

STRUCTURAL NOTES:

CAST IN PLACE CONCRETE

1. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 2500 PSI, A SLUMP OF 3" FOR FOOTINGS/FOUNDATIONS AND 4" FOR SLABS
2. ALL REINFORCING STEEL SHALL BE NEW DOMESTIC DEFORMED BILLET STEEL CONFORMING TO ASTM A-615 GRADE 60
3. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185. WWF SHALL BE LAPPED AT LEAST 6" AND CONTAIN AT LEAST ONE CROSS WIRE WITHIN THE 6".
4. HOOKS SHALL BE PROVIDED AT DISCONTINUOUS ENDS OF ALL TOP BARS OF BEAMS.
5. HORIZONTAL FOOTING BARS SHALL HAVE 1'-0" HOOK LENGTH OR CORNER BARS WITH A 2'-1" LAP PROVIDED
6. MIN. LAP SPLICES ON ALL REINFORCING BAR SPLICES SHALL BE 40 BAR DIAMETERS TYP.
7. CONCRETE COVER MIN. 3" WHEN EXPOSED TO EARTH OR 1 1/2" TO FORM.

REINFORCING STEEL

ALL REINFORCING STEEL SHALL BE NEW DEFORMED BARS FREE FROM RUST, SCALE & OIL & SHALL MEET ASTM A615 REINFORCING FOR FOOTING SHALL BE SUPPORTED ON PRE-CAST CONCRETE PADS, TOP REINFORCING SHALL BE SUPPORTED BY TEMPORARY STRINGERS, JOISTELS, FOR COLUMNS & FILLED CELLS SHALL BE SECURED IN PLACE USING ADDITIONAL CROSS-REINFORCING TIED TO FOOTING REINFORCING. SPLICES IN REINFORCING WHERE PERMITTED SHALL BE THE FOLLOWING MINIMUM, UNLESS OTHERWISE INDICATED ON THE DRAWINGS:

FTGS, WALLS, COLUMNS, BEAMS, SLABS:	36 DIA. OR 2'-0" MIN.
FILLED CELL REINFORCING:	40 DIA. OR 2'-1" MIN.
TEMPERATURE REINFORCING:	20 DIA. OR 1'-0" MIN.
WELDED WIRE MESH:	8" LAP

MASONRY WALL CONST.

1. HOLLOW LOAD BEARING UNITS SHALL BE NORMAL WEIGHT, GRADE N, TYPE 2, CONFORMING TO ASTM C90, WITH A MINIMUM NET COMPRESSIVE STRENGTH OF 1900 PSI ($f_m = 1500$ PSI)
2. MORTAR SHALL BE TYPE "S", CONFORMING TO ASTM C270.
3. COARSE GROUT SHALL CONFORM TO ASTM C476 WITH A MAXIMUM AGGREGATE SIZE OF 3/8" AND A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 3000 PSI SLUMP 8" TO 11".
4. VERTICAL REINFORCEMENT SHALL BE AS NOTED ON THE DRAWINGS WITH THE CELLS FILLED WITH COARSE GROUT.
5. VERTICAL REINFORCEMENT SHALL BE HELD IN POSITION AT THE TOP AND BOTTOM AND AT A MAXIMUM SPACING OF 192 BAR DIAMETERS. REINFORCEMENT SHALL BE PLACED IN THE CENTER OF THE MASONRY CELL UNLESS OTHERWISE NOTED.
6. REINFORCING STEEL SHALL BE LAPPED A MINIMUM OF 40 BAR DIAMETERS, UNLESS OTHERWISE NOTED ON THE DRAWINGS.
7. GROUT STOPS SHALL BE PROVIDED BELOW BOND BEAM, PLASTER SCREEN, MILD LATH STRIP OR CAVITY CAPS MAY BE USED TO PREVENT THE FLOW OF GROUT INTO CELLS BELOW. THE USE OF FELT PAPER AS A STOP IS PROHIBITED.

WOOD CONSTRUCTION

1. WOOD CONSTRUCTION SHALL CONFORM TO THE NDS "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION", 2018 EDITION.
2. ALL EXTERIOR WOOD STUD WALLS, BEARING WALLS, SHEAR WALLS AND MISC. STRUCTURAL WOOD FRAMING MEMBERS, (I.E. BLOCKING OR GABLE END BRACING) SHALL BE EITHER SOUTHERN PINE, OR S.P.F. NUMBER 2 GRADE OR BETTER SHALL BE USED REGARDLESS OF SPECIES.
3. ANY WOOD FRAME INTERIOR BEARING WALL STUDS THAT HAVE HOLES IN THE CENTER OF STUD UP TO 1" DIA. SHALL HAVE STUD PROTECTION SHIELDS FOR ALL HOLES OVER 1" IN DIA. FOR PLUMBING LINES, ETC. SHALL BE REPAIRED WITH SIMPSON HSS2 STUD SHOS.TYP., U.N.O.
4. FASTENERS FOR PRESSURE PRESERVATIVE AND FIRE-RETARDANT-TREATED WOOD SHALL BE OF HOT-DIPPED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER.

PREFABRICATED WOOD TRUSSES

1. ALL PREFABRICATED WOOD TRUSSES SHALL BE SECURELY FASTENED TO THEIR SUPPORTING WALLS OR BEAMS WITH HURRICANE CLIPS OR ANCHORS.
2. PREFABRICATED WOOD TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL DESIGN SPECIFICATION FOR WOOD PRESSURE LUMBER AND ITS FASTENERS, AS RECOMMENDED BY THE NATIONAL FOREST PRODUCTS ASSOCIATION.
3. TRUSS MEMBERS AND CONNECTIONS SHALL BE PROPORTIONED (WITH A MAXIMUM ALLOWABLE STRESS INCREASE FOR LOAD DURATION OF 25%) TO WITHSTAND THE LIVE LOADS GIVEN IN THE NOTES AND TOTAL DEAD LOAD.
4. BRIDGING FOR PRE-ENGINEERED TRUSSES SHALL BE AS REQUIRED BY THE MANUFACTURER UNLESS NOTED OTHERWISE.
5. TRUSS ELEVATIONS AND SECTIONS ARE FOR GENERAL CONFIGURATION OF TRUSSES ONLY. WEB MEMBERS ARE NOT SHOWN, BUT SHALL BE DESIGNED BY THE TRUSS MANUFACTURER IN ACCORDANCE WITH THE FOLLOWING DESIGN LOADS:
6. DESIGN SPECIFICATIONS FOR LIGHT WEIGHT METAL PLATE CONNECTED WOOD TRUSSES PER THE TRUSS PLATE INSTITUTE TPI LATEST EDITION.
7. PRE-ENGINEERED WOOD TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER IN ACCORDANCE WITH THE SPECIFIC LOADS AND GOVERNING CODES. SUBMITTALS SHALL INCLUDE TRUSS FRAMING PLANS AND DETAILS SHOWING MEMBER SIZES, BRACING, ANCHORAGE, CONNECTIONS, TRUSS LOCATIONS, AND PERMANENT BRACING AND/OR BRIDGING AS REQUIRED FOR ERECTION AND FOR THE PERMANENT STRUCTURE. EACH SUBMITTAL SHALL BE SIGNED AND SEALED BY A FLORIDA REGISTERED STRUCTURAL ENGINEER. SUBMIT 2 COPIES FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
8. THE TRUSS MANUFACTURER SHALL DETERMINE ALL SPANS WORKING POINTS, BEARING POINTS, AND SIMILAR CONDITIONS. TRUSS SHOP DRAWINGS SHALL SHOW ALL TRUSSES, ALL BRACING MEMBERS, AND ALL TRUSS TO TRUSS HANGERS.

