

RENAISSANCE
RESIDENTIAL DESIGN, INC.

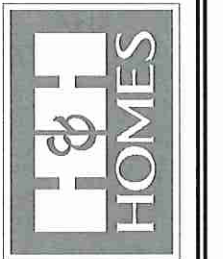
4010 GLENMIST CT., | RALEIGH, NC 27612
(919) 816-4128
WWW.RDCAKOLA.COM

"The art of transforming your vision into reality."

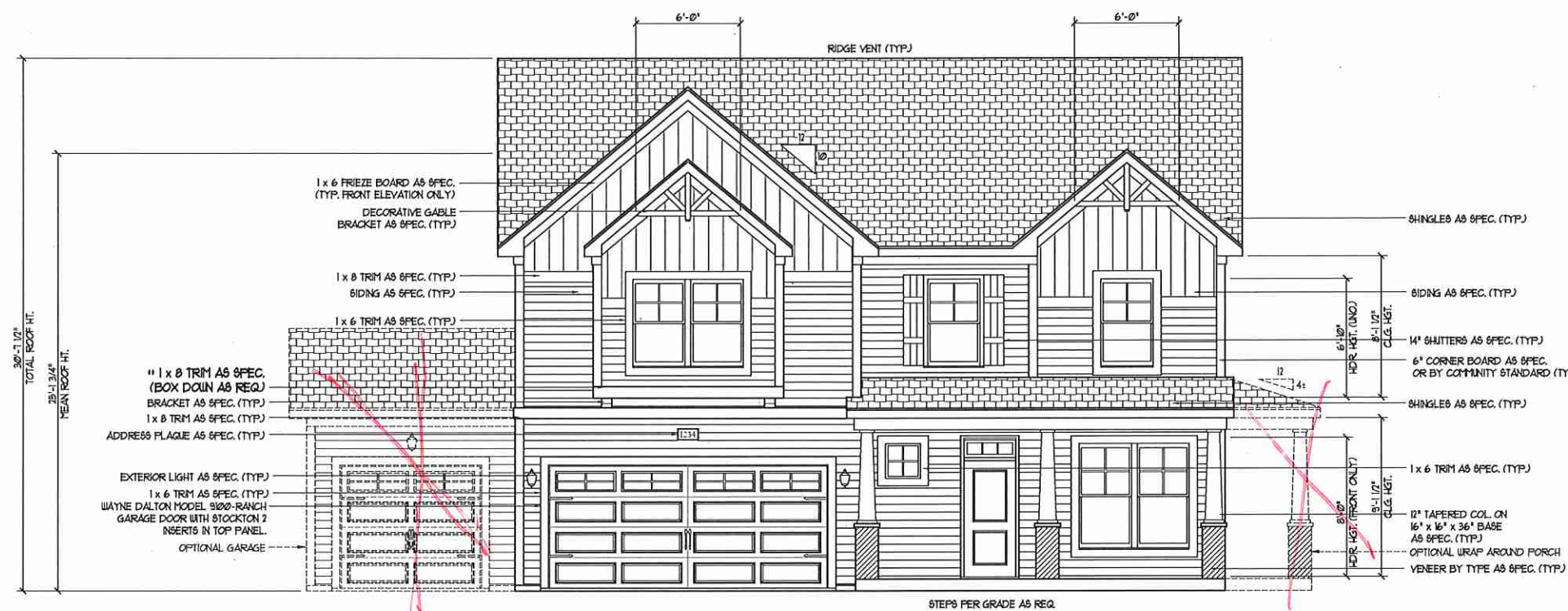
RENAISSANCE RESIDENTIAL DESIGN, INC. RESERVES THE RIGHT TO MAKE MODIFICATIONS TO FLOOR PLANS, EXTERIOR MATERIALS AND SPECIFICATIONS WITHOUT NOTICE. THESE DRAWINGS ARE FOR THE PURPOSE OF CONVEYING AN ARCHITECTURAL CONCEPT ONLY.

RENAISSANCE RESIDENTIAL DESIGN, INC. HEREBY EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS AND DRAWINGS ARE NOT TO BE REPRODUCED, CHANGED OR COPIED IN ANY FORM OR MANNER WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN CONSENT OF RENAISSANCE RESIDENTIAL DESIGN, INC. NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY WITHOUT FIRST OBTAINING SAID WRITTEN PERMISSION AND CONSENT.

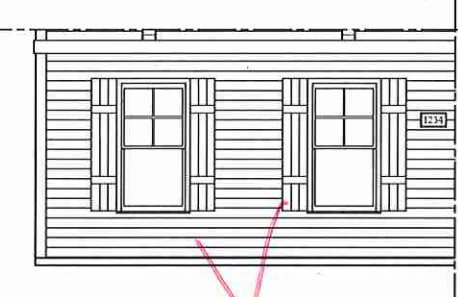
J.S. THOMPSON
ENGINEERING, INC.
1000 WADE AVE., SUITE 101
RALEIGH, NC 27605
PHONE: (919) 780-9919
FAX: (919) 780-9921
N.C. LICENSE NO. C11333



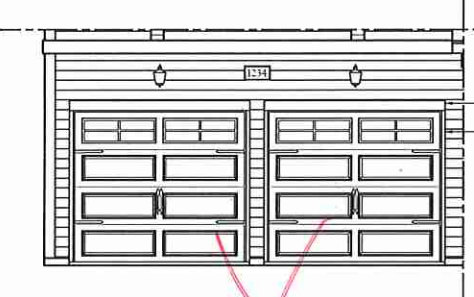
PRICES, PROMOTIONS, INVENTORIES, FEATURES, MATERIALS AND DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SQUARE FOOTAGE AND DIMENSIONS ARE ESTIMATED AND MAY VARY IN ACTUAL CONSTRUCTION. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED. ALL DIMENSIONS WILL BE DETERMINED BY THE SITE PLAN AND 60% PLAN FLOOR PLANS AND ELEVATION RENDERINGS ARE ARTIST CONCEPTIONS. FLOOR PLANS ARE THE COPYRIGHTED PROPERTY OF H&H HOMES. ANY USE, REPRODUCTION, COPIING, OR DISTRIBUTION OF THESE DRAWINGS IS PROHIBITED. SEE NEW HOME SALES CONSULTANT FOR CURRENT DETAILS. COPYRIGHT 2017 H&H HOMES



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

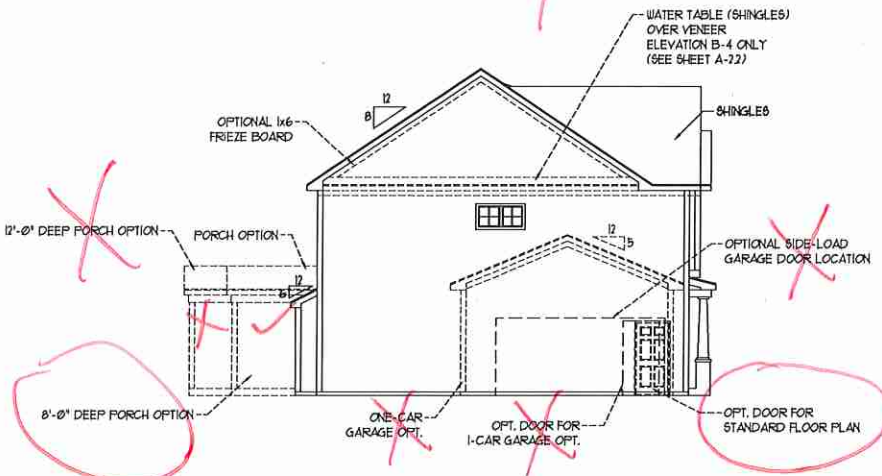


SIDE LOAD GARAGE OPTION
(NOT AVAILABLE WITH OPTIONAL ONE-CAR GARAGE)
SCALE: 1/4" = 1'-0"

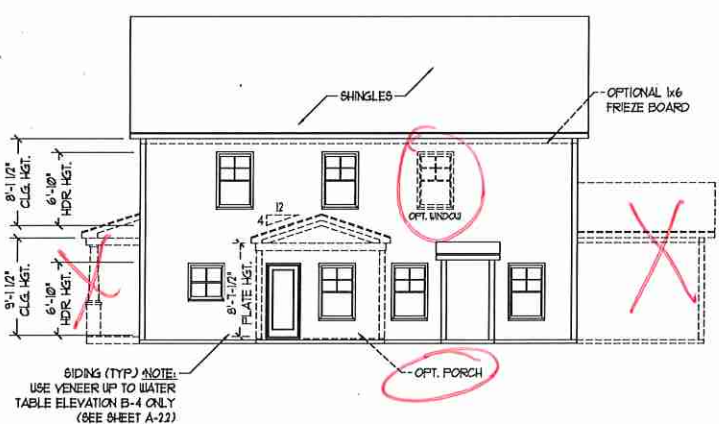


DOUBLE GARAGE DOOR OPTION
SCALE: 1/4" = 1'-0"

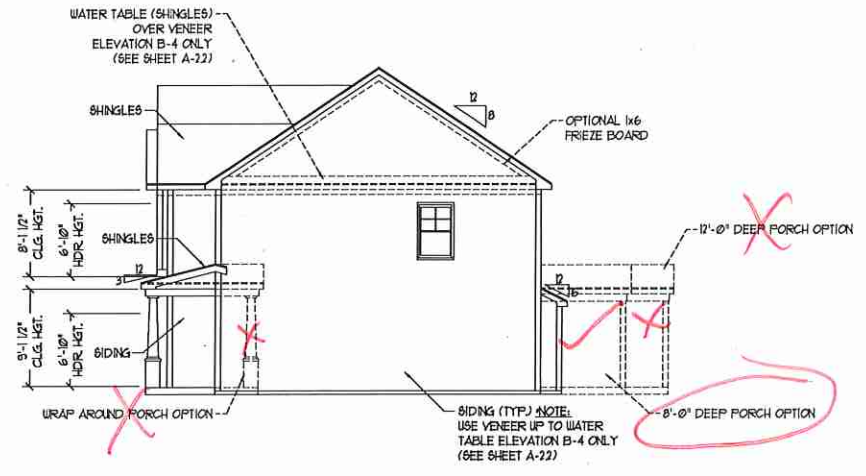
NOTE: SEE PAGE A-21 FOR SPECIFIC FRONT ELEVATION-B DETAILS. SEE PAGE A-22 FOR B-4 (ALL BRICK) ELEVATIONS



LEFT ELEVATION
SCALE: 1/8" = 1'-0"



REAR ELEVATION
SCALE: 1/8" = 1'-0"



RIGHT ELEVATION
SCALE: 1/8" = 1'-0"

OKM000183
H&H HOMES, INC.
TOPSAIL
Inventory Marked

DATE: OCTOBER 18, 2017
REV.:
SCALE: AS NOTED
DRAWN BY: WG
ENGINEERED BY: WLF
REVIEWED BY: JES

B - ELEVATIONS
A-2



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



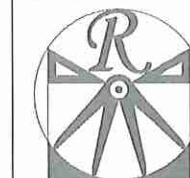
FRONT ELEVATION-B-2
SCALE: 1/4" = 1'-0"



FRONT ELEVATION-B-3
SCALE: 1/4" = 1'-0"



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



RENAISSANCE
RESIDENTIAL DESIGN, INC.

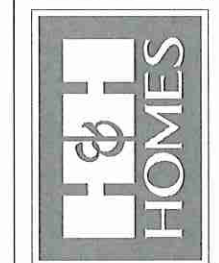
4810 GLENMIST CT., J. RALEIGH, NC 27612
919) 648-4128
WWW.HIRCHROCK.COM

"The art of transforming your vision into reality."

RENAISSANCE RESIDENTIAL DESIGN, INC. RESERVES THE RIGHT TO MAKE MODIFICATIONS TO FLOOR PLANS, SPECIFICATIONS, MATERIALS, AND FINISHES WITHOUT NOTICE. THESE DRAWINGS ARE FOR THE PURPOSE OF CONVEYING AN ARCHITECTURAL CONCEPT ONLY.

RENAISSANCE RESIDENTIAL DESIGN, INC. HEREBY EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS AND DRAWINGS ARE NOT TO BE REPRODUCED, CHANGED, OR COPIED IN ANY FORM OR MANNER WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN CONSENT OF RENAISSANCE RESIDENTIAL DESIGN, INC. NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY WITHOUT FIRST OBTAINING SAID WRITTEN PERMISSION AND CONSENT.

J.S. THOMPSON
ENGINEERING, INC.
1006 WADE AVE., SUITE 104
RALEIGH, NC 27605
PHONE: (919) 789-9919
FAX: (919) 789-9921
N.C. LICENSE NO. C-1733



PRICES, PROVISIONS, INVENTORIES, FEATURES, PERMITS, AND DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SQUARE FOOTAGE AND DIMENSIONS ARE ESTIMATED AND MAY VARY IN ACTUAL CONSTRUCTION. ALL DIMENSIONS SHALL BE DETERMINED BY THE SITE PLAN AND FLOOR PLAN. CONCEPTUAL FLOOR PLANS ARE THE COPYRIGHTED PROPERTY OF RENAISSANCE RESIDENTIAL DESIGN, INC. AND ARE NOT TO BE REPRODUCED, CHANGED, OR COPIED IN ANY FORM OR MANNER WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN CONSENT OF RENAISSANCE RESIDENTIAL DESIGN, INC. NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY WITHOUT FIRST OBTAINING SAID WRITTEN PERMISSION AND CONSENT.

H&H HOMES, INC.
TOPSAIL

DATE: OCTOBER 18, 2017

REV.:

SCALE: AS NOTED

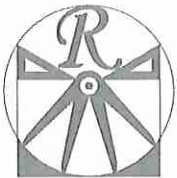
DRAWN BY: WG

ENGINEERED BY: WLF

REVIEWED BY: JES

B - ELEVATION
OPTIONS

A-2.1



RENAISSANCE

RESIDENTIAL DESIGN, INC.
4810 GLENHIST CT., J. RALEIGH, NC 27612
919 848-4128
WWW.RDCAPI.COM

"The art of transforming your vision into reality"

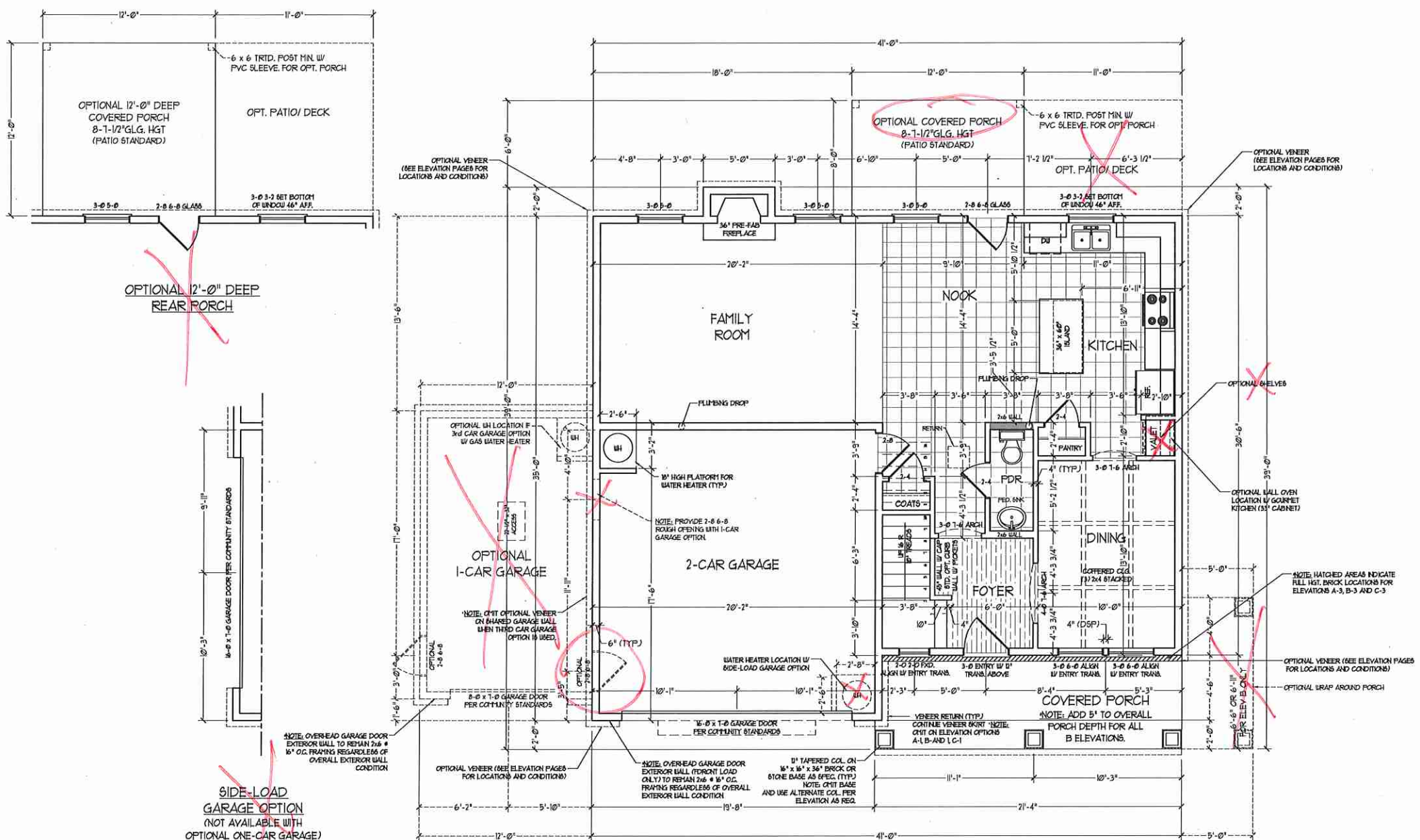
RENAISSANCE RESIDENTIAL DESIGN, INC. RESERVES THE RIGHT TO MAKE MODIFICATIONS TO FLOOR PLANS, ELEVATIONS, MATERIALS AND SPECIFICATIONS WITHOUT NOTICE. THESE DRAWINGS ARE FOR THE PURPOSE OF CONVEYING AN ARCHITECTURAL CONCEPT ONLY.

