# **ABBREVIATIONS**

ABY ABOVE AC AIR CONDITIONING AD. AREA DRAIN AD. AREA DRAIN AD. AREA DRAIN AD. ALL ALLENNITH ALL ALLENNITH ALL ALLENNITH ALL ALLENNITH BD EOARD BD EOARD CAREAD CAREAD CAREAD CONTROL JOINT OR CONSTRUCTION JOINT C ALL CONTROL JOINT OR CONSTRUCTION JOINT C CONTROL JOINT OR CONSTRUCTION JOINT C CONTROL JOINT OR CONTROL TO CONTROL JOINT OR CONTROL SISTANT C AND CONSTRUCTION CONTROL SISTANT C ALL CASEMENT C ALL C	L LENGTH LA LAUNDRY LAV LAVATORY LAV LAVATORY LVR LOUVER MAX MAXIMUM MER MECHANCOL MIN MINIMUM MIN MINIMUM MIN MINIMUM MIN MINIMUM MIN MINIMUM
AUJ AUUS TABLE ALT ALTENNTE ALTM ALTENNTE ALTM ALTENNTE ALTM ALTENNTE BE BENCIE BE BENCIE CLI COLLETTE MASONRY UNIT COL COLLETTE BESISTANT COL COLLETTE BESISTANT COL COLLETTE CH COLRECTIONE COLLETTE BE BENCIE DE DEFERE BE	NTR WICH OF SCALE OCD. OVERHEAD GRAGE DOOR OCD. OVERHEAD GRAGE DOOR OFF OFFICAUL PARE DOWNERTON PER POWERTON PER PERPENSION PER PERPENSION P
ADDI ICADI E CODER:	

**INDEX** 

DS-1

1.1.1 1.2.1

1.3.1 2.1.1 2.1.1.1

2.2.1 2.2.1.1

2.3.1 2.3.1.1

3.1.1

4.1.1

5.1.1

5.1.2

5.1.3 5.1.4

5.1.5

5.1.6 6.1

D-1

7.1

7.2

73

DELTA SHEET FRONT ELEVATIONS 'CLASSIC' SIDE ELEVATIONS 'CLASSIC' REAR ELEV W/ ROOF PLAN 'CLASSIC FIRST FLOOR PLAN 'CLASSIC' FIRST FLOOR PLAN OPTIONS SECOND FLOOR PLAN 'CLASSIC SECOND FLOOR PLAN OPTIONS THIRD FLOOR PLAN THIRD FLOOR OPTIONS SLAB PLAN 'CLASSIC' CRAWL SPACE PLAN 'CLASSIC OPT. COVERED PATIO W/ SLAB OPT. COVERED DECK W/ CRAWL OPT. SIDE FIREPLACE OPT. SIDELOAD GARAGE 'CLASSIC OPT. 3RD CAR GARAGE 'CLASSIC OPT. 3RD CAR GARAGE 'CLASSIC SECTIONS DETAILS FIRST FLOOR UTILITY PLAN

THIRD FLOOR UTILITY PLAN

SECOND FLOOR UTILITY PLAN

- THE NELSON 2020 - 'CLASSIC'
  - NELSON 2020 04.13.2021 HVAC unit moved to side of house. NOTICE TO CONTRACTOR assuction must comply with current NC Building Codes All construction must comply with current NC Bui and is subject to field inspection and verification. APPROVED mited building only review ermit holder responsible for full compliance with the code

06/16/2021

SIGNATURE

ELEV. 'CLASSIC' AREA RST FLOOF 1042 SI SECOND FLOOR 1321 SF 2363 S FRONT PORCH GARAGE 401 SI REAR PATIO 179 SF JNFINISHED THIRD FLOOR 451 S UNHEATER

# **BUILDER SET:**

THE SCOPE OF THIS SET OF PLANS IS TO PROVIDE A "BUILDER'S SET" THE SCOPE OF THIS SET OF PLANS IS TO PROVIDE A "BUILDER'S SET" OF CONSTRUCTION DOCUMENTS AND GENERAL NOTES HEREINAFTER REFERRED TO AS "PLANS". THIS SET OF PLANS IS SUFFICIENT TO OBTAIN A BUILDING PERMIT; HOWEVER, ALL MATERIALS AND METHODS OF CONSTRUCTION NECESSARY TO COMPLETE THE PROJECT ARE NOT NECESSARILY DESCRIBED. THE PLANS DELINEATE AND DESCRIBE ONLY LOCATIONS. DIMENSIONS, TYPES OF MATERIALS, AND GENERAL METHODS OF ASSEMBLING OR FASTENING. THEY ARE NOT INTENDED TO SPECIFY PARTICULAR PRODUCTS OR OTHER METHODS OF ANY SPECIFIC MATERIALS AND GENERAL METHODS OF ASSEMBLING OR FASTENING. SPECIFIC MATERIALS, PRODUCT OR METHOD. THE IMPLEMENTATION OF THE PLANS REQUIRES A CLIENT / CONTRACTOR THOROUGHLY KNOWLEDGEABLE WITH THE APPLICABLE BUILDING CODES AND METHODS OF CONSTRUCTION SPECIFIC TO THIS PRODUCT TYPE AND TYPE OF CONSTRUCTION

CONSTRUCTION REQUIREMENTS AND QUALITY: PROVIDE WORK OF THE SPECIFIC QUALITY: WHERE QUALITY LEVEL IS NOT INDICATED, PROVIDE WORK OF QUALITY CUSTOMARY IN SIMILAR TYPES OF WORK. WHERE THE PLANS AND SPECIFICATIONS, CODES, LWS, REGULATIONS, MANUFACTURER'S RECOMMENDATIONS OF INDUSTRY STANDARDS REQUIRE WORK OF HIGHER QUALITY OR PERFORMANCE, PROVIDE WORK COMPUTING WITH THOSE REQUIREMENTS AND QUALITY. WHERE TWO OR MORE QUALITY PROVISIONS OF THOSE REQUIREMENTS CONFLICT WITH THE MOST STRINGENT REQUIREMENT; WHERE REQUIREMENTS CONFLICT WITH THE MOST STRINGENT REQUIREMENT; WHERE REQUIREMENTS AND QUALITY. COLAL, IND WHERE TIS LOCETAIN WIGH REQUIREMENTS CONFLICT WITH THE MOST STRINGENT REQUIREMENT; WHERE REQUIREMENTS AND GUALITY CLARIFICATION FROM THE ARCHITECT BEFORE PROCEEDING.

SCALE IS NOTED ON INDIVIDUAL PLAN TITLES. NCGS 83A-13(e) COMPLIANCE: CORPORATE OFFICER ADDRESS

CONFORMANCE WITH ALL CURRENT APPLICABLE CODES IN EFFECT AT TIME OF CONSTRUCTION. BY USING THESE DRAWINGS FOR CONSTRUCTION IT IS UNDERSTOOD THAT CONFORMANCE WITH ALL APPLICABLE CODES IS THE RESPONSIBILITY OF THE BUILDER AND CONTRACTOR.

CONTRACTOR AND BUILDER SHALL BEVIEW ENTIRE PLAN TO VERIEY

PRODUCT SINGLE FAMILY RESIDENCE

FOLLOW ALL APPLICABLE STATE AND LOCAL CODES. 2018 NORTH CAROLINA STATE RESIDENTIAL CODE

OCCUPANCY CLASSIFICATION RESIDENTIAL R-3

APPLICABLE CODES:

CONSTRUCTION TYPE TYPE VB

# **GENERAL NOTES:**

THESE DOCUMENTS ARE THE PROPERTY OF THE BUILDER AND SHALL NOT BE COPIED DUPLICATED, ALTERED, MODIFIED OR REVISED IN ANY WAY WITHOUT THE EXPRESSED WRITTEN APPROVAL OF THE BUILDER.

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE SITE AND ALL INCONSISTENCES SHALL BE BROUGHT TO THE ATTENTION OF THE DEVELOPER AND THE BUILDER BEFORE PROCEEDING WITH WORK.

ANY ERRORS OR OMISSIONS FOUND IN THESE DRAWINGS SHALL BE BROUGHT TO DEVELOPERS AND BUILDERS ATTENTION IMMEDIATELY.

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. ALL TRUSS DRAWINGS TO BE REVIEWED AND APPROVED BY THE STRUCTURAL

ENGINEER PRIOR TO ISSUANCE OF BUILDING PERMIT ALL OR EQUAL SUBSTITUTIONS MUST BE SUBMITTED TO AND APPROVED BY CITY

BUILDING OFFICIAL PRIOR TO INSTALLATION.

ALL ANGLED PARTITIONS ARE 45 DEGREES UNLESS OTHERWISE NOTED. PROVIDE FIREBLOCKING. (PER LOCAL CODES.)

ALL ELECTRICAL AND MECHANICAL FOUIPMENT AND METERS ARE SUBJECT TO RELOCATION DUE TO FIELD CONDITIONS, CONTRACTOR TO VERIFY

PROVIDE BLOCKING AND/OR BACKING AT ALL TOWEL BAR, TOWEL RING AND/OR TOILET PAPER HOLDER LOCATIONS, AS SHOWN PER PLAN, TYPICAL AT ALL BATHROOMS AND POWDER ROOMS. VERIFY LOCATIONS AT FRAMING WALK. ELASTOMERIC SHEET WATERPROOFING: EURNISH AND INSTALL ALL WATERPROOFING COMPLETE. A 40 MIL SELF-ADHERING MEMBRANE OF RUBBERIZED ASPHALT INTEGRALLY BONDED TO POLYETHYLENE SHEETING, OR EQUAL. INSTALL PER MANUFACTURE'S AND TRADE ASSOCIATION'S PRINTED

INSTALLATION INSTRUCTIONS, 6" MINIMUM LAP AT ALL ADJACENT WALL SURFACES. TO THE BEST OF THE BUILDER'S KNOWLEDGE THESE DOCUMENTS ARE IN

CONFORMANCE WITH THE REQUIREMENTS OF THE BUILDING AUTHORITIES HAVING JUBISDICTION OVER THIS TYPE OF CONSTRUCTION AND OCCUPANCY. SHOP DRAWING REVIEW AND DISTRIBUSTION, ALONG WITH PRODUCT SUBMITTALS,

REQUESTED IN THE CONSTRUCTION DOCUMENTS, SHALL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR, UNLESS DIRECTED OTHERWISE UNDER A SEPARATE AGREEMENT.

DEVIATIONS FROM THESE DOCUMENTS IN THE CONSTRUCTION PHASE SHALL BE REVIEWED BY THE BUILDER AND THE OWNER PRIOR TO THE START OF WORK IN QUESTION. ANY DEVIATIONS FROM THESE DOCUMENTS WITHOUT PRIOR REVIEW, SHALL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK AND MATERIALS REPRESENTED ON THESE DOCUMENTS INCLUDING THE WORK AND MATERIALS FURNISHED BY SUBCONTRACTORS AND VENDORS.

THE OWNER SHALL FURNISH ANY AND ALL REPORTS RECEIVED FROM THE GEOTECHNICAL ENGINEER (SOILS REPORT), ON THE STUDY OF THE PROPOSED SITE TO THE BUILDER, STRUCTURAL ENGINEER, AND GENERAL CONTRACTOR, IN THE TO THE BUILDER, STRUCTURAL ENGINEER, AND GENERAL CONTRACTOR. IN THE EVENT THE GENERATION AND A DESIGN SOIL PRESSURE STATED BY THE STRUCTURAL ENGINEER OF RECORD FOR THE PURPOSE OF STRUCTURAL DESIGN. GENERAL, CONTRACTOR SHALL ASSURE THE SOIL CONDITIONS MEET OR EXCEED TUR GRUEDA. THE CRITERIA.

ALL WORK PERFORMED BY THE GENERAL CONTRACTOR SHALL COMPLY AND CONFORM WITH LOCAL AND STATE BUILDING CODES, ORDINANCES AND REGULATIONS, ALONG WITH ALL OTHER AUTHORITIES HAVING JURISDICTION. THE GENERAL CONTRCATOR IS RESPONSIBLE TO BE AWARE OF THESE REQUIREMENTS AND GOVERNING REGULATIONS.

PROVIDE AN APPROVED WASHER DRAIN PAN AT SECOND FLOOR ONLY. THAT DRAINS TO EXTERIOR.

WINDOW SUPPLIER TO VERIEV AT LEAST ONE WINDOW IN ALL BEDROOMS TO HAVE A CLEAR WINCOW SUPFICE AREA OF 4.0 SO THE MEASURE AND A WINCOW IN ALL BEDWOOMS TO MUNICAU SECTION OF A SUPERION AND A SUPERION AND A SUPERION STALL BE 22° AND THE MINIMUM NET OLEAR OPENING HIGHT SHALL BE 22° AND THE MINIMUM NET OLEAR OPENING HIGHT SHALL BE 22° AND THE MINIMUM NET OLEAR OPENING HIGHT SHALL BE 22° AND THE MINIMUM NET OLEAR OPENING HIGHT SHALL BE 22° AND THE MINIMUM NET OLEAR OPENING HIGHT SHALL BE 22° AND THE MINIMUM NET OLEAR OPENING HIGHT SHALL BE 22° AND THE MINIMUM NET OLEAR OPENING HIGHT SHALL BE 22° AND THE MINIMUM NET OLEAR OPENING HIGHT SHALL BE 22° AND THE MINIMUM NET OLEAR OPENING HIGHT SHALL BE 22° AND THE MINIMUM NET OLEAR OPENING HIGHT SHALL BE 22° AND THE MINIMUM NET OLEAR OPENING HIGHT SHALL BE 22° AND THE MINIMUM NET OLEAR OPENING HIGHT SHALL BE 20° AL AND THE MINIMUM NET OLEAR OPENING HIGHT SHALL BE 20° AL AND THE MINIMUM NET OLEAR OPENING HIGHT SHALL BE 20° AL AND THE MINIMUM NET OLEAR OPENING HIGHT SHALL BE 20° AL AND THE MINIMUM NET OLEAR OPENING HIGHT SHALL BE 20° AL AND THE MINIMUM NET OLEAR OPENING HIGHT SHALL BE 20° AL AND THE MINIMUM NET OLEAR OPENING HIGHT SHALL BE 20° AL AND THE MINIMUM NET OLEAR OPENING HIGHT SHALL BE 20° AL AND THE MINIMUM NET OLEAR OPENING HIGHT SHALL BE 20° AL AND THE MINIMUM NET OLEAR OPENING HIGHT SHALL BE 20° AL AND THE MINIMUM NET OLEAR OPENING HIGHT SHALL BE 20° AL AND THE MINIMUM NET OLEAR OPENING HIGHT SHALL BE 20° AL AND THE MINIMUM NET OLEAR OPENING HIGHT SHALL BE 20° AL AND THE MINIMUM NET OLEAR OPENING HIGHT SHALL BE 20° AL AND THE MINIMUM NET OPENING HIGHT SHALL BE 20° AL AND THE MINIMUM NET OLEAR OPENING HIGHT SHALL BE 20° AL AND THE AN

CASE OF AN UPPER STORY WINDOW. (PER NCRC SECTION R310.1.1) ALL HANDRAIL BALLUSTERS TO BE SPACED SUCH THAT A 4" SPHERE CANNOT PASS BETWEEN BALLUSTERS, (PER LOCAL CODES.) PROVIDE STAIR HANDRAILS AND GUARDRAILS PER LOCAL CODES,

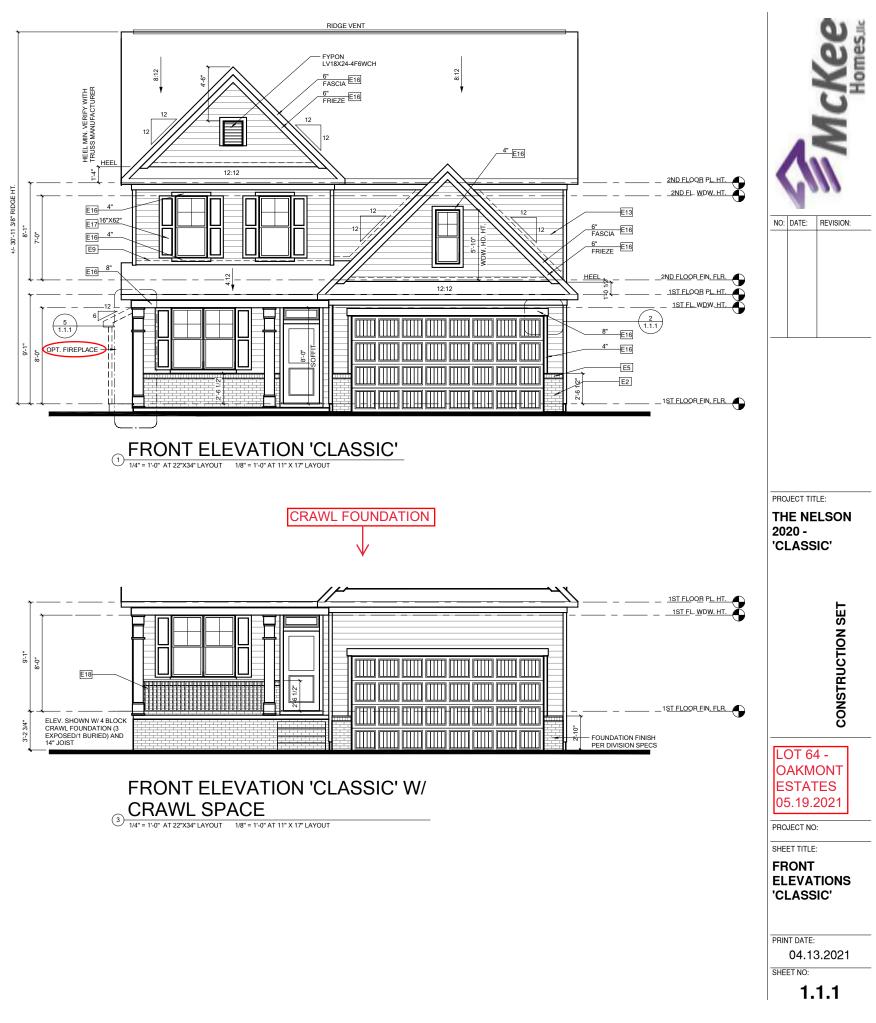


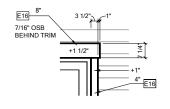


-	NO:	DATE:	REVISIO	Homesuc
	TH 20	IE NE 20 - LASS	LSON	1
-		DT 64	CONSTRUCTION S	
-	O E O PROJ	AKM STAT 5.19.2 FECT NO:	ONT ES	 
		T NO:	3.2021 <b>-1</b>	 

REVISION SCHEDULE					
DATE REQUESTED	<b>REVISION #</b>	DESCRIPTION			
04.13.2021	1.	RELOCATE HVAC PAD TO SIDE OF HOUSE, JUST OUTSIDE POWDER ROOM.			

		McKee	numerolic
NO:	DATE:	REVISION:	
ТН 20:	ECT TITLE E NE 20 - _ASS	LSON	
		CONSTRUCTION SET	
O. E: Ot PROJ	OT 64 AKM STAT 5.19.2 ECT NO:	ONT ES 2021	 
PRIN	T DATE: 04.13	SHEET 3.2021 <b>3-1</b>	







ALL WINDOWS WHOSE OPENING IS LESS THAN 24" ABOVE THE FINISH FLOOR AND WHOSE OPENING IS GREATER THAN 72" ABOVE THE OUTSIDE WALKING SURFACE MUST HAVE WINDOW OPENING CONTROL DEVICES COMPLYING WITH THE 2018 NCBC SECTION B312.2

NOTES:

-GRADE CONDITIONS MAY VARY FOR INDIVIDUAL SITE FROM THAT SHOWN. BUILDER SHALL VERIFY AND COORDINATE PER ACTUAL SITE CONDITIONS.

-WINDOW HEAD HEIGHTS: 1ST FLOOR = 8'-0" U.N.O. ON ELEVATIONS 2ND FLOOR = 7'-0" U.N.O. ON ELEVATIONS

-ROOFING: PITCHED SHINGLES PER BUILDER. INSTALL ALL LOW SLOPE ROOFING IN ACCORDANCE WITH R905 AND MANUFACTURERS SPECS.

WINDOWS: MANUFACTURER PER BUILDER. DIVIDED LITES AS SHOWN ON THE EXTERIOR ELEVATIONS

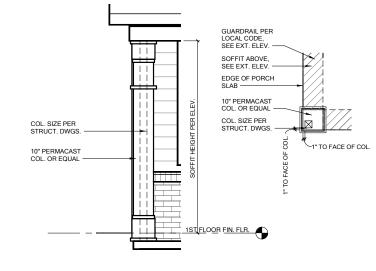
ENTRY DOOR: AS SELECTED BY BUILDER

-CHIMNEY AS OCCURS: TOP OF CHIMNEYS TO BE A MINIMUM OF 24" ABOVE ANY ROOF WITHIN 10'-0" OF CHIMNEY.

-ALL EXTERIOR MATERIALS TO BE INSTALLED PER MANUFACTURER'S ITTEN INSTRUCTIONS.

### ELEVATION KEYNOTE LEGEND

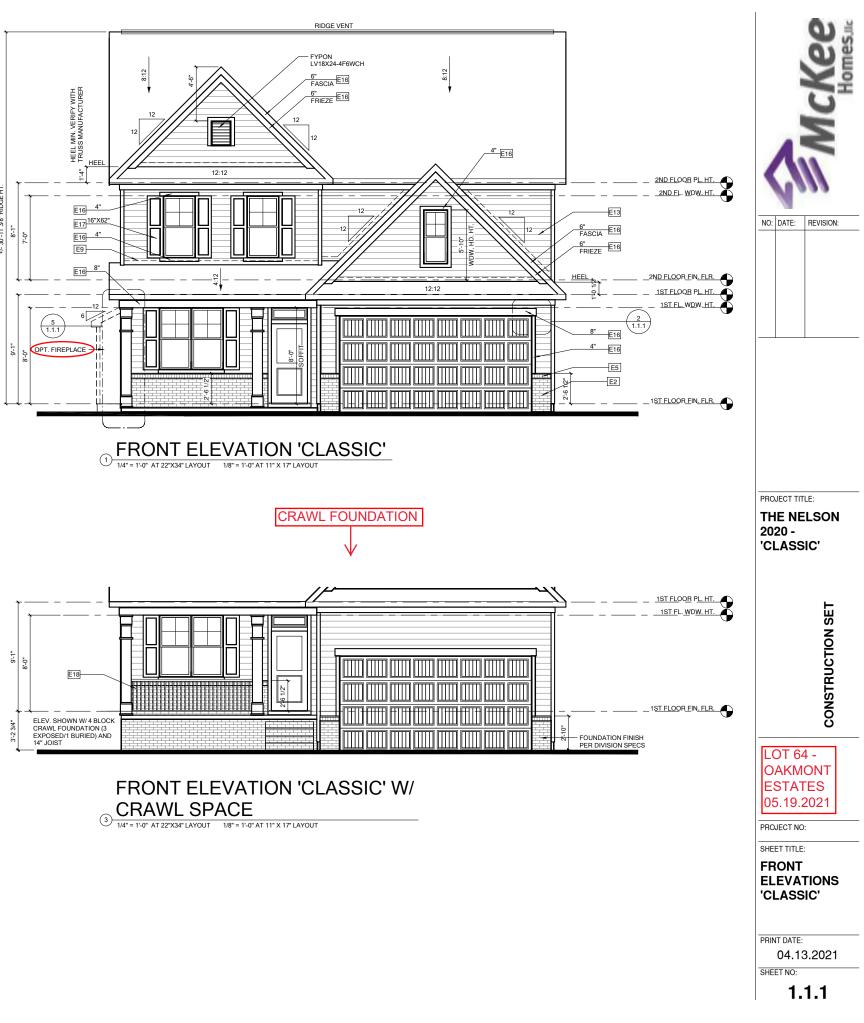
ADHERED STONE VENEER AS SELECTED BY DEVELOPER, HEIGHT AS NOTED. PROVIDE CONT. FLASHING MIN. 4" ABOVE GRADE THROUGH MASONRY VENEER MASONRY FULL BRICK AS SELECTED BY DEVELOPER, HEIGHT AS NOTED ROWLOCK COURSE ROWLOCK COURSE CORROSION RESISTANT ROOF TO WALL FLASHING, CODE COMPLIANT FLASHING MUST BE INSTALLED AT ALL ROOF/WALL INTERSECTIONS FIBER CEMENT SHAKE SDING PER DEVELOPER W/ 5444 CORNER TRIM BOARDS FIBER CEMENT LAP SIDING PER DEVELOPER W/ 5444 CORNER TRIM BOARDS FIBER CEMENT PANEL SIDING W/ 1X3 BATTS AT 16" O.C. (VINYL BOARD AND BATTEN SIDING SIDING CEMENT TRIM OR EQUAL, U.N.O. SIZE AS NOTED. PROVIDE CAP FLASHING AS REQUIRED FOR ALL TRIM W/A NEXPOSED TO P EDGE. E17 FALSE WOOD/VINYL SHUTTERS, TYPE AS SHOWN, SIZE AS NOTED E18 PROVIDE GUARDRAIL PER NCRC SECTION R312