SOIL BEARING VALUE:

ASSUME ALLOWABLE SOIL BEARING PRESSURE AFTER COMPACTION:
2000 PSF SEE SOILS REPORT AND SPECIFICATIONS FOR COMPACTION
REQUIREMENTS IF SOIL CONDITIONS IN THE PROJECT DO NOT MEET
OR EXCEED THE CAPACITY THE GENERAL CONTRACTOR SHALL
CONTACT THE ENGINEER PRIOR TO FOUNDATION POUR FOR VERIFICATION
OF FOUNDATION DESIGN. SOIL TO BE COMPACTED TO AT LEAST 95% OF
MAX. DRY DENSITY AS DETERMINED BY ASTM - D1557

UPLIFT CONNECTORS

1. UPLIFT CONNECTORS SUCH AS HURRICANE CLIPS, TRUSS ANCHORS AND ANCHOR BOLTS ARE ONLY REQUIRED ON MEMBERS IN WALLS THAT ARE EXPOSED TO UPLIFT FORCES. INTERIOR LOAD BEARING WALLS ARE NOT ALWAYS EXPOSED TO UPLIFT FORCES. THE MEMBER OF THESE WALLS WOULD NOT NEED TO HAVE CONNECTORS APPLIED. PLEASE CONSULT THE TRUSS ENGINEERING FOR THE LOCATION OF THESE WALLS.

FIELD REPAIR NOTES

1. MISSED "J" BOLTS FOR WOOD BEARING WALLS MAY BE SUBSTITUTED W/ 1/2" DIA. EPOXY ANCHORS WITH 6" EMBEDMENT. SIMPSON "SET" EPOXY ADHESIVE BINDER FOLLOWING ALL MANUFACTURERS' RECOMMENDATIONS. SEE PLAN FOR EMBEDMENT DEPTH AT FLOOR STUD.
2. FOR MISSED VERT. DOWELS DRILL A 3/4" DIAMETER HOLE 6" DEEP AT THE LOCATION OF THE OMITTED REBAR, AND INSTALL A 32" LONG #5 BAR INTO THE EPOXY FILLED HOLE. USE A TWO PART EMBEDMENT EPOXY (SIMPSON "SET", EPOXY), MIXED PER MANUFACTURER'S INSTRUCTIONS AS DIRECTED AT THAT TIME. EXCESS EPOXY DRILLING AND REMOVED FROM THE HOLE BY BRUSHING AND AND USING COMPRESSED AIR PRIOR TO APPLYING THE EPOXY. ALLOW THE EPOXY TO CURE TO MANUFACTURER'S SPECIFICATIONS, THEN FILL THE CELL IN THE NORMAL WAY DURING BOND BEAM POUR.
3. FOR JOINTER JOISTS LESS THAN 1/4", PROVIDE (1) #5 VERT. IN CONC. FILLED CELL EACH SIDE OF THE JOINT (BAR DOES NOT HAVE TO BE CONT. TO FOOTING)
4. MISSED LINTEL STRAPS FOR MASONRY CONSTRUCTION MAY BE SUBSTITUTED WITH (1) SIMPSON MTS16 TRUSS STRIP W/ (4) 1/4" X 2 1/4" TITENES FOR MASONRY AND (7)-10d NAILS TO TRUSS OR UP LIFTS LESS THAN 160 LBS. USE (2) 1/4" X 2 1/4" TITENES FOR TRUSS STRIP. (2) 1/4" X 2 1/4" TITENES LESS THAN 10 STRAPS MAY BE SUBSTITUTED OR NO LESS THAN 3 IN A ROW. IF GIRDER TRUSS CONNECTIONS ARE MISSED CONTACT ENGINEER OF RECORD FOR SUBSTITUTION.

TERMITE SPECIFICATIONS:

SECTION R318 PROTECTION AGAINST TERMITES

TERMITE PROTECTION SHALL BE PROVIDED BY REGISTERED TERMICIDIES, INCLUDING SOL APPLIED PESTICIDES, BAITING SYSTEMS, AND PESTICIDES APPLIED TO WOOD, OR EITHER OF THESE METHODS IN COMBINATION WITH ANOTHER PREVENTIVE TREATMENT TO NEW CONSTRUCTION (SEE SECTION 202, REGISTERED TERMICIDE), UPON COMPLETION OF THE APPLICATION OF THE TERMITE PROTECTIVE TREATMENT, A CERTIFICATE OF COMPLIANCE SHALL BE ISSUED TO THE BUILDING DEPARTMENT BY THE LICENSED PEST CONTROL COMPANY THAT CONTAINS THE FOLLOWING STATEMENT: "THE TERMITE PROTECTIVE TREATMENT WAS APPLIED IN ACCORDANCE WITH THE FLORIDA TERMITES, TREATMENT IS IN ACCORDANCE WITH RULES AND LAWS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES."

RADON:

WHERE PROJECT IS TO BE LOCATED IN KNOWN RADON GAS PREVALENT AREAS, APPENDIX "F" OF THE 2017 FLORIDA RESIDENTIAL BUILDING CODE IS TO BE IMPLEMENTED. CONCRETE STRENGTH IN THESE AREAS ARE TO BE A MINIMUM OF 3000 P.S.I.. THEREFORE, ANY AND ALL NOTES ON THESE PLANS THAT INDICATE 2500 PSI SHALL BE REPLACED WITH 3000 P.S.I. FOR THE CONCRETE STRENGTH.

STRUCTURAL DESIGN CRITERIA

INDEX OF DRAWINGS

SHT NO:	TITLE
1	COVER SHEET
2	FLOOR PLAN
3	FOUNDATION PLAN
4	TRUSS LAYOUT
	ELEVATIONS
	ELECTRICAL PLAN
S-1	DETAILS

CODES:	2020 FLORIDA BUILDING CODE RESIDENTIAL	
	2020 FLORIDA FIRE PREVENTION CODE	
	2020 FLORIDA ACCESSIBILITY CODE	
	NEC NFPA 70 & FBCEB	
	ACI 318-19 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE	
	ACI 301-19 SPECIFICATIONS FOR STRUCTURAL CONCRETE BUILDINGS	
	ACI 530-19 BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES	
	2018 NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION	
	2018 WOOD FRAMED CONSTRUCTION MANUAL	
	APA PLYWOOD DESIGN SPECIFICATION	
	ASCE/SEI 7-16 AMERICAN SOCIETY OF CIVIL ENGINEERS	
LIVE LOADS:	ROOF	20 PSF (REDUCIBLE)
	RESIDENTIAL FLOOR, UNLESS OTHERWISE INDICATED	40 PSF
	BALCONIES	60 PSF
	STAIRS	40 PSF
	LIGHT PARTITIONS (DEAD LOAD), U.N.O.	20 PSF
		10 PSF ATTIC L.L.
CONCRETE STRENGTH @ 28 DAYS	ALL CONCRETE UNLESS OTHERWISE INDICATED	2500 PSI
	PEA GRAVEL CONCRETE FOR MASONRY CELLS ONLY	3000 PSI
	(DO NOT USE FOR CONCRETE COLUMNS OR THE BEAMS)	