RENAISSANCE RESIDENTIAL DESIGN, INC. HEREBY EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS AND DRAWINGS ARE NOT TO BE REPRODUCED, COPIED, OR COPIED IN ANY FORM OR MANNER WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN CONSENT OF RENAISSANCE RESIDENTIAL DESIGN, INC. NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY WITHOUT FIRST OBTAINING SAID WRITTEN PERMISSION AND CONSENT.

J.S. THOMPSON ENGINEERING, INC.
105 WADE AVE., SUITE 104
RALEIGH, NC 27605
PHONE (919) 789-9919
FAX (919) 789-9921
N.C. LICENSE NO. C-1533



THESE PROVISIONS, INCLUDING FEES, RESERVE RIGHTS, AND LIMITATIONS, APPLY TO ALL FLOOR PLANS, ELEVATIONS, DETAILS, MATERIALS AND DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SQUARE FOOTAGE AND DIMENSIONS ARE ESTIMATED AND MAY VARY SLIGHTLY FROM THE ACTUAL. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF RALEIGH PLANNING DEPARTMENT'S CONCEPTS. FLOOR PLANS ARE THE COPYRIGHTED PROPERTY OF RENAISSANCE RESIDENTIAL DESIGN, INC. AND ARE NOT TO BE REPRODUCED, COPIED, OR COPIED IN ANY FORM OR MANNER WITHOUT THE WRITTEN PERMISSION OF RENAISSANCE RESIDENTIAL DESIGN, INC. ADAPTATION, REVISION, OR REUSE OF THESE PLANS IS STRICTLY PROHIBITED. SEE NEW HOME SALES CONSULTANT FOR CURRENT DETAILS. COPYRIGHT 2017 H&H HOMES



NOTE: ALL EXTERIOR WALLS AND ATTIC WALLS ARE TO BE 2 x 6 @ 16" O.C. (UNO). 2 x 4 @ 16" O.C. EXTERIOR WALLS MAY BE CONSTRUCTED IN LIEU OF 2 x 6 WALLS (UNO). ALL INTERIOR LOAD BEARING WALLS ARE TO BE 2 x 4 @ 16" O.C. (UNO) AND NON-LOAD BEARING INTERIOR WALLS ARE TO BE 2 x 4 @ 24" O.C. (UNO).

2x6 WALL
* SHADED WALLS ARE TO BE 2 x 6 @ 16" O.C. (LOAD BEARING) OR 2 x 6 @ 24" O.C. (NON-LOAD BEARING) REGARDLESS OF EXTERIOR WALL CONDITION

SQUARE FOOTAGE

1st FLOOR:	949 SQ. FT.
2nd FLOOR:	1351 SQ. FT.
TOTAL:	2300 SQ. FT.
FRONT PORCH:	131 SQ. FT.
STD. REAR PATIO:	96 SQ. FT.
GARAGE:	401 SQ. FT.

SQUARE FOOTAGE (OPTIONS)

FIRST FLOOR (BRICK):	999 SQ. FT.
SECOND FLOOR (BRICK):	1405 SQ. FT.
TOTAL (BRICK):	2404 SQ. FT.
GARAGE (BRICK):	418 SQ. FT.
FRONT PORCH (WRAP OPTION):	53 SQ. FT.
REAR PORCH (8'-0" DEEP):	96 SQ. FT.
REAR PORCH (12'-0" DEEP):	144 SQ. FT.
OPT. PATIO/ DECK: (8'-0" DEEP):	88 SQ. FT.
OPT. PATIO/ DECK: (12'-0" DEEP):	132 SQ. FT.
I-CAR GARAGE:	240 SQ. FT.

~~SIDE-LOAD GARAGE OPTION (NOT AVAILABLE WITH OPTIONAL ONE-CAR GARAGE)~~

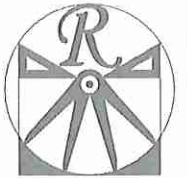
~~SIDE-LOAD GARAGE OPTION (NOT AVAILABLE WITH OPTIONAL ONE-CAR GARAGE)~~

~~DOUBLE GARAGE DOOR OPTION~~

H&H HOMES, INC.
TOPSAIL

DATE: OCTOBER 18, 2017
REV.:
SCALE: 1/4" = 1'-0"
DRAWN BY: WG
ENGINEERED BY: WLF
REVIEWED BY: JES

FIRST FLOOR PLAN
A-4



RENAISSANCE
RESIDENTIAL DESIGN, INC.

4810 GLENHURST CT., | RALEIGH, NC 27612

(919) 545-4128

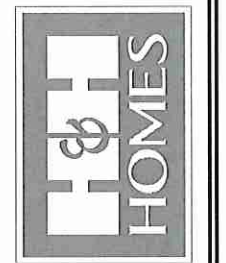
WWW.RRD-CAROLINA.COM

"The art of transforming your vision into reality."

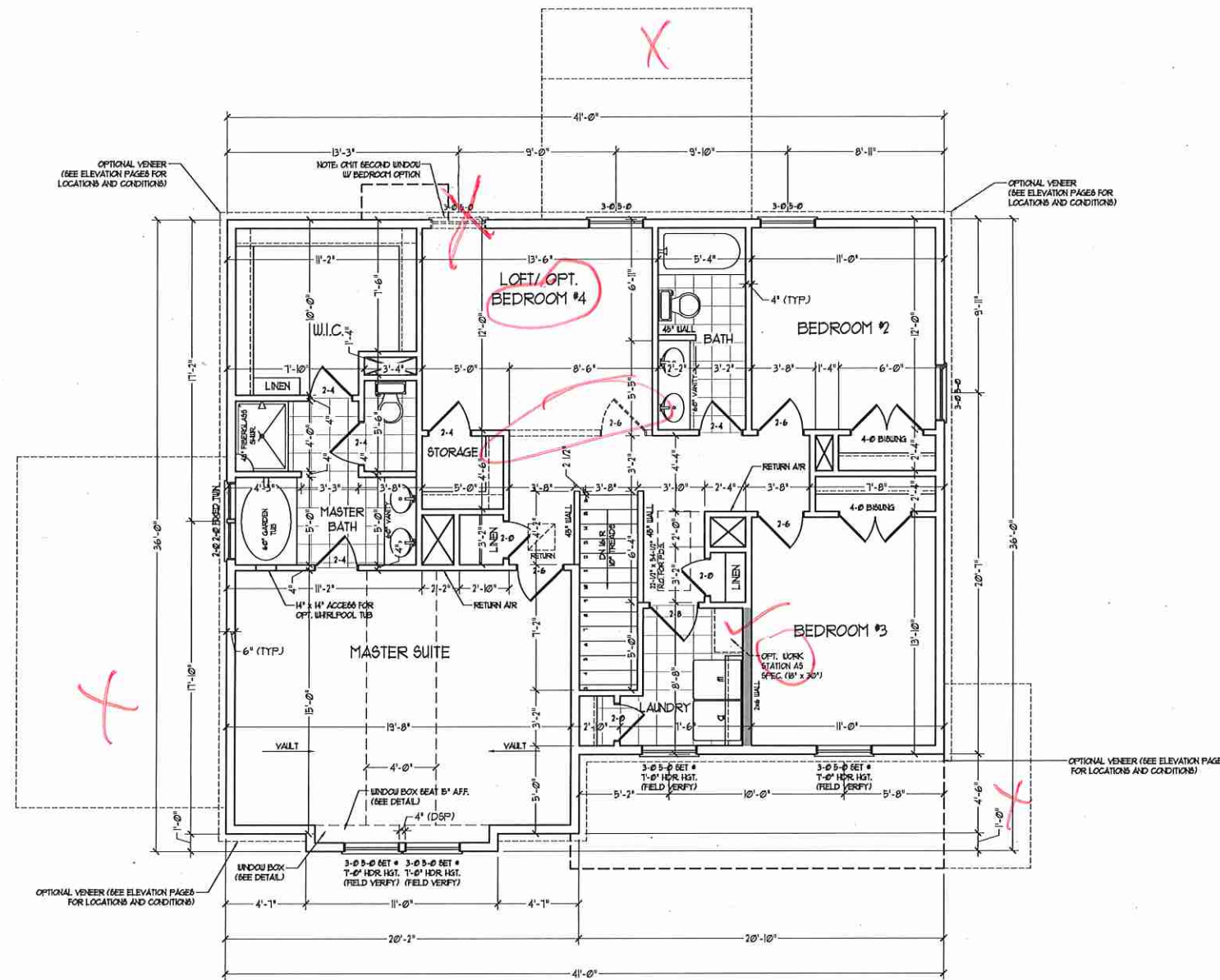
RENAISSANCE RESIDENTIAL DESIGN, INC. RESERVES THE RIGHT TO MAKE MODIFICATIONS TO FLOOR PLANS, ELEVATIONS, MATERIALS AND SPECIFICATIONS WITHOUT NOTICE. THESE DRAWINGS ARE FOR THE PURPOSE OF CONVEYING AN ARCHITECTURAL CONCEPT ONLY.

RENAISSANCE RESIDENTIAL DESIGN, INC. HEREBY EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS AND DRAWINGS ARE NOT TO BE REPRODUCED, CHANGED, OR COPIED IN ANY FORM OR MANNER WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN CONSENT OF RENAISSANCE RESIDENTIAL DESIGN, INC. NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY WITHOUT FIRST OBTAINING SAID WRITTEN PERMISSION AND CONSENT.

J.S. THOMPSON ENGINEERING, INC.
688 WADE AVE., SUITE 104
RALEIGH, NC 27605
PHONE: (919) 289-9919
FAX: (919) 289-9921
N.C. LICENSE NO.: C-17333

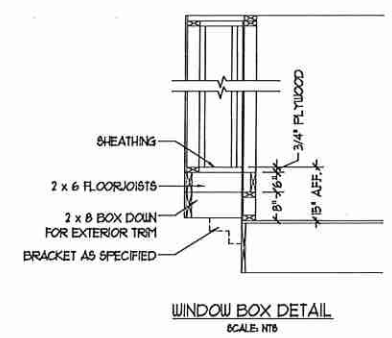


PRICES, PROPORTIONS, IDENTITIES, FEATURES, MATERIALS AND DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SQUARE FOOTAGE AND DIMENSIONS ARE ESTIMATED AND MAY VARY IN ACTUAL CONSTRUCTION. ALL DIMENSIONS SHOWN ON FLOOR PLANS AND ELEVATION RENDERINGS ARE ARTIST CONCEPTIONS. FLOOR PLANS ARE THE COPYRIGHTED PROPERTY OF H&H HOMES, INC. ALL RIGHTS ARE RESERVED. REPRODUCTION OF THESE DRAWINGS IS PROHIBITED. SEE H&H HOMES SALES CONSULTANT FOR CURRENT DETAILS. COPYRIGHT 2017 H&H HOMES



NOTE: ALL EXTERIOR WALLS AND ATTIC WALLS ARE TO BE 2 x 6 @ 16" O.C. (UNO). 2 x 4 @ 16" O.C. EXTERIOR WALLS MAY BE CONSTRUCTED IN LIEU OF 2 x 6 WALLS (UNO). ALL INTERIOR LOAD BEARING WALLS ARE TO BE 2 x 4 @ 16" O.C. (UNO) AND NON-LOAD BEARING INTERIOR WALLS ARE TO BE 2 x 4 @ 24" O.C. (UNO).

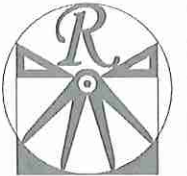
2x6 WALL
* SHADED WALLS ARE TO BE 2 x 6 @ 16" O.C. (LOAD BEARING) OR 2 x 6 @ 24" O.C. (NON-LOAD BEARING) REGARDLESS OF EXTERIOR WALL CONDITION



H&H HOMES, INC.
TOPSAIL

DATE: OCTOBER 18, 2017
REV.:
SCALE: 1/4"=1'-0"
DRAWN BY: WG
ENGINEERED BY: WLF
REVIEWED BY: JES

SECOND FLOOR PLAN
A-5



RENAISSANCE

RESIDENTIAL DESIGN, INC.
4910 GLENHIST CT., J. RALEIGH, NC 27612

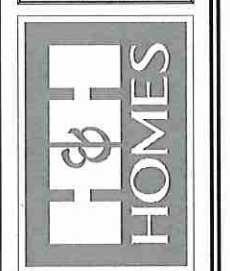
(919) 519-4123
WWW.RRDCAROLINA.COM

"The art of transforming your vision into reality."

RENAISSANCE RESIDENTIAL DESIGN, INC. HEREBY EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS AND DRAWINGS ARE NOT TO BE REPRODUCED, COPIED, CHANGED, OR COPIED IN ANY FORM OR MANNER WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN CONSENT OF RENAISSANCE RESIDENTIAL DESIGN, INC. IF YOU ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY WITHOUT FIRST OBTAINING SAID WRITTEN PERMISSION AND CONSENT.

RENAISSANCE RESIDENTIAL DESIGN, INC. HEREBY EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS AND DRAWINGS ARE NOT TO BE REPRODUCED, COPIED, CHANGED, OR COPIED IN ANY FORM OR MANNER WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN CONSENT OF RENAISSANCE RESIDENTIAL DESIGN, INC. IF YOU ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY WITHOUT FIRST OBTAINING SAID WRITTEN PERMISSION AND CONSENT.

J.S. THOMPSON
ENGINEERING, INC.
606 WADE AVE., SUITE 104
RALEIGH, NC 27605
PHONE: (919) 789-9919
FAX: (919) 789-9921
N.C. LICENSE NO. C-1733



THESE PRELIMINARY INQUIRIES, FEASIBILITY STUDIES, FLOOR PLANS, ELEVATIONS, DESIGNS, MATERIALS AND DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SQUARE FOOTAGE AND DIMENSIONS ARE ESTIMATED AND MAY VARY IN FACTORY PRODUCTION. ALL DIMENSIONS SHALL BE DETERMINED BY THE SITE PLAN AND R.O.P. PLAN. FLOOR PLANS AND ELEVATION DRAWINGS ARE ARTIST CONCEPTS. FLOOR PLANS ARE THE COPYRIGHTED PROPERTY OF RENAISSANCE RESIDENTIAL DESIGN, INC. ADAPTATION, OR DISPLAY OF THE PLANS STRICTLY PROHIBITED. SEE NEW HOME SALES CONSULTANT FOR CURRENT DETAILS. COPYRIGHT 2017 H&H HOMES

H&H HOMES, INC.
TOPSAIL

DATE: OCTOBER 18, 2017

REV.:

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

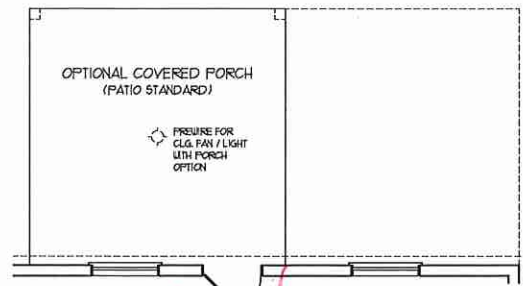
DRAWN BY: WG

ENGINEERED BY: WLF

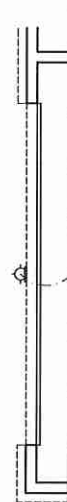
REVIEWED BY: JES

FIRST FLOOR
ELECTRICAL
PLAN

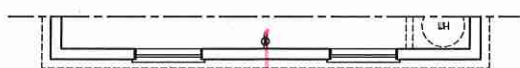
E-1



OPTIONAL 12'-0" DEEP REAR PORCH



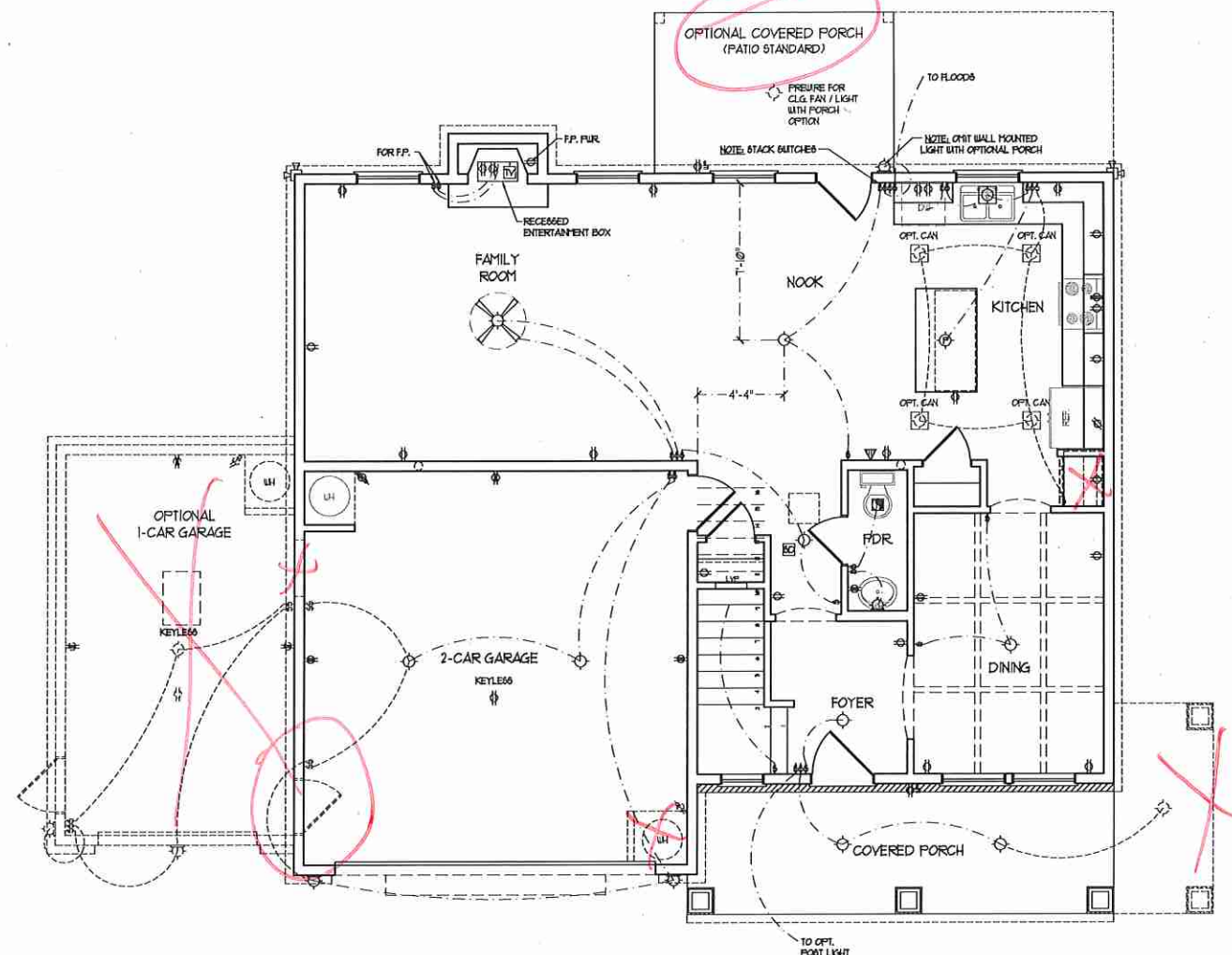
SIDE-LOAD GARAGE OPTION (NOT AVAILABLE WITH OPTIONAL ONE-CAR GARAGE)



SIDE-LOAD GARAGE OPTION (NOT AVAILABLE WITH OPTIONAL ONE-CAR GARAGE)



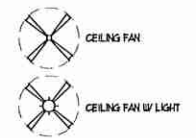
DOUBLE GARAGE DOOR OPTION

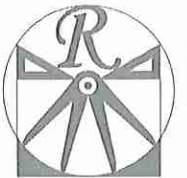


ELECTRICAL LAYOUT NOTES:
1) BLOCK AND WIRE FOR ALL CEILING FANS PER PLAN
2) VANITY LIGHTS TO BE SET @ 90" AFF. (TYP)
3) ADDITIONAL EXTERIOR OUTLETS REQUIRED BY CODE TO BE LOCATED BY ELECTRICAL
4) PLACE SWITCHES @ 48" FROM ROUGH OPENING

ELECTRICAL LEGEND

- ⊙ 120 V OUTLET
- ⊙ 120 V GFI OUTLET
- ⊙ 120 V SWITCHED OUTLET
- ⊙ 120 V BASEBOARD OUTLET
- ⊙ 4-FLEX
- ⊙ COUNTER OR FLOOR MOUNTED
- ⊙ COUNTER OR FLOOR MOUNTED MOV GFI
- ⊙ LEATHERPROOF
- ⊙ 220 V OUTLET
- ⊙ 120 V DEDICATED CIRCUIT
- ⊙ 220 V DEDICATED CIRCUIT
- ⊙ SPECIAL PURPOSE (120 V, ETC.)
- ⊙ WALL MOUNT LIGHT
- ⊙ CEILING MOUNT LIGHT
- ⊙ PENDANT LIGHT
- ⊙ RECESSED CAN LIGHT
- ⊙ MINI CAN LIGHT
- ⊙ EYEBALL LIGHT
- ⊙ FLUORESCENT LIGHT
- ⊙ UNDERCABINET LIGHT
- ⊙ FLOOD LIGHT
- ⊙ SWITCH
- ⊙ 3-WAY SWITCH
- ⊙ 4-WAY SWITCH
- ⊙ DIMMER SWITCH
- ⊙ TELEPHONE
- ⊙ TV CONNECTION
- ⊙ CONDUIT FOR COMPONENT WIRING
- ⊙ SPEAKER
- ⊙ DOORBELL CHIME
- ⊙ 120 V SMOKE DETECTOR
- ⊙ EXHAUST FAN
- ⊙ LOW VOLTAGE PANEL





RENAISSANCE
RESIDENTIAL DESIGN, INC.

4910 GLENMIST CT., | RALEIGH, NC 27612
(919) 549-4128

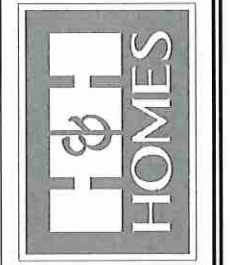
WWW.RRDCAROLINA.COM

"The art of transforming your vision into reality."

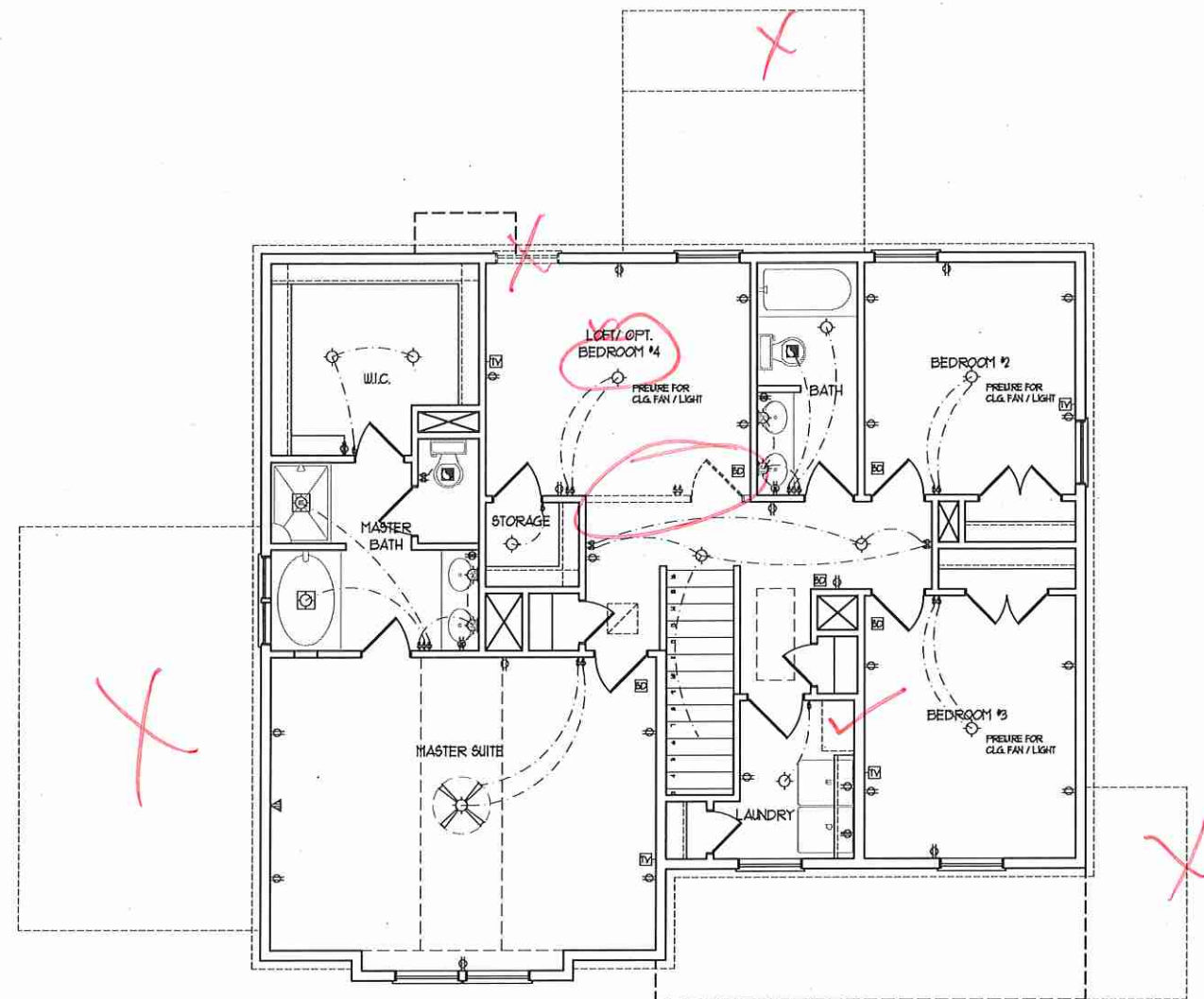
RENAISSANCE RESIDENTIAL DESIGN, INC. RESERVES THE RIGHT TO MAKE MODIFICATIONS TO FLOOR PLANS, DIMENSIONS, MATERIALS, AND SPECIFICATIONS WITHOUT NOTICE. THESE DRAWINGS ARE FOR THE PURPOSE OF CONVEYING AN ARCHITECTURAL CONCEPT ONLY.

RENAISSANCE RESIDENTIAL DESIGN, INC. HEREBY EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS AND DRAWINGS ARE NOT TO BE REPRODUCED, CHANGED, OR COPIED IN ANY FORM OR MANNER WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN CONSENT OF RENAISSANCE RESIDENTIAL DESIGN, INC. ANY OTHER PARTY WITHOUT FIRST OBTAINING SAID WRITTEN PERMISSION AND CONSENT.

J.S. THOMPSON
ENGINEERING, INC.
100 WADE AVE., SUITE 104
RALEIGH, NC 27605
PHONE: (919) 280-9919
FAX: (919) 280-9921
N.C. LICENSE NO. -C-1733



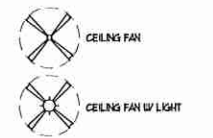
THESE ARCHITECTURAL INVENTORIES, ELEVATIONS, OPTIONS, FLOOR PLANS, ELEVATIONS, DIMENSIONS, MATERIALS AND DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SQUARE FOOTAGE AND DIMENSIONS ARE ESTIMATED AND MAY VARY IN ACTUAL CONSTRUCTION. ALL DIMENSIONS AND FINISHES WILL BE DETERMINED BY THE SITE PLAN AND PLAT. FLOOR PLANS AND ELEVATION RENDERINGS ARE ARTIST CONCEPTS. FLOOR PLANS ARE THE COPYRIGHTED PROPERTY OF RENAISSANCE RESIDENTIAL DESIGN, INC. REPRODUCTION, REUSE, OR ANY OTHER FORM OF COPIING IS PROHIBITED. SEE NEW HOME SALES CONSULTANT FOR CURRENT DETAILS. COPYRIGHT 2017 H&H HOMES.



ELECTRICAL LAYOUT NOTES:

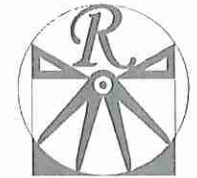
- 1) BLOCK AND WIRE FOR ALL CEILING FANS PER PLAN
- 2) VANITY LIGHTS TO BE SET @ 50" AFF. (TYP)
- 3) ADDITIONAL EXTERIOR OUTLETS REQUIRED BY CODE TO BE LOCATED BY ELECTRICIAN
- 4) PLACE SWITCHES 8" (MIN) FROM ROUGH OPENINGS.

- ELECTRICAL LEGEND**
- 100 V OUTLET
 - 100 V GFI OUTLET
 - 100 V SWITCHED OUTLET
 - 100 V BASEBOARD OUTLET
 - 4-FLEX
 - COUNTER OR FLOOR MOUNTED
 - COUNTER OR FLOOR MOUNTED MOV GFI
 - LEATHERPROOF
 - 200 V OUTLET
 - 100 V DEDICATED CIRCUIT
 - 200 V DEDICATED CIRCUIT
 - SPECIAL PURPOSE (240 V, ETC.)
 - WALL MOUNT LIGHT
 - CEILING MOUNT LIGHT
 - PENDANT LIGHT
 - RECESSED CAN LIGHT
 - MINI CAN LIGHT
 - EYEBALL LIGHT
 - FLUORESCENT LIGHT
 - UNDERCABINET LIGHT
 - FLOOD LIGHT
 - SWITCH
 - 3-WAY SWITCH
 - 4-WAY SWITCH
 - DIMMER SWITCH
 - TELEPHONE
 - TV CONNECTION
 - CONDUIT FOR COMPONENT WIRING
 - SPEAKER
 - DOORBELL CHIME
 - 100 V SMOKE DETECTOR
 - EXHAUST FAN
 - LOW VOLTAGE PANEL



H&H HOMES, INC.
TOPSAIL

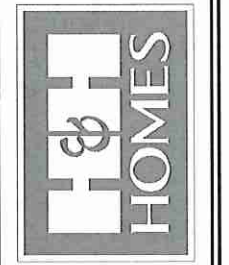
DATE: OCTOBER 18, 2017
REV.:
SCALE: 1/4"=1'-0"
DRAWN BY: WG
ENGINEERED BY: WLF
REVIEWED BY: JES
SECOND FLOOR
ELECTRICAL
PLAN
E-2



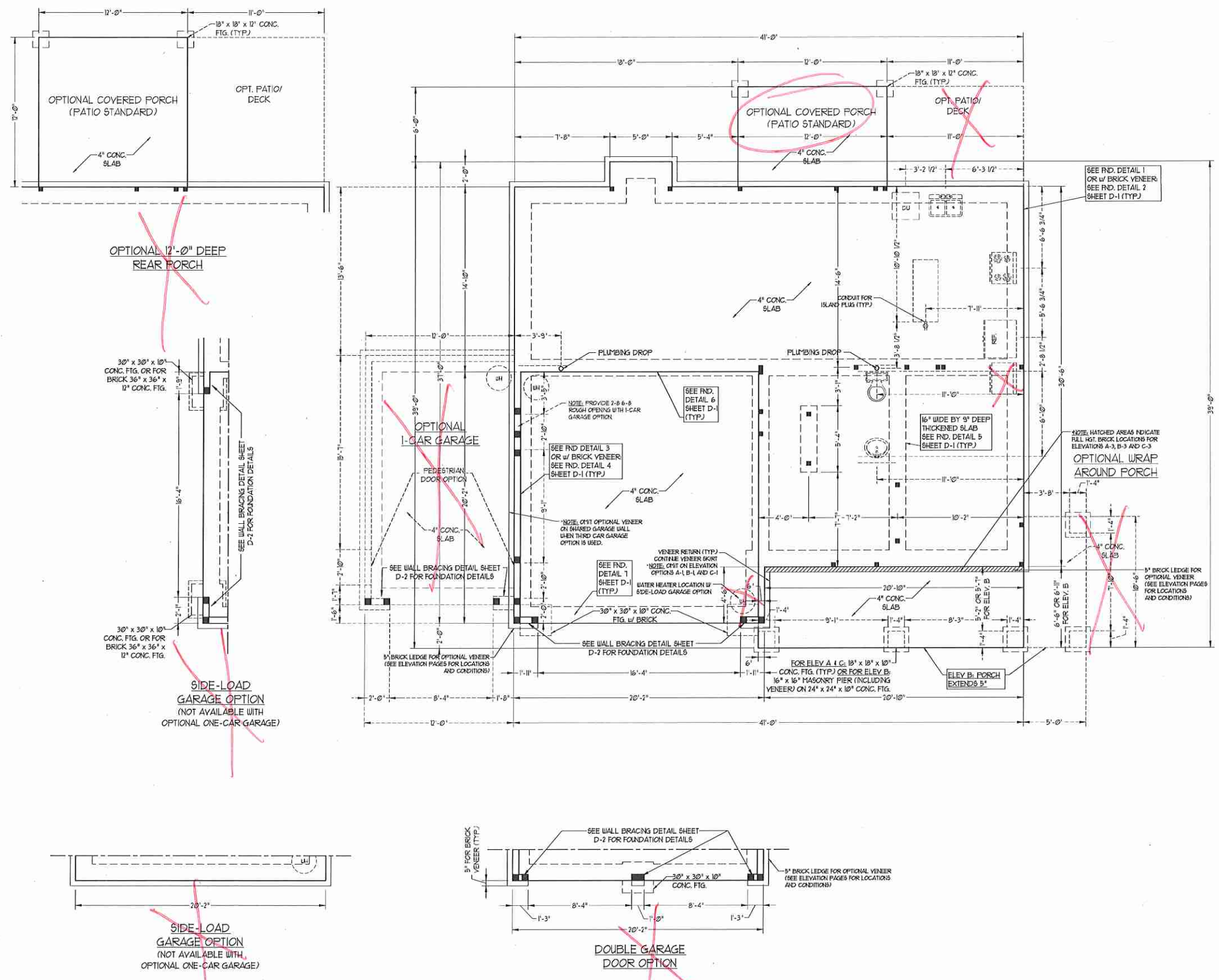
RENAISSANCE
RESIDENTIAL DESIGN, INC.
4810 GLENHURST CT., J. RALEIGH, NC 27612
919-848-4128
WWW.H&H-CAROLINA.COM

"The art of transforming your vision into reality."
RENAISSANCE RESIDENTIAL DESIGN, INC. HEREBY EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS AND DRAWINGS ARE NOT TO BE REPRODUCED, COPIED, OR COPIED IN ANY FORM OR MANNER WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN CONSENT OF RENAISSANCE RESIDENTIAL DESIGN, INC. NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY WITHOUT FIRST OBTAINING SAID WRITTEN PERMISSION AND CONSENT.