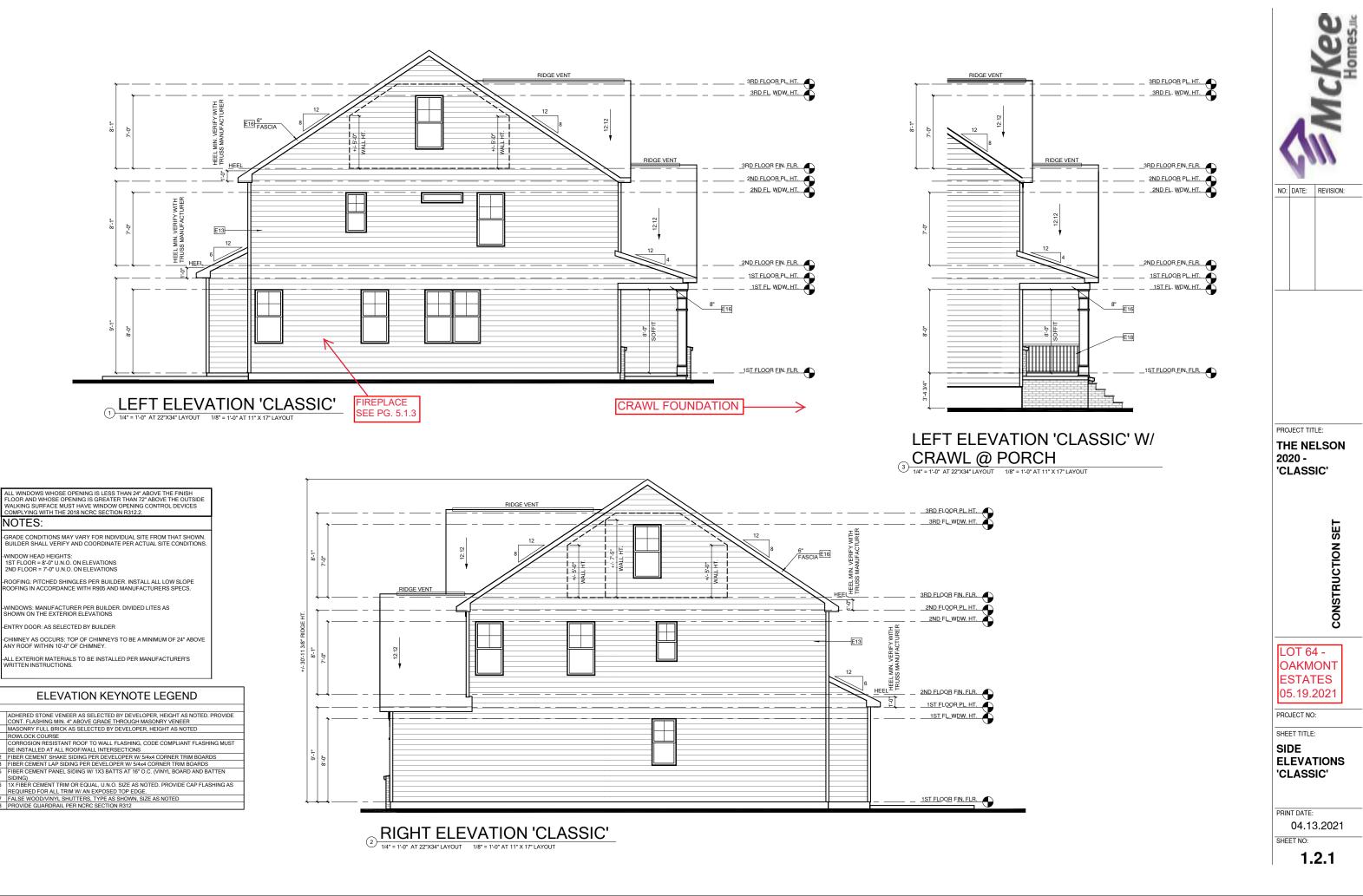


## COLUMN DETAIL 'CLASSIC'

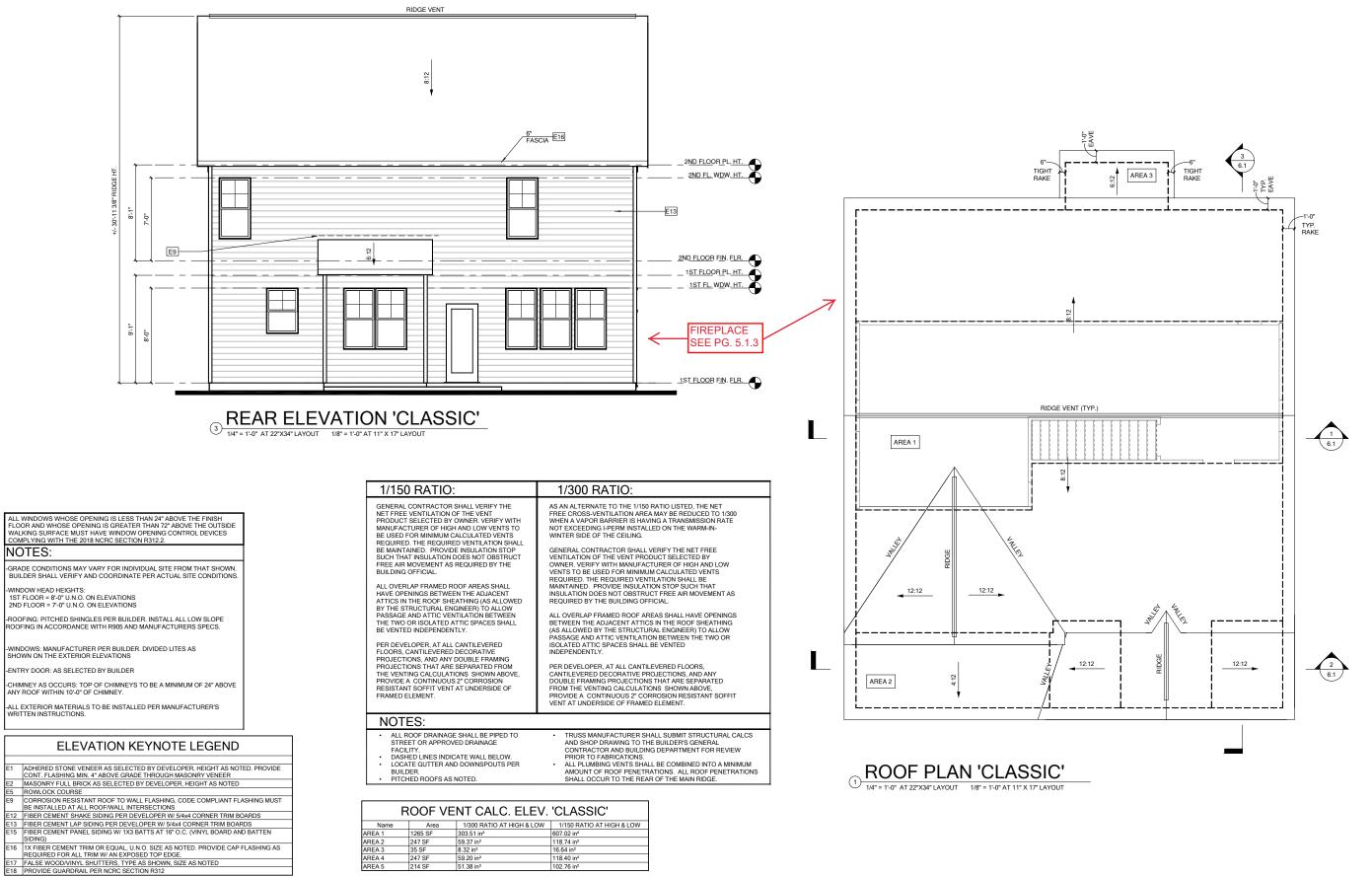
1/2" = 1'-0" AT 22"X34" LAYOUT 1/8" = 1'-0" AT 11" X 17" LAYOUT

(5)



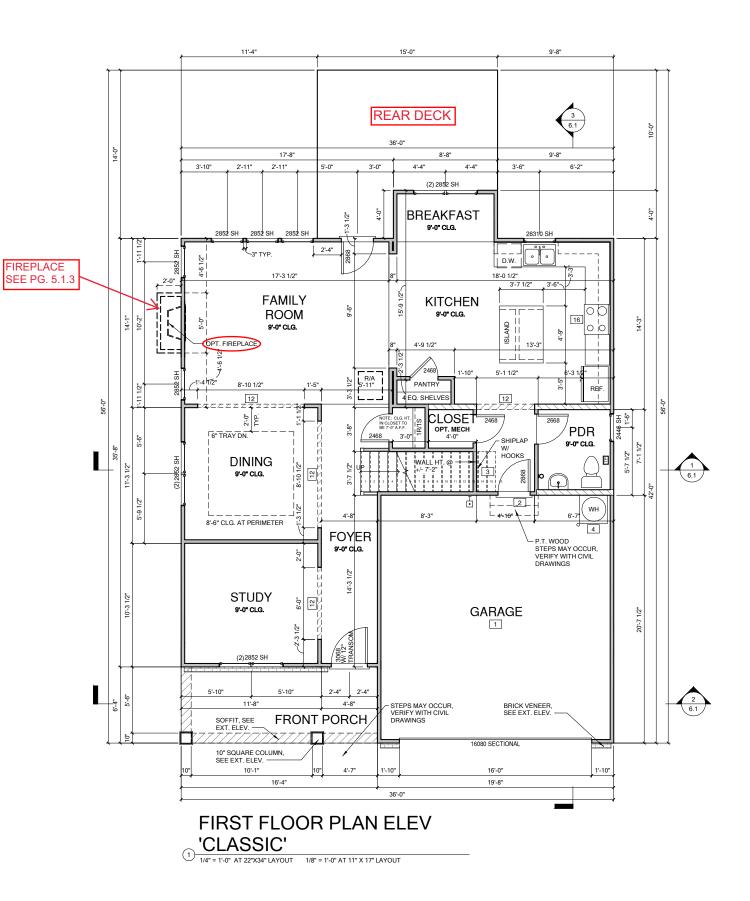


	ELEVATION KEYNOTE LEGEND					
E1	ADHERED STONE VENEER AS SELECTED BY DEVELOPER, HEIGHT AS NOTED. PROVIDE CONT. FLASHING MIN. 4" ABOVE GRADE THROUGH MASONRY VENEER					
E2	MASONRY FULL BRICK AS SELECTED BY DEVELOPER, HEIGHT AS NOTED					
E5	ROWLOCK COURSE					
E9	CORROSION RESISTANT ROOF TO WALL FLASHING, CODE COMPLIANT FLASHING MUST BE INSTALLED AT ALL ROOF/WALL INTERSECTIONS					
E12	FIBER CEMENT SHAKE SIDING PER DEVELOPER W/ 5/4x4 CORNER TRIM BOARDS					
E13	FIBER CEMENT LAP SIDING PER DEVELOPER W/ 5/4x4 CORNER TRIM BOARDS					
E15	FIBER CEMENT PANEL SIDING W/ 1X3 BATTS AT 16" O.C. (VINYL BOARD AND BATTEN SIDING)					
E16	1X FIBER CEMENT TRIM OR EQUAL, U.N.O. SIZE AS NOTED. PROVIDE CAP FLASHING AS REQUIRED FOR ALL TRIM W/ AN EXPOSED TOP EDGE.					
E17	FALSE WOOD/VINYL SHUTTERS, TYPE AS SHOWN, SIZE AS NOTED					
E18	PROVIDE GUARDRAIL PER NCRC SECTION R312					





FULL HEIGHT     FULL HEIGHT       2X4 WOOD STUD PARTITION     2X6 WOOD STUD PARTITION       3     BERCK VENEER       BRICK VENEER     FULL HEIGHT         4     GAS WATER HEATER ON 18" HIGH PLATFORM	WALL LEGEND			FLOOR PLAN KEYNOTE LEGEND
STUD WALL BELOW       SIZE AS NOTED       9       TEMPERED SAFETY GLASS         HEIGHT AND STUD SIZE AS NOTED       INTERIOR SOFETY GLASS       11       HALF WALL, HEIGHT AS NOTED         FULL HEIGHT CMU WALL, SIZE AS NOTED       INTERIOR SOFETIS: FFL = 7-& U.N.O. SFL = 7-& U.N.O. OPT. CASED OPENING U.N.O.       12         13       SHOWER, TEMPERED GLASS ENCLOSURE       14       TUB-SHOWER COMBO         15       ACRYLIC TUB W/ PLATFORM, SIZE AS NOTED       15       ACRYLIC TUB W/ PLATFORM, SIZE AS NOTED         16       SLIDE-IN ELECTRICAL RANGE W/ HOOD AND MICRO ABV. VENT PER MANUFACTURERS WRITTEN INSTRUCTIONS       NOTED	2X4 WOOD STUD PARTITION	FULL HEIGHT 2K6 WOOD STUD PARTITION 1====== DRYWALL OPENING HEIGHT AS NOTED ON PLAN TO CONCRETE WALL, SIZE AS NOTED FULL HEIGHT FULL HEIGHT	3 4 7 9 11 12 13 14 15 16	HOUSE TO GARAGE DOOR SEPARATION. PROVIDE 1 3/8" SOLID CORE DOOR OR APPROVED 20 MINUTE RATED DOOR BENEATH STAIRS AND LANDINGS. 1/2" GYPSUM BOARD ON WALLS AND CEILING OF ENCLOSED ACCESSIBLE AREAS GAS WATER HEATER ON 18" HIGH PLATFORM PRE-FABRICATED METAL. FIREPLACE, INSTALL PER MANUFACTURER WRITTEN INSTRUCTIONS TEMPERED SAFETY GLASS HALF WALL, HEIGHT AS NOTED INTERIOR SOFFITS: FFL = 7-8" U.N.O. SFL = 7-6" U.N.O., OPT. CASED OPENING U.N.O. SHOWER, TEMPERED GLASS ENCLOSURE TUB-SHOWER COMBO ACRYLIC TUB WI PLATFORM, SIZE AS NOTED SLIDE-IN ELECTRICAL RANGE W/ HOOD AND MICRO ABV. VENT PER MANUFACTURER'S WRITTEN





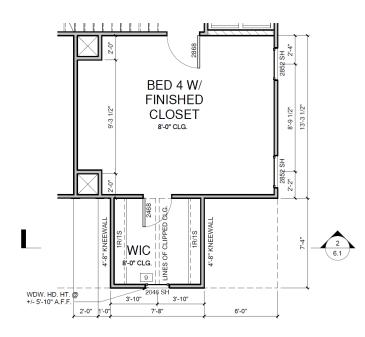
WALL LEGEND	
FULL HEIGHT 2X4 WOOD STUD PARTITION STONE VENEER	FULL HEIGHT 2X6 WOOD STUD PARTITION ======== DRYWALL OPENING HEIGHT AS NOTED ON PLAN
BRICK VENEER STUD WALL BELOW HEIGHT AND STUD SIZE AS NOTED	FULL HEIGHT POURED CONCRETE WALL, SIZE AS NOTED FULL HEIGHT FULL HEIGHT CMU WALL, SIZE AS NOTED

#### FLOOR PLAN KEYNOTE LEGEND

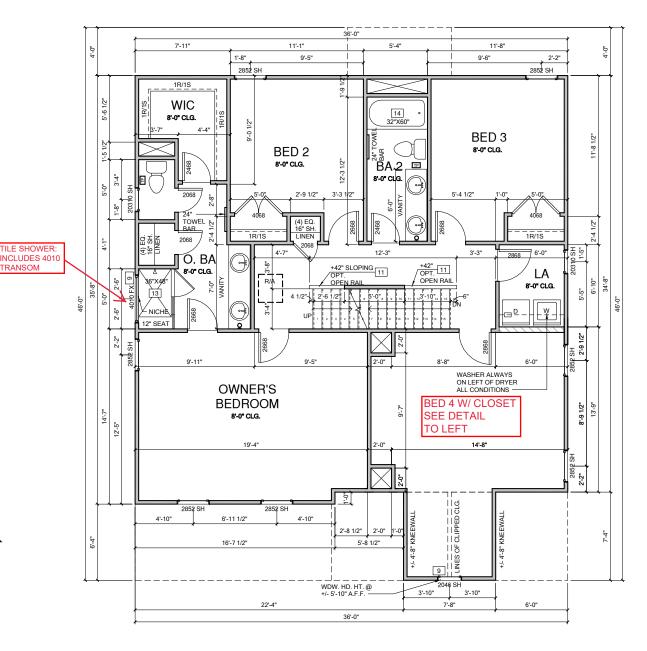
HOUSE TO GARAGE FIRE SEPARATION, GARAGE/HOUSE SEPARATION AT VERTICAL SURFACES SHALL BE PROTECTED WITH ONE (1) LAYER 1/2" GYPSUM BOARD. GARAGE/HOUSE SEPARATION AT HORIZONTAL SURFACES SHALL BE PROTECTED WITH ONE (1) LAYER 5/8" TYPE "3" GYPSUM BOARD. WITH HABITABLE SPACE ABOVE GARAGE, ALL WALLS REQUIRE MINIMUM 1/2 INCH GB. (PER NCRC TABLE R302.6). HOUSE TO GARAGE DOOR SEPARATION. PROVIDE 1 3/8" SOLID CORE DOOR OR APPROVED 20 MINUTE RATED DOOR BENEATH STAIRS AND LANDINGS. 1/2" GYPSUM BOARD ON WALLS AND CEILING OF ENCLOSED ACCESSIBLE A BEAS

- BENEALT STATIS AND ENDERING ENDERING. WE STOLEN TO ACCESSIBLE AREAS GAS WATER HEATER ON 18" HIGH PLATFORM PRE-FABRICATED METAL FIREPLACE, INSTALL PER MANUFACTURER WRITTEN INSTRUCTIONS

- PRE-FABRICATED METAL FIREPLACE, INSTALL PER MANUFACTURER WRITTEN INST TEMPERED SAFETY GLASS HALF WALL, HEIGHT AS NOTED INTERIOR SOFFITS: FFL = 7-8" U.N.O. SFL = 7-6" U.N.O., OPT. CASED OPENING U.N.C SHOWER, TEMPERED GLASS ENCLOSURE TUB-SHOWER COMBO
- ACRYLIC TUB W/ PLATFORM, SIZE AS NOTED SUIDE-IN ELECTRICAL RANGE W/ HOOD AND MICRO ABV. VENT PER MANUFACTURER'S WRITTEN INSTRUCTIONS
- ACCESS HATCH/DOOR. FULLY WEATHER STRIPPED AND INSULATED. (PER NCRC SECTION N1102.2.4)







SECOND FLOOR PLAN ELEV 'CLASSIC' 
 1/4" = 1'-0" AT 22"X34" LAYOUT
 1/8" = 1'-0" AT 11" X 17" LAYOUT

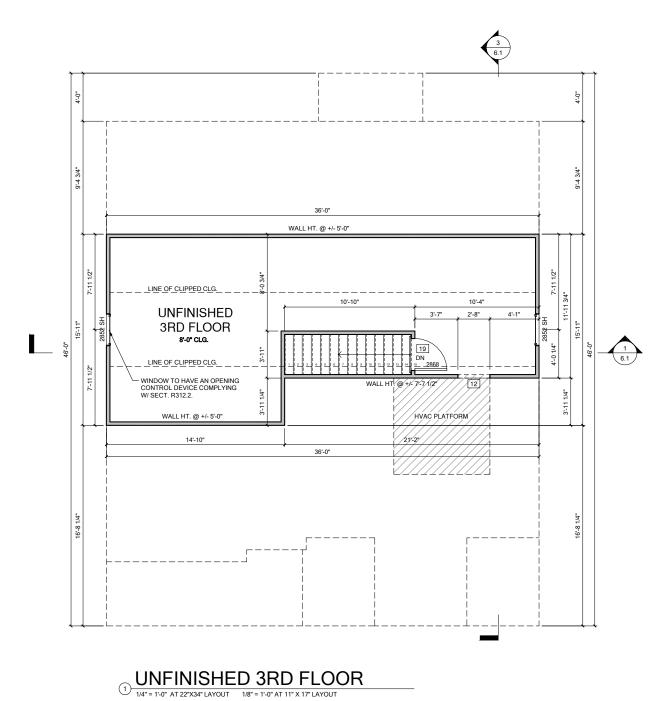


### WALL LEGEND

FULL HEIGHT 2X4 WOOD STUD PARTITION	FULL HEIGHT 2X6 WOOD STUD PARTITION
STONE VENEER	DRYWALL OPENING HEIGHT AS NOTED ON PLAN
BRICK VENEER	FULL HEIGHT
STUD WALL BELOW HEIGHT AND STUD SIZE AS NOTED	POURED CONCRETE WALL, SIZE AS NOTED
	FULL HEIGHT

### FLOOR PLAN KEYNOTE LEGEND

1	HOUSE TO GARAGE FIRE SEPARATION, GARAGE/HOUSE SEPARATION AT VERTICAL SURFACES SHALL BE PROTECTED WITH ONE (1) LAYER 1/2" GYPSUM BOARD, GARAGE/HOUSE SEPARATION AT HORIZONTAL
	SURFACES SHALL BE PROTECTED WITH ONE (1) LAYER 5/8" TYPE "X" GYPSUM BOARD. WITH HABITABLE
	SPACE ABOVE GARAGE, ALL WALLS REQUIRE MINIMUM 1/2 INCH GB. (PER NCRC TABLE R302.6).
2	HOUSE TO GARAGE DOOR SEPARATION, PROVIDE 1.3/8" SOLID CORE DOOR OR APPROVED 20 MINUTE
2	RATED DOOR
3	BENEATH STAIRS AND LANDINGS. 1/2" GYPSUM BOARD ON WALLS AND CEILING OF ENCLOSED
	ACCESSIBLE AREAS
4	GAS WATER HEATER ON 18" HIGH PLATFORM
7	PRE-FABRICATED METAL FIREPLACE, INSTALL PER MANUFACTURER WRITTEN INSTRUCTIONS
9	TEMPERED SAFETY GLASS
11	HALF WALL, HEIGHT AS NOTED
12	INTERIOR SOFFITS: FFL = 7'-8" U.N.O. SFL = 7'-6" U.N.O., OPT. CASED OPENING U.N.O.
13	SHOWER, TEMPERED GLASS ENCLOSURE
14	TUB-SHOWER COMBO
15	ACRYLIC TUB W/ PLATFORM, SIZE AS NOTED
16	SLIDE-IN ELECTRICAL RANGE W/ HOOD AND MICRO ABV. VENT PER MANUFACTURER'S WRITTEN
	INSTRUCTIONS
19	ACCESS HATCH/DOOR, FULLY WEATHER STRIPPED AND INSULATED, (PER NCRC SECTION N1102.2.4)



		MCKee
NO:	DATE:	REVISION:
ТН 20	JECT TIT IE NE 20 - _ASS	ilson IC'
		CONSTRUCTION SET
O. E: Ot PRO SHE	OT 64 AKM STAT 5.19.2 JECT NO ET TITLE IRD I AN	ONT ES 2021
	et no:	3.2021 <b>3.1</b>

#### CRAWL SPACE NOTES FOR NORTH CAROLINA:

REFER TO STRUCTURAL DRAWINGS FOR INFORMATION NOT SHOWN ON THIS PLAN

FOR ADDITIONAL NOTES SEE GENERAL NOTES ON TITLE SHEET AND DETAILS.

PROVIDE FIREBLOCKING. (PER NCRC SECTION R602.8)

ALL ELECTRICAL AND MECHANICAL EQUIPMENT AND METERS ARE SUBJECT TO RELOCATION DUE TO FIELD CONDITIONS, CONTRACTOR TO VERIFY.

-VERIFY ALL DOOR THRESHOLD HEIGHTS TO HARD S URFACES. 8 1/4" MAX AT INSWING DOORS. (PER NCRC SECTION R311.3.1)

-SLOPE ALL STOOPS AND HARDSCAPE MATERIAL AWAY FROM BUILDING - TYPICAL

-SLOPE GARAGE FLOOR 1/8" PER FOOT TO GARAGE DOOR OPENING.

VERIEV CURB CUT BLOCKOUT WITH GARAGE DOOR MANUEACTURER

REFER TO CIVIL DRAWINGS FOR FINISH SURFACE ELEVATIONS

-AT VENTED CRAWL SPACE

-TYP. STOOP AT INSWING/SLIDER DOORS: 36" DEEP BY THE WIDTH OF THE DOOR SERVED, MINIMUM (PER NCRC SECTIONS R311.3) PROVIDE A SLIP-RESISTANT FINISH.

-SOILS TREATMENT -SOLIS I INCATIVENTI. 100% GROUND COVERAGE OVER FINISHED GRADE/CRAWL SPACE, EITHER BAIT STATIONS OR CHEMICAL TREATMENT FOR PROTECTION FROM TERMITE INVESTATION ACCORDING TO THE STANDARDS OF THE NC DEPT. OF AGRICULTURE.

APPLY AN APPROVED VAPOR RETARDER OR EQUIVALENT, 6 MIL POLY-VINYL, GROUND COVER OVER FINISH GRADE OR CRAWL SPACE PER NCRC SECTION 408.2

-PROVIDE VENTS SPACED AROUND PERIMETER TO PROMOTE CROSS VENTILATION AT A RATE OF 1 SF VENT FOR EVERY 1500 SF OF CRAWL FLOOR AREA. ONE VENT MUST BE LOCATED WITHIN 3-0" OF EACH CORNER OF THE BUILDING AND LOCATED TO ALLOW FOR CROSS VENTILATION. (PER NCRC SECTION R408.1.1 EXCEPTION.)

-PROVIDE AN ACCESS OPENING, MINIMUM SIZE OF 18"X24" FOR CRAWL ACCESS. COORDINATE WITH MECHANICAL CONTRACTOR FOR LARGER SIZE REQUIREMENTS IF MECHANICAL EQUIPMENT IS LOCATED IN CRAWL. (PER NCRC SECTION 408.8)

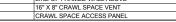
-WOOD CONTACTING CONCRETE OR MASONRY OR LESS THAN CODE REQUIRED SEPARATION TO GRADE SHALL BE PRESSURE TREATED OR FOUNDATION GRADE REDWOOD. SET ALL EXTERIOR WALL SILLS IN MASTIC.

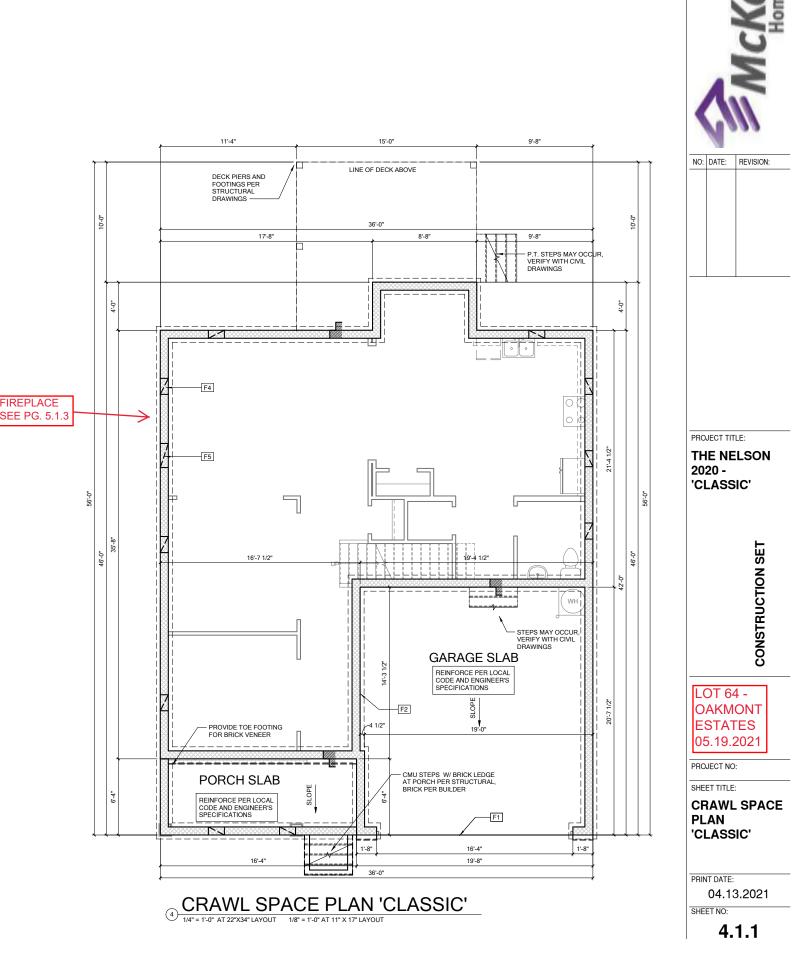
CRAWL SPACE VENT CALC. 'CLASSIC'					
Name	Area	1/150 VENT REQ.	1/1500 VENT REQ.		
AREA 1	1042 SF	6.95 SF	0.69 SF		

# **REFER TO STRUCTURAL** DRAWINGS FOR ALL FOUNDATION DIMENSIONS



LINE OF SLAB ABOVE LINE OF FRAMED WALL ABOVE





WALL LEGEND	
FULL HEIGHT 2X4 WOOD STUD PARTITION	FULL HEIGHT 2X6 WOOD STUD PARTITIC
STONE VENEER	DRYWALL OPENING HEIGH AS NOTED ON PLAN
	CMU WALL, SIZE AS NOTE

#### FLOOR PLAN KEYNOTE LEGEND

1	HOUSE TO GARAGE FIRE SEPARATION, GARAGE/HOUSE SEPARATION AT VERTICAL SURFACES SHALL BE PROTECTED WITH ONE (1) LAYER 1/2" GYPSUM BOARD. GARAGE/HOUSE SEPARATION AT HORIZONTAL SURFACES SHALL BE PROTECTED WITH ONE (1) LAYER 5/8" TYPE "X" GYPSUM BOARD. WITH HABITABLE SPACE ABOVE GARAGE, ALL WALLS REQUIRE MINIMUM 1/2 INCH GB. (PER NCRC TABLE R302.6).
2	HOUSE TO GARAGE DOOR SEPARATION. PROVIDE 1 3/8" SOLID CORE DOOR OR APPROVED 20 MINUTE RATED DOOR
3	BENEATH STAIRS AND LANDINGS. 1/2" GYPSUM BOARD ON WALLS AND CEILING OF ENCLOSED ACCESSIBLE AREAS
4	GAS WATER HEATER ON 18" HIGH PLATFORM
7	PRE-FABRICATED METAL FIREPLACE, INSTALL PER MANUFACTURER WRITTEN INSTRUCTIONS
9	TEMPERED SAFETY GLASS
11	HALF WALL, HEIGHT AS NOTED
12	INTERIOR SOFFITS: FFL = 7'-8" U.N.O. SFL = 7'-6" U.N.O., OPT. CASED OPENING U.N.O.
13	SHOWER, TEMPERED GLASS ENCLOSURE
14	TUB-SHOWER COMBO
15	ACRYLIC TUB W/ PLATFORM, SIZE AS NOTED
16	SLIDE-IN ELECTRICAL RANGE W/ HOOD AND MICRO ABV. VENT PER MANUFACTURER'S WRITTEN INSTRUCTIONS
19	ACCESS HATCH/DOOR. FULLY WEATHER STRIPPED AND INSULATED. (PER NCRC SECTION N1102.2.4)

#### ELEVATION KEYNOTE LEGEND

E1	ADHERED STONE VENEER AS SELECTED BY DEVELOPER, HEIGHT AS NOTED. PROVIDE CONT. FLASHING MIN. 4" ABOVE GRADE THROUGH MASONRY VENEER
E2	MASONRY FULL BRICK AS SELECTED BY DEVELOPER, HEIGHT AS NOTED
E5	ROWLOCK COURSE
E9	CORROSION RESISTANT ROOF TO WALL FLASHING, CODE COMPLIANT FLASHING MUST BE INSTALLED AT ALL ROOF/WALL INTERSECTIONS
E12	FIBER CEMENT SHAKE SIDING PER DEVELOPER W/ 5/4x4 CORNER TRIM BOARDS
E13	FIBER CEMENT LAP SIDING PER DEVELOPER W/ 5/4x4 CORNER TRIM BOARDS
E15	FIBER CEMENT PANEL SIDING W/ 1X3 BATTS AT 16" O.C. (VINYL BOARD AND BATTEN SIDING)
E16	1X FIBER CEMENT TRIM OR EQUAL, U.N.O. SIZE AS NOTED. PROVIDE CAP FLASHING AS REQUIRED FOR ALL TRIM W/ AN EXPOSED TOP EDGE.
E17	FALSE WOOD/VINYL SHUTTERS, TYPE AS SHOWN, SIZE AS NOTED
E18	PROVIDE GUARDRAIL PER NCRC SECTION R312

# ALL WINDOWS WHOSE OPENING IS LESS THAN 24" ABOVE THE FINISH FLOOR AND WHOSE OPENING IS GREATER THAN 72" ABOVE THE OUTSIDE WALKING SURFACE MUST HAVE WINDOW OPENING CONTROL DEVICES COMPLYING WITH THE 2018 NCRC SECTION R312.2.