REINFORCING:	WELDED WIRE FABRIC SHALL CONFORM TO	ASTM A1064/A1064M
	ALL REINFORCING BARS	ASTM A615-40 40,000
	ALL STIRRUPS AND TIES	ASTM A615-40 40,000
	POLYPROPYLENE FIBERS FOR SLABS ON GRADE	MINIMUM 1.5 LBS. OF FIBER PER YD ³ OF CONCRETE

CONCRETE	ASTM C90-01, STANDARD WEIGHT UNITS, fm=1500 PSI
MASONRY	MORTAR TYPE "S" 1800 PSI
UNITS:	CONCRETE GROUT 3000 PSI
	CONTINUOUS MASONRY INSPECTION IS REQUIRED DURING CONSTRUCTION

STRUCTURAL STEEL: ALL STRUCTURAL AND MISCELLANEOUS STEEL A36 36,000 PSI, U.N.O
SHOP AND FIELD WELDS: E70XX ELECTRODES
ALL BOLTS CAST IN CONCRETE: ASTM A36 OR ASTM A-307

WOOD FRAMING: BEAMS, RAFTERS, JOIST, PLATES, ETC. U.N.O.
NO. 2 SOUTHERN YELLOW PINE (19% M.C.)
ROOF DECK: PLYWOOD C-C/C-D, EXTERIOR, or OSB
FLOOR SHEATHING: T&G A-C GROUP 1 APA RATED (48/24)
WALL SHEATHING: PLYWOOD C-C/C-D, EXTERIOR OR OSB
VERSA LAM BEAM Pb = 2900 PSI (2.0E)
WOOD COLS. PARALLAM 2.0E U.N.O.

WOOD ROOF TRUSSES:	DESIGN LOADS:	SHINGLE ROOF:
	TOP CHORD LIVE LOAD:	20 PSF
	TOP CHORD DEAD LOAD:	10 PSF
	BOTTOM CHORD DEAD LOAD:	10 PSF
		40 PSF
	BOTTOM CHORD ATTIC LIVE LOAD:	10 PSF

SEE DRAWINGS FOR SPECIAL CONCENTRATED LOADS. DESIGN FOR NEW WIND UPLIFT AS PER SPECIFIED CODES, DEDUCTING A MAXIMUM OF 5 P.S.F. DEAD LOAD, BUT NOT EXCEEDING ACTUAL DEAD LOAD.

USP AND SIMPSON CONNECTOR CROSS REFERENCE CHART

[illegible]

WIND LOADING CRITERIA

WIND SPEED (ULTIMATE)	130 MPH
WIND SPEED (ALLOWABLE)	101 MPH
EXPOSURE CATEGORY	B
BUILDING CATEGORY	II
BUILDING TYPE	V
ENCLOSURE CLASSIFICATION	ENCLOSED
INTERNAL PRESSURE COEFFICIENT	+/- 0.18

NOTICE TO BUILDER

**THIS DRAWING AND DESIGN IS VALID
FOR 12 MONTHS AFTER THE DATE IT
IS SIGNED AND SEALED OR WHILE
CURRENT CODE IS VALID**

IT IS THE INTENT OF THIS DESIGNER THAT THESE PLANS ARE ACCURATE AND ARE CLEAR ENOUGH FOR THE LICENSED PROFESSIONAL TO CONSTRUCT THIS PROJECT. IN THE EVENT THAT SOMETHING IS UNCLEAR OR NEEDS CLARIFICATION, STOP, AND CALL THE DESIGNER LISTED IN THIS TITLE PAGE. IT IS THE RESPONSIBILITY OF THE LICENSED PROFESSIONAL THAT IS CONSTRUCTING THIS PROJECT TO FULLY REVIEW THESE DOCUMENTS BEFORE CONSTRUCTION BEGINS AND ANY AND ALL CORRECTIONS, IF NEEDED, TO BE MADE BEFORE ANY WORK IS DONE.

DO NOT SCALE DRAWINGS FOR CRITICAL DIMENSIONS. INSTEAD CALL THE DESIGNER LISTED IN TITLE PAGE.

Randolph
Wiggins
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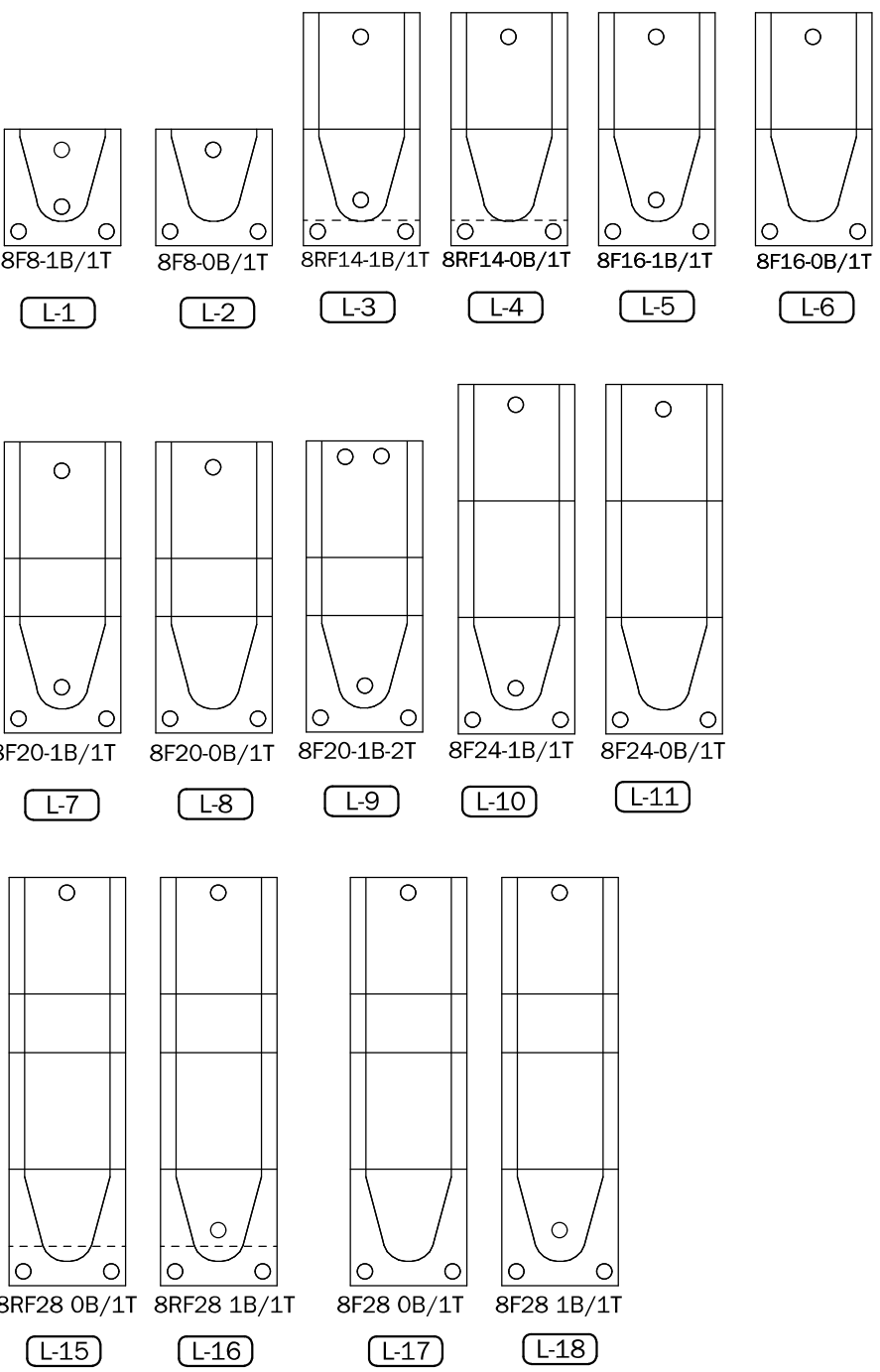
#CBC1256817
190 E. Thrasher Drive, Bronson FL 32621
(352) 538-3141

