). FOR THE SKEWED CONDITION PARTICULAR CARE SHALL BE TAKEN TO ENSURE STUD COLUMN IS CENTERED ON THE BEAM
2-BEAMS BEARING ONTO THE END OF A STUD WALL PARALLEL TO THE BEAM SHALL BEAR A

MINIMUM OF 3" ONTO THE WALL AND BE SUPPORTED BY A DBL STUD GANGED COLUMN

4.03 EXTRA JOISTS BEARING ON A STUD WALL PERPENDICULAR TO OR SKEWED RELATIVE TO THE BEAM SHALL BE SUPPORTED BY ONE ADDITIONAL STUD.

STUDS THAT ARE CANGED TO FORM A COLUMN SHALL HAVE ADJACENT STUDS WITHIN THE COLUMN NAILED TOGETHER WITH ONE ROW OF 10d NAILS AT 8" O.C. (TWO ROWS OF 10d NAILS @ 8" O.C., 3" APART, FOR 2X8 OR 2X10 STUDS) ALL COLUMNS SHALL BE CONTINUOUS DOWN TO THE FOUNDATION OR OTHER PROPERLY DESIGNED STRUCTURAL ELEMENT SUCH AS A BEAM. COLUMNS TRANSFERRING LOADS THROUGH FLOOR LEVELS SHALL BE SOLIDLY BLOCKED FOR THE FULL WIDTH OF THE STUD COLUMN

WITHIN THE CAVITY FORMED BY THE

PART 15: NAILING OF MULTI PLY WOOD BEAMS

SOLID SAWN LUMBER JOISTS THAT ARE GANGED TO FORM A BEAM SHALL HAVE ADJACENT MEMBERS IN THE BEAM NAILED TOGETHER WITH THREE ROWS OF 10d NAILS @ 16" O.C. FOR 2X10 OR LARGER, TWO ROWS OF 10d NAILS @ 16" O.C. FOR 2X8, ONE 10d NAILS @ 16" O.C. FOR 2X6 OR SMALLER. STAGGER ROWS 5" MIN.

LVL MEMBERS THAT ARE GANGED TO FORM A BEAM SHALL HAVE ADJACENT MEMBERS IN THE BEAM FASTENED TOGETHER PER MANUFACTURERS RECOMMENDATIONS, TYP

PART 16: WALL FRAMING AND BRACING

STUD WALLS SHALL CONSIST OF 2X4 STUDS SPACED AT 16" O.C. UNO. STUDS SHALL BE CONTINUOUS FROM SOLE PLATE AT FLOOR TO DOUBLE TOP PLATE AT THE CEILING OR ROOF. NO INTERMEDIATE BANDS OR PLATES SHALL CAUSE DISCONTINUITIES IN A STUD WALL EXCEPT AS REQUIRED FOR DOOR OR WINDOW OPENINGS. THE KING STUDS FOR SUCH OPENINGS SHALL BE CONTINUOUS, TYP UND.

MAX ALLOWABLE WALL HEIGHTS FOR EXTERIOR STUD WALLS, WITH SOLE PLATE AND DBL TOP PLATE AND 7/16" OSB EXTERIOR BRACING AND ROW OF 2X4 / AND DEL 10F FATEL AND /10 USB EXTENDOR BRACING AND NOW OF 2A4 / 226 PURLINS AT 8' HEIGHT (AND AT 16' HEIGHT FOR TALL WALLS), TYP UNO: 2X4 @ 16" O.C.: 11'-0" 2X6 @ 16" O.C.: 17'-0" 2X6 @ 12" O.C.: 18'-8" DEL 2X4 @ 16" O.C.: 13'-4" DEL 2X6 @ 16' O.C.: 21'-0"

16.02 FOR WALL BRACING THE FOLLOWING SHALL APPLY:
-BLOCKING AT UNSUPPORTED PANEL EDGES IS REQUIRED TYP UNO.
-WALL BRACING IS BY ENGINEERED DESIGN AND NOT PRESCRIPTIVE PER SECTION
602.10 OF THE 2018 NORC. CONTINUOUS SHEATHING HAS BEEN PROVIDED, ALONG
WITH ALTERNATIVE METHODS TO INSURE THE MINIMUM INTENT OF SECTION 602.10 OF THE 2018 NCRC HAS BEEN MET AND EXCEEDED.

OF THE 2018 NORC HAS BEEN MET AND EXCELUEU.

PRACED WALL PANELS SHALL BE FASTENED IN ACCORDANCE WITH TABLE 602.3(1) TO PROVIDE CONTINUOUS PANEL UPLIFT RESISTANCE AND COMPLIANCE WITH NORBC R602.3.5 AND R802.11 UNLESS NOTED OTHERWISE ON STRUCTURAL PLANS.—MAY SUBSTITUTE WSP FOR GB

—SINGLE JUST, CONTINUOUS RIM JOIST, OR BLOCKING OF EQUAL DEPTH IS REQUIRED ABOVE AND BELOW ALL BRACED WALLS NAL BLOCKING ABOVE WALL TO TOP PLATE

WITH 16d TOE NAILS @ 6" O.C. NAIL SOLE PLATE OF BRACED WALL TO BLOCKING BELOW WITH (3) 16d NAILS @ 16" O.C. BLOCKING AT HORIZONTAL JOINTS IN BRACED WALL LINES ONLY REQUIRED AT SHADED WALLS, UNO.

