

TOPSAIL

REVISION LIST - STRUCTURAL:

2.) REMOVED BEDROOM VAULTS AND BALLOON FRAMING (10-17)

4.) CHANGED TO (3) PLY GARAGE HEADERS (10-17)

5.) CODE UPDATE TO NCRC 2018 (1-19)

1.) ADDED I-JOIST SERIES AND SPACING TO SECOND FLOOR FRAMING AND CRAWL (10-17)

3.) CHANGED STANDARD HEADER SIZE TO 2 x 6. CALLED OUT 2 x 10 WHERE NECESSARY (10-17)



full compliance with the code

05/21/2021







DATE: OCTOBER 13, 2017

REV.: MARCH 30, 2020

DRAWN BY: WG

REVIEWED BY:

NGINEERED BY:

TOPSAIL

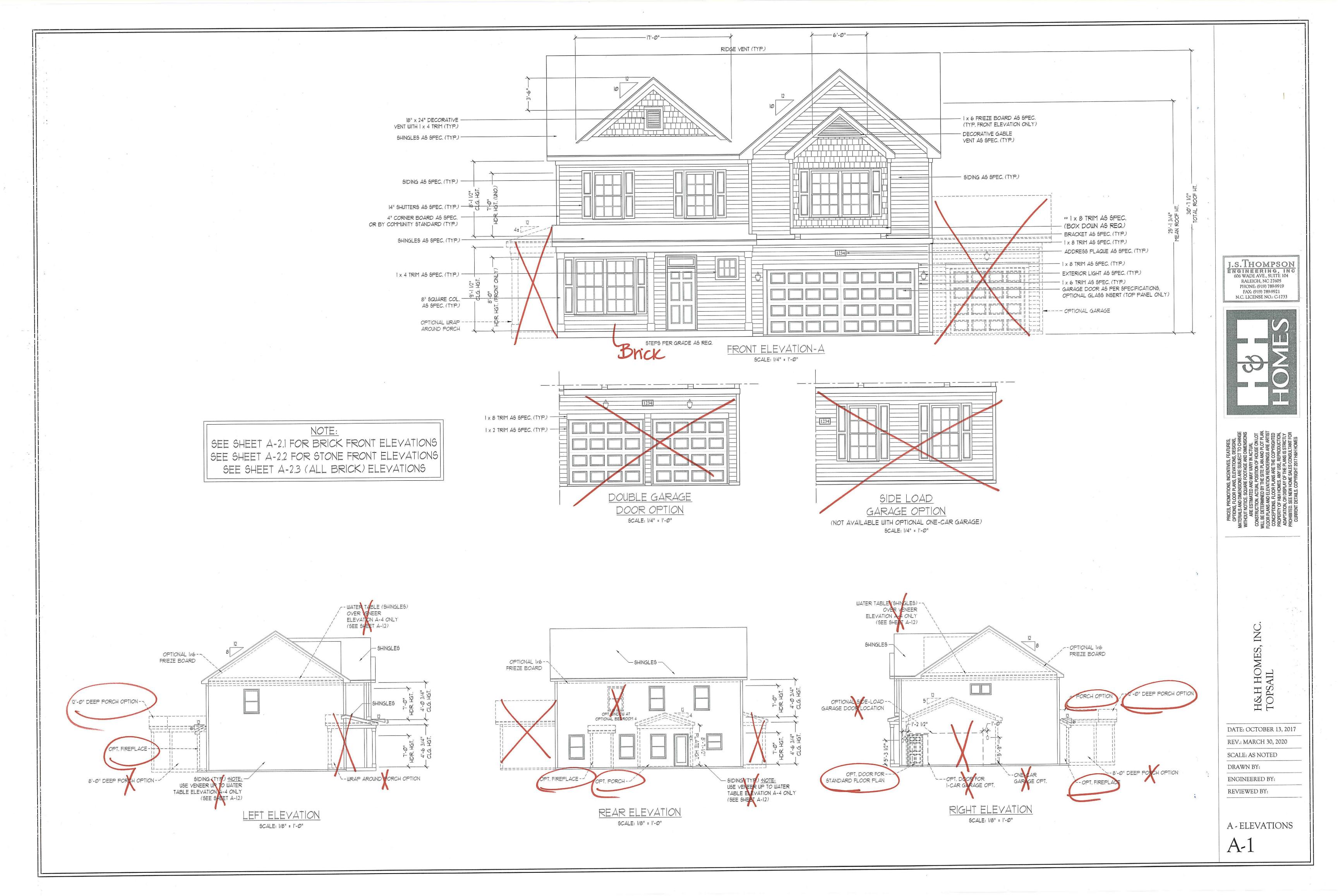
- 12. ADDED DIAGONAL DIMENSION ON SLAB INTERFACE PLAN
- 13. ADDED PLUMBING DROPS TO SLAB INTERFACE PLAN
- 14. ADDED CONDUIT IN KITCHEN OF THE SLAB INTERFACE PLAN
- 15. CHANGED COLUMN ON PATIO TO 8"x8"
- 16. CHANGED EXTERIOR WALLS FROM 2x6 TO 2x4 EXCEPT AT SHADED AREAS
- 19. REMOVED ALL 2x6 NOTES
- 20. UPDATED ALL INTERIOR ROOM DIMENSIONS
- 21. ADDED HOSE BIBS TO PLANS
- 22. UPDATED SQUARE FOOTAGES
- 23. ADDED SQUARE FOOTAGE WITH FULL BRICK VENEER
- 24. PATIO CHANGED TO 12'x10'
- 25. FLIPPED TUB AND REMOVED ACCESS AND NOTE FROM OWNER'S BATH 1
- 26. ADDED NOTE TO LAUNDRY
- 27. ADDED OPTIONAL FLOOR OUTLETS
- 28. REMOVED ALL OUTLETS ON ELECTRICAL PLAN (EXCEPT OPT. FLOOR OUTLETS)
- 30. REMOVED ALL PHONE OUTLETS
- 33. ADDED NEW ELECTRICAL KEY
- 34. CHANGED SWING OF SERVICE DOOR (7-8-20)
- 36. CHANGED KITCHEN LIGHT FROM 2 BULB FLUORESCENT TO 3 BULB CEILING MOUNT (7-8-20)
- 37. CHANGED LIGHT OVER KITCHEN SINK TO 1 BULB CEILING MOUNT (7-8-20)

REVISION LIST - ARCHITECTURAL: CHANGES ON 03-30-2020 1. CHANGED ALL CORNER BOARDS ON ELEVATIONS FROM 6" TO 4"

- 2. CHANGED NOTE FOR GARAGE LABEL ON ELEVATIONS
- 3. REMOVED GRIDS FROM ALL WINDOWS & DOORS ON SIDES AND REAR ELEVATIONS
- 4. UPDATED ALL COACH LIGHTS ON ELEVATIONS
- 5. REMOVED DUPLICATE DIMENSIONS AND LABELS FROM ALL ELEVATIONS
- 6. DIMENSIONED STONE/BRICK WATER TABLE HEIGHT
- 7. HATCHED 4" ROWLOCK ON WINDOWS IN ELEVATIONS WITH STONE AND BRICK
- 8. UPDATED STONE HATCH TO CURRENT HATCH
- 9. ADDED COLUMN DETAILS ON B-1 AND B-4 ELEVATIONS
- 10. REMOVED HARDWARE ON SHUTTERS ON ALL C ELEVATIONS. CHANGED TO SHOW B&B
- 11. SEPARATED ALL OPTIONS FROM BASE PLAN TO CORRESPONDING SHEETS

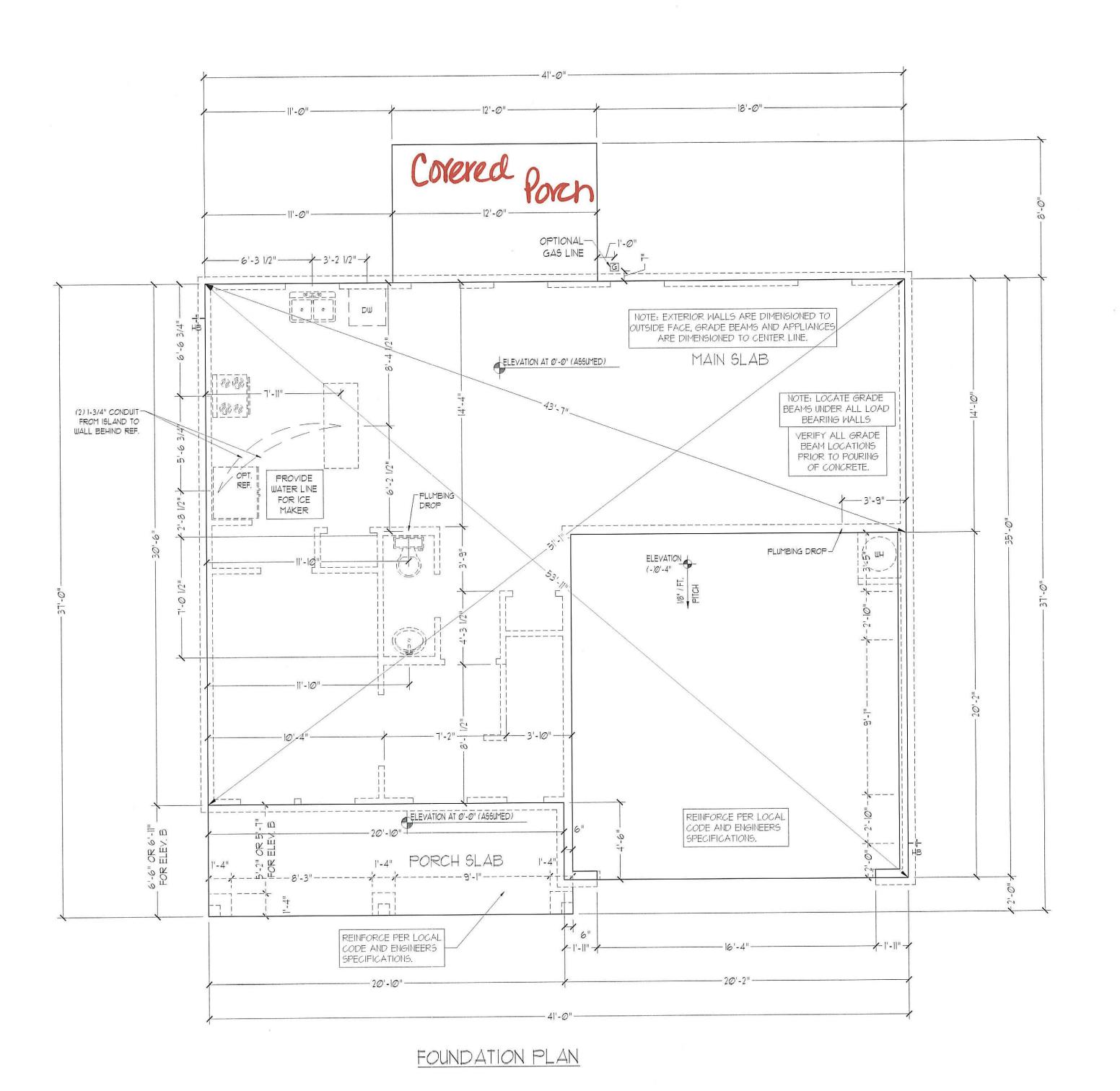
- 29. REMOVED ALL TV OUTLETS
- 31. SHOWED ALL CEILING FANS DASHED WITH NEW NOTE
- 32. ADDED CO2 DETECTORS

- 35. CHANGED LIGHT IN GARAGE FROM KEYLESS TO CEILING MOUNT (7-8-20)
- 38. REMOVED LIGHT IN SECONDARY BATH OVER TUB/SHOWER COMB (7-8-20)

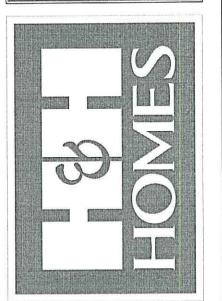




J.S.THOMPSON ENGINEERING, INC 606 WADE AVE., SUITE 104 RALEIGH, NC 27605 PHONE: (919) 789-9919



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



OPTIONS, FLOOR PLANS, ELEVATIONS, DESIGNS, MATERIALS AND DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SQUARE FOOTAGE AND DIMENSIONS ARE ESTIMATED AND MAY VARY IN ACTUAL CONSTRUCTION. ACTUAL POSITION OF HOUSE ON LOT WILL BE DETERMINED BY THE SITE PLAN AND PLOT PLAN. FLOOR PLANS ARE THE COPYRIGHTED PROPERTY OF H&H HOMES. ANY USE, REPRODUCTION, ADAPTATION, OR DISPLAY OF THE PLANS IS STRICTLY PROHIBITED. SEE NEW HOME SALES CONSULTANT FOR AUGUST AND ADAPTATION, OR DISPLAY OF THE PLANS IS STRICTLY PROHIBITED. SEE NEW HOME SALES CONSULTANT FOR

H&H HOMES, INC. TOPSAIL

DATE: OCTOBER 13, 2017

REV.: MARCH 30, 2020

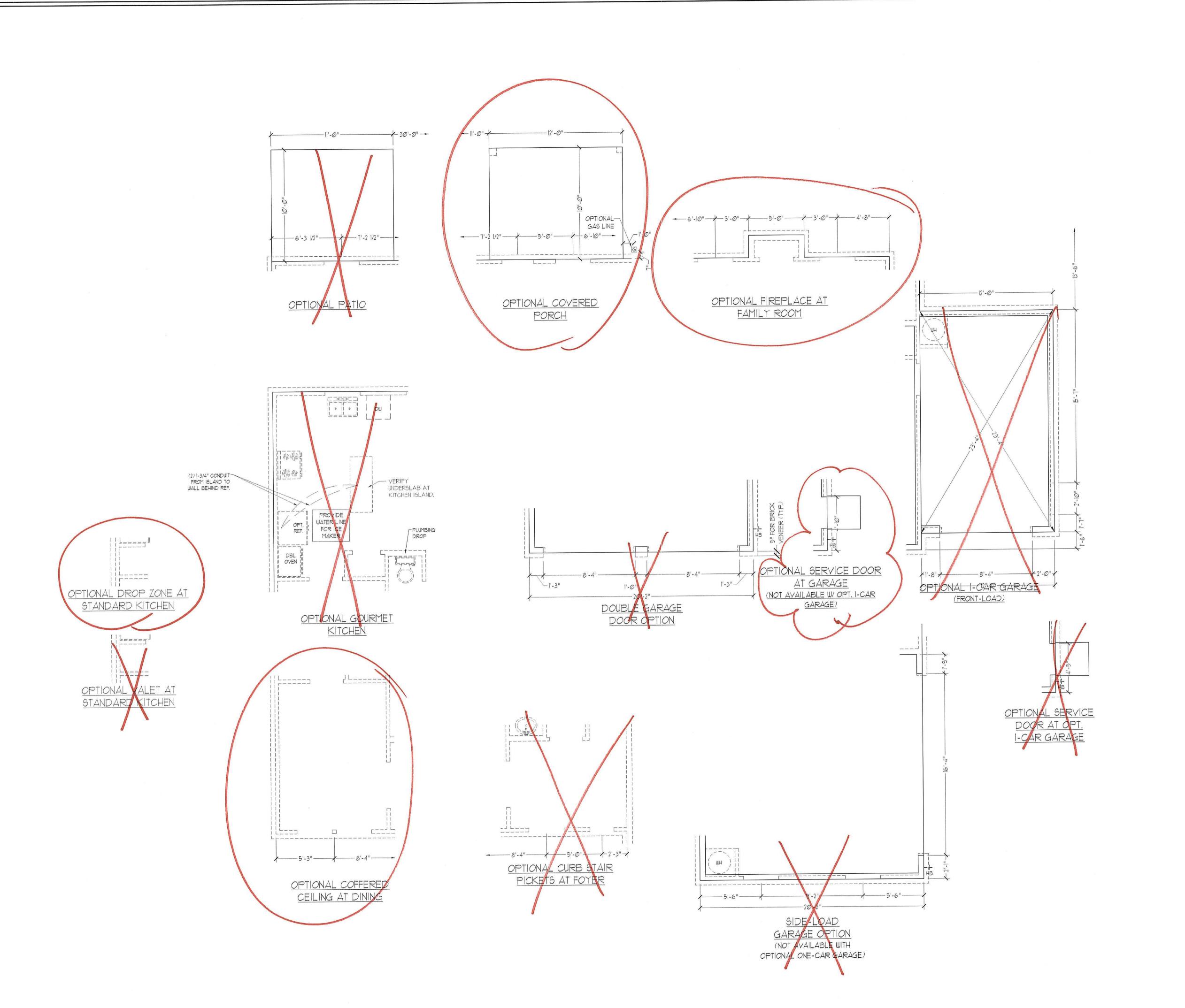
SCALE: 1/4"=1'-0"

DRAWN BY:

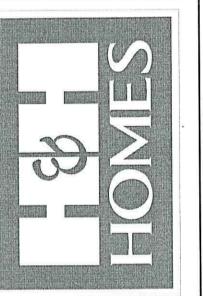
ENGINEERED BY:
REVIEWED BY:

SLAB INTERFACE PLAN

A-4



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



MATERIALS AND DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SQUARE FOOTAGE AND DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SQUARE FOOTAGE AND DIMENSIONS ARE ESTIMATED AND MAY VARY IN ACTUAL 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 H&H HOMES. ANY USE, REPRODUCTION, ADAPTATION, OR DISPLAY OF THE PLANS IS STRICTLY PROHIBITED. SEE NEW HOME SALES CONSULTANT FOR

H&H HOMES, INC. TOPSAIL

DATE: OCTOBER 13, 2017

REV.: MARCH 30, 2020

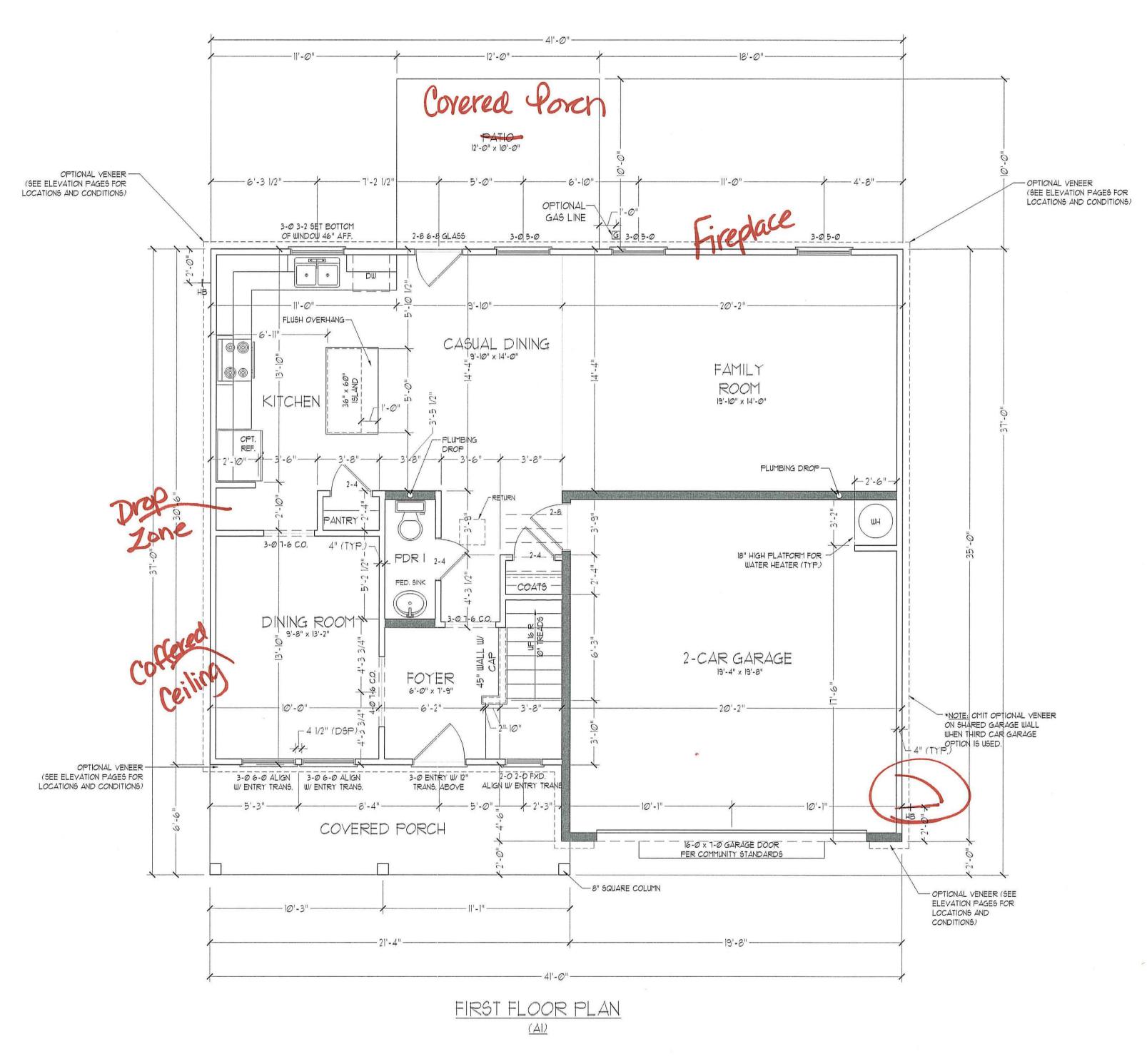
SCALE: 1/4"=1'-0"

DRAWN BY:
ENGINEERED BY:

REVIEWED BY:

SLAB INTERFACE PLAN - OPTIONS

A-4.1



SQUARE FOOTAGE Ist FLOOR: 942 SQ. FT. 2nd FLOOR: 1304 SQ. FT. TOTAL: 2,246 SQ. FT. GARAGE: 399 SQ. FT. FRONT PORCH (A & C ELEVATIONS): 136 SQ. FT. FRONT PORCH (B ELEVATIONS): 145 SQ. FT. REAR COVERED PORCH: 120 SQ. FT. 1st FLOOR OPTIONS 10 SQ. FT. OPTIONAL FIREPLACE: UNHEATED OPTIONS OPT I-CAR GARAGE: 240 SQ. FT. OPT 11'-0" X 10'-0" PORCH: 110 SQ. FT. OPT WRAP AROUND PORCH (ELEV A&C): 53 SQ. FT. OPT. WRAP AROUND PORCH (ELEV. B): 59 SQ. FT.

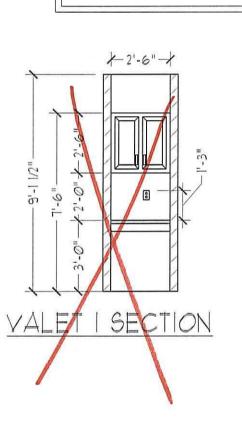
SQUARE FOOTAGE W/ FULL BRICK VENEER 1st FLOOR: 988 SQ. FT. 2nd FLOOR: 1375 SQ. FT. TOTAL: 2,363 SQ. FT. GARAGE: 418 SQ. FT. FRONT PORCH (A & C ELEVATIONS): 135 SQ. FT. FRONT PORCH (B ELEVATIONS): 145 SQ. FT. REAR COVERED PORCH: 120 SQ. FT. 1st FLOOR OPTIONS OPTIONAL FIREPLACE: 14 SQ FT. UNHEATED OPTIONS OPT I-CAR GARAGE: 259 SQ. FT. 110 SQ. FT. OPT II'-0" X 10'-0" PORCH: OPT WRAP AROUND PORCH (ELEV A4C): 53 SQ. FT. OPT, WRAP AROUND PORCH (ELEV. B): 59 SQ. FT.

NOTE: ALL EXTERIOR WALLS AND ATTIC WALLS ARE TO BE 2 x 4 @ 16" O.C. (UN.O.). 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).

WALL 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

PROVIDE MINIMUM INSULATION
IN CEILINGS AND WALLS
PER SECTION N 1102.1



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



OPTIONS, FLOOH PLANS, ELEVATIONS, DESIGNS, TERIALS AND DIMENSIONS ARE SUBJECT TO CHANGE THOUT NOTICE. SQUARE FOOTAGE AND DIMENSIONS ARE ESTIMATED AND MAY VARY IN ACTUAL ARE ESTIMATED AND MAY VARY IN ACTUAL ONSTRUCTION. ACTUAL POSITION OF HOUSE ON LOT L. BE DETERMINED BY THE SITE PLAN AND PLOT PLAN. OR PLANS AND ELEVATION RENDERINGS ARE ARTIST ONCEPTIONS. FLOOR PLANS ARE THE COPYRIGHTED OPERITY OF H&H HOMES. ANY USE, REPRODUCTION, OR DISPLAY OF THE PLANS IS STRICTLY

H&H HOMES, INC. TOPSAIL

DATE: OCTOBER 13, 2017
REV.: MARCH 30, 2020

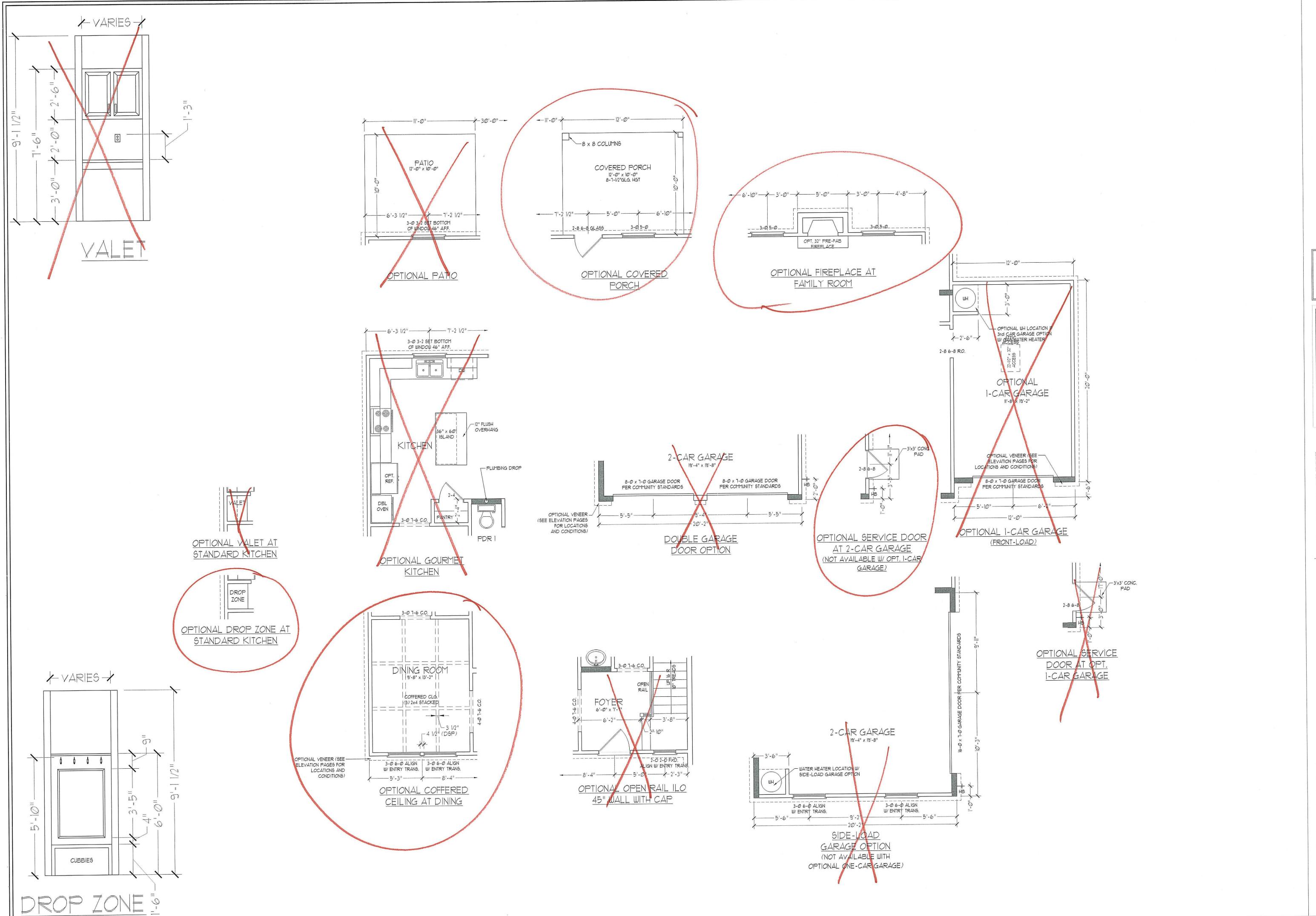
SCALE: 1/4"=1'-0"

DRAWN BY:

ENGINEERED BY:
REVIEWED BY:

FIRST FLOOR PLAN

A-5



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



PRICES, PROMOTIONS, INCENTIVES, FEATURES, OPTIONS, FLOOR PLANS, ELEVATIONS, DESIGNS, MATERIALS AND DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SQUARE FOOTAGE AND DIMENSIONS ARE ESTIMATED AND MAY VARY IN ACTUAL 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 H&H HOMES. ANY USE, REPRODUCTION, 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 13, 2017

REV.: MARCH 30, 2020

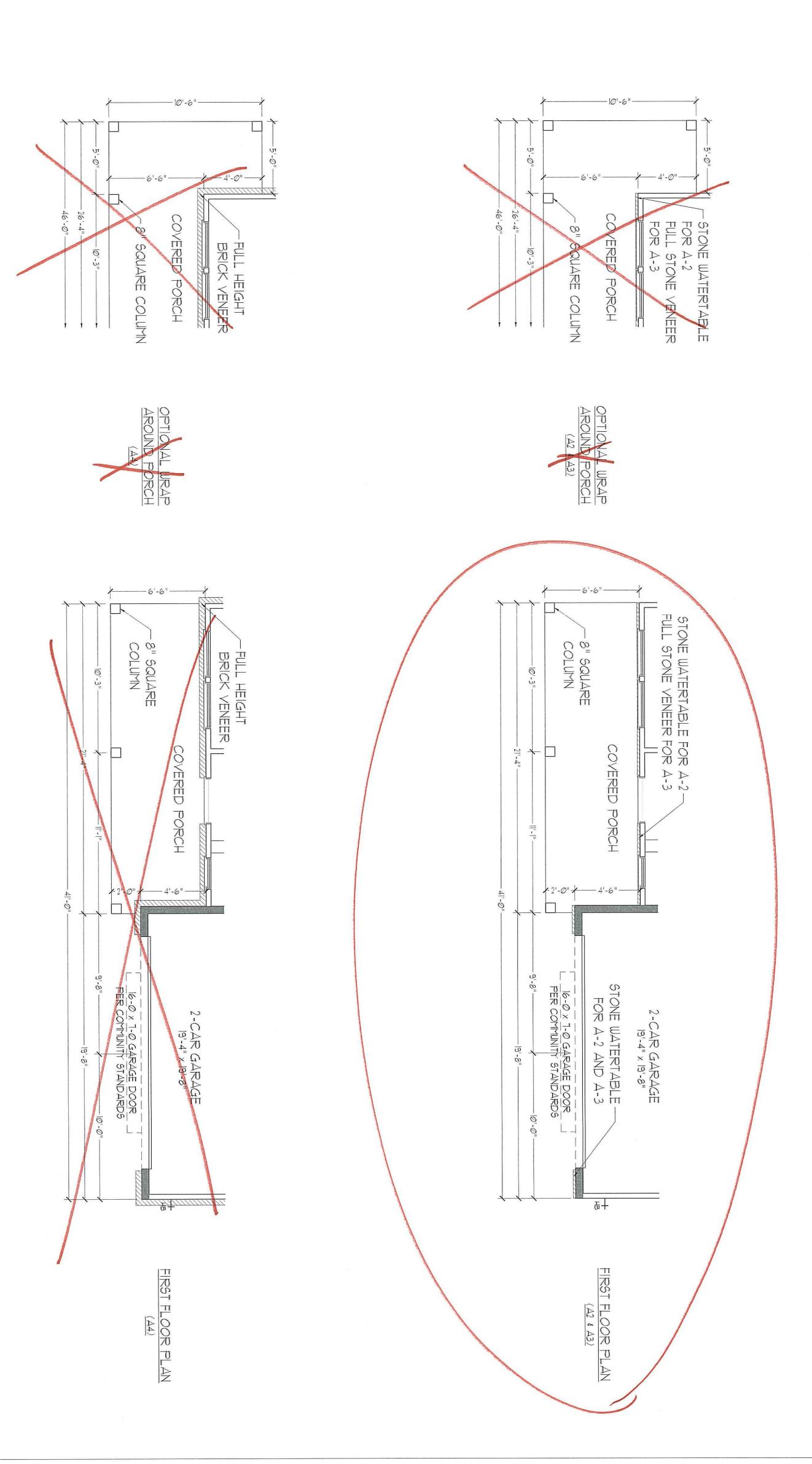
SCALE: 1/4"=1'-0"

DRAWN BY:

ENGINEERED BY:
REVIEWED BY:

FIRST FLOOR PLAN OPTIONS

A-5.1



A-5.2

DATE: OCTOBER 13, 2017

REV.: MARCH 30, 2020

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

DRAWN BY:

ENGINEERED BY:

REVIEWED BY:

