



COVER SHEET

H&H HOMES  
WILMINGTON

DATE: 2-14-18  
REV: 3-20-19  
& 6-6-19  
DRAWN BY: WG  
ENGINEERED BY:  
REVIEWED BY:

CS

# WILMINGTON

## WILMINGTON REVISION LIST - STRUCTURAL:

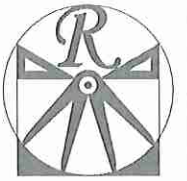
- 1.) COMBINED WILMINGTON AND WILMINGTON II PLANS. (2-18)
- 2.) ADDED BRICK OPTION ON SECOND FLOOR. (2-18)
- 3.) CALLED OUT SERIES/SPACING OF JOISTS ON BASEMENT. (2-18)
- 4.) 2018 NCRC UPDATE (6-19)
- 5.)
- 6.)
- 7.)
- 8.)
- 9.)

## WILMINGTON REVISION LIST - ARCHITECTURAL:

- 1.) STAIR TREADS CHANGED TO 10" (6-14)
- 2.) REPLACED CASUAL DINING FLUSH MOUNT FIXTURE WITH (2) CAN LIGHTS (9-14)
- 3.) ADDED WATER TABLE OVER GARAGE DOOR (1-15)
- 4.) ADDED OPTION FOR (2) 8-0 7-0 GARAGE DOORS (1-15)
- 5.) ADDED OPTION FOR 12-0 DEEP COVERED PORCH. CHANGED ROOF FROM SHED TO GABLE (1-15)
- 6.) ADDED THIS COVER SHEET (9-14-17). COPIED INFORMATION ABOVE FROM H&H COVER SHEET (9-17)
- 7.) SHOWED DROPPED CEILING UNDER STAIRS AT 8'-6" TO ACCOMMODATE FLUSH MOUNT LIGHT (9-17)
- 8.) INCREASED DEPTH OF WALL BETWEEN MASTER TUB AND SHOWER BY 6" (9-17)
- 9.) MOVED LVP TO COAT CLOSET OFF OF FOYER (9-17)
- 10.) CHANGED FLUSH MOUNT LIGHT OVER KITCHEN ISLAND TO PENDANT LIGHT AND ADDED SWITCH AT STAIR WALL (9-17)
- 11.) ADDED SWITCH TO FAMILY ROOM LIGHT AT STAIR WALL (9-17)
- 12.) ADDED EXTERIOR WALL MOUNT LIGHTS AT OPT. GARAGE PEDESTRIAN DOORS (9-17)
- 13.) ADDED LIGHT SWITCH TO MEDIA ROOM OUTSIDE OF DOOR IN HALLWAY (9-17)
- 14.) MOVED SWITCHES FOR FAN, TUB AND SHOWER LIGHT IN MASTER BATH (9-17)
- 15.) UPDATED CUTSHEETS TO NEW FORMAT (9-17)
- 16.) COMBINED WILMINGTON AND WILMINGTON-II (BASEMENT). (2-18)
- 17.) ADDED ALL BRICK OPTION (A, B AND C ELEVATIONS). (2-18)
- 18.) ADDED THREE CAR GARAGE OPTION. (2-18)
- 19.) UPDATED/ ADDED CUTSHEETS. (2-18)
- 20.) ADDED GOURMET KITCHEN OPTION. (2-18)
- 21.) CHANGED FIREPLACE FROM 36" TO 32" (3-19)
- 22.)
- 23.)
- 24.)
- 25.)
- 26.)
- 27.)
- 28.)
- 29.)
- 30.)
- 31.)
- 32.)
- 33.)

ACA001127

Inventory Marked



**RENAISSANCE**  
RESIDENTIAL DESIGN, INC.  
4810 GLENMIST CT., | RALEIGH, NC 27612  
(919) 649-4128  
WWW.HIRCAROLINA.COM

"The art of transforming your vision into reality."

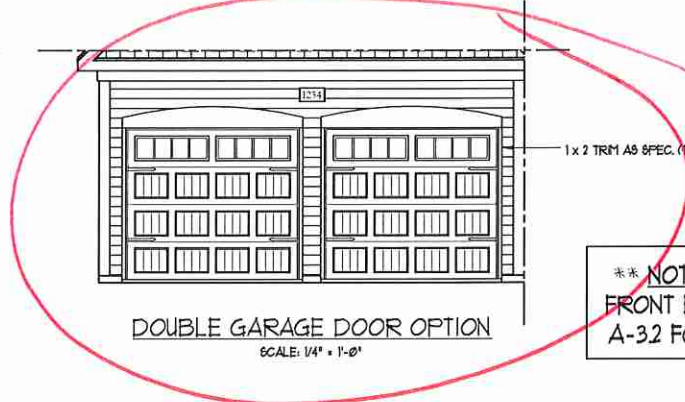
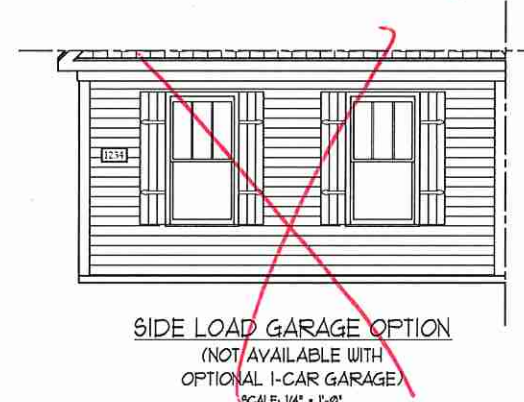
RENAISSANCE RESIDENTIAL DESIGN, INC. RECEIVES THE RIGHT TO MAKE MODIFICATIONS TO FLOOR PLANS, DIMENSIONS, MATERIALS AND SPECIFICATIONS WITHOUT NOTICE. THESE DRAWINGS ARE FOR THE PURPOSE OF CONVEYING AN ARCHITECTURAL CONCEPT ONLY.

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 PERMISSION OF RENAISSANCE RESIDENTIAL DESIGN, INC. NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY WITHOUT FIRST OBTAINING SAID WRITTEN PERMISSION AND CONSENT.

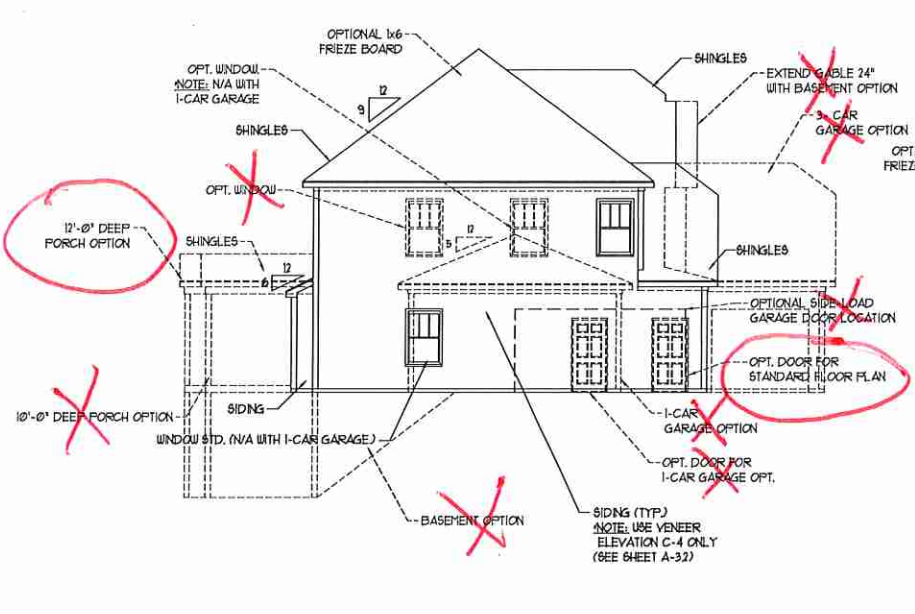
**J.S. THOMPSON**  
**ENGINEERING, INC.**  
1601 WOODS AVE., SUITE 104  
RALEIGH, NC 27605  
PHONE (919) 768-8919  
FAX (919) 768-8921  
N.C. LICENSE NO. C-1735



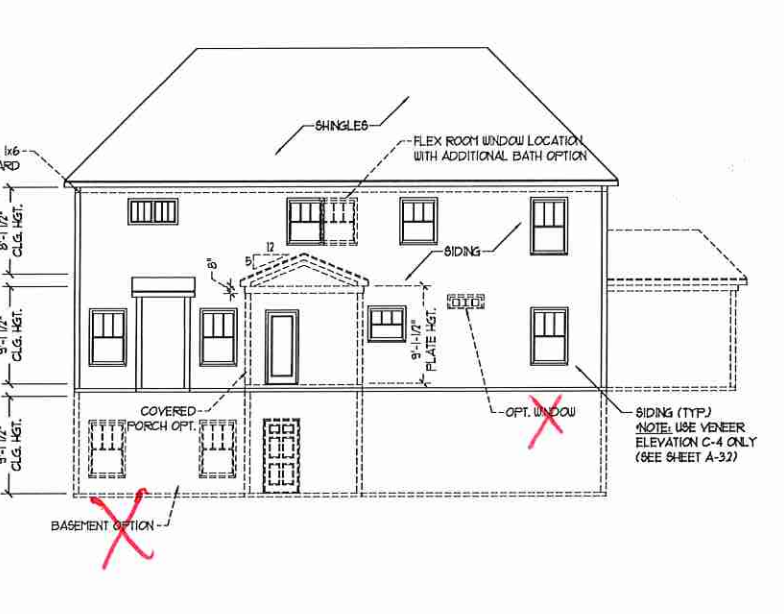
PRICES, SPECIFICATIONS, MATERIALS, METHODS, OPERATIONS, CONDITIONS, ESTIMATIONS, DIMENSIONS AND DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SQUARE FOOTAGE AND DIMENSIONS ARE ESTIMATED AND MAY VARY IN ACTUAL CONSTRUCTION. ALL DIMENSIONS ARE TO FINISH UNLESS OTHERWISE NOTED. THE SITE PLAN AND LOT PLAN WILL BE DETERMINED BY THE SITE PLAN AND LOT PLAN. FLOOR PLANS AND ELEVATION RENDERINGS ARE ARTIST CONCEPTIONS. FLOOR PLANS ARE THE COPYRIGHTED PROPERTY OF RENAISSANCE RESIDENTIAL DESIGN, INC. AND ARE NOT TO BE REPRODUCED, COPIED, OR DISTRIBUTED WITHOUT THE WRITTEN PERMISSION OF RENAISSANCE RESIDENTIAL DESIGN, INC. CURRENT DETAILS, COPYRIGHT © 2018 H&H HOMES



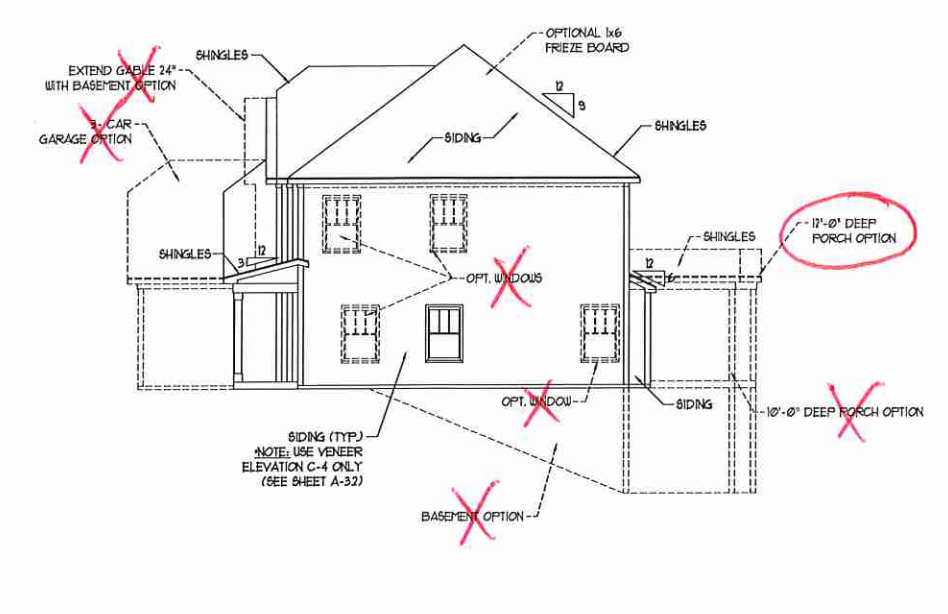
**\*\* NOTE: SEE PAGE A-3.1 FOR SPECIFIC FRONT ELEVATION-C DETAILS. SEE PAGE A-3.2 FOR C-4 (ALL BRICK) ELEVATIONS**



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



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



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

H&H HOMES, INC.  
WILMINGTON DRIVE LEFT

DATE: FEBRUARY 12, 2018  
REV:  
SCALE: AS NOTED  
DRAWN BY: WG  
ENGINEERED BY: WLF  
REVIEWED BY: JES

C - ELEVATIONS  
**A-3**



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



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



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

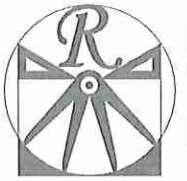
BRICK OR STONE  
LEDGE AS SPEC. (TYP)

brick



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

BRICK CRESCENT  
LEDGE AS SPEC. (TYP)



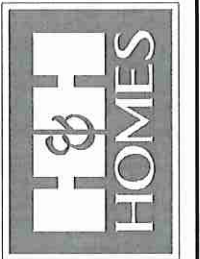
RENAISSANCE  
RESIDENTIAL DESIGN, INC.  
4810 GLENMIST CT. | RALEIGH, NC 27612  
(919) 649-4128  
WWW.RRDCAROLINA.COM

"The art of transforming your vision into reality."

RENAISSANCE RESIDENTIAL DESIGN, INC.  
RESERVED THE RIGHT TO MAKE  
MODIFICATIONS TO FLOOR PLANS,  
CONCRETE 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. IF YOU ARE  
THEY TO BE ASSIGNED TO ANY THIRD  
PARTY WITHOUT FIRST OBTAINING SAID  
WRITTEN PERMISSION AND CONSENT.

J.S. THOMPSON  
ENGINEERING, INC.  
608 WADE AVE., SUITE 104  
RALEIGH, NC 27605  
PHONE (919) 788-8919  
FAX (919) 788-0921  
N.C. LICENSE NO. C-1733



THESE PROVISIONS, RESERVATIONS, RIGHTS ARE  
APPLICABLE TO FLOOR PLANS, ELEVATIONS, DETAILS,  
MATERIALS AND DIMENSIONS ARE SUBJECT TO CHANGE  
WITHOUT NOTICE AND MAY VARY FROM ACTUAL  
CONSTRUCTION. SQUARE FOOTAGE AND DIMENSIONS  
ARE ESTIMATED AND MAY VARY FROM ACTUAL.  
CONCEPTS, FLOOR PLANS AND ELEVATION RENDERINGS ARE ARTIST  
CONCEPTIONS. FLOOR PLANS ARE THE COPYRIGHTED  
PROPERTY OF RENAISSANCE RESIDENTIAL DESIGN, INC.  
PROHIBITED. SEE NEW HOME SALES CONSULTANT FOR  
CURRENT DETAILS. COPYRIGHT © 2018 H&H HOMES

H&H HOMES, INC.  
WILMINGTON DRIVE LEFT

DATE: FEBRUARY 12, 2018

REV.:

SCALE: AS NOTED

DRAWN BY: WG

ENGINEERED BY: WLF

REVIEWED BY: JES

C - ELEVATION  
OPTIONS

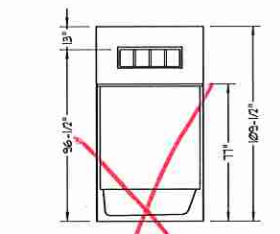
A-3.1

SQUARE FOOTAGE	
1st FLOOR:	1283 SQ. FT.
2nd FLOOR:	1587 SQ. FT.
TOTAL:	2865 SQ. FT.
FRONT PORCH:	105 SQ. FT.
STD. REAR PATIO:	110 SQ. FT.
GARAGE:	478 SQ. FT.

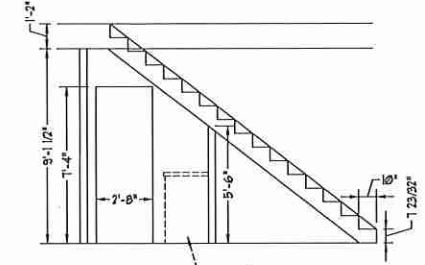
**\*NOTE: ALL EXTERIOR WALLS AND ATTIC WALLS ARE TO BE 2 x 6 @ 16" O.C. (UNO). 2 x 4 @ 16" O.C. EXTERIOR WALLS MAY BE CONSTRUCTED IN LIEU OF 2 x 6 WALLS (UNO). ALL INTERIOR LOAD BEARING WALLS ARE TO BE 2 x 4 @ 16" O.C. (UNO) AND NON-LOAD BEARING INTERIOR WALLS ARE TO BE 2 x 4 @ 24" O.C. (UNO).**

SQUARE FOOTAGE (OPTIONS)	
UNFINISHED BASEMENT:	1300 SQ. FT.
1st FLOOR (W/ BASEMENT):	1308 SQ. FT.
2nd FLOOR (W/ BASEMENT):	1607 SQ. FT.
1st FLOOR (ALL BRICK):	1336 SQ. FT.
2nd FLOOR (ALL BRICK):	1643 SQ. FT.
GARAGE (ALL BRICK):	443 SQ. FT.
1-CAR GARAGE:	240 SQ. FT.
1-CAR GARAGE (ALL BRICK):	258 SQ. FT.
3-CAR GARAGE:	601 SQ. FT.
3-CAR GARAGE (ALL BRICK):	633 SQ. FT.
UNFINISHED BASEMENT (ALL BRICK):	1358 SQ. FT.
1st FLOOR (ALL BRICK W/ BASEMENT):	1361 SQ. FT.
2nd FLOOR (ALL BRICK W/ BASEMENT):	1668 SQ. FT.
REAR PORCH (10'-0" DEEP):	110 SQ. FT.
REAR PORCH (12'-0" DEEP):	132 SQ. FT.
OPT. PATIO/ DECK (10'-0" DEEP):	120 SQ. FT.
OPT. PATIO/ DECK (12'-0" DEEP):	144 SQ. FT.