Newton Residence
Lot 53 Rum Island Terrace
Fort White, FL
Columbia County

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OF
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LAST PLOT DATE: September 10, 2021



SAFE LOAD TABLES

FOR GRAVITY, UPLIFT & LATERAL LOADS

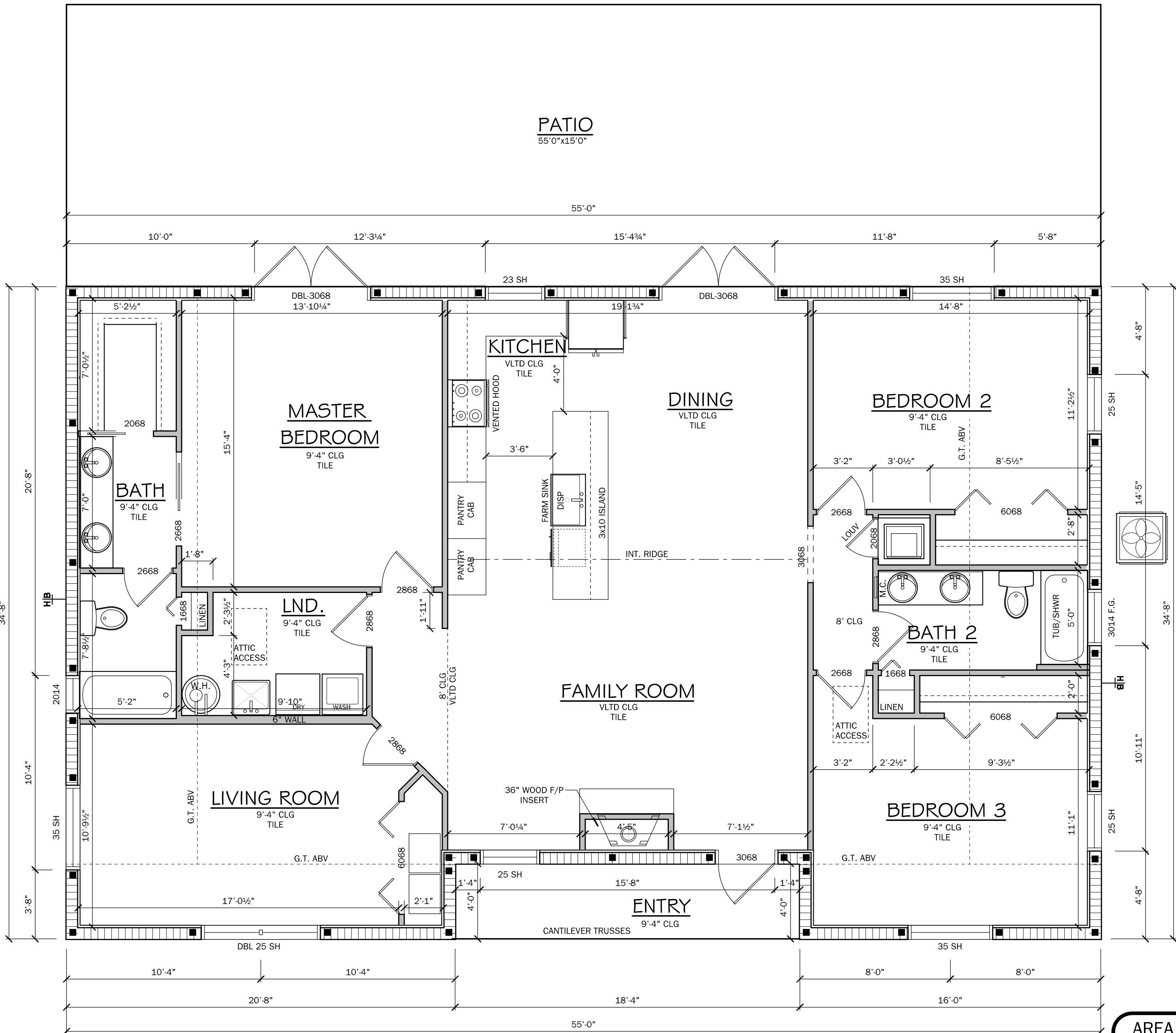
8" PRECAST & PRESTRESSED U/LINTELS		GRAVITY							
		BUB	8F8-08	8F12-08	8F16-08	8F20-08	8F24-08	8F28-08	8F32-08
LENGTH	TYPE								
2'-10" (34")	PRECAST	2302	1596	4215	6039	7526	9004	10472	11936
3'-6" (42")	PRECAST	2302	3166	4473	6039	7526	9004	10472	11936
4'-0" (48")	PRECAST	2029	2048	4473	6039	7526	9004	10472	11936
4'-6" (54")	PRECAST	1651	1787	1913	2657	3403	4149	4896	5644
5'-4" (64")	PRECAST	1184	1216	4027	6039	7526	9004	10472	11936
5'-10" (70")	PRECAST	972	1000	1059	1474	1889	2304	2721	3137
6'-6" (78")	PRECAST	937	1499	2464	4144	5458	4437	5286	6122
7'-6" (90")	PRECAST	767	1295	2101	3263	2746	3358	3071	4585
9'-4" (112")	PRECAST	573	1205	2101	3396	5260	7134	8995	6890
10'-6" (126")	PRECAST	456	1029	1675	2385	1994	2439	2686	3333
11'-4" (136")	PRECAST	445	1029	1675	2610	3639	5398	6813	8247
12'-0" (144")	PRECAST	414	632	1049	1469	1210	1482	1754	2027
13'-4" (160")	PRECAST	362	768	1212	1618	2544	3469	4030	3127
14'-0" (168")	PRECAST	338	482	802	1125	915	1122	1328	1535
14'-8" (176")	PRESTRESSED	N.R.	608	1025	1514	2041	2714	3330	3464
15'-4" (184")	PRESTRESSED	N.R.	598	935	1365	1854	2441	3155	4044
17'-4" (208")	PRESTRESSED	N.R.	545	864	1254	1689	2074	2570	3018
19'-4" (232")	PRESTRESSED	N.R.	505	804	1254	1689	2211	2832	3360
21'-4" (256")	PRESTRESSED	N.R.	427	726	1028	1331	1635	2224	2438
22'-0" (264")	PRESTRESSED	N.R.	485	748	1076	1438	1805	2343	2920
24'-0" (288")	PRESTRESSED	N.R.	338	481	646	920	1180	1462	1787
			453	705	1003	1335	1714	2153	2666
			NR	NR	NR	NR	NR	NR	NR
			465	765	1370	2045	2610	3185	3765
			NR	NR	NR	NR	NR	NR	NR
			620	895	1220	1805	2370	2890	3410
			NR	NR	NR	NR	NR	NR	NR
			310	530	950	1400	1800	2200	2600
			NR	NR	NR	NR	NR	NR	NR
			240	400	750	1090	1400	1720	2030
			NR	NR	NR	NR	NR	NR	NR
			183	330	610	940	1340	1780	2110
			NR	NR	NR	NR	NR	NR	NR
			160	300	570	870	1250	1660	1970
			NR	NR	NR	NR	NR	NR	NR
			130	240	470	720	1030	1350	1610