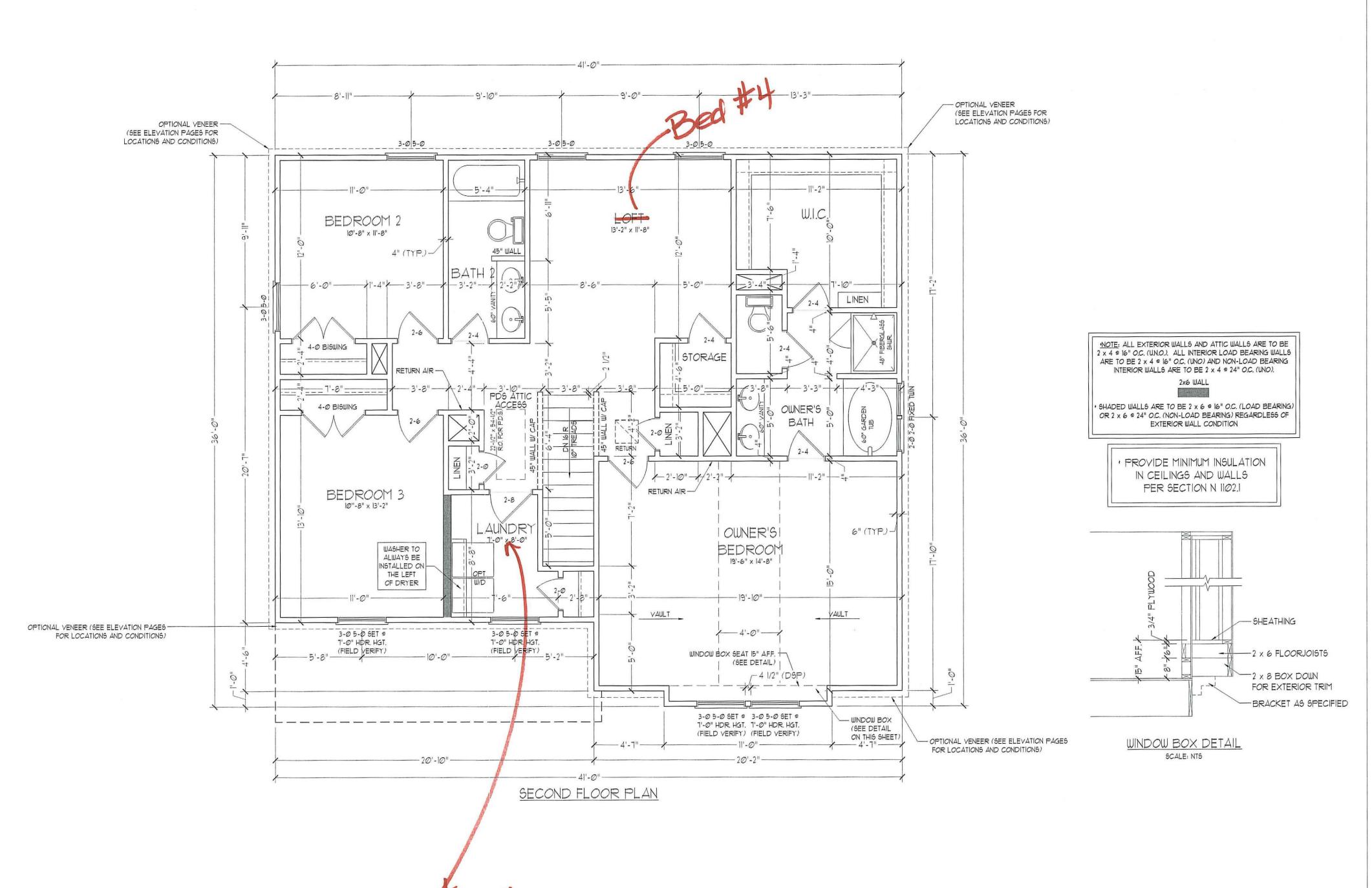
FIRST FLOOR

PLAN

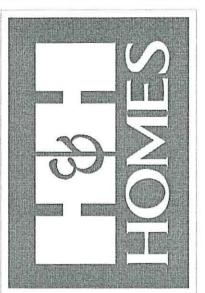
H&H HOMES, INC. TOPSAIL PRICES, PROMOTIONS, INCENTIVES, FEATURES,
OPTIONS, FLOOR PLANS, ELEVATIONS, DESIGNS,
MATERIALS AND DIMENSIONS ARE SUBJECT TO CHANGE
WITHOUT NOTICE. SQUARE FOOTAGE AND DIMENSIONS
ARE ESTIMATED AND MAY VARY IN ACTUAL
CONSTRUCTION. ACTUAL POSITION OF HOUSE ON LOT
WILL BE DETERMINED BY THE SITE PLAN AND PLOT PLAN.
FLOOR PLANS AND ELEVATION RENDERINGS ARE ARTIST
CONCEPTIONS. FLOOR PLANS ARE THE COPYRIGHTED
PROPERTY OF H&H HOMES. ANY USE, REPRODUCTION,
ADAPTATION, OR DISPLAY OF THE PLANS IS STRICTLY
PROHIBITED. SEE NEW HOME SALES CONSULTANT FOR
CURRENT DETAILS. COPYRIGHT 2017 H&H HOMES







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



TERIALS AND DIMENSIONS ARE SUBJECT TO CHANGE THOUT NOTICE. SQUARE FOOTAGE AND DIMENSIONS ARE ESTIMATED AND MAY VARY IN ACTUAL AND STILON OF HOUSE ON LOT LED ETERMINED BY THE SITE PLAN AND PLOT PLAN. OR PLANS AND ELEVATION RENDERINGS ARE ARTIST INCEPTIONS. FLOOR PLANS ARE THE COPYRIGHTED OPERITY OF H&H HOMES. ANY USE, REPRODUCTION, DAPTATION, OR DISPLAY OF THE PLANS IS STRICTLY OHIBITED. SEE NEW HOME SALES CONSULTANT FOR

H&H HOMES, INC. TOPSAIL

DATE: OCTOBER 13, 2017

REV.: MARCH 30, 2020

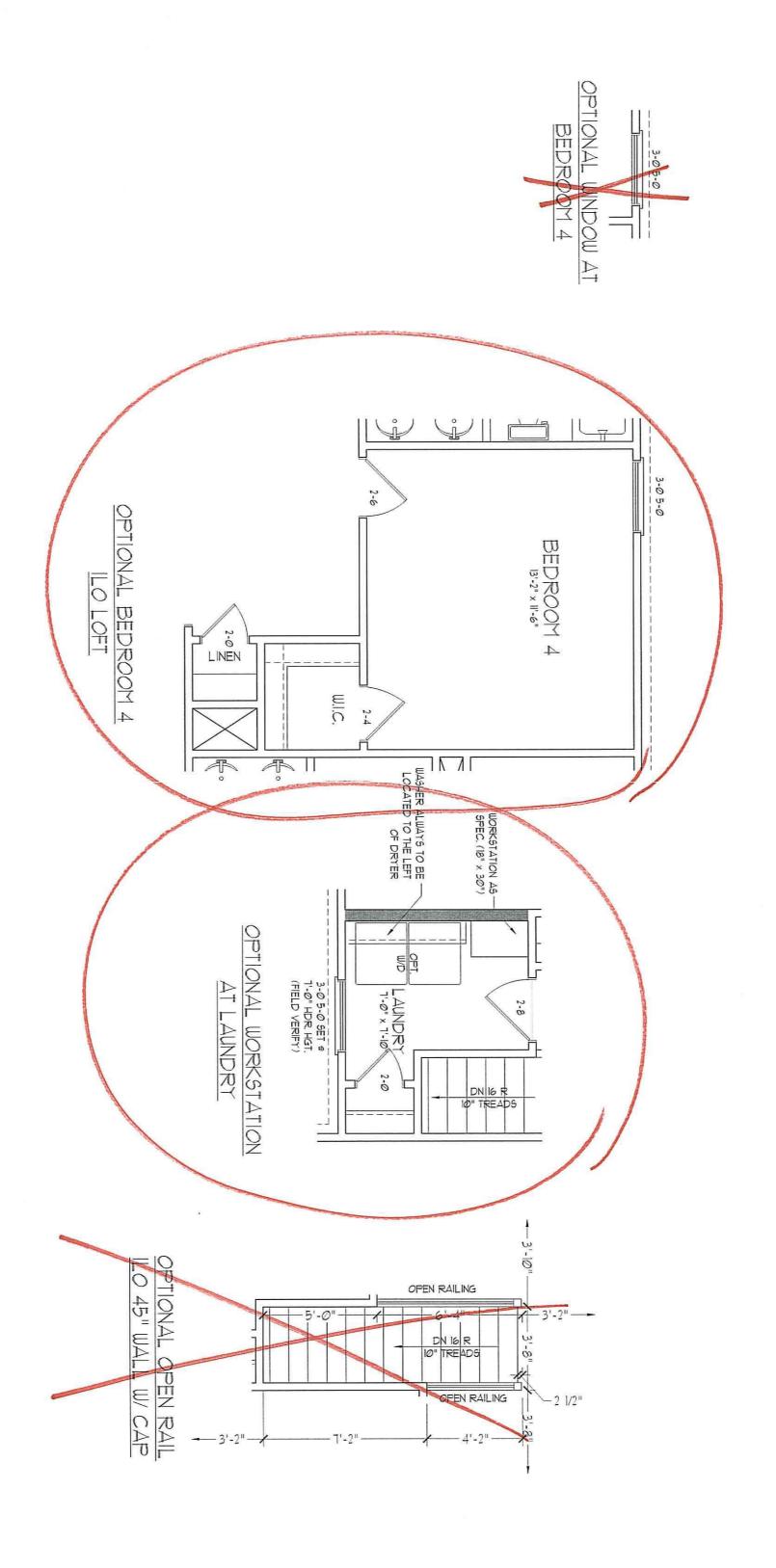
SCALE: 1/4"=1'-0"

DRAWN BY:
ENGINEERED BY:

REVIEWED BY:

SECOND FLOOR PLAN

A-6



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

DRAWN BY:

ENGINEERED BY:

REVIEWED BY:

SECOND FLOOR
PLAN OPTIONS

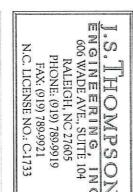
PLAN OPTIONS

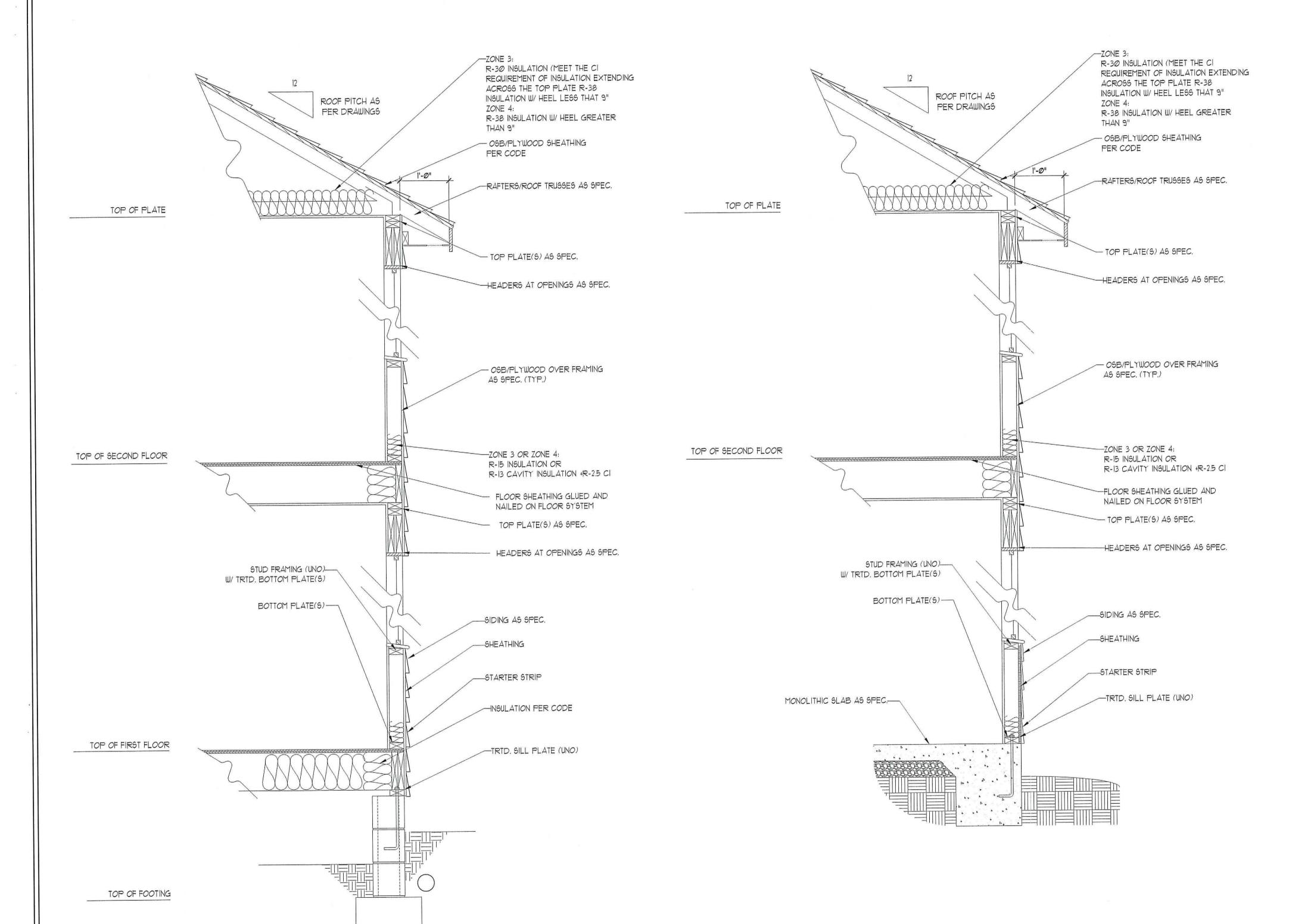
A-6. 1

DATE: OCTOBER 13, 2017
REV.: MARCH 30, 2020

H&H HOMES, INC. TOPSAIL PRICES, PROMOTIONS, INCENTIVES, FEATURES, OPTIONS, FLOOR PLANS, ELEVATIONS, DESIGNS, MATERIALS AND DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SQUARE FOOTAGE AND DIMENSIONS ARE ESTIMATED AND MAY VARY IN ACTUAL 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 H&H HOMES. ANY USE, REPRODUCTION, ADAPTATION, OR DISPLAY OF THE PLANS IS STRICTLY PROHIBITED. SEE NEW HOME SALES CONSULTANT FOR CURRENT DETAILS. COPYRIGHT 2017 H&H HOMES







LOW WALL — 3/4" PLYWD. DECKING FLOOR SYSTEM BEYOND FLOOR SYSTEM CONTINUOUS I" NOSING (TYP.) GRASPABLE LOW WALL RAILING IN -BEAM-BACKGROUND IX TREADS AND Ix RISERS (TYP.) 9 TREADS AT 10" EACH

> TYPICAL STAIR DETAIL (NTS)

* * * * * STAIR NOTES: BALUSTERS SHALL BE SPACED SO THAT A 4" SPHERE CANNOT

PASS THROUGH. THE TRIANGULAR OPENINGS FORMED BY THE RISER, TREAD AND BOTTOM RAIL OF A GUARD AT THE OPEN SIDE OF A STAIRWAY ARE PERMITTED TO BE A SUCH A SIZE THAT A SPHERE OF 6 INCHES CANNOT PASS THROUGH

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

HANDRAILS:

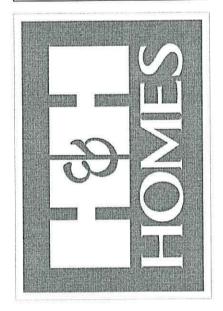
HANDRAILS FOR STAIRWAYS SHALL BE CONTINUOUS FOR THE FULL LENGTH OF THE FLIGHT, FROM A POINT DIRECTLY ABOVE THE TOP RISER OF THE FLIGHT TO A POINT DIRECTLY ABOVE THE LOWEST RISER. HANDRAIL ENDS SHALL BE RETURNED OR SHALL TERMINATE IN NEWEL POSTS OR SAFETY TERMINALS. HANDRAILS ADJACENT TO A WALL SHALL HAVE A SPACE OF NOT LESS THAN 1-1/2 INCH BETWEEN THE WALL AND HANDRAILS.

