# **KENZIE H&H HOMES - GARAGE LEFT**

### **PLAN REVISIONS**

01-10-19 COMPLETED CONSTRUCTION DOCUMENTS INCLUDING CLIENT REVIEW COMMENTS

Ø1-15-19 CLIENT BACK END COMMENTS

01-24-19 MIRROR PLAN TO CREATE LEFT HAND VERSION

03-26-20 LIPDATED ROOM NAMING PER HITH STANDARDS ADDED 2x6 WALL FLOOR PLANS I ELECTRICAL PLANS CHANGED ELEVATION 'A' ( 'C' TO 'A-I' ( 'C-I' ADDED ELEVATIONS 'A-2' ( 'C-2' CHANGED ELEVATION 'B' TO ELEV. 'B-2' AND ADDED NEW ELEV. 'B-1' BROKE OUT OPTIONS FROM THE FLOOR PLANS AND MADE A SEPARATE PAGE FOR

ISSUANCE OF PLANS FROM THIS DRAFTERS OFFICE SHALL NOT RELIEVE THE BUILDER OF RESPONSIBILITY TO REVIEW AND VERRY ALL NOTES, DYENSONS, AND ADVERBICE TO APPLICABLE BUILDING CODES FROM TO CONTROLLED OF MYE DEPOSIONS, OR ADVERSINGE TO APPLICABLE BUILDING CODES SHALL BE BROUGHT TO THE ATTENTION OF THE DRAFTERS OFFICE FOR CORRECTION BEFORE COPYEXCEPTION CAN'T CONSTITUTION OF THE DRAFTERS OFFICE FOR CORRECTION BEFORE COPYEXCEPTION CAN'T CONSTITUTION OF THE DRAFTERS OFFICE ANY DEPOSITION OF THE ATTENTION OF THE PROPERTY ANY BENEFIT DEPOSITION OF THE ATTENTION OF ANY CONSTITUTION OF THE ATTENTION OF THE

NOTICE TO CONTRACTOR
nstruction must comply with current NC Building Codes **APPROVED** Limited building only review
Permit holder responsible for
full compliance with the code 09/27/2021 NORTH CAROLINA

- 24			
1	ELEVATION "	Δ"	
1	MAIN FLOOR	804	S.F.
	UPPER FLOOR	1154	S.F.
	TOTAL LIVING	1958	S.F.
ı	GARAGE	480	S.F.
1	FRONT PORCH	82	SF.
1	PATIO	120	SF.
	TOTAL SQ FT	2640	SF.
	OPT COV PORCH	120	SF.
	OPT. EXT. PORCH	160	S.F.
	OPT, I CAR GARAGE	240	SF.
- 0			

ELEVATION "E	3"	
MAIN FLOOR	804	SF.
UPPER FLOOR	117Ø	SF
TOTAL LIVING	1974	SF.
GARAGE	480	SF.
FRONT PORCH	83	SF.
PATIO	120	S.F.
TOTAL SQ FT	2657	SF.
OPT. COV. PORCH	120	
OPT EXT PORCH	160	
OPT I CAR GARAGE	240	SF.

ELEVATION "	C"	
MAIN FLOOR	804	SF.
UPPER FLOOR	1170	SF.
TOTAL LIVING	1974	SF.
GARAGE	480	SF.
FRONT PORCH	81	S.F.
PATIO	120	SF.
TOTAL SQ FT.	2655	SF.
OPT. COV. PORCH	120	5.F.
OPT_EXT. PORCH	160	SF.
OPT I CAR GARAGE	240	S.F.



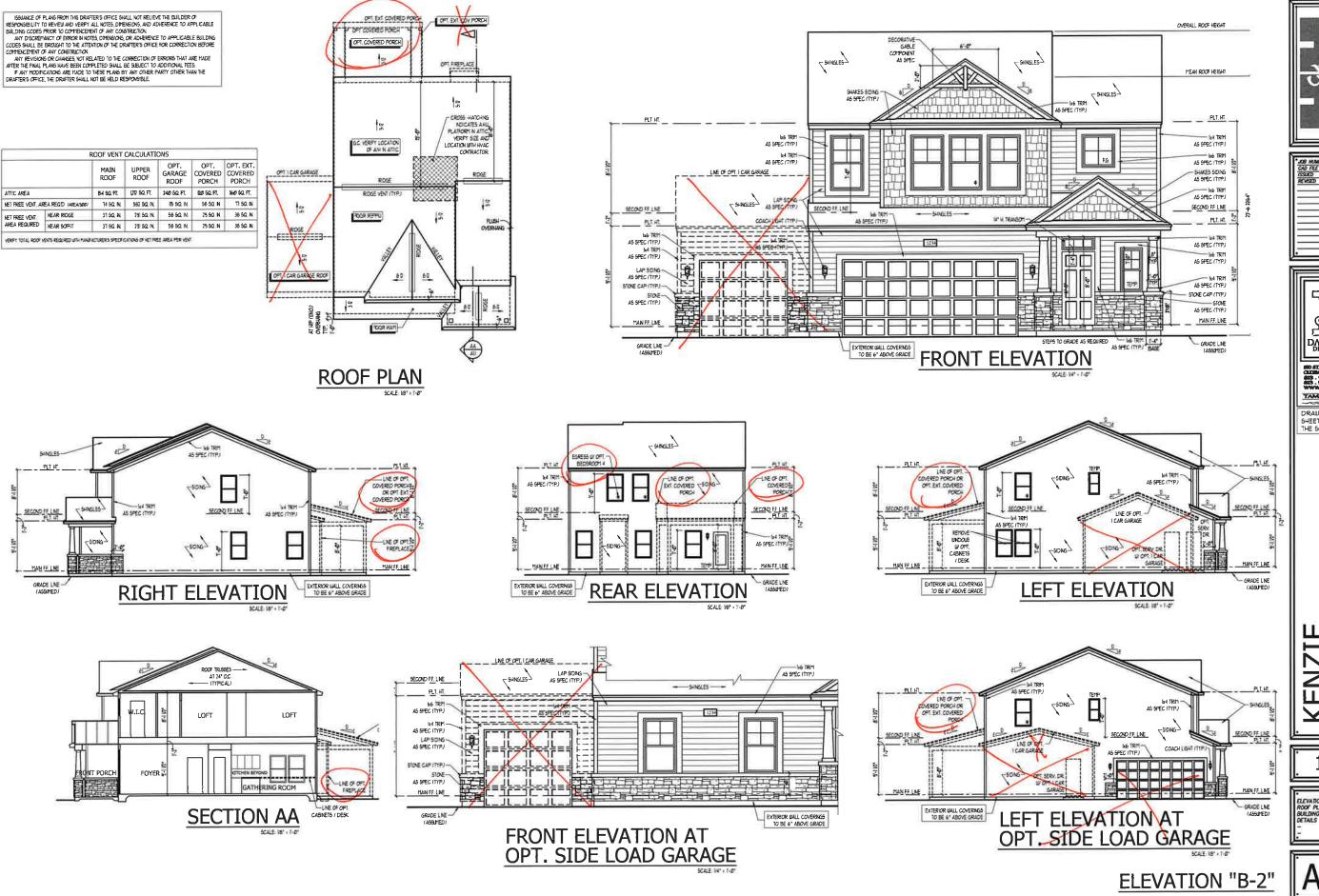


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1958







HOMES



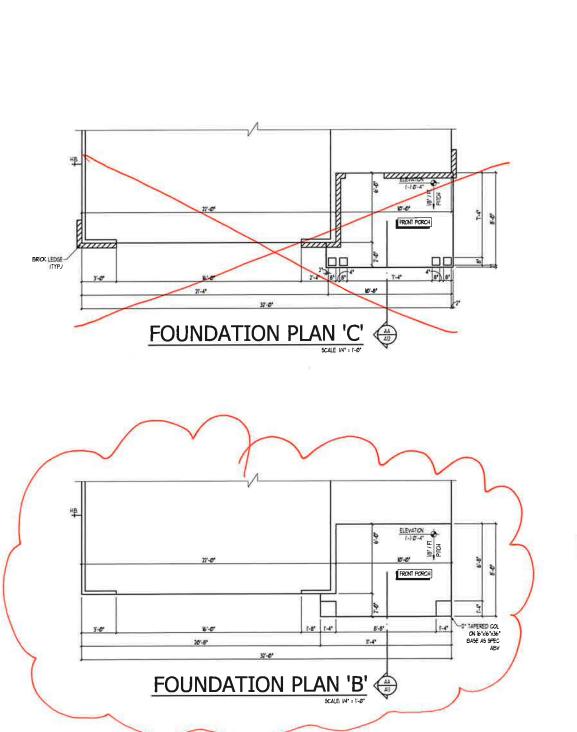


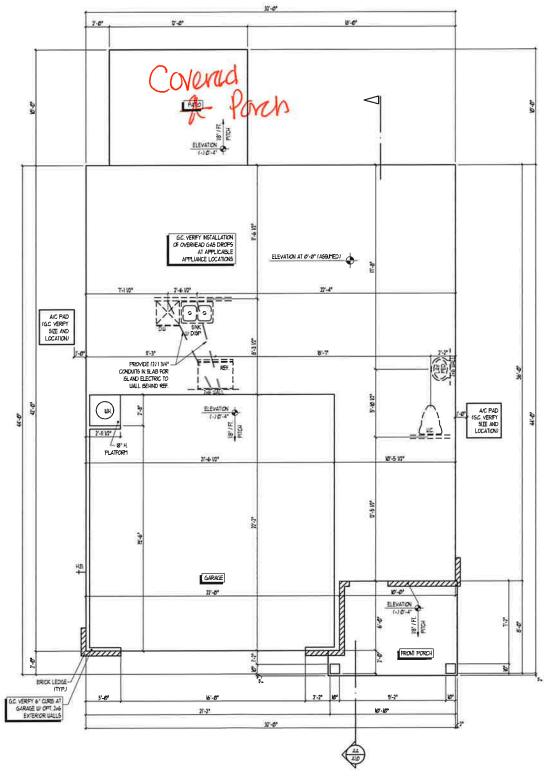
KENZIE H&H HOMES

1958

\* TITLE
ELEVATIONS
ROOF PLAN
BUILDING SECTION
DETAILS
-

A1.1











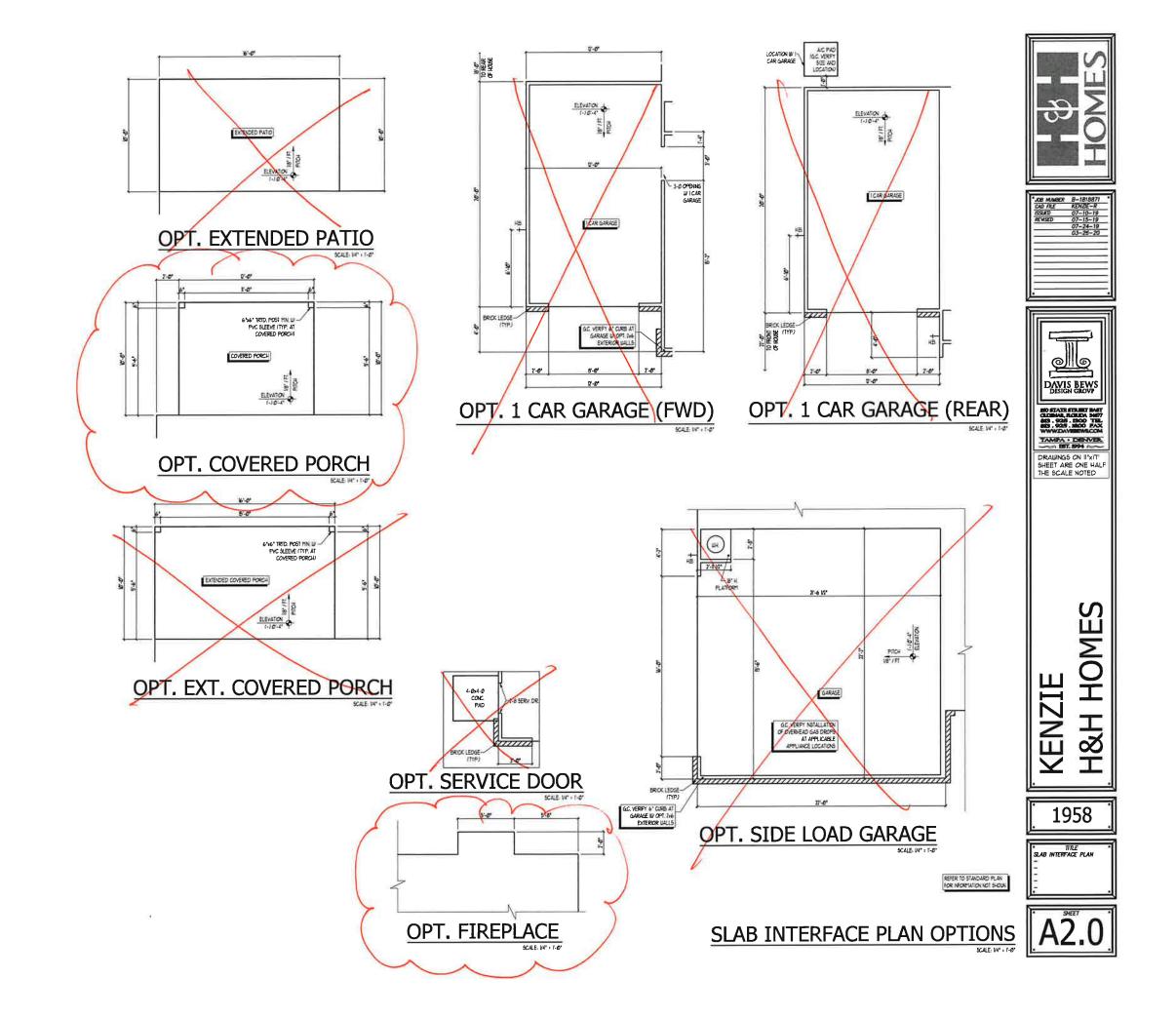
KENZIE H&H HOMES

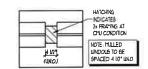
1958

SLAB INTERFACE PLAN

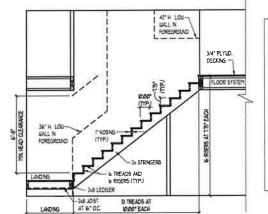
SLAB INTERFACE PLAN

A2.0





## TYP. MULL DETAIL



STAIR NOTES:

BALLISTERS SHALL BE SPACED SO THAT A 4" SPHERE CANNOT PASS THROUGH.