#### NOTES:

-GRADE CONDITIONS MAY VARY FOR INDIVIDUAL SITE FROM THAT SHOWN. BUILDER SHALL VERIFY AND COORDINATE PER ACTUAL SITE CONDITIONS.

WINDOW HEAD HEIGHTS: 1ST FLOOR = 8'-0" U.N.O. ON ELEVATIONS 2ND FLOOR = 7'-0" U.N.O. ON ELEVATIONS

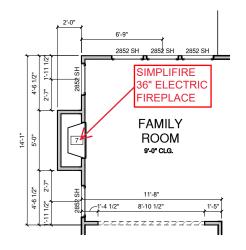
ROOFING: PITCHED SHINGLES PER BUILDER. INSTALL ALL LOW SLOPE ROOFING IN ACCORDANCE WITH R905 AND MANUFACTURERS SPECS.

INDOWS: MANUFACTURER PER BUILDER, DIVIDED LITES AS SHOWN ON THE EXTERIOR ELEVATIONS

ENTRY DOOR: AS SELECTED BY BUILDER

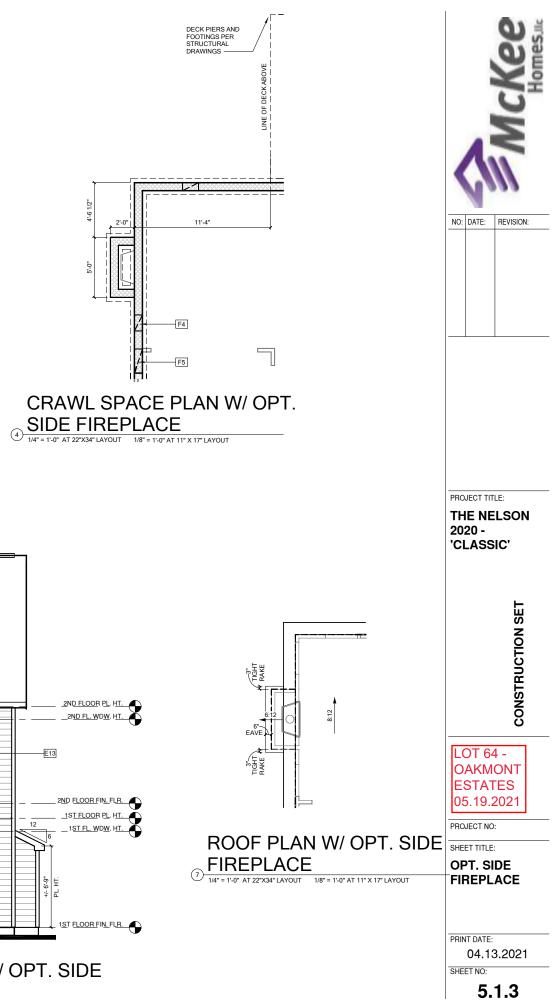
CHIMNEY AS OCCURS: TOP OF CHIMNEYS TO BE A MINIMUM OF 24" ABOVE NY ROOF WITHIN 10'-0" OF CHIMNEY.

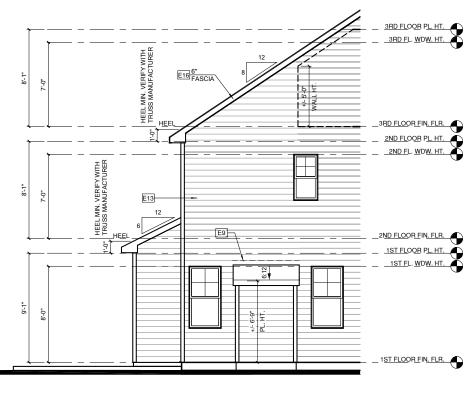
-ALL EXTERIOR MATERIALS TO BE INSTALLED PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

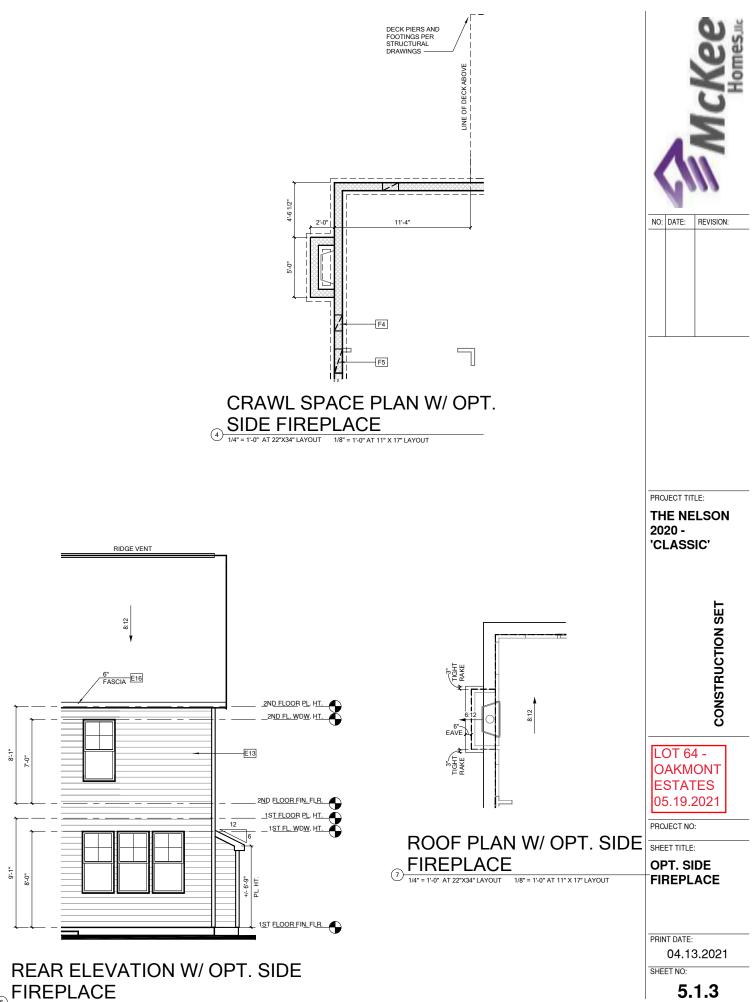


OPT. SIDE FIREPLACE

(1)





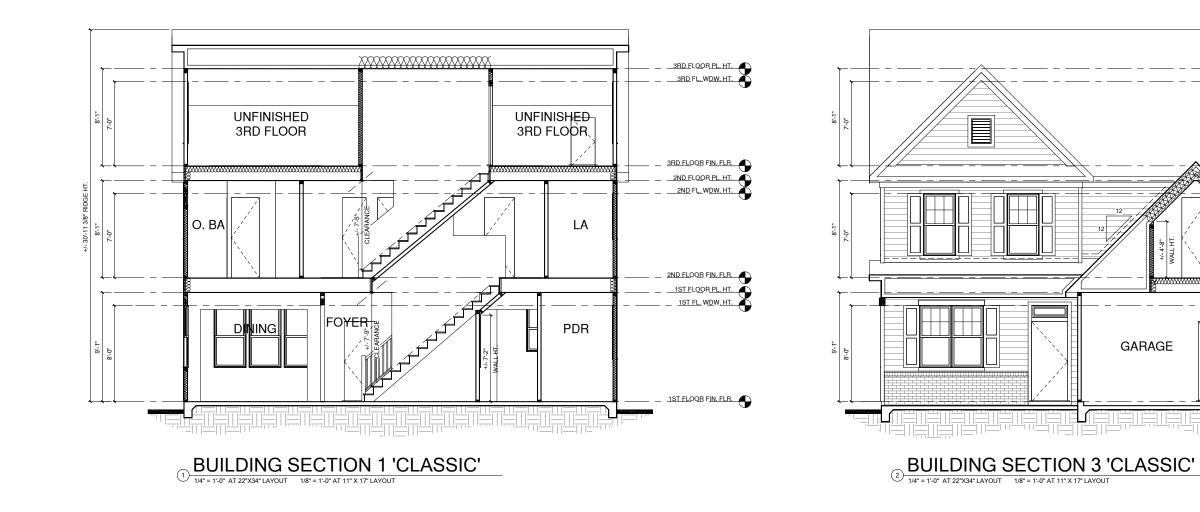


6 1/4" = 1'-0" AT 22"X34" LAYOUT 1/8" = 1'-0" AT 11" X 17" LAYOUT

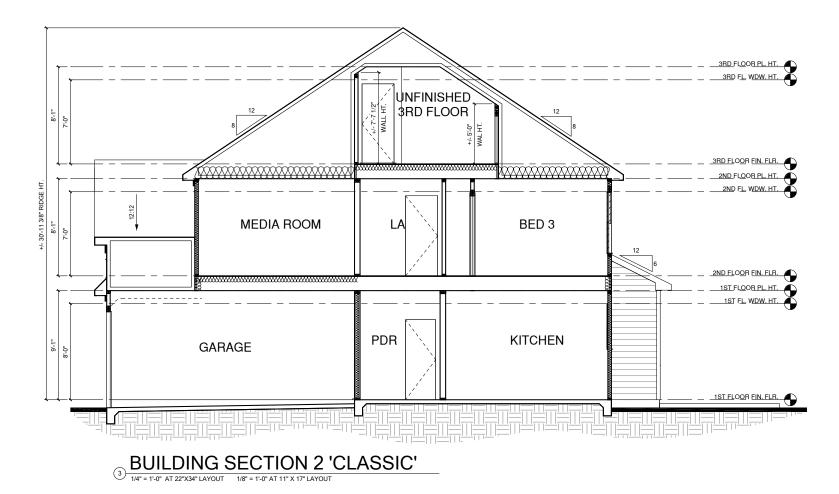


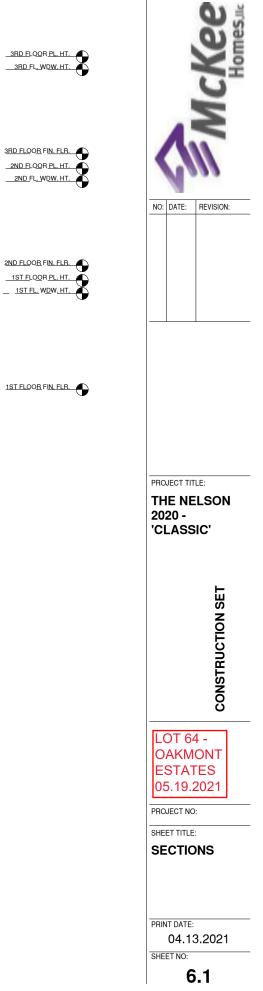
5 1/4" = 1'-0" AT 22"X34" LAYOUT 1/8" = 1'-0" AT 11" X 17" LAYOUT

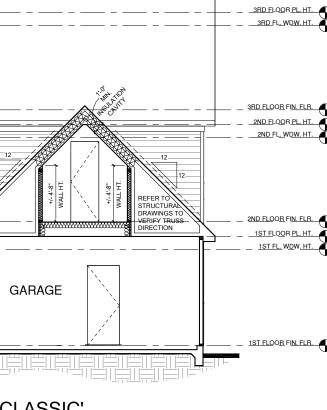
FIREPLACE

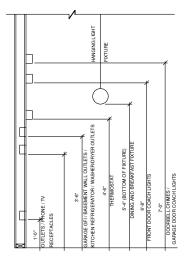


	INSULATION VALUES PER TABLE R402.1.2 OF THE 2018 NC ENERGY CONSERVATION CODE.					
CLIMATE ZONE	FENESTRATION U-FACTOR	CEILING	WALLS	FLOOR	SLAB	
ZONE 3	0.35	R-38	R-15	R-19	0	
ZONE 4	0.35	R-38	R-15	R-19	R-10	
ZONE 5	0.35	R-38	R-15	R-30	R-10	

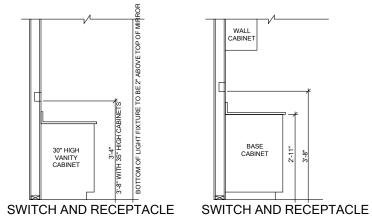








### STANDARD ELECTRICAL BOX HEIGHTS



## SWITCH AND RECEPTACLE

#### BOXES OVER BATH CABINETS BOXES OVER KITCHEN CABINETS

#### NOTES:

-PROVIDE GROUNDING ELECTRICAL ROD PER LOCAL CODES.

-PROVIDE AND INSTALL ARC FAULT CIRCUIT-INTERRUPTERS (AFCI) AS REQUIRED BY NATIONAL ELECTRICAL CODE (NEC) AND MEETING THE REQURIEMENTS OF ALL GOVERNING CODES.

ALL EXHAUST FANS SHALL HAVE BACKDRAFT DAMPERS

FAN/LIGHTS IN WET/DAMP LOCATIONS SHALL BE LABLED "SUITABLE FOR WET OR DAMP LOCATIONS."

-ELECTRICAL SYSTEMS ARE SHOWN FOR INTENT ONLY. THESE SYSTEMS SHALL BE ENGINEERED BY THERS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND PLACEMENT.

PROVIDE AND INSTALL LOCALLY CERTIFIED SMOKE DETECTORS AND CO2 DETECTORS AS REQUIRED BY NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES.

PROVIDE AND INSTALL GROUND FAULT CIRCUIT-INTERRUPTERS (GFI) AS REQUIRED BY NATIONAL ELECTRICAL CODE (NEC) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES.

ELECTRICAL CONTRACTOR TO PROVIDE REQURIED DIRECT HOOK-UPS/CUTOFFS.

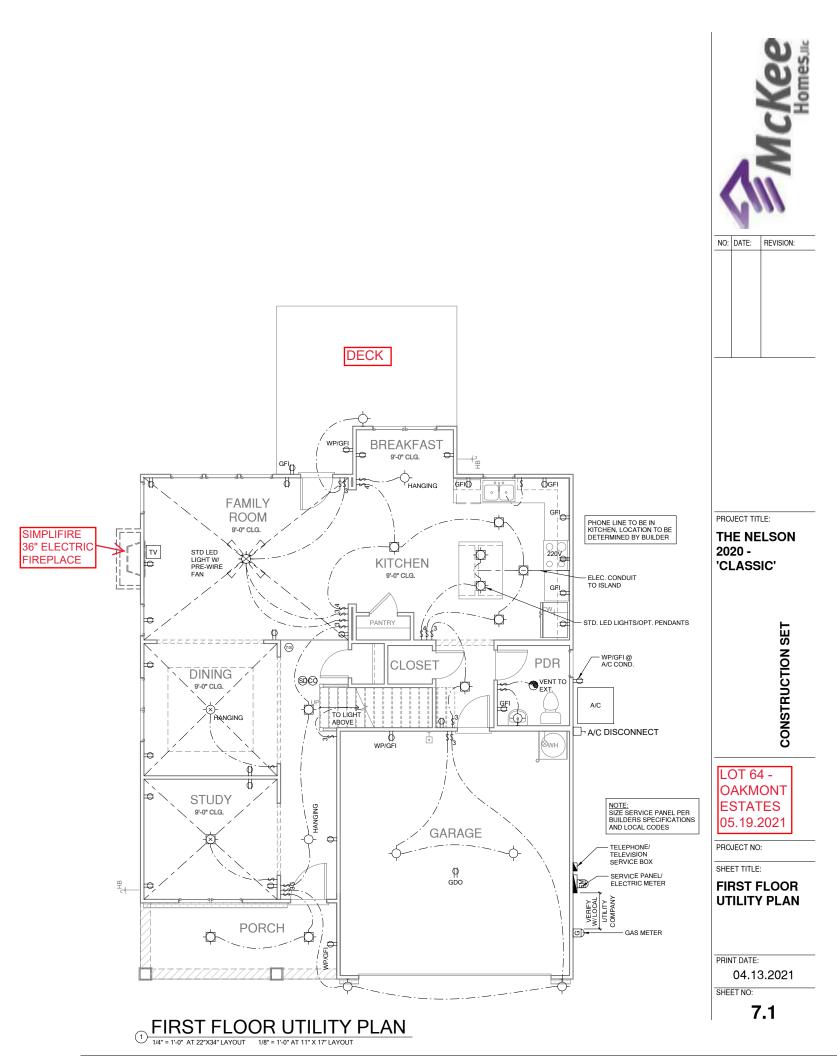
HVAC CONTRACTOR TO VERIFY THERMOSTAT LOCATIONS.

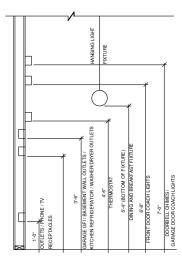
-ALL ELECTRICAL AND MECHANICAL EQUIPMENT (FURNACES, A/C UNITS, ELECTRICAL PANELS, SANITARY SUMP PITS, DRAING TILE SUMP, AND WATER HEATERS) ARE SUBJECT TO RELOCATOIN DUE TO FIELD CONDITIONS.

-PROVIDE POWER, LIGHT AND SWITCH AS REQUIRED FOR ATTIC FURNACE PER CODE AND MANUFACTURER'S WRITTEN INSTRUCTIONS.

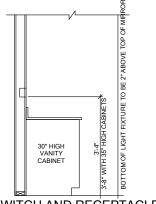
### 

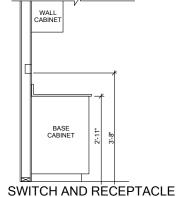
LEGE	:ND:		
ф	DUPLEX OUTLET	$\wedge$	CEILING MOUNTED INCANDESCENT LIGHT FIXTURE
Øw₽/GFI	WEATHERPROOF GFI DUPLEX OUTLET	Υ	CEILING MOUNTED INCANDESCENT LIGHT FIXTURE
₽ <sub>GFI</sub>	GROUND-FAULT CIRCUIT- INTERRUPTER DUPLEX OUTLET	-0-	WALL MOUNTED INCANDESCENT LIGHT FIXUTRE
P	HALF-SWITCHED DUPLEX OUTLET	-	
₽ 220V	220 VOLT OUTLET	]-Q-	SURFACE MOUNT LED LIGHT FIXTURE (VP) = VAPOR PROOF
J	REINFORCED JUNCTION BOX	0	EXHAUST FAN (VENT TO EXTERIOR)
\$	WALL SWITCH	r ha	EXHAUST FAN/LIGHT COMBINATION
\$3	THREE-WAY SWITCH	147	(VENT TO EXTERIOR)
\$4	FOUR-WAY SWITCH	$\sim$	1 FLUORESCENT LIGHT FIXTURE
CH	CHIMES		
9	PUSHBUTTON SWITCH		L TECH HUB SYSTEM
Sd	110V SMOKE DETECTOR W/ BATTERY BACKUP	X	CEILING FAN (PROVIDE ADEQUATE SUPPORT)
Co	CO2 DETECTOR		>
T	THERMOSTAT	1業	CEILING FAN WITH INCANDESCENT LIGHT FIXTURE (PROVIDE ADEQUATE SUPPORT)
PH	TELEPHONE		\$(************************************
TV	TELEVISION	1 ⊷	GAS SUPPLY WITH VALVE
	ELECTRIC METER	-+	, HOSE BIBB
	ELECTRIC PANEL	HE	1002 5155
	DISCONNECT SWITCH	-tcv	1/4" WATER STUB OUT N
		-X	WALL SCONCE





### STANDARD ELECTRICAL BOX HEIGHTS





#### SWITCH AND RECEPTACLE BOXES OVER BATH CABINETS BOXES OVER KITCHEN CABINETS

#### NOTES:

PROVIDE GROUNDING ELECTRICAL ROD PER LOCAL CODES.

PROVIDE AND INSTALL ARC FAULT CIRCUIT-INTERRUPTERS (AFCI) AS REQUIRED BY NATIONAL ELECTRICAL CODE (NEC) AND MEETING THE REQURIEMENTS OF ALL GOVERNING CODES.

ALL EXHAUST FANS SHALL HAVE BACKDRAFT DAMPERS

FAN/LIGHTS IN WET/DAMP LOCATIONS SHALL BE LABLED "SUITABLE FOR WET OR DAMP LOCATIONS." FLECTRICAL SYSTEMS ARE SHOWN FOR INTENT ONLY. THESE SYSTEMS SHALL BE ENGINEERED BY

OTHERS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND PLACEMENT

PROVIDE AND INSTALL LOCALLY CERTIFIED SMOKE DETECTORS AND CO2 DETECTORS AS REQUIRED BY NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES.

-PROVIDE AND INSTALL GROUND FAULT CIRCUIT-INTERRUPTERS (GFI) AS REQUIRED BY NATIONAL ELECTRICAL CODE (NEC) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES.

-ELECTRICAL CONTRACTOR TO PROVIDE REQURIED DIRECT HOOK-UPS/CUTOFFS

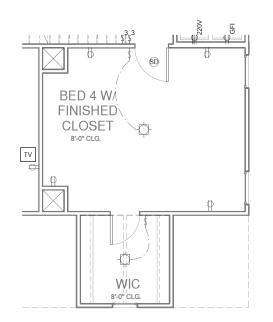
HVAC CONTRACTOR TO VERIFY THERMOSTAT LOCATIONS.

ALL ELECTRICAL AND MECHANICAL EQUIPMENT (FURNACES, A/C UNITS, ELECTRICAL PANELS, SANITARY SUMP PITS, DRAING TILE SUMP, AND WATER HEATERS) ARE SUBJECT TO RELOCATOIN DUE TO FIELD CONDITIONS.

-PROVIDE POWER, LIGHT AND SWITCH AS REQUIRED FOR ATTIC FURNACE PER CODE AND MANUFACTURER'S WRITTEN INSTRUCTIONS.

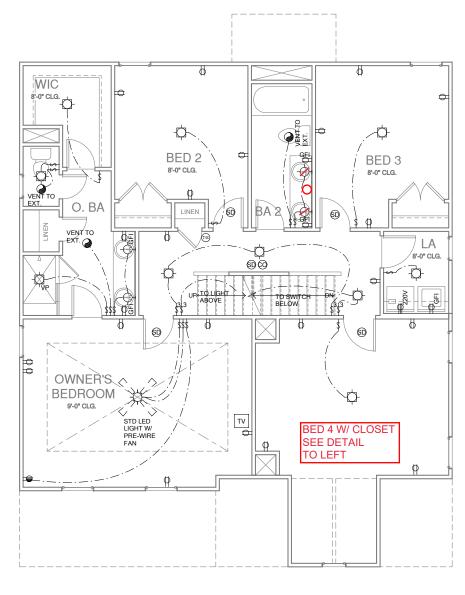
LEGEND:
---------

LEGE	IND:		
φ	DUPLEX OUTLET	6	
Øw₽/GFI	WEATHERPROOF GFI DUPLEX OUTLET	ľΥ	CEILING MOUNTED INCANDESCENT LIGHT FIXTURE
₽ <sub>GFI</sub>	GROUND-FAULT CIRCUIT- INTERRUPTER DUPLEX OUTLET	-0-	WALL MOUNTED INCANDESCENT LIGHT FIXUTRE
P	HALF-SWITCHED DUPLEX OUTLET	-	
₽ <sub>220V</sub>	220 VOLT OUTLET	]-Q-	SURFACE MOUNT LED LIGHT FIXTURE (VP) = VAPOR PROOF
J	REINFORCED JUNCTION BOX		EXHAUST FAN (VENT TO EXTERIOR)
\$	WALL SWITCH	- m	EXHAUST FAN/LIGHT COMBINATION
\$3	THREE-WAY SWITCH		(VENT TO EXTERIOR)
\$4	FOUR-WAY SWITCH		FLUORESCENT LIGHT FIXTURE
СН	CHIMES		TECH HUB SYSTEM
Ŧ	PUSHBUTTON SWITCH		
SD	110V SMOKE DETECTOR W/ BATTERY BACKUP	K	CEILING FAN (PROVIDE ADEQUATE SUPPORT)
Co	CO2 DETECTOR		>
T	THERMOSTAT	1 💥	CEILING FAN WITH INCANDESCENT LIGHT FIXTURE (PROVIDE ADEQUATE SUPPORT)
PH	TELEPHONE		
TV	TELEVISION	⊢⊗	GAS SUPPLY WITH VALVE
<u>۵</u>	ELECTRIC METER		HOSE BIBB
	ELECTRIC PANEL		
-	DISCONNECT SWITCH	t_t	1/4" WATER STUB OUT V
		-X	WALL SCONCE



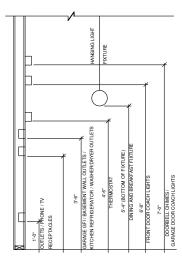
# OPT. BED 4 W/ FINISHED CLOSET UTILITY PLAN

2 1/4" = 1'-0" AT 22"X34" LAYOUT 1/8" = 1'-0" AT 11" X 17" LAYOUT

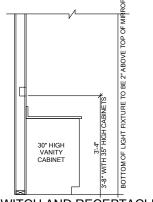


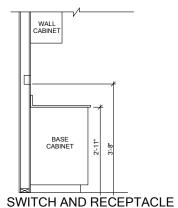


McK NO: DATE: REVISION: PROJECT TITLE: THE NELSON 2020 -'CLASSIC' **CONSTRUCTION SET** LOT 64 -OAKMONT ESTATES 05.19.2021 PROJECT NO: SHEET TITLE: SECOND FLOOR UTILITY PLAN PRINT DATE: 04.13.2021 SHEET NO: 7.2



### STANDARD ELECTRICAL BOX HEIGHTS





#### SWITCH AND RECEPTACLE BOXES OVER BATH CABINETS BOXES OVER KITCHEN CABINETS

#### NOTES:

PROVIDE GROUNDING ELECTRICAL ROD PER LOCAL CODES.