CONTINUOUS GRASPABLE HANDRAIL MUST MEET TYPE ONE OR TYPE TWO CRITERIA * * * * * * *

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

WALL SECTION W/ SLAB W/ STD. SIDING SHOWN (NTS)

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



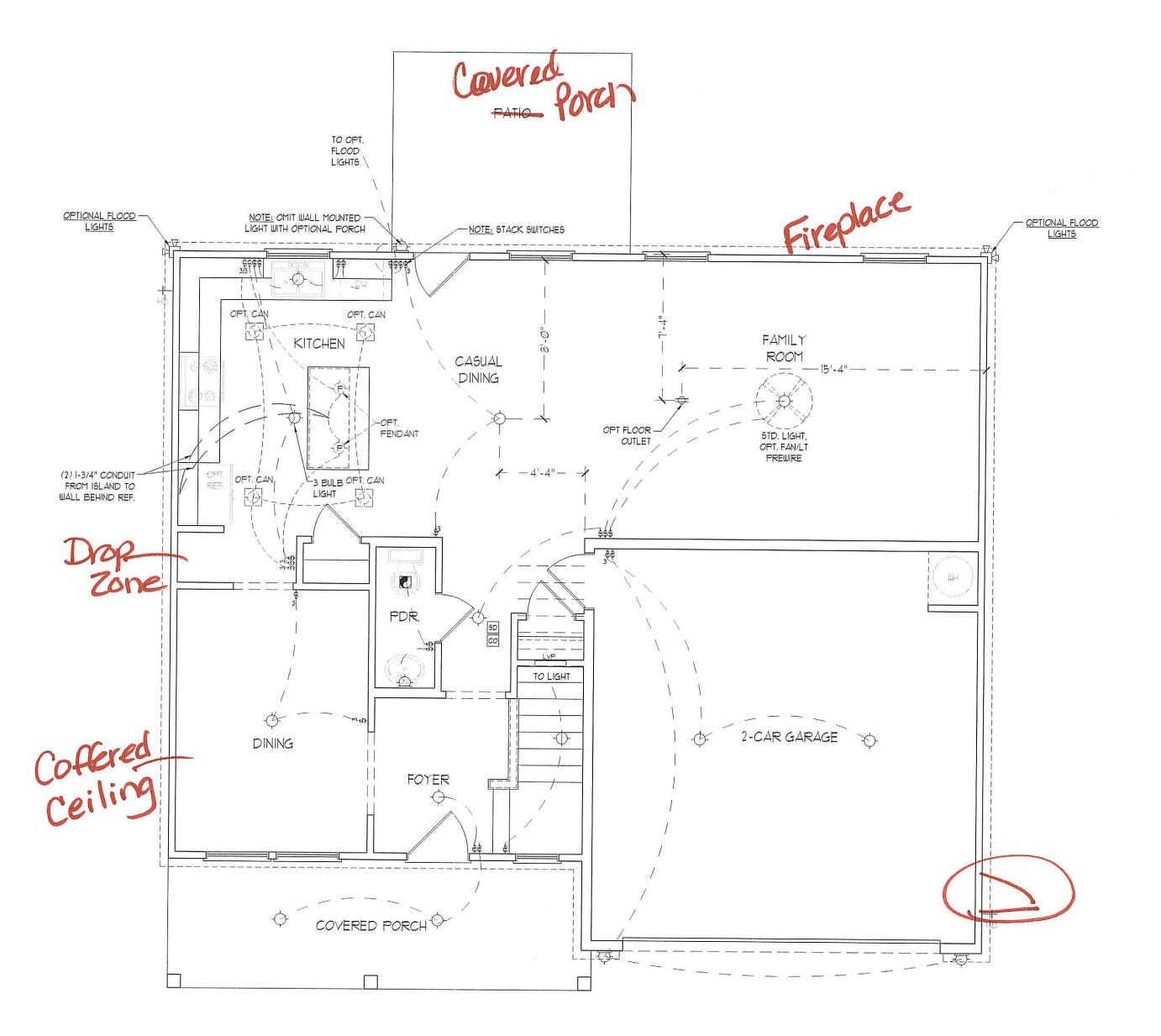
DATE: OCTOBER 13, 2017 REV.: MARCH 30, 2020

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

DRAWN BY:

ENGINEERED BY: REVIEWED BY:

WALL SECTIONS AND STAIR DETAIL

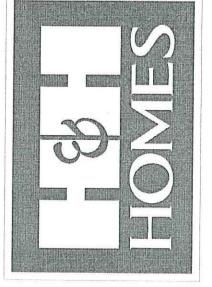


FIRST FLOOR PLAN

ELECTRICAL LAYOUT NOTES: I.) BLOCK AND WIRE FOR ALL CELING FANS PER PLAN. 2.) VANITY LIGHTS TO BE SET 9 90" A.F.F. (TYP.) ADDITIONAL EXTERIOR OUTLETS REQUIRED BY CODE TO BE LOCATED BY ELECTRICIAN. 4.) PLACE SWITCHES 8" (MIN.) FROM ROUGH OPENINGS.

⊕ IIØ ∨ OUTLE		
<u></u>	WALL MOUNT LIGHT	
\(\rightarrow\)	CEILING MOUNT LIGHT	
· ()-	PENDANT LIGHT	
\bigcirc	RECESSED CAN LIGHT	
O	MINI CAN LIGHT	
(1)	EYEBALL LIGHT	
>	FLUORESCENT LIGHT	
	2 LAMP, 4' FLUORESCENT LIGHT	
	FLOOD LIGHT	
\$	SWITCH	
\$	3-WAY SWITCH	
49	4-WAY SWITCH	
\$	DIMMER SWITCH	
[cm]-	CONDUIT FOR COMPONENT WIRING	
SP	5PEAKER	
D-	DOORBELL CHIME	
\$D	110 V SMOKE DETECTOR	
co	CO DETECTOR	
5	EXHAUST FAN	
LVP	LOW YOLTAGE PANEL	
	CEILING FAN	
	CEILING FAN W/ LIGHT	

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



H&H HOMES, INC. TOPSAIL

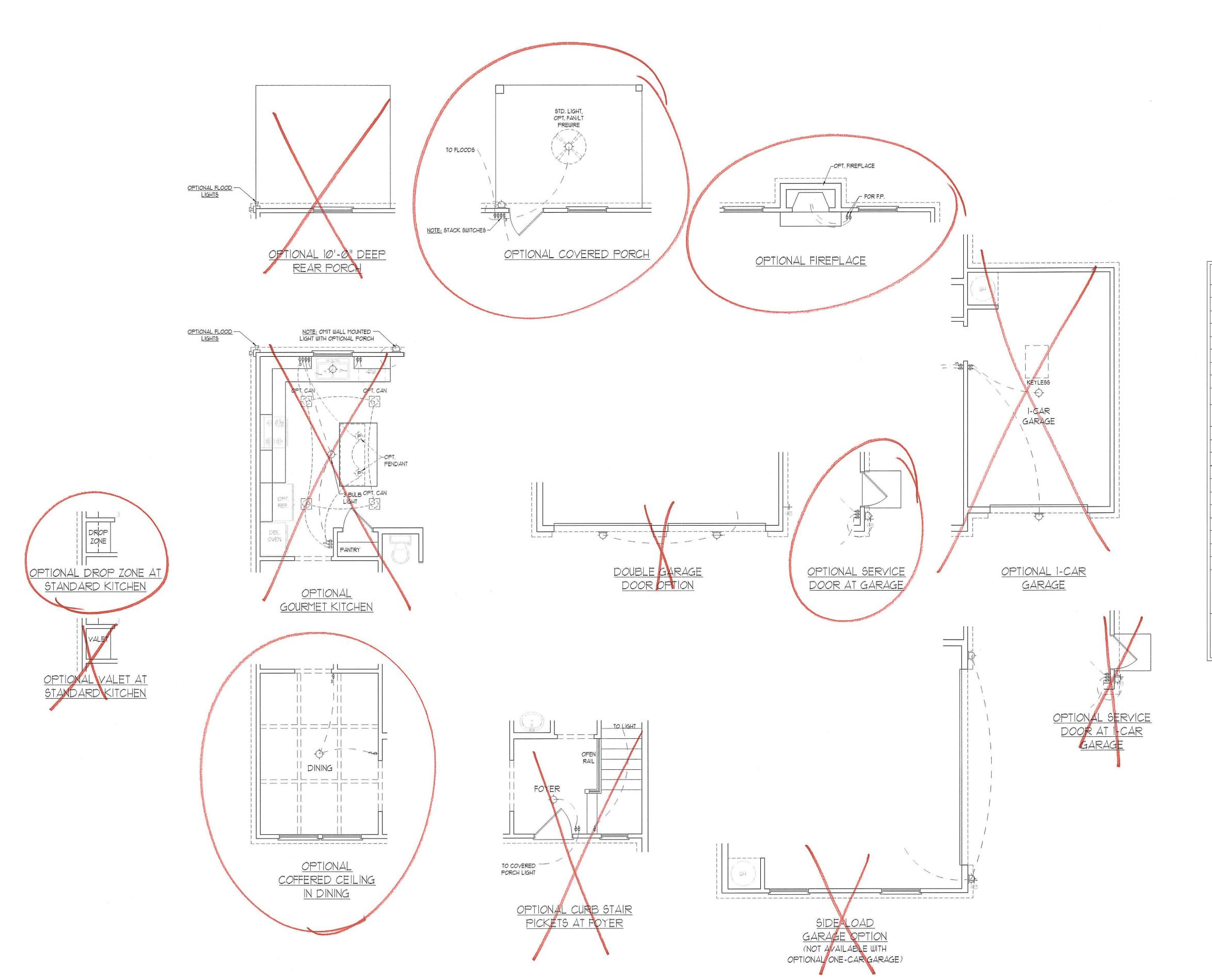
DATE: OCTOBER 13, 2017 REV.: MARCH 30, 2020

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

ENGINEERED BY: REVIEWED BY:

FIRST FLOOR ELECTRICAL PLAN

E-1



ELECTRICAL LAYOUT NOTES: I.) BLOCK AND WIRE FOR ALL CELING FANS PER PLAN.

2.) VANITY LIGHTS TO BE SET 90" A.F.F. (TYP.)

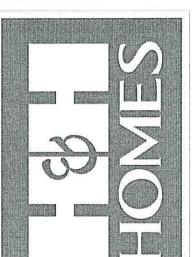
3.) ADDITIONAL EXTERIOR OUTLETS REQUIRED BY CODE TO BE LOCATED BY ELECTRICIAN.

4.) PLACE SWITCHES 8" (MIN.) FROM

ROUGH OPENINGS.

ELECTRICAL LEGEND			
	IIØ V OUTLET		
<u></u>	WALL MOUNT LIGHT		
-	CEILING MOUNT LIGHT		
- P -	PENDANT LIGHT		
Image: Control of the	RECESSED CAN LIGHT		
\bigcirc	MINI CAN LIGHT		
(E)	EYEBALL LIGHT		
	FLUORESCENT LIGHT		
	2 LAMP, 4' FLUORESCENT LIGHT		
	FLOOD LIGHT		
\$	SWITCH		
#	3-WAY SWITCH		
\$	4-WAY SWITCH		
\$	DIMMER SWITCH		
cw-	CONDUIT FOR COMPONENT WIRING		
SP	SPEAKER		
D-	DOORBELL CHIME		
5D	IIØ V SMOKE DETECTOR		
co	CO DETECTOR		
5	EXHAUST FAN		
LVP	LOW VOLTAGE PANEL		
X	CEILING FAN		
	CEILING FAN W/ LIGHT		

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



H&H HOMES, INC. TOPSAIL

DATE: OCTOBER 13, 2017 REV.: MARCH 30, 2020

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

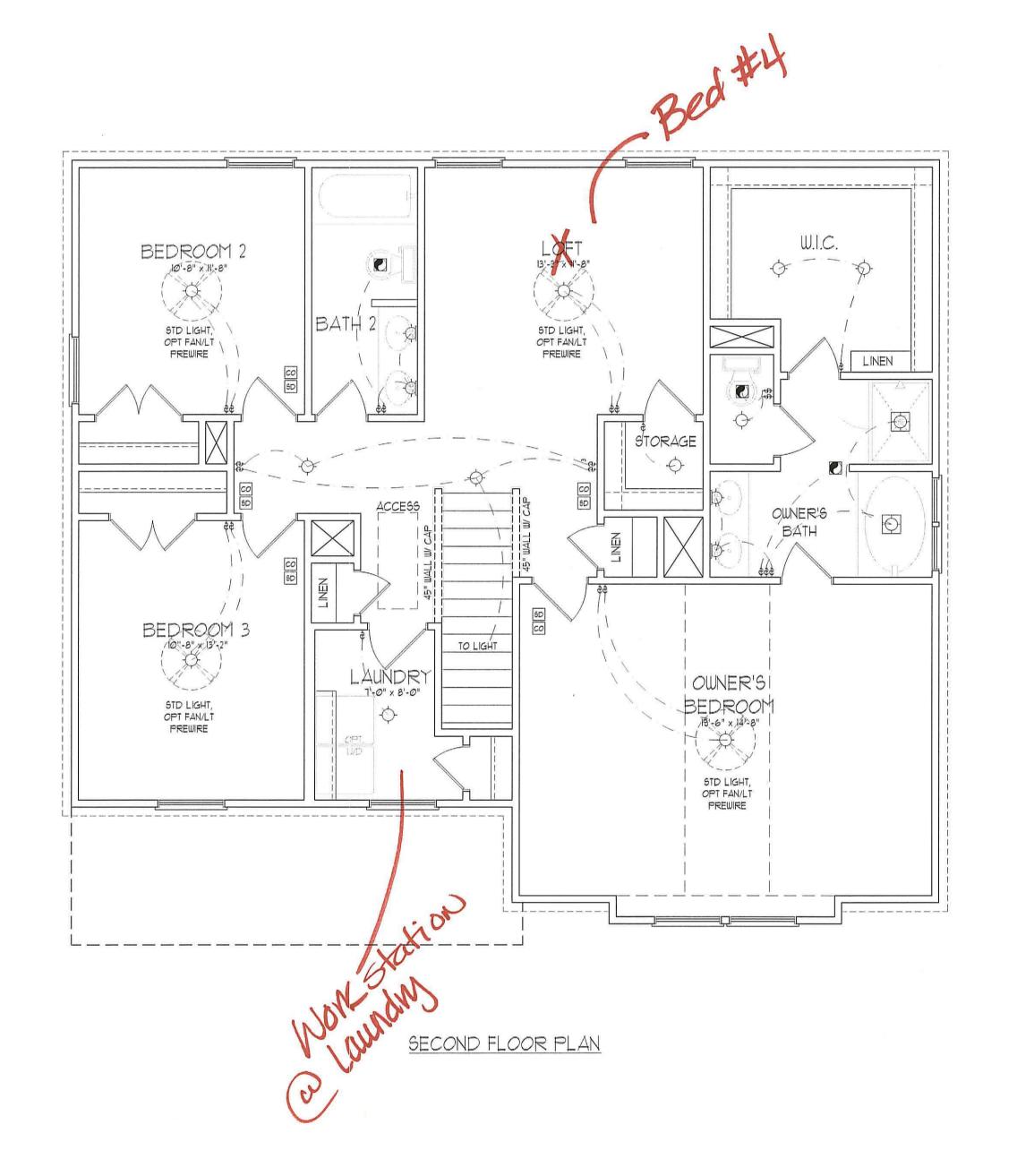
DRAWN BY:

ENGINEERED BY:

REVIEWED BY:

FIRST FLOOR ELECTRICAL PLAN - OPTIONS

E-1



ELECTRICAL LAYOUT NOTES:

I.) BLOCK AND WIRE FOR ALL CELING FANS PER PLAN.

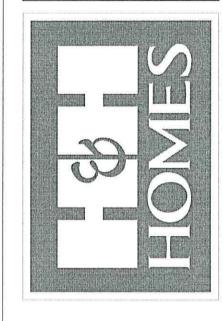
2.) VANITY LIGHTS TO BE SET 9 90" A.F.F. (TYP.)

3.) ADDITIONAL EXTERIOR OUTLETS REQUIRED BY CODE TO BE LOCATED BY ELECTRICIAN.

4,) PLACE SWITCHES 8" (MIN.) FROM ROUGH OPENINGS.