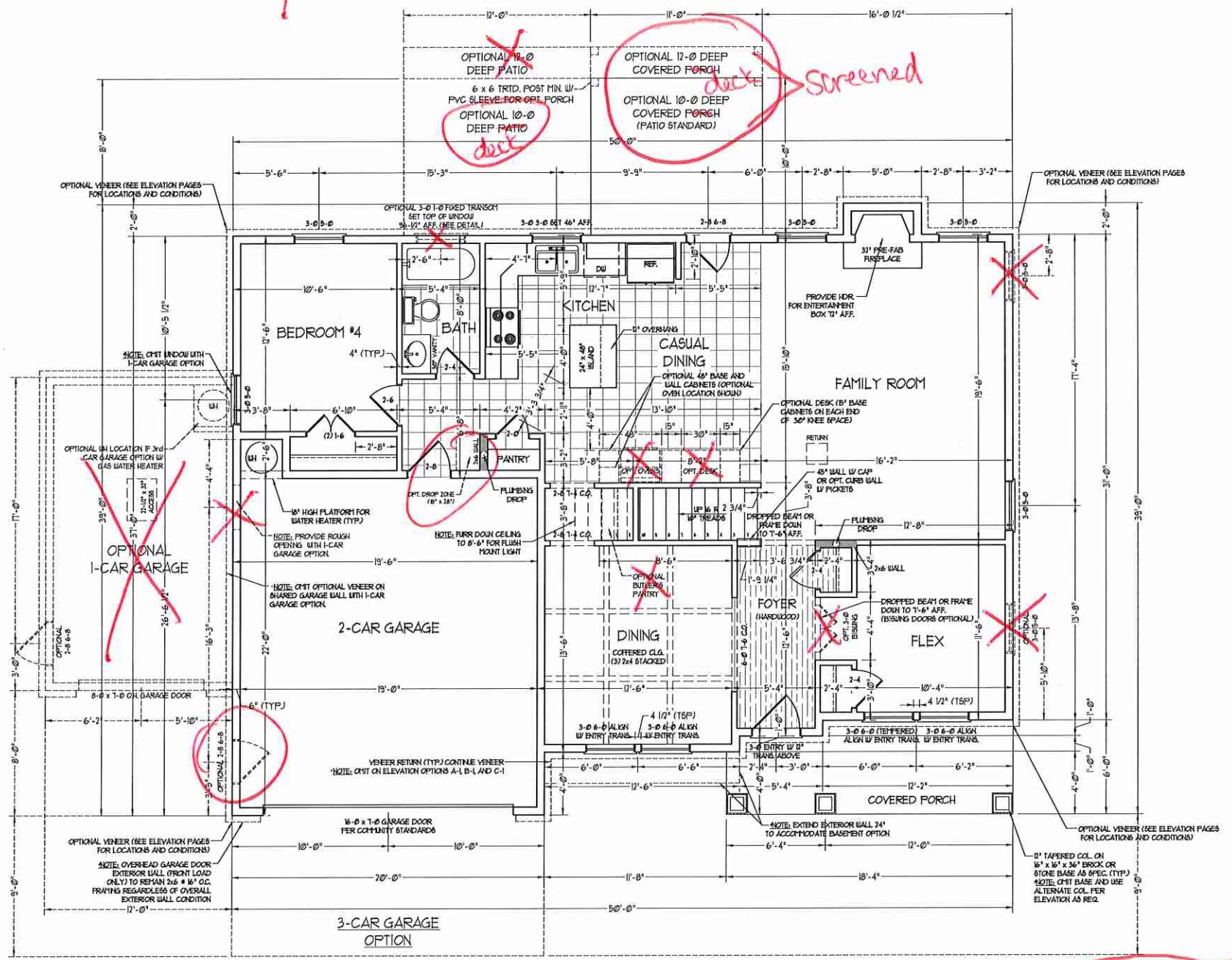
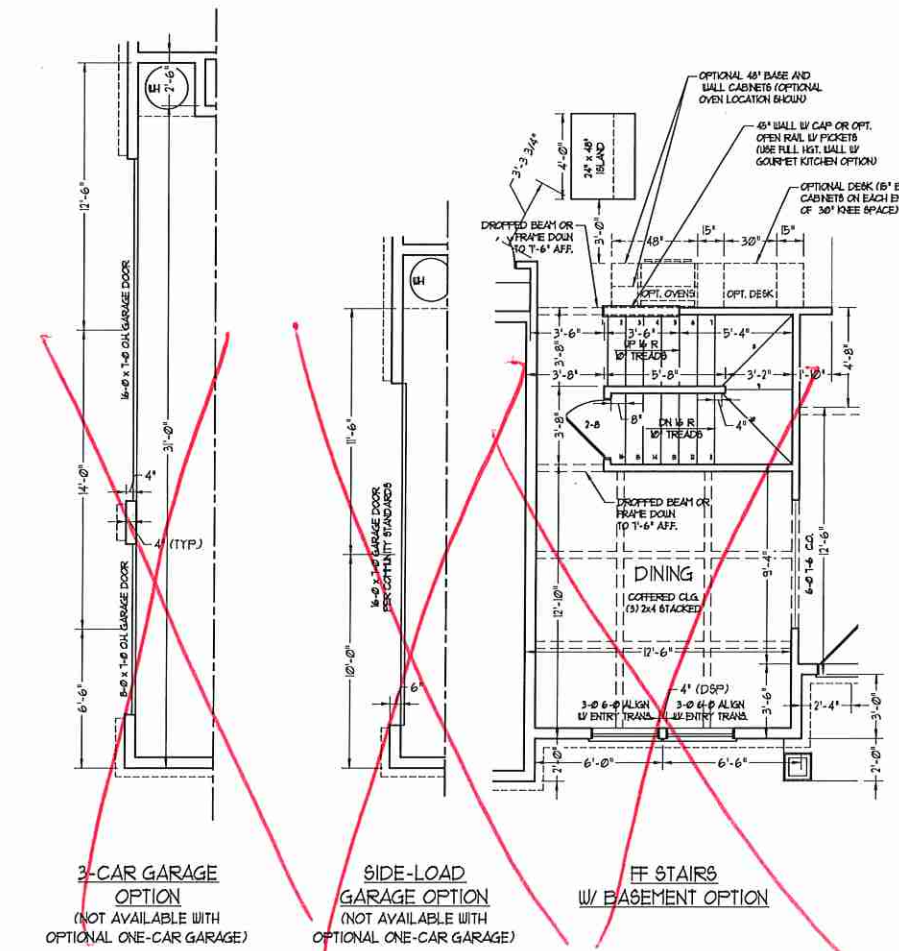
**2x6 WALL**  
 \* SHADED WALLS ARE TO BE 2 x 6 @ 16" O.C. (LOAD BEARING) OR 2 x 6 @ 24" O.C. (NON-LOAD BEARING) REGARDLESS OF EXTERIOR WALL CONDITION



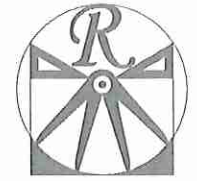
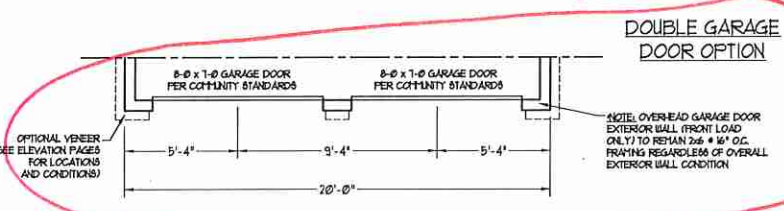
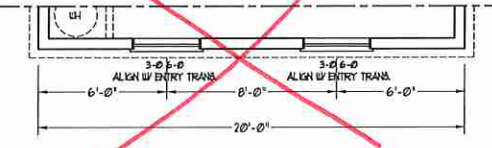
STAIR PROFILE  
 (FROM DINING ROOM, STANDARD STAIRS SHOWN)



OPTIONAL BATHROOM TRANSOM WINDOW OVER TUB DETAIL



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



**RENAISSANCE RESIDENTIAL DESIGN, INC.**  
 4810 GLENHIST CT., RALEIGH, NC 27612  
 (919) 649-4128  
 WWW.RDCCAROLENA.COM

"The art of transforming your vision into reality."  
 RENAISSANCE RESIDENTIAL DESIGN, INC. RESERVES THE RIGHT TO MAKE MODIFICATIONS TO FLOOR PLANS, CONSTRUCTION MATERIALS AND SPECIFICATIONS WITHOUT NOTICE. THESE CHANGES ARE FOR THE PURPOSE OF CONVEYING AN ARCHITECTURAL CONCEPT ONLY.

RENAISSANCE RESIDENTIAL DESIGN, INC. HEREBY EXPRESSLY RESERVES THE COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS AND DRAWINGS ARE NOT TO BE REPRODUCED, CHANGED, OR COPIED IN ANY MANNER WITHOUT THE 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.**  
 600 WADE AVE., SUITE 104  
 RALEIGH, NC 27605  
 PHONE: (919) 788-9919  
 FAX: (919) 788-9921  
 N.C. LICENSE NO. C-1133

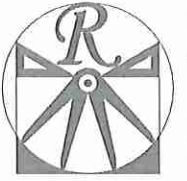


PRICES, FINANCING, INSURANCES, RESTRICTIONS AND DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SQUARE FOOTAGE AND DIMENSIONS ARE ESTIMATED AND MAY VARY FROM ACTUAL. COPIES OF THESE PLANS ARE NOT TO BE USED FOR ANY OTHER PROJECT. ALL RIGHTS ARE RESERVED. FLOOR PLANS AND ELEVATION RENDERINGS ARE ARTIST CONCEPTIONS. FLOOR PLANS ARE THE COPYRIGHTED PROPERTY OF RENAISSANCE RESIDENTIAL DESIGN, INC. PROHIBITED. SEE NEW HOME SALES CONSULTANT FOR CURRENT DETAILS. COPYRIGHT © 2018 H&H HOMES

H&H HOMES, INC.  
 WILMINGTON DRIVE LEFT

DATE: FEBRUARY 12, 2018  
 REV.:  
 SCALE: 1/4"=1'-0"  
 DRAWN BY: WG  
 ENGINEERED BY: WLF  
 REVIEWED BY: JES

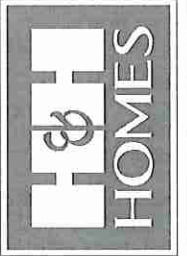
FIRST FLOOR PLAN  
 A-5



**RENAISSANCE**  
RESIDENTIAL DESIGN, INC.  
4818 GLENMIST CT. | RALEIGH, NC 27612  
(919) 649-4128  
WWW.RRD-CAROLINA.COM

"The art of transforming your vision into reality."  
RENAISSANCE RESIDENTIAL DESIGN, INC. RECEIVES 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 COPYRIGHT LAW AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS AND CHANGES 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.**  
605 WADE AVE., SUITE 104  
RALEIGH, NC 27609  
PHONE (919) 789-9919  
FAX (919) 789-9921  
N.C. LICENSE NO.: C-1733



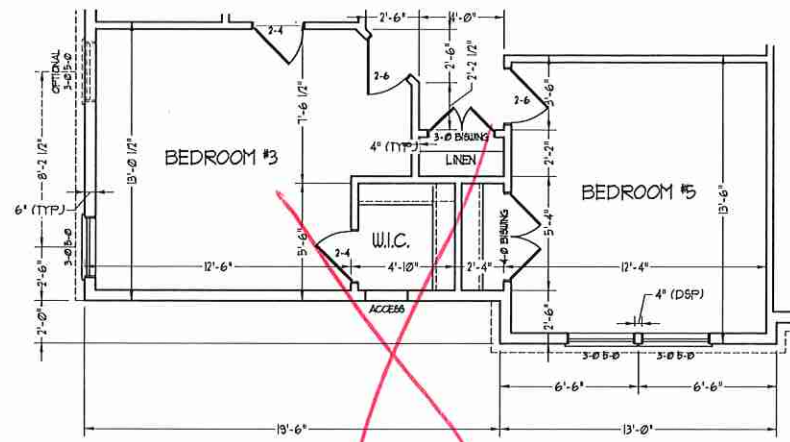
PRICES, PROMOTIONS, INSURANCE, FEATURES, OPTIONS, FLOOR PLANS, ELEVATIONS, DESIGN, MATERIALS AND DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SQUARE FOOTAGE AND DIMENSIONS CONSTRUCTION. ACTUAL POSITION OF HOUSE ON LOT WILL BE DETERMINED BY THE SITE PLAN AND PLOT PLAN. FLOOR PLANS AND ELEVATION RENDERINGS ARE ARTIST CONCEPTIONS. FLOOR PLANS ARE THE COPYRIGHTED PROPERTY OF RENAISSANCE RESIDENTIAL DESIGN, INC. ADAPTATION OR REPRODUCTION OF THESE PLANS IS STRICTLY PROHIBITED. SEE NEW HOME SALES CONSULTANT FOR CURRENT DETAILS. COPYRIGHT © 2018 H&H HOMES

H&H HOMES, INC.  
WILMINGTON DRIVE LEFT

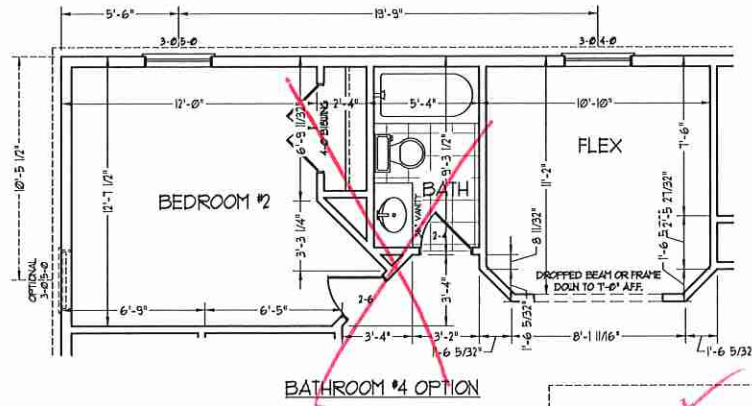
DATE: FEBRUARY 12, 2018  
REV.:  
SCALE: 1/4"=1'-0"  
DRAWN BY: WG  
ENGINEERED BY: WLF  
REVIEWED BY: JES