8" PRECAST & PRESTRESSED U/LINTELS		UPLIFT								LATERAL	
		8F8-08	8F12-08	8F16-08	8F20-08	8F24-08	8F28-08	8F32-08			
LENGTH	TYPE									BUB	8F8
2'-10" (34")	PRECAST	2727	2878	4101	5332	6669	7811	9095		2021	2021
3'-6" (42")	PRECAST	2727	2784	3943	5190	6467	7630	8857			
4'-0" (48")	PRECAST	2265	2299	3260	4237	5219	6204	7182		1257	1257
4'-6" (54")	PRECAST	1878	1989	2832	3680	4532	5387	6245		938	938
5'-4" (64")	PRECAST	1393	1484	2110	2741	3375	4010	4648		505	505
5'-10" (70")	PRECAST	1272	1315	1875	2441	3010	3583	4157		418	418
6'-6" (78")	PRECAST	1141	1200	1733	2250	2769	3290	3812		707	887
7'-6" (90")	PRECAST	990	1029	1466	1907	2351	2797	3245		591	657
9'-4" (112")	PRECAST	801	812	980	1269	1560	1852	2144		454	630
10'-6" (126")	PRECAST	666	686	793	1027	1265	1496	1731		396	493
11'-4" (136")	PRECAST	606	636	746	980	1220	1466	1712		363	556
12'-0" (144")	PRECAST	631	661	771	1005	1251	1496	1742		340	494
13'-4" (160")	PRECAST	500	530	640	874	1109	1354	1599		302	398
14'-0" (168")	PRECAST	573	603	713	947	1182	1427	1672		286	360
14'-8" (176")	PRESTRESSED	243	295	459	591	724	857	990		N.R.	357
15'-4" (184")	PRESTRESSED	228	329	542	791	1072	1381	1676		N.R.	327
17'-4" (208")	PRESTRESSED	188	236	361	454	567	670	774		N.R.	255
19'-4" (232")	PRESTRESSED	165	207	313	401	490	578	667		N.R.	204
21'-4" (256")	PRESTRESSED	145	186	278	356	433	512	590		N.R.	172
22'-0" (264")	PRESTRESSED	140	180	268	343	418	493	568		N.R.	161
24'-0" (288")	PRESTRESSED	137	165	244	312	380	447	513		N.R.	135

8" PRECAST W/ 2" RECESS DOOR U/LINTELS		GRAVITY							
		8R06	8R08-08	8R12-08	8R16-08	8R20-08	8R24-08	8R28-08	8R32-08
4'-4" (52")	PRECAST	1489	1591	3053	4982	6472	7947	9416	10878
4'-6" (54")	PRECAST	1357	1449	2782	4714	6204	7679	9148	10618
5'-8" (68")	PRECAST	785	832	1602	2508	3268	4028	4788	5548
5'-10" (70")	PRECAST	735	779	1500	2404	3164	3924	4684	5444
6'-8" (80")	PRECAST	822	907	1677	2603	3363	4123	4883	5643
7'-6" (90")	PRECAST	665	764	1377	2252	3012	3772	4532	5292
9'-8" (116")	PRECAST	371	430	834	1253	1671	2089	2507	2925

8" PRECAST W/ 2" RECESS DOOR U/LINTELS		UPLIFT								LATERAL	
		8R06	8R08-08	8R12-08	8R16-08	8R20-08	8R24-08	8R28-08	8R32-08		
4'-4" (52")	PRECAST	1244	1579	2413	3260	4112	4967	5825		932	932
4'-6" (54")	PRECAST	1192	1507	2311	3121	3937	4746	5555		853	853
5'-8" (68")	PRECAST	924	1172	1795	2423	3055	3689	4325		501	501
5'-10" (70")	PRECAST	896	1138	1742	2362	2995	3628	4261		469	469
6'-8" (80")	PRECAST	778	882	1513	2042	2573	3107	3642		830	1100
7'-6" (90")	PRECAST	688	809	1302	1762	2225	2690	3157		710	941
9'-8" (116")	PRECAST	533	633	1008	1369	1728	2088	2450		516	614

*REDUCE VALUE BY 15% FOR GRADE 40 FIELD REBAR



FLOOR PLAN

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

AREA CALCULATIONS

TOTAL LIVING	1833 S.F.
ENTRY PORCH	73 S.F.
TOTAL AREA UNDER ROOF	1906 S.F.

- NOTE:
- ALL WINDOWS WITHIN 2'-0" OF DOORS AND IN SHOWER OR TUB AREAS WILL BE SAFETY TEMPERED GLASS.
 - ALL DOORS LEADING FROM UNCONDITIONED SPACE TO CONDITIONED SPACE SHALL BE SOLID CORE.
 - CEILING FOR EXTERIOR ENTRIES AND COVERED PORCHES TO HAVE 7/16" SPAN RATED OSB NAILED PER ZONE ON ROOF DIAPHRAGM. NAILING SCHEDULE ON SHEET S-1 OR EXTERIOR GYPSUM SOFFIT BOARD INSTALLED PER GA-216

VENTILATION CALCULATION

FORMULA PER FBBC 2017 SEC 806.2+ S.F. / 300 (1/300) / 2 (INTAKE vs EXHAUST) * 144 (TO CONVERT TO SQ. INCHES) = NET SQ. INCH REQUIREMENT

1906/300 = 6.4 / 2 = 3.2 * 144 = 460
460 SQ. INCHES OF VENTILATION REQUIRED

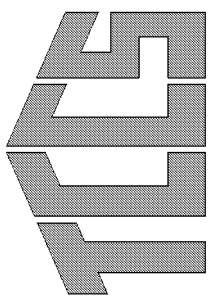
WALL LEGEND

FRAMED WALL
BEARING WALL
BEARING WALL (FLOOR SYSTEM ONLY)
8" CMU WALL

NOTE: SOFFITS ARE TO BE PERFORATED AND THE NET FREE SQUARE INCHES SHALL MEET OR EXCEED THE CALCULATED AMOUNT OF VENTILATION REQUIRED

Residential Design

1431 E. Wade Street
Trenton, FL 32693
352-274-3006
tchdesigns@gmail.com



RANDOLPH WIGGINS, P.E.