ELECTRICAL LEGEND			
#	IIØ V OUTLET		
<u></u>	WALL MOUNT LIGHT		
\(\rightarrow \)	CEILING MOUNT LIGHT		
•	PENDANT LIGHT		
\bigcirc	RECESSED CAN LIGHT		
Ø	MINI CAN LIGHT		
(II)	EYEBALL LIGHT		
——	FLUORESCENT LIGHT		
	2 LAMP, 4' FLUORESCENT LIGHT		
4	FLOOD LIGHT		
\$	SWITCH		
\$	3-WAY SWITCH		
\$	4-WAY SWITCH		
\$	DIMMER SWITCH		
cw-	CONDUIT FOR COMPONENT WIRING		
SP	SPEAKER		
D-	DOORBELL CHIME		
€D]	110 V SMOKE DETECTOR		
co	CO DETECTOR		
	EXHAUST FAN		
	LOW YOLTAGE PANEL		
	CEILING FAN		
	CEILING FAN W/ LIGHT		

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



DATE: OCTOBER 13, 2017

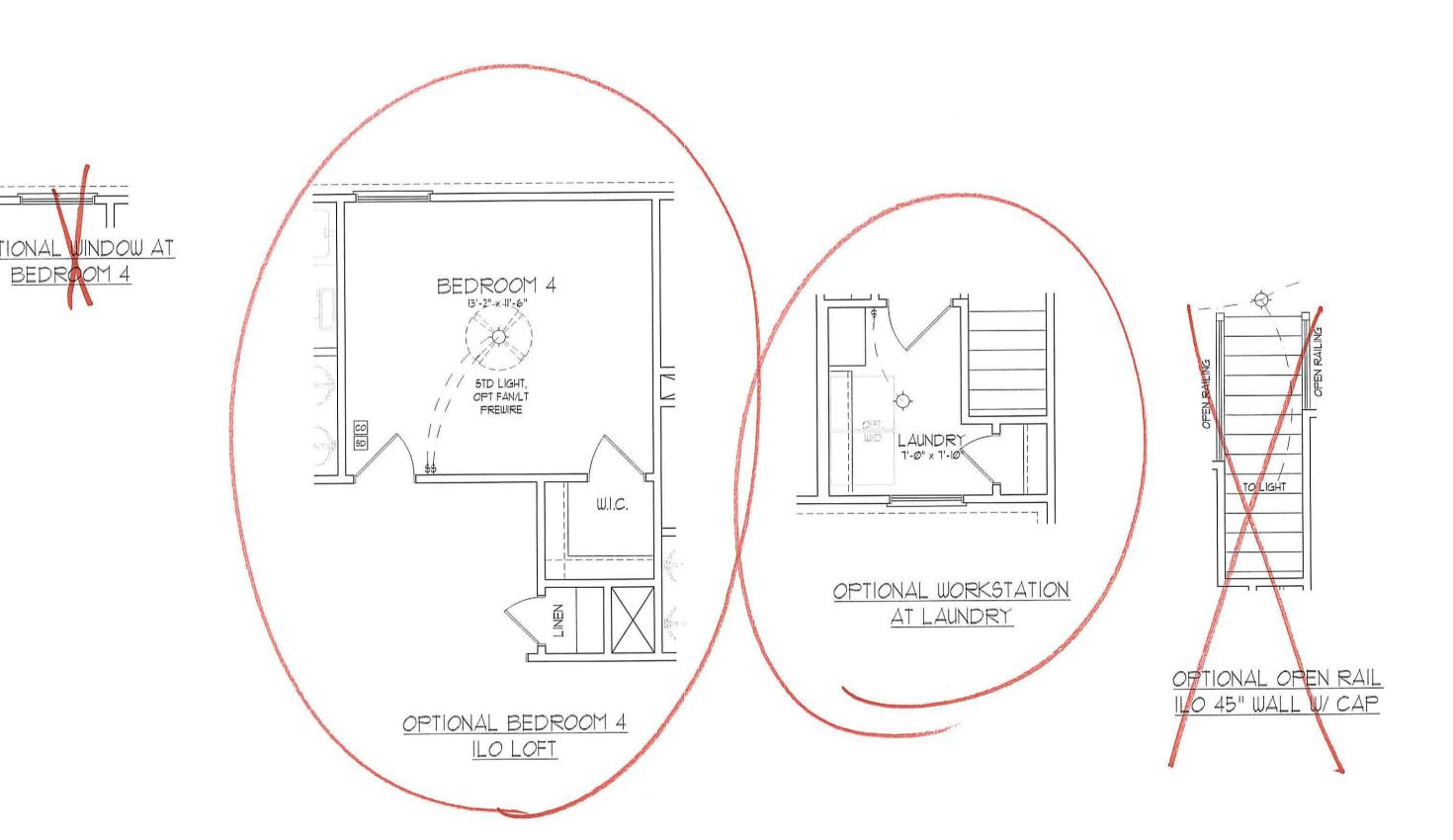
REV.: MARCH 30, 2020

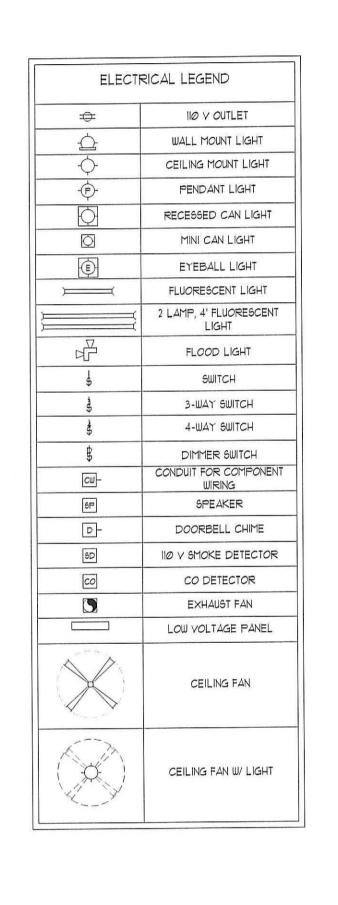
SCALE: 1/4"=1'-0" DRAWN BY:

ENGINEERED BY:

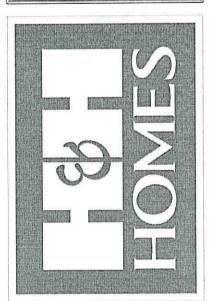
REVIEWED BY:

SECOND FLOOR ELECTRICAL PLAN





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.: C1733



PRIOES, FROM PLANS, INCENTIONS, INCIDENCY, OPTIONS, FLOOR PLANS, ELEVATIONS, DESIGNS, MATERIALS AND DIMENSIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SQUARE FOOTAGE AND DIMENSIONS ARE ESTIMATED AND MAY VARY IN ACTUAL 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 H&H HOMES. ANY USE, REPRODUCTION, ADAPTATION, OR DISPLAY OF THE PLANS IS STRICTLY PROHIBITED. SEE NEW HOME SALES CONSULTANT FOR

H&H HOMES, INC. TOPSAIL

DATE: OCTOBER 13, 2017

REV.: MARCH 30, 2020

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

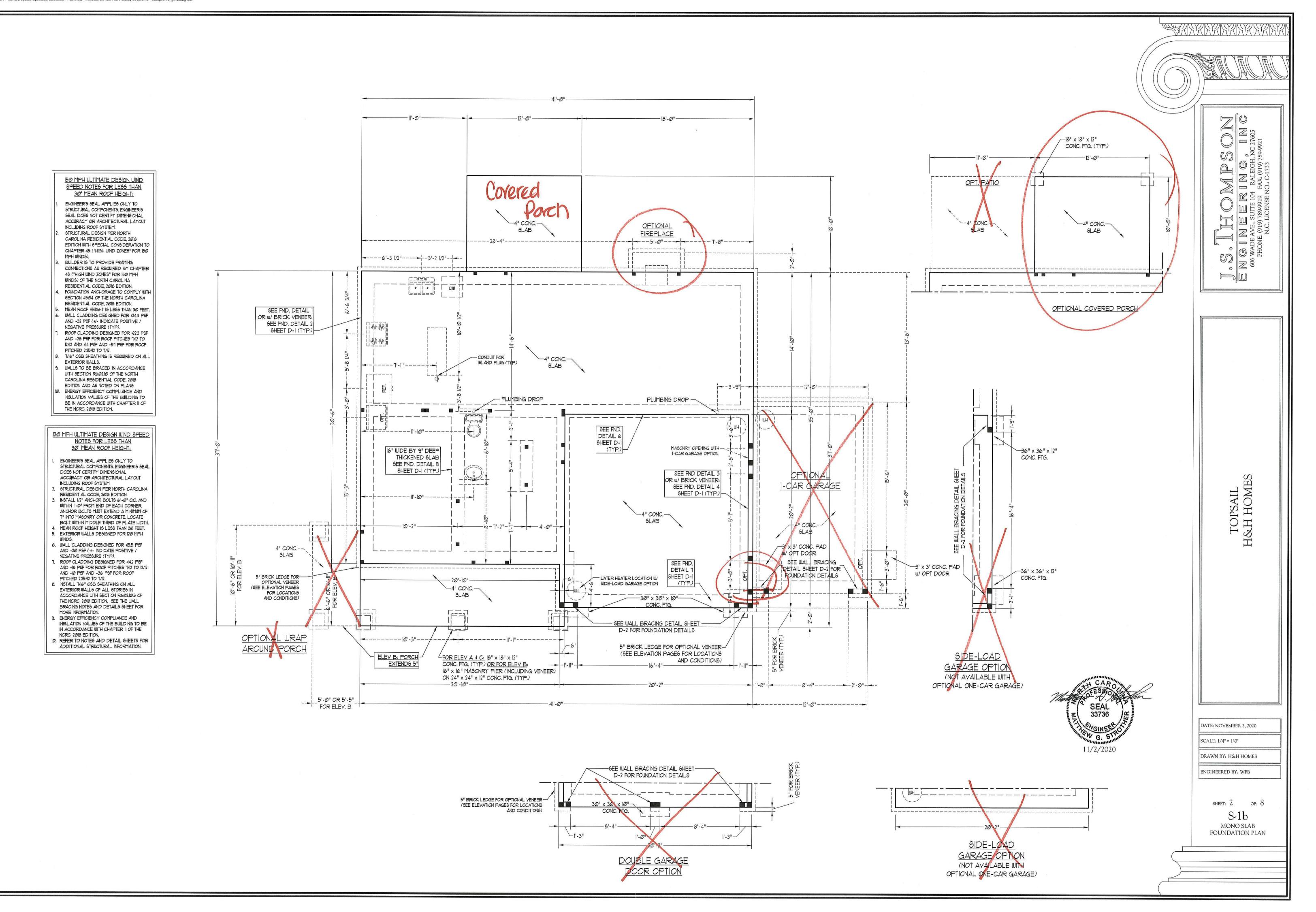
DRAWN BY:

ENGINEERED BY:

REVIEWED BY:

SECOND FLOOR ELECTRICAL PLAN OPTIONS

E-2.1



BRACED WALL DESIGN NOTES:

- BRACED WALL DESIGN PER SECTION R602.10 OF THE NCRC
- 2018 EDITION. CS-WSP 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 7" 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 NCRC 2018 EDITION.
- SEE NOTES AND DETAIL SHEETS FOR ADDITIONAL BRACED WALL INFORMATION.

BRACED WALL DESIGN

RECTANGLE B RECTANGLE A SIDE IB SIDE IA (FRONT LOAD) METHOD: CS-WSP/PF/GB METHOD: CS-WSP/PF TOTAL REQUIRED LENGTH: 15.1' TOTAL REQUIRED LENGTH: 4.56' TOTAL PROVIDED LENGTH: 21.6'

TOTAL PROVIDED LENGTH: 6" METHOD: CS-WSP METHOD: CS-WSP TOTAL REQUIRED LENGTH: 15.1' TOTAL REQUIRED LENGTH: 4.56' TOTAL PROVIDED LENGTH: 20.66' TOTAL PROVIDED LENGTH: 12'

SIDE 3A (SIDE LOAD) METHOD: CS-WSP/PF/GB METHOD: CS-WSP

METHOD: CS-WSP TOTAL REQUIRED LENGTH: 17.55' TOTAL REQUIRED LENGTH: 3.19' TOTAL PROVIDED LENGTH: 20.12' TOTAL PROVIDED LENGTH: 15.58' SIDE 4B/3A CUMULATIVE METHOD: CS-WSP/GB TOTAL REQUIRED LENGTH: 17.55' TOTAL REQUIRED LENGTH: 20.74' TOTAL PROVIDED LENGTH: 35' TOTAL PROVIDED LENGTH: 31.45'

TABLE R602.7.5 MINIMUM NUMBER OF FULL HEIGHT STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS

HEADER SPAN (FEET)	MAXIMUM STUD SPACING (INCHES) (PER TABLE R6023(5)		
(FEE I)	16	24	
UP TO 3'	1	1	
4'	2	1	
8'	3	2	
12'	5	3	
16'	6	4	

STRUCTURAL NOTES:

- ALL FRAMING LUMBER TO BE SPF #2 (UNO). ALL TREATED LUMBER TO BE SYP #2 (UNO.)
- ALL LOAD BEARING HEADERS TO BE (2) 2 x 6
- INSTALL AN EXTRA JOIST UNDER WALLS PARALLEL TO FLOOR JOISTS WHERE NOTED ON THE PLANS. WINDOW AND DOOR HEADERS TO BE SUPPORTED w/ (1) JACK STUD AND (1) KING STUD EA. END (UNO.). SEE TABLE R602.7.5 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 1/16" 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. 8. 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 700 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. 10. REFER TO NOTES AND DETAIL SHEETS FOR

ADDITIONAL STRUCTURAL INFORMATION.

DSP - DOUBLE STUD POCKET

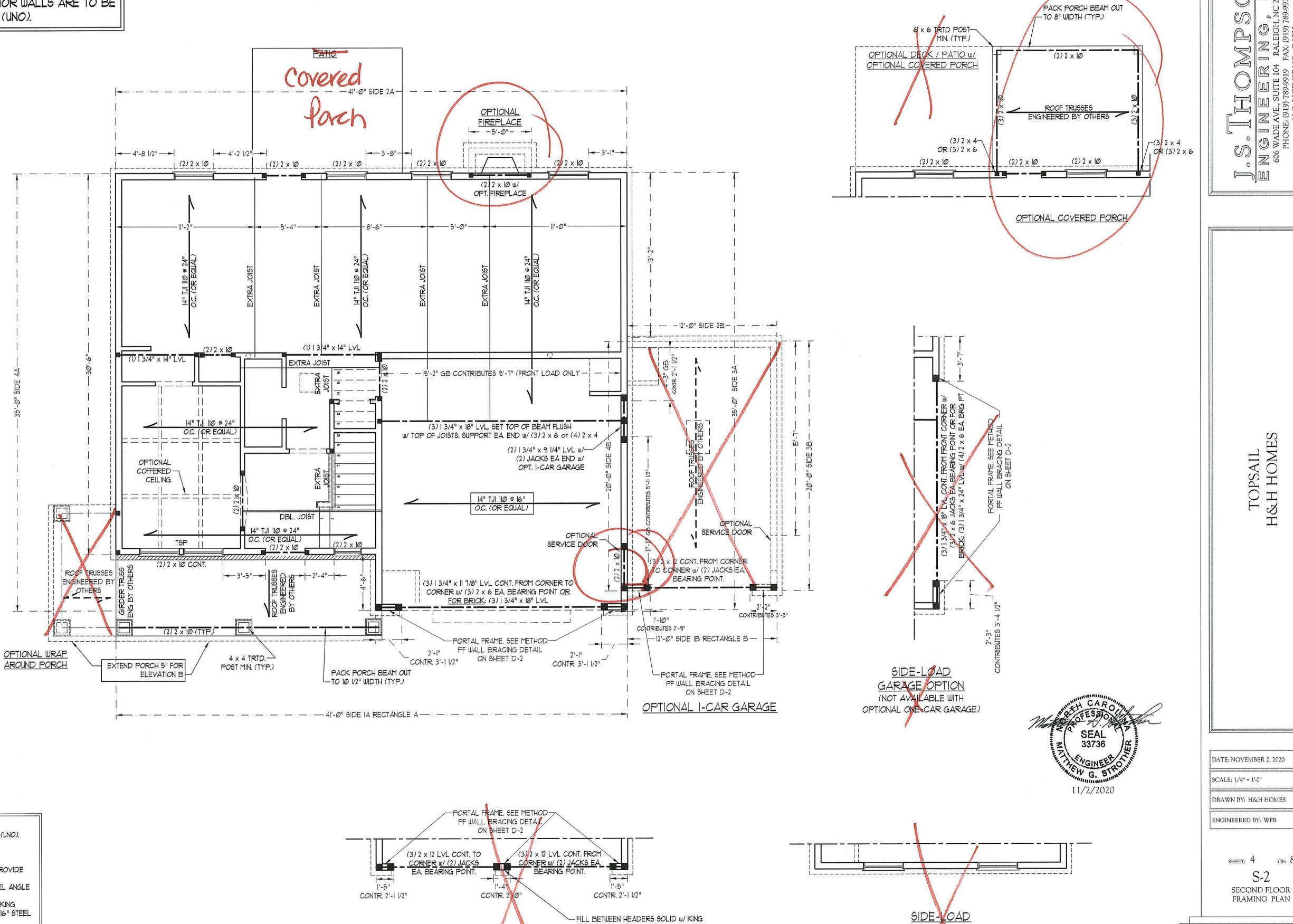
TSP - TRIPLE STUD POCKET

BCI 45006-1.8 I-JOISTS MAY BE USED IN LIEU OF TJI 110 1-JOISTS AT THE DEPTH AND SPACING NOTED ON THE PLAN.

	CHEDULE FOR AL STONE SUPPORT	BRICK SUPPORT NOTES: 1. LINTEL SCHEDULE APPLIES TO ALL OPENINGS IN BRICK VENEER (UNO). SEE ARCH DWGS, FOR SIZE AND LOCATION OF OPENINGS.
LENGTH (FT.)	<u>SIZE OF LINTEL</u>	2. (LLY) = LONG LEG VERTICAL 3. LENGTH = CLEAR OPENING 4. EMBED ALL ANGLE IRONS MIN. 4" EACH SIDE INTO VENEER TO PROVIDE BEARING.
UP TO 4 FT.	L 3 1/2 x 3 1/2 x 1/4	 5. FOR ALL HEADERS 8'-0" AND GREATER IN LENGTH, ATTACH STEEL ANGLE TO HEADER W/ 1/2" LAG SCREWS @ 12" O.C. STAGGERED. 6. FOR ALL BRICK SUPPORT @ ROOF LINES, FASTEN (2) 2 x 10 BLOCKING
4-8	L 5 x 3 1/2 x 5/16 LLV	BETWEEN STUDS w/ (4) 12d 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 R703.82.1 OF THE 2018 NCRC FOR ADDITIONAL
8 AND GREATER	L 6 x 4 x 5/16 LLV	BRICK SUPPORT INFORMATION 1. PRECAST REINFORCED CONCRETE LINTELS ENGINEERED BY OTHERS MAY BE USED IN LIEU OF STEEL LINTELS.