THE TRIANCIL AR OFFENINGS FORMED BY THE RISER, TREAD AND BOTTOM RAIL OF A CUARD AT THE OFFEN SIDE OF A STAIRWAY ARE PERMITTED TO BE A SUCH A SIZE THAT A SPHERE OF 6 NOIES CANNOT PASS THROUGH

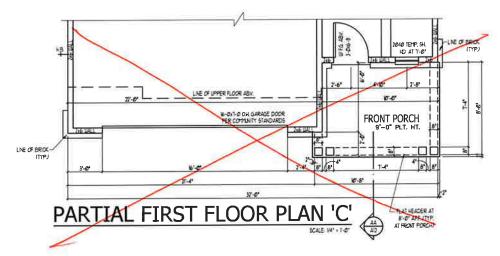
OPENINGS FOR RECUIRED GLIARDS ON THE SIDES OF STAIR TREADS SHALL NOT ALLOW A SPHERE 4 3/8 INCHES TO PASS THROUGH

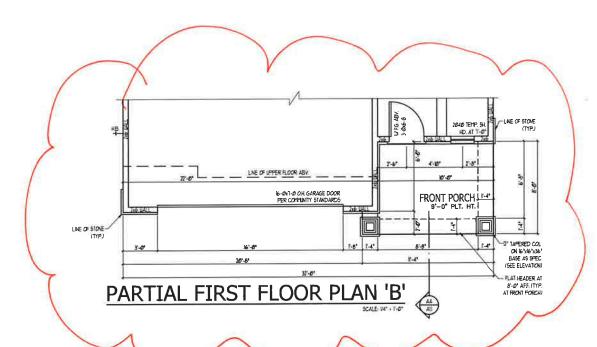
HADDRALLS HANDRALLS FOR STAIRLIAYS SHALL BE CONTINUOUS FOR THE FILL LEWSH OF THE FLOH FROM A POINT DIRECTLY ABOVE THE TOP RISERS OF THE LIGHT TO A POINT DIRECTLY ABOVE THE LOUEST RESER "HADDRALL BIDS SHALL BE RETURNED OR SHALL TRENIANTE IN NEUEL POSTS OR SAFETY TERMINAL SHADDRALLS ADJACENT TO A WALL SHALL WAVE A SPACE OF NOT LESS THAN 1-17 NCH BETIELD THE WALL AND HADDRALLS.

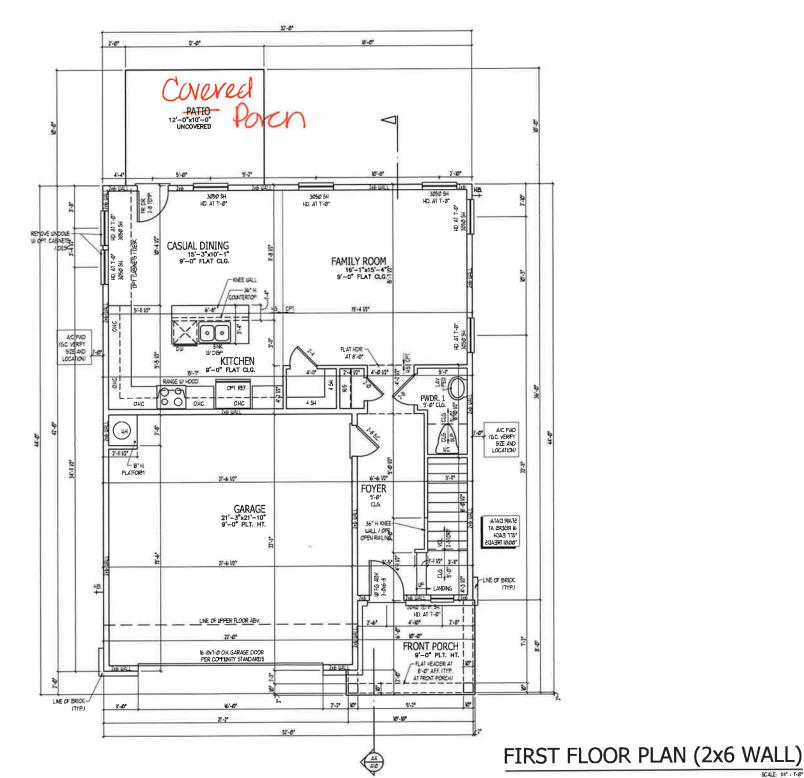
CONTINUOUS GRASPABLE HANDRAIL MUST MEET TYPE ONE OR TYPE TUD CRITERIA

\* \* \* \* \* \* \* \* \* \* \* \*

# STAIR SECTION SCALE 14\* : 1-2"







HOMES



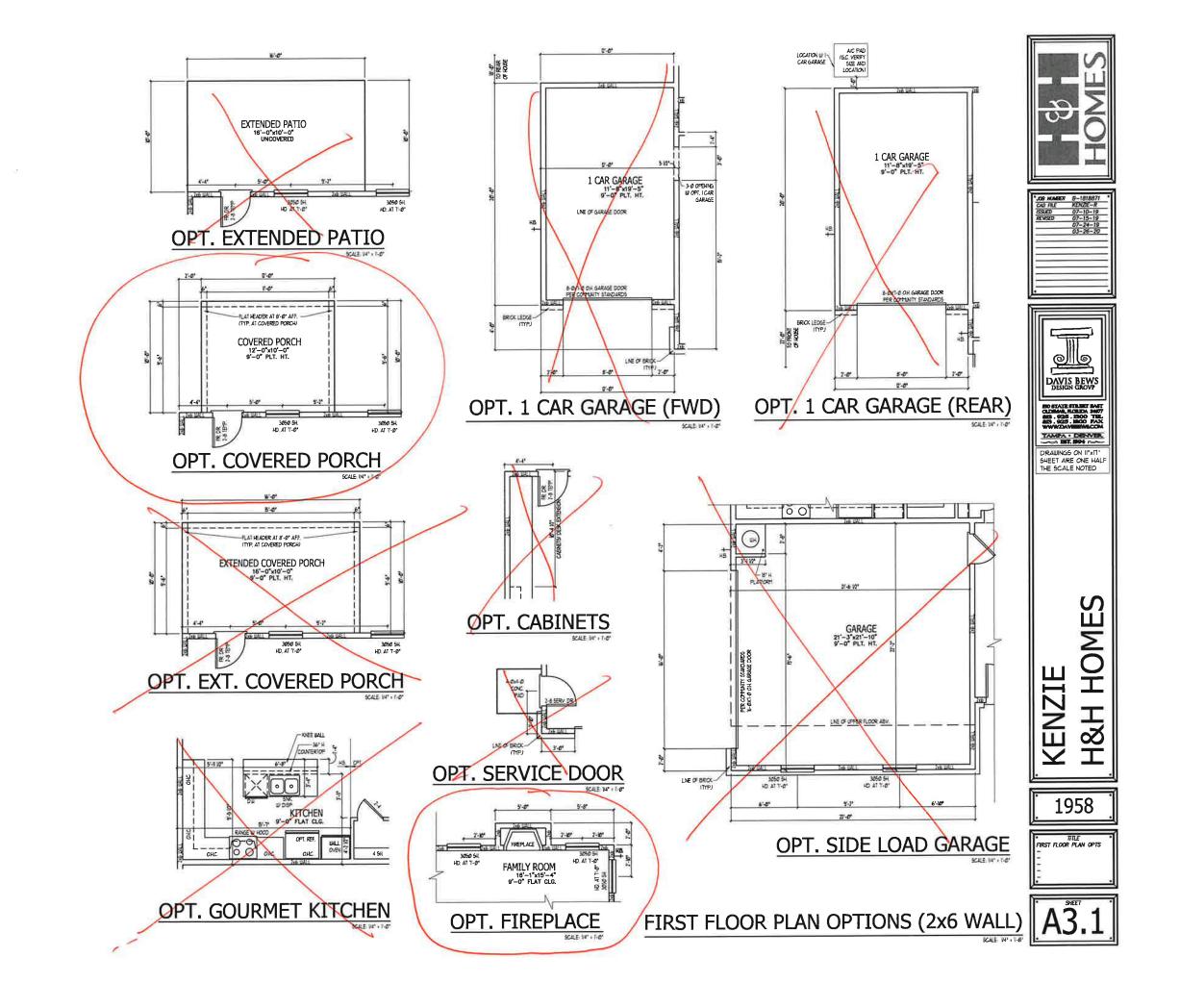


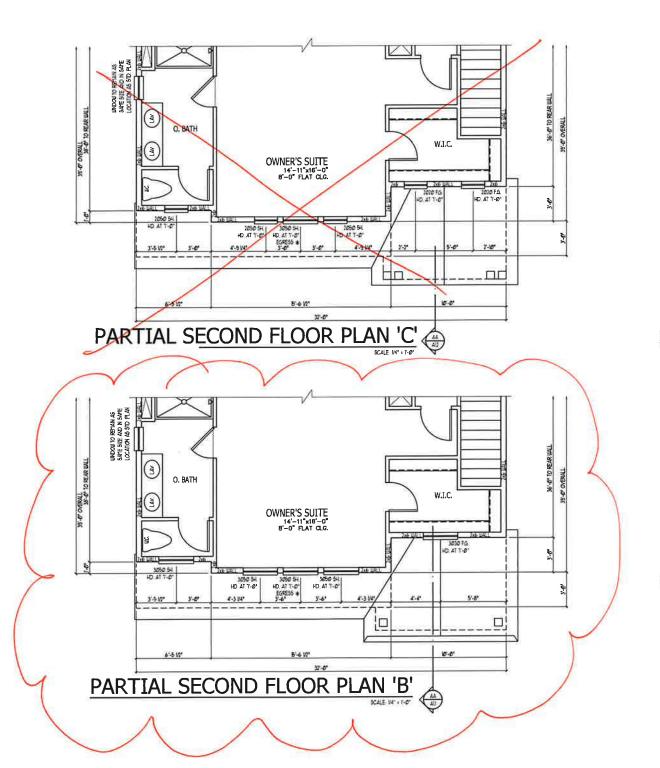
KENZIE H&H HOMES

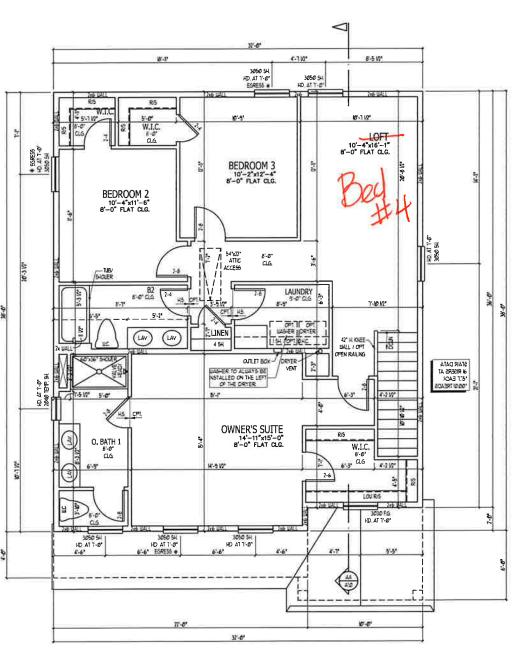
1958

TITLE IRST FLOOR PLAN

A3.0













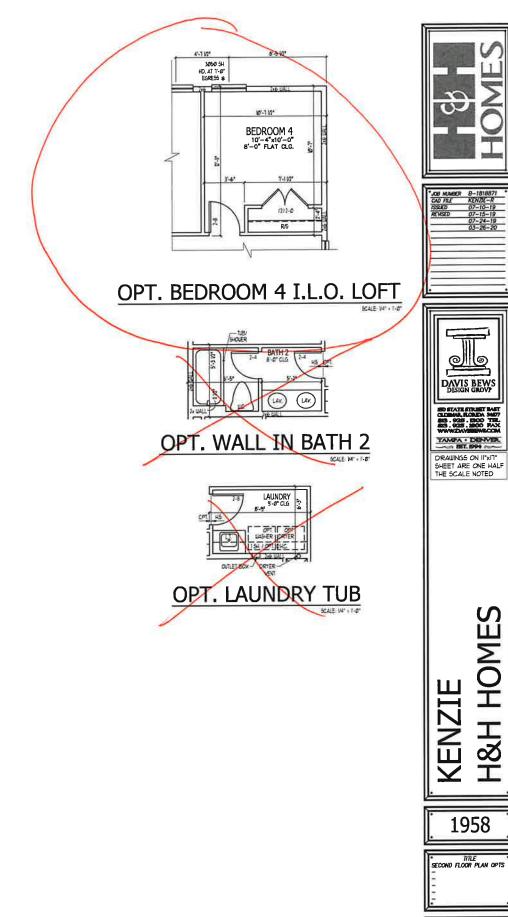
KENZIE H&H HOMES

1958



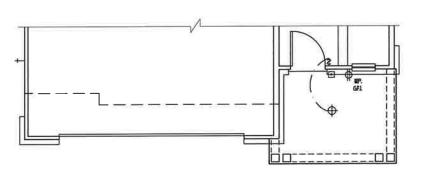
A3.2

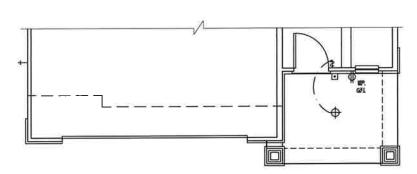
SECOND FLOOR PLAN (2x6 WALL)

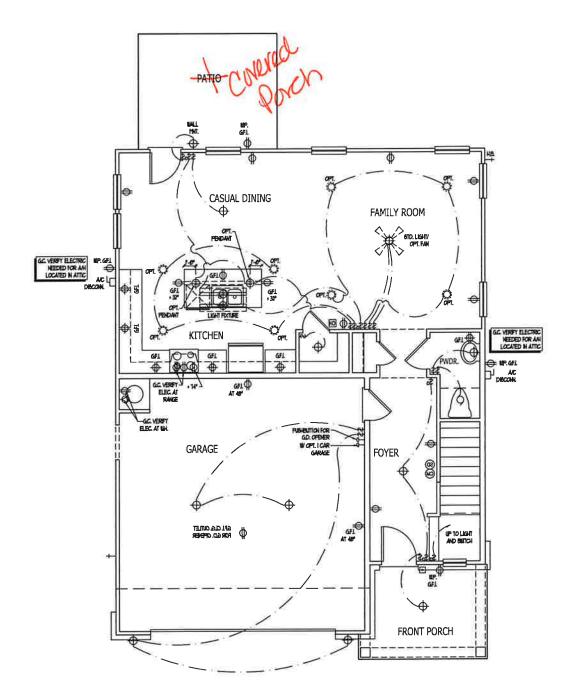


SECOND FLOOR PLAN OPTIONS (2x6 WALL)

A3.3







### ELECTRICAL KEY

DUPLEX COMPNENCE CUTLET DUPLEX CUTLET ABOVE COUNTER

GROUND FAILT NTERRUPTER DUPLEX CUTLET

HALF-BUTCHED CUPLEX CATLET

HO SPECIAL PURPOSE CUTLET

DUPLEX OUTLET IN FLOOR 220 YOLT OUTLET

WALL SUSTICIA \$3 THREE-MAY SUTTON

FOUR-BAY CHITCH DIMER SITCH

CELLING HOLNTED INCANDERCENT LIGHT FIXTURE

RECENSED NCANDENCENT LIGHT FOXTURE LIGHT FIXTURE WITH FULL CHAIN

TRACK LIGHT

EXHAUST FAN

EXCLUST FANALISHT COMPONATION

ELECTRIC DOOR OPERATOR (OPTIONAL)

PUBLICATION SUITCH (OPTIONAL) CARBON HONOXIDE DETECTOR

**GHOKE DETECTOR** SHOKE / CARBON HOND, COMBO DETECTOR

TELEPHONE (OPTIONAL)

TELEVISION (OPTIONAL)

THERMOSTAT

ELECTRIC HETER ELECTRIC PANEL

DISCONNECT BUTCH

⊗ SPEAKER (OPTIONAL)

POLICEL IN FOR OPT. CELLING FAN

CELING MOUNTED INCANDERCENT LIGHT FIXTURE BY ROUGH IN FOR CPT, CELING FAN

#### NOTES:

3. ALL BYCKE DETECTORS SHALL BE HARDWIRED INTO AN ELECTRICAL FORER BURGE AND SHALL BE BUTFIED WITH A HONTORED BATTERY BACKLP. PROVIDE AND INSTALL LOCALLY CERTIFIED WITHER DETECTORS.