SECOND FLOOR PLAN

A-6



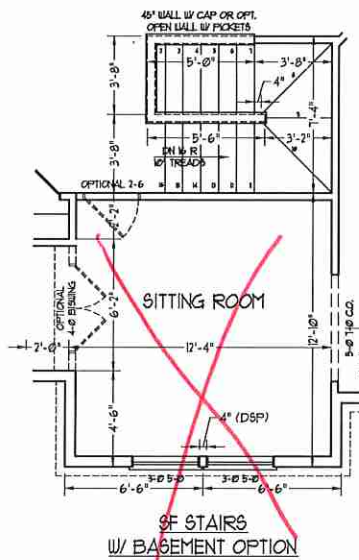
BEDROOM #5 OPTION



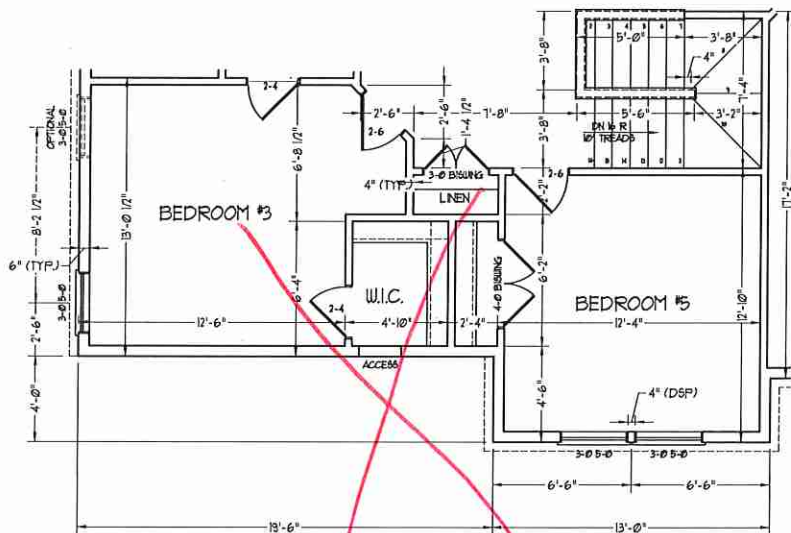
BATHROOM #4 OPTION

**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).

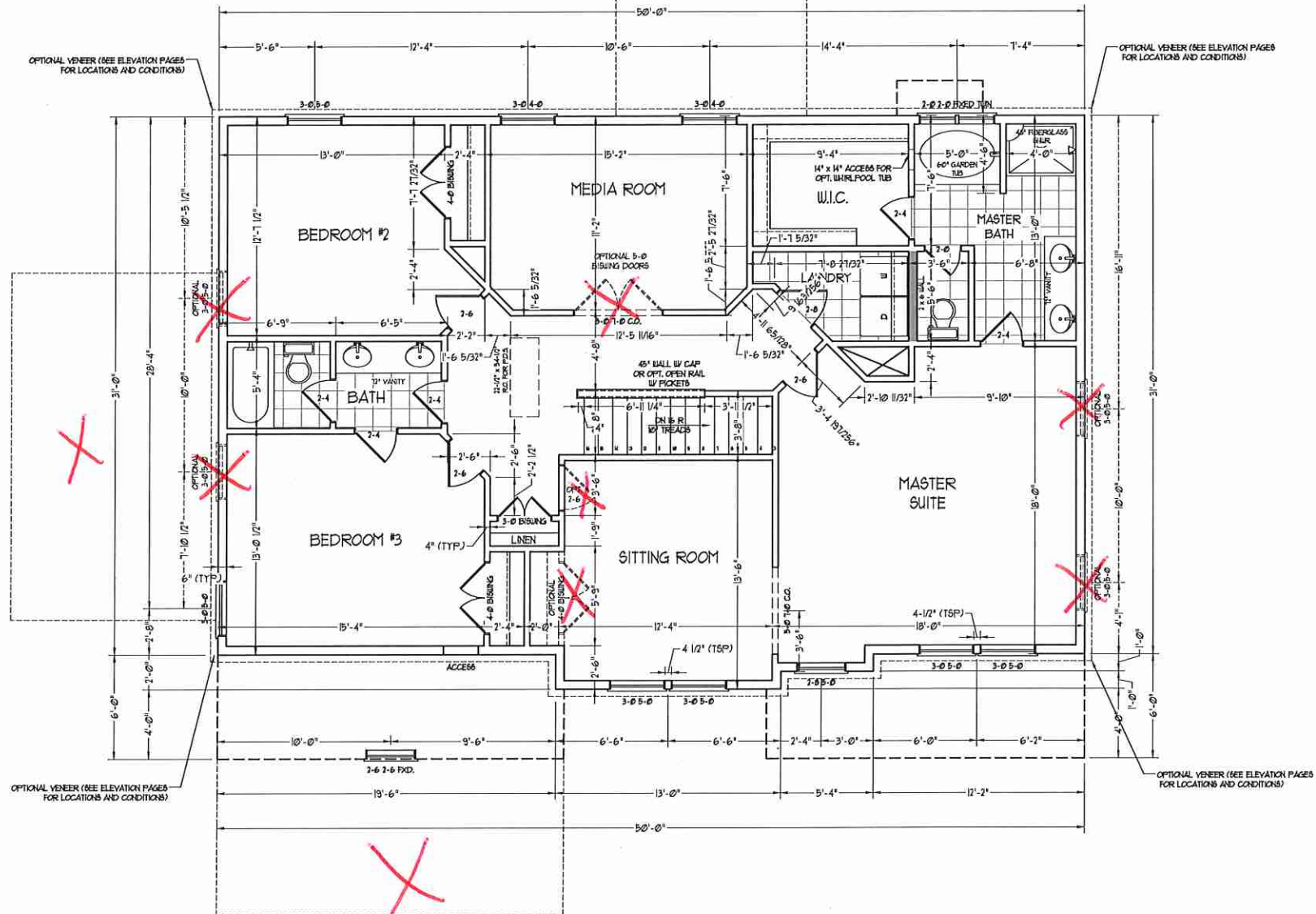
2x6 WALL  
SHADED WALLS ARE TO BE 2 x 6 @ 16" O.C. (LOAD BEARING) OR 2 x 4 @ 24" O.C. (NON-LOAD BEARING) REGARDLESS OF EXTERIOR WALL CONDITION



9F STAIRS W/ BASEMENT OPTION

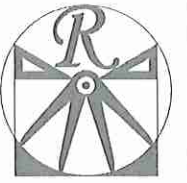


BEDROOM #5 OPTION (WITH OPTIONAL BASEMENT)



OPTIONAL VENEER (SEE ELEVATION PAGES FOR LOCATIONS AND CONDITIONS)

OPTIONAL VENEER (SEE ELEVATION PAGES FOR LOCATIONS AND CONDITIONS)



**RENAISSANCE**

RESIDENTIAL DESIGN, INC.  
4810 GLENNIST CT. | RALEIGH, NC 27612

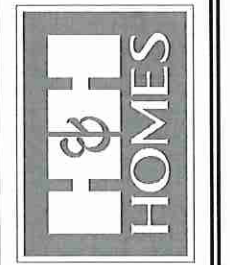
(919) 649-4128  
WWW.RIDCAROLINA.COM

"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. FOR 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, 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.**  
105 WARE AVE., SUITE 104  
RALEIGH, NC 27605  
PHONE: (919) 788-9919  
FAX: (919) 788-9921  
N.C. LICENSE NO.: C-14733



THESE PRODUCTIONS, INCLUDING, BUT NOT LIMITED TO, FLOOR PLANS, ELEVATIONS, DESIGN MATERIALS AND DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SQUARE FOOTAGE AND DIMENSIONS WILL BE DETERMINED BY THE SITE PLAN AND LOT PLAN. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FLOOR PLANS AND ELEVATION RENDERINGS ARE ARTIST CONCEPTIONS. FLOOR PLANS ARE THE COPYRIGHTED PROPERTY OF RENAISSANCE RESIDENTIAL DESIGN, INC. AND ARE NOT TO BE REPRODUCED, CHANGED, COPIED, ADAPTED, OR DISPLAYED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF RENAISSANCE RESIDENTIAL DESIGN, INC. FOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY WITHOUT FIRST OBTAINING SAID WRITTEN PERMISSION AND CONSENT. CURRENT DETAILS. COPYRIGHT © 2018 H&H HOMES

H&H HOMES, INC.  
WILMINGTON DRIVE LEFT

DATE: FEBRUARY 12, 2018  
REV.:  
SCALE: 1/4" = 1'-0"  
DRAWN BY: WG  
ENGINEERED BY: WLF  
REVIEWED BY: JES

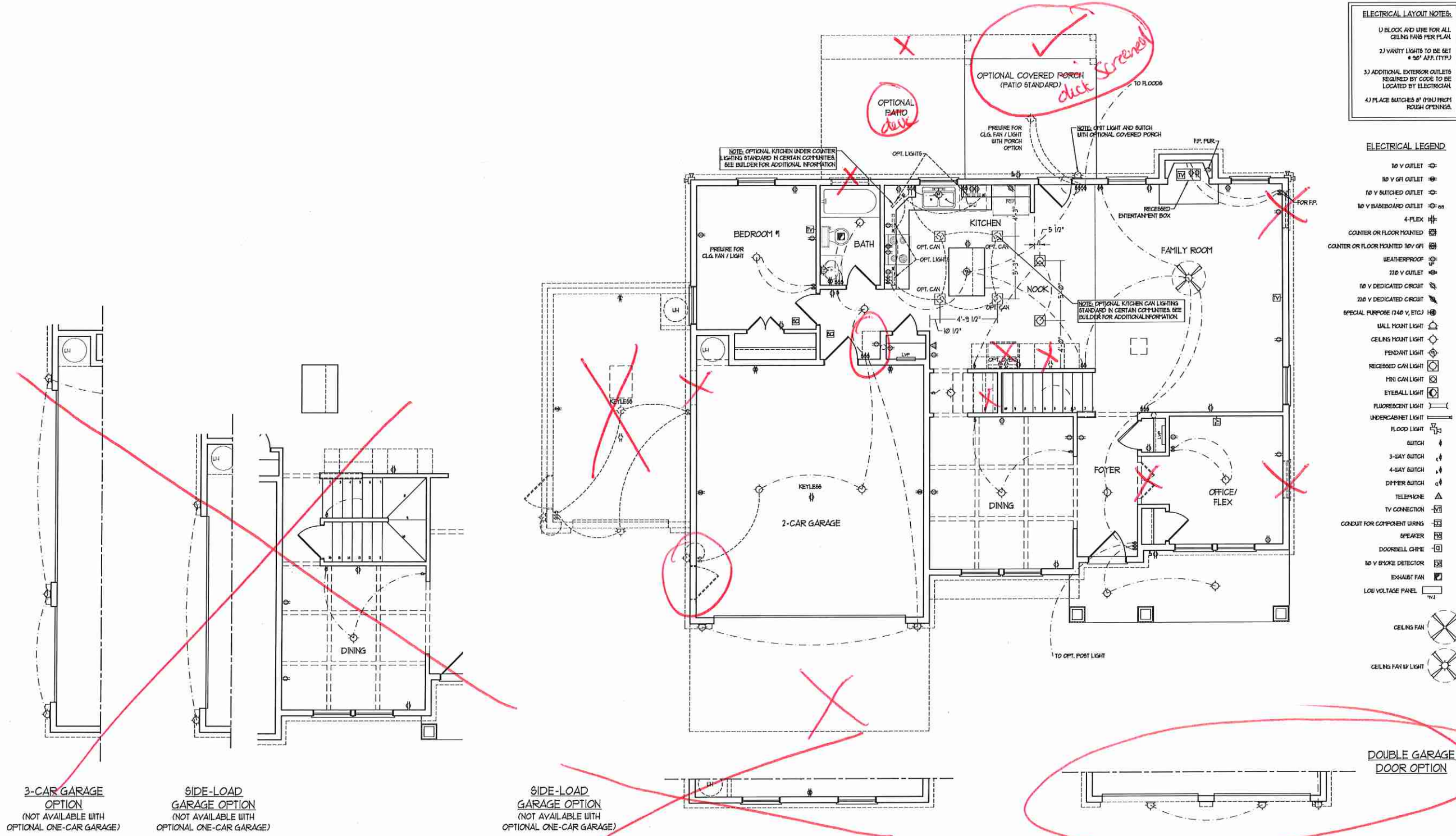
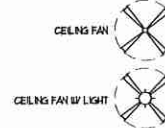
FIRST FLOOR  
ELECTRICAL  
PLAN

E-1

**ELECTRICAL LAYOUT NOTES:**  
1) BLOCK AND WIRE FOR ALL CEILING FANS PER PLAN.  
2) VANTY LIGHTS TO BE SET 4" 90° AFF. (TYP.)  
3) ADDITIONAL EXTERIOR OUTLETS REQUIRED BY CODE TO BE LOCATED BY ELECTRICIAN.  
4) PLACE SWITCHES 8" FROM ROUGH OPENINGS.

**ELECTRICAL LEGEND**

- 120 V OUTLET
- 120 V GFI OUTLET
- 120 V SWITCHED OUTLET
- 120 V BASEBOARD OUTLET
- 4-FLX
- COUNTER OR FLOOR MOUNTED
- COUNTER OR FLOOR MOUNTED 120V GFI
- WEATHERPROOF
- 220 V OUTLET
- 120 V DEDICATED CIRCUIT
- 220 V DEDICATED CIRCUIT
- SPECIAL PURPOSE (240 V, ETC.)
- WALL MOUNT LIGHT
- CEILING MOUNT LIGHT
- PENDANT LIGHT
- RECESSED CAN LIGHT
- 120 CAN LIGHT
- EYEBALL LIGHT
- FLUORESCENT LIGHT
- UNDERCABINET LIGHT
- FLOOD LIGHT
- SWITCH
- 3-WAY SWITCH
- 4-WAY SWITCH
- DIPPER SWITCH
- TELEPHONE
- TV CONNECTION
- CONDUIT FOR COMPONENT WIRING
- SPEAKER
- DOORBELL CHIME
- 120 V SMOKE DETECTOR
- EXHAUST FAN
- LOW VOLTAGE PANEL

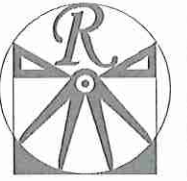


**3-CAR GARAGE OPTION**  
(NOT AVAILABLE WITH OPTIONAL ONE-CAR GARAGE)

**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**



RENAISSANCE  
RESIDENTIAL DESIGN, INC.

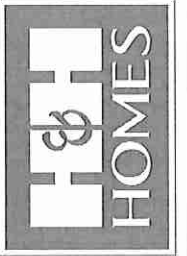
4810 GLENNIST CT. | RALEIGH, NC 27612  
(919) 649-4128  
WWW.RIDCAROLINA.COM

"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, COPIED, OR COPIED FROM FOR ANY PURPOSE 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.

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 FROM FOR ANY PURPOSE 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.**  
655 WARE AVE., SUITE 104  
RALEIGH, NC 27605  
PHONE: (919) 759-9919  
FAX: (919) 759-9911  
N.C. LICENSE NO. C-1733



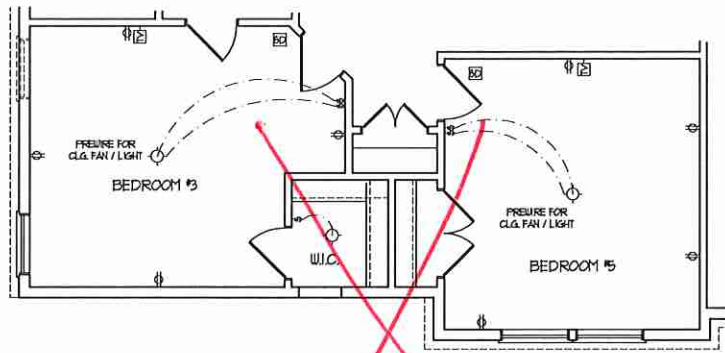
PLEASE NOTE: INCENTIVES, FEATURES, OPTIONS, FLOOR PLANS, ELEVATIONS, DESIGNS, MATERIALS AND DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SQUARE FOOTAGE AND DIMENSIONS CONSTRUCTION, ACTUAL POSITION OF HOUSE OR LOT WILL BE DETERMINED BY THE SITE PLAN AND LOT PLAN. FLOOR PLANS AND ELEVATION RENDERINGS ARE ARTIST CONCEPTIONS. FLOOR PLANS ARE THE COPYRIGHTED PROPERTY OF RENAISSANCE RESIDENTIAL DESIGN, INC. ADAPTATION, OR DISPLAY OF THE PLANS IS STRICTLY PROHIBITED. SEE NEW HOME SALES CONSULTANT FOR CURRENT DETAILS. COPYRIGHT © 2018 H&H HOMES

H&H HOMES, INC.  
WILMINGTON DRIVE LEFT

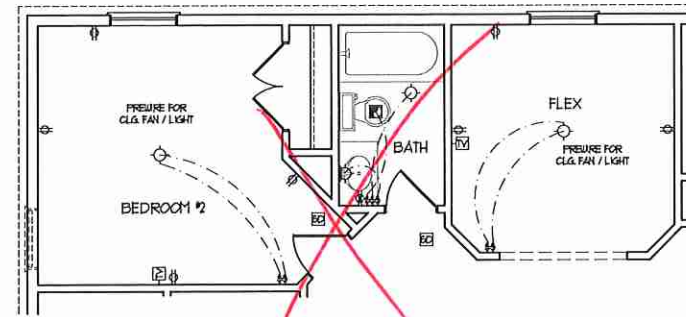
DATE: FEBRUARY 12, 2018  
REV.:  
SCALE: 1/4" = 1'-0"  
DRAWN BY: WG  
ENGINEERED BY: WLF  
REVIEWED BY: JES