BRICK SUPPORT NOTES:

*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).



- FILL BETWEEN HEADERS SOLID W/ KING STUDS, STRAP HDRS, TOGETHER W/ (2) 5'

DOUBLE GARAGE

LONG SIMPSON CSIG COIL STRAPS INSTALLED

TOP AND BOTTOM ON INSIDE FACE OF HDRS.

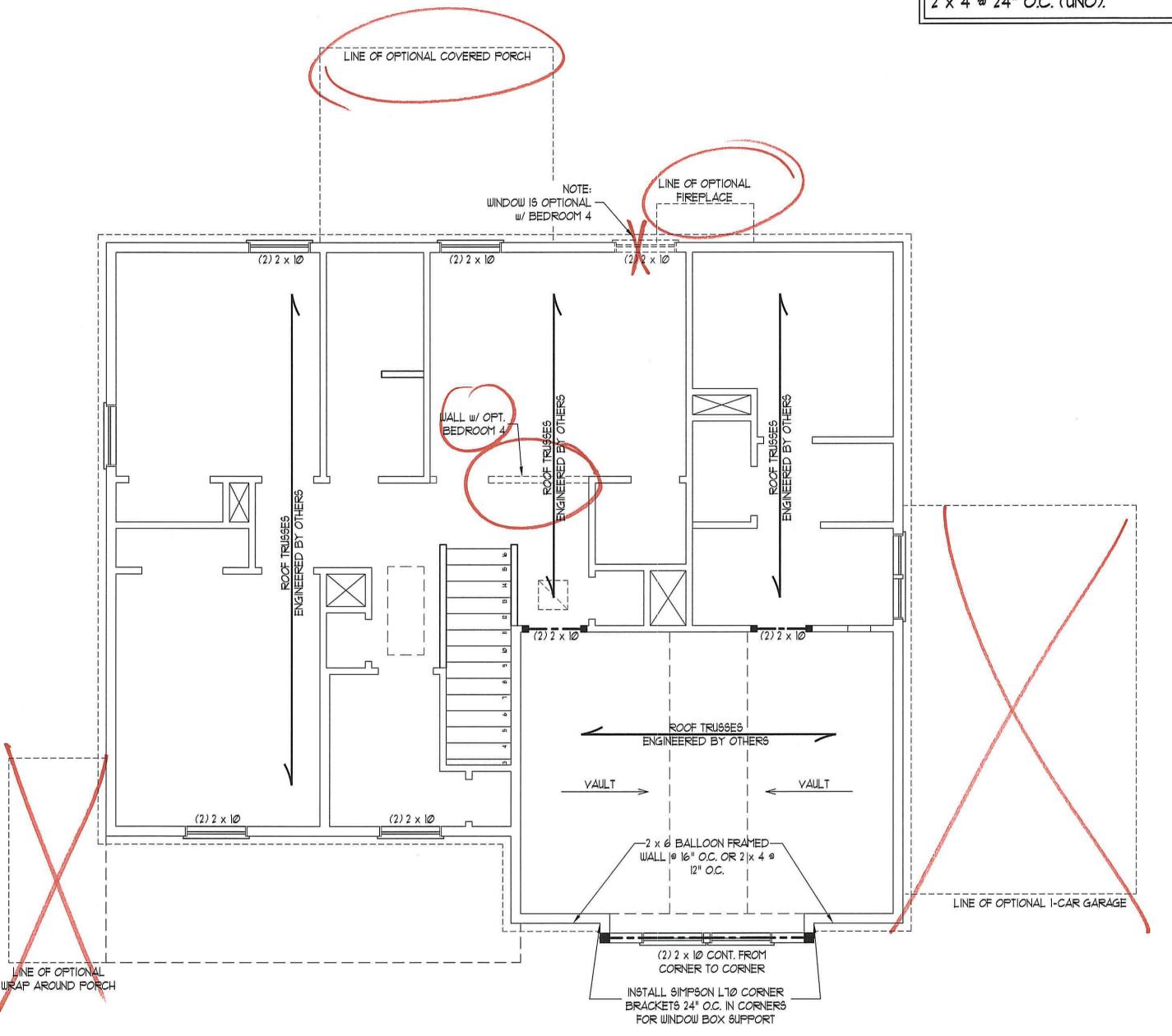
GARAGE OPTION

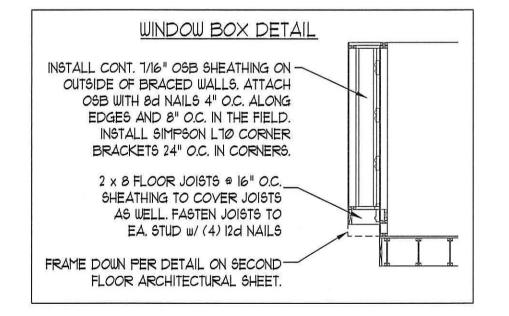
(NOT AVAILABLE WITH

OPTIONAL ONE-CAR GARAGE)

of: 8

*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:

I. BRACED WALL DESIGN PER SECTION R602.10 OF THE NCRC

2018 EDITION.

2. CS-WSP 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.

3. "GB REFERS TO "GYPSUM BOARD" CONTRACTOR IS TO INSTALL I/2" (MIN.) GYPSUM WALL BOARD WHERE NOTED ON THE PLANS. FASTEN GB WITH I I/4" SCREWS OR I 5/8" NAILS SPACED 1" O.C. ALONG PANEL EDGES AND IN THE FIELD INCLUDING TOP AND BOTTOM PLATES.

4. 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 NCRC 2018 EDITION.

5. SEE NOTES AND DETAIL SHEETS FOR ADDITIONAL BRACED WALL INFORMATION.

NOTE:

 PER SECTION R602.10.3.2 OF THE 2018 NCRC, THE AMOUNT OF BRACING ON THE SECOND FLOOR EXCEEDS THE AMOUNT REQUIRED FOR THE FIRST FLOOR AND NO BRACED WALL ANALYSIS IS REQUIRED.

2. 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.

HEDULE FOR STONE SUPPORT
SIZE OF LINTEL
L 3 1/2 x 3 1/2 x 1/4
L 5 x 3 1/2 x 5/16 LLV
L 6 x 4 x 5/16 LLV
֡֡֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜

BRICK SUPPORT NOTES:

- I. LINTEL SCHEDULE APPLIES TO ALL OPENINGS IN BRICK VENEER (UNO). SEE ARCH DUGS. FOR SIZE AND LOCATION OF OPENINGS.
- . (LLV) = LONG LEG VERTICAL
- 3. LENGTH = CLEAR OPENING 4. EMBED ALL ANGLE IRONS MIN. 4" EACH
- SIDE INTO VENEER TO PROVIDE BEARING.

 5. FOR ALL HEADERS 8'-0" AND GREATER
 IN LENGTH, ATTACH STEEL ANGLE TO
 HEADER W/ 1/2" LAG SCREWS @ 12" O.C.
 STAGGERED.
- 6. FOR ALL BRICK SUPPORT © ROOF LINES, FASTEN (2) 2 × 10 BLOCKING BETWEEN STUDS W/ (4) 12d NAILS PER PLY. FASTEN A 6" × 4" × 5/16" STEEL ANGLE TO (2) 2 × 10 BLOCKING W/ (2) 1/2" LAG SCREWS © 12" O.C. STAGGERED. SEE SECTION RT03.8.2.1 OF THE 2018 NCRC FOR ADDITIONAL
- BRICK SUPPORT INFORMATION.

 I. PRECAST REINFORCED CONCRETE
 LINTELS ENGINEERED BY OTHERS MAY BE
 USED IN LIEU OF STEEL LINTELS.

TABLE R602.7.5

MINIMUM NUMBER OF FULL HEIGHT STUDS
AT EACH END OF HEADERS IN EXTERIOR WAL

HEADER SPAN (FEET)	MAXIMUM STUD SPACING (INCHE (PER TABLE R6023(5)	
(FEE ()	16	24
UP TO 3'	1	1
4'	2	1
8'	3	2
12'	5	3
16'	6	4

STRUCTURAL NOTES:

- . ALL FRAMING LUMBER TO BE SPF #2 (UNO). ALL TREATED LUMBER TO BE SYP #2 (UNO.)
- 2. ALL LOAD BEARING HEADERS TO BE (2) 2 x 6 (UNO).

 B. WINDOW AND DOOR HEADERS TO BE
- 3. WINDOW AND DOOR HEADERS TO BE SUPPORTED w/ (1) JACK STUD AND (1) KING STUD EA. END (UNO.). SEE TABLE R602.7.5 FOR ADDITIONAL KING STUD REQUIREMENTS.
 4. SQUARES DENOTE POINT LOADS WHICH
- 4. SQUARES DENOTE POINT LOADS WHICH REQUIRE SOLID BLOCKING TO GIRDER OR FOUNDATION. ALL SQUARES TO BE (2) STUDS (UNO.)

 5. EOR LIGHTIMED TONES ALL EXTERIOR HIGH TIME
- 5. FOR HIGH WIND ZONES, ALL EXTERIOR WALLS
 TO BE SHEATHED WITH 1/16" OSB SHEATHING
 WITH JOINTS BLOCKED AND SECURED WITH
 8d NAILS AT 3" O.C. ALONG EDGES AND 6"
 O.C. IN THE FIELD.
 6. FOR HIGH WIND ZONES, SECURE ALL
- 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. REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

TSP - TRIPLE STUD POCKET

So HHOM PSON

ON SINEERING, IN 6

ON SHONE: (919) 789-9919

FAX: (919) 789-9921

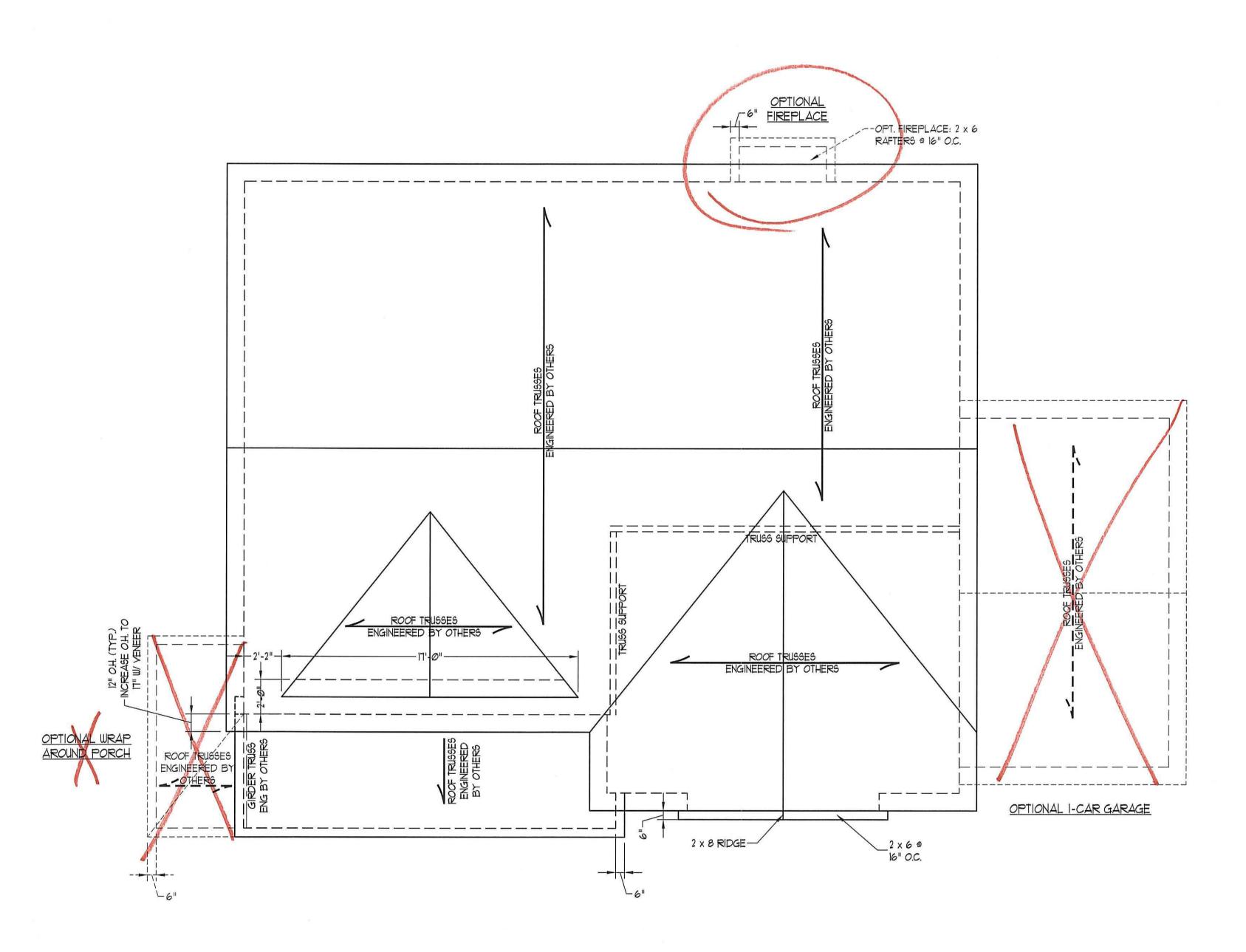
TOPSAIL H&H HOMES

DATE: NOVEMBER 2, 2020 SCALE: 1/4" = 1'-0"

DRAWN BY: H&H HOMES

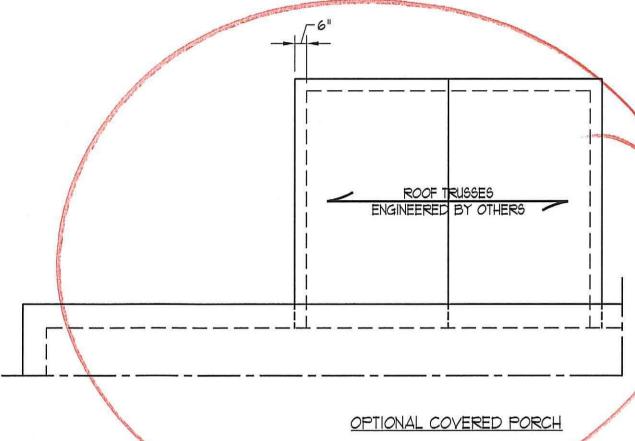
ENGINEERED BY: WFB

S-3
ATTIC FLOOR
FRAMING PLAN



ELEVATION A





STRUCTURAL NOTES:

- 1. ALL FRAMING LUMBER TO BE #2 SPF (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 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 H2.5A 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.II OF THE 2018 NCRC FOR REQUIRED UPLIFT RESISTANCE AT RAFTERS AND TRIBATES.
- 8. REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

BRICK SUPPORT NOTE:

- 1. FASTEN (2) 2 × 10 BLOCKING BETWEEN WALL STUDS w/ (4) 12d NAILS PER PLY. FASTEN A 6" × 4" × 5/16" STEEL ANGLE TO (2) 2 × 10 BLOCKING w/ (2) 1/2" LAG SCREWS @ 12" O.C. STAGGERED. SEE SECTION R103.8.2.1. OF THE 2018 NCRC FOR ADDITIONAL BRICK SUPPORT INFORMATION.

 2. WHERE ROOF SLOPES EXCEED 7:12, INSTALL
- 3" x 3" x 1/4" STEEL PLATE STOPS AT 24"
 O.C. PER SECTION R103.8.2.1 OF THE NORTH
 CAROLINA RESIDENTIAL CODE, 2018
 EDITION.

DATE: NOVEMBER 2, 2020

TOPSAIL H&H HOMES

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

DRAWN BY: H&H HOMES
ENGINEERED BY: WFB

S-4a
ROOF FRAMING
PLAN

DETAIL

TYPICAL SLAB DETAIL

-SIDING AS SPEC.

-STARTER STRIP

-SHEATHING

WALL FRAMING AND TRTD .-

TRTD. BOTTOM PLATE SECURED BY 1/2" DIA.

BOLTS, 1/2" REDHEAD ANCHORS, OR 1/2" SIMPSON

(MINIMUM OF TWO ANCHORS PER PLATE SECTION).

SEE CHART FOR SPACING AND EMBEDMENT REQ.