4. ALL BA MO 26A RECEPTACLES IN BLEEPING ROOMS, FAILY ROOMS, DAING ROOMS, LIMBS ROOMS, PARLORS, LIBEANERS, DEAR, SURCOMS, RECREATION ROOMS, CLORETS, HALLIMYS, APO SHLAR AREAS BLL. RECAIRE A COMPRIATION TYPE AFCL DEVICE AND TAMPER-PROOF RECEPTACLES FER NEC. 2014 46612 AND 46662

5, ALL BA AND 26A 86V RECEPTACLES LOCATED IN THE GARAGE AND UTILITY ROOMS SHALL BE GECL PROTECTED (GEL).

6. IT IS THE RESPONSIBILITY OF THE LICENSED ELECTRICIAN TO ENGINE THAT ALL ELECTRICIAL WORK IS IN TILL COPPLIANCE WITH MUFFA TO NEC. SON, AND ALL APPLICABLE LOCAL STANDARDS, CODES, AND ORDINANCES.

1 EMERY BILLDING HAVING A FOOGL FIEL-BLENNIN HEATER OF AFFILIANCE, FREFLACE, OR AN ATTACKED GARAGE BHALL HAVE AN OFFERATIONAL CARBON HOULDING DETECTOR NOTALLED WITHIN BY FEET OF EACH ROOM WED FOR \$LEFTING PREPARED.

& ALAPTS SHALL RECEIVE THEIR PROTHERY FORER PRICH THE BUILDING WIRNS WERN BLOW WIRNS IN BERNED RECHT THE LOCAL POWER VITEIT," SUCH ALAPTS SHALL HAVE BATTERY BUCKEY COMPANION AD ONDERCHARDEN ORDONOCE ALAPTS SHALL BE LISTED OR LAPELED BY A HATCHAULT RECOGNIZED TESTING LABORATORY.





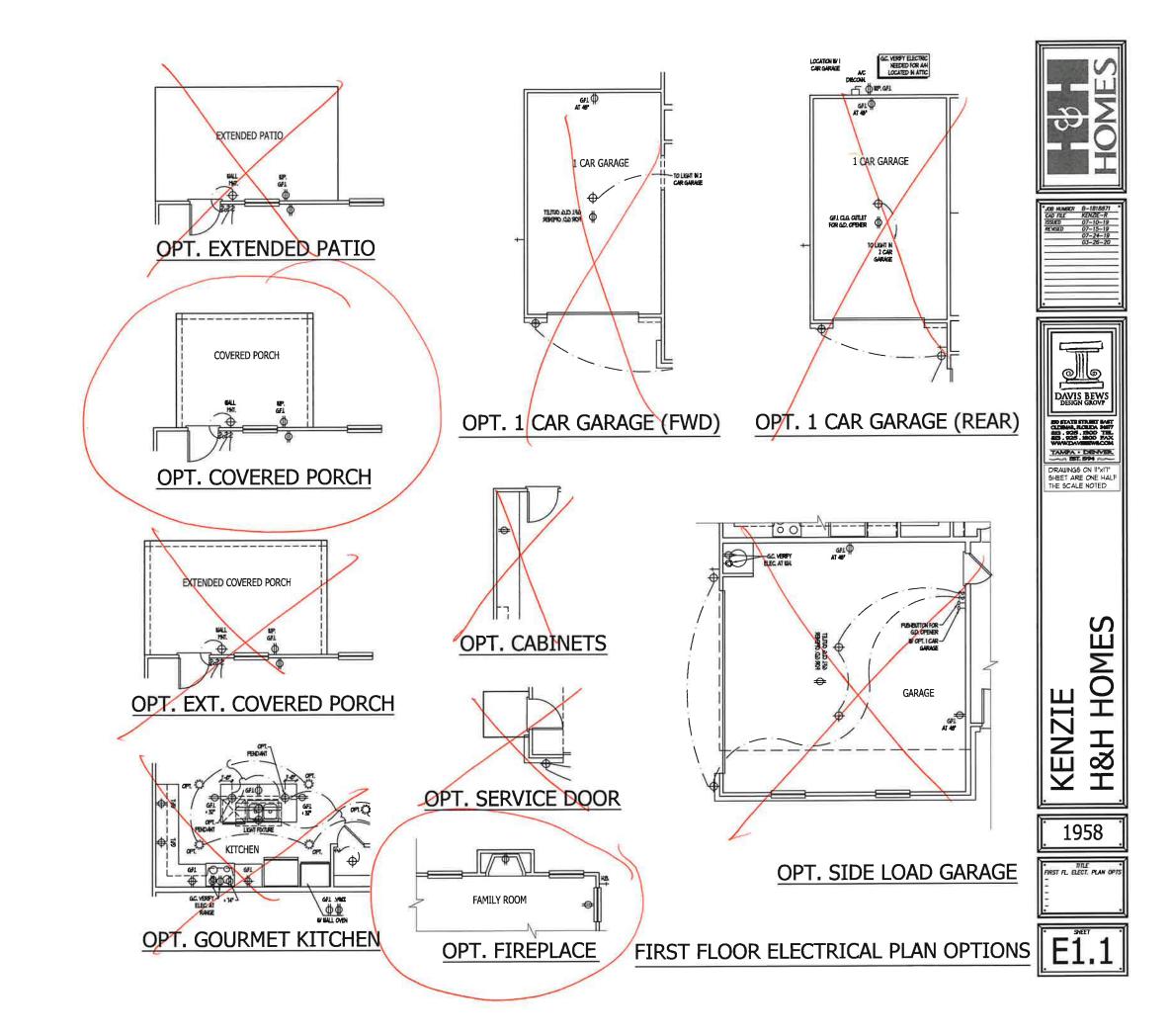


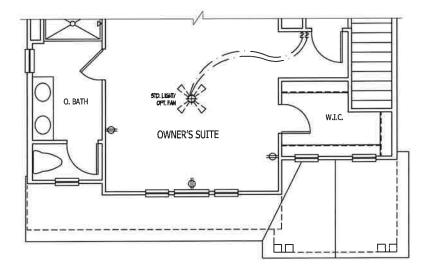
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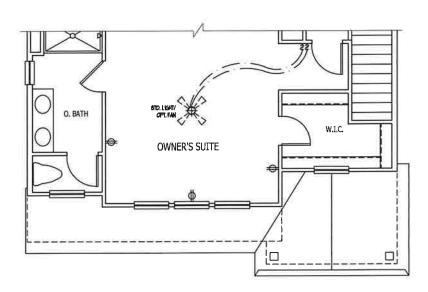
1958

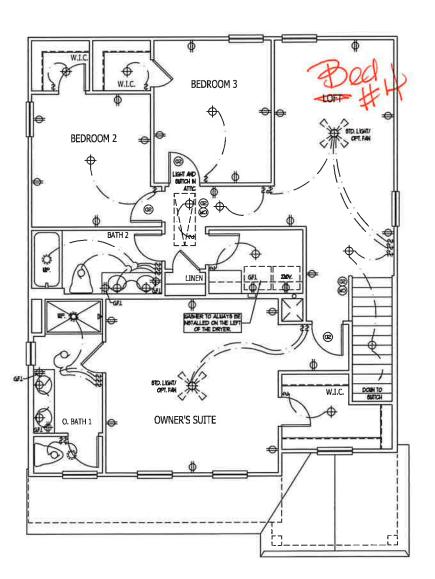
• TITLE FIRST FL. ELECT. PLAN

FIRST FLOOR ELECTRICAL PLAN









### ELECTRICAL KEY

- DUPLEX COMPRENCE CUTLET
- DUPLEX CUTILET ABOVE COUNTER
- HEATHERPROOF DUPLEX OUTLET
- HALF-BUTGED DUFLEX OUTLET
- HO SPECIAL PURPOSE CUILET
- DUPLEX CUTLET N FLOOR
- MALL SILLICH THREE-MAY GUTTCH
- \$4 FOUR-MAY CHITCH \$D DIMER OUTCH
- CEIL NG HOLNTED INCANDESCENT LIGHT FIXTURE
- BALL HOUNTED INCANCESCENT LIGHT FIXTURE
- MALL HOUNTED INCANDESCENT LIGHT FIXTURE

  RECESSED INCANDESCENT LIGHT FIXTURE

  LIGHT FIXTURE WITH PALL CHAIN

  TRACE LIGHT.
- TRACK LIGHT

  RUKKEACHT LIGHT FIXTURE
- EXHAUST FANALIGHT COMENATION FLECTRIC DOOR OFFRATOR (OPTIONAL)
- GI CHIES (OPTIONUL)
- CARRON MONOXIDE DETECTOR
- SA SHOKE DETECTOR
- (SE) BHOKE / CARBON HOND, COMBO DETECTOR
- TELEVISION (OPTIONAL)
- THERENCOTAT
- IN BLECTING HETER
- BECTRIC PANEL DISCONECT BITTCH
- O SPEAKER (OPTIONAL)

#### NOTES:

1. FROVIDE AND INSTALL GROUD FALL CROUT-INTERSEPTERS (GFL) AS INDIC ON PLANS OR AS ITEM NO. 4 AND 5 BELOW INDICATES.

2. UNLESS OTHERMEE NDICATED, NSTALL SMITCHES AND RECEPTIACLES AT THE FOLLOWING HEIGHTS ABOVE FINISHED FLOORSMITCHES ... "I"
TELEPHORE ... "I' (INLESS ABY COUNTERTOP)
TELEPHORE ... IP

3. ALL BYCKE DETECTORS SHALL BE HARDWIRED INTO AN ELECTRICAL POWER SOURCE AND SHALL BE EQUIPPED WITH A HONTORED BATTERY BACKUP, FROYDE AND INSTALL LOCALLY CERTIFED STOKE DETECTORS.

4. ALI BA AND 26A PECEPTACLES IN BLEFFING ROOMS, FAMILY ROOMS, DANN ROOMS, LIMAS ROOMS, PARLONS, LEWARES, DENS, SURGOMS, RECREATION ROOMS, CLORETS, HALLIMYS, AND SHEAR AREAS RELL RECREA CADEMARTOR THE AFFAIL DEVICE AND TAMPER-PROOF RECRETACLES FERNICE, 2011 406 JU AND 406 IS

5. ALL BA AND 28A 98V RECEPTACIES LOCATED IN THE GARAGE AND UTILITY ROOMS SHALL BE GFCL PROTECTED (GF1).

6. IT IS THE RESPONSIBILITY OF THE LICENSED ELECTRICIAN TO BRUISE THAT ALL ELECTRICIAL BOOK IS IN RELL COMPLIANCE WITH MEPIA TIO, NEC. 2011, AND ALL APPLICABLE LOCAL STANDARDS, CODES, AND ORDINANCES.

1 EVERY BUILDING HAVING A FOOSIL-FIEL-BURNING HEATER OR AFFILIANCE, FREEFLACE, OR AN ATTACKED GARAGE GAALL HAVE AN OFFERMICHAL CARRICH HACK/XIDE DETECTOR INSTALLED WITHIN 10 FEET OF EACH ROOM LIBED FOR SLEEPI FARFOREA.

A JUAN'S SULL RECEIVE THEIR PROTMET POWER MICH THE BUILDING WIRNS GUEN SICH WIRNS IS BERKEP PROTI THE LOCAL POWER WILLTY, SUCH JUAN'S SUML HAVE BUTTERT BACKLY COMPANION SUKCEARSISM NUMBOURS IL AND SUML EE LISTED OR LASELED SY A MATIONALLY RECOGNIZED TESTING LASORATORY.





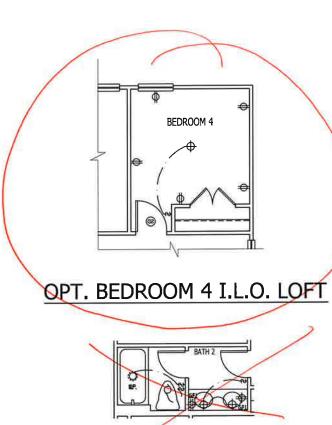


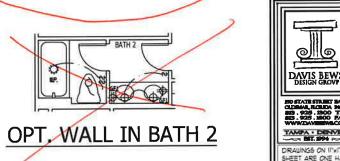
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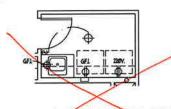
1958











OPT, LAUNDRY TUB



1958



SECOND FLOOR ELECTRICAL PLAN OPTIONS





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

# KENZIE

## NORTH CAROLINA

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

#### DESIGN SPECIFICATIONS:

DESIGN BUILDING CODE (REFERRED TO HEREIN AS 'THE BUILDING CODE'):
- 2018 NORTH CAROLINA RESIDENTIAL CODE. WALL BRACING PER INTERNATIONAL RESIDENTIAL

#### DESIGN LIVE LOADS:

- ROOF = 20 PSF (LOAD DURATION FACTOR=1.25)
- UNINHABITABLE ATTICS WITH LIMITED STORAGE = 20 PSF (WHERE SPECIFIED ON PLANS)
- \* HABITABLE ATTICS AND ATTICS SERVED WITH FIXED STAIRS = 30 PSF
- FLOOR = 40 PSF
- FLOOR (SLEEPING AREAS) = 30 PSF DECK = 40 PSF
- BALCONY = 40 PSF
- STAIRS = 40 PSF

- DESIGN DEAD LOADS: ROOF TRUSS = 17 PSF (TC=7, BC=10) FLOOR TRUSS = 15 PSF (TC=10, BC=5)
  - FLOOR JOIST = 10 PSF

  - QUEEN ANNE BRICK = 25 PSF

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

#### DESIGN WIND LOADS:

- ULTIMATE WIND SPEED = Up to 130 MPH
- EXPOSURE CATEGORY = B

ASSUMED SOIL BEARING CAPACITY = 2000 PSF

ASSUMED LATERAL SOIL PRESSURE = 45 PCF

FROST DEPTH = 12"

SEISMIC DESIGN CATEGORY = B

ENGINEERED LUMBER SHALL HAVE THE FOLLOWING MINIMUM DESIGN VALUES:

- TJI 210 SERIES (SERIES AND SPACING PER PLANS)

   LSL: E=1,550,000 PSI, F<sub>8</sub>=2,325 PSI, F<sub>v</sub>=310 PSI, F<sub>c</sub>=900 PSI

   LVL: E=2,000,000 PSI, F<sub>8</sub>=2,600 PSI, F<sub>v</sub>=285 PSI, F<sub>c</sub>=750 PSI

   PSL: E=2,100,000 PSI, F<sub>8</sub>=2,900 PSI, F<sub>v</sub>=290 PSI, F<sub>c</sub>=625 PSI

THIS PLAN HAS BEEN DESIGNED PER THE 2018 EDITION OF THE NC RESIDENTIAL CODE. WHERE FRAMING, FOUNDATION, OR OTHER STRUCTURAL ITEMS DO NOT COMPLY WITH THE PRESCRIPTIVE METHODS OF THE CODE, THOSE ITEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE PER NCRC R301.1.3.