-PROVIDE AND INSTALL ARC FAULT CIRCUIT-INTERRUPTERS (AFCI) AS REQUIRED BY NATIONAL ELECTRICAL CODE (NEC) AND MEETING THE REQURIEMENTS OF ALL GOVERNING CODES.

ALL EXHAUST FANS SHALL HAVE BACKDRAFT DAMPERS

FAN/LIGHTS IN WET/DAMP LOCATIONS SHALL BE LABLED "SUITABLE FOR WET OR DAMP LOCATIONS."

FLECTRICAL SYSTEMS ARE SHOWN FOR INTENT ONLY. THESE SYSTEMS SHALL BE ENGINEERED BY OTHERS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND PLACEMENT.

-PROVIDE AND INSTALL LOCALLY CERTIFIED SMOKE DETECTORS AND CO2 DETECTORS AS REQUIRED BY NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES.

-PROVIDE AND INSTALL GROUND FAULT CIRCUIT-INTERRUPTERS (GFI) AS REQUIRED BY NATIONAL ELECTRICAL CODE (NEC) AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES.

-ELECTRICAL CONTRACTOR TO PROVIDE REQURIED DIRECT HOOK-UPS/CUTOFFS.

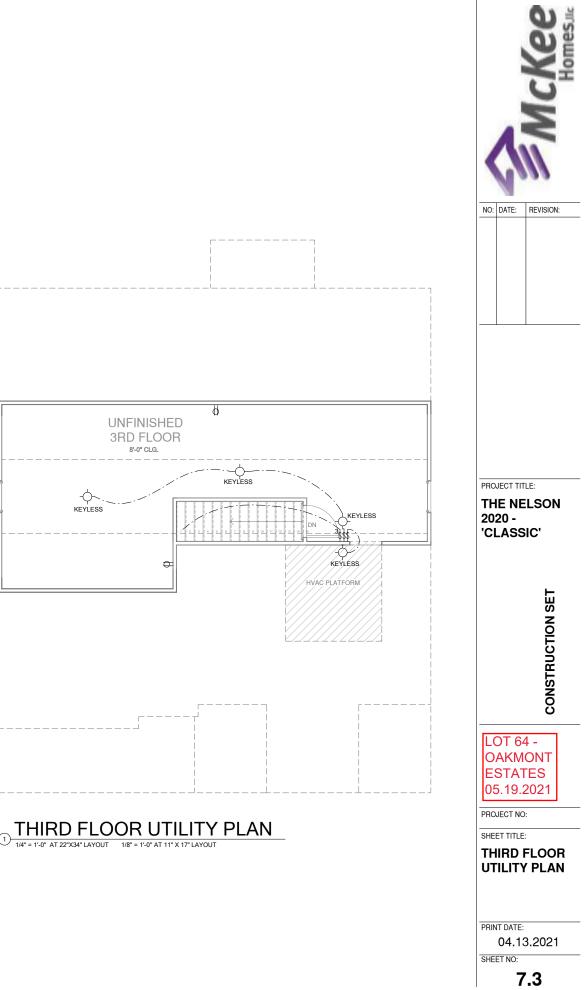
HVAC CONTRACTOR TO VERIFY THERMOSTAT LOCATIONS.

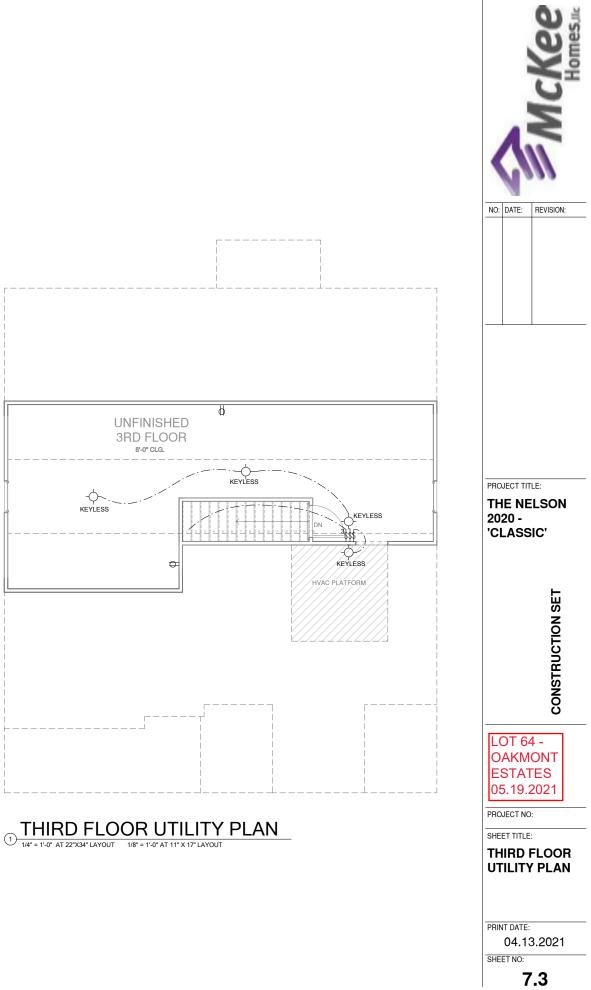
ALL ELECTRICAL AND MECHANICAL EQUIPMENT (FURNACES, A/C UNITS, ELECTRICAL PANELS, SANITARY SUMP PITS, DRAING TILE SUMP, AND WATER HEATERS) ARE SUBJECT TO RELOCATOIN DUE TO FIELD CONDITIONS.

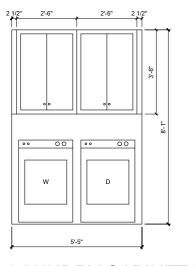
-PROVIDE POWER, LIGHT AND SWITCH AS REQUIRED FOR ATTIC FURNACE PER CODE AND MANUFACTURER'S WRITTEN INSTRUCTIONS.

### 

LEGE	ND:		
φ	DUPLEX OUTLET		CEILING MOUNTED INCANDESCENT LIGHT FIXTURE
₽wp/gfi	WEATHERPROOF GFI DUPLEX OUTLET	Υ	CEIEING MOONTED INCANDESCENT EIGHT HATONE
∯ <sub>GFI</sub>	GROUND-FAULT CIRCUIT- INTERRUPTER DUPLEX OUTLET	-0-	WALL MOUNTED INCANDESCENT LIGHT FIXUTRE
P	HALF-SWITCHED DUPLEX OUTLET	-	
₽ <sub>220V</sub>	220 VOLT OUTLET	]-Q-	SURFACE MOUNT LED LIGHT FIXTURE (VP) = VAPOR PROOF
J	REINFORCED JUNCTION BOX	0	EXHAUST FAN (VENT TO EXTERIOR)
\$	WALL SWITCH	- m	EXHAUST FAN/LIGHT COMBINATION
\$3	THREE-WAY SWITCH	_ N¢≣_	(VENT TO EXTERIOR)
\$4	FOUR-WAY SWITCH		1 FLUORESCENT LIGHT FIXTURE
СН	CHIMES		TECH HUB SYSTEM
Ŧ	PUSHBUTTON SWITCH		
SD	110V SMOKE DETECTOR W/ BATTERY BACKUP	K	CEILING FAN (PROVIDE ADEQUATE SUPPORT)
Co	CO2 DETECTOR		>
T	THERMOSTAT	] 業	CEILING FAN WITH INCANDESCENT LIGHT FIXTURE (PROVIDE ADEQUATE SUPPORT)
PH	TELEPHONE		,,
TV	TELEVISION	⊢⊗	GAS SUPPLY WITH VALVE
Ê	ELECTRIC METER		, HOSE BIBB
•	DISCONNECT SWITCH		1/4" WATER STUR OUT
		-4	WALL SCONCE









		MCKee
NO:	DATE:	REVISION:
TH 202	JECT TIT E NE 20 - _ASS	LSON
		CONSTRUCTION SET
0, E\$ 05	OT 64 AKM STAT 5.19.2	ONT ES 2021
DE	TAIL	
	ET NO:	3.2021
	D	)-1

## DESIGN SPECIFICATIONS:

Construction Type: Commerical 🗌 Residential 🛛

Applicable Building Codes:

• 2018 North Carolina Residential Building Code with All Local Amendments • ASCE 1-10: Minimum Design Loads for Buildings and Other Structures

• AS	CE 7-10: Minim	um Design Lo	ads for Build	lings and Oth	er Structures
Design Lo		ads			
					PSF
	1.2. Truss				PSF
					PSF
2.	Roof Dead L				
2					
3.	0110 00				-94
4	Floor Live Lo				
					PSF
	4.3. Decks	-			PSF
_		~ ~			PSF
5.	Floor Dead L			10 1	
6.	Ultimate Desig				
	6.1. Exposu	re	-	B	
	6.2. Importa	nce Factor		1.Ø	
	6.3. Wind Ba				
	6.3.1.				
-	6.3.2.V				
١.	Component an	a claddirig (	IN 1997		1
	MEAN ROOF HT.	UP TO 30'	30'1"-35'	35' "-4Ø'	40'1"-45'
	ZONE 1	16.7,-18.0	17.5,-18.9	18.2,-19.6	18.7,-20.2
	ZONE 2	16.T,-21.Ø	17.5,-22.1	18.2,-22.9	18.7,-23.5
	ZONE 3	16.T,=21.Ø	17.5,-22.1	18.2,-22.9	18.7,-23.5
	ZONE 4	18.2,-19.0	19.2,-20.0	19.9,-20.7	20.4,-21.3
	ZONE 5	18.2,-24.Ø	19.2,-25.2	19.9,-26.1	20.4,-26.9
	L				

8. Seismic

- 8.1. Site Class ... 8.2. Design Category
- 8.3. Importance Factor .
- 8.4. Seismic Use Group.
- 8.5. Spectral Response Acceleration
- 8.5.1. Sms = %q
- 8.5.2. Sml = %q 8.6. Seismic Base Shear
- 8.6.1. Vx =
- 8.6.2.Vy =
- 8.7. Basic Structural System (check one)
  - 🛛 Bearing Wall
  - Building Frame
  - □ Moment Frame
  - Dual w/ Special Moment Frame Dual w/ Intermediate R/C or Special Steel
  - 🗌 Inverted Pendulum
- 8.8. Arch/Mech Components Anchored .....
- 8.9. Lateral Design Control: Seismic 🗌 🛛 Wind 🖂
- 9. Assumed Soil Bearing Capacity ...... 2000psf

- GENERAL STRUCTURAL NOTES:
- The design professional whose seal appears on these drawings is the structural engineer 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 permission of SUMMIT Engineering, Laboratory & Testing, P.C. (SUMMIT) or the SER. For the purposes of these construction documents the SER and SUMMIT
- shall be considered the same entity. The structure is only stable in its completed form. The contractor shall provide all required temporary bracing during construction
- to stabilize the structure. 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.
- 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 SUMMIT 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 SUMMIT.
- 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 SUMMIT 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 international residential code. 8. This structure and all construction shall conform to all
- applicable sections of local building codes.
- 9. All structural assemblies are to meet or exceed to requirements of the current local building code.

## FOUNDATIONS:

The structural engineer has not performed a subsurface investigation. Verification of this 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.

- 2. The bottom of all footings shall extend below the frost line for the region in which the structure is to be constructed. However, the bottom of all footings shall be a minimum of 12" below grade.
- 3. Any fill shall be placed under the direction or recommendation of a licensed professional engineer.
- 4. The resulting soil shall be compacted to a minimum of 95% maximum dry density.
- 5. 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.
- 6. No concrete shall be placed against any subgrade containing water, ice, frost, or loose material.

### 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 the manual of Steel Construction "Load Resistance Factor Design" latest editions.
- Structural steel shall receive one coat of shop applied rust-inhibitive paint.
- All steel shall have a minimum yield stress ( $F_{u}$ ) of 36 ksi unless otherwise noted.
- Welding shall conform to the latest edition of the American Welding Society's Structural Welding Code AWS D1.1. Electrodes for shop and field welding shall be class ETØXX. All welding shall be performed by a certified welder per the above standards.

### CONCRETE:

- Concrete shall have a normal weight aggregate and a minimum compressive strength (f'c) at 28 days of 3000 psi, unless otherwise noted on the plan.
- Concrete shall be proportioned, 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 target values as follows: 3.1. Footings: 5%
  - 3.2. Exterior Slabs: 5%
- 4. No admixtures shall be added to any structural concrete without written permission of the SER.

- Construction".

- supported during the concrete pour.
- CONCRETE REINFORCEMENT:

- standard.
- ASTM A615, grade 60.
- tension splice.



STRUCTURAL PLANS PREPARED FOR:

NELSON 2020

PROJECT ADDRESS: TBD

OWNER: McKee Homes 109 Hay St., Suite 301 Fayetteville, NC 28301

DESIGNER: Planworx Architecture, P.A. 5711 Six Forks Rd. #100 Raleigh, NC 27609

These drawings are to be coordinated with the architectural, mechanical, plumbing, electrical, and civil drawings. This coordination is not the responsibility of the structural engineering of record (SER). Should any discrepancies become apparent, the contractor shall notify SUMMIT Engineering, Laboratory & Testing, P.C. before construction begins.

<u>PLAN</u>	ABBREVIATIONS:		
AB	ANCHOR BOLT	PT	PRESSURE TREATED
AFF	ABOVE FINISHED FLOOR	RS	ROOF SUPPORT
CJ	CEILING JOIST	SC	STUD COLUMN
CLR	CLEAR	SJ	SINGLE JOIST
DJ	DOUBLE JOIST	SPF	SPRUCE PINE FIR
DSP	DOUBLE STUD POCKET	SST	SIMPSON STRONG-TIE
EE	EACH END	SYP	SOUTHERN YELLOW PINE
ΕW	EACH WAY	ŤJ	TRIPLE JOIST
NTS	NOT TO SCALE	tsp	TRIPLE STUD POCKET
oc	ON CENTER	TYP	TYPICAL
PSF	POUNDS PER SQUARE FOOT	UNO	UNLESS NOTED OTHERWISE
PSI	POUNDS PER SQUARE INCH	WWF	WELDED WIRE FABRIC

Roof truss and floor joist layouts, and their corresponding loading details, were not provided to SUMMIT Engineering, Laboratory & Testing, P.C. (SUMMIT) prior to the initial design. Therefore, truss and joist directions were assumed based on the information provided by MCKEE HOMES. Subsequent plan revisions based on roof truss and floor joist layouts shall be noted in the revision list, indicating the date the layouts were provided. Should any discrepancies become apparent, the contractor shall notify SUMMIT immediately.

# Concrete slabs-on-grade shall be constructed in accordance with ACI 302.IR-96: "Guide for Concrete Slab and Slab

The concrete slab-on-grade has been designed using a subgrade modulus of k=250 pci and a design loading of 200 psf. The SER is not responsible for differential settlement, slab cracking or other future defects resulting from unreported conditions not in accordance with the above assumptions. Control or saw cut joints 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. Control or saw cut joints shall be produced using conventional process within 4 to 12 hours after the slab has been finished 9. Reinforcing steel may not extend through a control joint. Reinforcing steel may extend through a saw cut joint. 10. 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

Fibrous concrete reinforcement, or fibermesh, specified in concrete slabs-on-grade may be used for control of cracking due to shrinkage and thermal expansion/contraction, lowered water migration, an increase in impact capacity, increased abrasion resistance, and residual strength.

Fibermesh reinforcing to be 100% virgin polypropylene fibers containing no reprocessed olefin materials and specifically manufactured for use as concrete secondary reinforcement. Application of fibermesh per cubic yard of concrete shall equal a minimum of 0.1% by volume (1.5 pounds per cubic yard) Fibermesh shall comply with ASTM CIII6, any local building code requirements, and shall meet or exceed the current industry

5. Steel reinforcing bars shall be new billet steel conforming to

6. 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 with a class B

8. Lap reinforcement as required, a minimum of 40 bar diameters

for tension or compression unless otherwise noted. Splices in masonry shall be a minimum of 48 bar diameters.

- 9. 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.
- 10. Where reinforcing steel is required vertically, dowels shall be provided unless otherwise noted.

## 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 Southern-Yellow-Pine (SYP) #2.
- LVL or PSL engineered wood shall have the following minimum design values:
  - 2.1. E = 1,300,000 psi
  - 2.2. Fb = 2600 psi
  - 2.3. Fv = 285 psi
  - 2.4.Fc = 700 psi
- Wood in contact with concrete, masonry, or earth shall be pressure treated in accordance with AWPA standard C-15. All other moisture exposed wood shall be treated in accordance with AWPA standard C-2
- Nails shall be common wire nails unless otherwise noted. 5. Lag screws shall conform to ANSI/ASME standard B18.2.1-1981. Lead holes for lag screws shall be in accordance with NDS specifications.
- All beams shall have full bearing on supporting framing members unless otherwise noted.
- Exterior and load bearing stud walls are to be 2x4 SYP #2 @ 16" O.C. unless otherwise noted. Studs shall be continuous from the sole plate to the double top plate. Studs shall only be discontinuous at headers for window/door openings. A minimum
- of one king stud shall be placed at each end of the header. King studs shall be continuous.
- Individual studs forming a column shall be attached with one 10d nail @ 6" O.C. staggered. The stud column shall be continuous to the foundation or beam. The column shall be properly blocked at all floor levels to ensure proper load transfer.
- . Multi-ply beams shall have each ply attached with (3) 10d nails @ 24" O.C. 10. Four and five ply beams shall be bolted together with (2) rows
- of 1/2" diameter through bolts staggered @ 16" O.C. unless noted otherwise.

## <u>SHEET LIST:</u>

Sheet No.	Description
CSI	Cover Sheet, Specifications, Revisions
S1.Øm	Monolithic Slab Foundation
Sl.Øs	Stem Wall Foundation
SI.Øc	Crawl Space Foundation
SI.Øb	Basement Foundation
S2.Ø	Basement Framing Plan
\$3.Ø	Fírst Floor Framing Plan
\$4 <i>.</i> Ø	Second Floor Framing Plan
S5.Ø	Roof Framing Plan
S6.Ø	Basement Bracing Plan
ST.Ø	First Floor Bracing Plan
58.Ø	Second Floor Bracing Plan

## <u>REVISION LIST:</u>

Revision No.	Date	Project No.	Description
1	10/6/20	27796R	Revised per new architectural plans and to update garage beam to a 4-ply LVL Enlarged case opening at kitchen
2	11.19.20	27796R2	Enlarged case opening at kitchen

WOOD TRUSSES:

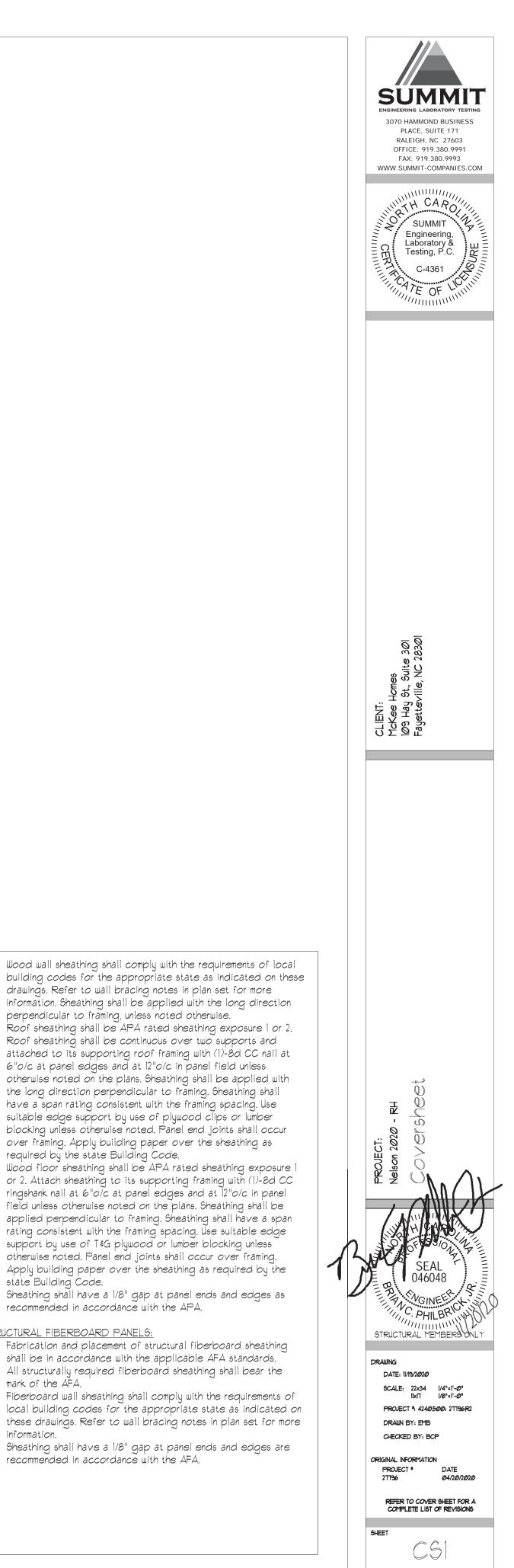
- The wood truss manufacturer/fabricator is responsible for the design of the wood trusses. Submit sealed shop drawings and supporting calculations to the SER for review prior to fabrication. The SER shall have a minimum of five (5) days for review. The review by the SER shall review for overall compliance with the design documents. The SER shall assume no responsibility for the correctness for the structural design for the wood trusses.
- 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 7-10), 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 "National Design Specification for Wood Construction." (NDS) and "Design Specification for Metal Plate Connected Wood Trusses."
- The truss manufacturer shall provide adequate bracing information in accordance with "Commentary and Recommendations for Handling, Installing, and Bracing Metal Plate Connected Wood Trusses" (HIB-91). This bracing, both
- temporary and permanent, shall be shown on the shop drawings. Also, the shop drawings shall show the required attachments for the trusses. 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.

### EXTERIOR WOOD FRAMED DECKS:

Decks are to be framed in accordance with local building codes and as referenced on the structural plans, either through code references or construction details.

## 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.
- All structurally required wood sheathing shall bear the mark of the APA.



	information. Sheathing shall be applied with the long direction perpendicular to framing, unless noted otherwise.
4.	Roof sheathing shall be APA rated sheathing exposure 1 or 2. Roof sheathing shall be continuous over two supports and attached to its supporting roof framing with (1)-8d CC 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 with
	the long direction perpendicular to framing. Sheathing shall have a span rating consistent with the framing spacing. Use suitable edge support by use of plywood clips or lumber blocking unless otherwise noted. Panel end joints shall occur over framing. Apply building paper over the sheathing as required by the state Building Code.
5.	Wood floor sheathing shall be APA rated sheathing exposure 1 or 2. Attach sheathing to its supporting framing with (1)-8d CC ringshank 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. Use suitable edge support by use of T&G plywood or lumber blocking unless otherwise noted. Panel end joints shall occur over framing. Apply building paper over the sheathing as required by the state Building Code.
6.	Sheathing shall have a $1/8"$ gap at panel ends and edges as recommended in accordance with the APA.
STR	UCTURAL FIBERBOARD PANELS:
1.	Fabrication and placement of structural fiberboard sheathing shall be in accordance with the applicable AFA standards.
2.	All structurally required fiberboard sheathing shall bear the mark of the AFA.
3.	Fiberboard 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.
- Sheathing shall have a 1/8" gap at panel ends and edges are recommended in accordance with the AFA.

FOUNDATION NOTES:

- 1. FOUNDATIONS TO BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 4 OF THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE WITH ALL LOCAL AMENDMENTS.
- 2. STRUCTURAL CONCRETE TO BE  $F_c = 3000$  PSI, PREPARED AND PLACED IN ACCORDANCE WITH ACI STANDARD 318.
- FOOTINGS TO BE PLACED ON UNDISTURBED EARTH, BEARING A MINIMUM OF 12" BELOW ADJACENT FINISHED GRADE, OR AS OTHERWISE DIRECTED BY THE CODE ENFORCEMENT OFFICIAL.
- 4. FOOTING SIZES BASED ON A PRESUMPTIVE SOIL BEARING CAPACITY OF 2000 PSF. CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFYING THE SUITABILITY OF THE SITE SOIL CONDITIONS AT THE TIME OF CONSTRUCTION.
- 5. FOOTINGS AND PIERS SHALL BE CENTERED UNDER THEIR RESPECTIVE ELEMENTS. PROVIDE 2" MINIMUM FOOTING PROJECTION FROM THE FACE OF MASONRY.
- 6. MAXIMUM DEPTH OF UNBALANCED FILL AGAINST MASONRY WALLS TO BE AS SPECIFIED IN SECTION R404.1 OF THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE.
- PILASTERS TO BE BONDED TO PERIMETER FOUNDATION WALL.
- PROVIDE FOUNDATION WATERPROOFING, AND DRAIN WITH POSITIVE SLOPE TO OUTLET AS REQUIRED BY SITE CONDITIONS.
- 9. PROVIDED PERIMETER INGULATION FOR ALL FOUNDATIONS PER 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE.
- 10. CORBEL FOUNDATION WALL AS REQUIRED TO ACCOMMODATE BRICK VENEERS.
- CRAWL SPACE TO BE GRADED LEVEL, AND CLEARED OF ALL DEBRIS. 12. FOUNDATION ANCHORAGE SHALL BE CONSTRUCTED PER THE 2018 NORTH CAROLINA RESIDENTIAL CODE SECTION R403.1.6. MINIMUM 1/2" DIA. BOLTS SPACED AT 6'-O" ON CENTER WITH A 1" MINIMUM EMBEDMENT INTO MASONRY OR CONCRETE, MINIMUM (2) ANCHOR BOLTS PER PLATE SECTION AND (1) LOCATED NOT MORE THAN 12" FROM THE CORNER. ANCHOR BOLTS SHALL BE LOCATED IN THE CENTER THIRD OF THE PLATE.
- 13. ABBREVIATIONS:
  - DJ = DOUBLE JOIST GT = GIRDER TRUSS SC = STUD COLUMN EE = EACH END TJ = TRIPLE JOIGT CL = CENTER LINE
- SJ = SINGLE JOIST FT = FLOOR TRUSS DR = DOUBLE RAFTER TR = TRIPLE RAFTER OC = ON CENTER PL = POINT LOAD
- 14. ALL PIERS TO BE 16"x16" MASONRY AND ALL PILASTERS TO BE 8"x16"
- MASONRY, TYPICAL. (UNO) 15. WALL FOOTINGS TO BE CONTINUOUS CONCRETE, SIZES PER STRUCTURAL PLAN. 16. A FOUNDATION EXCAVATION OBSERVATION SHOULD BE CONDUCTED BY A PROFESSIONAL GEOTECHNICAL ENGINEER, OR HIS QUALIFIED REPRESENTATIVE. IF ISOLATED AREAS OF YIELDING MATERIALS AND/OR POTENTIALLY EXPANSIVE SOILS ARE OBSERVED IN THE FOOTING EXCAVATIONS AT THE TIME OF CONSTRUCTION, SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. MUST BE PROVIDED THE OPPORTUNITY TO REVIEW THE FOOTING DESIGN PRIOR TO CONCRETE PLACEMENT.
- 17. ALL FOOTINGS & SLABS ARE TO BEAR ON UNDISTURBED SOIL OR 95% COMPACTED FILL, VERIFIED BY ENGINEER OR CODE OFFICIAL.