J.S. THOMPSON
ENGINEERING, INC.
100 W. VALLEY AVE., SUITE 101
RALEIGH, NC 27605
PHONE: (919) 789-9919
FAX: (919) 789-9921
N.C. LICENSE NO.: C17313



PRICES, PRODUCTIONS, INCENTIVES, FEATURES, MATERIALS AND DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SQUARE FOOTAGE AND DIMENSIONS ARE ESTIMATED AND MAY VARY IN ACTUAL CONSTRUCTION. CONSTRUCTION OF THIS PLAN MAY BE DETERMINED BY THE LOCAL PERMITS OFFICE. FLOOR PLANS AND ELEVATION RENDERINGS ARE ARTIST CONCEPTIONS. FLOOR PLANS ARE THE COPYRIGHTED PROPERTY OF H&H HOMES. ANY USE, REPRODUCTION, PROMOTION, OR SALE OF THIS PLAN WITHOUT THE WRITTEN PERMISSION OF H&H HOMES IS PROHIBITED. SEE NEW HOME SALES CONSULTANT FOR CURRENT DETAILS. COPYRIGHT 2017 H&H HOMES.



100-MPH WIND ZONE NOTES FOR LESS THAN 30' MEAN ROOF HEIGHT:

- ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT INCLUDING ROOF SYSTEM.
- STRUCTURAL DESIGN PER NORTH CAROLINA RESIDENTIAL CODE, 2002 EDITION WITH SPECIAL CONSIDERATION TO CHAPTER 45 ("HIGH WIND ZONES" FOR 100 MPH WINDS).
- BUILDER IS TO PROVIDE FRAMING CONNECTIONS AS REQUIRED BY CHAPTER 45 ("HIGH WIND ZONES" FOR 100 MPH WINDS) OF THE NORTH CAROLINA RESIDENTIAL CODE, 2002 EDITION.
- FOUNDATION ANCHORAGE TO COMPLY WITH SECTION 4504 OF THE NORTH CAROLINA RESIDENTIAL CODE, 2002 EDITION.
- MEAN ROOF HEIGHT IS LESS THAN 30 FEET.
- WALL CLADDING DESIGNED FOR 4.01 PSF (POSITIVE AND NEGATIVE).
- ROOF CLADDING DESIGNED FOR 39.6 PSF (POSITIVE AND NEGATIVE) FOR ROOF PITCHES 1/2 TO 2/3 AND 38.1 PSF (POSITIVE AND NEGATIVE) FOR ROOF PITCHES 23/30 TO 1/2.
- 1/8" OSB SHEATHING IS REQUIRED ON ALL EXTERIOR WALLS.
- WALLS TO BE BRACED IN ACCORDANCE WITH SECTION 1607.10 OF THE NORTH CAROLINA RESIDENTIAL CODE, 2002 EDITION.
- ENERGY EFFICIENCY COMPLIANCE AND INSULATION VALUES OF THE BUILDING TO BE IN ACCORDANCE WITH CHAPTER 8 OF THE NRC, 2002 EDITION.

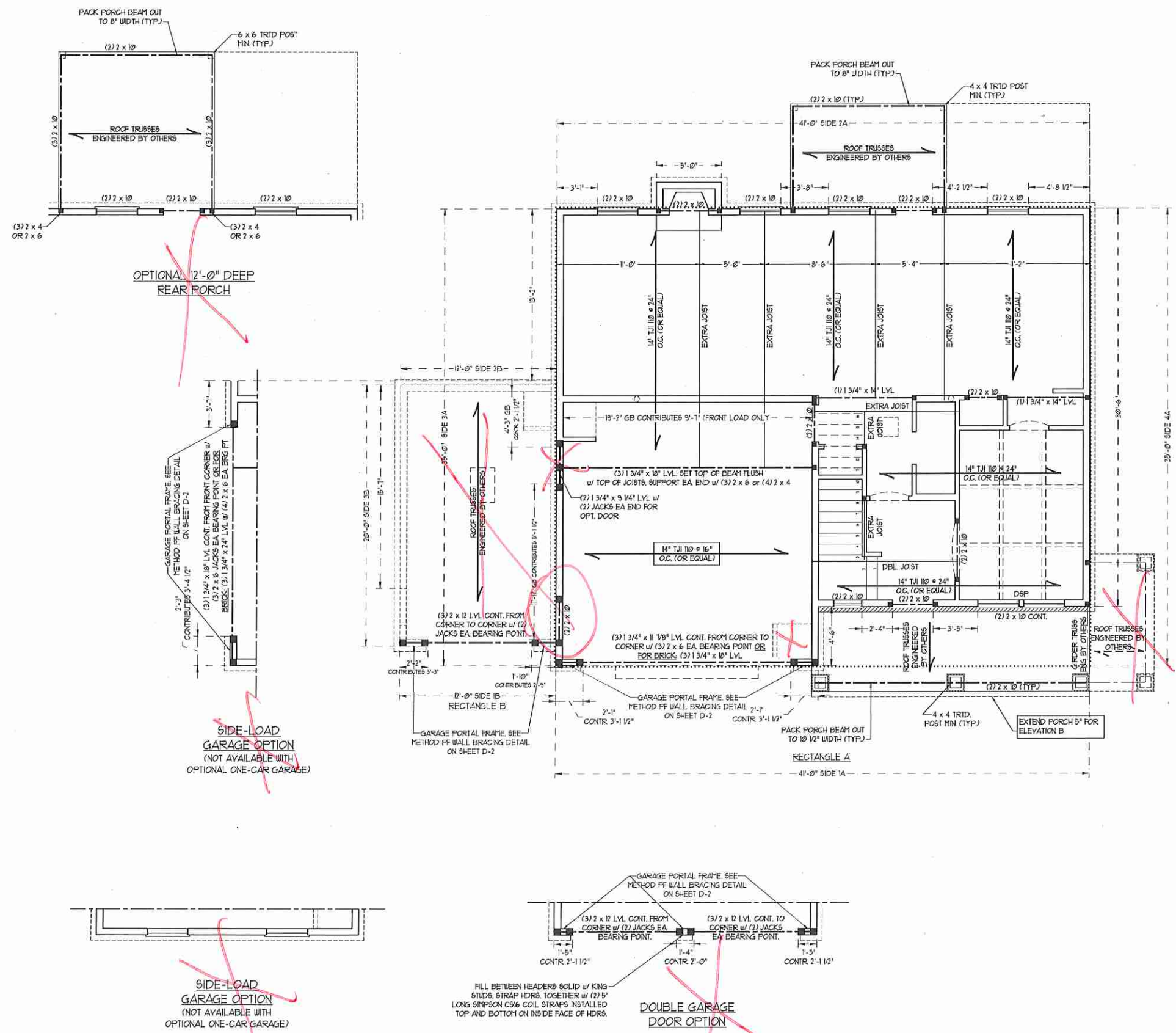
100-MPH WIND ZONE NOTES FOR LESS THAN 30' MEAN ROOF HEIGHT:

- ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT INCLUDING ROOF SYSTEM.
- STRUCTURAL DESIGN PER NORTH CAROLINA RESIDENTIAL CODE, 2002 EDITION.
- INSTALL 1/2" ANCHOR BOLTS 6'-0" O.C. AND WITHIN 1'-0" FROM END OF EACH PLATE. ANCHOR BOLTS MUST EXTEND A MINIMUM OF 1" INTO MASONRY OR CONCRETE.
- MEAN ROOF HEIGHT IS LESS THAN 30 FEET.
- EXTERIOR WALLS DESIGNED FOR 100 MPH WINDS.
- WALL CLADDING DESIGNED FOR 74.1 PSF (POSITIVE AND NEGATIVE).
- ROOF CLADDING DESIGNED FOR 210 PSF (POSITIVE AND NEGATIVE) FOR ROOF PITCHES 1/2 TO 2/3 AND 34.8 PSF (POSITIVE AND NEGATIVE) FOR ROOF PITCHES 23/30 TO 1/2.
- INSTALL 1/8" OSB SHEATHING ON ALL EXTERIOR WALLS OF ALL STORES IN ACCORDANCE WITH SECTION 1607.10.3 OF THE NRC, 2002 EDITION. SEE THE WALL BRACING NOTES AND DETAILS SHEET FOR MORE INFORMATION.
- ENERGY EFFICIENCY COMPLIANCE AND INSULATION VALUES OF THE BUILDING TO BE IN ACCORDANCE WITH CHAPTER 8 OF THE NRC, 2002 EDITION.
- REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

H&H HOMES, INC.
TOPSAIL

DATE: OCTOBER 18, 2017
REV.:
SCALE: 1/4"=1'-0"
DRAWN BY: WG
ENGINEERED BY: WLF
REVIEWED BY: JES
MONO SLAB FOUNDATION PLAN
S-1





- BRACED WALL DESIGN NOTES:**
- BRACED WALL DESIGN PER SECTION R6-02.10 OF THE SIMPLIFIED WALL BRACING CRITERIA EFFECTIVE SEPTEMBER 1, 2013.
 - C5-45P REFERS TO CONTINUOUS SHEATHING - WOOD STRUCTURAL PANELS. CONTRACTOR IS TO INSTALL 7/16" OSB ON ALL EXTERIOR WALLS ATTACHED w/ 8d NAILS SPACED 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN THE FIELD.
 - GB REFERS TO GYPSUM BOARD. CONTRACTOR IS TO INSTALL 1/2" (MIN) GYPSUM WALL BOARD WHERE NOTED ON THE PLANS. FASTEN GB WITH 1 1/4" SCREWS OR 1 5/8" NAILS SPACED 7" O.C. ALONG PANEL EDGES AND IN THE FIELD INCLUDING TOP AND BOTTOM FLATES.
 - BRACED WALL DESIGN APPLIES IN WIND ZONES UP TO 100 MPH. FOR HIGH WIND ZONES, BRACE WALLS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 45 OF THE NRCR, 2001 EDITION. SEE NOTES AND DETAIL SHEETS FOR ADDITIONAL BRACE WALL INFORMATION.

BRACED WALL DESIGN

RECTANGLE A	RECTANGLE B
SIDE 1A METHOD: C5-45P/FF/GB TOTAL REQUIRED LENGTH: 151' TOTAL PROVIDED LENGTH: 216'	SIDE 1B METHOD: C5-45P/FF TOTAL REQUIRED LENGTH: 456' TOTAL PROVIDED LENGTH: 6'
SIDE 2A METHOD: C5-45P TOTAL REQUIRED LENGTH: 151' TOTAL PROVIDED LENGTH: 206'	SIDE 2B METHOD: C5-45P TOTAL REQUIRED LENGTH: 456' TOTAL PROVIDED LENGTH: 7'
SIDE 3A METHOD: C5-45P/FF/GB TOTAL REQUIRED LENGTH: 1155' TOTAL PROVIDED LENGTH: 2012'	SIDE 3B METHOD: C5-45P TOTAL REQUIRED LENGTH: 319' TOTAL PROVIDED LENGTH: 538'
SIDE 4A METHOD: C5-45P TOTAL REQUIRED LENGTH: 1155' TOTAL PROVIDED LENGTH: 35'	SIDE 4B/3A CUMULATIVE METHOD: C5-45P/GB TOTAL REQUIRED LENGTH: 2014' TOTAL PROVIDED LENGTH: 3145'

NOTE: ALL EXTERIOR WALLS AND ATTIC WALLS ARE TO BE 2 x 6 @ 16" O.C. (UNO). 2 x 4 @ 16" O.C. EXTERIOR WALLS MAY BE CONSTRUCTED IN LIEU OF 2 x 6 WALLS (UNO). ALL INTERIOR LOAD BEARING WALLS ARE TO BE 2 x 4 @ 16" O.C. (UNO) AND NON-LOAD BEARING INTERIOR WALLS ARE TO BE 2 x 4 @ 24" O.C. (UNO).

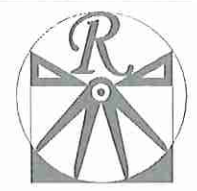
LINTEL SCHEDULE FOR BRICK/NATURAL STONE SUPPORT

LENGTH (FT.)	SIZE OF LINTEL
UP TO 4 FT.	L 3 1/2 x 3 1/2 x 1/4
4-8	L 5 x 3 1/2 x 5/16 LLY
8 AND GREATER	L 6 x 4 x 5/16 LLY

NOTES:

- LINTEL SCHEDULE APPLIES TO ALL OPENINGS IN BRICK VENEER (UNO). SEE ARCH DINGS FOR SIZE AND LOCATION OF OPENINGS.
- (LLV) = LONG LEG VERTICAL
- EMBED ALL ANGLE IRONS MIN. 4" EACH SIDE INTO VENEER TO PROVIDE BEARING.
- FOR ALL HEADERS 8'-0" AND GREATER IN LENGTH, ATTACH STEEL ANGLE TO HEADER w/ 1/2" LAG SCREWS @ 12" O.C. STAGGERED.
- FOR ALL BRICK SUPPORT @ ROOF LINES, FASTEN A 5" x 3 1/2" x 5/16" STEEL ANGLE TO 2 x 10 BLOCKING INSTALLED BETWEEN WALL STUDS w/ 1/2" LAG SCREWS 12" O.C. STAGGERED AND IN ACCORDANCE TO SECTION R103.122 OF THE NORTH CAROLINA RESIDENTIAL CODE, 2012 EDITION.
- PRECAST REINFORCED CONCRETE LINTELS ENGINEERED BY OTHERS MAY BE USED IN LIEU OF STEEL LINTELS.

- STRUCTURAL NOTES:**
- ALL FRAMING LUMBER TO BE 2 SF (UNO). ALL TREATED LUMBER TO BE 2 SYP (UNO).
 - ALL LOAD BEARING HEADERS TO BE (2) 2 x 6 (UNO).
 - PROVIDE EXTRA JOIST UNDER WALLS PARALLEL TO FLOOR JOISTS WHERE NOTED ON THE PLAN.
 - ALL BEAMS ARE TO BE SUPPORTED WITH (2) JACK STUDS EA. END (UNO). WINDOW AND DOOR HEADERS TO BE SUPPORTED w/ (1) JACK STUD AND (1) KING STUD EA. END (UNO).
 - FOR HIGH WIND ZONES, PROVIDE (2) 2 x 6 KING STUDS EA. SIDE OF EXTERIOR WINDOW AND DOOR HEADERS w/ CLEAR OPENINGS LESS THAN 6'-0" AND (3) 2 x 6 KING STUDS EA. SIDE OF HEADERS w/ CLEAR OPENINGS GREATER THAN 6'-0".
 - FOR HIGH WIND ZONES, ALL EXTERIOR WALLS TO BE SHEATHED WITH 7/16" OSB SHEATHING WITH JOISTS BLOCKED AND SECURED WITH 8d NAILS AT 3" O.C. ALONG EDGES AND 6" O.C. IN THE FIELD.
 - FOR HIGH WIND ZONES, SECURE ALL EXTERIOR WALL SHEATHING PANELS TO DOUBLE TOP PLATES, BANDS, JOISTS, AND GIRDERS WITH (2) ROWS OF 8d NAILS STAGGERED AT 3" O.C. PANELS SHALL EXTEND 12" BEYOND CONSTRUCTION JOINTS AND SHALL OVERLAP GIRDERS AND DOUBLE SILL PLATES THEIR FULL DEPTH.
 - SQUARES DENOTE POINT LOADS WHICH REQUIRE SOLID BLOCKING TO GIRDER OR FOUNDATION. ALL SQUARES TO BE (2) STUDS (UNO).
 - ALL 4 x 4 POSTS SHALL BE ANCHORED TO SLABS w/ SIMPSON ABU44 POST BASES (OR EQUAL) AND 6 x 6 POSTS w/ ABU66 POST BASES (OR EQUAL) (UNO). ALL 4 x 4 AND 6 x 6 POSTS TO BE INSTALLED WITH 100 LB CAPACITY UPLIFT CONNECTORS AT TOP (UNO).
 - FOR FIBERGLASS, ALUMINUM, OR COLUMN ENDS, BY OTHERS, SECURE TO SLAB w/ (2) METAL ANGLES USING 2" CONC. SCREWS. FASTEN ANGLES TO COLUMNS w/ 1/4" THROUGH BOLTS w/ NUTS AND WASHERS. LOCATE ANGLES ON OPPOSITE SIDES OF COLUMN. THROUGH BOLTS MUST BE INSTALLED PRIOR TO SETTING COLUMN.
 - REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.
- NOTE: D&P DENOTES DOUBLE STUD POCKET**



RENAISSANCE RESIDENTIAL DESIGN, INC.
 4810 GLENHIST CT., RALEIGH, NC 27612
 (919) 648-4128
 WWW.RENDESIGN.COM
 "The art of transforming your vision into reality."
 RENAISSANCE RESIDENTIAL DESIGN, INC. RESERVES THE RIGHT TO MAKE MODIFICATIONS TO FLOOR PLANS, EXISTING MATERIALS, AND SPECIFICATIONS WITHOUT NOTICE. THESE DRAWINGS ARE FOR THE PURPOSE OF CONVEYING AN ARCHITECTURAL CONCEPT ONLY.
 RENAISSANCE RESIDENTIAL DESIGN, INC. HEREBY EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS AND DRAWINGS ARE NOT TO BE REPRODUCED, CHANGED, OR COPIED IN ANY FORM OR MANNER WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN CONSENT OF RENAISSANCE RESIDENTIAL DESIGN, INC. FOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY WITHOUT FIRST OBTAINING SAID WRITTEN PERMISSION AND CONSENT.