Model – LH 130 M.P.H. Sheet Kenzie Up to Cover  $\frac{d}{d}$ 

Project #: 105-19004 Designed By: KRK Checked By:

Issue Date: 8/29/19 Re-Issue: 4/30/20 Scale: 1/8"=1'-0" @ 11x17

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

- 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 CONSENT OF KSE ENGINEERING, P.C. OR THE SER. FOR THE PURPOSES OF THESE CONSTRUCTION DOCUMENTS. THE SER AND KSE ENGINEERING SHALL BE CONSIDERED THE SAME ENTITY
- 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.
- THE SER DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT INCLUDING ROOF GEOMETRY, THE SER ASSUMES NO LIABILITY FOR CHANGES MADE TO THESE PLANS BY OTHERS, OR FOR CONSTRUCTION METHODS, OR FOR ANY DEVIATION FROM THE PLANS, THE SER SHALL BE NOTIFIED PRIOR TO CONSTRUCTION IF ANY DISCREPANCIES ARE NOTED ON THE PLANS.
- ANY STRUCTURAL FLEMENTS OR DETAILS NOT FULLY DEVELOPED ON THE CONSTRUCTION DRAWINGS SHALL BE COMPLETED UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. THESE SHOP DRAWINGS SHALL BE SUBMITTED TO KSE ENGINEERING FOR REVIEW BEFORE ANY CONSTRUCTION BEGINS, THE SHOP DRAWINGS WILL BE REVIEWED FOR OVERALL COMPLIANCE AS IT RELATES TO THE STRUCTURAL DESIGN OF THIS PROJECT, VERIFICATION OF THE SHOP DRAWINGS FOR DIMENSIONS, OR FOR ACTUAL FIELD CONDITIONS, IS NOT THE RESPONSIBILITY OF THE SER OR KSE ENGINEERING, P.C.
- VERIFICATION OF ASSUMED FIELD CONDITIONS IS NOT THE RESPONSIBILITY OF THE SER, THE CONTRACTOR SHALL VERIFY THE FIFLD CONDITIONS FOR ACCURACY AND REPORT ANY DISCREPANCIES TO KSE ENGINEERING, P.C. BEFORE CONSTRUCTION BEGINS.
- THE SER IS NOT RESPONSIBLE FOR ANY SECONDARY STRUCTURAL ELEMENTS OR NON-STRUCTURAL ELEMENTS, EXCEPT FOR THE ELEMENTS SPECIFICALLY NOTED ON THE STRUCTURAL DRAWINGS
- THIS STRUCTURE AND ALL CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE SECTIONS OF THE BUILDING CODE AND ANY LOCAL CODES OR RESTRICTIONS
- DO NOT SCALE DRAWINGS, WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS, ALL DIMENSIONS ARE TO FACE OF STUD OR TO FACE OF FRAMING UNLESS OTHERWISE NOTED.
- 10. PROVIDE MOISTURE PROTECTION AND FLASHING PER ARCHITECTURAL

### FOUNDATIONS:

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

#### CONCRETE & REINFORCING

- CONCRETE DESIGN BASED ON ACI 318 AND ACI 318,1 OR ACI 332. CONCRETE SHALL HAVE A NORMAL WEIGHT AGGREGATE AND A MINIMUM COMPRESSIVE STRENGTH (f'c) = 3.000 PSI MINIMUM AT 28 DAYS PER CODE (VARIES W/ WEATHER), UNLESS OTHERWISE NOTED ON THE PLAN.
- CONCRETE SHALL BE PROPORTIONED, MIXED, AND PLACED IN ACCORDANCE WITH THE LATEST EDITIONS OF ACL 318: "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" AND ACI 301: "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS".
- AIR ENTRAINED CONCRETE MUST BE USED FOR ALL STRUCTURAL FLEMENTS EXPOSED TO FREEZE/THAW CYCLES AND DEICING CHEMICALS. AIR ENTRAINMENT AMOUNTS (IN PERCENT) SHALL BE WITHIN -1% TO +2% OF 5% FOR FOOTINGS AND EXTERIOR SLABS
- NO ADMIXTURES SHALL BE ADDED TO ANY STRUCTURAL CONCRETE WITHOUT WRITTEN PERMISSION OF THE SER, WATER ADDED TO CONCRETE ON SITE SHALL NOT EXCEED THAT ALLOWED BY THE MIX DESIGN.
- CONCRETE SLABS-ON-GRADE SHALL BE CONSTRUCTED IN ACCORDANCE WITH ACI 302.1R: "GUIDE FOR CONCRETE SLAB AND SLAB CONSTRUCTION".
- CONTROL OR SAW CUT JOINTS (CUT OR TOOLED) SHALL BE SPACED IN INTERIOR SLABS-ON-GRADE AT A MAXIMUM OF 15'-0" O.C. AND IN EXTERIOR SLABS-ON-GRADE AT A MAXIMUM OF 10'-0" UNLESS OTHERWISE NOTED. CARE SHALL BE TAKEN TO AVOID RE-ENTRANT CORNERS.
- CONTROL OR SAW CUT JOINTS SHALL BE PRODUCED USING CONVENTIONAL CUT OR TOOLED PROCESSES WITHIN 4 TO 12 HOURS AFTER THE SLAB HAS BEEN FINISHED.
- ALL WELDED WIRE FABRIC (W.W.F.) FOR CONCRETE SLABS-ON-GRADE SHALL BE PLACED AT MID-DEPTH OF SLAB. THE W.W.F. SHALL BE SECURELY SUPPORTED DURING THE CONCRETE POUR. FIBROUS CONCRETE REINFORCEMENT, OR POLYPROPYLENE FIBERS MAY BE USED IN LIEU OF W.W.F. APPLICATION OF POLYPROPYLENE FIBERS PER CUBIC YARD OF CONCRETE SHALL BE PER MANUFACTURER AND COMPLY WITH ASTM C1116. ANY LOCAL BUILDING CODE REQUIREMENTS AND SHALL MEET OR EXCEED CURRENT INDUSTRY STANDARD.
- POLYPROPYLENE REINFORCING TO BE 100% VIRGIN, CONTAINING NO REPROCESSED OFFIN MATERIALS AND SPECIFICALLY MANUFACTURED FOR USE AS CONCRETE SECONDARY REINFORCEMENT.
- 10. STEEL REINFORCING BARS SHALL BE NEW BILLET STEEL CONFORMING TO ASTM A615, GRADE 60
- 11. 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"
- 12. HORIZONTAL FOOTING AND WALL REINFORCEMENT SHALL BE CONTINUOUS AND SHALL HAVE 90' BENDS, OR CORNER BARS WITH
- THE SAME SIZE/SPACING AS THE HORIZONTAL REINFORCEMENT. 13. PROVIDE REINFORCEMENT LAP AS NOTED BELOW, UNLESS NOTED OTHERWISE:

#4 BARS - 30" LENGTH 5 BARS - 38" LENGTH #6 BARS - 45" LENGTH

- WHERE REINFORCING DOWELS ARE REQUIRED, THEY SHALL BE EQUIVALENT IN SIZE AND SPACING TO THE VERTICAL REINFORCEMENT THE DOWEL SHALL EXTEND 48 BAR DIAMETERS VERTICALLY AND 20 BAR DIAMETERS INTO THE FOOTING, SEE KSE FOUNDATION DETAILS,
- 15. WHERE FOOTING BOTTOMS ARE TO BE STEPPED AT SLOPING GRADE CONDITIONS, PROVIDE CONTINUOUS REINFORCING WITH Z BARS (TO MATCH FOOTING REINFORCING) AS REQUIRED.
- BAR SUPPORT ACCESSORIES SHALL BE PROVIDED IN ACCORDANCE WITH THE LATEST ACI MANUAL OF STANDARD PRACTICE FOR DETAILING RFINFORCED CONCRETE STRUCTURES, EXCEPT THAT REINFORCING SHALL BE CHAIRED ON THE BOTTOM AND/OR THE SIDES ON BOLSTERS SPACED NOT MORE THAN 4 FEET ON CENTER, NO ROCKS, CMU, CLAY
- TILE, OR BRICK SHALL BE USED TO SUPPORT REINFORCING.

  17. FOR GRADE SUPPORTED SLABS, SLAB REINFORCING SHALL BE HELD IN PLACE BY BAR SUPPORTS AND ACCESSORIES AS DESCRIBED IN THE CRSI MANUAL OF STANDARD PRACTICE, BAR SUPPORTS SHALL BE SPACED A MAXIMUM OF 4'-0" O.C. BOTH WAYS IN STRAIGHT LINES ON THE MESH GRID.

- ALL MASONRY SHALL CONFORM TO ASTM C-90, F'm=1500 PSI, ALL BRICK SHALL CONFORM TO ASTM C-216,  $F'_m$ =1500 PSI, ALL MORTAR SHALL BE TYPE 'S' (TYPE 'M' BELOW GRADE) AND CONFORM TO ASTM C-270. COARSE GROUT SHALL CONFORM TO ASTM C-476 WITH A MAXIMUM AGGREGATE SIZE OF 3/4" AND A MINIMUM COMPRESSIVE STRENGTH OF 2.000
- ALL MASONRY WORK SHALL BE IN ACCORDANCE WITH "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" ACL 530/ASCE 5/TMS 402 AND "SPECIFICATIONS FOR MASONRY STRUCTURES" ACI 530.1/ ASCE 6/TMS 602.
- THE UNSUPPORTED HEIGHT OF SOLID MASONRY PIERS SHALL NOT EXCEED TEN TIMES THEIR LEAST DIMENSION, UNFILLED HOLLOW PIERS MAY BE USED IF THE UNSUPPORTED HEIGHT IS NOT MORE THAN FOUR TIMES THEIR LEAST DIMENSION.
- EACH CRAWL SPACE PIER SHALL BEAR IN THE MIDDLE THIRD OF ITS RESPECTIVE FOOTING AND EACH GIRDER SHALL BEAR IN THE MIDDLE THIRD OF THE PIERS. PILASTERS TO BE BONDED TO PERIMETER
- TOP COURSE OF MASONRY SHALL BE GROUTED SOLID.
- HORIZONTAL WALL JOINT REINFORCEMENT SHALL BE STANDARD 9 GAGE GALVANIZED LADDER OR TRUSS TYPE SPACED AT 16" O.C., UNLESS SHOWN OTHERWISE ON THE DRAWINGS.
- SPLICED WIRE REINFORCEMENT SHALL BE LAPPED AT LEAST 6" AND CONTAIN AT LEAST ONE CROSS WIRE OF EACH PIECE OF REINFORCEMENT WITHIN THE 6". LAP WITH STANDARD 'T' AND 'L' SHAPED PIECES AT INTERSECTIONS AND CORNERS.

#### WOOD FRAMING:

- SOLID SAWN WOOD FRAMING MEMBERS SHALL CONFORM TO THE SPECIFICATIONS LISTED IN THE LATEST EDITION OF THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION": (NDS) UNLESS OTHERWISE NOTED, ALL WOOD FRAMING MEMBERS ARE DESIGNED TO
- SPRUCE-PINE-FIR (SPF) WITH THE FOLLOWING MINIMUM DESIGN
- E=1.400,000 PSI, F<sub>b</sub>=875 PSI, F<sub>v</sub>=135 PSI 1.1 FRAMING: SPF #2.
- 1.2. PLATES: SPF #2
- 1.3 STUDS: SPF STUD GRADE.
- WALL STUD SPACING, (MAXIMUM 10' NOMINAL PLATE HEIGHT): 1 & 2 STORY EXTERIOR AND INTERIOR BEARING: 2x4 @ 16" O.C. OR 2x6 @ 24" O.C., U.N.O.
- BOTTOM OF 3 STORIES EXTERIOR AND INTERIOR BEARING 2x6 @ 16" O.C., U.N.O.