SECOND FLOOR  
ELECTRICAL  
PLAN

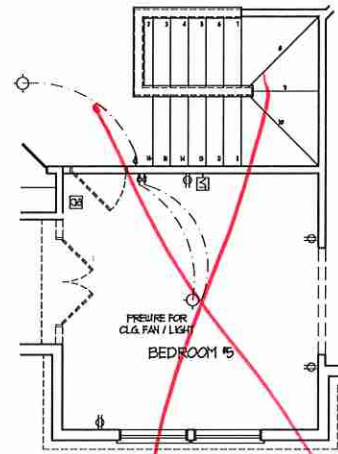
E-2



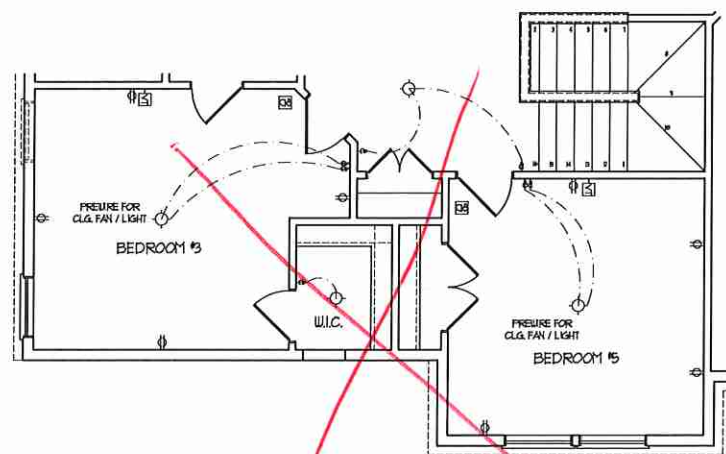
BEDROOM #5 OPTION



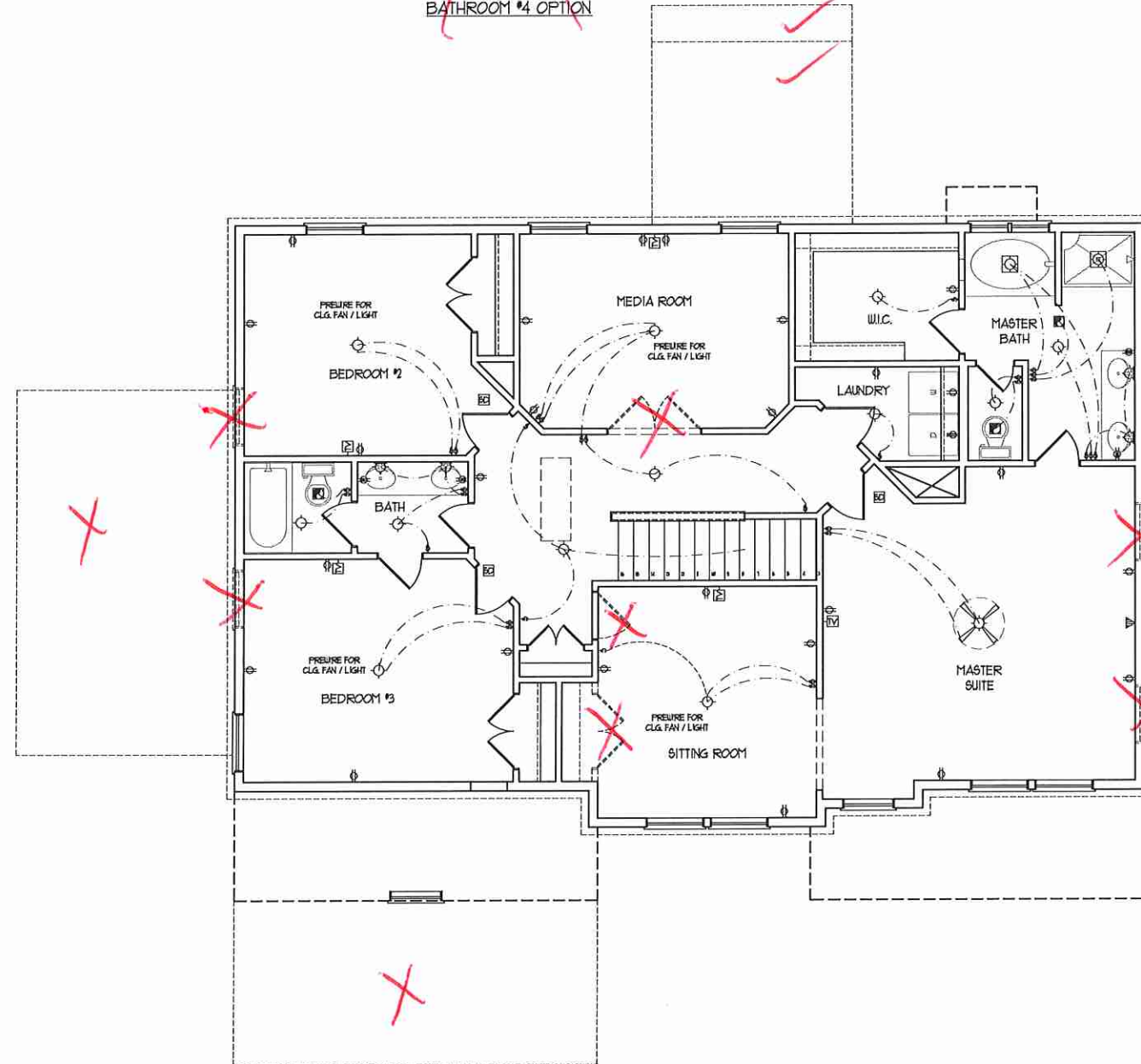
BATHROOM #4 OPTION



STAIRS  
W/ BASEMENT OPTION

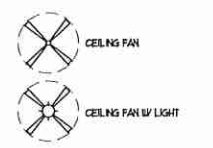


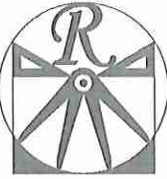
BEDROOM #5 OPTION  
(WITH OPTIONAL BASEMENT)



- ELECTRICAL LAYOUT NOTES:**
- 1) BLOCK AND WIRE FOR ALL CEILING FANS PER PLAN
  - 2) VANITY LIGHTS TO BE SET # 30" AFF. (TYP)
  - 3) ADDITIONAL EXTERIOR OUTLETS REQUIRED BY CODE TO BE LOCATED BY ELECTRICIAN
  - 4) PLACE SWITCHES 6" MIN FROM ROUGH OPENING

- ELECTRICAL LEGEND**
- ⊖ NO V OUTLET
  - ⊖ V GFI OUTLET
  - ⊖ V SWITCHED OUTLET
  - ⊖ V BASEBOARD OUTLET
  - 4-FLEX
  - COUNTER OR FLOOR MOUNTED
  - COUNTER OR FLOOR MOUNTED ROV GFI
  - LEATHERPROOF
  - 220 V OUTLET
  - NO V DEDICATED CIRCUIT
  - 220 V DEDICATED CIRCUIT
  - SPECIAL PURPOSE (140 V, ETC.)
  - WALL MOUNT LIGHT
  - CEILING MOUNT LIGHT
  - FREEDOM LIGHT
  - RECESSED CAN LIGHT
  - 120 CAN LIGHT
  - EYEBALL LIGHT
  - FLUORESCENT LIGHT
  - UNDERCABINET LIGHT
  - FLOOD LIGHT
  - SWITCH
  - 3-WAY SWITCH
  - 4-WAY SWITCH
  - DIPPER SWITCH
  - TELEPHONE
  - TV CONNECTION
  - CONDUIT FOR COMPONENT WIRING
  - SPEAKER
  - DOORBELL CHIME
  - NO V SMOKE DETECTOR
  - EXHAUST FAN
  - LOW VOLTAGE PANEL

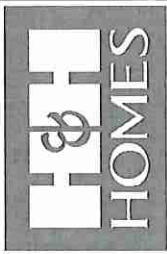




**RENAISSANCE**  
RESIDENTIAL DESIGN, INC.  
4810 GLENMIST CT. | RALEIGH, NC 27612  
(919) 849-4128  
WWW.RIDCAROLINA.COM

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 BY ANY MEANS 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.  
(50 VALE AVE., SUITE 101  
RALEIGH, NC 27605  
PHONE (919) 788-9919  
FAX (919) 788-9921  
N.C. LICENSE NO. C-1733



PRELIMINARY. THESE PLANS, ELEVATIONS, DESIGNS, MATERIALS AND DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SQUARE FOOTAGE AND DIMENSIONS SHALL BE DETERMINED BY THE ACTUAL POSITION OF HOUSE ON LOT. CONSTRUCTION OF HOUSE MUST ACCORD TO THE FLOOR PLAN AND ELEVATION DIMENSIONS AND NOT TO THE ADAPTATION, OR DISPLAY OF THESE PLANS IN STRICTLY PROHIBITED. SEE NEW HOME SALES CONSULTANT FOR CURRENT DETAILS. COPYRIGHT © 2018 H&H HOMES

**H&H HOMES, INC.**  
WILMINGTON DRIVE LEFT

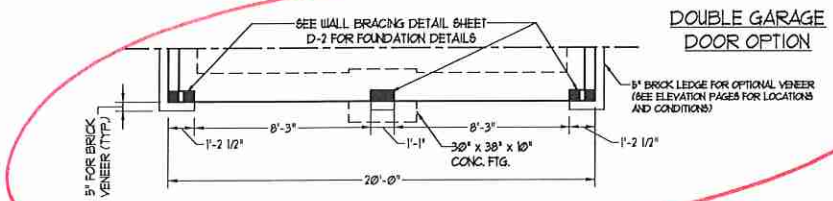
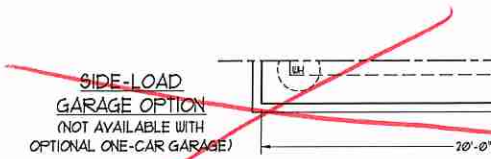
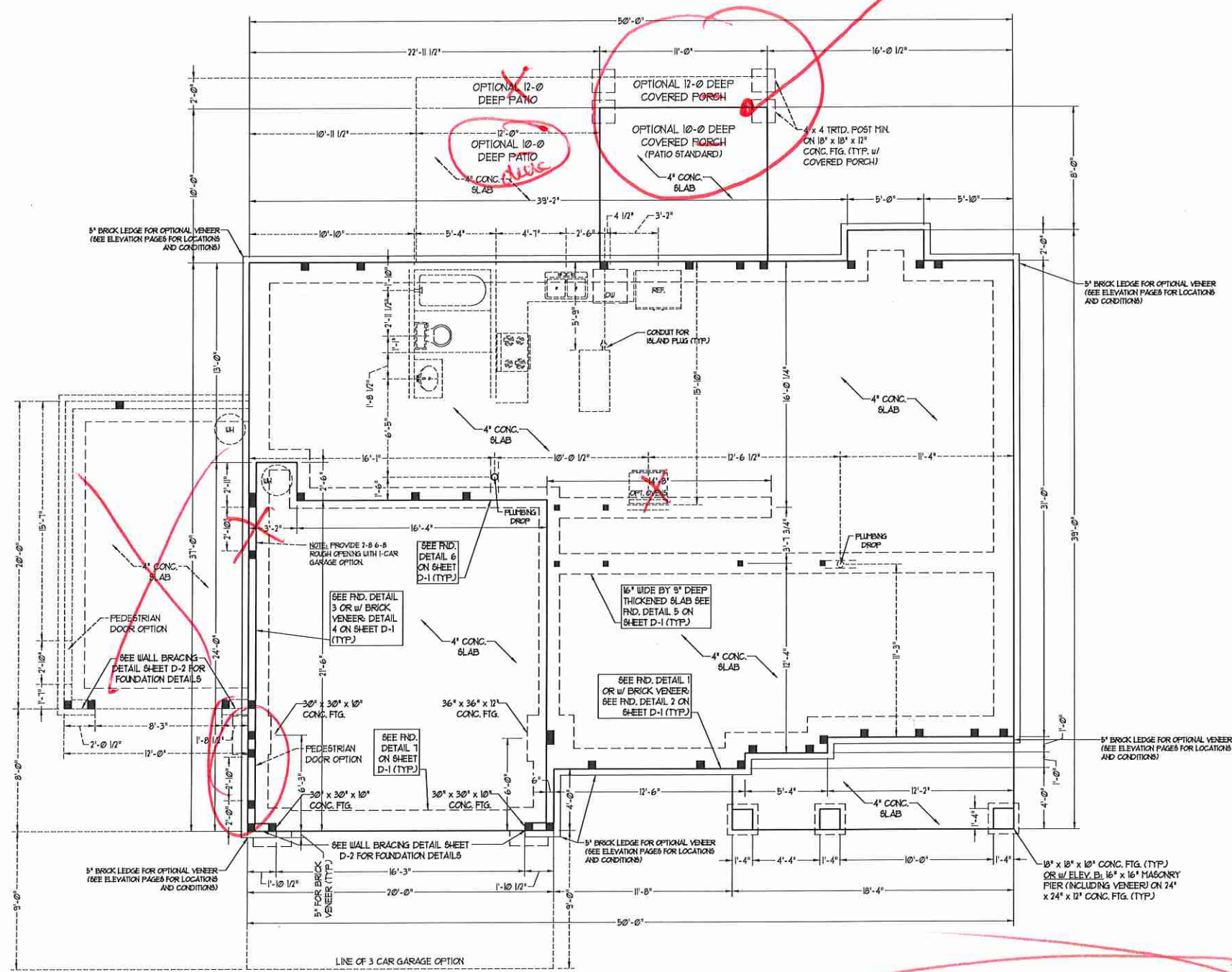
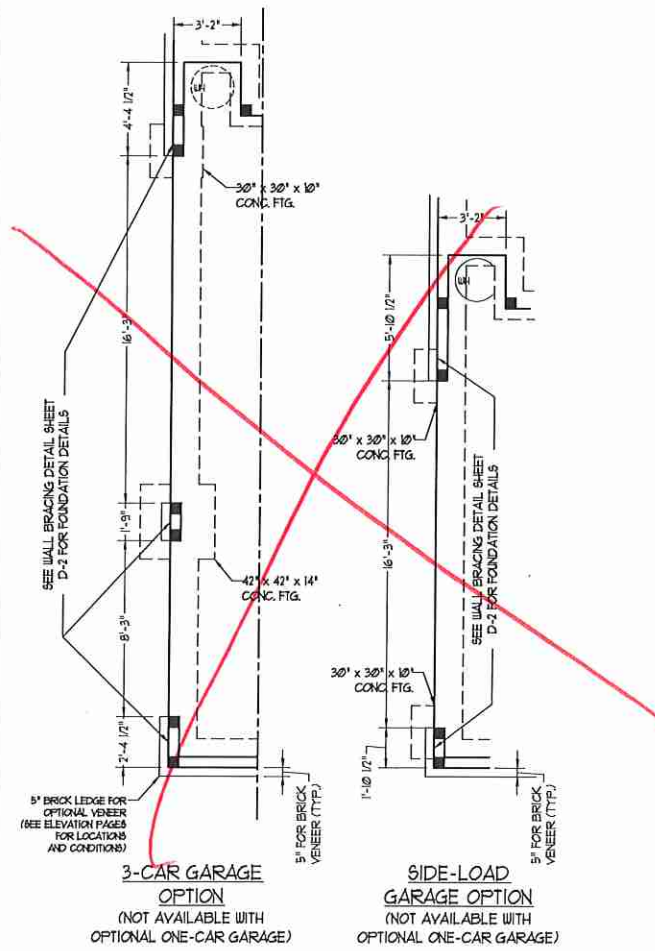
**120 MPH ULTIMATE DESIGN WIND SPEED NOTES FOR LESS THAN 30' MEAN ROOF HEIGHT:**

- ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT INCLUDING ROOF SYSTEMS.
- STRUCTURAL DESIGN PER NORTH CAROLINA RESIDENTIAL CODE, 2008 EDITION.
- INSTALL 1/2" ANCHOR BOLTS 6'-0" O.C. AND WITHIN 1'-0" FROM END OF EACH CORNER. ANCHOR BOLTS MUST EXTEND A MINIMUM OF 1' INTO MASONRY OR CONCRETE. LOCATE BOLT WITHIN MIDDLE THIRD OF PLATE WIDTH.
- MEAN ROOF HEIGHT IS LESS THAN 30 FEET.
- EXTERIOR WALLS DESIGNED FOR 10 PSF WINDS.
- WALL CLADDING DESIGNED FOR 40 PSF AND -20 PSF (-). INDICATE POSITIVE / NEGATIVE PRESSURE (TYP).
- ROOF CLADDING DESIGNED FOR 40 PSF AND -18 PSF FOR ROOF PITCHES 1/2 TO 1/2 AND -40 PSF AND -36 PSF FOR ROOF PITCHES 2/3 TO 1/2.
- INSTALL 1/2" OGS SHEATHING ON ALL EXTERIOR WALLS OF ALL STORES IN ACCORDANCE WITH SECTION R602.3 OF THE NRC, 2008 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 1 OF THE NRC, 2008 EDITION.
- REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

PROVIDE TERMITE TREATMENT PER SECTION R303 OF THE 2008 NRC

**150 MPH ULTIMATE DESIGN WIND SPEED 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 SYSTEMS.
- STRUCTURAL DESIGN PER NORTH CAROLINA RESIDENTIAL CODE, 2008 EDITION WITH SPECIAL CONSIDERATION TO CHAPTER 15 ("HIGH WIND ZONES") FOR 150 MPH WINDS.
- BUILDER IS TO PROVIDE FRAMING CONNECTIONS AS REQUIRED BY CHAPTER 15.4.4 OF THE NORTH CAROLINA RESIDENTIAL CODE, 2008 EDITION.
- MEAN ROOF HEIGHT IS LESS THAN 30 FEET.
- WALL CLADDING DESIGNED FOR 40 PSF AND -30 PSF (-). INDICATE POSITIVE / NEGATIVE PRESSURE (TYP).
- ROOF CLADDING DESIGNED FOR 40 PSF AND -28 PSF FOR ROOF PITCHES 1/2 TO 1/2 AND -51 PSF FOR ROOF PITCHES 2/3 TO 1/2.
- 1/2" OGS SHEATHING IS REQUIRED ON ALL EXTERIOR WALLS.
- WALLS TO BE BRACED IN ACCORDANCE WITH SECTION R602.3 OF THE NORTH CAROLINA RESIDENTIAL CODE, 2008 EDITION AND AS NOTED ON PLANS.
- ENERGY EFFICIENCY COMPLIANCE AND INSULATION VALUES OF THE BUILDING TO BE IN ACCORDANCE WITH CHAPTER 1 OF THE NRC, 2008 EDITION.

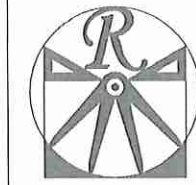


DATE: FEBRUARY 12, 2018  
REV.:  
SCALE: 1/4" = 1'-0"  
DRAWN BY: WG  
ENGINEERED BY: WLF  
REVIEWED BY: JES

MONO SLAB FOUNDATION PLAN

**S-1**





**RENAISSANCE**  
RESIDENTIAL DESIGN, INC.  
4810 GLENNVIEW CT., J. RALEIGH, NC 27612  
(919) 649-4128  
WWW.RENDESIGN.COM

"The art of transforming your vision into reality."  
RENAISSANCE RESIDENTIAL DESIGN, INC. RESERVES THE RIGHT TO MAKE MODIFICATIONS TO FLOOR PLANS, SPECIFICATIONS, 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. IF YOU ARE TRYING TO BE ASSURED THAT THESE PARTS WERE FIRST OBTAINED SAID WRITTEN PERMISSION AND CONSENT.

**J.S. THOMPSON**  
ENGINEERING, INC.  
100 W. WARE AVE., SUITE 104  
RALEIGH, NC 27605  
PHONE: (919) 782-9919  
FAX: (919) 782-9917  
N.C. LICENSE NO. C-1133



PRICE PRODUCTIONS INCENTIVES FEATURE. OPTIONS FLOOR PLANS, ELEVATIONS, FINISHES, MATERIALS AND DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SQUARE FOOTAGE AND DIMENSIONS ARE ESTIMATED AND MAY VARY SLIGHTLY. FLOOR PLANS AND ELEVATION RENDERINGS ARE ARTIST CONCEPTIONS. FLOOR PLANS ARE THE COPYRIGHTED PROPERTY OF H&H HOMES. ALL RIGHTS RESERVED. ADAPTATION, REPRODUCTION OR SALE OF THESE PLANS STRICTLY PROHIBITED. SEE KEY H&H SALES CONSULTANT FOR CURRENT DETAILS. COPYRIGHT © 2018 H&H HOMES

H&H HOMES, INC.  
WILMINGTON DRIVE LEFT

DATE: FEBRUARY 12, 2018  
REV.:  
SCALE: 1/4"=1'-0"  
DRAWN BY: WG  
ENGINEERED BY: WLF  
REVIEWED BY: JES

SECOND FLOOR FRAMING PLAN

S-2

**STRUCTURAL NOTES:**

- ALL FRAMING LUMBER TO BE OFF 2 (UNO). ALL TREATED LUMBER TO BE 6TP 2 (UNO).
- ALL LOAD BEARING HEADERS TO BE (2) 2 x 6 (UNO).
- WINDOW AND DOOR HEADERS TO BE SUPPORTED w/ (1) JACK STUD AND (1) KING STUD EA END (UNO). SEE TABLE R6-02.15 FOR ADDITIONAL KING STUD REQUIREMENTS.
- SQUARES DENOTE POINT LOADS WHICH REQUIRE SOLID BLOCKING TO GIRDER OR FOUNDATION. ALL SQUARES TO BE (2) STUDS (UNO).
- FOR HIGH WIND ZONES, ALL EXTERIOR WALLS TO BE SHEATHED WITH 1/2" OSB SHEATHING WITH JOINTS 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.
- ALL 4 x 4 POSTS SHALL BE ANCHORED TO SLABS w/ 8" SPM CONCRETE 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 ENG. 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.