1431 E. Wade Street, Suite B Trenton, FL 32693
PROFESSIONAL DESIGNER IN ACCORDANCE WITH THE
STATE OF FLORIDA
STRUCTURAL DESIGN ONLY
FOR THE STRUCTURAL DESIGN

RANDOLPH WIGGINS, P.E. FL # 15721
DATE: September 10, 2021

Randolph Wiggins
2021.09.10
09:50:03
-04'00'



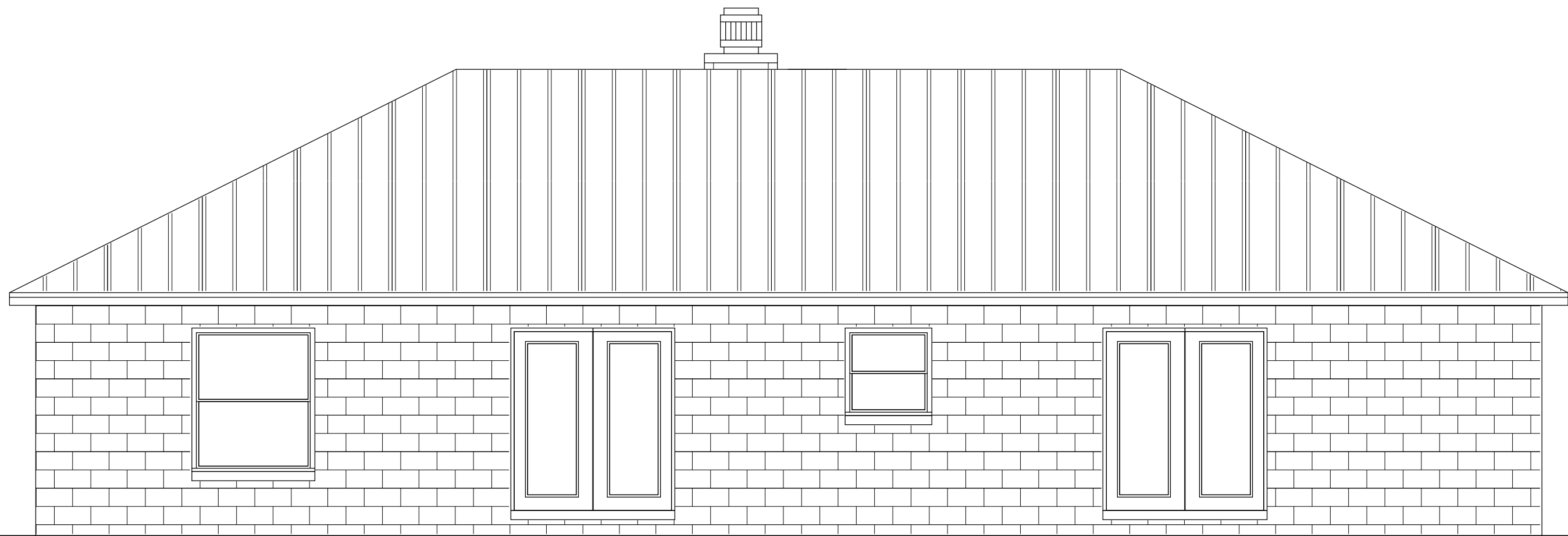
#CBC1256817
190 E. Thrasher Drive, Bronson FL 32621
(352) 538-3141

PROJECT:
Newton Residence
Lot 53 Rum Island Terrace
Fort White, FL
Columbia County

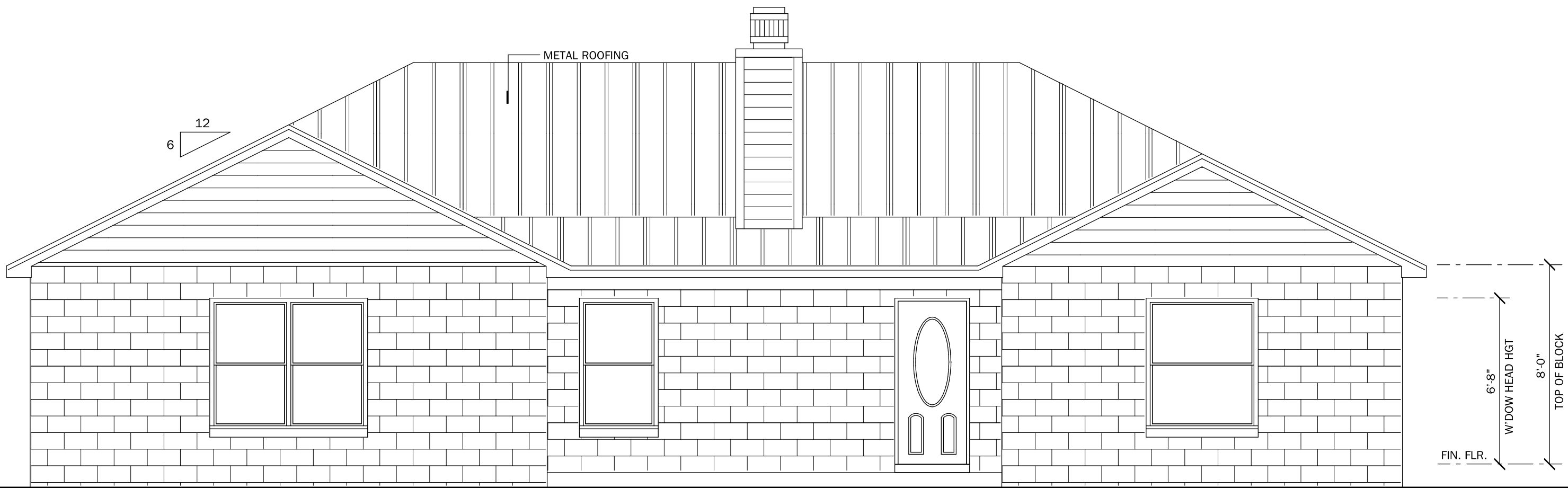
LAST PLOT DATE: September 10, 2021

SHEET NO.