#### INTERIOR NON-BEARING: 2y @ 24" O.C. UNO

- ALL LUMBER EXPOSED TO WEATHER OR IN CONTACT WITH CONCRETE SHALL BE PRESERVATIVE TREATED SOUTHERN YELLOW PINE #2 OR
- ANCHOR SILL PLATES IN ACCORDANCE W/ GENERAL STRUCTURAL NOTES.
- ALL BEAMS SPECIFIED ARE MINIMUM SIZES ONLY, LARGER MEMBERS MAY BE SUBSTITUTED AS NEEDED FOR EASE OF CONSTRUCTION.
- NAILS SHALL BE COMMON WIRE NAILS UNLESS OTHERWISE NOTED. BOLT HOLES AND LEAD HOLES FOR LAG SCREWS SHALL BE IN ACCORDANCE WITH NDS SPECIFICATIONS.
- INDIVIDUAL STUDS FORMING A COLUMN SHALL BE ATTACHED WITH (2) ROWS 10d NAILS @ 6" O.C. STAGGERED, THE STUD COLUMN SHALL BE FULLY BLOCKED AT ALL FLOOR LEVELS TO ENSURE PROPER LOAD TRANSFER, WALL SHEATHING SHALL BE NAILED TO EDGE OF EACH STUD.
- FACE NAIL ALL MULTI-PLY BEAMS AND HEADERS WITH (2) ROWS 16d COMMON NAILS @ 16" O.C., STAGGERED, OR PER MANUFACTURER'S SPECIFICATIONS FOR ENGINEERED LUMBER, APPLY NAILING FROM BOTH FACES FOR (3) OR MORE PLIES.
- 10. FASTEN 4-PLY BEAMS WITH (1) 1/2" DIAMETER THROUGH BOLT W/ NUTS AND WASHERS AT 12" O.C. STAGGERED TOP AND BOTTOM, 11/2" MINIMUM EDGE DISTANCE. (UNLESS OTHERWISE NOTED)
- ALL BEAMS AND HEADERS SHALL HAVE (1)2x JACK STUD & (1)2x KING STUD UNLESS OTHERWISE NOTED. THE NUMBER OF STUDS INDICATED ON PLANS ARE THE TOTAL NUMBER OF JACK STUDS REQUIRED, UNLESS
- 12 PROVIDE KING STUDS AT EACH END OF HEADERS AS NOTED BELOW. (1) STUD UP TO 6' OPENING (2) STUDS UP TO 8' OPENING
- STUDS UP TO 9' OPENING
- 13. ALL BEAMS TO BE CONTINUOUSLY SUPPORTED LATERALLY AND SHALL BEAR FULL WIDTH ON THE SUPPORTING WALLS OR COLUMNS INDICATED WITH A MINIMUM OF TWO STILDS LINESS OTHERWISE NOTED: ALL BEAM SPLICES SHALL OCCUR OVER SUPPORTS
- 14. SOLID BLOCKING TO BE PROVIDED AT ALL POINT LOADS THROUGH FLOOR LEVELS TO THE FOUNDATION OR TO OTHER STRUCTURAL COMPONENTS.
- ALL LUMBER SPECIFIED ON DRAWINGS IS INTENDED FOR DRY USE ONLY (MOISTURE CONTENT <19%) UNLESS OTHERWISE NOTED.
- ALL WATERPROOFING AND FIRE SAFETY SYSTEMS ARE TH RESPONSIBILITY OF THE CONTRACTOR AND ARE TO BE DESIGNED AND DETAILED BY OTHERS.
- 17. ANY WOOD FRAME INTERIOR BEARING WALL STUDS THAT HAVE HOLES IN THE CENTER OF THE STUD UP TO 1" DIAMETER SHALL HAVE STUD PROTECTION SHIELDS. ALL HOLES OVER 1" IN DIAMETER FOR PLUMBING LINES, ETC. SHALL BE REPAIRED WITH SIMPSON HSS2 OR USP STS1 STUD SHOES TYPICAL UNLESS OTHERWISE NOTED.
- BEARING WALLS SHALL BE SHEATHED ON NOT LESS THAN ONE SIDE WITH OSB OR GYPSUM BOARD, BRIDGING SHALL BE INSTALLED NOT GREATER THAN 4 FEET APART MEASURED VERTICALLY FROM EITHER END OF THE STUD IN LIFU OF SHEATHING.
- 19 DIAGONAL BRACING SHALL BE INSTALLED AT EACH END OF BASEMENT BEARING WALLS AND NOT MORE THAN 20' ON CENTER

#### EXTERIOR WOOD FRAMED DECKS:

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

### RAFTER FRAMED ROOF CONSTRUCTION:

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

#### WOOD TRUSSES (FLOOR & ROOF):

- THE WOOD TRUSS MANUFACTURER/FABRICATOR IS RESPONSIBLE FOR THE DESIGN OF THE WOOD TRUSSES, SUBMIT SEALED SHOP DRAWINGS AND SUPPORTING CALCULATIONS TO THE SER FOR REVIEW PRIOR TO FABRICATION, THE SER SHALL HAVE A MINIMUM OF (5) DAYS FOR REVIEW. THE REVIEW BY THE SER SHALL BE FOR OVERALL COMPLIANCE OF THE DESIGN DOCUMENTS. THE SER SHALL ASSUME NO RESPONSIBILITY FOR THE CORRECTNESS OF THE STRUCTURAL DESIGN FOR THE WOOD TRUSSES.
- THE WOOD TRUSSES SHALL BE DESIGNED FOR ALL REQUIRED LOADINGS AS SPECIFIED IN THE LOCAL BUILDING CODE, THE ASCE STANDARD "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES," (ASCE 7), AND THE LOADING REQUIREMENTS SHOWN ON THESE SPECIFICATIONS. THE TRUSS DRAWINGS SHALL BE COORDINATED WITH ALL OTHER CONSTRUCTION DOCUMENTS AND PROVISIONS PROVIDED FOR LOADS SHOWN ON THESE DRAWINGS INCLUDING BUT NOT LIMITED TO HVAC EQUIPMENT, PIPING, AND ARCHITECTURAL FIXTURES ATTACHED TO THE TRUSSES.
- THE TRUSSES SHALL BE DESIGNED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE LATEST EDITION OF THE ANSI/TPI 1: "NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION".
- THE TRUSS MANUFACTURER SHALL PROVIDE ADEQUATE BRACING INFORMATION IN ACCORDANCE WITH "BUILDING COMPONENT SAFETY INFORMATION GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING RESTRAINING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES" (BCSI): THIS BRACING, BOTH TEMPORARY AND PERMANENT, SHALL BE SHOWN ON THE SHOP DRAWINGS, ALSO, THE SHOP DRAWINGS SHALL SHOW THE REQUIRED ATTACHMENTS FOR THE TRUSSES.
- THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING TEMPORARY BRACING AND SHORING FOR THE FLOOR AND ROOF TRUSSES AS REQUIRED DURING CONSTRUCTION. AT A MINIMUM, CONTRACTOR SHALL FOLLOW THE REQUIREMENTS OF THE LATEST BOSL THE CONTRACTOR SHALL KEEP A COPY OF THE BCSI SUMMARY SHEETS ON SITE
- THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING ALL PERMANENT TRUSS BRACING SHOWN IN THE STRUCTURAL DRAWINGS AND IN THE TRUSS DESIGNS, ALL CONTINUOUS LATERAL BRACING OF WEBS REQUIRES BRACES, REFER TO BCSI SUMMARY SHEET B3 FOR TYPES OF DIAGONAL BRACES TO PROVIDE AT EACH CONTINUOUS LATERAL BRACE LINE, SUCH DIAGONAL BRACES SHALL NOT BE SPACED MORE THAN 20 FEET O.C. DIAGONAL BRACES SHALL BE FASTENED TO EACH TRUSS WEB WITH A MINIMUM OF TWO 10d FACE NAILS: WHERE CONTINUOUS LATERAL BRACING CANNOT BE INSTALLED, DUE TO A MINIMUM OF THREE ADJACENT TRUSSES NOT BEING IDENTICAL, THE CONTRACTOR SHALL COORDINATE WITH THE TRUSS SPECIALTY ENGINEER/MANUFACTURER TO DETERMINE WHAT TYPE OF ALTERNATE BRACE (I.E., T OR L BRACE, ETC.) IS REQUIRED.
- ANY CHORDS OR TRUSS WEBS SHOWN ON THESE DRAWINGS HAVE BEEN SHOWN AS A REFERENCE ONLY. THE FINAL DESIGN OF THE TRUSSES SHALL BE PER THE MANUFACTURER.
- TRUSS LAYOUT AND PLACEMENT BY MANUFACTURER TO COINCIDE WITH THE SUPPORT LOCATIONS SHOWN ON THE SEALED STRUCTURAL DRAWINGS: TRUSS PROFILES TO BE SEALED BY THE TRUSS MANUFACTURER TRUSS PLANS TO BE COORDINATED WITH THE SEALED
- TRUSS MANUFACTURER TO PROVIDE REQUIRED UPLIFT CONNECTORS FOR ALL TRUSSES.
- 10. PROVIDE SIMPSON H2.5A, USP RT7 OR EQUIVALENT AT EACH TRUSS TO TOP PLATE CONNECTION, UNLESS OTHERWISE NOTED.

### WOOD STRUCTURAL PANELS

- FABRICATION AND PLACEMENT OF STRUCTURAL WOOD SHEATHING SHALL BE IN ACCORDANCE WITH THE APA DESIGN/CONSTRUCTION GUIDE "RESIDENTIAL AND COMMERCIAL," AND ALL OTHER APPLICABLE APA STANDARDS.
- ALL REQUIRED WOOD SHEATHING SHALL BEAR THE MARK OF THE
- WOOD WALL SHEATHING SHALL COMPLY WITH THE REQUIREMENTS OF LOCAL BUILDING CODES FOR THE APPROPRIATE STATE AS INDICATED ON THESE DRAWINGS, REFER TO WALL BRACING NOTES IN PLAN SET FOR MORE INFORMATION, EXTERIOR WALLS TO BE FULLY SHEATHED USING 1/6" OSB OR PLYWOOD MINIMUM. AT BRACED WALL PANELS, PROVIDE BLOCKING AT ALL SHEET EDGES NOT FALLING ON STUDS OR PLATES
- ROOF SHEATHING SHALL BE APA RATED SHEATHING EXPOSURE 1 OR 2. ROOF SHEATHING SHALL BE CONTINUOUS OVER TWO SUPPORTS MINIMUM AND ATTACHED TO ITS SUPPORTING ROOF FRAMING WITH 8d NAILS AT 6" O.C. AT PANEL EDGES AND AT 12" O.C. IN PANEL FIELD UNLESS OTHERWISE NOTED ON THE PLANS, SHEATHING SHALL BE APPLIED WITH THE LONG DIRECTION PERPENDICULAR TO FRAMING SHEATHING SHALL HAVE A SPAN RATING CONSISTENT WITH THE FRAMING SPACING. PROVIDE SUITABLE EDGE SUPPORT BY USE OF PLYWOOD CLIPS OR LUMBER BLOCKING UNLESS OTHERWISE NOTED. PANEL END JOINTS SHALL OCCUR OVER FRAMING, ROOF SHEATHING TO BE %6" OSB MINIMUM.
- WOOD FLOOR SHEATHING SHALL BE APA RATED SHEATHING EXPOSURE 1 OR 2. ATTACH SHEATHING TO ITS SUPPORTING FRAMING WITH (1) 10d NAIL AT 6" O.C. AT PANEL EDGES AND AT 12" O.C. IN PANEL FIELD UNLESS OTHERWISE NOTED ON THE PLANS, SHEATHING SHALL BE APPLIED PERPENDICULAR TO FRAMING, SHEATHING SHALL HAVE A SPAN RATING CONSISTENT WITH THE FRAMING SPACING PROVIDE SUITABLE EDGE SUPPORT BY USE OF T&G PLYWOOD OR LUMBER BLOCKING UNLESS OTHERWISE NOTED PANEL END JOINTS SHALL OCCUR OVER FRAMING.
- SHEATHING SHALL HAVE A 1/8" GAP AT PANEL ENDS AND EDGES AS RECOMMENDED IN ACCORDANCE WITH THE APA.

#### STRUCTURAL FIBERBOARD PANELS:

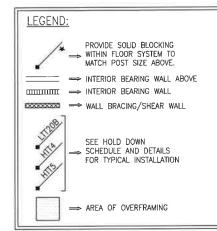
- STRUCTURAL FIBERBOARD SHEATHING SHALL ONLY BE USED WHERE SPECIFICALLY NOTED ON THE STRUCTURAL PLANS, FABRICATION AND PLACEMENT OF STRUCTURAL FIBERBOARD
- SHEATHING SHALL BE IN ACCORDANCE WITH THE APPLICABLE AFA STANDARDS:
- FIBERBOARD WALL SHEATHING SHALL COMPLY WITH THE REQUIREMENTS OF LOCAL BUILDING 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 1/4" GAP AT PANEL ENDS AND EDGES AS RECOMMENDED IN ACCORDANCE WITH THE AFA.

- STRUCTURAL STEEL:

  1. STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" AND OF THE MANUAL OF STEEL CONSTRUCTION "LOAD RESISTANCE FACTOR DESIGN" LATEST EDITIONS ALL STEEL SHALL HAVE A MINIMUM YIELD STRESS (F,) OF 50 KSI
- UNLESS OTHERWISE NOTED. WELDING SHALL CONFORM TO THE LATEST EDITION OF THE AMERICAN WELDING SOCIETY'S STRUCTURAL WELDING CODE AWA D1.1. ELECTRODES FOR SHOP AND FIELDING WELDING SHALL BE CLASS E70XX, ALL WELDING SHALL BE PERFORMED BY A CERTIFIED
- WELDER PER THE ABOVE STANDARDS.
  ALL STEEL BEAMS TO BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 31/2" AND FULL FLANGE WIDTH UNLESS OTHERWISE NOTED. BEAMS MUST BE ATTACHED AT EACH END WITH A MINIMUM OF FOUR 16d NAILS OR (2) 1/2" x 4" LAG SCREWS
- UNLESS OTHERWISE NOTED. INSTALL 2x WOOD PLATE ON TOP OF STEEL BEAMS, RIPPED TO MATCH BEAM WIDTH, FASTEN PLATE TO BEAM W/ HILTI X-DNI 52 P8 PINS AT 12" O.C. STAGGERED OR 1/2" DIAMETER BOLTS AT 24"

#### MECHANICAL FASTENERS:

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



SPAN	LINTEL SIZE	END BEARING
UP TO 3'-0"	3½"×3½"×¼"	4"
UP TO 6'-3"	5"x3½"x¾s" L.L.V.	8"
UP TO 9'-6"	6"x3½"x%6" L.L.V.	12**



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(D) 88 57



M.P.

130

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Carolina

Notes

Structural

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<u>d</u> Project #: 105-19000 Designed By: KRK Checked By:

ssue Date: 1/1/19 Re-Issue Scale: 1/8"=1'-0" @ 11x17

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

Foundation Plans 'A2' & Option - LH

LEGEND PROVIDE SOLID BLOCKING

WITHIN FLOOR SYSTEM TO MATCH POST SIZE ABOVE. ⇒ BEARING WALL ABOVE ПШППП ⇒ INTERIOR BEARING WALL

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

■ LOCATION OF DOOR ABOVE

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



Designed By: KRK Checked By: Issue Date: 8/29/19 Re-Issue: 4/30/20 Scale: 1/8"=1"-0" @ 11x17 1/4"=1"-0" @ 22x34

MONOLITHIC SLAB FOUNDATION PLAN ELEVATIONS 'A1' & 'A2'

32'-0"

32'-0"

SLAB ON GRADE 4" THICK CONCRETE SLAB

W/ FIBERMESH ON 6 MIL VAPOR BARRIER ON 95%

COMPACTED FILL

24"x42"x20" DEEP-

MONOLITHIC CONCRETE FOOTING

4-14

2'-01/2"

-16" WIDE TURNDOWN

TO 12" BELOW GRADE

@ OPT\_ COV\_ PORCH

COV PORCH

18'-0"

8" DEEP x 16"

WIDE THICKENED SLAB (TYP.)

57

10'-51/2"

4" THICK CONCRETE

SLAB W/ FIBERMESH

ON 95% COMPACTED

16" WIDE TURNDOWN-

TO 12 BELOW GRADE

10'-10"

5'-0"

OPT. FIREPLACE

16" WIDE x 20" DEEP

MONOLITHIC CONCRETE FOOTING 20" WIDE W/ 4"

LEDGE @ BRICK VENEER (TYP.)