J.S. THOMPSON ENGINEERING, INC.
 100 W. WALKER AVE., SUITE 104
 RALEIGH, NC 27605
 PHONE: (919) 788-9919
 FAX: (919) 788-9921
 N.C. LICENSE NO. C-13133



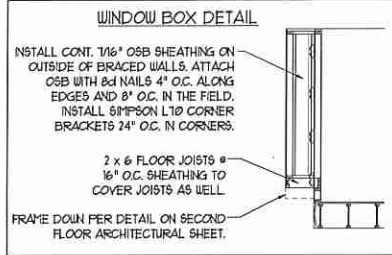
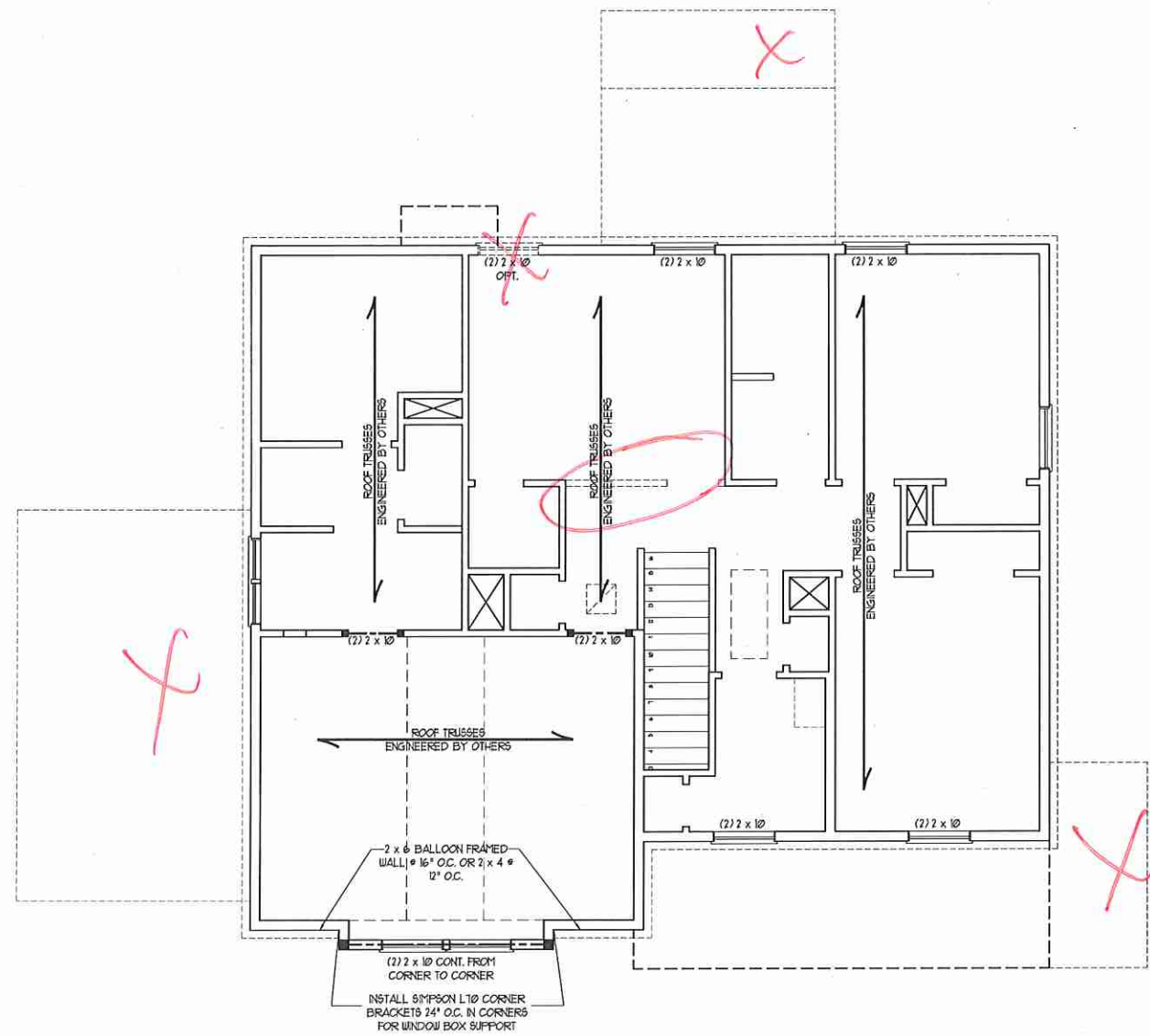
THESE PROVISIONS, INCENTIVES, FEES, AND OTHERS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SQUARE FOOTAGE AND DIMENSIONS ARE ESTIMATED AND MAY VARY SLIGHTLY FROM THE ESTIMATED AND MAY VARY SLIGHTLY FROM THE ESTIMATED. THE SITE PLAN AND LOT PLAN WILL BE DETERMINED BY THE CITY AND COUNTY PLANNING DEPARTMENT. CONCEPTUAL FLOOR PLANS ARE THE COPYRIGHTED PROPERTY OF H&H HOMES. ANY REPRODUCTION, ADAPTATION, OR DISPLAY OF THESE PLANS IS STRICTLY PROHIBITED. SEE NEW HOME SALES CONSULTANT FOR CURRENT DETAILS. COPYRIGHT 2017 H&H HOMES

H&H HOMES, INC.
 TOPSAIL

DATE: OCTOBER 18, 2017
 REV: 1
 SCALE: 1/4"=1'-0"
 DRAWN BY: WG
 ENGINEERED BY: WLF
 REVIEWED BY: JES

SECOND FLOOR FRAMING PLAN
S-2





NOTE: ALL EXTERIOR WALLS AND ATTIC WALLS ARE TO BE 2 x 6 @ 16" O.C. (UNO). 2 x 4 @ 16" O.C. EXTERIOR WALLS MAY BE CONSTRUCTED IN LIEU OF 2 x 6 WALLS (UNO). ALL INTERIOR LOAD BEARING WALLS ARE TO BE 2 x 4 @ 16" O.C. (UNO) AND NON-LOAD BEARING INTERIOR WALLS ARE TO BE 2 x 4 @ 24" O.C. (UNO).

BRACED WALL DESIGN NOTES:

- BRACED WALL DESIGN PER SECTION R602.10 OF THE SIMPLIFIED WALL BRACING CRITERIA EFFECTIVE SEPTEMBER 1, 2013.
- CS-OSB REFERS TO 'CONTINUOUS SHEATHING - WOOD STRUCTURAL PANELS'. CONTRACTOR IS TO INSTALL 1/16" OSB ON ALL EXTERIOR WALLS ATTACHED w/ 8d NAILS SPACED 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN THE FIELD.
- GB REFERS TO 'GYPSUM BOARD'. CONTRACTOR IS TO INSTALL 1/2" (MIN) GYPSUM WALL BOARD WHERE NOTED ON THE PLANS. FASTEN GB WITH 1 1/4" SCREWS OR 1 5/8" NAILS SPACED 1" O.C. ALONG PANEL EDGES AND IN THE FIELD INCLUDING TOP AND BOTTOM PLATES.
- BRACED WALL DESIGN APPLIES IN WIND ZONES UP TO 110 MPH. FOR HIGH WIND ZONES, BRACE WALLS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 45 OF THE NCRC, 2012 EDITION.
- SEE NOTES AND DETAIL SHEETS FOR ADDITIONAL BRACED WALL INFORMATION.

NOTE:

- PER SECTION R602.10.3.2 OF THE 2012 NCRC, 2012 EDITION, THE AMOUNT OF BRACING ON THE SECOND FLOOR EXCEEDS THE AMOUNT REQUIRED FOR THE FIRST FLOOR AND NO BRACED WALL ANALYSIS IS REQUIRED.
- SHEATH ALL EXTERIOR WALLS WITH 1/16" OSB SHEATHING ATTACHED WITH 8d NAILS AT 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN THE FIELD.

LINTEL SCHEDULE FOR BRICK/NATURAL STONE SUPPORT

LENGTH (FT)	SIZE OF LINTEL
UP TO 4 FT.	L 3 1/2 x 3 1/2 x 1/4
4-8	L 5 x 3 1/2 x 5/16 LLV
8 AND GREATER	L 6 x 4 x 5/16 LLV

NOTES:

- LINTEL SCHEDULE APPLIES TO ALL OPENINGS IN BRICK VENEER (UNO). SEE ARCH DUGS FOR SIZE AND LOCATION OF OPENINGS.
- (LLV) = LONG LEG VERTICAL
- LENGTH = CLEAR OPENING
- EMBED ALL ANGLE IRONS MIN. 4" EACH SIDE INTO VENEER TO PROVIDE BEARING.
- FOR ALL HEADERS 8'-0" AND GREATER IN LENGTH, ATTACH STEEL ANGLE TO HEADER W/ 1/2" LAG SCREWS @ 12" O.C. STAGGERED.
- FOR ALL BRICK SUPPORT & ROOF LINES, FASTEN A 5" x 3 1/2" x 5/16" STEEL ANGLE TO 2 x 10 BLOCKING INSTALLED BETWEEN WALL STUDS W/ 1/2" LAG SCREWS 12" O.C. STAGGERED AND IN ACCORDANCE TO SECTION R103.1.2.2 OF THE NORTH CAROLINA RESIDENTIAL CODE, 2012 EDITION.
- PRECAST REINFORCED CONCRETE LINTELS ENGINEERED BY OTHERS MAY BE USED IN LIEU OF STEEL LINTELS.

STRUCTURAL NOTES:

- ALL FRAMING LUMBER TO BE #2 SFF (UNO).
- ALL LOAD BEARING HEADERS TO BE (2) 2 x 6 (UNO).
- ALL BEAMS ARE TO BE SUPPORTED WITH (2) JACK STUDS EA. END (UNO). WINDOW AND DOOR HEADERS TO BE SUPPORTED w/ (1) JACK STUD AND (1) KING STUD EA. END (UNO).
- FOR HIGH WIND ZONES, PROVIDE (2) 2 x 6 KING STUDS EA. SIDE OF EXTERIOR WINDOW AND DOOR HEADERS w/ CLEAR OPENINGS LESS THAN 6'-0" AND (3) 2 x 6 KING STUDS EA. SIDE OF HEADERS w/ CLEAR OPENINGS GREATER THAN 6'-0".
- SQUARES DENOTE POINT LOADS WHICH REQUIRE SOLID BLOCKING TO GIRDER OR FOUNDATION.
- REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

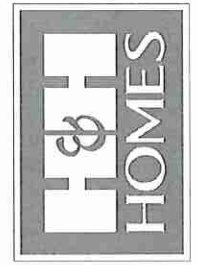


RENAISSANCE
RESIDENTIAL DESIGN, INC.
4810 GLENNHIST CT., J. RALEIGH, NC 27612
(919) 549-4128
WWW.RIDCAROLINA.COM

RENAISSANCE RESIDENTIAL DESIGN, P.C. RESERVES THE RIGHT TO MAKE MODIFICATIONS TO FLOOR PLANS, CONCEPTS, MATERIALS, AND SPECIFICATIONS WITHOUT NOTICE. THESE SERVICES ARE FOR THE PURPOSE OF CONVEYING AN ARCHITECTURAL CONCEPT ONLY.

RENAISSANCE RESIDENTIAL DESIGN, P.C. HEREBY EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS AND DRAWINGS ARE NOT TO BE REPRODUCED, CHANGED, OR COPIED IN ANY FORM OR MANNER WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN CONSENT OF RENAISSANCE RESIDENTIAL DESIGN, P.C. NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY WITHOUT FIRST OBTAINING SAID WRITTEN PERMISSION AND CONSENT.

J.S. THOMPSON
ENGINEERING, INC.
606 W. WALKER AVE., SUITE 101
RALEIGH, NC 27605
PH: (919) 589-9919
FAX: (919) 589-9921
N.C. LICENSE NO. C-17313

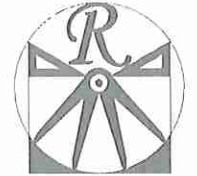


THESE PRODUCTIONS, INCLUDING FEATURES, OPTIONS, FLOOR PLANS, ELEVATIONS, DESIGNS, MATERIALS AND DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SQUARE FOOTAGE AND DIMENSIONS WILL BE DETERMINED BY THE SITE PLAN AND FLOOR PLAN. CONSTRUCTION ACTUAL POSITION OF HOUSE SHALL BE DETERMINED BY THE SITE PLAN AND FLOOR PLAN. FLOOR PLANS AND ELEVATION RENDERINGS ARE ARTIST CONCEPTIONS. FLOOR PLANS ARE THE COPYRIGHTED PROPERTY OF H&H HOMES. ALL RIGHTS ARE RESERVED. ADAPTATION, OR DISPLAY OF THE PLANS IS STRICTLY PROHIBITED. SEE NEW HOME SALES CONSULTANT FOR CURRENT DETAILS. COPYRIGHT ©2017 H&H HOMES

H&H HOMES, INC.
TOPSAIL

DATE: OCTOBER 18, 2017
REV:
SCALE: 1/4"=1'-0"
DRAWN BY: WG
ENGINEERED BY: WLF
REVIEWED BY: JES

ATTIC FLOOR FRAMING PLAN
S-3



RENAISSANCE

RESIDENTIAL DESIGN, INC.
4910 GLENHIST CT., J. RALEIGH, NC 27612
(919) 545-1123

WWW.RIDCAROLINA.COM

"The art of transforming your vision into reality."

RENAISSANCE RESIDENTIAL DESIGN, INC. HEREBY EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS AND DRAWINGS ARE NOT TO BE REPRODUCED, CHANGED, OR COPIED IN ANY FORM OR MANNER WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN CONSENT OF RENAISSANCE RESIDENTIAL DESIGN, INC. NO PART OF THESE PLANS IS TO BE ASSIGNED TO ANY THIRD PARTY WITHOUT FIRST OBTAINING EARL WRITTEN PERMISSION AND CONSENT.

RENAISSANCE RESIDENTIAL DESIGN, INC. HEREBY EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS AND DRAWINGS ARE NOT TO BE REPRODUCED, CHANGED, OR COPIED IN ANY FORM OR MANNER WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN CONSENT OF RENAISSANCE RESIDENTIAL DESIGN, INC. NO PART OF THESE PLANS IS TO BE ASSIGNED TO ANY THIRD PARTY WITHOUT FIRST OBTAINING EARL WRITTEN PERMISSION AND CONSENT.

J.S. THOMPSON
ENGINEERING INC.
106 WADE AVE., SUITE 104
RALEIGH, NC 27605
PHONE: (919) 289-9919
FAX: (919) 289-9921
N.C. LICENSE NO.: C11733



THESE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING (M.E.P.) OPTIONS AND DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SQUARE FOOTAGE AND DIMENSIONS ARE ESTIMATED AND MAY VARY IN ACTUAL CONSTRUCTION. ALL DIMENSIONS SHALL BE DETERMINED BY THE SITE PLAN AND FLOOR PLAN. FLOOR PLANS AND ELEVATION DRAWINGS ARE ARTIST CONCEPTIONS. FLOOR PLANS ARE THE COPYRIGHTED PROPERTY OF RENAISSANCE RESIDENTIAL DESIGN, INC. ANY REPRODUCTION, ADAPTATION, OR DISPLAY OF THESE PLANS WITHOUT THE WRITTEN PERMISSION OF RENAISSANCE RESIDENTIAL DESIGN, INC. IS STRICTLY PROHIBITED. SEE NEW HOME SALES CONSULTANT FOR CURRENT DETAILS. COPYRIGHT 2017 H&H HOMES

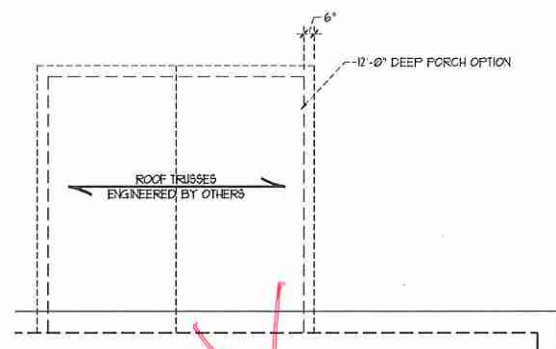
H&H HOMES, INC.
TOPSAIL

DATE: OCTOBER 18, 2017
REV.:
SCALE: 1/4"=1'-0"
DRAWN BY: WG
ENGINEERED BY: WLF
REVIEWED BY: JES

ROOF PLAN
ELEVATION - B
S-4

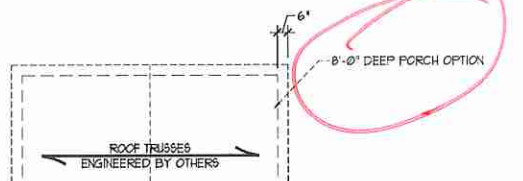


ATTIC VENT CALCULATION:
163 SQ. FT. OF ATTIC DIVIDED BY 150 REQUIRES 1.1 SQ. FT. OF NET FREE VENTILATING AREA (MIN).