**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

**BRICK SUPPORT NOTES:**

- LINTEL SCHEDULE APPLIES TO ALL OPENINGS IN BRICK VENEER (UNO). SEE ARCH DWGS. 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"-8" 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 (2) 2 x 10 BLOCKING BETWEEN STUDS w/ (4) 10d NAILS PER PLY. FASTEN A 6" x 4" x 5/16" STEEL ANGLE TO (2) 2 x 10 BLOCKING w/ (2) 1/2" LAG SCREWS @ 12" O.C. STAGGERED. SEE SECTION R103.821 OF THE 2018 NCRC FOR ADDITIONAL BRICK SUPPORT INFORMATION.
- PRECAST REINFORCED CONCRETE LINTELS ENGINEERED BY OTHERS MAY BE USED IN LIEU OF STEEL LINTELS.

**TABLE R6-02.15  
MINIMUM NUMBER OF FULL HEIGHT STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS**

HEADER SPAN (FEET)	MAXIMUM STUD SPACING (INCHES) (PER TABLE R6-02.15)	16	24
UP TO 3'		1	1
4'		2	1
5'		3	2
6'		5	3
10'		6	4

**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).**

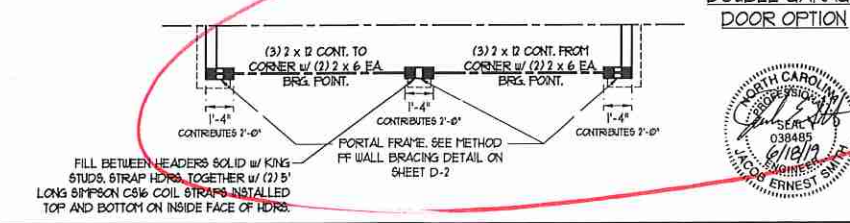
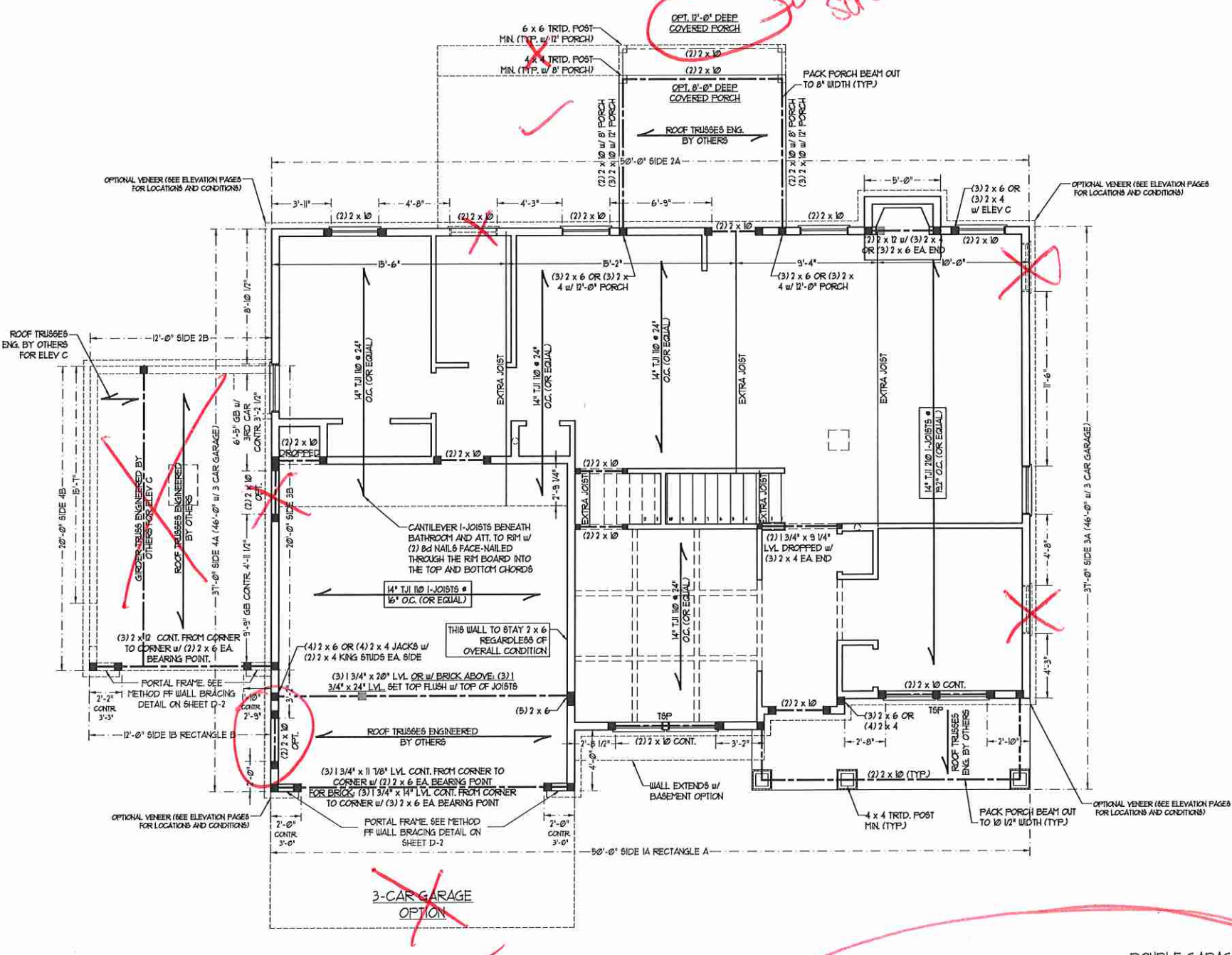
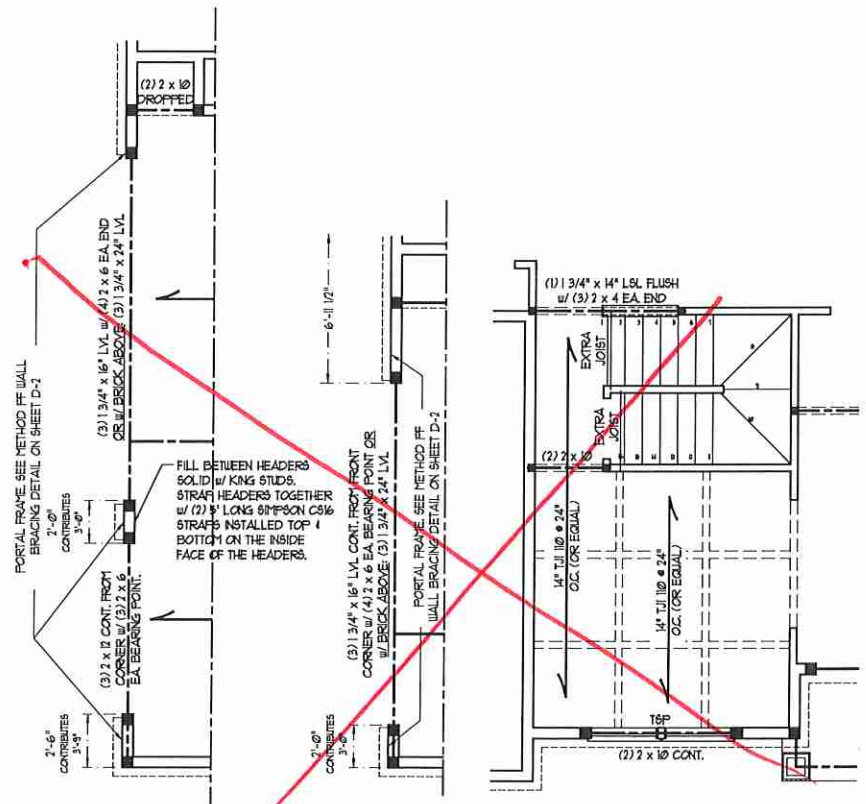
**BRACED WALL DESIGN**

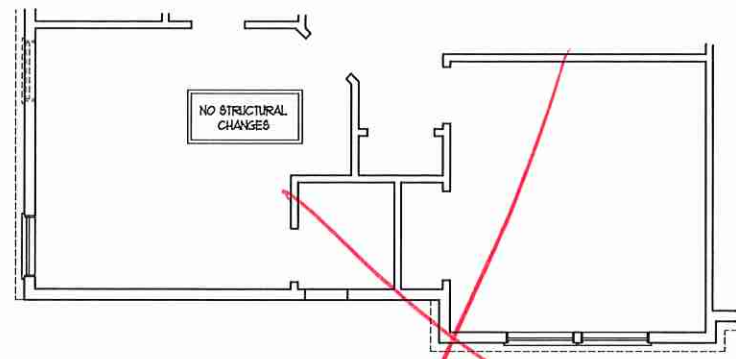
**RECTANGLE A**  
SIDE 1A (FRONT LOAD)  
METHOD: CS-U5P/FF  
TOTAL REQUIRED LENGTH: 112'  
TOTAL PROVIDED LENGTH: 1135'

**RECTANGLE B**  
SIDE 1B  
METHOD: FF/C5-U5P  
TOTAL REQUIRED LENGTH: 456'  
TOTAL PROVIDED LENGTH: 6'

**BRACED WALL DESIGN NOTES:**

- BRACED WALL DESIGN PER SECTION R6-01.01 OF THE NCRC 2018 EDITION.
- CS-U5P REFERS TO "CONTINUOUS SHEATHING - WOOD STRUCTURAL PANELS" CONTRACTOR IS TO INSTALL 1/2" 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 BOARD WHERE NOTED ON THE PLANS. FASTEN GB WITH 1 1/4" SCREWS OR 1 5/8" NAILS SPACED 12" O.C. ALONG PANEL EDGES AND IN THE FIELD INCLUDING TOP AND BOTTOM PLATES.
- BRACED WALL DESIGN APPLIED IN WIND ZONES UP TO 150 MPH. FOR HIGH WIND ZONES, BRACE WALLS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 45 OF THE NCRC 2018 EDITION. SEE NOTES AND DETAIL SHEETS FOR ADDITIONAL BRACED WALL INFORMATION.

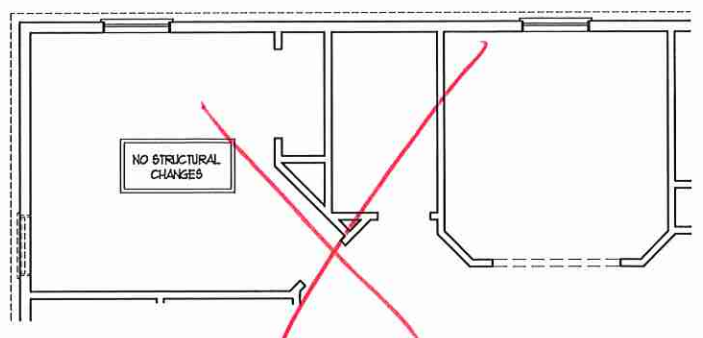




**TABLE R602.15**  
MINIMUM NUMBER OF FULL HEIGHT STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS

HEADER SPAN (FEET)	MAXIMUM STUD SPACING (INCHES) (PER TABLE R602.15)	16	24
UP TO 3'	1	1	
4'	2	1	
6'	3	2	
8'	5	3	
16'	6	4	

BEDROOM #5 OPTION



BATHROOM #4 OPTION

**BRACED WALL DESIGN NOTES:**

- BRACED WALL DESIGN PER SECTION R602.10 OF THE NRCR 2018 EDITION.
- CS-USP REFERS TO 'CONTINUOUS SHEATHING - WOOD STRUCTURAL PANELS' CONTRACTOR IS TO INSTALL 1/8" 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 12" O.C. ALONG PANEL EDGES AND IN THE FIELD INCLUDING TOP AND BOTTOM PLATES.
- BRACED WALL DESIGN APPLIED IN WIND ZONES UP TO 130 MPH. FOR HIGH WIND ZONES, BRACE WALLS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 45 OF THE NRCR 2018 EDITION.
- SEE NOTES AND DETAIL SHEETS FOR ADDITIONAL BRACED WALL INFORMATION.

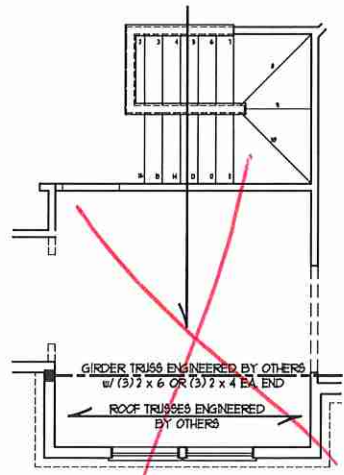
**NOTE:**

- PER SECTION R602.10.3.2 OF THE 2018 NRCR, THE AMOUNT OF BRACING ON THE SECOND FLOOR EXCEEDS THE AMOUNT REQUIRED FOR THE FIRST FLOOR AND NO BRACING ANALYSIS IS REQUIRED.
- SHEATH ALL EXTERIOR WALLS WITH 1/8" OSB SHEATHING ATTACHED WITH 8d NAILS AT 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN THE FIELD.

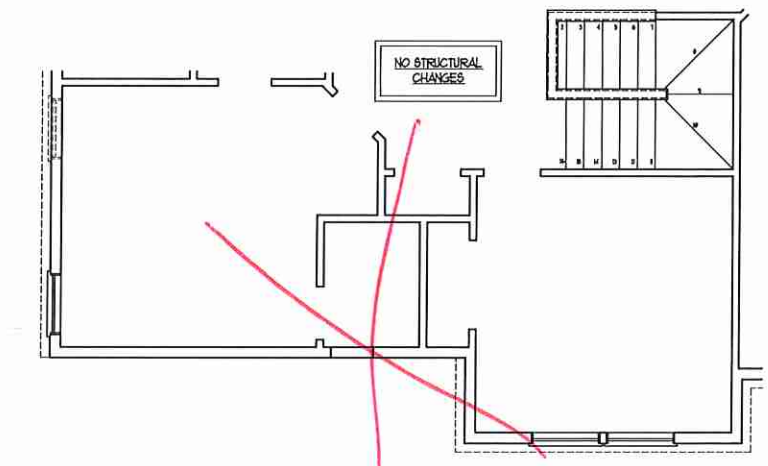
**STRUCTURAL NOTES:**

- ALL FRAMING LUMBER TO BE SYP #1 (UNO). ALL TREATED LUMBER TO BE SYP #1 (UNO).
- ALL LOAD BEARING HEADERS TO BE (2) 2 x 6 (UNO).
- WINDOW AND DOOR HEADERS TO BE SUPPORTED w/ (1) JACK STUD AND (1) KING STUD EA. END (UNO). SEE TABLE R602.15 FOR ADDITIONAL KING STUD REQUIREMENTS.
- SQUARES DENOTE POINT LOADS WHICH REQUIRE SOLID BLOCKING TO GIRDER OR FOUNDATION. ALL SQUARES TO BE (2) STUDS (UNO).
- FOR HIGH WIND ZONES, ALL EXTERIOR WALLS TO BE SHEATHED WITH 1/8" OSB SHEATHING WITH JOINTS 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 1" BEYOND CONSTRUCTION JOINTS AND SHALL OVERLAP GIRDERS AND DOUBLE SILL PLATES THEIR FULL DEPTH. REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