5'-8"

12'-0"

4" THICK CONCRETE SLAB

W/ FIBERMESH ON 95%
COMPACTED FILL

16" WIDE x 20" DEEP MONOLITHIC CONCRETE

FOOTING. 20" WIDE W/ 4"

LEDGE @ BRICK VENEER (TYP.)

16" WIDE x 20" DEEP MONOLITHIC CONCRETE FOOTING W/ 6" STEMWALL @ GARAGE 20" WIDE W/ 4" LEDGE @ BRICK VENEER (TYP.)

> 21'-6%" GARAGE SLAB 4" THICK CONCRETE SLAB W/ FIBERMESH ON 6 MIL VAPOR BARRIER ON 95% COMPACTED FILL SLOPE 1/8" PER 1'-0" TOWARDS DOOR

> > 16" WIDE TURNDOWN

TO 12" BELOW GRADE

16"-3"

21'-2"

16" WIDE x 20" DEEP MONOLITHIC CONCRETE FOOTING-

-24"x42"x20" DEEP

MONOLITHIC

CONCRETE FOOTING

2'-10/2"

LINE OF

BRICK @

ELEVATION 'A2'

-16" WIDE TURNDOWN

TO 12" BELOW GRADE

4" THICK CONCRETE SLAB

W/ FIBERMESH ON 95%

16" WIDE x 20" DEEP MONOLITHIC CONCRETE

FOOTING 20" WIDE W/ 4"

LEDGE @ BRICK VENEER (TYP.)

OPT EXTENDED COV. PORCH

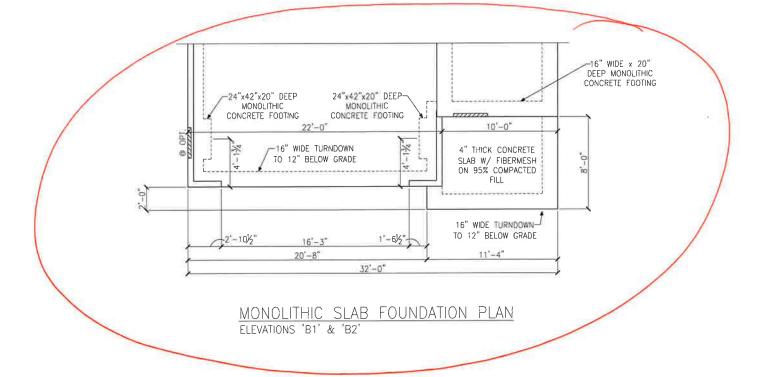
PARTIAL FOUNDATION PLAN

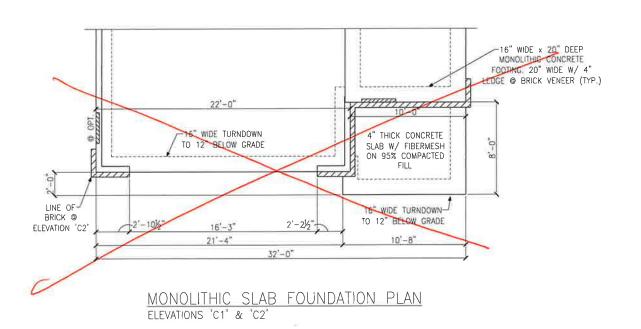
COMPACTED FILL

Monolithic Slab Four Elevations 'A1', 'A2' Kenzie Model — LH Up to 130 M.P.H. Carolina Division

Project #: 105-19004









PROVIDE SOLID BLOCKING

WITHIN FLOOR SYSTEM TO
MATCH POST SIZE ABOVE

⇒ BEARING WALL ABOVE

□□□□□□□ ⇒ INTERIOR BEARING WALL ⇒ BRACED WALL PANEL

(SEE KSE STRUCTURAL DETAILS SET FOR BRACED WALL PANEL SHEATHING FASTENING & BLOCKING DETAILS)

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



Monolithic Slab Fou Elevations 'B1', 'B2 Kenzie Model — LH Up to 130 M.P.H. Project #: 105-19004 Designed By: KRK

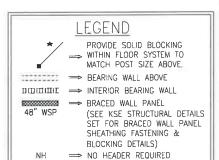
Foundation Plans , 'B2', 'C1' & 'C2' - LH

Checked By:

Issue Date: 8/29/19
Re-Issue: 4/30/20
Scale: 1/8"=1'-0" @ 11x17
1/4"=1'-0" @ 22x34







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

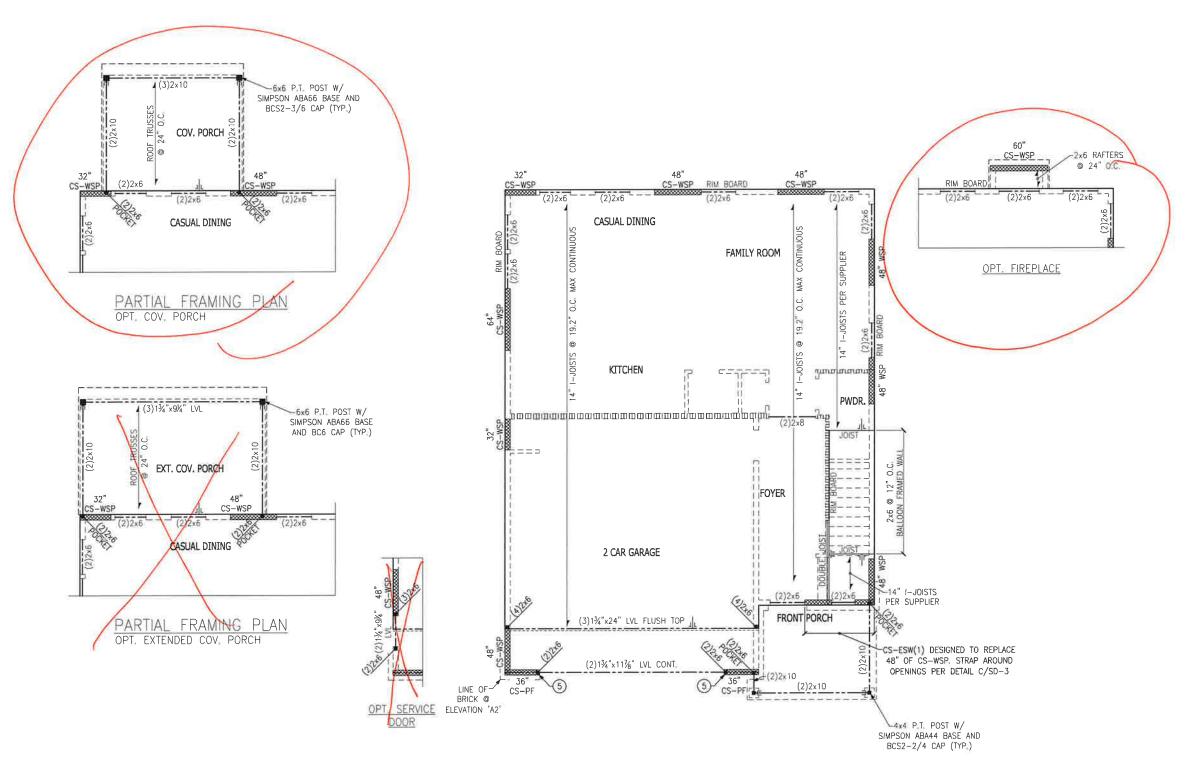
PLAN DESIGNED WITH 9' WALL PLATES

FLOOR FRAMING TO BE 14" DEEP TJI 110 SERIES OR EQUAL, SPACING PER MANUFACTURER.

#### KEYNOTES:

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





SECOND FLOOR FRAMING PLAN ELEVATIONS 'A1' & 'A2'

Options

Second Floor Framing Pl Elevations 'A1', 'A2' & C Kenzie Model — LH Up to 130 M.P.H.

Project #: 105-19004

Designed By: KRK Checked By: Issue Date: 8/29/19 Re-Issue: 4/30/20 Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

Plans



,C2,

Second Floor Framing Plans
Elevations 'B1', 'B2', 'C1' & '
Kenzie Model — LH
Garolina Division

Project #: 105-19004 Designed By: KRK



2 CAR GARAGE

LINE OF EXTERIOR

L FLUSH TOP

(2)134"x1178" LVL CONT

ELEVATIONS 'B1' & 'B2'

2 CAR GARAGE

(3)13/4"x20" LVL

LINE OF EXTERIOR

WALL ABOVE

ROOF TRUSSES

DESIGNED TO FORM

FLOOR ABOVE

ELEVATIONS 'C1' & 'C2'

SECOND FLOOR FRAMING PLAN

(5)

CS-PF

LINE OF

BRICK @

ELEVATION 'C2"

CS-PF

ROOF TRUSSES

DESIGNED TO FORM FLOOR ABOVE

SECOND FLOOR FRAMING PLAN

WALL ABOVE (3)13/4"x24" LVL

14" I-JOISTS
PER SUPPLIER

-CS-ESW(1) DESIGNED TO REPLACE 48" OF CS-WSP. STRAP AROUND

OPENINGS PER DETAIL C/SD-3

4x4 P.T. POST W/ SIMPSON ABA44 BASE AND BCS2-2/4 CAP (TYP.)

-14" I-JOISTS

PER SUPPLIER

-CS-ESW(1) DESIGNED TO REPLACE

48" OF CS-WSP. STRAP AROUND OPENINGS PER DETAIL C/SD-3

SIMPSON ABA44 BASE AND BCS2-2/4 CAP (TYP.)

(2)2x6

CS-PF

FRONT PORCH

FRONT PORCH

PROVIDE SOLID BLOCKING

WITHIN FLOOR SYSTEM TO MATCH POST SIZE ABOVE.

⇒ BEARING WALL ABOVE □□□□□□□ ⇒ INTERIOR BEARING WALL ⇒ BRACED WALL PANEL

(SEE KSE STRUCTURAL DETAILS SET FOR BRACED WALL PANEL SHEATHING FASTENING & BLOCKING DETAILS)

→ NO HEADER REQUIRED REFER TO KSE STRUCTURAL DETAILS SET FOR GENERAL STRUCTURAL NOTES AND

PLAN DESIGNED WITH 9' WALL PLATES

FLOOR FRAMING TO BE 14" DEEP TJI 110 SERIES OR EQUAL, SPACING PER MANUFACTURER.

#### KEYNOTES:

TYPICAL DETAILS

48" WSP

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





Re-issue: 4/30/20 Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34 S-2.1

Issue Date: 8/29/19

Checked By:







48" WSP

BEDROOM 4

W.I.C.

(2)2x6

(2)2×6

LAUNDRY

OWNER'S

SUITE

ROOF TRUSSES

DESIGNED TO FORM FLOOR BELOW

ROOF FRAMING PLAN ELEVATIONS 'B1' & 'B2'

BEDROOM 3

64" WSP

W.I.C.

BATH 2

O. BATH 1

====

LINE UP GIRDER

TRUSS W/ INSIDE FACE OF WALL

돌

ROOF TRUSSES

@ 24 O.C.

돌

W.I.C.

BEDROOM 2

PROVIDE SOLID BLOCKING

⇒ WITHIN FLOOR SYSTEM TO MATCH POST SIZE ABOVE.

⇒ BEARING WALL ABOVE ПШІШІПІ ⇒ INTERIOR BEARING WALL

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

NH => NO HEADER REQUIRED

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

PLAN DESIGNED WITH 8' WALL PLATES

KEYNOTES:

- (10) B'x12' HVAC PLATFORM TRUSSES DESIGNED TO SUPPORT HVAC UNITS.
- 2x6 OVERFRAMING W/ 2x8 RIDGE AND VALLEY PLATES OR VALLEY SET TRUSSES

  ② 24" O.C. (TYP.)





Checked By: | Sixue Date: 8/29/19 | Re-issue: 4/30/20 | Scale: 1/8"=1'-0" @ 11x17 | 1/4"=1'-0" @ 22x34

& 'B2'

Framing Plan

Model – LH 130 M.P.H.

Roof Framing Pla Elevations 'B1' & Kenzie Model — L Up to 130 M.P.H. Carolina Division

Project #: 105-19004 Designed By: KRK













Details

Wall

Braced

130 M.P.H

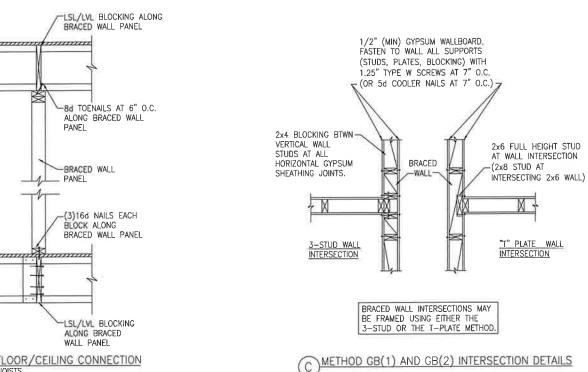
40 Up to North

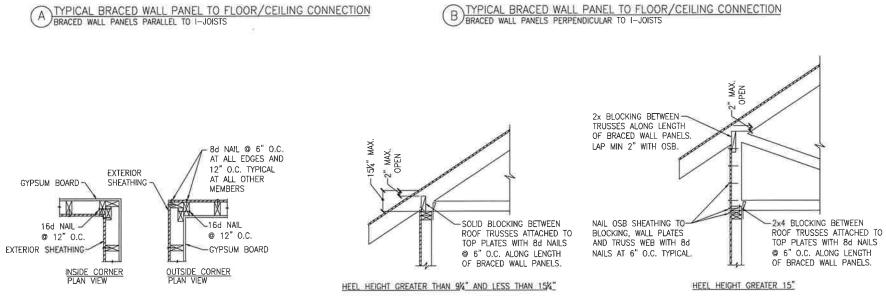
Project #: 105-19000 Designed By: KRK Checked By: Issue Date: 1/1/19 Re-Issue:

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

Carolina

WALL





2×4 CLEAT WITH (2)10d NAILS AT CHORDS AND

(4)10d NAILS AT

BLOCKING (TYP.) 7

-8d TOENAILS AT 6" O.C. ALONG BRACED WALL

PANEL

PANEL

-BRACED WALL

-(3)16d NAILS AT

16" O.C. ALONG

-LOCATE JOIST

BELOW WALL

D TYPICAL EXTERIOR CORNER WALL FRAMING

BRACED WALL PANEL

-CONTINUOUS RIM LOCATE JOIST

-8d TOENAILS AT 6" O.C.