REFER TO BRACED WALL PLAN FOR PANEL LOCATIONS AND ANY REQUIRED HOLD-DOWNS. ADDITIONAL INFORMATION PER SECTION R602.10.4 AND FIGURE R602.10.3(4) OF THE 2018 NCRC.

NOTE: ALL EXTERIOR FOUNDATION DIMENSIONS ARE TO FRAMING AND NOT BRICK VENEER, UNO

NOTE: A 4" CRUSHED STONE BASE COURSE IS NOT REQUIRED WHEN SLAB IS INSTALLED ON WELL-DRAINED OR SAND-GRAVEL MIXTURE SOILS CLASSIFIED AS GROUP I PER TABLE R405.1

REINFORCE GARAGE PORTAL WALLS PER FIGURE R602.10.4.3 OF THE 2018 NCRC. (TYP)

BEAM POCKETS MAY BE SUBSTITUTED FOR MASONRY PILASTERS AT GIRDER ENDS. BEAM POCKETS SHALL HAVE A MINIMUM 4" SOLID MASONRY BEARING.

NOTE: REDUCE JOIST SPACING UNDER TILE FLOORS, GRANITE COUNTERTOPS AND/OR ISLANDS.

DECK JOISTS SHALL BE SPACED AT A MAX. 12" O.C. WHEN DECK BOARDS ARE INSTALLED DIAGONALLY.

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY MCKEE HOMES COMPLETED/REVISED ON 9/11/20. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

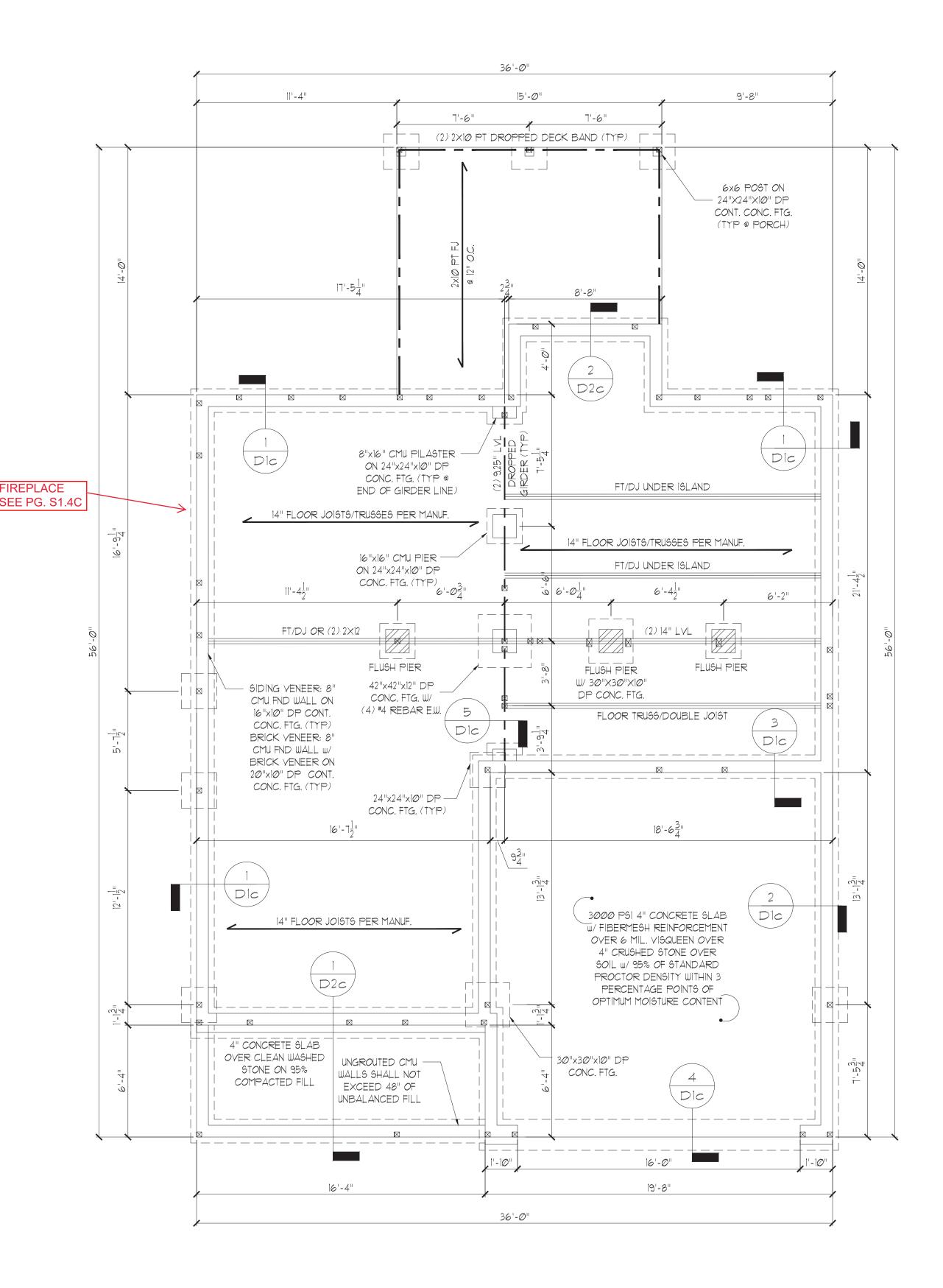
STRUCTURAL MEMBERS ONLY

ENGINEERING SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS ON THIS DOCUMENT, SEAL DOES NOT INCLUDE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS. ANY DEVIATIONS OR DISCREPANCIES ON PLANS ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. FAILURE TO DO SO WILL VOID SUMMIT LIABILITY.

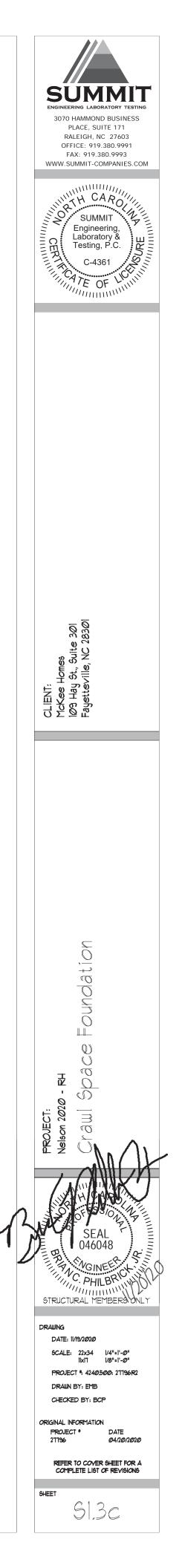
STRUCTURAL ANALYSIS BASED ON 2018 NCRC.

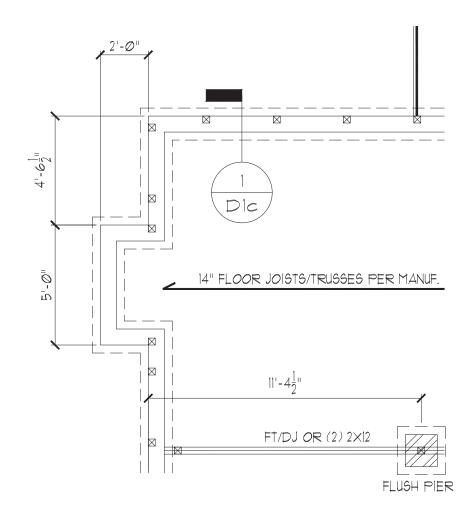
CRAWL SPACE FOUNDATION PLAN

SCALE: 1/4"=1'-Ø" ON 22"x34" OR 1/8"=1'-Ø" ON 11"x17"



CLASSIC





<u>OPT. FIREPLACE</u>

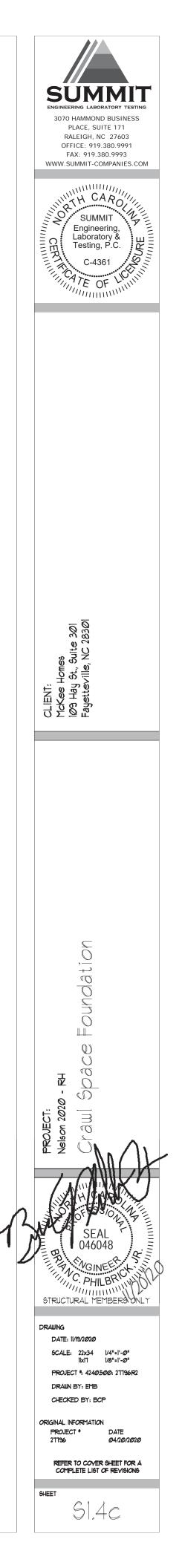
# STRUCTURAL MEMBERS ONLY

ENGINEERING SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS ON THIS DOCUMENT, SEAL DOES NOT INCLUDE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS. ANY DEVIATIONS OR DISCREPANCIES ON PLANS ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. FAILURE TO DO SO WILL VOID SUMMIT LIABILITY.

STRUCTURAL ANALYSIS BASED ON 2018 NCRC.

CRAWL SPACE FOUNDATION PLAN

SCALE: 1/4"=1'-Ø" ON 22"x34" OR 1/8"=1'-Ø" ON 11"x17"



GENERAL STRUCTURAL NOTES:

- 1. CONSTRUCTION SHALL CONFORM TO 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE WITH ALL LOCAL AMENDMENTS.
- 2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, CONTRACTOR SHALL COMPLY WITH THE CONTENTS OF THE DRAWING FOR THIS SPECIFIC PROJECT. ENGINEER IS NOT RESPONSIBLE FOR ANY DEVIATIONS FROM THIS PLAN.
- 3. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY BRACING REQUIRED TO REGIST ALL FORCES ENCOUNTERED DURING ERECTION.
- PROPERTIES USED IN THE DESIGN ARE AS FOLLOWS: 4 MICROLLAM (LVL):  $F_b = 2600$  PSI,  $F_v = 285$  PSI,  $E = 1.9 \times 10^6$  PSI PARALLAM (PSL):  $F_{b}$  = 2900 PSI,  $F_{v}$  = 290 PSI, E = 1.25x10<sup>6</sup> PSI
- ALL WOOD MEMBERS SHALL BE #2 SYP UNLESS NOTED ON PLAN. ALL STUD COLUMNS SHALL BE #2 SYP (UNO). 6. ALL BEAMS SHALL BE SUPPORTED WITH A (2) 2x4 #2 SYP STUD COLUMN
- AT EACH END UNLESS NOTED OTHERWISE.
- 1. ALL REINFORCING STEEL SHALL BE GRADE 60 BARS CONFORMING TO ASTM AGI5 AND SHALL HAVE A MINIMUM COVER OF 3".
- 8. FOUNDATION ANCHORAGE SHALL BE CONSTRUCTED PER THE 2018 NORTH CAROLINA RESIDENTIAL CODE SECTION R403.1.6. MINIMUM 1/2" DIA. BOLTS SPACED AT 6'-0" ON CENTER WITH A 1" MINIMUM EMBEDMENT INTO MASONRY OR CONCRETE, MINIMUM (2) ANCHOR BOLTS PER PLATE SECTION AND (1) LOCATED NOT MORE THAN 12" FROM THE CORNER. ANCHOR BOLTS SHALL BE LOCATED IN THE CENTER THIRD OF THE PLATE.
- 9. CONTRACTOR TO PROVIDED LOOKOUTS WHEN CEILING JOISTS SPAN
- PERPENDICULAR TO RAFTERS. 10. FLITCH BEAMS, 4-PLY LVLS AND 3-PLY SIDE LOADED LVLS SHALL BE BOLTED TOGETHER WITH 1/2" DIA. THRU BOLTS SPACED AT 24" O.C. (MAX) STAGGERED OR EQUIVALENT CONNECTIONS PER DETAIL 1/D3f. MIN, EDGE DISTANCE SHALL BE 2" AND (2) BOLTS SHALL BE LOCATED MINIMUM 6" FROM EACH END OF THE BEAM.
- 11. ALL NON-LOAD BEARING HEADERS SHALL BE (1) FLAT 2x4 SYP #2, DROPPED. FOR NON-LOAD BEARING HEADERS EXCEEDING 8'-0" IN WIDTH AND/OR WITH MORE THAN 2'-O" OF CRIPPLE WALL ABOVE, SHALL BE (2) FLAT 2x4 SYP #2, DROPPED. (UNLESS NOTED OTHERWISE) 12. ABBREVIATIONS:
- DJ = DOUBLE JOIST
- GT = GIRDER TRUSS SC = STUD COLUMN
- FT = FLOOR TRUSS DR = DOUBLE RAFTER EE = EACH END
- TJ = TRIPLE JOIST CL = CENTER LINE
- TR = TRIPLE RAFTER OC = ON CENTER PL = POINT LOAD

SJ = SINGLE JOIST

SHADED WALLS INDICATED LOAD BEARING WALLS

NOTE: REDUCE JOIST SPACING UNDER TILE FLOORS, GRANITE COUNTERTOPS AND/OR ISLANDS.

JOIST & BEAM SIZES SHOWN ARE MINIMUMS, BUILDER MAY INCREASE DEPTH FOR EASE OF CONSTRUCTION.

NOTE:

\_\_\_\_ DESIGNATES JOIST SUPPORTED LOAD BEARING WALL ABOVE, PROVIDE BLOCKING UNDER JOIST SUPPORTED LOAD BEARING WALL.

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY MCKEE HOMES COMPLETED/REVISED ON <u>9/11/20.</u> IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. SUMMIT ENGINEERING, LABORATORY # TESTING, P.C. CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

STRUCTURAL MEMBERS ONLY

ENGINEERING SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS ON THIS DOCUMENT, SEAL DOES NOT INCLUDE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS. ANY DEVIATIONS OR DISCREPANCIES ON PLANS ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. FAILURE TO DO SO WILL VOID SUMMIT LIABILITY.

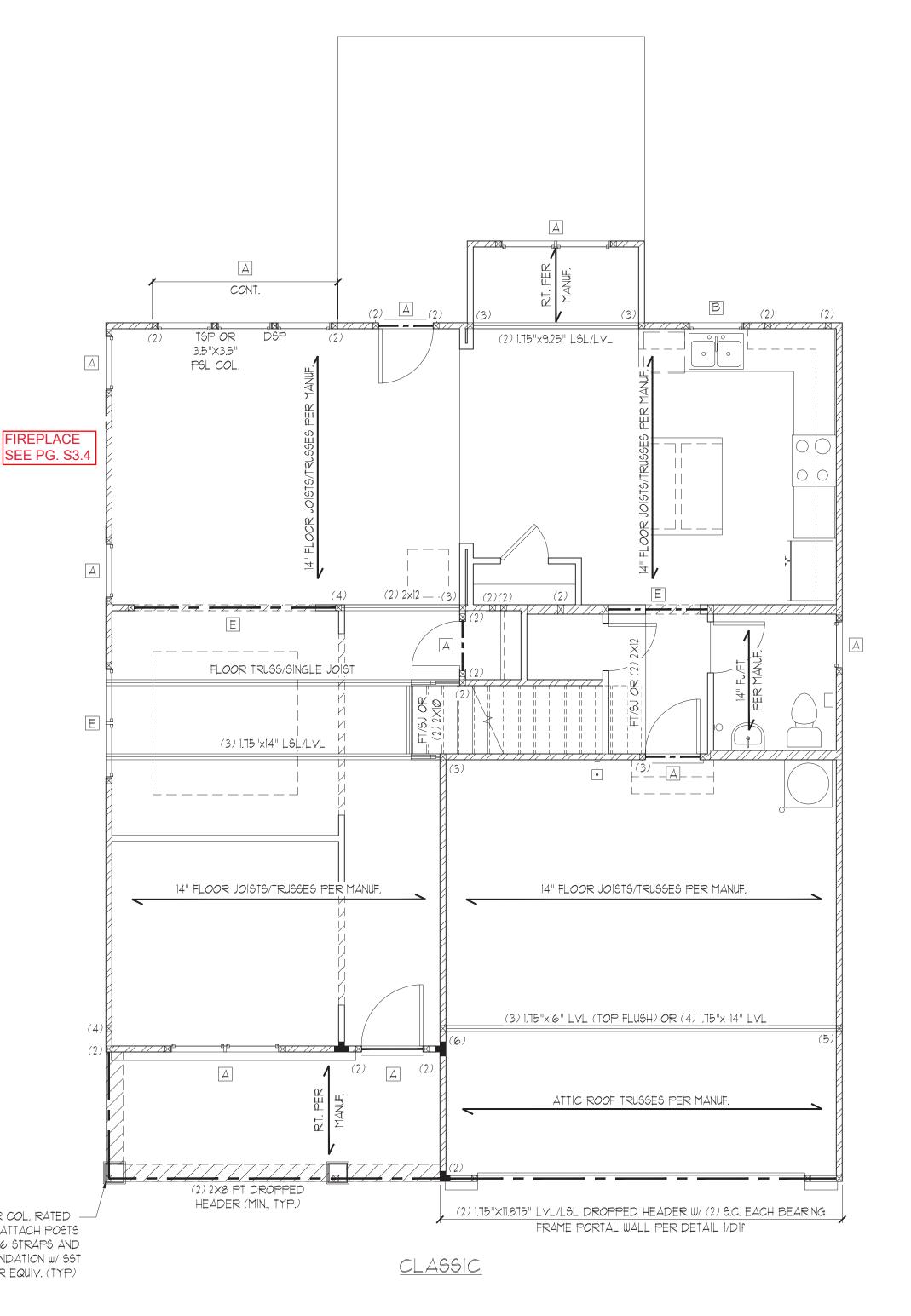
STRUCTURAL ANALYSIS BASED ON 2018 NCRC.

# FIRST FLOOR FRAMING PLAN

SCALE: 1/4"=1'-0" ON 22"x34" OR 1/8"=1'-0" ON 11"x17"

MIN. 4" P.T. POSTS OR COL. RATED FOR 2000# (MIN, TYP) ATTACH POSTS TO HEADER W/ SST CSIG STRAPS AND ATTACH POSTS TO FOUNDATION W/ SST ABA44 POST BASE OR EQUIV. (TYP)

FIREPLACE

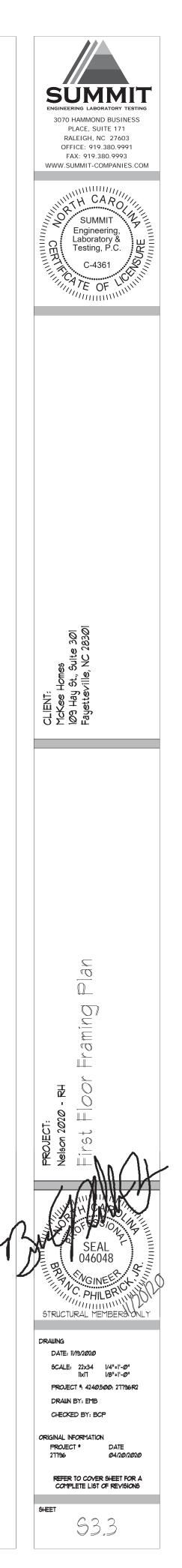


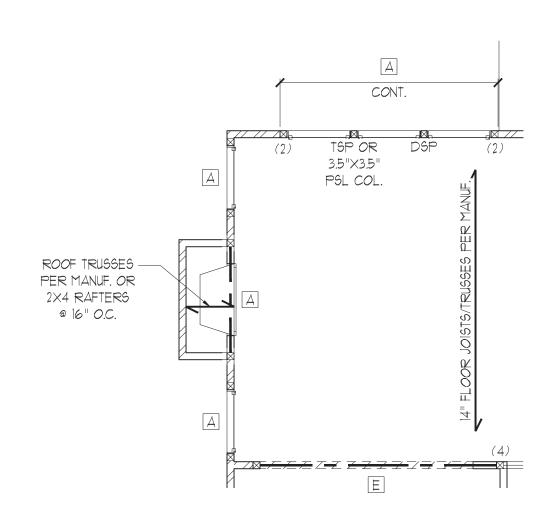
HEADER SCHEDULE				
	AVER JUHEV			
TAG	SIZE	JACKS (EACH END)		
А	(2) 2x6	(1)		
В	(2) 2x8	(2)		
С	(2) 2x1Ø	(2)		
D	(2) 2x12	(2)		
Ш	(2) 9-1/4" LSL/LVL	(3)		
F	(3)2x6	(1)		
G	(3)2x8	(2)		
Ŧ	(3) 2x1Ø	(2)		
[	(3) 2x12	(3)		

LINTEL (U.N.O.) LINTEL SCHEDULE: STEEL ANGLES TO HAVE MINIMUM 4" BEARING ONTO BRICK AT EACH END. () L3x3x1/4" 2 L5x3"x1/4" (3) L5x3-1/2x5/16" (4) L5x3-1/2"x5/16" ROLLED OR EQUAL ARCHED COMPONENT. SECURE LINTEL TO HEADER w/ (2) 1/2" DIAMETER LAG SCREWS STAGGERED @ 16" O.C. (TYP FOR (3))

ALL HEADERS WHERE BRICK IS USED, TO BE:

WALL STUD SCHEDULE (10 FT HEIGHT)				
STUD SIZE		STUD SPAC	CING ( <i>0.C.)</i>	
	ROOF ONLY	ROOF	ROOF ∉ 2 FLOORS	NON-LOAD BEARING
2×4	24"	16"	12"	24"
2×6	24"	24"	16"	24"
NOTES: 1. BRACED WALLS STUDS SHALL BE A MAX. OF 16" O.C. 2. STUDS SUPPORTS OPTIONAL WALK-UP ATTIC SHALL BE SPACED A MAX. OF 16" O.C. 3. TWO STORY WALLS SHALL BE FRAMED W/ 2x4 STUDS @ 12" O.C. OR 2x6 STUDS @ 16" O.C. BALLOON FRAMED W/ CROSS BRACING @ 6'-0" O.C. VERTICALLY.				





<u>OPT. FIREPLACE</u>

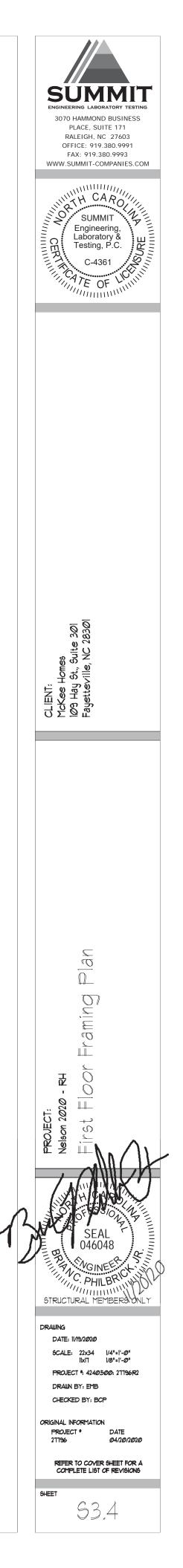
STRUCTURAL MEMBERS ONLY

ENGINEERING SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS ON THIS DOCUMENT, SEAL DOES NOT INCLUDE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS. ANY DEVIATIONS OR DISCREPANCIES ON PLANS ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. FAILURE TO DO SO WILL VOID SUMMIT LIABILITY.

STRUCTURAL ANALYSIS BASED ON 2018 NCRC.

FIRST FLOOR FRAMING PLAN

SCALE: 1/4"=1'-0" ON 22"x34" OR 1/8"=1'-0" ON 11"x17"



HEADER SCHEDULE			
TAG	SIZE	JACKS (EACH END)	
А	(2) 2x6	(1)	
В	(2) 2x8	(2)	
С	(2) 2x1Ø	(2)	
D	(2) 2×12	(2)	
E	(2) 9-1/4" LSL/LVL	(3)	
F	(3) 2x6	(1)	
G	(3)2x8	(2)	
Н	(3) 2x1Ø	(2)	
Ī	(3) 2x12	(3)	
NOTES:         1. HEADER SIZES SHOWN ON PLANS ARE MINIMUMS, GREATER         HEADER SIZES MAY BE USED FOR EASE OF CONSTRUCTION.         2. ALL HEADERS TO BE DROPPED (U.N.O.).         3. STUD COLUMNS NOTED ON PLAN OVERRIDE STUD         COLUMNS LISTED ABOVE (U.N.O.).         4. OPENINGS LESS THAN 3'-0" USE (1) KING STUD AT E.E.         OPENINGS 3'-1" TO 4'-0" USE (2) KING STUDS AT E.E.         OPENINGS 4'-1" TO 8'-0" USE (3) KING STUDS AT E.E.         OPENINGS 8'-1" TO 12'-0" USE (5) KING STUDS AT E.E.			

ALL HEADERS WHERE BRICK IS USED, TO BE: () LINTEL (U.N.O.)

OPENINGS 12'-1" TO 16'-0" USE (6) KING STUDS AT E.E.

LINTEL SCHEDULE:

STEEL ANGLES TO HAVE MINIMUM 4" BEARING ONTO BRICK AT EACH END.

1 L3x3x1/4"

2 L5x3"x1/4"

3 L5x3-1/2x5/16"

(4) L5x3-1/2"x5/16" ROLLED OR EQUAL ARCHED COMPONENT.

SECURE LINTEL TO HEADER W/ (2) 1/2" DIAMETER LAG SCREWS STAGGERED @ 16" O.C. (TYP FOR (3))

WALL STUD SCHEDULE (10 FT HEIGHT) STUD SIZE STUD SPACING (O.C.)

ROOF & ROOF & NON-LOAD ROOF ONLY I FLOOR 2 FLOORS BEARING 24" 2x4 12 " 24" 16" 24" 2x6 24" 24" 16" NOTES: I. BRACED WALLS STUDS SHALL BE A MAX. OF 16" O.C. 2. STUDS SUPPORTS OPTIONAL WALK-UP ATTIC SHALL BE

SPACED A MAX, OF 16" O.C. 3. TWO STORY WALLS SHALL BE FRAMED w/ 2x4 STUDS @ 12" O.C. OR 2x6 STUDS @ 16" O.C. BALLOON FRAMED W/ CROSS

BRACING @ 6'-0" O.C. VERTICALLY.

SHADED WALLS INDICATED LOAD BEARING WALLS

JOIST & BEAM SIZES SHOWN ARE MINIMUMS, BUILDER MAY INCREASE DEPTH FOR EASE OF CONSTRUCTION.