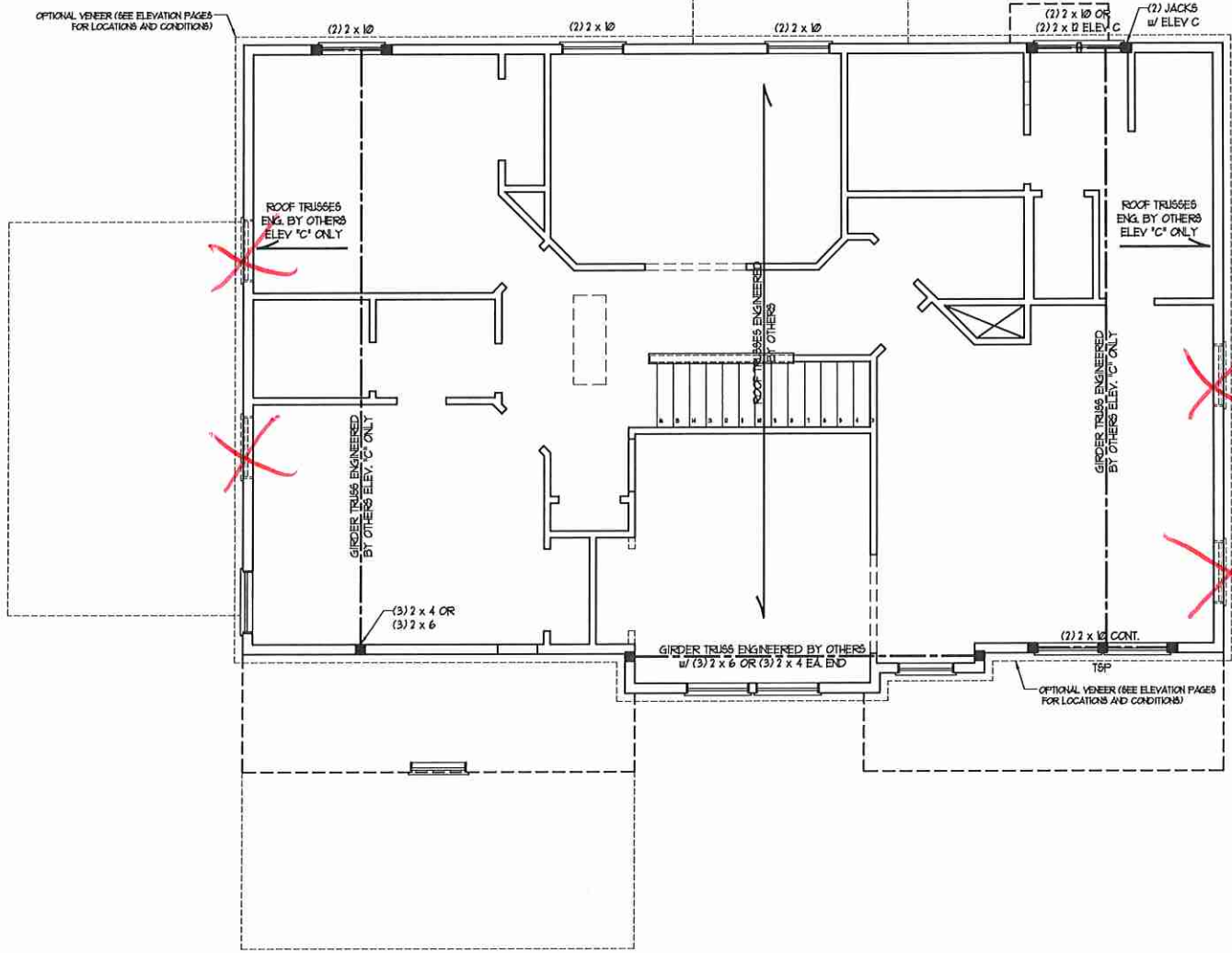
NOTE: T&P DENOTES TRIPLE STUD POCKET



9F STAIRS W/ BASEMENT OPTION



BEDROOM #5 OPTION (WITH OPTIONAL BASEMENT)



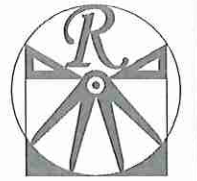
**LINTEL SCHEDULE FOR BRICK/NATURAL STONE SUPPORT**

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

**BRICK SUPPORT NOTES:**

- LINTEL SCHEDULE APPLIES TO ALL OPENINGS IN BRICK VENEER (UNO). SEE ARCH DWGS. 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"-8" 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 (2) 2 x 10 BLOCKING BETWEEN STUDS w/ (4) 8d NAILS PER PLY. FASTEN 4 6" x 4" x 5/16" STEEL ANGLE TO (2) 2 x 10 BLOCKING w/ (2) 1/2" LAG SCREWS @ 12" O.C. STAGGERED. SEE SECTION R103.8.2 OF THE 2018 NRCR FOR ADDITIONAL BRICK SUPPORT INFORMATION.
- PRECAST REINFORCED CONCRETE LINTELS ENGINEERED BY OTHERS MAY BE USED IN LIEU OF STEEL LINTELS.

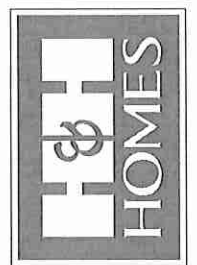
**NOTE: ALL EXTERIOR WALLS AND ATTIC WALLS ARE TO BE 2 x 6 @ 16" O.C. (UNO). 2 x 4 @ 16" O.C. EXTERIOR WALLS MAY BE CONSTRUCTED IN LIEU OF 2 x 6 WALLS (UNO). ALL INTERIOR LOAD BEARING WALLS ARE TO BE 2 x 4 @ 16" O.C. (UNO) AND NON-LOAD BEARING INTERIOR WALLS ARE TO BE 2 x 4 @ 24" O.C. (UNO).**



**RENAISSANCE**  
RESIDENTIAL DESIGN, INC.  
4810 GLENHIST CT. | RALEIGH, NC 27612  
(919) 649-4128  
WWW.RHDGARCHIT.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. NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY WITHOUT FIRST OBTAINING EXP. WRITTEN PERMISSION AND CONSENT.

**J.S. THOMPSON**  
ENGINEERING, INC.  
100 WARE AVE., SUITE 101  
RALEIGH, NC 27605  
PHONE: (919) 282-8919  
FAX: (919) 282-8921  
N.C. LICENSE NO. - C-1733



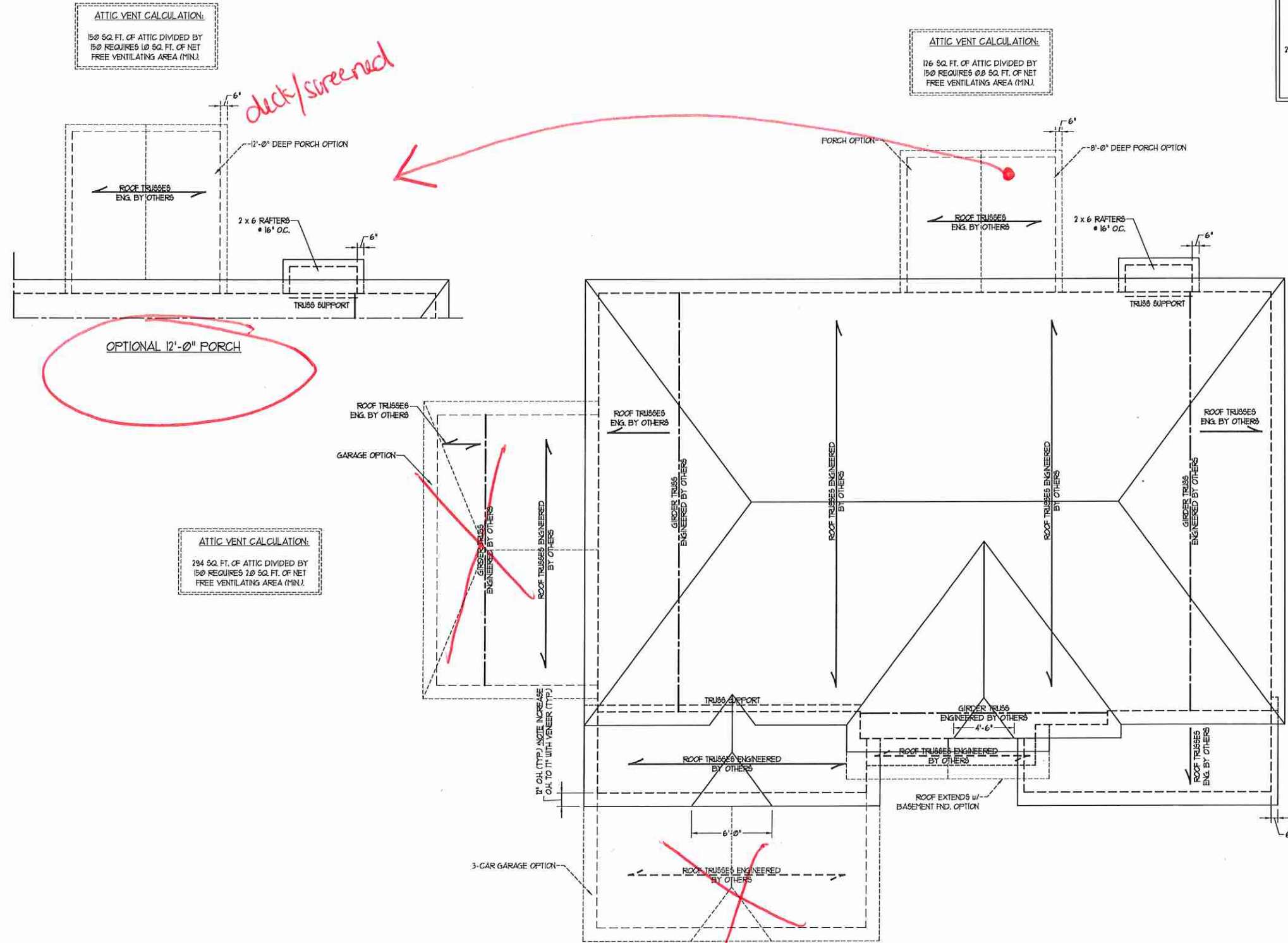
PRECISE PROMOTIONS INCENTIVES FEATURES OPTIONS FLOOR PLANS ELEVATIONS DESIGNS MATERIALS AND DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE SQUARE FOOTAGE AND DIMENSIONS WILL BE DETERMINED BY THE ACTUAL CONSTRUCTION. CONSTRUCTION ACTUAL POSITION OF HOUSE ON LOT FLOOR PLANS AND ELEVATION REQUIREMENTS ARE ARTIST CONCEPTS AND NOT TO BE USED FOR PERMITS OR ADAPTATION OR DISPLAY OF THE PLANS IS STRICTLY PROHIBITED. SEE NEW HOME SALES CONSULTANT FOR CURRENT DETAILS. COPYRIGHT © 2018 H&H HOMES

H&H HOMES, INC.  
WILMINGTON DRIVE LEFT

DATE: FEBRUARY 12, 2018  
REV.:  
SCALE: 1/4"=1'-0"  
DRAWN BY: WG  
ENGINEERED BY: WLF  
REVIEWED BY: JES



CEILING  
FRAMING PLAN  
S-3



**ATTIC VENT CALCULATION:**  
150 SQ. FT. OF ATTIC DIVIDED BY 150 REQUIRES 10 SQ. FT. OF NET FREE VENTILATING AREA (MIN.)

**ATTIC VENT CALCULATION:**  
116 SQ. FT. OF ATTIC DIVIDED BY 150 REQUIRES 0.8 SQ. FT. OF NET FREE VENTILATING AREA (MIN.)

**ATTIC VENT CALCULATION:**  
294 SQ. FT. OF ATTIC DIVIDED BY 150 REQUIRES 2.0 SQ. FT. OF NET FREE VENTILATING AREA (MIN.)

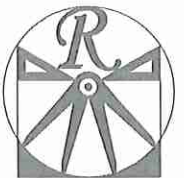
**ATTIC VENT CALCULATION:**  
194 SQ. FT. OF ATTIC DIVIDED BY 50 REQUIRES 13.3 SQ. FT. OF NET FREE VENTILATING AREA (MIN.)

**BRICK SUPPORT NOTE:**

1. FASTEN (2) 2 x 10 BLOCKING BETWEEN WALL STUDS w/ (4) 12d NAILS PER FLY. FASTEN A 6' x 4' x 5/16" STEEL ANGLE TO (2) 2 x 10 BLOCKING w/ (2) 1/2" LAG SCREWS # 8" O.C. STAGGERED. SEE SECTION R103.021 OF THE 2018 NRC FOR ADDITIONAL BRICK SUPPORT INFORMATION.
2. WHERE ROOF SLOPES EXCEED 1:10, INSTALL 3' x 3' x 1/4" STEEL PLATE STOPS AT 24" O.C. PER SECTION R103.021 OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION.

**STRUCTURAL NOTES:**

1. ALL FRAMING LUMBER TO BE #2 SFT (NO).
2. CIRCLES DENOTE (3) 2 x 4 POSTS FOR ROOF SUPPORT.
3. FRAME DORMER WALLS ON TOP OF DOUBLE OR TRIPLE RAFTERS.
4. HIP SPLICES ARE TO BE SPACED A MIN. OF 8'-0". FASTEN MEMBERS 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 H25A 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 SECTION R802.1 OF THE 2018 NRC FOR REQUIRED LEFT RESISTANCE AT RAFTERS AND TRUSSES.
8. REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.



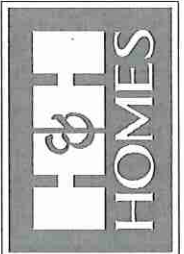
**RENAISSANCE**  
RESIDENTIAL DESIGN, INC.

4810 GLENMIST CT. | RALEIGH, NC 27612  
(919) 649-4128  
WWW.RIDCAROLINA.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. NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY WITHOUT FIRST OBTAINING SAID WRITTEN PERMISSION AND CONSENT.

**J.S. THOMPSON**  
ENGINEERING, INC.  
600 WADE AVE., SUITE 101  
RALEIGH, NC 27605  
TEL: (919) 788-9919  
FAX: (919) 788-9921  
N.C. LICENSE NO.: C-1733



PRICES, PROMOTIONS, INCENTIVES, FEATURES, OPTIONS, FLOOR PLANS, ELEVATIONS, DESIGNS, MATERIALS AND DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SQUARE FOOTAGE AND DIMENSIONS CONSTRUCTION. ACTUAL POSITION OF HOUSE ON LOT WILL BE DETERMINED BY THE SITE PLAN AND LOT PLAN. FLOOR PLANS AND ELEVATION RENDERINGS ARE ARTIST PROPERTY OF H&H HOMES. ANY REPRODUCTION, ADAPTATION, OR DISPLAY OF THE PLANS IS STRICTLY PROHIBITED. SEE NEW HOME SALES CONSULTANT FOR CURRENT DETAILS. COPYRIGHT © 2018 H&H HOMES

H&H HOMES, INC.  
WILMINGTON DRIVE LEFT

DATE: FEBRUARY 12, 2018  
REV.:  
SCALE: 1/4" = 1'-0"  
DRAWN BY: WG  
ENGINEERED BY: WLF  
REVIEWED BY: JES

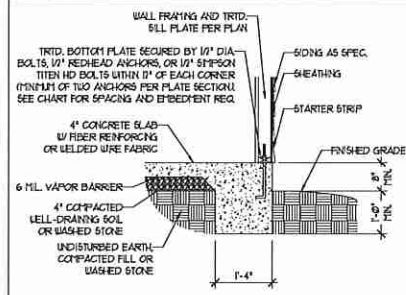
ROOF PLAN  
ELEVATION - C  
**S-4**



ELEVATION C

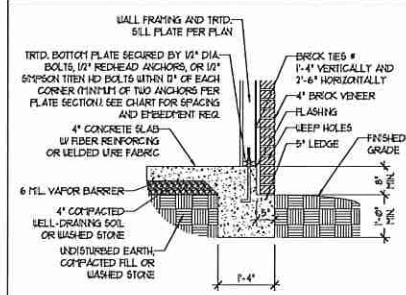
### MONOLITHIC SLAB DETAILS

DETAIL 1



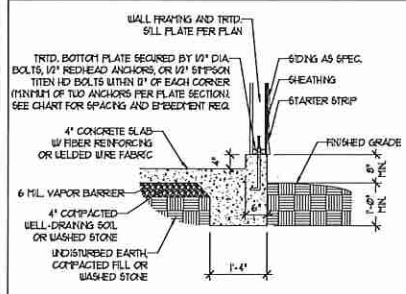
TYPICAL SLAB DETAIL

DETAIL 2



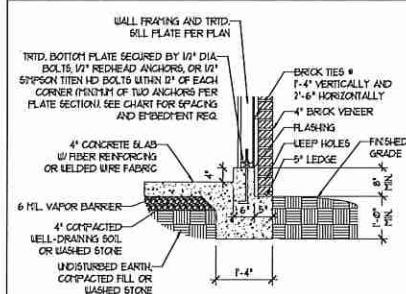
BRICK VENEER DETAIL

DETAIL 3



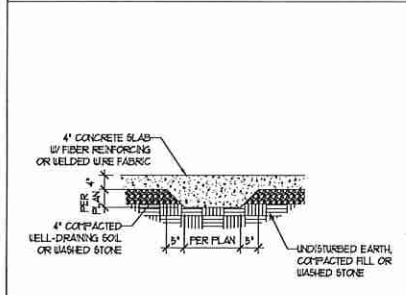
GARAGE CURB DETAIL

DETAIL 4



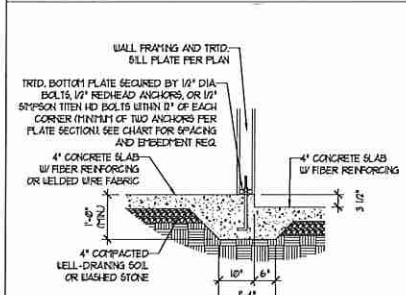
GARAGE CURB BRICK LEDGE DETAIL

DETAIL 5



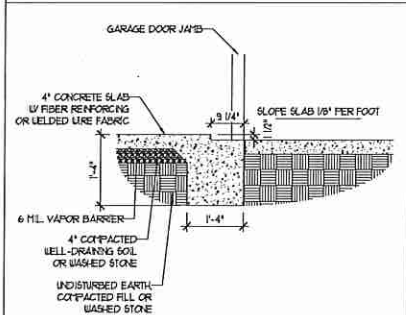
THICKENED SLAB DETAIL

DETAIL 6



STEP IN GARAGE DETAIL

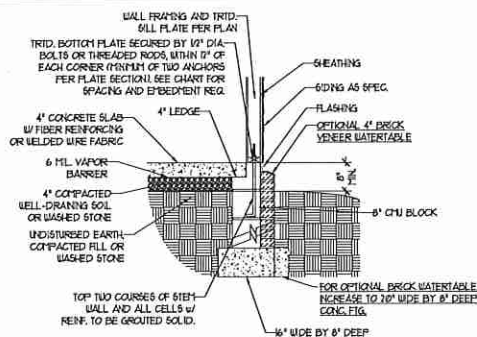
DETAIL 7



SLAB AT GARAGE DOOR DETAIL

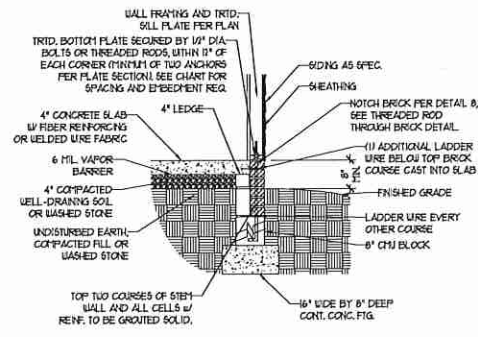
### STEMWALL DETAILS

DETAIL 1



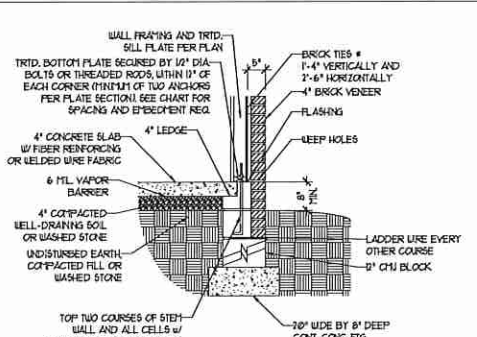
TYPICAL STEM WALL DETAIL  
(w/ OPTIONAL WATERTABLE)