ALONG BRACED WALL

PANEL

PANEL

BRACED WALL

(3)16d NAILS AT

16 O.C. ALONG BRACED WALL PANEL

-CONTINUOUS RIM

BOARD

LSL/LVL BLOCKING AT 16" O.C. ALONG

(3)8d TOENAILS

EACH BLOCK ALONG BRACED

WALL PANEL

BRACED WALL

(3)16d NAILS EACH

BRACED WALL PANEL

LSL/LVL BLOCKING

AT 16" O.C. ALONG

BRACED WALL PANEL

BLOCK ALONG

PANEL

BRACED WALL PANEL

-CONTINUOUS RIM

−8d TOENAILS AT 6" O.C. ALONG BRACED WALL

PANEL

PANEL

-BRACED WALL

-(3)16d NAILS AT

16" O.C. ALONG

..... -CONTINUOUS RIM BOARD

-8d TOENAILS AT 6"

WALL PANEL

O.C. ALONG BRACED

BRACED WALL PANEL

E ROOF TRUSS BEARING/BLOCKING AT BRACED WALL PANELS

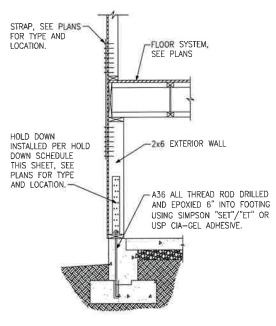
ONLY REQUIRED AT BRACED WALL PANELS





SIMPSON HOLD DOWN INSTALLED PER HOLD DOWN SCHEDULE THIS SHEET -A36 ALL THREAD ROD DRILLED AND EPOXIED 6" INTO FOOTING USING SIMPSON "SET" OR "ET" ADHESIVE

# (C)HOLD DOWN AT STEMWALL SLAB



G HOLD DOWN AT BASEMENT FOUNDATION

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





SHEAR WALL, SEE SCHEDULE AND PLANS FOR LOCATION

AND LOCATION.

HOLD DOWN INSTALLED PER = HOLD DOWN SCHEDULE THIS

A TYPICAL HOLD DOWN DETAIL

—HOLD DOWN INSTALLED PER HOLD DOWN SCHEDULE THIS SHEET, SEE

PLANS FOR TYPE AND LOCATION.

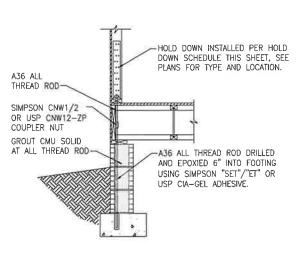
DHOLD DOWN AT MONOLITHIC SLAB FOUNDATION

-A36 ALL THREAD ROD DRILLED AND

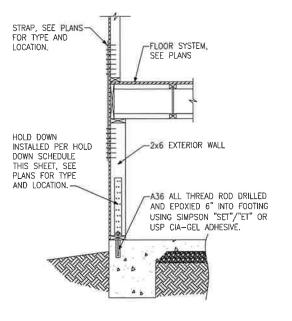
EPOXIED 6" INTO FOOTING USING SIMPSON

"SET"/"ET" OR JUSP CIA-GEL ADHESIVE.

# B TYPICAL HOLD DOWN DETAIL







C HOLD DOWN AT STEMWALL SLAB FOUNDATION

-HOLD DOWN INSTALLED PER HOLD

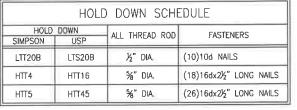
DOWN SCHEDULE THIS SHEET, SEE PLANS FOR TYPE AND LOCATION

A36 ALL THREAD ROD DRILLED AND

EPOXIED 6" INTO FOOTING USING SIMPSON

"SET"/"ET" OR USP CIA-GEL ADHESIVE

## F HOLD DOWN AT BASEMENT FOUNDATION



Details

Down

Hold

130 M.P.H.

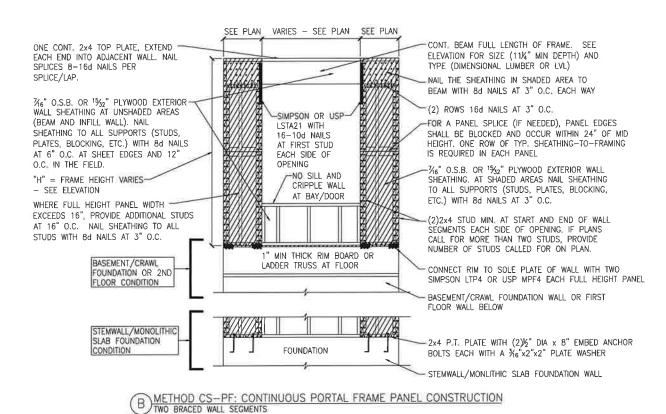
to Up to North

Project #: 105-19000 Designed By: KRK Checked By: Issue Date: 1/1/19 Re-Issue:

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

Carolina

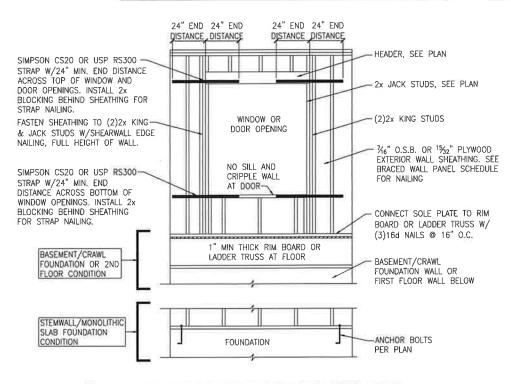
ONE BRACED WALL SEGMENT



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

#### BRACED WALL PANEL NOTES

- ALL BRACED WALL PANELS, EXCEPT GB(1) & GB(2), SHALL HAVE 2x BLOCKING BETWEEN WALL STUDS AT ALL HORIZONTAL SHEET EDGES,
- PROVIDE NAILING/BLOCKING ABOVE AND BELOW ALL BRACED WALL PANELS PER KSE BRACED WALL DETAILS.
- SHEATH ALL EXTERIOR WALLS OF THE HOUSE WITH 1/16" O.S.B., OR 15/32" PLYWOOD, FASTENED PER IRC. AT EXTERIOR CORNERS, SHEATHING SHALL BE FASTENED PER KSE BRACED WALL DETAILS. AT INTERIOR WALL INTERSECTIONS, FASTEN STUDS & WALL BRACING
- BRACED WALL PANELS AND ENGINEERED SHEAR WALLS ARE PROVIDED PER IRC. PANEL LENGTHS SHOWN ON PLANS ARE THE MINIMUM LENGTH REQUIRED.



(C) WINDOW OR DOOR REINFORCEMENT IN ENGINEERED SHEAR WALL







 $\approx$ Braced

Up Nor Project #. 105-19000 Designed By: KRK Checked By: Issue Date: 1/1/19

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Carolina

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

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

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Up to North Project #: 105-19000 Designed By: KRK

Checked By Issue Date: 1/1/19

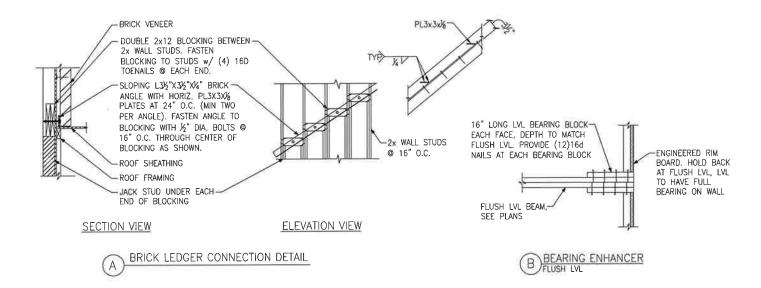
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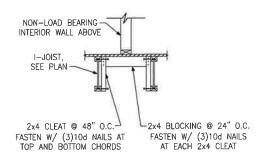
M.P.H.

to

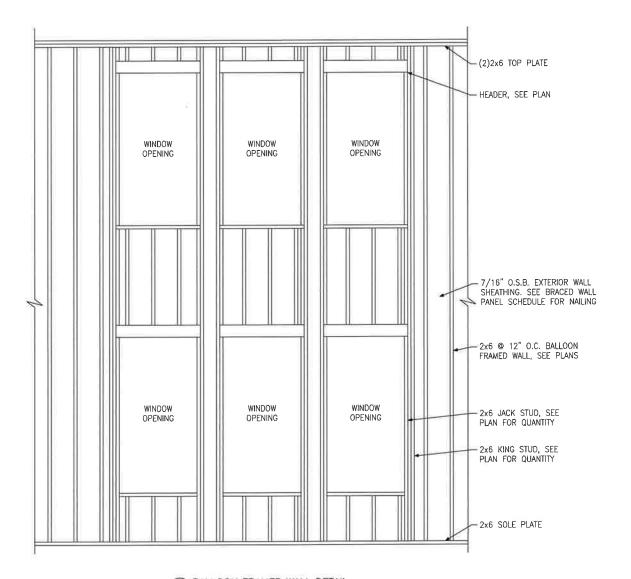
Carolina 130

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





O I-JOIST LADDER BLOCKING
AS REQUIRED @ PARALLEL WALLS



DBALLOON FRAMED WALL DETAIL N.T.S.



Details Miscellaneous Framing

Up to North Project #: 105-19000

130 M.P.H.

to

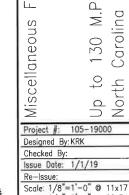
Carolina

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Designed By: KRK Checked By: Issue Date: 1/1/19

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



Framing

130 9 Up to North

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

M.P.H.

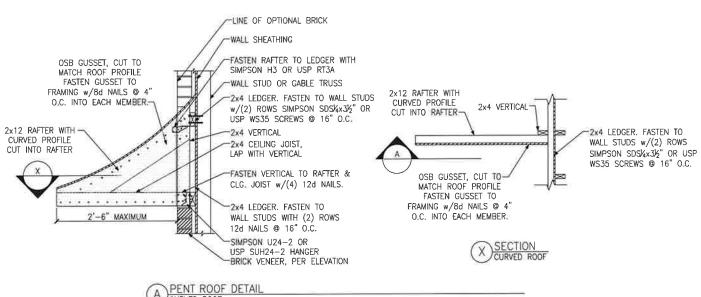
Carolina

Project #: 105-19000 Designed By: KRK Checked By: Issue Date: 1/1/19

Details

-WALL STUD OR GABLE TRUSS TOENAIL RAFTER TO LEDGER WITH (4) 12d NAILS 2x4 LEDGER. FASTEN TO WALL STUDS w/(2) ROWS SIMPSON SDS1/4x31/2" OR USP WS35 SCREWS @ 16" O.C. -2x4 RAFTER & CEILING JOIST. LAP AND FACE NAIL WITH (4) 12d NAILS MAXIMUM 2x4 LEDGER FASTEN TO WALL OR GABLE TRUSS WITH (2) ROWS 12d NAILS @ 16" O.C.

C EYEBROW ROOF DETAIL
STRAIGHT ROOF



2x4 BLOCKING BETWEEN

SIMPSON LTP4 OR USP

MPF4 EVERY OTHER

BLOCK

TRUSSES WITH SIMPSON U24 OR USP JL24 EACH END

A PENT ROOF DETAIL

SLOPING L31/2"x31/2"x1/4" BRICK ANGLE WITH HORIZ. PL3x3x1/8
PLATES AT 24" O.C. (MIN TWO PER ANGLE. NAIL TO GIRDER TRUSS WITH 16d NAILS AT 9"

BRICK VENEER -O.C. THROUGH PRE-DRILLED HOLES. PL3x3x%

2x WALL STUDS,

ROOF GIRDER TRUSS TO

SUPPORT DEAD LOAD OF BRICK, LIMIT DEFLECTION TO L/600 OR 0.3" MAX., SFF PLANS

(D)TRUSS DETAIL

(E) GABLE END WALL DETAIL

SHEATHING

(2) SIMPSON GBC OR USP HC520 EACH KICKER NON-SHEAR WALLS)

8d NAILS AT 6" O.C. -

2x4 BLOCKING BTWN

RAFTERS.

2x4 FRAMING AT 24" O.C.

CANTILEVERED OVER GABLE

2x6 KICKER AT 6'-0" O.C., WITH-

2x6 "T" SCAB. NAIL SCAB TO

KICKER WITH 10d NAILS AT 6"

7/6" OSB WALL

TRUSS IS 4'-0" OR LESS. 7/6" OSB AT GABLE END -TRUSS, PER SHEAR WALL EDGE NAILING PER SHEAR WALL SCHEDULE PER SHEAR WALL ABOVE (6" O.C. AT

O.C. KICKER MAY BE OMITTED WHEN HEIGHT OF GABLE END

- MEMBER.

4" O.C. INTO EACH

=8d NAILS AT 4" O.C.

ROOF TRUSSES AT

SIMPSON A35 OR USP MPA1

SPACED PER SHEAR WALL BELOW ENTIRE GABLE END

24" O.C.

2x4 RAFTER & CEILING JOIST,

B PENT ROOF DETAIL

12"x12"x1/2" OSB GUSSET

FRAMING w/8d NAILS @

2'-6" MAXIMUM

FASTEN GUSSET TO

LAP WITH VERTICAL FASTEN VERTICAL TO RAFTER & CLG. JOIST w/(4) 12d NAILS.

-LINE OF OPTIONAL BRICK -WALL SHEATHING

FASTEN RAFTER TO LEDGER WITH

USP WS35 SCREWS @ 16" O.C.

-2x4 LEDGER, FASTEN TO WALL STUDS

w/(2) ROWS SIMPSON SDS1/4×31/2" OR

SIMPSON H3 OR USP RT3A

WALL STUD OR GABLE TRUSS

-2x4 VERTICAL

2x4 LEDGER, FASTEN TO

WALL STUDS WITH (2) ROWS 12d NAILS @ 16" O.C. SIMPSON U24-2 OR USP SUH24-2 HANGER

BRICK VENEER, PER ELEVATION

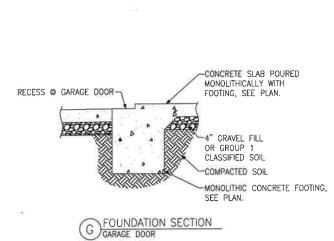
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COM
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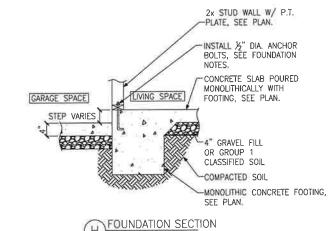
-CONCRETE SLAB POURED MONOLITHICALLY WITH FOOTING, SEE PLAN. GARAGE SPACE STEP VARIES -4" GRAVEL FILL OR GROUP 1 CLASSIFIED SOIL COMPACTED SOIL -MONOLITHIC CONCRETE FOOTING, SEE PLAN. SEE PLAN.

FOOTING, SEE PLAN.

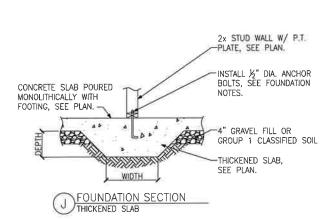


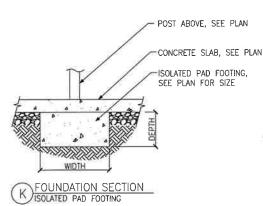
FOUNDATION SECTION

EXTERIOR WALL AT PORCH



H FOUNDATION SECTION INTERIOR GARAGE WALL





2x STUD WALL W/ P.T.