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY MCKEE HOMES COMPLETED/REVISED ON 9/11/20. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. SUMMIT ENGINEERING, LABORATORY § TESTING, P.C. CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

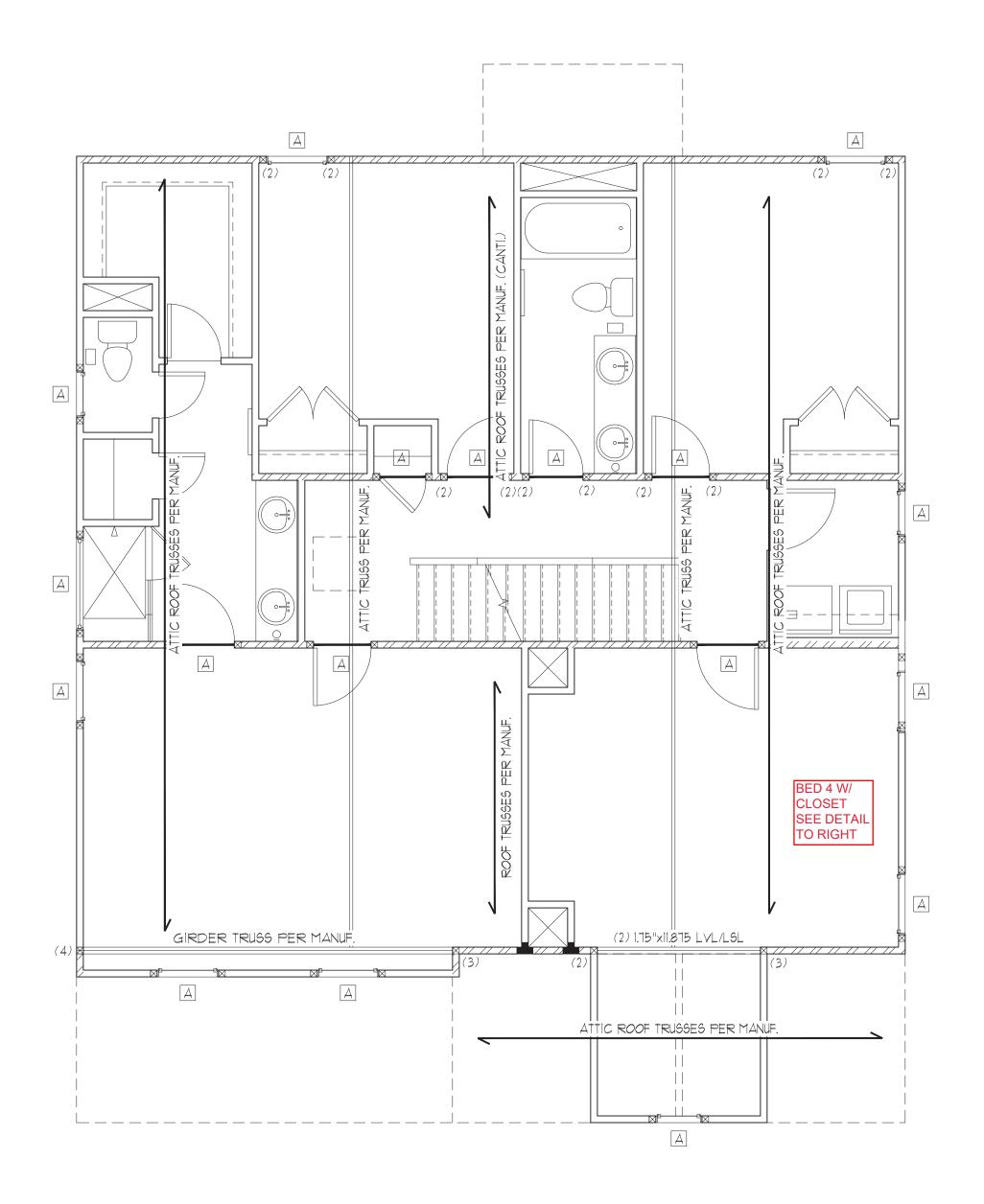
STRUCTURAL MEMBERS ONLY

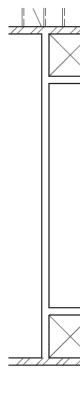
ENGINEERING SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS ON THIS DOCUMENT, SEAL DOES NOT INCLUDE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS. ANY DEVIATIONS OR DISCREPANCIES ON PLANS ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. FAILURE TO DO SO WILL VOID SUMMIT LIABILITY.

STRUCTURAL ANALYSIS BASED ON 2018 NCRC.

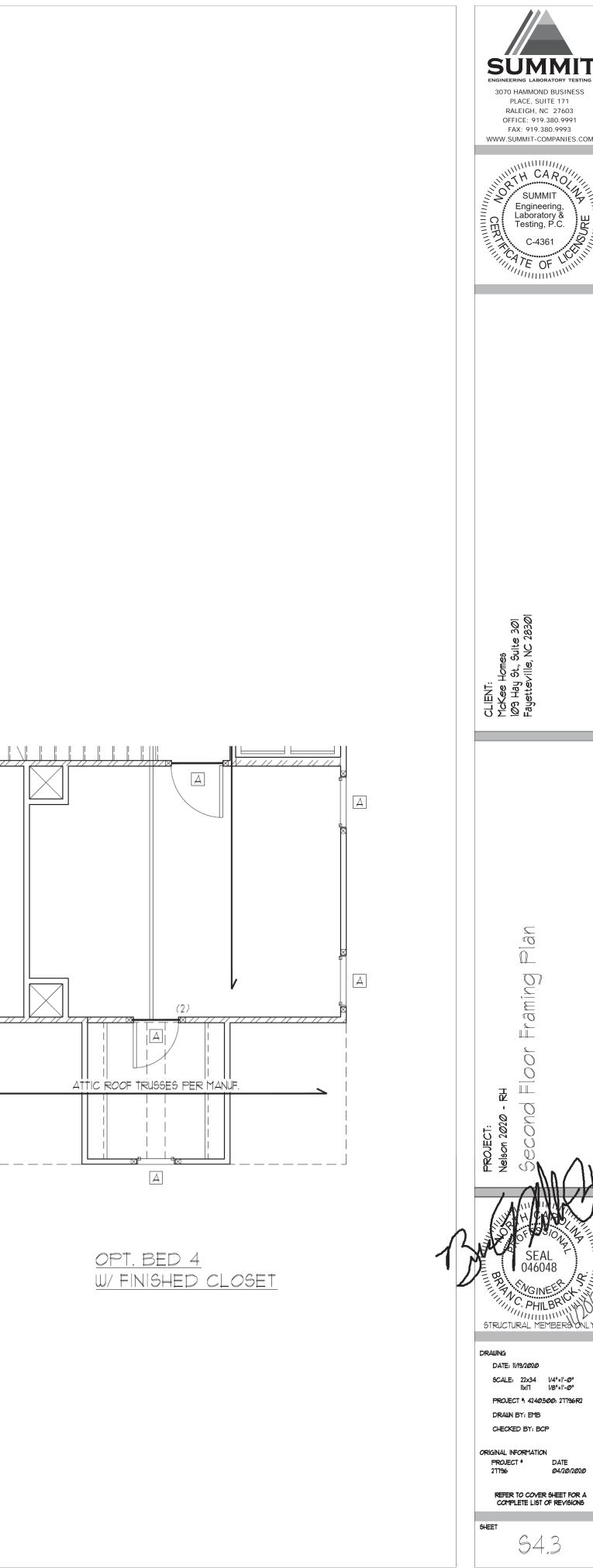
# SECOND FLOOR FRAMING PLAN

SCALE: 1/4"=1'-Ø" ON 22"x34" OR 1/8"=1'-Ø" ON 11"x17"





CLASSIC



┝───	ADER SCHEDI	JLE
TAG	SIZE	JACKS (EACH END)
А	(2) 2x6	(1)
В	(2) 2x8	(2)
С	(2) 2×1Ø	(2)
D	(2) 2×12	(2)
E	(2) 9=1/4" LSL/LVL	(3)
F	(3)2x6	(1)
G	(3)2x8	(2)
Н	(3) 2x1Ø	(2)
	(3) 2x12	(3)
HEADER SIZES MAY	OWN ON PLANS ARE 1 BE USED FOR EASE BE DROPPED (UN.C	OF CONSTRUCTION.

3. STUD COLUMNS NOTED ON PLAN OVERRIDE STUD COLUMNS LISTED ABOVE (U.N.O.). 4. OPENINGS LESS THAN 3'-0" USE (1) KING STUD AT E.E. OPENINGS 3'-1" TO 4'-0" USE (2) KING STUDS AT E.E. OPENINGS 4'-1" TO 8'-0" USE (3) KING STUDS AT E.E. OPENINGS 8'-1" TO 12'-0" USE (5) KING STUDS AT E.E. OPENINGS 12'-1" TO 16'-0" USE (6) KING STUDS AT E.E.

ALL HEADERS WHERE BRICK IS USED, TO BE:

LINTEL (U.N.O.)

LINTEL SCHEDULE:

STEEL ANGLES TO HAVE MINIMUM 4" BEARING ONTO BRICK AT EACH END.

1 L3x3x1/4"

2 L5x3"x1/4" 3 L5x3-1/2x5/16"

(4) L5x3-1/2"x5/16" ROLLED OR EQUAL ARCHED COMPONENT.

SECURE LINTEL TO HEADER w/(2) 1/2" DIAMETER LAG SCREWS STAGGERED @ 16" O.C. (TYP FOR (3))

WALL STUD SCHEDULE (10 FT HEIGHT) STUD SI7E STUD SPACING (O.C.)

UIUD UIZE		UTUD OF AC			
	ROOF ONLY	ROOF ∉ 1 FLOOR	ROOF ∉ 2 FLOORS	NON-LOAD BEARING	
2×4	24"	16"	12"	24"	
2x6	24"	24"	16"	24"	
NOTES:					
I, BRACED WALLS STUDS SHALL BE A MAX, OF 16" O.C.					

2. STUDS SUPPORTS OPTIONAL WALK-UP ATTIC SHALL BE SPACED A MAX, OF 16" O.C. 3. TWO STORY WALLS SHALL BE FRAMED w/ 2x4 STUDS @ 12"

O.C. OR 2×6 STUDS @ 16" O.C. BALLOON FRAMED W/ CROSS BRACING @ 6'-0" O.C. VERTICALLY.

SHADED WALLS INDICATED LOAD BEARING WALLS

JOIST & BEAM SIZES SHOWN ARE MINIMUMS, BUILDER MAY INCREASE DEPTH FOR EASE OF CONSTRUCTION.

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY MCKEE HOMES COMPLETED/REVISED ON <u>9/11/20.</u> IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

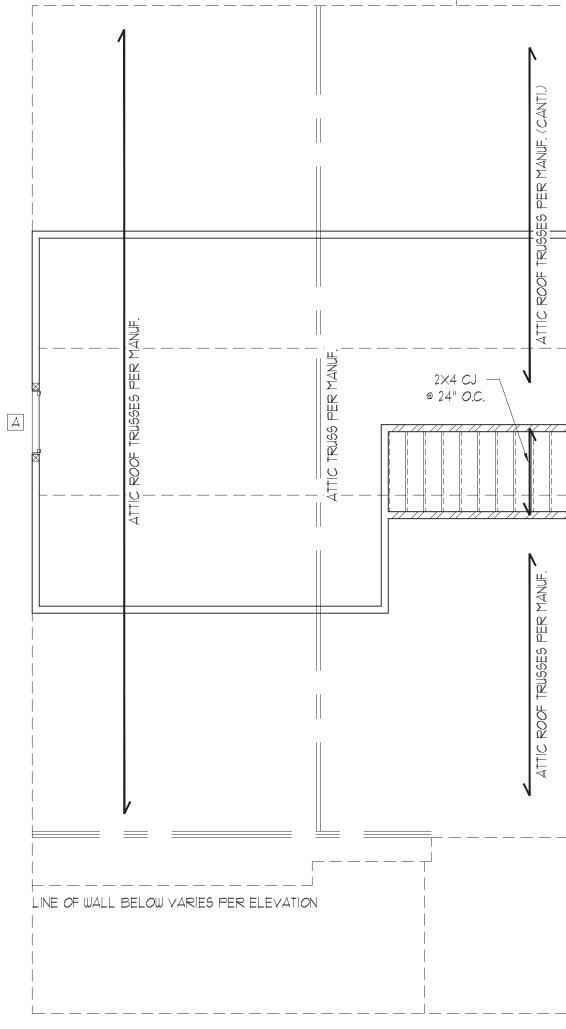
STRUCTURAL MEMBERS ONLY

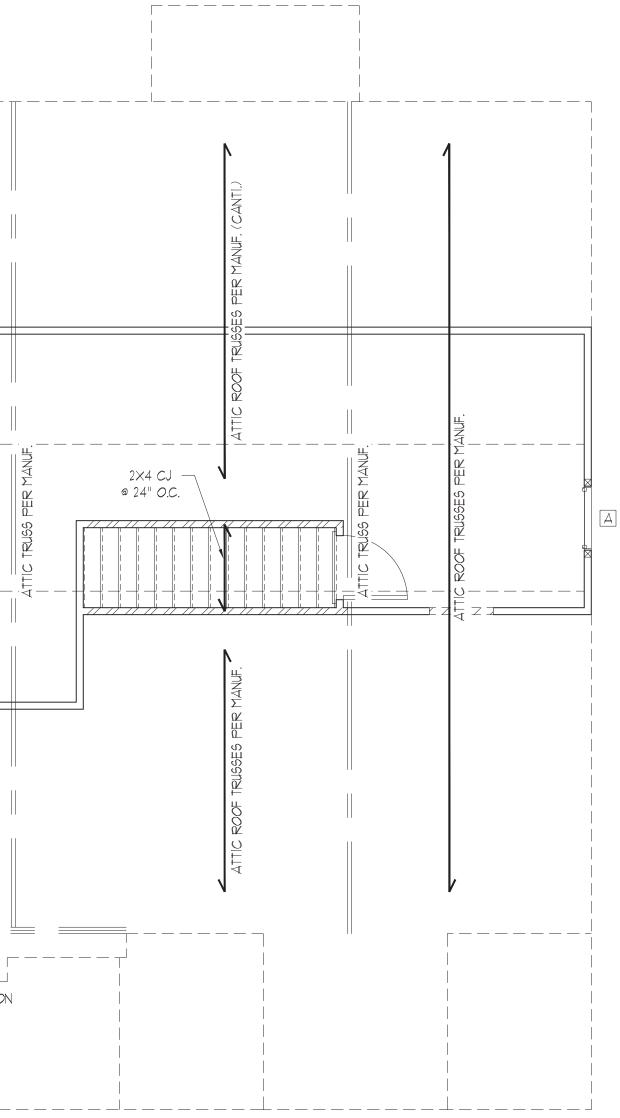
ENGINEERING SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS ON THIS DOCUMENT, SEAL DOES NOT INCLUDE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS. ANY DEVIATIONS OR DISCREPANCIES ON PLANS ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. FAILURE TO DO SO WILL VOID SUMMIT LIABILITY.

STRUCTURAL ANALYSIS BASED ON 2018 NCRC.

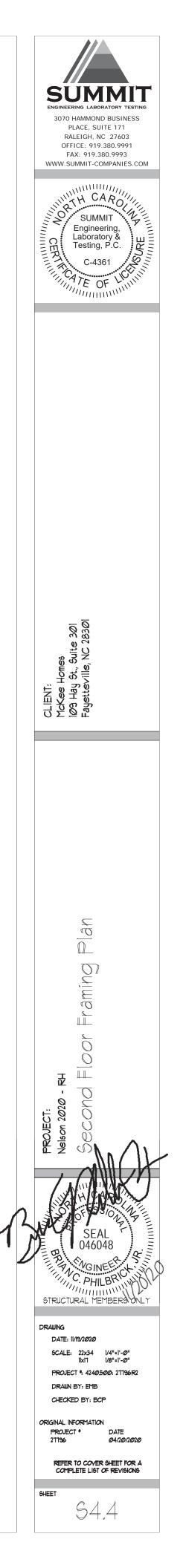
SECOND FLOOR FRAMING PLAN

SCALE: 1/4"=1'-Ø" ON 22"x34" OR 1/8"=1'-Ø" ON 11"x17"





ALL ELEVATIONS



TRUSS UPLIFT CONNECTOR SCHEDULEMAX. UPLIFTROOF TO WALLFLOOR TO FLOORFLOOR TO FND600 LBSH2.5APER WALL SHEATHING & FASTENERS1200 LBS(2) H2.5ACSI6 (END = 11")DTT2Z1450 LBSHTS20CSI6 (END = 11")DTT2Z2000 LBS(2) MTS20(2) CSI6 (END = 11")DTT2Z2900 LBS(2) HTS20(2) CSI6 (END = 11")HTT43685 LBSLGT3-SDS2.5MSTC52HTT41. ALL PRODUCTS LISTED ARE SIMPSON STRONG-TIE. EQUIVALENTPRODUCTS MAY BE USED PER MANUFACTURER'S SPECIFICATIONS.2. UPLIFT VALUES LISTED ARE FOR SYP #2 GRADE MEMBERS.3. REFER TO TRUSS LAYOUT PER MANUF. FOR UPLIFT VALUES ANDTRUSS TO TRUSS CONNECTIONS. CONNECTORS SPECIFIED BY TRUSSMANUFACTURER OVERRIDE THOSE LISTED ABOVE.	=			
600 LBSH2.5APER WALL SHEATHING & FASTENERS1200 LBS(2) H2.5ACSI6 (END = II")DTT2Z1450 LBSHTS20CSI6 (END = II")DTT2Z2000 LBS(2) MTS20(2) CSI6 (END = II")DTT2Z2900 LBS(2) HTS20(2) CSI6 (END = II")HTT43685 LBSLGT3-SDS2.5MSTC52HTT41. ALL PRODUCTS LISTED ARE SIMPSON STRONG-TIE. EQUIVALENTPRODUCTS MAY BE USED PER MANUFACTURER'S SPECIFICATIONS.2. UPLIFT VALUES LISTED ARE FOR SYP #2 GRADE MEMBERS.3. REFER TO TRUSS LAYOUT PER MANUF. FOR UPLIFT VALUES ANDTRUSS TO TRUSS CONNECTIONS. CONNECTORS SPECIFIED BY TRUSS	I RUSS	<u> SUPLIFI CC</u>	DNNECIOR SC	HEDULE
1200 LBS(2) H2.5ACSI6 (END = 11")DTT2Z1450 LBSHTS20CSI6 (END = 11")DTT2Z2000 LBS(2) MTS20(2) CSI6 (END = 11")DTT2Z2900 LBS(2) HTS20(2) CSI6 (END = 11")HTT43685 LBSLGT3-SDS2.5MSTC52HTT41. ALL PRODUCTS LISTED ARE SIMPSON STRONG-TIE. EQUIVALENTPRODUCTS MAY BE USED PER MANUFACTURER'S SPECIFICATIONS.2. UPLIFT VALUES LISTED ARE FOR SYP *2 GRADE MEMBERS.3. REFER TO TRUSS LAYOUT PER MANUF. FOR UPLIFT VALUES ANDTRUSS TO TRUSS CONNECTIONS. CONNECTORS SPECIFIED BY TRUSS	MAX, UPLIFT	ROOF TO WALL	FLOOR TO FLOOR	FLOOR TO FND
1450 LBSHTS20CSI6 (END = II")DTT2Z2000 LBS(2) MTS20(2) CSI6 (END = II")DTT2Z2900 LBS(2) HTS20(2) CSI6 (END = II")HTT43685 LBSLGT3-SDS2.5MSTC52HTT41. ALL PRODUCTS LISTED ARE SIMPSON STRONG-TIE. EQUIVALENT PRODUCTS MAY BE USED PER MANUFACTURER'S SPECIFICATIONS.2. UPLIFT VALUES LISTED ARE FOR SYP #2 GRADE MEMBERS.3. REFER TO TRUSS LAYOUT PER MANUF. FOR UPLIFT VALUES AND TRUSS TO TRUSS CONNECTIONS. CONNECTORS SPECIFIED BY TRUSS	6 <i>00</i> LBS	H2.5A	PER WALL SHEATHIN	NG & FASTENERS
2000 LBS(2) MTS20(2) CSI6 (END = II")DTT2Z2900 LBS(2) HTS20(2) CSI6 (END = II")HTT43685 LBSLGT3-SDS2.5MSTC52HTT41. ALL PRODUCTS LISTED ARE SIMPSON STRONG-TIE. EQUIVALENT PRODUCTS MAY BE USED PER MANUFACTURER'S SPECIFICATIONS.2. UPLIFT VALUES LISTED ARE FOR SYP #2 GRADE MEMBERS.3. REFER TO TRUSS LAYOUT PER MANUF. FOR UPLIFT VALUES AND TRUSS TO TRUSS CONNECTIONS. CONNECTORS SPECIFIED BY TRUSS	12 <i>00</i> LBS	(2) H2.5A	CS16 (END = 11")	DTT2Z
2900 LBS(2) HTS20(2) CSI6 (END = II")HTT43685 LBSLGT3-SDS2.5MSTC52HTT41. ALL PRODUCTS LISTED ARE SIMPSON STRONG-TIE. EQUIVALENTPRODUCTS MAY BE USED PER MANUFACTURER'S SPECIFICATIONS.2. UPLIFT VALUES LISTED ARE FOR SYP #2 GRADE MEMBERS.3. REFER TO TRUSS LAYOUT PER MANUF. FOR UPLIFT VALUES ANDTRUSS TO TRUSS CONNECTIONS. CONNECTORS SPECIFIED BY TRUSS	1450 LBS	HTS2Ø	CS16 (END = 11")	DTT2Z
3685 LBSLGT3-SDS2.5MSTC52HTT41. ALL PRODUCTS LISTED ARE SIMPSON STRONG-TIE. EQUIVALENT PRODUCTS MAY BE USED PER MANUFACTURER'S SPECIFICATIONS.2. UPLIFT VALUES LISTED ARE FOR SYP #2 GRADE MEMBERS.3. REFER TO TRUSS LAYOUT PER MANUF. FOR UPLIFT VALUES AND TRUSS TO TRUSS CONNECTIONS. CONNECTORS SPECIFIED BY TRUSS	2 <i>000</i> LBS	(2) MTS2Ø	(2) CS16 (END = 11")	DTT2Z
<ol> <li>ALL PRODUCTS LISTED ARE SIMPSON STRONG-TIE. EQUIVALENT PRODUCTS MAY BE USED PER MANUFACTURER'S SPECIFICATIONS.</li> <li>UPLIFT VALUES LISTED ARE FOR SYP #2 GRADE MEMBERS.</li> <li>REFER TO TRUSS LAYOUT PER MANUF. FOR UPLIFT VALUES AND TRUSS TO TRUSS CONNECTIONS. CONNECTORS SPECIFIED BY TRUSS</li> </ol>	2900 LBS	(2) HTS2Ø	(2) CS16 (END = 11")	HTT4
PRODUCTS MAY BE USED PER MANUFACTURER'S SPECIFICATIONS. 2. UPLIFT VALUES LISTED ARE FOR SYP #2 GRADE MEMBERS. 3. REFER TO TRUSS LAYOUT PER MANUF. FOR UPLIFT VALUES AND TRUSS TO TRUSS CONNECTIONS. CONNECTORS SPECIFIED BY TRUSS	3685 LBS	LGT3-SDS2.5	MSTC52	HTT4
4. CONTACT SUMMIT FOR REQUIRED CONNECTORS WHEN LOADS				

NOTE: IST PLY OF ALL SHOWN GIRDER TRUSSES TO ALIGN WITH INSIDE FACE OF WALL (TYP, UNO)

EXCEED THOSE LISTED ABOVE.

NOTE: ROOF TRUSSES SHALL BE SPACED TO SUPPORT FALSE FRAMED DORMER WALLS (TYP, UNO)

REFER TO DETAIL 5/D3F FOR EYEBROW, RETURN OR SHED ROOF FRAMING REQUIREMENTS. (TYP FOR ROOFS PROTRUDING MAXIMUM 24" FROM STRUCTURE)

NOTE: TRUSS UPLIFT LOADS SHALL BE DETERMINED PER TRUSS MANUFACTURER IN ACCORDANCE WITH SECTION R802.11.11. WALL SHEATHING: AND FASTENERS HAVE BEEN DESIGNED TO RESIST THE WIND UPLIFT LOAD PATH IN ACCORDANCE WITH METHOD 3 OF SECTION R602.3.5 OF THE 2018 NCRC. REFER TO BRACED WALL PLANS FOR SHEATHING: AND FASTENER REQUIREMENTS.

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY <u>MCKEE HOMES</u> COMPLETED/REVISED ON <u>9/11/20</u>. IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

STRUCTURAL MEMBERS ONLY

ENGINEERING SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS ON THIS DOCUMENT, SEAL DOES NOT INCLUDE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS. ANY DEVIATIONS OR DISCREPANCIES ON PLANS ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. FAILURE TO DO SO WILL VOID SUMMIT LIABILITY.

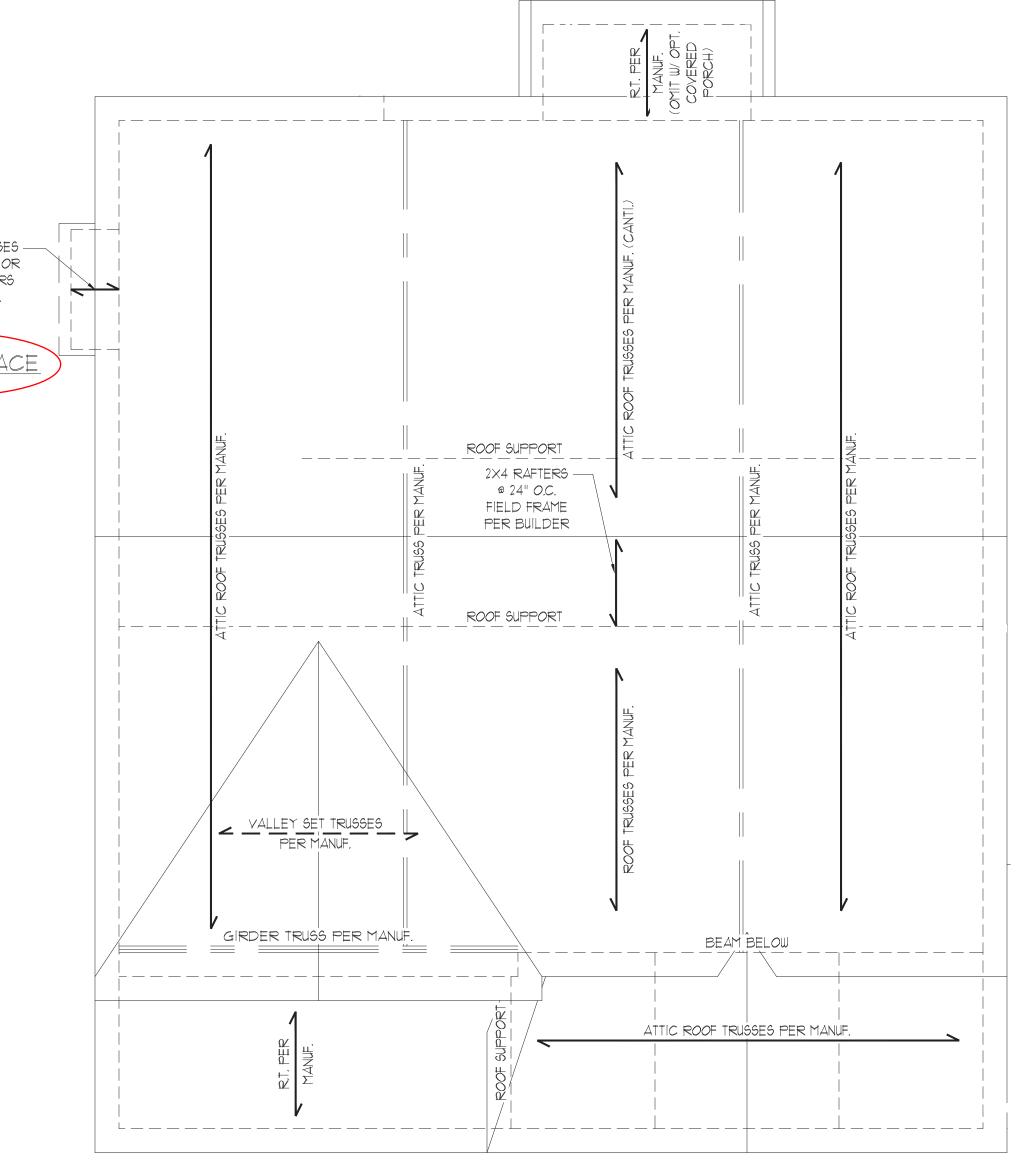
STRUCTURAL ANALYSIS BASED ON 2018 NCRC.