OPTIONAL DETAIL 1



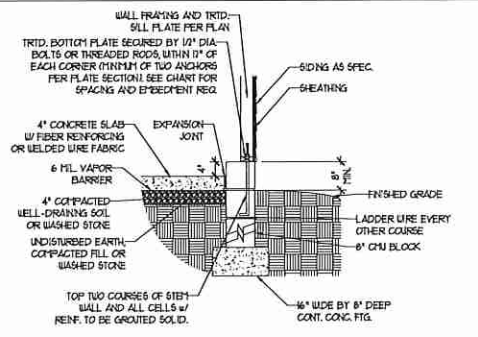
OPTIONAL STEM WALL DETAIL

DETAIL 2



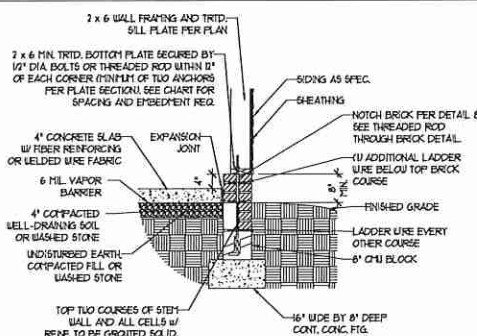
TYPICAL STEM WALL FND. w/ BRICK DETAIL

DETAIL 3



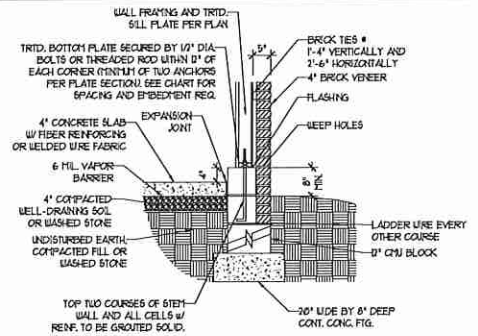
TYPICAL STEM WALL FND. DETAIL w/ CURB @ GARAGE

OPTIONAL DETAIL 3



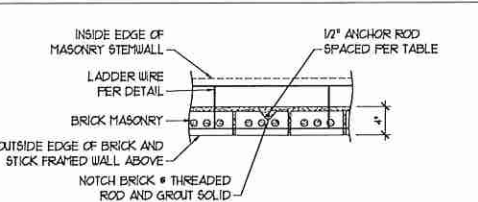
OPTIONAL STEM WALL FND. DETAIL w/ CURB @ GARAGE

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	UNGROUTED	GROUT SOLID	UNGROUTED	UNGROUTED
3	UNGROUTED	GROUT SOLID	UNGROUTED	UNGROUTED
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 PSF/FT BELOW GRADE) CLASSIFIED AS GROUP 1 ACCORDING TO UNIFIED SOILS CLASSIFICATION SYSTEM IN ACCORDANCE WITH TABLE 4.02.1 OF THE 2018 INTERNATIONAL RESIDENTIAL CODE ARE ALLOWABLE.
- PREP SLAB PER RS206.21 AND RS206.22 BASE OF THE 2018 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.	4'-0" O.C.
EMBEDMENT	1'	15" INTO MASONRY 1' INTO CONCRETE

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

120 MPH - 130 MPH ULTIMATE DESIGN WIND SPEED  
FOUNDATION DETAILS

DATE: NOVEMBER 14, 2018

SCALE: NTS

DRAWN BY: JST

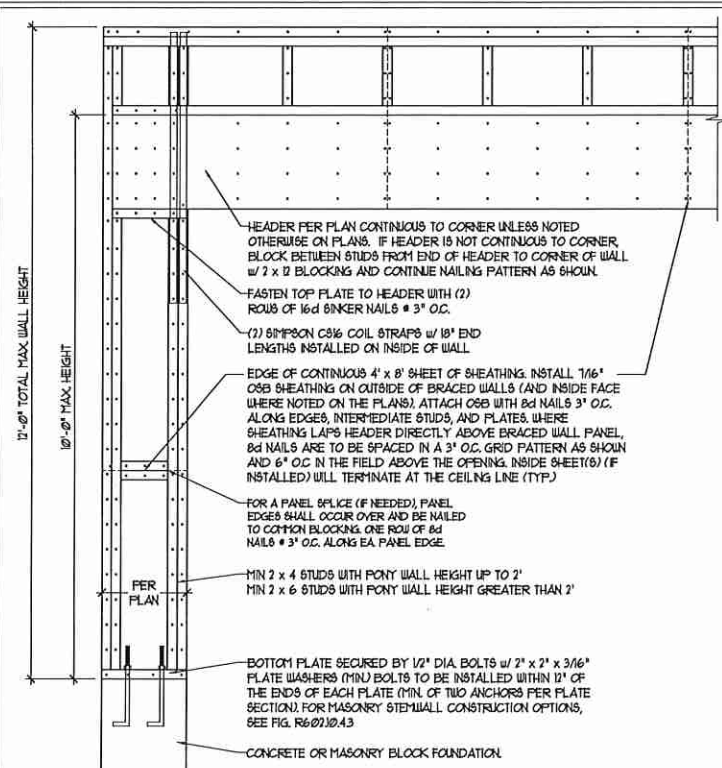
ENGINEERED BY: JES

D-1  
FOUNDATION DETAILS

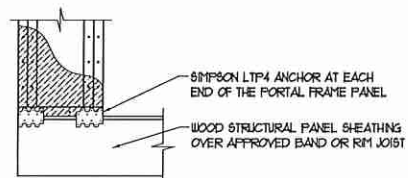


**GENERAL WALL BRACING NOTES:**

1. WALL BRACING DESIGNED IN ACCORDANCE WITH CHAPTER 6 OF THE 2018 NC RESIDENTIAL BUILDING CODE (NRC). TABLES AND FIGURES REFERENCED ARE FROM THE 2018 NRC.
2. SEE THIS SHEET FOR GENERAL DETAILS. REFER TO THE 2018 NRC 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-USP 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.
6. CS-USP REFERS TO THE "CONTINUOUS SHEATHING - WOOD STRUCTURAL PANELS" WALL BRACING METHOD. 1/8" OSB SHEATHING IS TO BE INSTALLED ON ALL EXTERIOR WALLS ATTACHED w/ 6d COMMON NAILS OR 6d (2 1/2" LONG x Ø13" 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(U). 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-USP CONTRIBUTES ITS ACTUAL LENGTH, METHOD GB CONTRIBUTES 5 ITS ACTUAL LENGTH, AND METHOD PF CONTRIBUTES 15 TIMES ITS ACTUAL LENGTH.

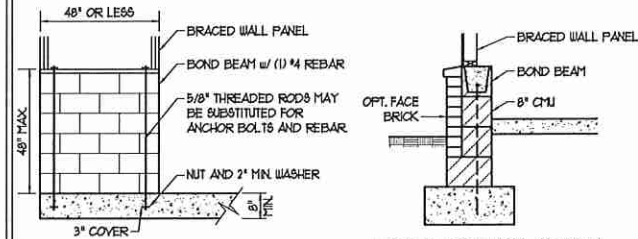
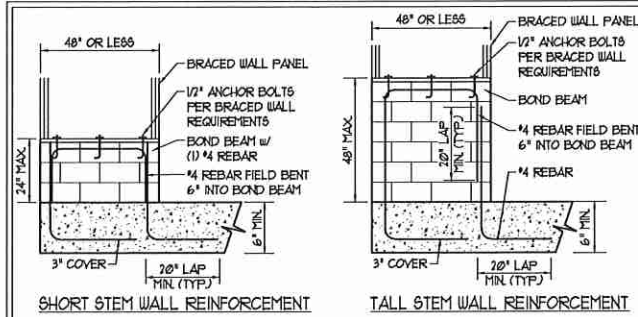


OVER CONCRETE OR MASONRY BLOCK FOUNDATION



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 ①**

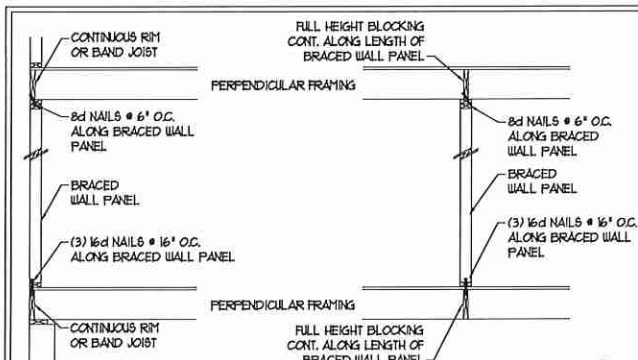


RODS MAY BE INSTALLED USING AN ADHESIVE ANCHORING SYSTEM WITH A MINIMUM TENSILE CAPACITY OF 3150 LBS AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECS.

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

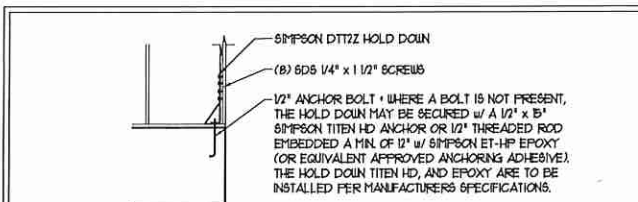
**MASONRY STEMWALLS SUPPORTING BRACED WALL PANELS ②**

PER FIGURE R602.10.4.3



**BRACED WALL PANEL CONNECTION WHEN PERPENDICULAR TO FLOOR/CEILING FRAMING ③**

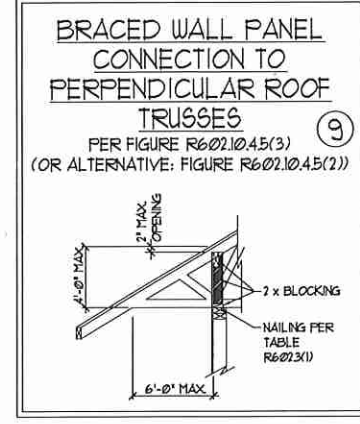
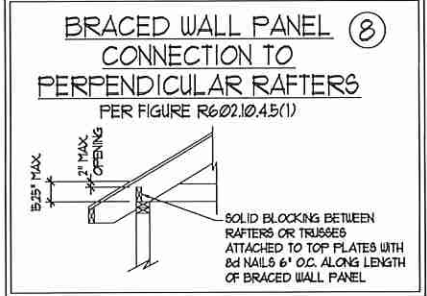
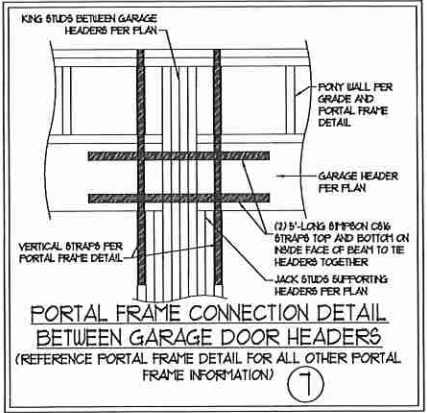
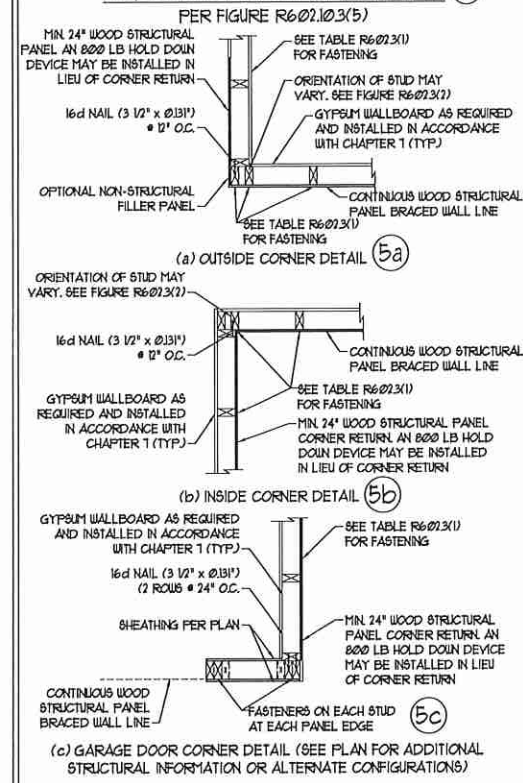
PER FIGURE R602.10.4.4(1)



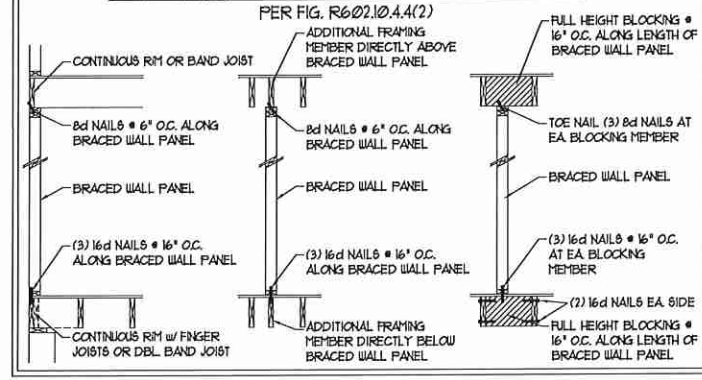
**HOLD DOWN DETAIL FOR MASONRY FOUNDATION OR MONOLITHIC SLAB ④**

\* APPLICABLE ONLY WHERE SPECIFIED ON PLAN \*

**TYPICAL EXTERIOR CORNER FRAMING FOR CONTINUOUS SHEATHING ⑤**



**BRACED WALL PANEL CONNECTION WHEN PARALLEL TO FLOOR/CEILING FRAMING ⑥**



This sealed page is to be used in conjunction with a full plan set engineered by J.S. Thompson Engineering, Inc. only. Use of this individual sealed page within architectural pages or shop drawings by others is a punishable offense under N.C. Statute § 89C-23

**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

120 MPH - 130 MPH ULTIMATE DESIGN WIND SPEED  
WALL BRACING NOTES AND DETAILS

DATE: NOVEMBER 14, 2018
SCALE: 1/4" = 1'-0"
DRAWN BY: JST
ENGINEERED BY: JST



D-2  
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), 2018 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 CONTRACTOR'S FAILURE TO CARRY OUT THE CONSTRUCTION WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- STRUCTURAL DESIGN BASED ON THE PROVISIONS OF THE NRC, 2018 EDITION (R301.4 - R301.7)

DESIGN CRITERIA:	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION (IN)
ATTIC WITH LIMITED STORAGE	20	10	L/240 (L/360 w/ BRITTLE FINISHES)
ATTIC WITHOUT STORAGE	10	10	L/360
DECKS	40	10	L/360
EXTERIOR BALCONIES	40	10	L/360
FIRE ESCAPES	40	10	L/360
HANDRAIL GUARDRAILS	100 LB OR 50 (FL)	10	L/360
PASSENGER VEHICLE GARAGE	50	10	L/360
ROOMS OTHER THAN SLEEPING ROOM	40	10	L/360
SLEEPING ROOMS	30	10	L/360
STAIRS	40	10	L/360
WIND LOAD (BASED ON TABLE R301.4) WIND ZONE AND EXPOSURE)	20 (PSF)		
GROUND SNOW LOAD: P <sub>g</sub>	20 (PSF)		

- I-JOIST SYSTEMS DESIGNED WITH 10 PSF DEAD LOAD AND DEFLECTION (IN) OF L/480
  - FLOOR TRUSS SYSTEMS DESIGNED WITH 10 PSF DEAD LOAD
- FOR 15 AND 100 MPH WIND ZONES, FOUNDATION ANCHORAGE IS TO COMPLY WITH SECTION R403.6 OF THE NRC, 2018 EDITION. FOR 150 MPH, 140 MPH, AND 50 MPH WIND ZONES, FOUNDATION ANCHORAGE IS TO COMPLY WITH SECTION 450.4 OF THE NRC, 2018 EDITION.
  - ENERGY EFFICIENCY COMPLIANCE AND INSULATION VALUES OF THE BUILDING TO BE IN ACCORDANCE WITH CHAPTER 11 OF THE NRC, 2018 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 1, ACCORDING TO THE UNITED SOIL CLASSIFICATION SYSTEM IN ACCORDANCE WITH TABLE R405J OF THE NRC, 2018 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 SAILED 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, 2018 EDITION. CONCRETE REINFORCING STEEL TO BE ASTM A605 GRADE 60, WELDED WIRE FABRIC TO BE ASTM A108. 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 1/2" BARS OR SMALLER, AND NOT LESS THAN 2" FOR 1/2" BARS OR LARGER.
- MASONRY UNITS TO CONFORM TO ACE 530/ASCE 5/11/19 402. MORTAR SHALL CONFORM TO ASTM C210.
- 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 CAPPED 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, 2018 EDITION OR IN ACCORDANCE WITH ACI 318, ACI 332, NCHA TR68-A OR ACE 530/ASCE 5/11/19 402. MASONRY FOUNDATION WALLS ARE TO BE REINFORCED PER TABLE R404.1X(1), R404.1X(2), R404.1X(3), OR R404.1X(4) OF THE NRC, 2018 EDITION. CONCRETE FOUNDATION WALLS ARE TO BE REINFORCED PER TABLE R404.1X(5) OF THE NRC, 2018 EDITION. STEEP CONCRETE FOUNDATION WALLS TO 2 x 6 FRAMED WALLS AT 16" O.C. WHERE GRADE PERMITS (N.O.).