~~12'-0" DEEP REAR PORCH OPTION~~
SCALE: 1/4" = 1'-0"

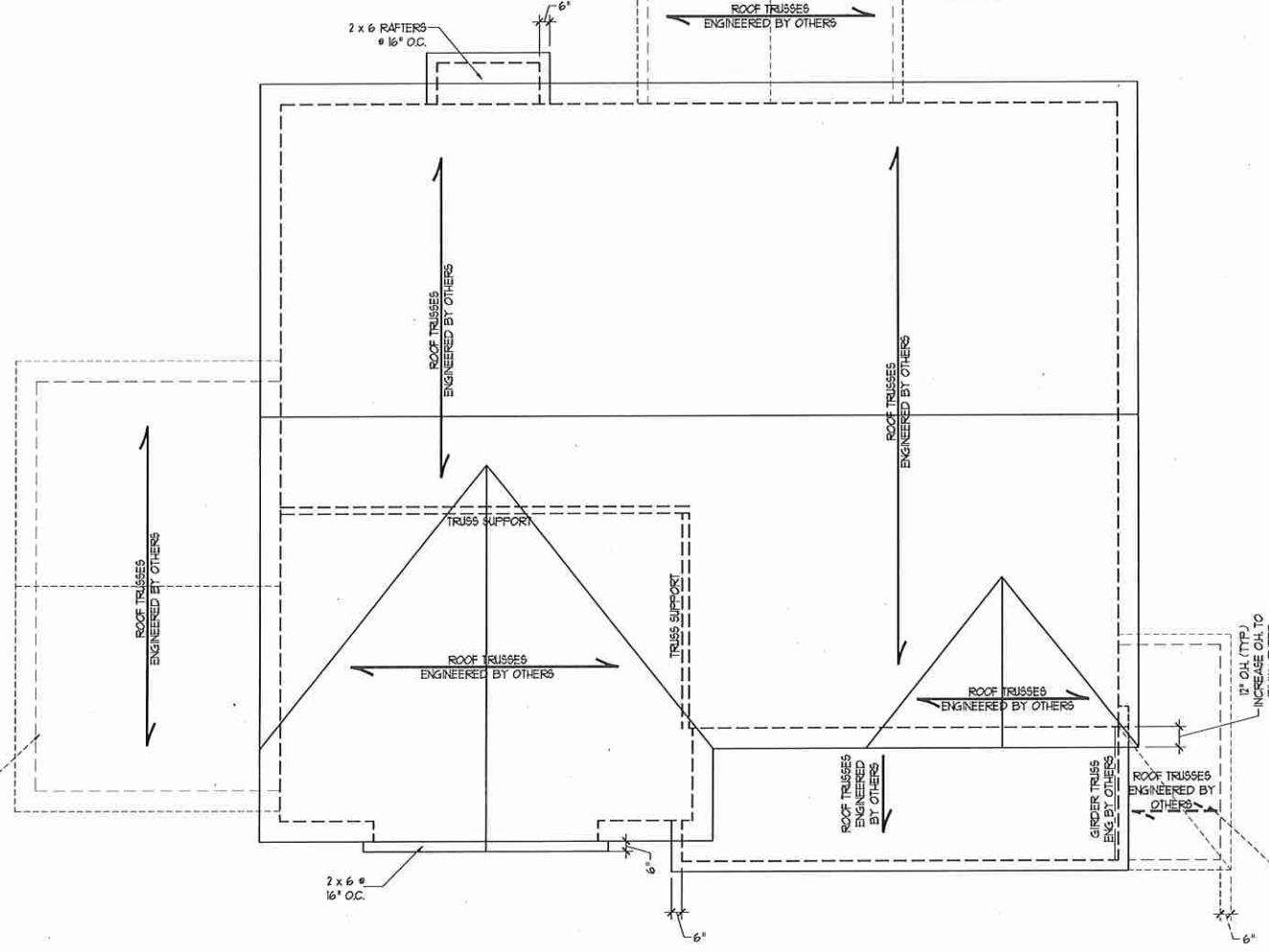
ATTIC VENT CALCULATION:
111 SQ. FT. OF ATTIC DIVIDED BY 150 REQUIRES 0.74 SQ. FT. OF NET FREE VENTILATING AREA (MIN).



ATTIC VENT CALCULATION:
1630 SQ. FT. OF ATTIC DIVIDED BY 150 REQUIRES 10.9 SQ. FT. OF NET FREE VENTILATING AREA (MIN).

ATTIC VENT CALCULATION:
286 SQ. FT. OF ATTIC DIVIDED BY 150 REQUIRES 1.9 SQ. FT. OF NET FREE VENTILATING AREA (MIN).

~~GARAGE OPTION~~



ELEVATION B

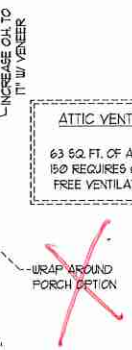
STRUCTURAL NOTES:

1. ALL FRAMING LUMBER TO BE #2 SFF (UNO).
2. CIRCLES DENOTE (3/2 x 4 POSTS FOR ROOF SUPPORT).
3. FRAME DORMER WALLS ON TOP OF DOUBLE OR TRIPLE RAFTERS.
4. HIP SPICES ARE TO BE SPACED A MIN. OF 8'-0". FASTEN PITCHES WITH THREE ROWS OF 12d NAILS @ 16" O.C. (TYP).
5. STICK FRAME OVER-FRAMED ROOF SECTIONS W/ 2 x 8 RIDGES, 2 x 6 RAFTERS @ 16" O.C. AND FLAT 2 x 10 VALLEYS OR USE VALLEY TRUSSES.
6. FASTEN FLAT VALLEYS TO RAFTERS OR TRUSSES WITH SIMPSON HD35 HURRICANE TIES @ 32" O.C. MAX. PASS HURRICANE TIES THROUGH NOTCH IN ROOF SHEATHING. EACH RAFTER IS TO BE FASTENED TO THE FLAT VALLEY WITH A MIN. OF (6) 12d TOE NAILS.
7. REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

BRICK SUPPORT NOTE:

1. FOR BRICK SUPPORT @ ROOF LINES, BOLT A 5" x 3 1/2" x 5/16" STEEL ANGLE TO 2 x 10 BLOCKING INSTALLED BETWEEN WALL STUDS W/ 1/2" LAG SCREWS 12" O.C. STAGGERED AND IN ACCORDANCE WITH SECTION R103.122 OF THE NORTH CAROLINA RESIDENTIAL CODE, 2012 EDITION.
2. WHERE ROOF SLOPES EXCEED 1:12, INSTALL 3" x 3" x 1/4" STEEL PLATE STOPS AT 24" O.C. PER SECTION R103.121 OF THE NORTH CAROLINA RESIDENTIAL CODE, 2012 EDITION.

ATTIC VENT CALCULATION:
63 SQ. FT. OF ATTIC DIVIDED BY 150 REQUIRES 0.4 SQ. FT. OF NET FREE VENTILATING AREA (MIN).



MONOLITHIC SLAB DETAILS

DETAIL 1

TYPICAL SLAB DETAIL

DETAIL 2

BRICK VENEER DETAIL

DETAIL 3

GARAGE CURB DETAIL

DETAIL 4

GARAGE CURB BRICK LEDGE DETAIL

DETAIL 5

THICKENED SLAB DETAIL

DETAIL 6

STEP IN GARAGE DETAIL

DETAIL 7

SLAB AT GARAGE DOOR DETAIL

STEMWALL DETAILS

DETAIL 1

TYPICAL STEM WALL DETAIL (w/ OPTIONAL WATERTABLE)

OPTIONAL DETAIL 1

OPTIONAL STEM WALL DETAIL

DETAIL 2

TYPICAL STEM WALL FND. w/ BRICK DETAIL

OPTIONAL DETAIL 3

OPTIONAL STEM WALL FND. DETAIL w/ CURB @ GARAGE

DETAIL 3

TYPICAL STEM WALL FND. DETAIL w/ CURB @ GARAGE

DETAIL 4

TYPICAL STEM WALL FND. DETAIL w/ BRICK AND CURB @ GARAGE

DETAIL 8

THREADED ROD THROUGH BRICK MASONRY

MASONRY STEMWALL SPECIFICATIONS

WALL HEIGHT (FEET)	MASONRY WALL TYPE			
	8" CMU	4" BRICK AND 4" CMU	4" BRICK AND 8" CMU	12" CMU
2 AND BELOW	INGROUTED	GROUT SOLID	INGROUTED	INGROUTED
3	INGROUTED	GROUT SOLID	INGROUTED	INGROUTED
4	GROUT SOLID	GROUT SOLID w/ #4 REBAR @ 48" O.C.	GROUT SOLID	GROUT SOLID w/ #4 REBAR @ 64" O.C.
5	GROUT SOLID w/ #4 REBAR @ 36" O.C.	NOT APPLICABLE	GROUT SOLID w/ #4 REBAR @ 36" O.C.	GROUT SOLID w/ #4 REBAR @ 64" O.C.
6	GROUT SOLID w/ #4 REBAR @ 24" O.C.	NOT APPLICABLE	GROUT SOLID w/ #4 REBAR @ 24" O.C.	GROUT SOLID w/ #4 REBAR @ 64" O.C.
7 AND GREATER	ENGINEERED DESIGN BASED ON SITE CONDITIONS			

STRUCTURAL NOTES:

- WALL HEIGHT MEASURED FROM TOP OF FOOTING TO TOP OF THE WALL.
- THE MULTIPLE WYTHES TOGETHER WITH LADDER WIRE AT 16" O.C. VERTICALLY.
- CHART APPLICABLE FOR HOUSE FOUNDATION ONLY. CONSULT ENGINEER FOR DESIGN OF GARAGE FOUNDATION NOT COMMON TO HOUSE.
- BACKFILL OF CLEAN #1 / #1 WASHED STONE IS ALLOWABLE.
- BACKFILL OF WELL DRAINED OR SAND - GRAVEL MIXTURE SOILS (45 POUNDS PER CUBIC FOOT) CLASSIFIED AS GROUP 1 ACCORDING TO UNIFIED SOILS CLASSIFICATION SYSTEM IN ACCORDANCE WITH TABLE R402.1 OF THE 2012 INTERNATIONAL RESIDENTIAL CODE ARE ALLOWABLE.
- PREP SLAB PER R526.2.1 AND R526.2.2 BASE OF THE 2012 INTERNATIONAL RESIDENTIAL CODE. MINIMUM 24" LAP SPlice LENGTH.
- LOCATE REBAR IN CENTER OF FOUNDATION WALL.
- WHERE REQUIRED, FILL BLOCK SOLID WITH TYPE "S" MORTAR OR 3000 PSI GROUT. USE OF "LOW LIFT GROUTING" METHOD REQUIRED WHEN FILLING WALLS WITH GROUT AT HEIGHTS OF 5' AND GREATER.

ANCHOR SPACING AND EMBEDMENT

	WIND ZONE	
	120 MPH	130 MPH
SPACING	6'-0" O.C. 3'-0" O.C. FOR STRAPS	4'-0" O.C. 2'-0" O.C. FOR STRAPS
EMBEDMENT	1"	1"
WIND ZONE	120 MPH	
WIND ZONE	130 MPH	
SPACING	6'-0" O.C. w/ DBL. SILL PLATE OR 4'-0" O.C. w/ SINGLE SILL PLATE w/ 2" x 2" x 1/8" WASHERS	6'-0" O.C. w/ DBL. SILL PLATE OR 4'-0" O.C. w/ SINGLE SILL PLATE w/ 2" x 2" x 1/8" WASHERS
EMBEDMENT	1" INTO MASONRY 1" INTO CONCRETE	1" INTO MASONRY 1" INTO CONCRETE

NOTE: HORIZONTAL FOOTING REBAR REQUIRED IN HIGH WIND ZONES ONLY (120 MPH - 130 MPH)

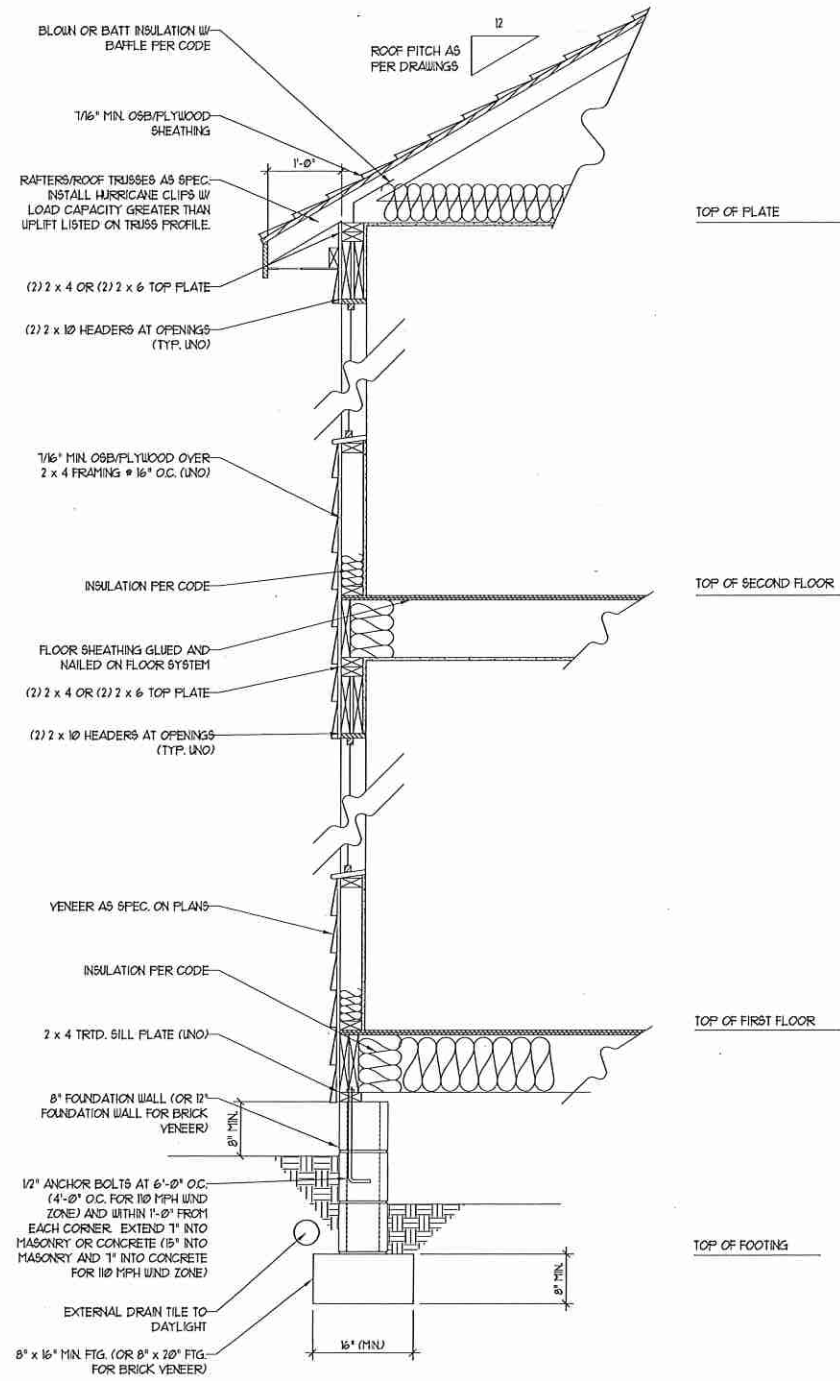
J.S. THOMPSON ENGINEERING, INC.
 606 WADE AVE., SUITE 104, RALEIGH, NC 27605
 PHONE: (919) 789-9119 FAX: (919) 789-9921
 N.C. LICENSE NO.: C-1733