# ROOF FRAMING PLAN

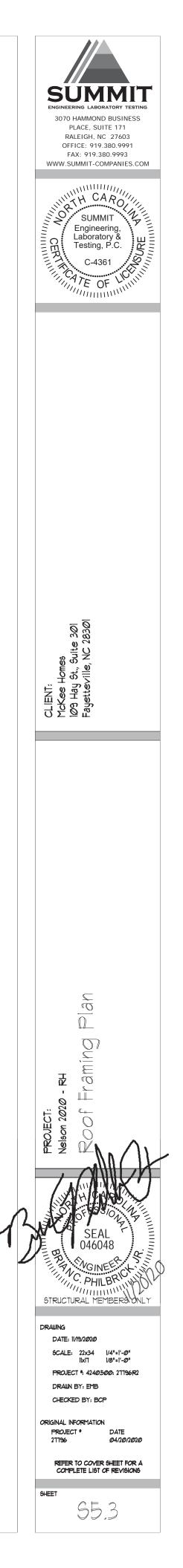
SCALE: 1/4"=1'-Ø" ON 22"x34" OR 1/8"=1'-Ø" ON 11"x17"

ROOF TRUSSES -PER MANUF. OR 2×4 RAFTERS @ 16" O.C.





<u>CLASSIC</u>



REQUIRED	BRACED W	ALL PANEL CONNE	CTIONS
		REQUIRED CONNECTION	
MATERIAL	MIN, THICKNESS	@ PANEL EDGES	@ INTERMEDIATE SUPPORTS
WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS @ 6" O.C.	6d COMMON NAILS @ 12" O.C.
GYPSUM BOARD	1/2"	5d COOLER NAILS** @ 7" O.C.	5d COOLER NAILS** @ 7" O.C.
WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS @ 6" O.C.	6d COMMON NAILS @ 12" O.C.
WOOD STRUCTURAL PANEL	7/16"	PER FIGURE R602.10.1	PER FIGURE R6@2.1@.1
-	MATERIAL WOOD STRUCTURAL PANEL GYPSUM BOARD WOOD STRUCTURAL PANEL WOOD STRUCTURAL	MATERIALMIN. THICKNESSWOOD STRUCTURAL PANEL3/8"GYPSUM BOARD1/2"WOOD STRUCTURAL PANEL3/8"WOOD STRUCTURAL PANEL3/8"	MATERIAL       MIN. THICKNESS       @ PANEL EDGES         WOOD STRUCTURAL PANEL       3/8"       6d COMMON NAILS @ 6" O.C.         GYPSUM BOARD       1/2"       5d COOLER NAILS** @ 1" O.C.         WOOD STRUCTURAL PANEL       3/8"       6d COMMON NAILS @ 6" O.C.         WOOD STRUCTURAL PANEL       3/8"       6d COMMON NAILS @ 6" O.C.         WOOD STRUCTURAL       1/16"       PER EIGURE R602101

REAR

HOUSE

FRONT

BRACED WALL NOTES:

- WALLS SHALL BE DESIGNED IN ACCORDANCE WITH SECTION R602.10 FROM THE 2018 INTERNATIONAL RESIDENTIAL CODE WITH ALL LOCAL AND STATE AMENDMENTS.
- 2. WALLS ARE DESIGNED FOR SEISMIC ZONES A-C AND ULTIMATE DESIGN WIND SPEEDS UP TO 130 MPH.
- REFER TO ARCHITECTURAL PLAN FOR DOOR/WINDOW OPENING SIZES.
- 4. BRACING MATERIALS, METHODS AND FASTENERS SHALL BE IN ACCORDANCE WITH TABLE R602.10.1
- 5. ALL BRACED WALL PANELS SHALL BE FULL WALL HEIGHT AND SHALL NOT EXCEED 10 FEET FOR ISOLATED PANEL METHOD AND 12 FEET FOR CONTINUOUS SHEATHING METHOD WITHOUT ADDITIONAL ENGINEERING CALCULATIONS.
- 6. MINIMUM PANEL LENGTH SHALL BE PER TABLE R602.10.1. 1. THE INTERIOR SIDE OF EXTERIOR WALLS AND BOTH SIDES OF INTERIOR WALLS SHALL BE SHEATHED CONTINUOUSLY WITH MINIMUM 1/2" GYPSUM BOARD (UNO).
- 8. FOR CONTINUOUS SHEATHING METHOD, EXTERIOR WALLS SHALL BE SHEATHED ON ALL SHEATHABLE SURFACES INCLUDING INFILL AREAS BETWEEN BRACED WALL PANELS, ABOVE AND BELOW WALL OPENINGS, AND ON GABLE END WALLS.
- 9. FLOORS SHALL NOT BE CANTILEVERED MORE THAN 24" BEYOND THE FOUNDATION OR BEARING WALL BELOW WITHOUT ADDITIONAL ENGINEERING CALCULATIONS.
- 10. A BRACED WALL PANEL SHALL BE LOCATED WITHIN 12 FEET OF EACH END OF A BRACED WALL LINE.
- 11. THE MAXIMUM EDGE DISTANCE BETWEEN BRACED WALL PANELS SHALL NOT EXCEED 21 FEET.
- 12. MASONRY OR CONCRETE STEM WALLS WITH A LENGTH OF 48" OR LESS SUPPORTING A BRACED WALL PANEL SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE R602.10.4.3 OF THE 2018 IRC OR DETAIL 2/D2f.
- 13. BRACED WALL PANEL CONNECTIONS TO FLOOR/CEILING SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R602.10.4.4
- 14. BRACED WALL PANEL CONNECTIONS TO ROOF SHALL BE CONSTRUCTED
- IN ACCORDANCE WITH SECTION R602.10.4.5 15. CRIPPLE WALLS AND WALK OUT BASEMENT WALLS SHALL BE DESIGNED IN ACCORDANCE WITH SECTION R602.104.6
- 16. PORTAL WALLS SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE R602.10.1 (UNO)
- 17. ON SCHEMATIC, SHADED WALLS INDICATE BRACED WALL PANELS. 18. ABBREVIATIONS:

GB = GYPSUM BOARD PF = PORTAL FRAME

WSP = WOOD STRUCTURAL PANEL CS-XXX = CONT. SHEATHED ENG = ENGINEERED SOLUTION PF-ENG = ENG, PORTAL FRAME

INSTALL HOLD-DOWNS FOR BRACED WALL END CONDITIONS PER SECTION R602.10.4 AND FIGURE R602.10.3(4) OF THE 2018 NCRC.

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY MCKEE HOMES COMPLETED/REVISED ON <u>9/11/20.</u> IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

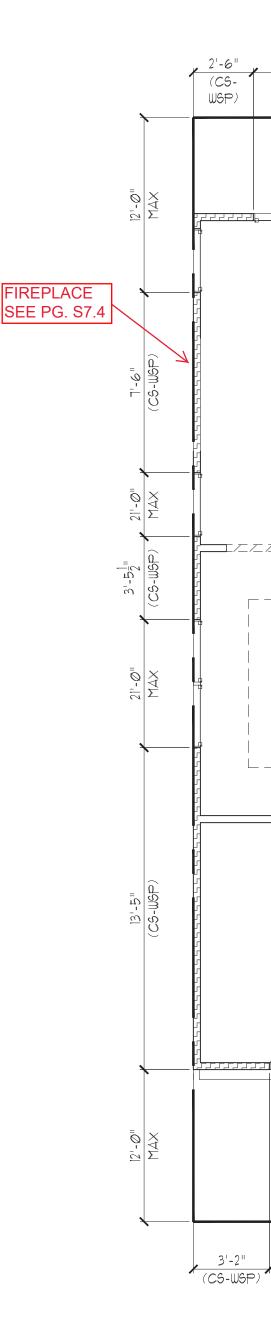
STRUCTURAL MEMBERS ONLY

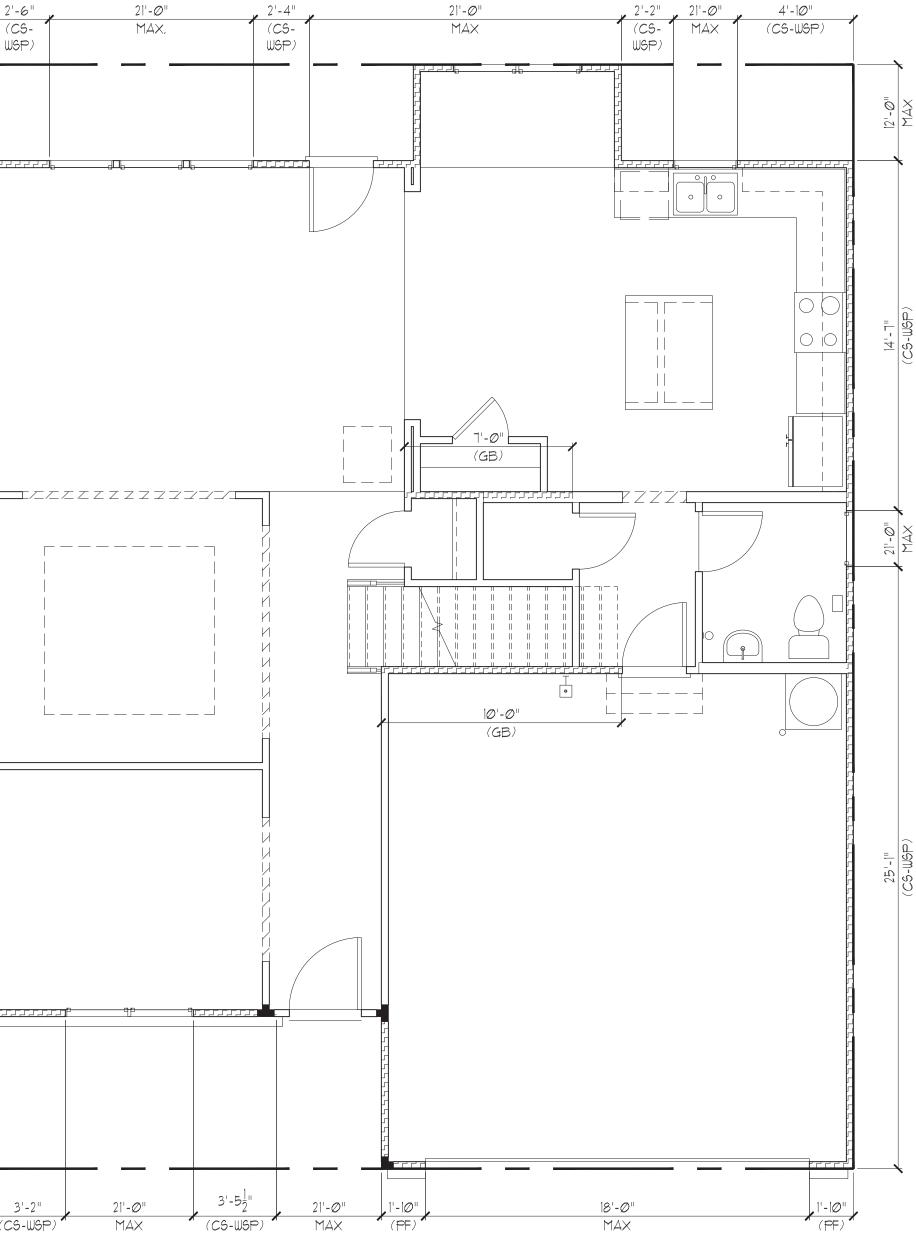
ENGINEERING SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS ON THIS DOCUMENT, SEAL DOES NOT INCLUDE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS. ANY DEVIATIONS OR DISCREPANCIES ON PLANS ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. FAILURE TO DO SO WILL VOID SUMMIT ELT LIABILITY.

STRUCTURAL ANALYSIS BASED ON 2018 NCRC.

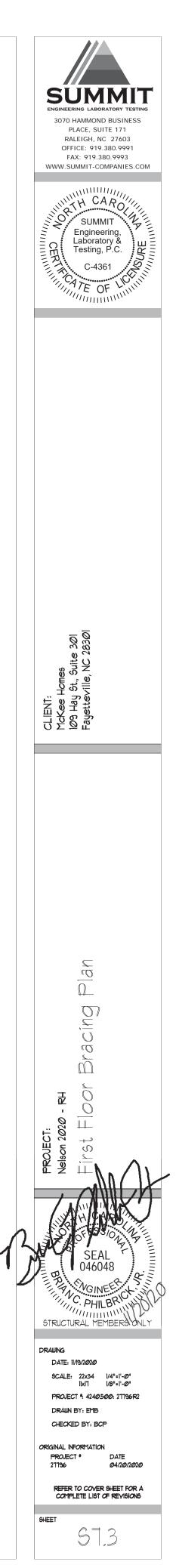
FIRST FLOOR BRACING PLAN

SCALE: 1/4"=1'-Ø" ON 22"x34" OR 1/8"=1'-Ø" ON 11"x17"

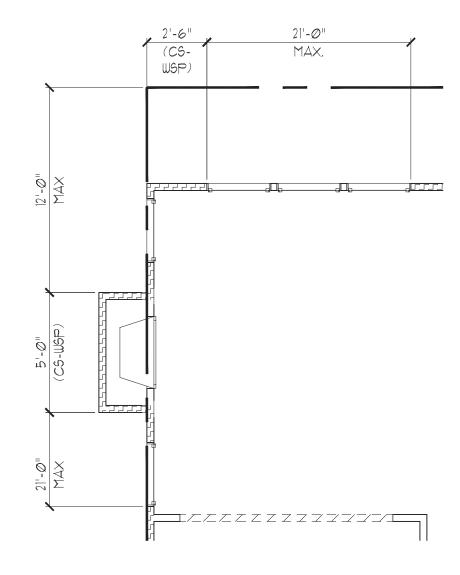




CLASSIC



FIRST FL	FIRST FLOOR BRACING (FT)			
CONTIN	NUOUS SHEATHING M	ETHOD		
	REQUIRED PROVIDED			
FRONT	14.6	17,1		
LEFT	11.7	24.3		
REAR	14.6	15.3		
RIGHT	11.7	39.6		



<u>OPT. FIREPLACE</u>

FIRST FLOOR BRACING (FT)			
CONTINUOUS SHEATHING METHOD			
	REQUIRED	PROVIDED	
FRONT	14.6	*PER ELEV.*	
	12.3	21.8	
REAR	14.6	15.3	
RIGHT	12.3	39.6	

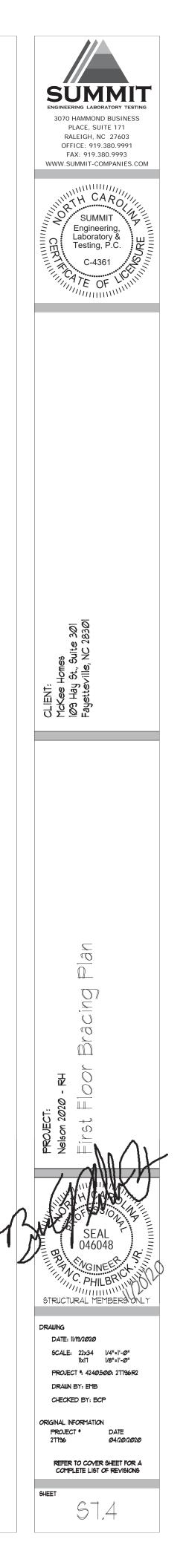
STRUCTURAL MEMBERS ONLY

ENGINEERING SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS ON THIS DOCUMENT, SEAL DOES NOT INCLUDE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS. ANY DEVIATIONS OR DISCREPANCIES ON PLANS ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. FAILURE TO DO SO WILL VOID SUMMIT ELT LIABILITY.

STRUCTURAL ANALYSIS BASED ON 2018 NCRC.

FIRST FLOOR BRACING PLAN

SCALE: 1/4"=1'-0" ON 22"x34" OR 1/8"=1'-0" ON 11"x17"



	REQUIRED BRACED WALL PANEL CONNECTIONS				
			REQUIRED CONNECTION		
METHOD	MATERIAL	MIN. THICKNESS	@ PANEL EDGES	@ INTERMEDIATE SUPPORTS	
CS-WSP	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS @ 6" O.C.	6d COMMON NAILS @ 12" O.C.	
GB	GYPSUM BOARD	1/2"	5d COOLER NAILS** @ 7" O.C.	5d COOLER NAILS** @ 7" O.C.	
WSP	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS @ 6" O.C.	6d COMMON NAILS @ 12" O.C.	
PF	WOOD STRUCTURAL PANEL	7/16"	PER FIGURE R602.10.1	PER FIGURE R602.10.1	
		**OR EQUIVALEN	T PER TABLE R102.3.5	1	

BRACED WALL NOTES:

- WALLS SHALL BE DESIGNED IN ACCORDANCE WITH SECTION R602.10 FROM THE 2018 INTERNATIONAL REGIDENTIAL CODE WITH ALL LOCAL AND STATE AMENDMENTS.
- 2. WALLS ARE DESIGNED FOR SEISMIC ZONES A-C AND ULTIMATE DESIGN WIND SPEEDS UP TO 130 MPH.
- REFER TO ARCHITECTURAL PLAN FOR DOOR/WINDOW OPENING SIZES. 4. BRACING MATERIALS, METHODS AND FASTENERS SHALL BE IN
- ACCORDANCE WITH TABLE R602.10.1
- 5. ALL BRACED WALL PANELS SHALL BE FULL WALL HEIGHT AND SHALL NOT EXCEED 10 FEET FOR ISOLATED PANEL METHOD AND 12 FEET FOR CONTINUOUS SHEATHING METHOD WITHOUT ADDITIONAL ENGINEERING CALCULATIONS.
- 6. MINIMUM PANEL LENGTH SHALL BE PER TABLE R602.10.1. 1. THE INTERIOR SIDE OF EXTERIOR WALLS AND BOTH SIDES OF INTERIOR WALLS SHALL BE SHEATHED CONTINUOUSLY WITH MINIMUM 1/2" GYPSUM
- BOARD (UNO). 8. FOR CONTINUOUS SHEATHING METHOD, EXTERIOR WALLS SHALL BE SHEATHED ON ALL SHEATHABLE SURFACES INCLUDING INFILL AREAS BETWEEN BRACED WALL PANELS, ABOVE AND BELOW WALL OPENINGS, AND ON GABLE END WALLS.
- 9. FLOORS SHALL NOT BE CANTILEVERED MORE THAN 24" BEYOND THE FOUNDATION OR BEARING WALL BELOW WITHOUT ADDITIONAL ENGINEERING CALCULATIONS.
- 10. A BRACED WALL PANEL SHALL BE LOCATED WITHIN 12 FEET OF EACH END OF A BRACED WALL LINE.
- 11. THE MAXIMUM EDGE DISTANCE BETWEEN BRACED WALL PANELS SHALL NOT EXCEED 21 FEET.
- 12. MASONRY OR CONCRETE STEM WALLS WITH A LENGTH OF 48" OR LESS SUPPORTING A BRACED WALL PANEL SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE R602.10.4.3 OF THE 2018 IRC OR DETAIL 2/D2f.
- 13. BRACED WALL PANEL CONNECTIONS TO FLOOR/CEILING SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R602.10.4.4
- 14. BRACED WALL PANEL CONNECTIONS TO ROOF SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION R602.10.4.5
- 15. CRIPPLE WALLS AND WALK OUT BASEMENT WALLS SHALL BE DESIGNED IN ACCORDANCE WITH SECTION R602.104.6
- 16. PORTAL WALLS SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE R602.10.1 (UNO)
- 17. ON SCHEMATIC, SHADED WALLS INDICATE BRACED WALL PANELS. 18. ABBREVIATIONS:

GB = GYPSUM BOARD PF = PORTAL FRAME

WSP = WOOD STRUCTURAL PANEL CS-XXX = CONT, SHEATHED ENG = ENGINEERED SOLUTION PF-ENG = ENG. PORTAL FRAME

INSTALL HOLD-DOWNS FOR BRACED WALL END CONDITIONS PER SECTION R602.10.4 AND FIGURE R602.10.3(4) OF THE 2018 NCRC.

THESE PLANS ARE DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS PROVIDED BY MCKEE HOMES COMPLETED/REVISED ON <u>9/11/20.</u> IT IS THE RESPONSIBILITY OF THE CLIENT TO NOTIFY SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. IF ANY CHANGES ARE MADE TO THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. CANNOT GUARANTEE THE ADEQUACY OF THESE STRUCTURAL PLANS WHEN USED WITH ARCHITECTURAL PLANS DATED DIFFERENTLY THAN THE DATE LISTED ABOVE.

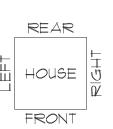
STRUCTURAL MEMBERS ONLY

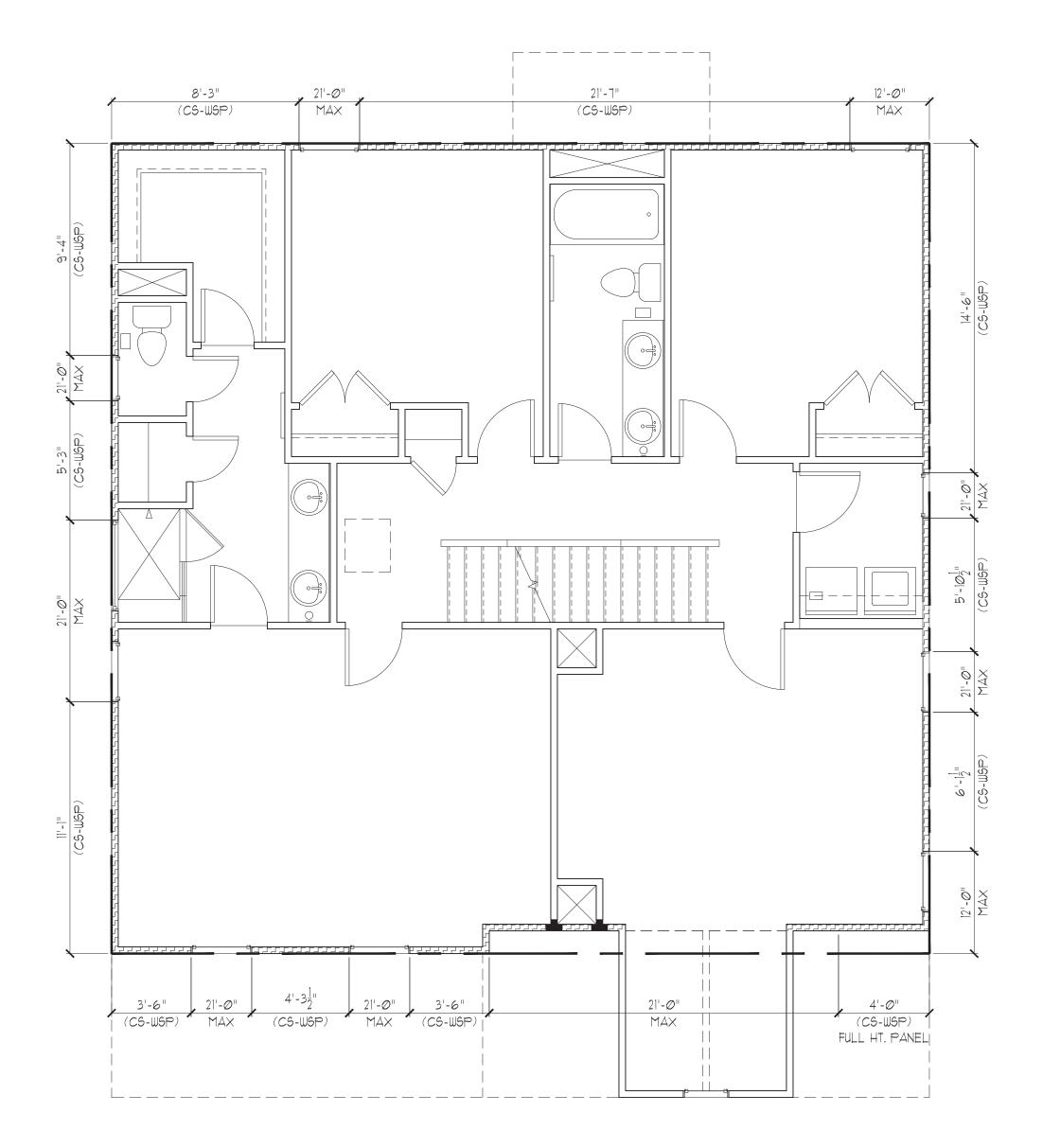
ENGINEERING SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS ON THIS DOCUMENT, SEAL DOES NOT INCLUDE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS. ANY DEVIATIONS OR DISCREPANCIES ON PLANS ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF SUMMIT ENGINEERING, LABORATORY & TESTING, P.C. FAILURE TO DO SO WILL VOID SUMMIT ELT LIABILITY.

STRUCTURAL ANALYSIS BASED ON 2018 NCRC.