This sealed page is to be used in conjunction with a full plan set engineered by J.S. Thompson Engineering, Inc. only. Use of this individual sealed page within architectural pages or shop drawings by others is a punishable offense under N.C. Statute § 89C-23

**FRAMING NOTES**

- ALL FRAMING LUMBER SHALL BE #2 SFF MINIMUM (Fb = 875 PSI, Fv = 375 PSI, E = 16,000,000 PSI) UNLESS NOTED OTHERWISE (N.O.). ALL TREATED LUMBER SHALL BE #2 SYP MINIMUM (Fb = 575 PSI, Fv = 175 PSI, E = 16,000,000 PSI) UNLESS NOTED OTHERWISE (N.O.).
- LAMINATED VENEER LUMBER (LVL) SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fb = 2600 PSI, Fv = 205 PSI, E = 18000000 PSI. LAMINATED STRAND LUMBER (LSL) SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fb = 2375 PSI, Fv = 310 PSI, E = 8500000 PSI. PARALLEL STRAND LUMBER (PSL) UP TO 7" DEPTH SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fc = 2500 PSI, E = 18000000 PSI. PARALLEL STRAND LUMBER (PSL) MORE THAN 7" DEPTH SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fc = 2300 PSI, E = 20000000 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 (N.O.). PROVIDE SOLID BEARING FROM BEAM SUPPORT TO FOUNDATION. BEAMS SHALL BE ATTACHED AT THE BOTTOM FLANGE TO EACH SUPPORT AS FOLLOWS (N.O.):
  - 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 R602.1(1) AND R602.1(2) OF THE NRC, 2018 EDITION OR BE (2) 2 x 6 WITH (1) JACK AND (1) KING STUD EACH END (N.O.) 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 (N.O.). INSTALL KING STUDS PER SECTION R602.15 OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION.
- 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 (N.O.). 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 (N.O.). BEAM ENDS THAT BUTT INTO ONE ANOTHER ARE TO EACH BEAR EQUAL LENGTHS (N.O.).
- 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 (N.O.).
- 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 NORTH CAROLINA RESIDENTIAL CODE 2018 EDITION 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 (N.O.). 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) 2 x 10 BLOCKING INSTALLED w/ (4) 8d NAILS EA. PLY BETWEEN WALL STUDS WITH (2) ROWS OF 1/2" LAG SCREWS AT 12" O.C. STAGGERED AND IN ACCORDANCE WITH SECTION R703.8(1) OF THE NRC, 2018 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 (N.O.).
- 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 6 RIDGES, 2 x 6 RAFTERS AT 16" O.C. AND FLAT 2 x 10 VALLEYS (N.O.).
- ALL 4 x 4 AND 6 x 6 POSTS TO BE INSTALLED WITH 1000 LB CAPACITY UPLIFT CONNECTORS TOP AND BOTTOM (N.O.). POSTS MAY BE SECURED USING ONE SIMPSON 145 OR L109 UPLIFT CONNECTOR FASTENED TO THE BAND AT THE BOTTOM AND THE BEAM AT THE TOP OF EACH POST. ONE 1/2" SECTION OF SIMPSON C86 COIL STRAPPING WITH (8) 8d HDG NAILS AT EACH END MAY BE USED IN LIEU OF EACH TRUSS STRAP IF DESIRED. FOR MASONRY OR CONCRETE FOUNDATION USE SIMPSON POST BASE.

**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

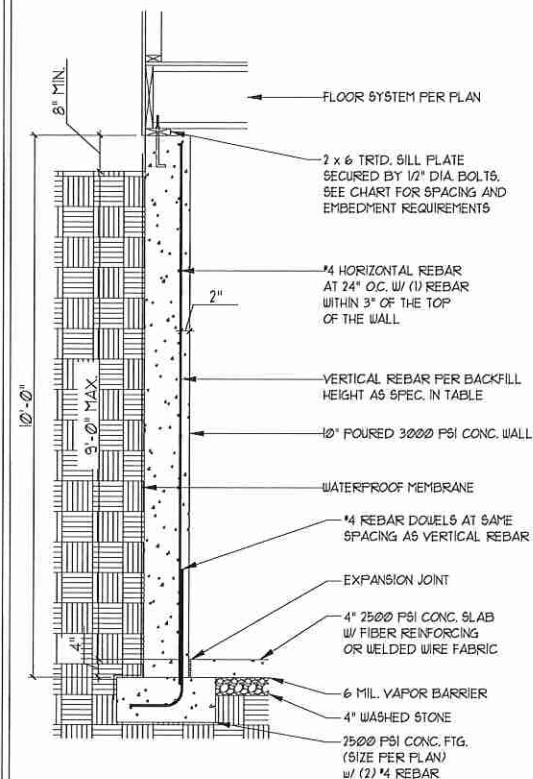
120 MPH - 130 MPH ULTIMATE DESIGN WIND SPEED  
 STANDARD STRUCTURAL NOTES

DATE: NOVEMBER 14, 2018  
 SCALE: 1/4" = 1'-0"  
 DRAWN BY: JES  
 ENGINEERED BY: JST



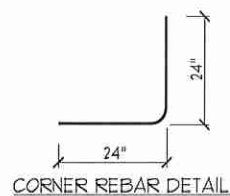
SO  
 STRUCTURAL  
 NOTES

**10" POURED BASEMENT WALL**



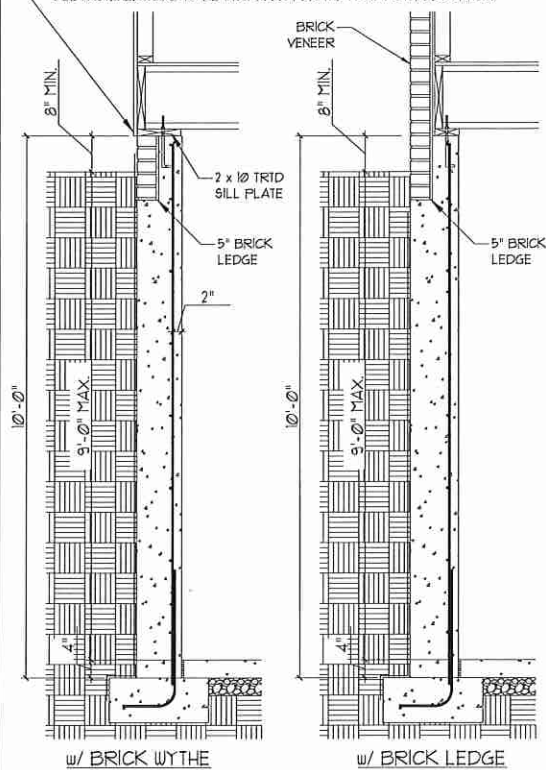
BACKFILL HEIGHT (FT)	VERTICAL REBAR
≤ 5	#4 @ 48" O.C.
6	#4 @ 32" O.C.
7	#4 @ 24" O.C. OR #5 @ 36" O.C. OR #6 @ 56" O.C.
8	#4 @ 20" O.C. OR #5 @ 32" O.C. OR #6 @ 48" O.C.
9	#4 @ 16" O.C. OR #5 @ 24" O.C. OR #6 @ 40" O.C.

**BASEMENT WALL REINFORCEMENT TABLE**

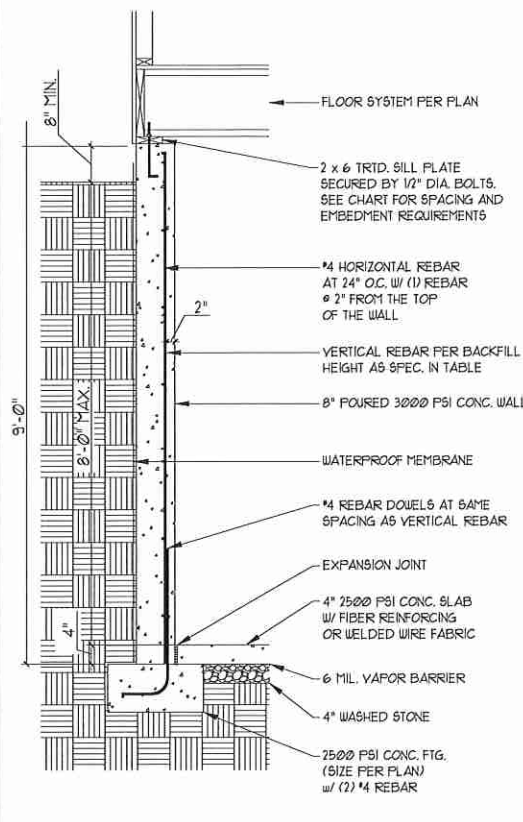


**CORNER REBAR DETAIL**

WHERE FRAMED WALLS WILL BE SUPPORTED PARTIALLY BY THE BRICK WYTHE, STANDARD CORRUGATED WALL TIES ARE TO BE FASTENED TO THE POURED WALLS w/ 1 1/4" LONG CONCRETE SCREWS OR 1 1/8" POWDER DRIVEN FASTENERS @ 16" O.C. HORIZONTALLY AND VERTICALLY. WALL TIES ARE TO BE LOCATED A MIN. OF 8" FROM THE TOP OF THE WALL AND ARE FULLY EMBEDDED INTO THE HEAD AND BED JOINTS. ALL FASTENERS ARE TO BE INSTALLED PER THE MANUFACTURERS SPECS.

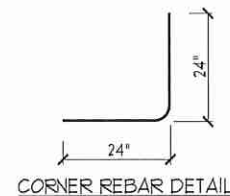


**8" POURED BASEMENT WALL**

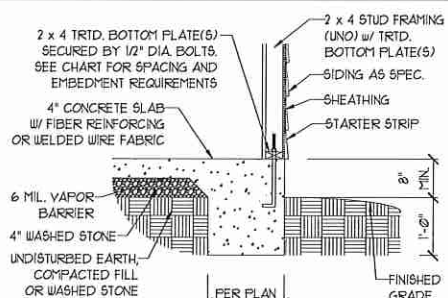


BACKFILL HEIGHT (FT)	VERTICAL REBAR
≤ 5	#4 @ 48" O.C.
6	#4 @ 24" O.C. OR #5 @ 36" O.C.
7	#4 @ 16" O.C. OR #5 @ 24" O.C. OR #6 @ 28" O.C.
8	#4 @ 12" O.C. OR #5 @ 18" O.C. OR #6 @ 28" O.C. OR

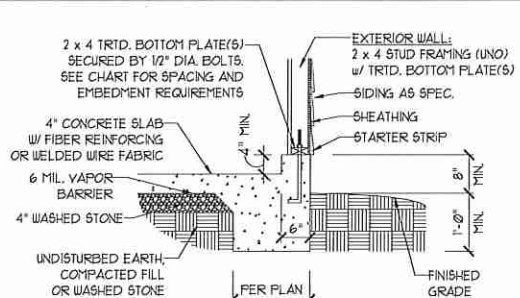
**BASEMENT WALL REINFORCEMENT TABLE**



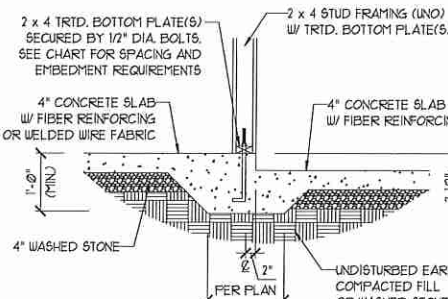
**CORNER REBAR DETAIL**



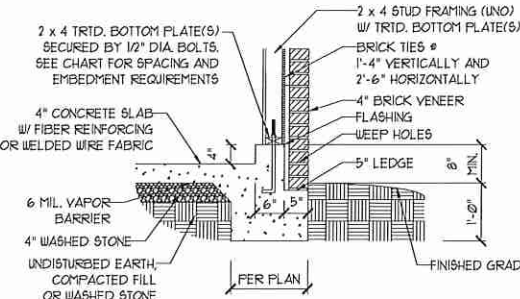
**TYPICAL SLAB**



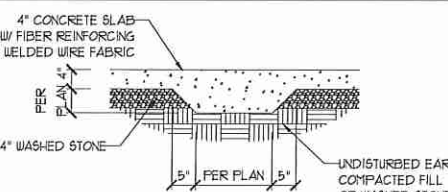
**GARAGE CURB**



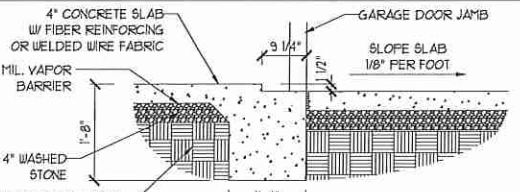
**STEP IN GARAGE**



**GARAGE CURB w/ BRICK LEDGE**



**TYPICAL THICKENED SLAB**



**SLAB AT GARAGE DOOR**

**ANCHOR SPACING AND EMBEDMENT**

WIND ZONE	ANCHOR SPACING AND EMBEDMENT	
	120 MPH	130 MPH
SPACING	6'-0" O.C. INSTALL MIN. (2) ANCHORS PER PLATE SECTION AND (1) ANCHOR WITHIN 12" OF CORNERS	4'-0" O.C. INSTALL MIN. (2) ANCHORS PER PLATE SECTION AND (1) ANCHOR WITHIN 12" OF CORNERS
EMBEDMENT	7"	7"
WIND ZONE	140 MPH	150 MPH
SPACING	6'-0" O.C. w/ DBL. SILL PLATE OR 1'-9" O.C. w/ SINGLE SILL PLATE w/ 2" x 2" x 1/8" WASHERS	6'-0" O.C. w/ DBL. SILL PLATE OR 1'-6" O.C. w/ SINGLE SILL PLATE w/ 2" x 2" x 1/8" WASHERS
EMBEDMENT	7"	7"

**NOTE:**

THREADED ROD WITH EPOXY, SIMPSON TITEN HD, OR APPROVED ANCHORS SPACED AS REQUIRED TO PROVIDE EQUIVALENT ANCHORAGE TO 1/2" DIAMETER ANCHOR BOLTS MAY BE USED IN LIEU OF 1/2" ANCHOR BOLTS.

**STRUCTURAL NOTES:**

- 1) FOR #4 REBAR 24" MINIMUM REBAR LAP SPLICE LENGTH. FOR #5 REBAR 32" MINIMUM REBAR LAP SPLICE LENGTH. FOR #6 REBAR 38" MINIMUM REBAR LAP SPLICE LENGTH.
- 2) REBAR TO MAINTAIN A MINIMUM CONCRETE COVER OF 3" (UNO).
- 3) REBAR TO BE ASTM A615 GRADE 60.
- 4) SOIL BEARING CAPACITY IS REQUIRED TO BE 2000 PSF MIN.
- 5) INSTALL #4 L-BARS AT ALL WALL CORNERS AT SAME SPACING AS HORIZ. STEEL. SEE DETAIL.
- 6) THE FLOOR FRAMING IS TO BE INSTALLED AND A MIN. OF SEVEN DAYS IS REQUIRED TO ALLOW THE CONCRETE TO CURE BEFORE THE BACKFILL CAN BE INSTALLED. THE BACKFILL IS RECOMMENDED TO BE PLACED IN 12" LIFTS AND CAREFULLY TAMPED.
- 7) A 4" LEDGE IS TO BE PROVIDED FOR THE PORCH SLAB. THE WALLS ARE REQUIRED TO BE BONDED TO THE SLABS USING #4 x 36" REBAR DOVELS 32" O.C. EMBEDDED 4" INTO THE CONC. USING EPOXY.
- 8) WHERE THE FLOOR JOISTS ARE PARALLEL TO THE WALLS, 2 x 4 BLOCKING IS TO BE INSTALLED 24" O.C. BETWEEN THE BOTTOM FLANGES OF THE 1-JOISTS FOR A MIN. OF 6'-0" AWAY FROM THE WALL OR DIAGONAL 2 x 6 BLOCKS MAY BE INSTALLED 24" O.C. FROM THE EDGE OF THE SILL PLATE TO THE TOP FLANGE AND SUBFLOORING, ATTACHED w/ (3) 12d NAILS EACH END.

**NOTE TO FOUNDATION CONTRACTOR:**

ALTERNATE REINFORCED CONCRETE POURED WALL DESIGNS ENGINEERED BY OTHERS MAY BE CONSTRUCTED. NO CONTINUOUS FOOTINGS OR LUG FOOTINGS MAY BE REDUCED IN SIZE.

**J.S. THOMPSON ENGINEERING INC**  
660 WADE AVE. SUITE 104 RALEIGH, NC 27605  
PHONE: (919) 789-9911 FAX: (919) 789-9911  
N.C. LICENSE NO. C-1733

POURED WALL BASEMENT FOUNDATION DETAILS

DATE: FEBRUARY 22, 2010

SCALE: NTS

DRAWN BY: JST

ENGINEERED BY: JST

FOUNDATION DETAILS D-3



This sealed page is to be used in conjunction with a full plan set engineered by J.S. Thompson Engineering, Inc. only. Use of this individual sealed page within architectural pages or shop drawings by others is a punishable offense under N.C. Statute § 89C-23