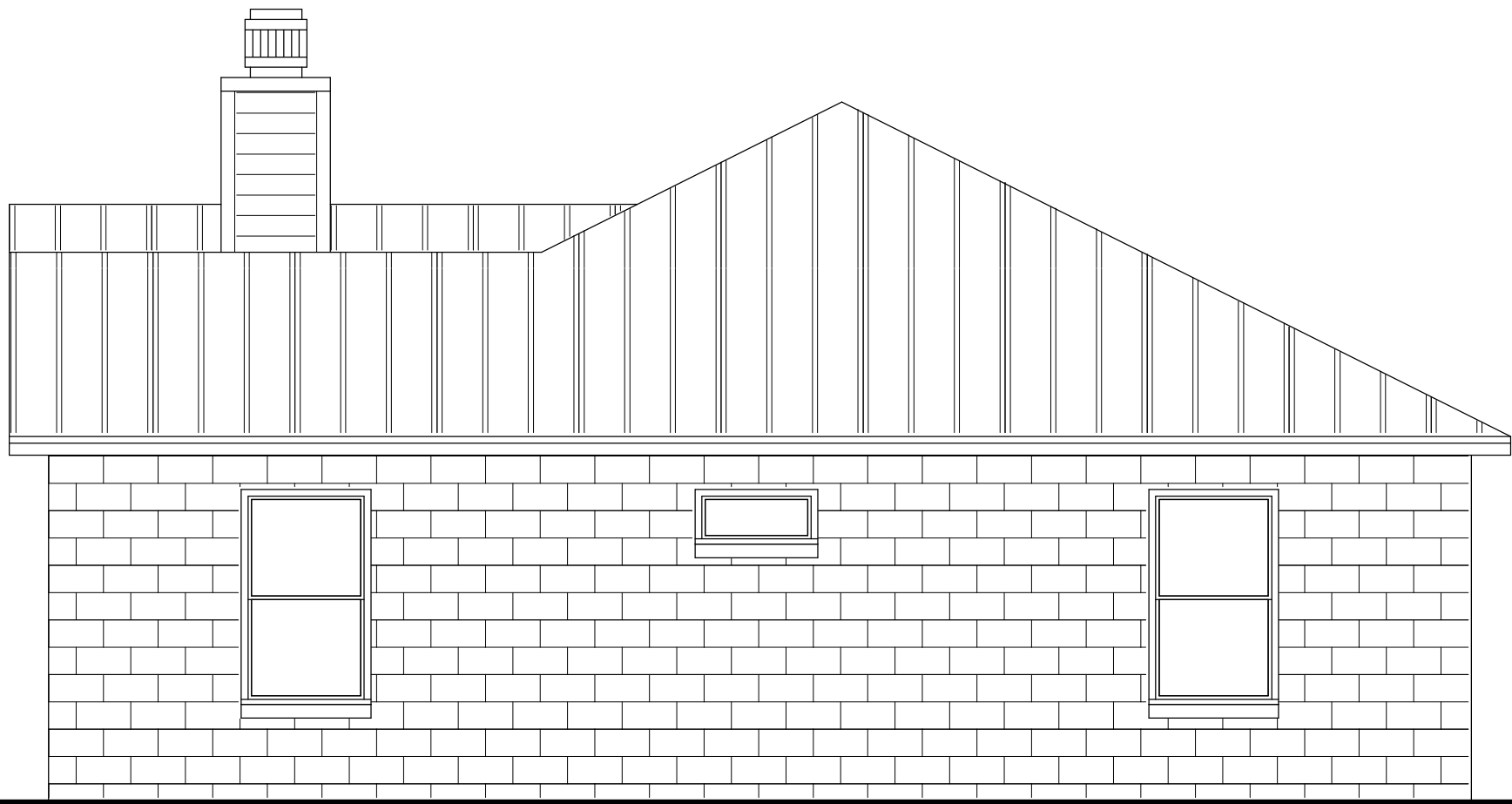
2 OF 5



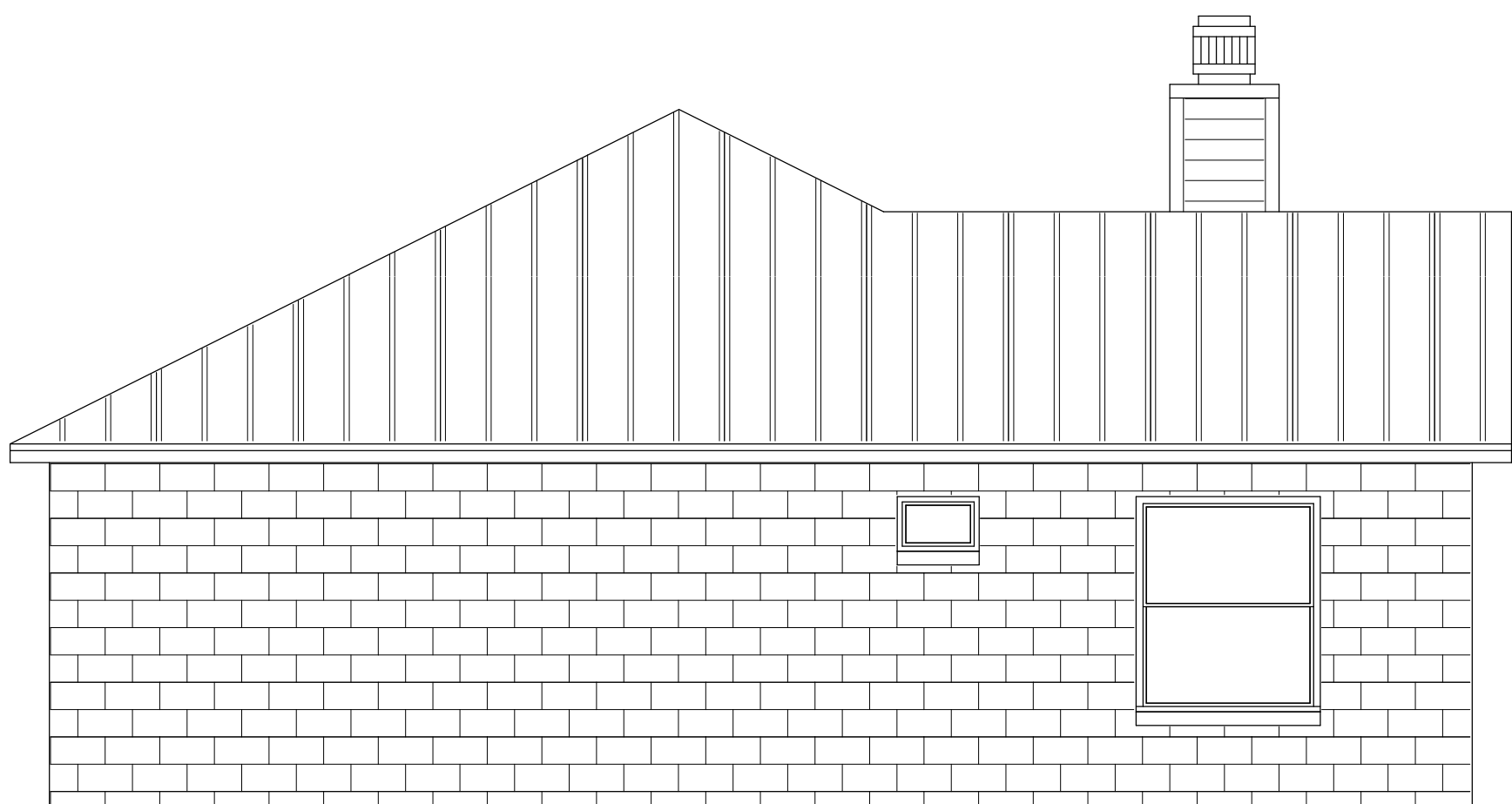
REAR ELEVATION
SCALE: 1/4" = 1'-0"