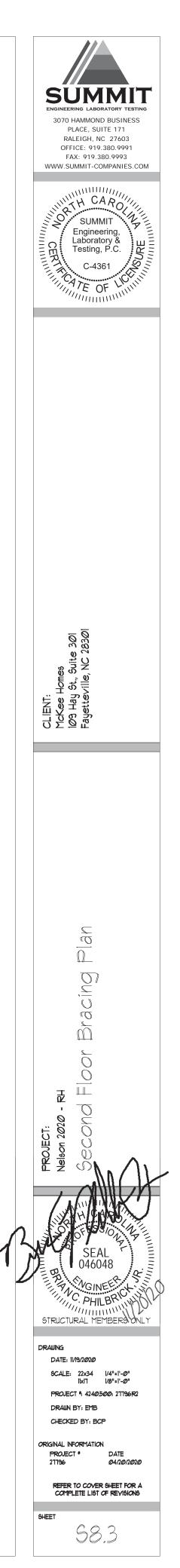
SECOND FLOOR BRACING PLAN

SCALE: 1/4"=1'-0" ON 22"x34" OR 1/8"=1'-0" ON 11"x17"





CLASSIC



SECOND	SECOND FLOOR BRACING (FT)			
CONTIN	NUOUS SHEATHING M	ETHOD		
	REQUIRED	PROVIDED		
FRONT	5.1	15.2		
LEFT	5.1	25.6		
REAR	5.1	29.8		
RIGHT	5.1	26.5		

	DE5/GN SPECIFICATIONS:         Construction Type:       Commerical       Residential       Image: Second S	ENGINEERING LABORATORY TESTING	Sheet No.         Description           C6I         Cover Sheet, Specifications, Revisions           DIm         Monolithic Slab Foundation Details           DIs         Shem Wall Foundation Details           Dic         Crawl Space Foundation Details           Dib         Basement Foundation Details           Dif         Framing Details
	4. Floor Live Loads       40 PGF         41. Typ. Duelling       40 PGF         42. Sleeping Areas       30 PGF         43. Decks       40 PGF         44. Passenger Garage       50 PGF         55. Floor Dead Loads       50 PGF         52. I-Joint Izx       10 PGF         53. Floor True       15 PGF         6. Ultimate Design Wind Speed (3 sec. gust)       130 MPH         61. Exposure       B         62. Importance Factor       10         63. Wind Speed Yu =       63. Vu =	Standard Details PROJECT ADDRESS: TBD McKee Homes 109 Hay St., Suite 301 Fayetteville, NC 28301 DESIGNER:	Revision     Date     Project     Description       No.     Date     Project     Description       I     UIU9     -     Updated to 2018 NCRC
	1. Component and Cladding (in PSF)         MEAN ROOF       UP TO 30       30"1"-35'       351"-40'       40"1"-45'         HT.       ID 70 30       30"1"-35'       351"-40'       40"1"-45'         ZONE 1       16.1,-180       115,-18.9       182,-19.6       181,-202         ZONE 2       161,-210       115,-22.1       182,-22.9       181,-23.5         ZONE 3       16.1,-210       115,-22.1       182,-22.9       181,-23.5         ZONE 4       182,-19.0       192,-20.2       193,-26.1       204,-26.3         2. Design Category       C       83.       Importance Factor       C         8.1. Botte Class       D       20,-25.2       193,-26.1       204,-26.3         8.2. Design Category       C       83.       Importance Factor       C         8.3. Importance Factor       L0       84. Selamic Use Group       I         8.4. Setamic Use Group       I       85.1 Sms = %g       86.1 Vx =         8.6.1 Vx =       8.6.2 Vy =       8.1. Basic Structural System (check one)       IS Beating Uall         Building Frame       Dual w/ Special Moment Frame       Dual w/ Special Moment Frame         Dual w/ Special Moment Achored       Dual w/ Intermediate RC or Special Steel       Inverted Periculum	These drawings are to be coordinated with the architectural, mechanical, plumbing, electrical, and civil drawings. This coordination is not the responsibility of the structural engineering of coord (SER). Should any discrepancies become apparent, the contractor shall notify SUMMIT Engineering, Laboratory 4 Testing, P.C. before construction begins.         ELAN ABBREVIATIONS:         AB       ANCHOR BOLT       PT       PRESSURE TREATED         AF       ABOVE FINISHED FLOOR       R5       ROOF SUPPORT         CJ. CELLING JOIST       SC       STUD COLUMN         CLR       CLEAR       SJ       SINGLE JOIST         D       DOUBLE JOIST       SF       SPRUCE PINE FIR         DSP       DOUBLE JOIST       SF       SPRUCE PINE FIR         DSP       DOUBLE STUD POCKET       S61       SIMPSON STRONGS-TIE         EE       EACH BND       SYF       SOUTHERN YELLOW PINE         EW       EACH WAY       TJ       TRIPLE STUD POCKET         OC ON CENTER       TYF       TYFICAL         PSF       POUNDS PER SQUARE FOOT       UNO       INLESS NOTED OTHERWISE         P3I       POUNDS PER SQUARE FOOT       UNO       INLESS NOTED OTHERWISE         P3F       POUNDS PER SQUARE FOOT       UNO       INLESS NOTED OTHERWISE         P3I       POUNDS PER SQUARE FOOT       UNO	Image: set of the
<ul> <li>GENERAL STRUCTURAL NOTES:</li> <li>The design professional whose seal appears on these drawings is the structural engineer 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 permission of SUMMIT Engineering. Laboratory 4 Testing, P.C. (SUMMIT) or the SER. For the purposes of these construction documents the SER and SUMMIT shall be considered the same entity.</li> <li>The structure is only stable in its completed form. The contractor shall provide all required temporary bracing during construction to stabilize the structure.</li> <li>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.</li> <li>Any structural elements or details not fully developed on the construction drawings shall be completed inder the direction of a licensed professional engineer. These shop drawings shall be submitted to SUMMIT for reviewed for overall compliance as it relates to the structural design of this project. Verification of the shop drawings will be reviewed for overall compliance as it relates to the structural design of this project. Verification of the SER the contractor shall verify the field conditions, is not the responsibility of the SER of SUMMIT.</li> <li>Verification of assumed field conditions for accuracy and report any discrepancies to SUMMIT before construction begins.</li> <li>The SER is not responsible for any secondary structural elements or non-structural elements, except for the elements specifically noted on the structural drawings.</li> <li>This structure and all construction shall conform to all applicable sections of the international residential code.</li> <li>This structure and all</li></ul>	<ul> <li>the region in which the structure is to be constructed. However, the bottom of all footings shall be a minimum of 12" below grade.</li> <li>Any fill shall be placed under the direction or recommendation of a licensed professional engineer.</li> <li>The resulting soil shall be compacted to a minimum of 95% maximum dry density.</li> <li>Excavations of footings shall be lined temporarily with a 6 mill polyathylene membrane if placement of concrete data of a monotonic of a scavation.</li> <li>No concrete shall be placed against any subgrade containing water, ice, frost, or loose material.</li> <li>STRICTURAL STEEL:</li> <li>Structural steel shall be fabricated and erected in accordance in manual of steel Construction "Load Resistance Factor Design" latest editions.</li> <li>Biructural steel shall have a minimum yield stress (Fy) of 36 kis unless otherwise noted.</li> <li>Concrete shall have a normal weight aggregate and a minimum compressive strength (F<sub>2</sub>) at 28 days of 30000 psi, unless otherwise noted.</li> <li>Concrete shall have a normal weight aggregate and a minimum cole the proportioned, mixed, and placed in accordance with the latest editions of ACI 30<sup>6</sup>.</li> <li>Concrete shall have a normal weight aggregate and a minimum cole the placed in accordance with the latest editions of ACI 30<sup>6</sup>.</li> <li>Concrete shall have a normal weight aggregate and a minimum cole the placed in accordance with the latest editions of ACI 30<sup>6</sup>.</li> <li>Detailing, fabrication, an ACI 30<sup>6</sup>.</li> </ul>	<ul> <li>discrepancies become apparent, the contractor shall notify SUMMIT immediately.</li> <li>discrepancies become apparent, the contractor shall notify SUMMIT immediately.</li> <li>discrepancies become apparent, the contractor shall notify SUMMIT immediately.</li> <li>discrepancies become apparent, the contractor shall notify SUMMIT immediately.</li> <li>discrepancies become apparent, the contractor shall notify SUMMIT immediately.</li> <li>discrepancies become apparent, the contractor shall be contract with accordance with the above assumptions.</li> <li>to there reinforcing steel is required vertically dow provided unless otherwise noted.</li> <li>Solid sam wood framing members shall conform to apportide through a saw cut joint.</li> <li>Solid sam wood framing members are de Specification for Wood Construction? (ND other wise noted, all wood framing members are de Specification for Wood Construction? (ND otherwise noted, all wood framing members are de Specification for Wood Construction? (ND otherwise noted, all wood framing members are de Specification for Wood Construction? (ND otherwise noted, all wood framing members are de Specification for Wood Construction? (ND otherwise noted, all wood framing members are de Specification for Wood Construction? (ND otherwise noted, all wood framing members are de Specification for Wood Construction? (ND otherwise noted, all wood framing members are de Specification for Wood Construction? (ND otherwise noted, all wood framing members are de Specification for Wood Construction? (ND otherwise noted and base otherwise noted at the active and approximation of W-0° vingin polypropylene fibers ase do lefin materials and specificality as concrets shall equal to be Wood's vingin polypropylene fibers ase dolers materials and specificality as concrets shall equal the set wood yrein polymonylene fibers as concrets shall be produced at each end of a wood with AWPA standard C-2</li> <li>Nalls beams shall have full bearing on supporting f</li></ul>	The douel       I. 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 five (5) days for review. The review by the SER shall review for overall compliance with the design documents. The SER shall review for overall compliance with the design documents. The SER shall review for overall compliance with the design documents. The SER shall review for overall compliance with the design documents. The SER shall review for overall compliance with the design documents. The SER shall assume no responsibility for the correctness for the structural design for the wood trusses.         50. Inless       The wood trusses shall be designed for all required loadings as specified in the local building code, the ASCE Shandard "filmimun Design Loads for Equipments shown on these specifications. The trus drawings including but not limited to HVAC equipment, piping, and architectural fixtures attached to the trusses.         3. The trusses shall be designed, fabricated, and erected in accordance with the latest colition of the "National Design Specification for Meal Plate Connected Wood Trusses."         4. The trusses shall be designed, fabricated, and erected in accordance with the latest colition of the "National Design Specification for Meal Plate Connected Wood Trusses."         5. The truss and advectore with "Commentary and Recommendations for Handling, installing, and Eracing Metal Plate Connected Wood Trusses."         6. 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.         existence       Any chords or truss webs shown on these drawings have b

- Initial studies and be contributed in the set of the s
- 24" 0'C
- noted otherwise.

- All structurally required wood sheathing shall bear the mark of the APA.

- 4
- FOUNDATIONS: I. The structural engineer has not performed a subsurface investigation. Verification of this 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.

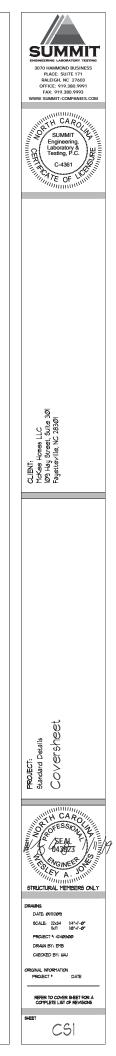
of the current local building code.

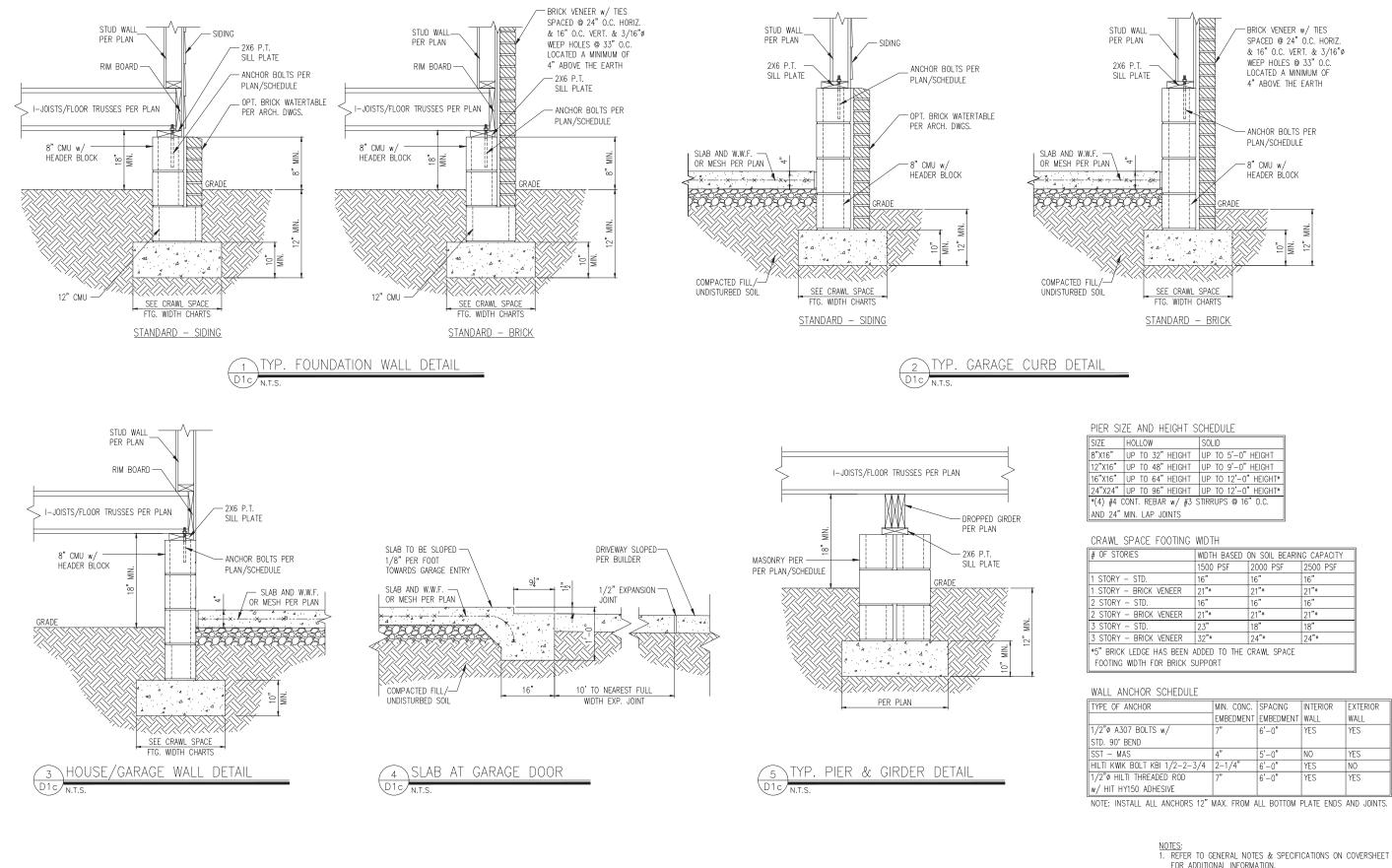
- Requirements for Reinforced Concrete" and ACI 301: "Specifications for Structural Concrete for Buildings". Air entrained concrete must be used for all structural elements
- exposed to freeze/thau cycles and deicing chemicals. Air entrainment amounts (in percent) shall be within -1% to +2% of target values as follows: 3.1. Footings: 5% 3.2. Exterior Glabs: 5%

- No admixtures shall be added to any structural concrete without written permission of the SER.
- Detailing, fabrication, and placement of reinforcing steel shall be in accordance with the latest edition of ACI 315: "Manual of
- be in accordance with the latest edition of ACI 3B: "Manual of Standard Practice for Detailing Concrete Structures" Horizontal footing and wall reinforcement shall be continuous and shall have 30° bends, or corner bars with the same size/spacing as the horizontal reinforcement with a class B tension splice. Lap reinforcement as required, a minimum of 40 bar diameters for tension or compression unless otherwise noted. Splices in masorry shall be a minimum of 48 bar diameters.

- Four and five ply beams shall be bolted together with (2) rows of 1/2" diameter through bolts staggered @ 16" O.C. unless not of how to be and the staggered of the
- codes and as referenced on the structural plans, either through code references or construction details.
- UDOD STRUCTURAL PANELS: 1. 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

3.	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. Sheathing shall be applied with the long direction perpendicular to framing, unless noted otherwise.
4.	Roof sheathing shall be APA rated sheathing exposure I or 2. Roof sheathing shall be continuous over two supports and attached to its supporting roof framing with (1)-8d CC 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 with the long direction perpendicular to framing. Sheathing shall have a span rating consistent with the framing spacing, Use suitable edge support by use of plywood clips or lumber
	blocking unless otherwise noted. Panel end joints shall occur over framing. Apply building paper over the sheathing as required by the state Building Code.
5.	Wood floot sheathing shall be APA rated sheathing exposure I or 2. Attach sheathing to its supporting framing with (1)-8d CC ringshark hall 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. Use suitable edge support by use of T4G plywood or lumber blocking unless otherwise noted. Panel end joints shall occur over framing. Appli building paper over the sheathing as required by the state Building Code.
6.	Sheathing shall have a 1/8" gap at panel ends and edges as recommended in accordance with the APA.
<u>STR</u> I. 2.	<u>UCTURAL FIBERBOARD PANELS:</u> Fabrication and placement of structural fiberboard sheathing shall be in accordance with the applicable AFA standards. All structurally required fiberboard sheathing shall bear the
3.	The source of the source in the source of th
4.	Sheathing shall have a 1/8" gap at panel ends and edges are recommended in accordance with the AFA.





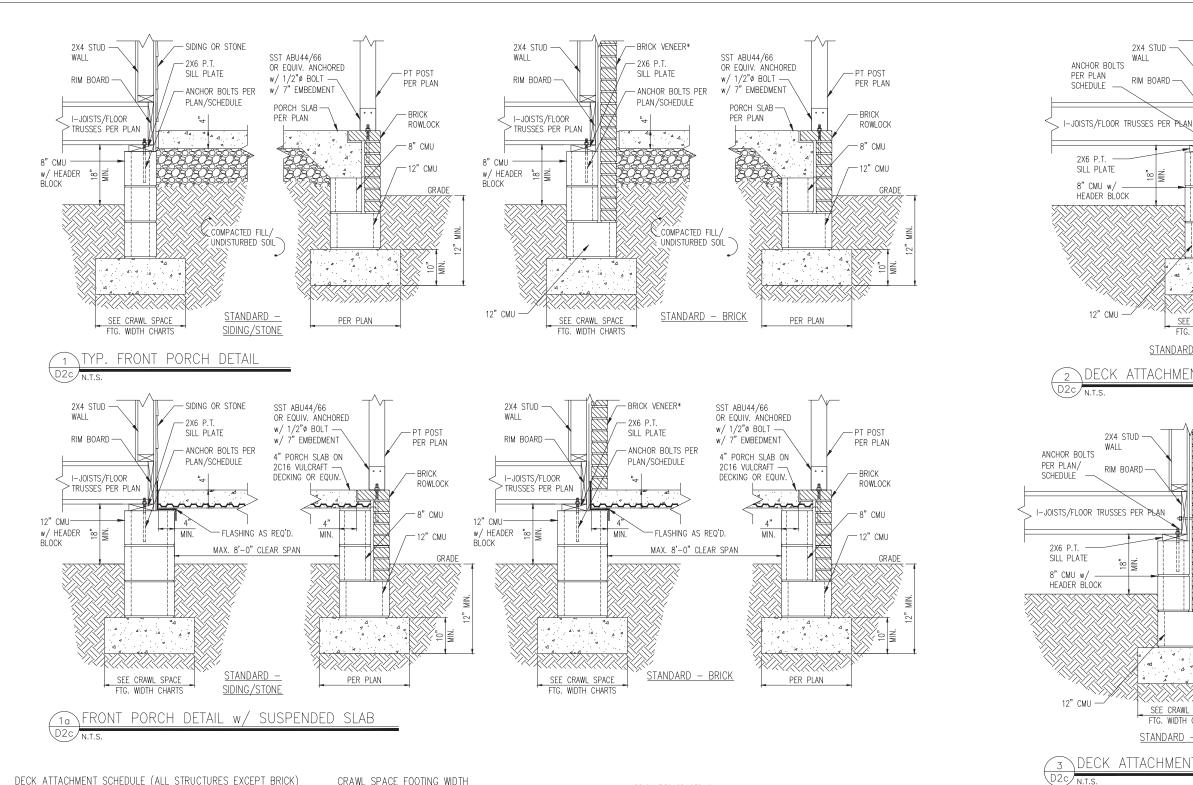
HOLLOW	SOLID		
UP TO 32" HEIGHT	UP TO 5'-0" HEIGHT		
	UP TO 9'-0" HEIGHT		
UP TO 64" HEIGHT	UP TO 12'-0" HEIGHT*		
UP TO 96" HEIGHT	UP TO 12'-0" HEIGHT*		
ONT. REBAR w/ #3 STIRRUPS @ 16" O.C.			
MIN. LAP JOINTS			

RIES	WIDTH BASED ON SOIL BEARING CAPACITY			
	1500 PSF	2000 PSF	2500 PSF	
- STD.	16"	16"	16"	
- BRICK VENEER	21"*	21"*	21"*	
- STD.	16"	16"	16"	
- BRICK VENEER	21"*	21"*	21"*	
- STD.	23"	18"	18"	
- BRICK VENEER	32"*	24"*	24"*	
LEDGE HAS BEEN ADDED TO THE CRAWL SPACE WIDTH FOR BRICK SUPPORT				

ANCHOR	MIN. CONC.	SPACING	INTERIOR	EXTERIOR
	EMBEDMENT	EMBEDMENT	WALL	WALL
607 BOLTS w/	7"	6'-0"	YES	YES
BEND				
AS	4"	5'-0"	NO	YES
K BOLT KBI 1/2-2-3/4	2-1/4"	6'-0"	YES	NO
TI THREADED ROD	7"	6'-0"	YES	YES
Y150 ADHESIVE				

- FOR ADDITIONAL INFORMATION.
- 2. PROVIDE 6 MIL VAPOR BARRIER UNDER ALL SLABS-ON-GRADE. 3. SEE ARCH. DWGS. FOR ALL TOP OF THE SLAB ELEVATIONS,
- SLOPES AND DEPRESSIONS. 4. REFER TO STRUCTURAL PLANS AND FRAMING DETAILS FOR BRACED WALL PANEL LAYOUT, DIMENSIONS, ATTACHMENT AND CONNECTIONS
- 5. REFER TO LOCAL AND STATEWIDE CODES FOR ADDITIONAL AMENDMENTS AND REQUIREMENTS NOT SHOWN
- 6. PERIMETER INSULATION SHOWN AS REQUIRED BY LOCAL CLIMATE ZONE. INSTALL PER TABLE N1102.2.10 OF THE 2018 NCRC





DECK ATTACHMENT SCHEDULE	(ALL STRUCTURES EXCEPT BRICK)	
--------------------------	-------------------------------	--

FASTENERS	MAX. 8'-0" JOIST	MAX. 16'-0" JOIST	
	SPAN	SPAN	
5/8" GALV. BOLTS w/ NUT & WASHER <sup>b</sup>	(1) @ 3'-6" O.C.	(1) @ 1'-8" O.C.	
AND	AND	AND	
12d COMMON GALV NAILS <sup>C</sup>	(2) @ 8" 0 C	(3) @ 6" 0 C	

a. ATTACHMENT INTERPOLATION BETWEEN 8' AND 16' JOIST SPANS IS ALLOWED. b. MINIMUM EDGE DISTANCE FOR BOLTS IS 22".

c. NAILS MUST PENETRATE THE SUPPORTING STRUCTURE BAND A MINIMUM OF  $1\frac{1}{2}^{n}$ 

DECK ATTACHMENT SCHEDULE (BRICK STRUCTURES)

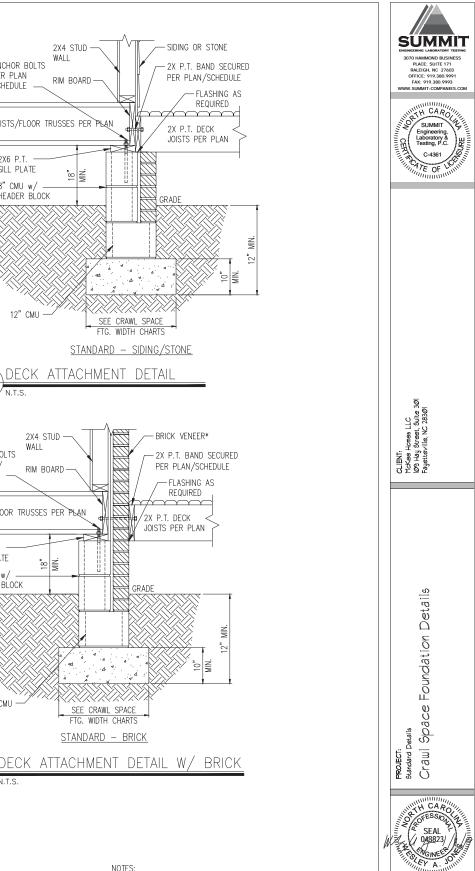
FASTENERS	MAX. 8'-0" JOIST	MAX. 16'-0" JOIST
	SPAN	SPAN
5/8" GALV. BOLTS w/ NUT & WASHER <sup>b</sup>	(1) @ 2'-4" O.C.	(1) @ 1'-4" O.C.

a. ATTACHMENT INTERPOLATION BETWEEN 8' AND 16' JOIST SPANS IS ALLOWED. b. MINIMUM EDGE DISTANCE FOR BOLTS IS  $2\frac{1}{2}$ ".

CRAWL SPACE FOOTING WIDTH

# OF STORIES WIDTH BASED ON SOIL BEARING CAPACI				
	1500 PSF	2000 PSF	2500 PSF	
1 STORY - STD.	16"	16"	16"	
1 STORY - BRICK VENEER	21"*	21"*	21"*	
2 STORY - STD.	16"	16"	16"	
2 STORY - BRICK VENEER	21"*	21"*	21"*	
3 STORY - STD.	23"	18"	18"	
3 STORY - BRICK VENEER	32"*	24"*	24"*	
*5" BRICK LEDGE HAS BEEN ADDED TO THE CRAWL SPACE FOOTING WIDTH FOR BRICK SUPPORT				

\*BRICK TIES SPACED @ 24" O.C. HORIZ. & 16" O.C. VERT. AND 3/16"Ø WEEP HOLES @ 33" O.C. LOCATED A MINIMUM OF 4" ABOVE THE EARTH



NOTES: 1. REFER TO GENERAL NOTES & SPECIFICATIONS ON COVERSHEET FOR ADDITIONAL INFORMATION.

N.T.S

- 2. PROVIDE 6 MIL VAPOR BARRIER UNDER ALL SLABS-ON-GRADE. 3. SEE ARCH. DWGS. FOR ALL TOP OF THE SLAB ELEVATIONS,
- SLOPES AND DEPRESSIONS. 4. REFER TO STRUCTURAL PLANS AND FRAMING DETAILS FOR BRACED WALL PANEL LAYOUT, DIMENSIONS, ATTACHMENT AND CONNECTIONS
- 5. REFER TO LOCAL AND STATEWIDE CODES FOR ADDITIONAL AMENDMENTS AND REQUIREMENTS NOT SHOWN
- 6. PERIMETER INSULATION SHOWN AS REQUIRED BY LOCAL CLIMATE ZONE. INSTALL PER TABLE N1102.2.10 OF THE 2018 NCRC

REFER TO COVER SHEET FOR A COMPLETE LIST OF REVISIONS

D2c

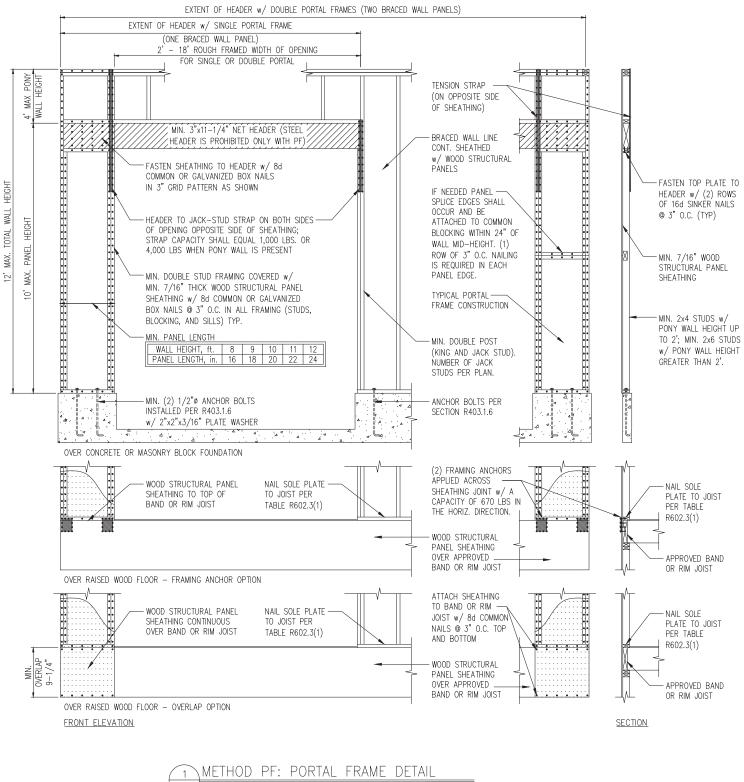
STRUCTURAL MEMBERS ONLY

SCALE: 22x34 1/4"+1"-Ø" 1x11 1/8"+1"-Ø"

PROJECT \* 4240500 DRAWN BY; EMB CHECKED BY: WAJ

PROJECT PROJECT DATE

DRAWING DATE: 01/1/2019



D1f 3/8" = 1'-0"