-INSTALL ½" DIA. ANCHOR BOLTS, SEE FOUNDATION

CONCRETE SLAB POURED

GRADE

12" MINIMUM-

RELOW GRADE

MONOLITHICALLY WITH

FOOTING, SEE PLAN.

4" GRAVEL FILL

CLASSIFIED SOIL

COMPACTED SOIL

MONOLITHIC CONCRETE

FOOTING W/ 4" LEDGE @

BRICK VENEER, SEE PLAN.

2x STUD WALL W/ P.T.

INSTALL ½" DIA. ANCHOR BOLTS, SEE FOUNDATION

CONCRETE SLAB POURED

MONOLITHICALLY WITH

FOOTING, SEE PLAN.

4" GRAVEL FILL

CLASSIFIED SOIL

COMPACTED SOIL

-MONOLITHIC CONCRETE

FOOTING W/ 4" LEDGE @

BRICK VENÉER, SEE PLAN.

OR GROUP 1

PLATE, SEE PLAN.

OR GROUP 1

-PLATE, SEE PLAN.

VENEER TIES SHALL BE SPACED NOT MORE THAN

24" O.C. HORIZONTALLY

AND VERTICALLY AND

MORE THAN 2 SQUARE

FEET OF WALL AREA-

FOUNDATION SECTION

FOUNDATION SECTION

EXTERIOR GARAGE WALL @ MASONRY

B EXTERIOR WALL @ MASONRY

VENEER

MASONRY VENEER-

8" MINIMUM

TO GRADE-

12" MINIMUM

BELOW GRADE

VENEER TIES SHALL BE SPACED NOT MORE THAN

24" O.C. HORIZONTALLY

AND VERTICALLY AND

SHALL SUPPORT NOT

FEET OF WALL AREA-

MASONRY VENEER

EXTERIOR GRADE-

12" MINIMUM-

BELOW GRADE

MORE THAN 2 SQUARE

2'-6" MAXIMUM

EXTERIOR GRADE

SHALL SUPPORT NOT

-2x STUD WALL W/

NOTES

8" MINIMUM

TO GRADE -

12" MINIMUM-

BELOW GRADE

FXTERIOR GRADE-

12" MINIMUM

BELOW GRADE

2'-6" MAXIMUM

EXTERIOR GRADE -

P.T. PLATE, SEE PLAN.

INSTALL ½" DIA, ANCHOR BOLTS, SEE FOUNDATION

CONCRETE SLAB POURED

MONOLITHICALLY WITH

FOOTING, SEE PLAN.

4" GRAVEL FILL

CLASSIFIED SOIL

-COMPACTED SOIL

-MONOLITHIC CONCRETE

FOOTING, SEE PLAN.

-2x STUD WALL W/

NOTES

4" GRAVEL FILL

OR GROUP 1

CLASSIFIED SOIL

COMPACTED SOIL

-MONOLITHIC CONCRETE

FOOTING, SEE PLAN.

P.T. PLATE, SEE PLAN

INSTALL 1/2" DIA. ANCHOR

BOLTS, SEE FOUNDATION

6" CONCRETE STEMWALL

-CONCRETE SLAB POURED

MONOLITHICALLY WITH

FOOTING, SEE PLAN:

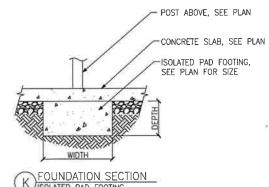
OR GROUP 1

FOUNDATION SECTION

STEP VARIES

FOUNDATION SECTION

EXTERIOR GARAGE WALL



Monolithic Project #: 105-19000 Designed By: KRK Checked By: Issue Date: 1/1/19 Re-Issue: Scale 1/8"=1"-0" @ 11x17 1/4"=1"-0" @ 22x34

Details

Foundation

Slab

M.P.H.

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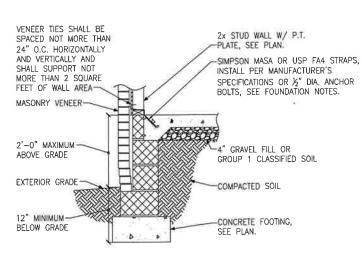
Carolina 130

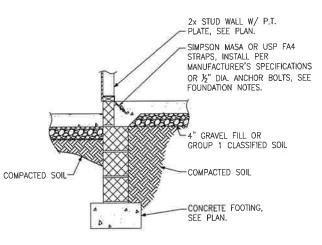
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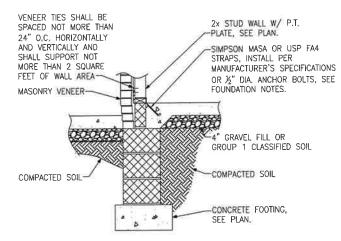


FOOTING W/ 4" LEDGE @

BRICK VENEER, SEE PLAN.



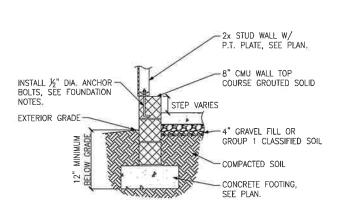




FOUNDATION SECTION EXTERIOR WALL AT PORCH W/ MASONRY VENEER

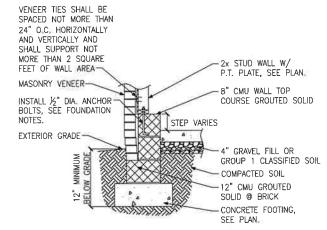
FOUNDATION SECTION B EXTERIOR WALL @ MASONRY VENEER

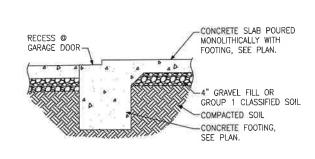
FOUNDATION SECTION EXTERIOR WALL AT PORCH

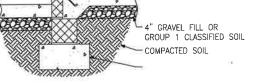


FOUNDATION SECTION

(A) EXTERIOR WALL





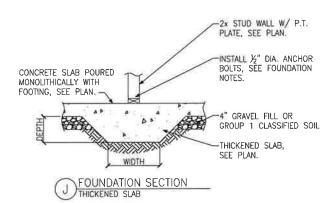


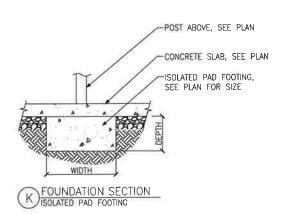
H FOUNDATION SECTION

GARAGE SPACE

FOUNDATION SECTION EXTERIOR GARAGE WALL

FOUNDATION SECTION EXTERIOR GARAGE WALL @ MASONRY G FOUNDATION SECTION GARAGE DOOR







Details Foundation Slab Wall Stem Project #: 105-19000 Designed By: KRK Checked By:

M.P.H.

9 Up to North

Carolina 130

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

Issue Date: 1/1/19

Re-Issue:

-2x STUD WALL W/ P.T. PLATE, SEE PLAN. SIMPSON MASA OR USP FA4 STRAPS, INSTALL PER MANUFACTURER'S SPECIFICATIONS OR ½" DIA. ANCHOR BOLTS, SEE FOUNDATION NOTES. LIVING SPACE

ENGINEERING
E, SUITE 201, QUAKERTOWN, PA 18951

SE





Details

to Up Nort Project #: 105-19000

工  $\mathbb{A}$ 

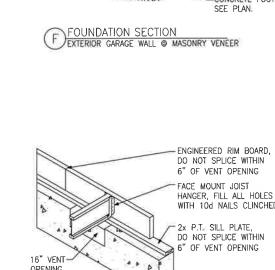
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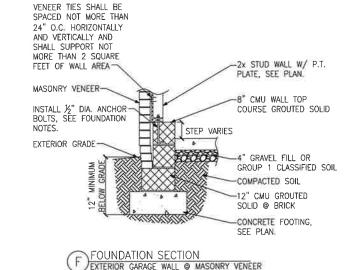
Carolina

Designed By: KRK Checked By:

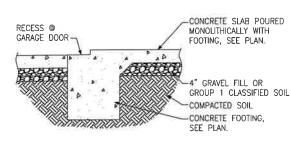
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CRAWL SPACE VENT DETAIL



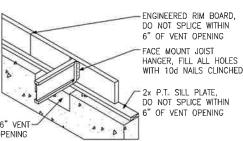


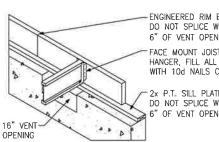




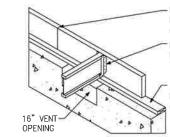
-	FOUNDATION SECTION GARAGE DOOR
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GARAGE	DOOR	

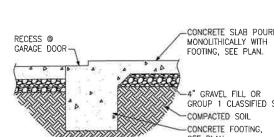








FOUNDATION SECTION INTERIOR PIER



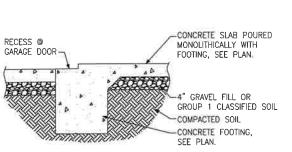
FOUNDA	ATION SE	CTION

FOUNDATION SECTION B FOUNDATION SCOTION EXTERIOR WALL @ MASONRY VENEER

-FLOOR JOIST. SEE PLAN

-2x STUD WALL W/ PLATE, SEE PLAN.

-CONCRETE FOOTING, SEE PLAN. SEE ARCHITECTURAL DETAILS FOR WATERPROOFING AT PORCH SLAB/WOOD FRAMING. FOUNDATION SECTION

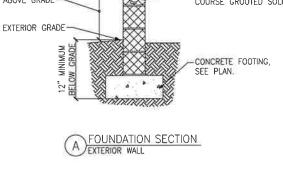


PIFR A	ND FOOT	TING SCHEDULE
PIER HEIGHT	PIER SIZE	MIN. FOOTING SIZE
UP TO 2'-8"	8" x 16"	24" x 24" x 12" U.N.O.
UP TO 5'-4"	16" x 16"	24" x 24" x 12" U.N.O.
UP TO 8'-0"	16" x 16"	30" x 30" x 12" U.N.O.
NOTE:		
PIERS SHALL	BE CAPPE	WITH 8" OF SOLID
MASONRY OR	CONCRETE	OR TOP COURSE FILLED
SOLID WITH CONCRETE/MORTAR.		

-FLOOR JOIST, SEE PLAN NOTES. TURN DOWN PORCH SLAB TO BELOW TOP OF FOUNDATION WALL

-CONCRETE FOOTING, SEE PLAN.





INSTALL ½" DIA. ANCHOR - BOLTS, SEE FOUNDATION

NOTES.

EXTERIOR GRADE

GIRDER PER-

CMU PIER GROUTED

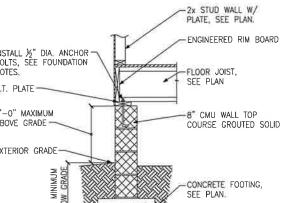
SOLID, SEE SCHEDULE

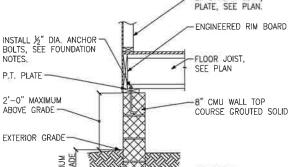
FOR SIZE AND HEIGHT

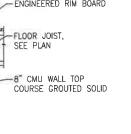
STEP VARIES

E FOUNDATION SECTION EXTERIOR GARAGE WALL

FLOOR JOIST, SEE PLAN







-2x STUD WALL W/ P.T.

COURSE GROUTED SOLID

PLATE, SEE PLAN.

8" CMU WALL TOP

" GRAVEL FILL OR

COMPACTED SOIL

2x8 PT BEARING BLOCK, FULL LENGTH OF PIER

-CONCRETE FOOTING,

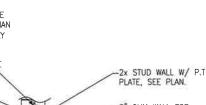
SEE PLAN.

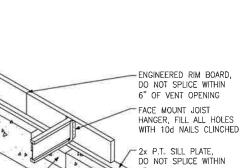
SEE PLAN.

CONCRETE FOOTING,

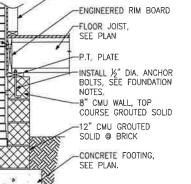
GROUP 1 CLASSIFIED SOIL

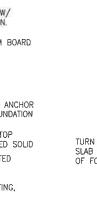
VENEER TIES SHALL BE

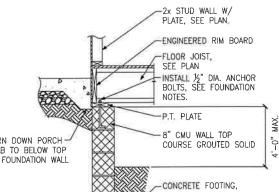


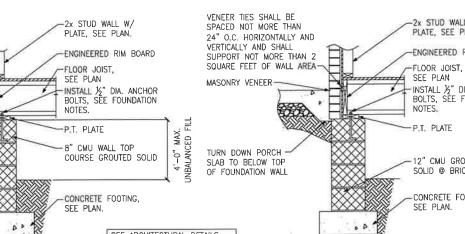


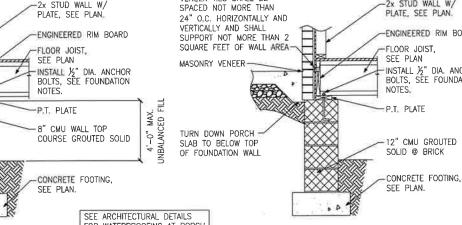
SPACED NOT MORE THAN 24" O.C. HORIZONTALLY AND VERTICALLY AND -ENGINEERED RIM BOARD SHALL SUPPORT NOT MORE THAN 2 SQUARE FEET OF WALL AREA-MASONRY VENEER -INSTALL ½" DIA. ANCHOR BOLTS, SEE FOUNDATION 2'-0" MAXIMUM ABOVE GRADE -8" CMU WALL, TOP COURSE GROUTED SOLID EXTERIOR GRADE--12" CMU GROUTED SOLID @ BRICK -CONCRETE FOOTING, SEE PLAN.





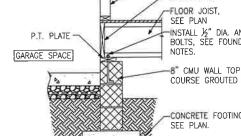


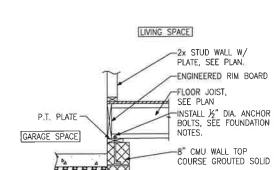




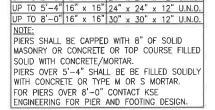


EXTERIOR WALL AT PORCH W/ MASONRY VENEER LIVING SPACE -2x STUD WALL W/ PLATE, SEE PLAN. -ENGINEERED RIM BOARD

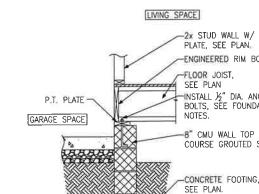




FOUNDATION SECTION INTERIOR GARAGE WALL



C EXTERIOR WALL AT PORCH



-ENGINEERED RIM BOARD INSTALL ½" DIA. ANCHOR BOLTS, SEE FOUNDATION