FOUNDATION DETAILS

DATE: AUGUST 14, 2015
 SCALE: NTS
 DRAWN BY: JST
 ENGINEERED BY: JES

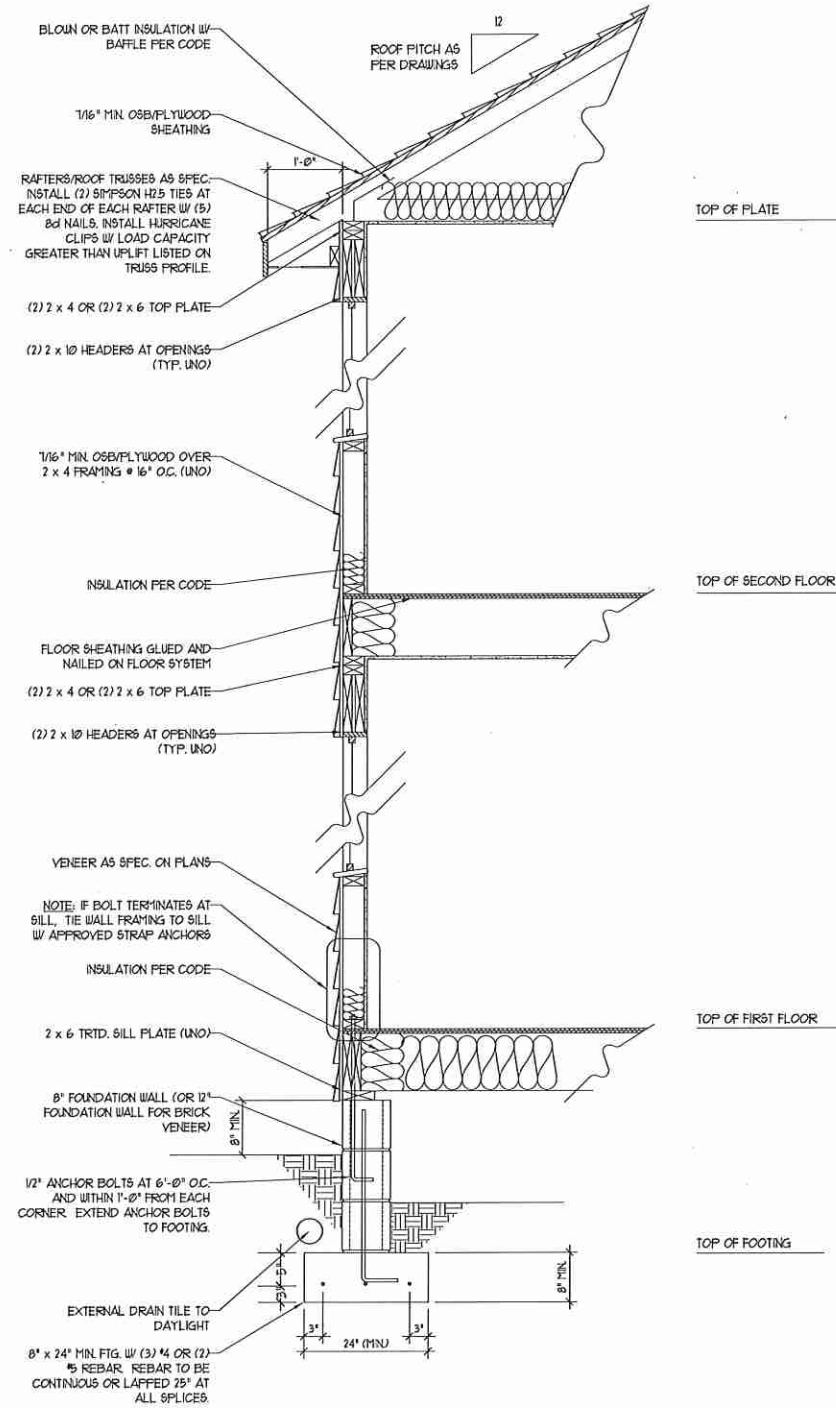


100/110 MPH WIND ZONE



WALL SECTION W/ CRAWL SPACE
W/ STD. SIDING SHOWN (NTS)

120/130 MPH WIND ZONE



WALL SECTION W/ CRAWL SPACE
W/ STD. SIDING SHOWN (NTS)

NOTE:
- BUILDER IS TO PROVIDE FRAMING CONNECTIONS AS REQUIRED BY CHAPTER 45 ("HIGH WIND ZONES" FOR 110/120/130 MPH WINDS) AND CHAPTER 46 (COASTAL AND FLOOD PLAIN CONSTRUCTION STANDARDS) OF THE NORTH CAROLINA STATE BUILDING CODE, 2012 EDITION.



**J.S. THOMPSON
ENGINEERING, INC**
406 WADE AVE, SUITE 104 RALEIGH, NC 27605
PHONE: (919) 789-9919 FAX: (919) 789-9921
N.C. LICENSE NO.: C-1733

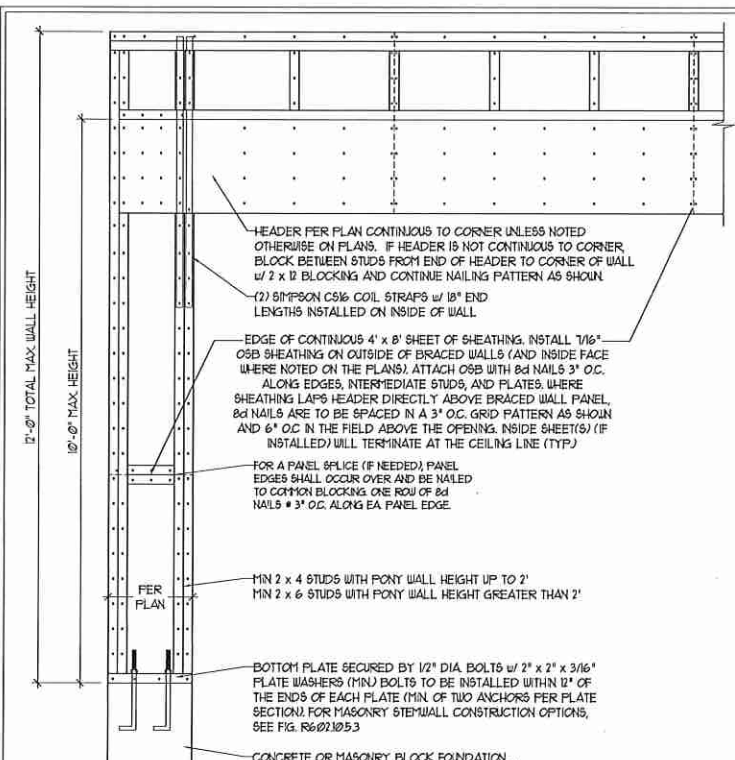
DETAILS

DATE: JULY 12, 2012
SCALE: NTS
DRAWN BY: JST
ENGINEERED BY: JST
REVIEWED BY: MGS

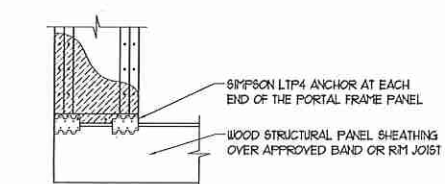
TYPICAL WALL SECTION

GENERAL WALL BRACING NOTES:

1. WALL BRACING DESIGNED IN ACCORDANCE WITH CHAPTER 6 OF THE 2012 NC RESIDENTIAL BUILDING CODE (NCRBC). TABLES AND FIGURES REFERENCED ARE FROM THE 2012 NCRBC.
2. SEE THIS SHEET FOR GENERAL DETAILS. REFER TO THE 2012 NCRBC FOR ADDITIONAL INFORMATION AS NEEDED.
3. SEE STRUCTURAL SHEETS FOR BRACED WALL LOCATIONS, DIMENSIONS, HOLD DOWN TYPE AND LOCATIONS, BRACED WALL LINE KEY WITH WALL DESIGN SUMMARY OF REQUIRED/PROVIDED TOTALS FOR EACH WALL LINE AND ANY SPECIAL NOTES OR REQUIREMENTS.
4. ALL EXTERIOR WALLS ARE TO BE SHEATHED WITH CS-45P IN ACCORDANCE WITH SECTION R602.10.3 UNLESS NOTED OTHERWISE.
5. ALL EXTERIOR AND INTERIOR WALLS TO HAVE 1/2" GYPSUM INSTALLED. WHEN NOT USING METHOD 'GB', GYPSUM TO BE FASTENED PER TABLE R102.3.5, METHOD GB TO BE FASTENED PER TABLE R602.10.1.
6. CS-45P REFERS TO THE 'CONTINUOUS SHEATHING - WOOD STRUCTURAL PANELS' WALL BRACING METHOD. 1/16" OSB SHEATHING IS TO BE INSTALLED ON ALL EXTERIOR WALLS ATTACHED w/ 6d COMMON NAILS OR 8d (2 1/2" LONG x 0.131" DIAMETER) NAILS SPACED 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN THE FIELD (UNO).
7. GB REFERS TO THE 'GYPSUM BOARD' WALL BRACING METHOD. 1/2" (MIN) GYPSUM WALL BOARD IS TO BE INSTALLED ON BOTH SIDES OF THE BRACED WALL FASTENED WITH 1 1/4" SCREWS OR 1 5/8" NAILS SPACED 1" O.C. ALONG PANEL EDGES INCLUDING TOP AND BOTTOM PLATES AND INTERMEDIATE SUPPORTS (UNO). VERIFY ALL FASTENER OPTIONS FOR 1/2" AND 5/8" GYPSUM PRIOR TO CONSTRUCTION. FOR INTERIOR FASTENER OPTIONS SEE TABLE R102.3.5. FOR EXTERIOR FASTENER OPTIONS SEE TABLE R602.3(1). EXTERIOR GB TO BE INSTALLED VERTICALLY.
8. REQUIRED BRACED WALL LENGTH FOR EACH SIDE OF THE CIRCUMSCRIBED RECTANGLE ARE INTERPOLATED PER TABLE R602.10.3. METHOD CS-45P CONTRIBUTES ITS ACTUAL LENGTH, METHOD GB CONTRIBUTES 5 ITS ACTUAL LENGTH, AND METHOD PF CONTRIBUTES 15 TIMES ITS ACTUAL LENGTH.



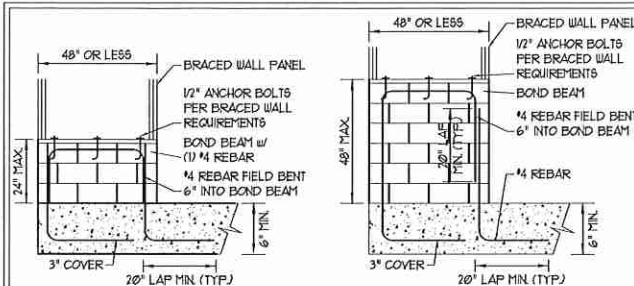
OVER CONCRETE OR MASONRY BLOCK FOUNDATION



OVER RAISED WOOD FLOOR - FRAMING ANCHOR OPTION

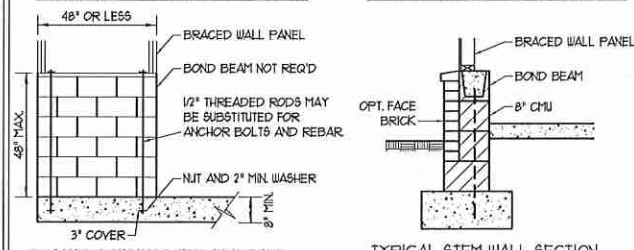
* APPLICABLE w/ GREATER THAN 12" KNEE WALL HEIGHTS IN CRAWL SPACE AND ABOVE FRAMED BASEMENT WALLS *

METHOD PF-PORTAL FRAME DETAIL



SHORT STEM WALL REINFORCEMENT

TALL STEM WALL REINFORCEMENT



OPTIONAL STEM WALL REINFORCEMENT

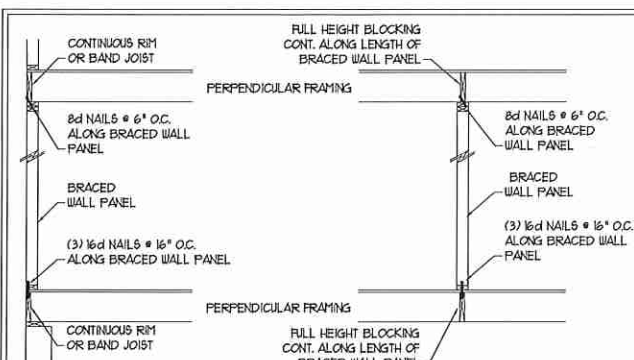
TYPICAL STEM WALL SECTION

RODS MAY BE INSTALLED USING AN ADHESIVE ANCHORING SYSTEM WITH A MINIMUM TENSILE CAPACITY OF 3150 LBS AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECS.

NOTE: GROUT BOND BEAMS AND ALL CELLS WHICH CONTAIN REBAR, THREADED RODS AND ANCHOR BOLTS

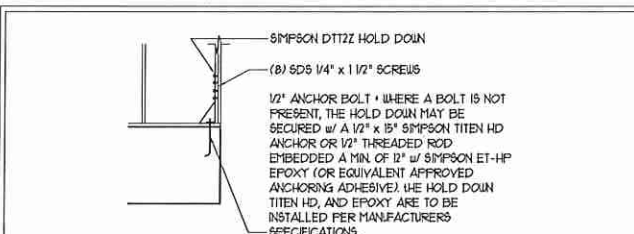
MASONRY STEM WALLS SUPPORTING BRACED WALL PANELS

PER FIGURE R602.10.5.3



BRACED WALL PANEL CONNECTION WHEN PERPENDICULAR TO FLOOR/CEILING FRAMING

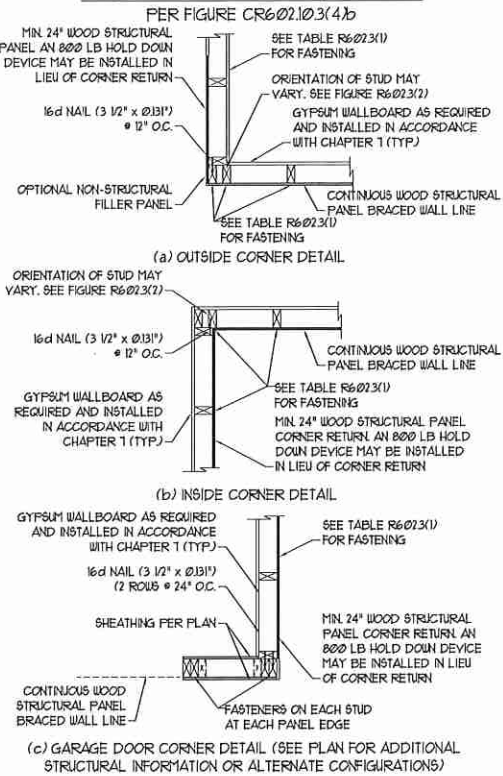
PER FIGURE CR602.10.5.4(1)



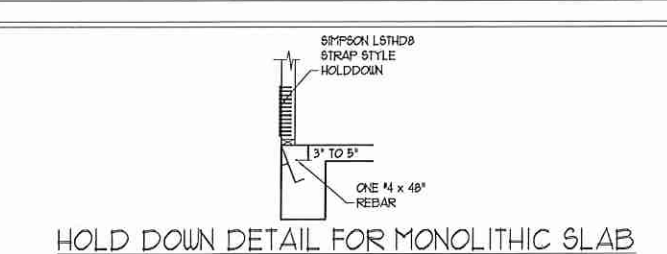
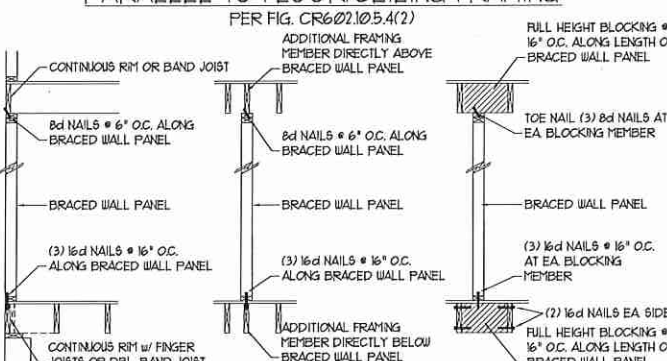
HOLD DOWN DETAIL FOR MASONRY FOUNDATION OR MONOLITHIC SLAB

* APPLICABLE ONLY WHERE SPECIFIED ON PLAN *

TYPICAL EXTERIOR CORNER FRAMING FOR CONTINUOUS SHEATHING

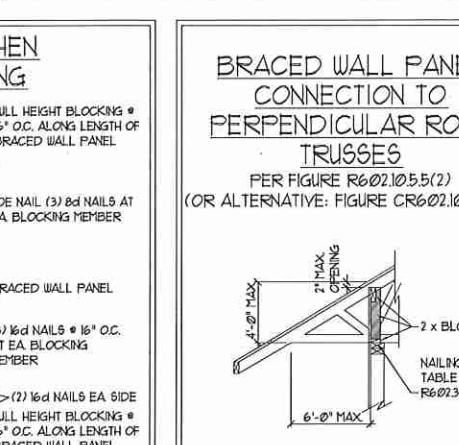
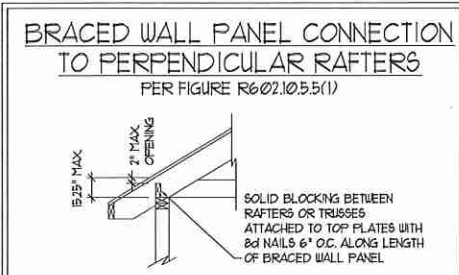
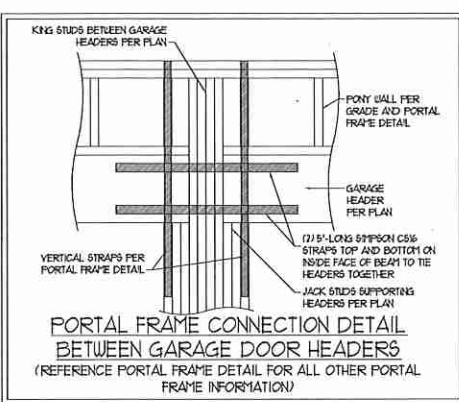