PART 17: KING STUDS

17.01 KING STUDS FOR OPENINGS IN EXTERIOR WALLS SHALL BE AS FOLLOWS:

			NOWRE	r uf kin	G STUDS	
MAX OPENIN	G WIDTH	5'-0 "	9'-0"	13'-0"	17'-0"	21'-0"
	2X4	1	2	3	4	5
STUD SIZE	2X6	1	1	2	2	2
	2X8	1	1	1	1	2

PART 18: SUBSTITUTIONS

MATERIAL OR MEMBER SIZE SUBSTITUTIONS OR PLAN DEVIATIONS REQUIRE THE WRITTEN AUTHORIZATION OF THE DESIGNERS. UNAUTHORIZED DEVIATIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

PART 19: OWNERSHIP OF STRUCTURAL DESIGN

THE STRUCTURAL DESIGN OF THIS PLAN IS THE PROPERTY 19.01 OF ENGINEERING TECH ASSOCIATES (ETA). THESE PLANS ARE FOR THE ONE TIME USE AT THE LOCATION INDICATED AND FOR THE CUBIT LISTED. ETA ASSUMES NO LIABILITY FOR THESE PLANS IF THEY ARE REPRODUCED, IN WHOLE OR IN PART, FOR CONSTRUCTION AT ANY OTHER LOCATION WITHOUT WRITTEN PERMISSION FROM FTA

ABBREVIATIONS

THE BUILDER IS RESPONSIBLE FOR REVIEWING PLANS PRIOR TO CONSTRUCTION. THE BUILDER SHALL IMMEDIATELY CONTACT THE ENGINEER OF RECORD (EOR) BEFORE PROCEEDING IF THE FOLLOWING CONDITIONS ARE NOTED BEFORE OR DURING CONSTRUCTION: THE WORKING PLANS DO NOT BEAR THE SEAL OF THE EOR

2) THE PLANS CONTAIN DISCREPANT OR INCOMPLETE INFORMATION

ANY ERRORS DUE TO A FAILURE TO FOLLOW THE ABOVE PROCEDURES SHALL NOT BE THE RESPONSIBILITY OF THE EOR. FURTHERMORE, IT IS THE RESPONSIBILITY OF THE BUILDER TO ENSURE THAN ANY REVISIONS ISSUED BY THE EOR ARE PROMPLY DISTRIBUTED TO THE

THE EOR DOES NOT PERFORM FENESTRATION OR VENTING CALCULATIONS OR ANY OTHER CALCULATIONS THAT ARE NOT DIRECTLY RELATED TO STRUCTURAL ENGINEERING

ROOF AND FLOOR TRUSSES TO BE DESIGNED BY AN ENGINEER REGISTERED BY THE STATE. FINAL TRUSS DRAWING SHOULD BE SUBMITTED TO THE EOR FOR REVIEW

ABV ABOVE FND FOUNDATION TJ TRIPLE JOIST BOTH FTG FOOTING TYP TYPICAL BOTH ENDS HDG HOT DIPPED TSP TRIPLE STUD POCKET RTWN RFTWFFN GAI VANIZED CAST IN PLACE HGR HANGER UNO UNLESS NOTED CONC CONCRETE LVL LAMINATED VENEER OTHERWISE XJ EXTRA JOIST CS CONTINUOUS SHEATHIN LUMBER NTS NOT TO SCALE DIAMETER DBL DOUBLE DJ DOUBLE JOIST O.C. ON CENTER PSL PARALLEL STRAND DBL STUD POCKET LUMBER PT PRESSURE TREATED EQ EQUAL EACH QUAD JOIST FLG FLANGE FL PL FLITCH PLATE SP STUD POCKET SQ SQUARE FLR FLOOR

ALLOWABLE I-JOIST SUBSTITUTION

NOTE: MAINTAIN JOIST DEPTH, DIRECTION, AND SPACING SPECIFIED ON PLANS.

	MANUFACTURER	DEPTH	SERIES	SIMPSON FACE MOUNT HGR	SIMPSON TOP FLANGE HGR
	BLUELINX	14"	BLI 40	IUS2.56/14	ITS2.56/14
١	BOISE CASCADE	14"	BCI 5000s	IUS2.06/14	ITS2.06/14
١	BOISE CASCADE	14"	BCI 6000S	IUS2.37/14	ITS2.37/14
١	LP CORP	14"	LPI 20+	IUS2.56/14	ITS2.56/14
١	NORDIC	14"	NI 40X	IUS2.56/14	ITS2.56/14
١	ROSEBURG	14"	RFPI 40s	IUS2.56/14	ITS2.56/14
١	WEYERHAEUSER	14"	TJI 210	IUS2.06/14	ITS2.06/14
ı	WEYERHAEUSER	14"	EEI-20	IUS2.37/14	ITS2.73/14
- 1					

JOISTS NOT LISTED IN THE ABOVE TABLE MAY BE USED PROVIDED THEY MEET OR EXCEED THE PROPERTIES OF THOSE LISTED. SUBSTITUTE USP BRAND HANGERS WITH EQUIVALENT VALUES AS DESIRED.

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PROJECT NO. 23-30-026

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6 of 6