4" CONCRETE SLAB-

W/ FIBER REINFORCING

UNDISTURBED EARTH,-

WASHED STONE

COMPACTED FILL OR

OR WELDED WIRE FABRIC

6 MIL. VAPOR BARRIER-

WELL-DRAINING SOIL

OR WASHED STONE

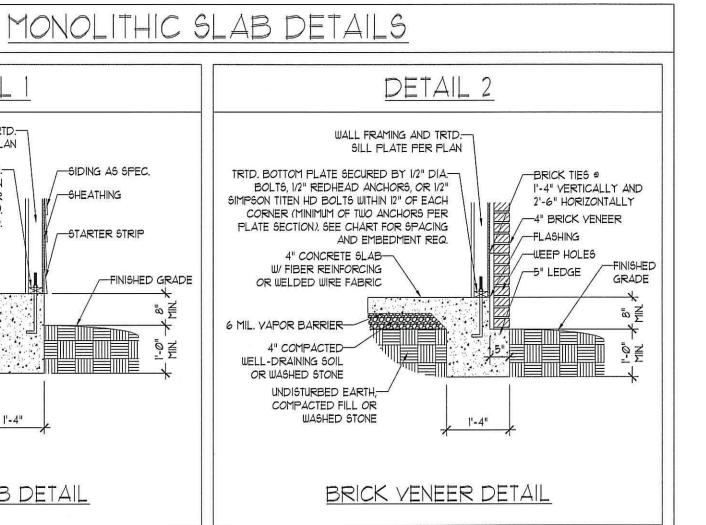
4" COMPACTED-

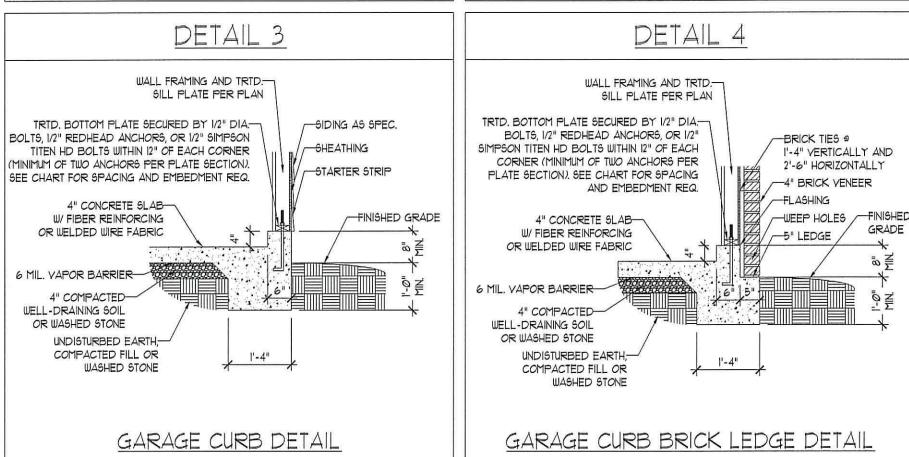
TITEN HD BOLTS WITHIN 12" OF EACH CORNER

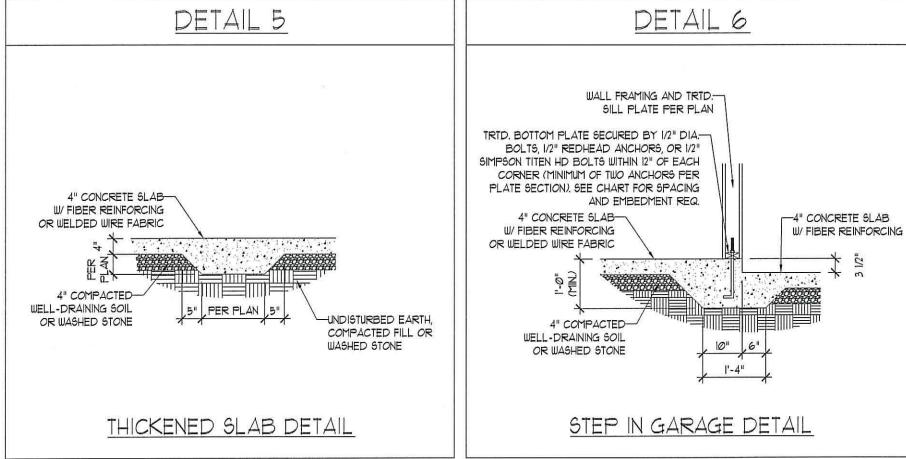
SILL PLATE PER PLAN

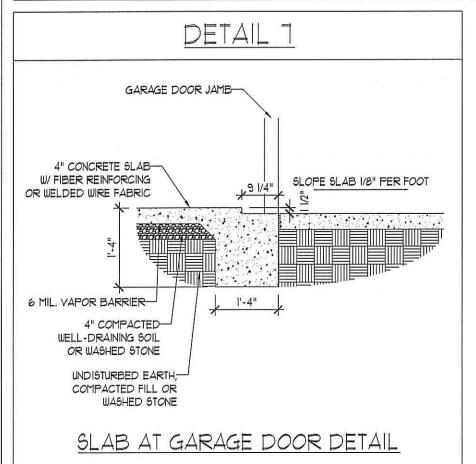
ENGINEERED BY: JES

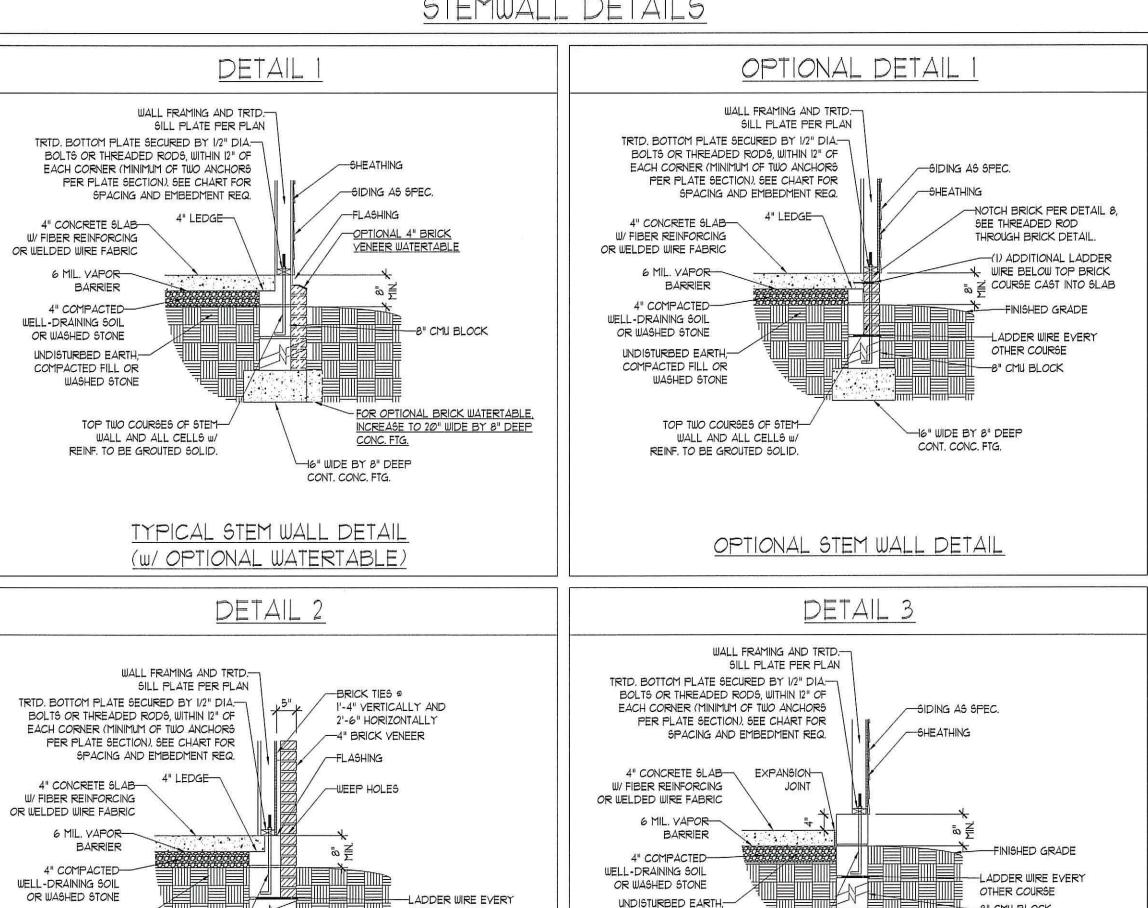
STEMWALL DETAILS





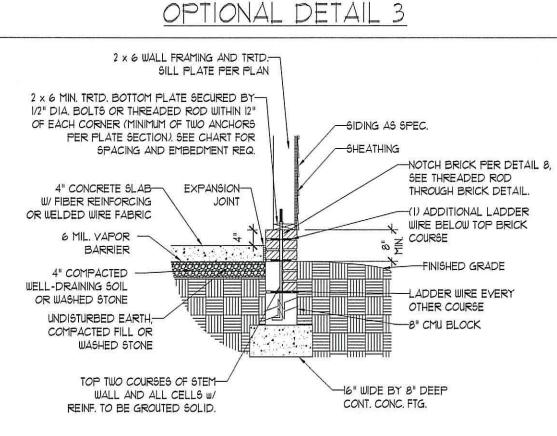




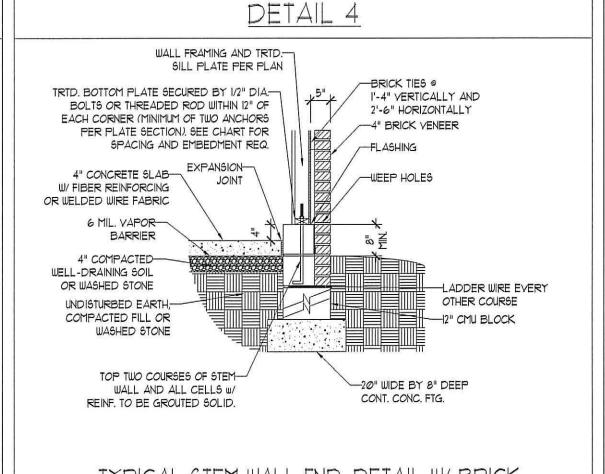


-8" CMU BLOCK UNDISTURBED EARTH, OTHER COURSE COMPACTED FILL OR COMPACTED FILL OR -12" CMU BLOCK WASHED STONE WASHED STONE TOP TWO COURSES OF STEM--16" WIDE BY 8" DEEP WALL AND ALL CELLS W/ CONT. CONC. FTG. REINF. TO BE GROUTED SOLID. -20" WIDE BY 8" DEEP WALL AND ALL CELLS w/ CONT. CONC. FTG. REINF. TO BE GROUTED SOLID.

TYPICAL STEM WALL FND. W/ BRICK DETAIL OPTIONAL DETAIL 3



OPTIONAL STEM WALL FND. DETAIL W/ CURB @ GARAGE



TYPICAL STEM WALL FND. DETAIL W/ CURB @ GARAGE

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

DETAIL 8		
INSIDE EDGE OF MASONRY STEMWALL LADDER WIRE PER DETAIL BRICK MASONRY OUTSIDE EDGE OF BRICK AND STICK FRAMED WALL ABOVE NOTCH BRICK © THREADED ROD AND GROUT SOLID		
THREADED ROD THROUGH BRICK MASONRY		

MASONRY STEMWALL SPECIFICATIONS MASONRY WALL TYPE WALL HEIGHT (FEET) 4" BRICK AND 4" 4" BRICK AND 8" 12" CMU 8" CMU CMU CMU UNGROUTED GROUT SOLID UNGROUTED UNGROUTED 2 AND BELOW UNGROUTED GROUT SOLID UNGROUTED UNGROUTED GROUT SOLID w/ #4 GROUT SOLID w/ #4 GROUT SOLID GROUT SOLID REBAR @ 48" O.C. REBAR @ 64" O.C. GROUT SOLID w/ *4 | GROUT SOLID w/ *4 GROUT SOLID W/ REBAR @ 36" O.C. REBAR @ 36" O.C. | REBAR @ 64" O.C. GROUT SOLID w/ #4 | GROUT SOLID w/ #4 GROUT SOLID W/ #4 REBAR @ 24" O.C. | REBAR @ 64" O.C. REBAR @ 24" O.C. ENGINEERED DESIGN BASED ON SITE CONDITIONS 1 AND GREATER

STRUCTURAL NOTES:

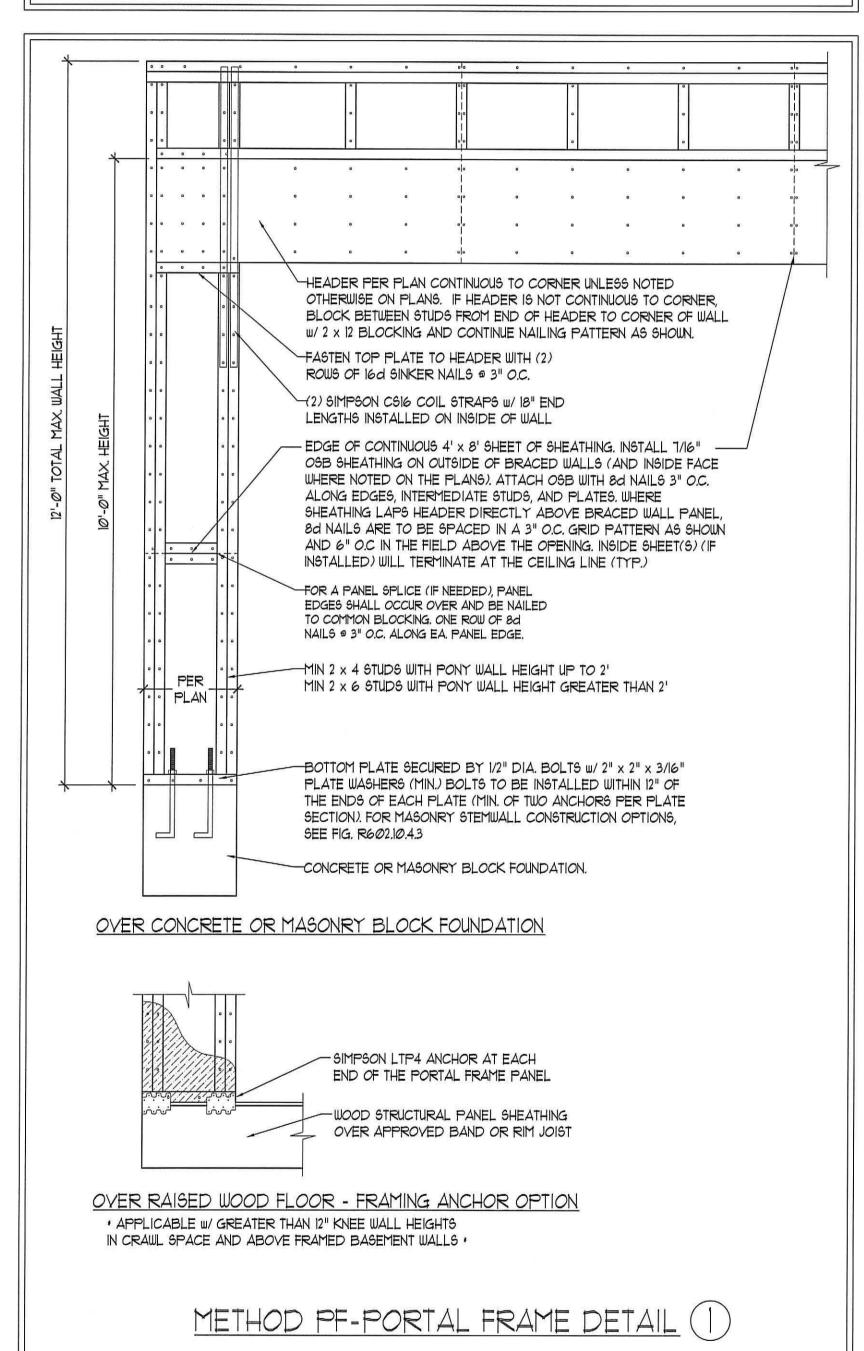
- WALL HEIGHT MEASURED FROM TOP OF FOOTING TO TOP OF THE WALL. TIE MULTIPLE WYTHES TOGETHER WITH LADDER WIRE AT 16" O.C. VERTICALLY.
- CHART APPLICABLE FOR HOUSE FOUNDATION ONLY. CONSULT ENGINEER FOR DESIGN OF GARAGE FOUNDATION NOT COMMON TO HOUSE.
- BACKFILL OF CLEAN #57 / #67 WASHED STONE IS ALLOWABLE.
- BACKFILL OF WELL DRAINED OR SAND GRAVEL MIXTURE SOILS (45 PSF/FT BELOW GRADE) CLASSIFIED AS GROUP I ACCORDING TO UNIFIED SOILS CLASSIFICATION SYSTEM IN ACCORDANCE
- WITH TABLE R405.1 OF THE 2018 INTERNATIONAL RESIDENTIAL CODE ARE ALLOWABLE. . PREP SLAB PER <u>R506.2.1</u> AND <u>R506.2.2</u> 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.