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



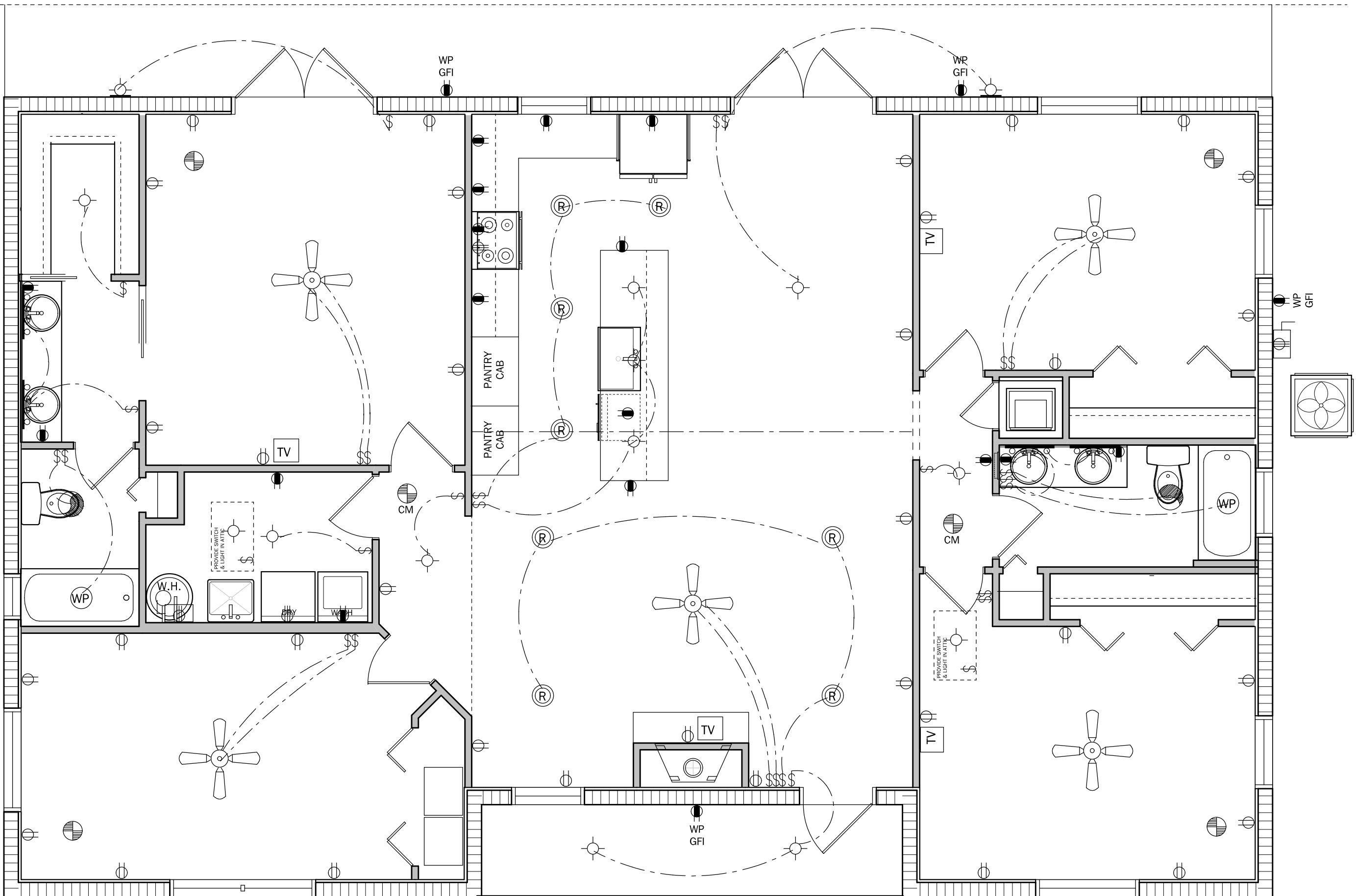
RIGHT ELEVATION
SCALE: 1/4" = 1'-0"



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

- NOTES:**
UNLESS OTHERWISE NOTED
- ELECTRICAL OUTLET HEIGHTS AS MEASURED FROM FINISHED FLOOR TO CENTERED LINE OF THE BOX TO BE: 12" AFF (GENERAL)
KITCHEN 48" AFF
BATHROOM 36" AFF
LAUNDRY ROOM 36" AFF
EXTERIOR WATERPROOF 12" AFF
GARAGE GENERAL PURPOSE 42" AFF
RANGE 2" AFF
 - ALL TRIM PLATES & DEVICES TO BE GANGED, WHERE POSSIBLE.
 - ELECTRICAL SWITCHES TO BE AT 42" CENTERLINE ABOVE FINISHED FLOOR.
 - ELECTRICAL PLAN IS INTENDED FOR BID PURPOSES ONLY. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE NATIONAL ELECTRIC CODE, LATEST EDITION, BY A LICENSED ELECTRICAL CONTRACTOR WHO SHALL BE RESPONSIBLE FOR THE INSTALLATION & SIZING OF ALL ELECTRICAL, WIRING & ACCESSORIES.
 - SMOKE DETECTORS SHALL BE IN ACCORDANCE WITH FLORIDA BUILDING CODE, SECTION 907.
 - KEEP ALL SMOKE DETECTORS MINIMUM OF 36" FROM BATHROOM DOORS
 - IN NEW CONSTRUCTION, SMOKE DETECTORS SHALL BE HARDWIRED INTO AN A/C ELECTRICAL POWER SOURCE AND SHALL BE EQUIPPED WITH A MONITORED BATTERY BACKUP.
 - BATHROOM EXHAUST FANS MUST VENT TO THE EXTERIOR OF THE BUILDING, ATTIC SPACE AND SOFFITS ARE NOT ACCEPTABLE.
 - ALL DOORS AND WINDOWS PROVIDING DIRECT ACCESS FROM THE HOME TO THE POOL SHALL BE EQUIPPED WITH AN EXIT ALARM COMPLYING WITH UL 2017 THAT HAS A MINIMUM SOUND PRESSURE RATING OF 85 dBA AT 10 FEET, AND EITHER HARDWIRED OR OF THE PLUG-IN TYPE. THE EXIT ALARM SHALL PRODUCE A CONTINUOUS AUDIBLE WARNING WHEN THE DOOR OR WINDOW ARE OPENED.
 - STOVE AND DRYER TO HAVE NEUTRAL
 - PROVIDE TAMPER RESISTANT RECEPTACLES WHERE APPLICABLE
 - PROVIDE AFC FAULT RECEPTACLES ON ALL 15 & 20 AMP NON GFCI PROTECTED CIRCUITS

ELECTRICAL LEGEND	
\$	SINGLE POLE SWITCH
\$2	DOUBLE POLE SWITCH
\$3	THREE-WAY SWITCH
\$4	FOUR-WAY SWITCH
\$DM	DIMMER SWITCH
⊙	CEILING FIXTURE
⊙	SCOUNCE (WALL MOUNTED) FIXTURE
⊕	110 VOLT DUPLEX OUTLET
⊕	110 VOLT SPLIT SWITCHED OUTLET
⊕	GROUND FAULT INTERRUPT
⊕	WP WATER PROOF W/ GROUND FAULT
⊕	220 VOLT OUTLET
⊕	SPECIAL SERVICES OUTLET
TV	T.V. CABLE OUTLET
⬆	TELEPHONE CABLE OUTLET
⊙	RECESSED LIGHTING
⊙	5'-6" L.E.D. SURFACE MOUNT
⊙	BATH FAN
⊙	BATH FAN W/ LIGHT
⊙	CARBON MONOXIDE DETECTOR
⊙	SMOKE DETECTOR
⊙	FLOOD LIGHT
⊙	L.E.D STRIP LIGHT
⊙	CEILING FAN
⊙	DISPOSAL
⊙	DISCONNECT SWITCH
⊙	PREWIRE SPEAKER
⊙	JUNCTION BOX
⊙	THERMOSTAT
⊙	LOW VOLTAGE LIGHTING
⊙	INTERCOM SYSTEM
⊙	GARAGE DOOR PUSH BUTTON



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

Randolph Wiggins
2021.09.10 09:50:31
-04'00'

STEVE SMITH
CONSTRUCTION
INCORPORATED
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PROJECT:
Newton Residence
Lot 53 Rum Island Terrace
Fort White, FL
Columbia County
LAST PLOT DATE: September 10, 2021 09:47 AM

SHEET NO.
4
OF
5

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STATE OF FLORIDA
PROFESSIONAL ENGINEER
RANDOLPH WIGGINS, P.E. FL # 15721
DATE: September 10, 2021