BRACED WALL PANEL CONNECTION WHEN PARALLEL TO FLOOR/CEILING FRAMING



HOLD DOWN DETAIL FOR MONOLITHIC SLAB

* APPLICABLE ONLY WHERE SPECIFIED ON PLAN *



J.S. THOMPSON ENGINEERING, INC.
 606 WADE AVE. SUITE 104 RALEIGH, NC 27605
 PHONE: (919) 788-9919 FAX: (919) 788-9921
 N.C. LICENSE NO.: C-1733

WALL BRACING NOTES AND DETAILS

DATE: MAY 11, 2017
SCALE: NONE
DRAWN BY: JST
ENGINEERED BY: JST
REVIEWED BY: JES

BRACED WALL NOTES AND DETAILS AND PF DETAIL



GENERAL NOTES

- ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS INCLUDING ROOF RAFTERS, HIPS, VALLEYS, RIDGES, FLOORS, WALLS, BEAMS, HEADERS, COLUMNS, CANTILEVERS, OFFSET LOAD BEARING WALLS, PIERS, GIRDER SYSTEM AND FOOTING. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OF ARCHITECTURAL LAYOUT INCLUDING ROOF. ENGINEER'S SEAL DOES NOT APPLY TO I-JOIST OR FLOOR/ROOF TRUSS LAYOUT DESIGN AND ACCURACY.
 - ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE (NRC), 2012 EDITION, PLUS ALL LOCAL CODES AND REGULATIONS. THE STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR, AND WILL NOT HAVE CONTROL OF, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE CONSTRUCTION WORK. NOR WILL THE ENGINEER BE RESPONSIBLE FOR THE CONTRACTORS FAILURE TO CARRY OUT THE CONSTRUCTION WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
 - STRUCTURAL DESIGN BASED ON THE PROVISIONS OF THE NRC, 2012 EDITION (R301.4 - R301.7)
- | DESIGN CRITERIA: | LIVE LOAD (PSF) | DEAD LOAD (PSF) | DEFLECTION (IN) |
|----------------------------------|--|-----------------|-----------------|
| ATTIC WITH LIMITED STORAGE | 20 | 10 | L/240 |
| ATTIC WITHOUT STORAGE | 10 | 10 | L/360 |
| DECKS | 40 | 10 | L/360 |
| EXTERIOR BALCONIES | 40 | 10 | L/360 |
| FIRE ESCAPES | 40 | 10 | L/360 |
| HANDRAILS/GUARDRAILS | 200 LB OR 50 (PLF) | 10 | L/360 |
| PASSENGER VEHICLE GARAGE | 50 | 10 | L/360 |
| ROOMS OTHER THAN SLEEPING ROO | 40 | 10 | L/360 |
| SLEEPING ROOMS | 30 | 10 | L/360 |
| STAIRS | 40 | 10 | L/360 |
| WIND LOAD | (BASED ON FIGURE R301.4(1) WIND ZONE AND EXPOSURE) | | |
| GROUND SNOW LOAD: P _g | 20 (PSF) | | |
- I-JOIST SYSTEMS DESIGNED WITH 12 PSF DEAD LOAD
 - FLOOR TRUSS SYSTEMS DESIGNED WITH 15 PSF DEAD LOAD
- FOR 90 AND 100 MPH WIND ZONES, FOUNDATION ANCHORAGE IS TO COMPLY WITH SECTION R403.16 OF THE NRC, 2012 EDITION. FOR 110 MPH, 120 MPH, AND 130 MPH WIND ZONES, FOUNDATION ANCHORAGE IS TO COMPLY WITH SECTION 4504 OF THE NRC, 2012 EDITION.
 - ENERGY EFFICIENCY COMPLIANCE AND INSULATION VALUES OF THE BUILDING TO BE IN ACCORDANCE WITH CHAPTER 11 OF THE NRC, 2012 EDITION.

FOOTING AND FOUNDATION NOTES

- FOUNDATION DESIGN BASED ON A MINIMUM ALLOWABLE BEARING CAPACITY OF 2000 PSF. CONTACT GEOTECHNICAL ENGINEER IF BEARING CAPACITY IS NOT ACHIEVED.
- FOR ALL CONCRETE SLABS AND FOOTINGS, THE AREA WITHIN THE PERIMETER OF THE BUILDING ENVELOPE SHALL HAVE ALL VEGETATION TOP SOIL AND FOREIGN MATERIAL REMOVED. FILL MATERIAL SHALL BE FREE OF VEGETATION AND FOREIGN MATERIAL. THE FILL SHALL BE COMPACTED TO ASSURE UNIFORM SUPPORT OF THE SLAB, AND EXCEPT WHERE APPROVED, THE FILL DEPTHS SHALL NOT EXCEED 24" FOR CLEAN SAND OR GRAVEL. A 4" THICK BASED COURSE CONSISTING OF CLEAN GRADED SAND OR GRAVEL SHALL BE PLACED. A BASE COURSE IS NOT REQUIRED WHERE A CONCRETE SLAB IS INSTALLED ON WELL-DRAINED OR SAND-GRAVEL MIXTURE SOILS CLASSIFIED AS GROUP I, ACCORDING TO THE UNITED SOIL CLASSIFICATION SYSTEM IN ACCORDANCE WITH TABLE R403.1 OF THE NRC, 2012 EDITION.
- PROPERLY DEWATER EXCAVATION PRIOR TO POURING CONCRETE WHEN BOTTOM OF CONCRETE SLAB IS AT OR BELOW WATER TABLE. IF APPLICABLE, 3/4" - 1" DEEP CONTROL JOINTS ARE TO BE SAUED WITHIN 4 TO 12 HOURS OF CONCRETE FINISHING AND WALL LOCATIONS HAVE BEEN MARKED. ADJUST WHERE NECESSARY.
- CONCRETE SHALL CONFORM TO SECTION R402.2 OF THE NRC, 2012 EDITION. CONCRETE REINFORCING STEEL TO BE ASTM A63 GRADE 60. WELDED WIRE FABRIC TO BE ASTM A185. MAINTAIN A MINIMUM CONCRETE COVER AROUND REINFORCING STEEL OF 3" IN FOOTINGS AND 1 1/2" IN SLABS. FOR POURED CONCRETE WALLS, CONCRETE COVER FOR REINFORCING STEEL MEASURED FROM THE INSIDE FACE OF THE WALL SHALL NOT BE LESS THAN 3/4". CONCRETE COVER FOR REINFORCING STEEL MEASURED FROM THE OUTSIDE FACE OF THE WALL SHALL NOT BE LESS THAN 1 1/2" FOR #5 BARS OR SMALLER, AND NOT LESS THAN 2" FOR #6 BARS OR LARGER.
- MASONRY UNITS TO CONFORM TO ACE 530/ASCE 5/7/15 402. MORTAR SHALL CONFORM TO ASTM C710.
- THE UNSUPPORTED HEIGHT OF MASONRY PIERS SHALL NOT EXCEED FOUR TIMES THEIR LEAST DIMENSION FOR UNFILLED HOLLOW CONCRETE MASONRY UNITS AND TEN TIMES THEIR LEAST DIMENSION FOR SOLID OR SOLID FILLED PIERS. PIERS MAY BE FILLED SOLID WITH CONCRETE OR TYPE M OR S MORTAR. PIERS AND WALLS SHALL BE CAFFED WITH 8" OF SOLID MASONRY.
- THE CENTER OF EACH OF THE PIERS SHALL BEAR IN THE MIDDLE THIRD OF ITS RESPECTIVE FOOTING. EACH GIRDER SHALL BEAR IN THE MIDDLE THIRD OF THE PIERS.
- ALL CONCRETE AND MASONRY FOUNDATION WALLS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF SECTION R404 OF THE NRC, 2012 EDITION OR IN ACCORDANCE WITH ACI 318, ACI 332, NCHA TRS-9-A OR ACE 530/ASCE 5/7/15 402. MASONRY FOUNDATION WALLS ARE TO BE REINFORCED PER TABLE R404.1(1), R404.1(2), R404.1(3), OR R404.1(4) OF THE NRC, 2012 EDITION. CONCRETE FOUNDATION WALLS ARE TO BE REINFORCED PER TABLE R404.1(5) OF THE NRC, 2012 EDITION. STEP CONCRETE FOUNDATION WALLS TO 2 x 6 FRAMED WALLS AT 16" O.C. WHERE GRADE PERMITS (UNO).

FRAMING NOTES

- ALL FRAMING LUMBER SHALL BE #2 SFF MINIMUM (Fb = 815 PSI, Fv = 375 PSI, E = 1600000 PSI) UNLESS NOTED OTHERWISE (UNO). ALL TREATED LUMBER SHALL BE #2 S1P MINIMUM (Fb = 915 PSI, Fv = 175 PSI, E = 1600000 PSI) UNLESS NOTED OTHERWISE (UNO).
- LAMINATED VENEER LUMBER (LVL) SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fb = 2600 PSI, Fv = 285 PSI, E = 1300000 PSI. LAMINATED STRAND LUMBER (LSL) SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fb = 2375 PSI, Fv = 310 PSI, E = 1550000 PSI. PARALLEL STRAND LUMBER (PSL) UP TO 1" DEPTH SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fc = 2500 PSI, E = 1600000 PSI. PARALLEL STRAND LUMBER (PSL) MORE THAN 1" DEPTH SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fc = 2300 PSI, E = 2000000 PSI. INSTALL ALL CONNECTIONS PER MANUFACTURER'S SPECIFICATIONS.
- STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS

A. W AND WT SHAPES:	ASTM A992
B. CHANNELS AND ANGLES:	ASTM A36
C. PLATES AND BARS:	ASTM A36
D. HOLLOW STRUCTURAL SECTIONS:	ASTM A500 GRADE B
E. STEEL PIPE:	ASTM A53, GRADE B, TYPE E OR S
- STEEL BEAMS SHALL BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3 1/2" AND FULL FLANGE WIDTH (UNO). PROVIDE SOLID BEARING FROM BEAM SUPPORT TO FOUNDATION. BEAMS SHALL BE ATTACHED AT THE BOTTOM FLANGE TO EACH SUPPORT AS FOLLOWS (UNO):

A. WOOD FRAMING	(2) 1/2" DIA x 4" LONG LAG SCREWS
B. CONCRETE	(2) 1/2" DIA x 4" WEDGE ANCHORS
C. MASONRY (FULLY GROUTED)	(2) 1/2" DIA x 4" LONG SIMPSON TITEN HD ANCHORS

LATERAL SUPPORT IS CONSIDERED ADEQUATE PROVIDING THE JOISTS ARE TOE NAILED TO THE 2x NAILER ON TOP OF THE STEEL BEAM, AND THE 2x NAILER IS SECURED TO THE TOP OF THE STEEL BEAM w/ (2) ROWS OF SELF TAPPING SCREWS @ 16" O.C. OR (2) ROWS OF 1/2" DIAMETER BOLTS @ 16" O.C. IF 1/2" BOLTS ARE USED TO FASTEN THE NAILER, THE STEEL BEAM SHALL BE FABRICATED w/ (2) ROWS OF 3/16" DIAMETER HOLES @ 16" O.C.
- SQUARES DENOTE POINT LOADS WHICH REQUIRE SOLID BLOCKING TO GIRDER OR FOUNDATION. SHADED SQUARES DENOTE POINT LOADS FROM ABOVE WHICH REQUIRE SOLID BLOCKING TO SUPPORTING MEMBER BELOW.
- ALL LOAD BEARING HEADERS TO CONFORM TO TABLE R502.5(1) AND R502.5(2) OF THE NRC, 2012 EDITION OR BE (2) 2 x 6 WITH (1) JACK AND (1) KING STUD EACH END (UNO) WHICHEVER IS GREATER. ALL HEADERS TO BE SECURED TO EACH JACK STUD WITH (4) 8d NAILS. ALL BEAMS TO BE SUPPORTED WITH (2) STUDS AT EACH BEARING POINT (UNO).
- ALL BEAMS, HEADERS, OR GIRDER TRUSSES PARALLEL TO WALL ARE TO BEAR FULLY ON (1) JACK OR (2) STUDS MINIMUM OR THE NUMBER OF JACKS OR STUDS NOTED. ALL BEAMS OR GIRDER TRUSSES PERPENDICULAR TO WALL AND SUPPORTED BY (3) STUDS OR LESS ARE TO HAVE 1 1/2" MINIMUM BEARING (UNO). ALL BEAMS OR GIRDER TRUSSES PERPENDICULAR TO WALL AND SUPPORTED BY MORE THAN (3) STUDS OR OTHER NOTED COLUMN ARE TO BEAR FULLY ON SUPPORT COLUMN FOR ENTIRE WALL DEPTH (UNO). BEAM ENDS THAT BUTT INTO ONE ANOTHER ARE TO EACH BEAR EQUAL LENGTHS (UNO).
- FLITCH BEAMS SHALL BE BOLTED TOGETHER USING 1/2" DIAMETER BOLTS (ASTM A307) WITH WASHERS PLACED AT THREADED END OF BOLT. BOLTS SHALL BE SPACED AT 24" CENTERS (MAXIMUM), AND STAGGERED AT TOP AND BOTTOM OF BEAM (2" EDGE DISTANCE), WITH (2) BOLTS LOCATED AT 6" FROM EACH END (UNO).
- ALL I-JOIST OR TRUSS LAYOUTS ARE TO BE IN COMPLIANCE WITH THE OVERALL DESIGN SPECIFIED ON THE PLANS. ALL DEVIATIONS ARE TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD PRIOR TO INSTALLATION.
- BRACED WALL PANELS SHALL BE CONSTRUCTED ACCORDING TO THE CURRENT NORTH CAROLINA RESIDENTIAL CODE WALL BRACING CRITERIA. THE AMOUNT, LENGTH, AND LOCATION OF BRACING SHALL COMPLY WITH ALL APPLICABLE TABLES IN SECTION R602.10.
- PROVIDE DOUBLE JOIST UNDER ALL WALLS PARALLEL TO FLOOR JOISTS. PROVIDE SUPPORT UNDER ALL WALLS PARALLEL TO FLOOR TRUSSES OR I-JOISTS PER MANUFACTURER'S SPECIFICATIONS. INSTALL BLOCKING BETWEEN JOISTS OR TRUSSES FOR POINT LOAD SUPPORT FOR ALL POINT LOADS ALONG OFFSET LOAD LINES.
- FOR ALL HEADERS SUPPORTING BRICK VENEER THAT ARE LESS THAN 8'-0" IN LENGTH, REST A 6" x 4" x 5/16" STEEL ANGLE WITH 6" MINIMUM EMBEDMENT AT SIDES FOR BRICK SUPPORT. FOR ALL HEADERS 8'-0" AND GREATER IN LENGTH, BOLT A 6" x 4" x 5/16" STEEL ANGLE TO HEADER WITH 1/2" LAG SCREWS AT 12" O.C. STAGGERED FOR BRICK SUPPORT. FOR ALL BRICK SUPPORT AT ROOF LINES, BOLT A 6" x 4" x 5/16" STEEL ANGLE TO 2 x 10 BLOCKING INSTALLED BETWEEN WALL STUDS WITH 1/2" LAG SCREWS AT 12" O.C. STAGGERED AND IN ACCORDANCE WITH SECTION R103.122 OF THE NRC, 2012 EDITION.
- FOR STICK FRAMED ROOFS: CIRCLES DENOTE (3) 2 x 4 POSTS FOR ROOF MEMBER SUPPORT. HIP SPLICES ARE TO BE SPACED A MINIMUM OF 8'-0". FASTEN MEMBERS WITH THREE ROWS OF 12d NAILS AT 16" O.C. FRAME DORMER WALLS ON TOP OF DOUBLE OR TRIPLE RAFTERS AS SHOWN (UNO).
- FOR TRUSSED ROOFS: FRAME DORMER WALLS ON TOP OF 2 x 4 LADDER FRAMING AT 24" O.C. BETWEEN ADJACENT ROOF TRUSSES. STICK FRAME OVER-FRAMED ROOF SECTIONS WITH 2 x 8 RIDGES, 2 x 6 RAFTERS AT 16" O.C. AND FLAT 2 x 10 VALLEYS (UNO).
- ALL 4 x 4 AND 6 x 6 POSTS TO BE INSTALLED WITH 100 LB CAPACITY UPLIFT CONNECTORS TOP AND BOTTOM (UNO). POSTS MAY BE SECURED USING ONE SIMPSON H6 OR LT612 UPLIFT CONNECTOR FASTENED TO THE BAND AT THE BOTTOM AND THE BEAM AT THE TOP OF EACH POST. ONE 16" SECTION OF SIMPSON C916 COIL STRAPPING WITH (8) 8d HDG NAILS AT EACH END MAY BE USED IN LIEU OF EACH TWIST STRAP IF DESIRED. FOR MASONRY OR CONCRETE FOUNDATION USE SIMPSON POST BASE.

**J.S. THOMPSON
ENGINEERING, INC.**
606 WADE AVE, SUITE 104, DALEIGH, NC 27605
PHONE: (810) 789-9919 FAX: (810) 789-9921
N.C. LICENSE NO.: C-1133

STANDARD STRUCTURAL NOTES

DATE: AUGUST 27, 2013
SCALE: N/A
DRAWN BY: JES
ENGINEERED BY: JES
REVIEWED BY: JST

SHEET:
STRUCTURAL
NOTES