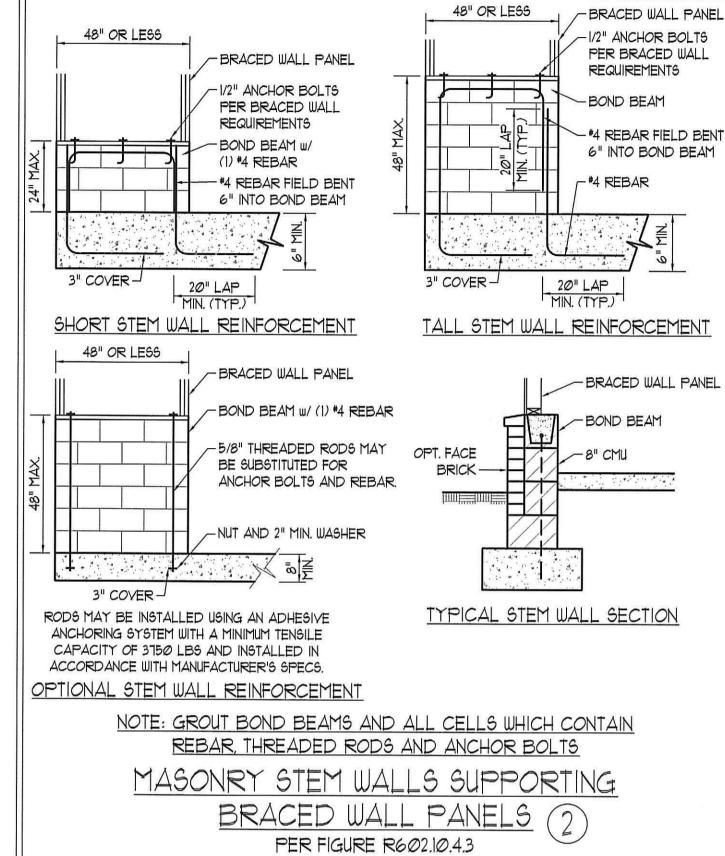
ANCHOR SPACING AND EMBEDMENT		
WIND ZONE	12Ø MPH	130 MPH
SPACING	6'-0" O.C.	4'-0" O.C.
EMBEDMENT	7"	15" INTO MASONRY 7" INTO CONCRETE

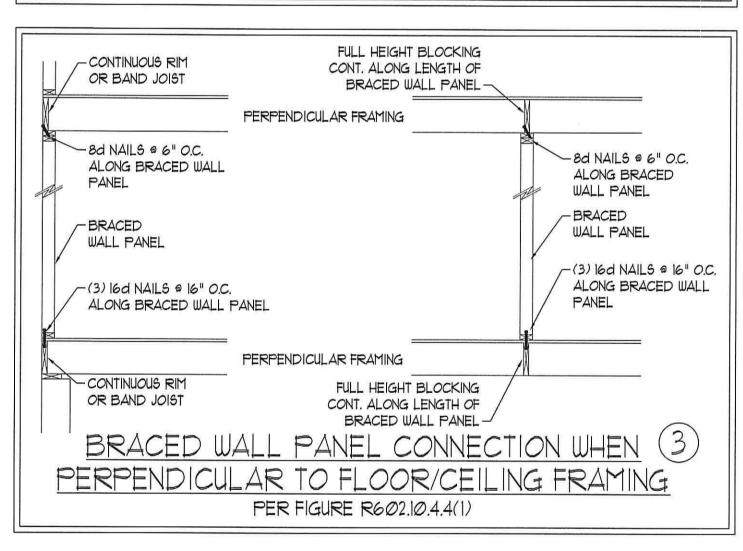


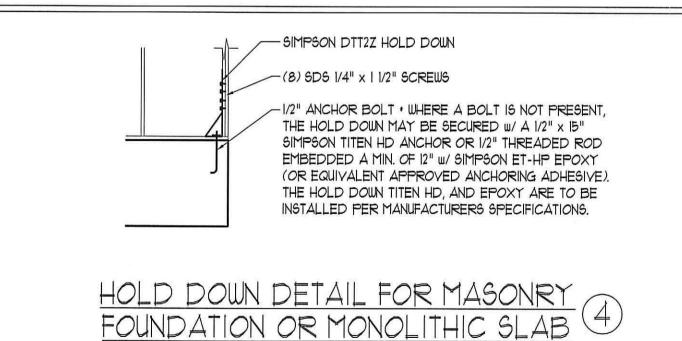
GENERAL WALL BRACING NOTES:

- WALL BRACING DESIGNED IN ACCORDANCE WITH CHAPTER 6 OF THE 2018 NC RESIDENTIAL BUILDING CODE (NCRC). TABLES AND FIGURES REFERENCED ARE FROM THE 2018 NCRC.
- 2. SEE THIS SHEET FOR GENERAL DETAILS. REFER TO THE 2018 NCRC 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-WSP 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 R1023.5. METHOD GB TO BE FASTENED PER TABLE R602.10.
- 6. CS-WSP 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 Ø.113" DIAMETER) NAILS SPACED 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN THE FIELD (UN.O.).
- . 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 (UN.O.). 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 R6023(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-WSP CONTRIBUTES ITS ACTUAL LENGTH, METHOD GB CONTRIBUTES .5 ITS ACTUAL LENGTH, AND

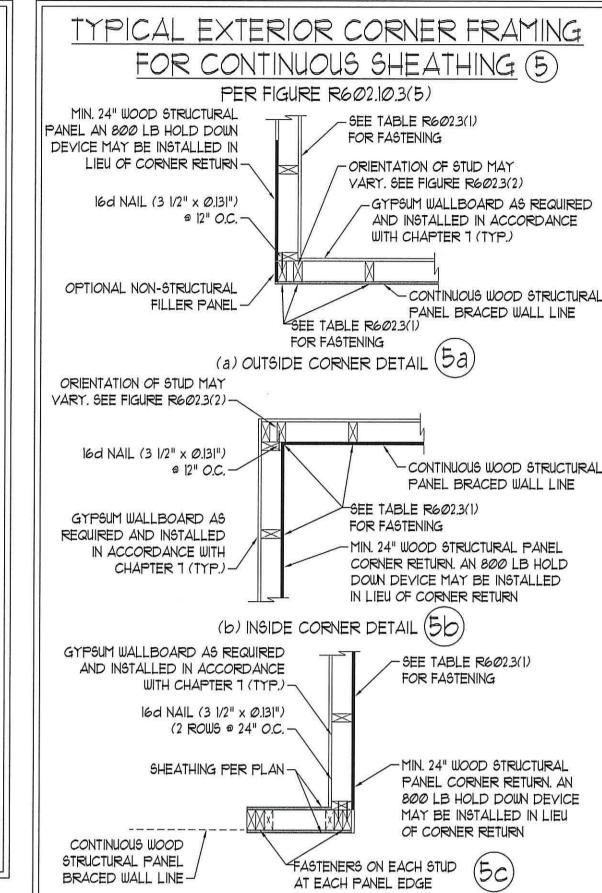






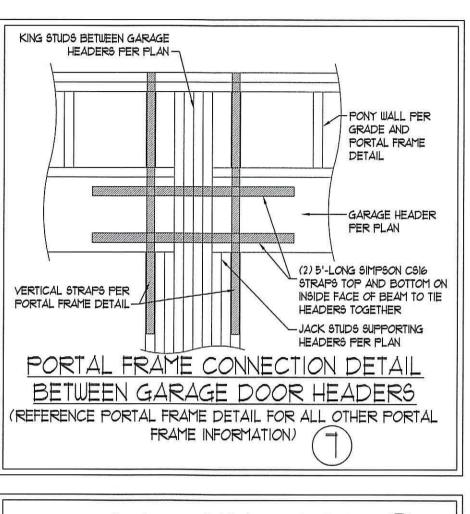


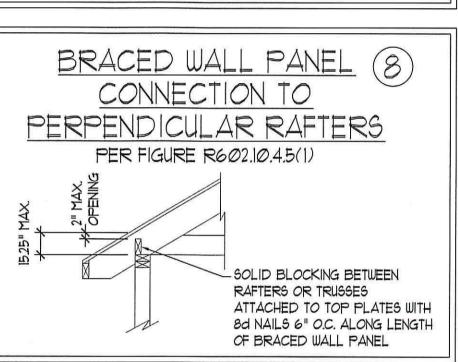
* APPLICABLE ONLY WHERE SPECIFIED ON PLAN

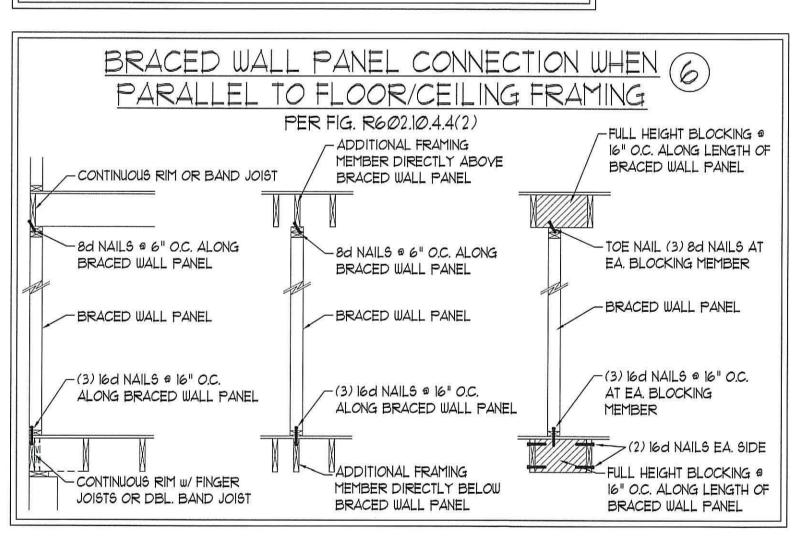


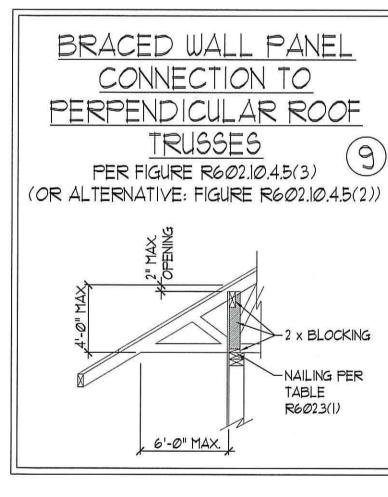
(c) GARAGE DOOR CORNER DETAIL (SEE PLAN FOR ADDITIONAL

STRUCTURAL INFORMATION OR ALTERNATE CONFIGURATIONS)









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

DRAWN BY: JST ENGINEERED BY: JST

> D-2 **BRACED WALL** NOTES AND DETAILS AND PF DETAIL

DATE: NOVEMBER 14, 2018

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



SIG MPH ULTIMATE I BRACING NOTES MPH - 130 | WALL I 20

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 1-JOIST OR FLOOR/ROOF TRUSS LAYOUT DESIGN AND ACCURACY.
- 2. ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE (NCRC), 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 CONTRACTORS FAILURE TO CARRY OUT THE CONSTRUCTION WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- 3. STRUCTURAL DESIGN BASED ON THE PROVISIONS OF THE NCRC, 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/36Ø
DECKS	40	10	L/36Ø
EXTERIOR BALCONIES	40	10	L/36Ø
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 ROOM	40	10	L/360
SLEEPING ROOMS	30	10	L/360
STAIRS	40	10	L/360
WIND LOAD	(BASED ON TABLE R3Ø1.2(4) WIND ZONE AND EXPOSURE)		
GROUND SNOW LOAD: Pg	20 (PSF)		

- I-JOIST SYSTEMS DESIGNED WITH 12 PSF DEAD LOAD AND DEFLECTION (IN) OF L/480 - FLOOR TRUSS SYSTEMS DESIGNED WITH 15 PSF DEAD LOAD
- 4. FOR 115 AND 120 MPH WIND ZONES, FOUNDATION ANCHORAGE IS TO COMPLY WITH SECTION R403.1.6 OF THE NCRC, 2018 EDITION. FOR 130 MPH, 140 MPH, AND 150 MPH WIND ZONES, FOUNDATION ANCHORAGE IS TO COMPLY WITH SECTION 4504 OF THE NCRC, 2018 EDITION.
- 5. ENERGY EFFICIENCY COMPLIANCE AND INSULATION VALUES OF THE BUILDING TO BE IN ACCORDANCE WITH CHAPTER II OF THE NCRC, 2018 EDITION.

FOOTING AND FOUNDATION NOTES

- I. FOUNDATION DESIGN BASED ON A MINIMUM ALLOWABLE BEARING CAPACITY OF 2000 PSF. CONTACT GEOTECHNICAL ENGINEER IF BEARING CAPACITY IS NOT ACHIEVED.
- 2. 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 R405.1 OF THE NCRC, 2018 EDITION.
- 3. 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 SAWED WITHIN 4 TO 12 HOURS OF CONCRETE FINISHING AND WALL LOCATIONS HAVE BEEN MARKED. ADJUST WHERE NECESSARY.
- 4. CONCRETE SHALL CONFORM TO SECTION R402.2 OF THE NCRC, 2018 EDITION. CONCRETE REINFORCING STEEL TO BE ASTM A615 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 I 1/2" FOR #5 BARS OR SMALLER, AND NOT LESS THAN 2" FOR #6 BARS OR LARGER.
- 5. MASONRY UNITS TO CONFORM TO ACE 530/ASCE 5/TMS 402. MORTAR SHALL COMFORM
- TO ASTM C270.
- 6. 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. PERS MAY BE FILLED SOLID WITH CONCRETE OR TYPE M OR 5 MORTAR PIERS AND WALLS SHALL BE CAPPED WITH 8" OF SOLID MASONRY.
- 1. 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.
- 8. ALL CONCRETE AND MASONRY FOUNDATION WALLS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF SECTION R404 OF THE NCRC, 2018 EDITION OR IN ACCORDANCE WITH ACI 318, ACI 332, NCMA TR68-A OR ACE 530/A6CE 5/TM6 402. MASONRY FOUNDATION WALLS ARE TO BE REINFORCED PER TABLE R404.LI(1), R404.LI(2), R404.LI(3), OR R404.LI(4) OF THE NCRC, 2018 EDITION. CONCRETE FOUNDATION WALLS ARE TO BE REINFORCED PER TABLE R404.1.(5) OF THE NCRC, 2018 EDITION. STEP CONCRETE FOUNDATION WALLS TO 2 x 6 FRAMED WALLS AT 16" O.C. WHERE GRADE PERMITS (UNO).

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

- 1. ALL FRAMING LUMBER SHALL BE #2 SPF MINIMUM (Fb = 875 PSI, Fv = 375 PSI, E = 16000000 PSI) UNLESS NOTED OTHERWISE (UNO). ALL TREATED LUMBER SHALL BE 2 SYP MINIMUM (Fb = 975 PSI, Fv = 175 PSI, E = 16000000 PSI) UNLESS NOTED OTHERWISE (UNO).
- 2. LAMINATED VENEER LUMBER (LYL) SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fb =2600 PSI, Fv = 285 PSI, E = 1900000 PSI. LAMINATED STRAND LUMBER (LSL) SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fb = 2325 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 = 18000000 PSI. PARALLEL STRAND LUMBER (PSL) MORE THAN 1" DEPTH SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fc = 2900 PSI, E = 20000000 PSI. INSTALL ALL CONNECTIONS PER MANUFACTURER'S SPECIFICATIONS.
- STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS

SIRUCIL	IRAL STEEL SHALL CONFORT TO THE	FOLLOWING ASTIT 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

4. 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):

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

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 9/16" 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.
- 6. ALL LOAD BEARING HEADERS TO CONFORM TO TABLE R602.7(1) AND R602.7(2) OF THE NCRC, 2018 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). INSTALL KING STUDS PER SECTION R602.7.5 OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION.
- 7. 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 I 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).
- 8. FLITCH BEAMS SHALL BE BOLTED TOGETHER USING 1/2" DIAMETER BOLTS (ASTM A301) 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).
- 9. 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.
- 10. 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.
- II. PROVIDE DOUBLE JOIST UNDER ALL WALLS PARALLEL TO FLOOR JOISTS. PROVIDE SUPPORT UNDER ALL WALLS PARALLEL TO FLOOR TRUSSES OR 1-JOISTS PER MANUFACTURER'S SPECIFICATIONS. INSTALL BLOCKING BETWEEN JOISTS OR TRUSSES FOR POINT LOAD SUPPORT FOR ALL POINT LOADS ALONG OFFSET LOAD LINES.
- 12. 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 (UN.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) 12d NAILS EA. PLY BETWEEN WALL STUDS WITH (2) ROWS OF 1/2" LAG SCREWS AT 12" O.C. STAGGERED AND IN ACCORDANCE WITH SECTION RT03.8.2.1 OF THE NCRC, 2018 EDITION.
- 13. 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
- 14. 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).
- 15. 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 HE OR LTSIZ UPLIFT CONNECTOR FASTENED TO THE BAND AT THE BOTTOM AND THE BEAM AT THE TOP OF EACH POST. ONE 16" SECTION OF SIMPSON CSIG 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.

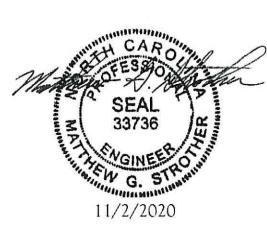
 \vdash MPH 0 7

DATE: NOVEMBER 14, 2018 SCALE: 1/4" = 1'-0"

DRAWN BY: JES

ENGINEERED BY: JST

STRUCTURAL NOTES



MPH VDAR 30 [A]