- 1. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY THAT ALL DIMENSIONS, ROOF PITCHES, AND SQUARE FOOTAGE ARE CORRECT PRIOR TO CONSTRUCTION. K&A HOME DESIGNS, INC. IS NOT RESPONSIBLE FOR ANY DIMENSIONING, ROOF PITCH, OR SQUARE FOOTAGE ERRORS ONCE CONSTRUCTION BEGINS.
- 2. ALL WALLS SHOWN ON THE FLOOR PLANS ARE DRAWN AT 4" UNLESS NOTED OTHERWISE.
- 3. ALL ANGLED WALL SHOWN ON THE PLANS ARE 45 DEGREES UNLESS NOTED OTHERWISE.
- 4. STUD WALL DESIGN SHALL CONFORM TO ALL NORTH CAROLINA STATE BUILDING CODE REQUIREMENTS.
- 5. DO NOT SCALE PLANS. DRAWING SCALE MAY BE DISTORTED DUE TO COPIER IMPERFECTIONS.
- 6. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH NORTH CAROLINA RESIDENTIAL STATE BUILDING CODE, 2018 EDITION.

SQUARE FOOTAGE

<u>HEATED SQUARE FOOTAGE</u>		<u>UNHEATED SQUARE FOOTAG</u>		
FIRST FLOOR=	2174	<i>GARAGE=</i>	719	
SECOND FLOOR=	2102	FRONT PORCH=	146	
THIRD FLOOR=	N/A	CVD. PORCH=	295	
BASEMENT=	N/A	<i>UNFINISHED REC.</i> =	N/A	
		STORAGE=	N/A	

CRAWL SPACE VENTILATION CALCULATIONS

TOTAL HEATED= 4276

-VENT LOCATIONS MAY VARY FROM THOSE SHOWN ON THE PLAN BUT SHOULD BE PLACED TO PROVIDE ADEQUATE VENTILATION AT ALL POINTS TO PREVENT DEAD AIR POCKETS.

TOTAL UNHEATED= 1160

-100% VAPOR BARRIER MUST BE PROVIDED WITH 12" MIN. LAP JOINTS.

-THE TOTAL AREA OF VENTILATION OPENINGS MAY BE REDUCED TO 1/1500 AS LONG AS REQUIRED OPENINGS ARE PLACED SO AS TO PROVIDE CROSS-VENTILATION OF THE SPACE. THE INSTALLATION OF OPERABLE LOUVERS SHALL NOT BE PROHIBITED. (COMPLY WITH NC CODE MIN. WITH REGARD TO VENT PLACEMENT FROM CORNERS)

N/A SQ. FT. OF CRAWL SPACE/1500

N/A SQ. FT. OF REQUIRED VENTILATION

PROVIDED BY: N/A VENTS AT 0.45 SQ. FT. NET FREE

VENTILATION EACH= N/A SQ. FT. OF VENTILATION

**FOUNDATION DRAINAGE- WATERPROOFING PER SECTIONS 405 & 406.

ATTIC VENTILATION CALCULATIONS

- CALCULATIONS SHOWN BELOW ARE BASED ON VENTILATORS USED AT LEAST 3 FT. ABOVE THE CORNICE VENTS WITH THE BALANCE OF VENTIALTION PROVIDED BE EAVE VENTS.

- CATHEDRAL CEILINGS SHALL HAVE A MIN. 1" CLEARANCE BETWEEN THE BOTTOM OF THE ROOF DECK AND THE INSULATION.

3418 SQ. FT. OF ATTIC/300= 11.39

EACH OF INLET AND OUTLET REQUIRED.

*WALL AND ROOF CLADDING DESIGN VALUES

- WALL CLADDING IS DESIGNED FOR A 24.1 SQ. FT. OR GREATER POSITIVE AND NEGATIVE PRESSURE.

- ROOF VALUES BOTH POSITVE AND NEGATIVE SHALL BE AS FOLLOWS:

45.5 LBS. PER SQ. FT. FOR ROOF PITCHES OF 0/12 TO 2.25/12

34.8 LBS. PER SQ. FT. FOR ROOF PITCHES OF 2.25/12 TO 7/12

21 LBS. PER SQ. FT. FOR ROOF PITCHES OF 7/12 TO 12/12

** MEAN ROOF HEIGHT 30' OR LESS

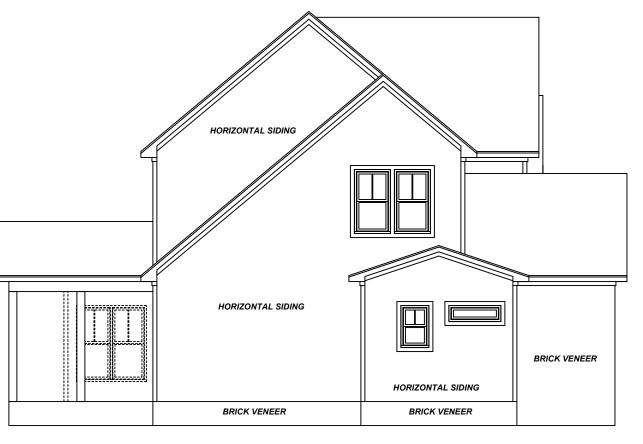


FRONT ELEVATION



REAR ELEVATION

1/8" = 1'-0"



LEFT ELEVATION

1/8" = 1'-0"



RIGHT ELEVATION

1/8" = 1'-0"

Project #:
23-519

Date:
4-18-24

Drawn/Design By:
KBB

Scale:
REFER TO ELEV.

REVISIONS

10. Date: Remarks

1

9101 Ten-Ten Rd. Raleigh, NC 27603 Office: (919) 302-0693



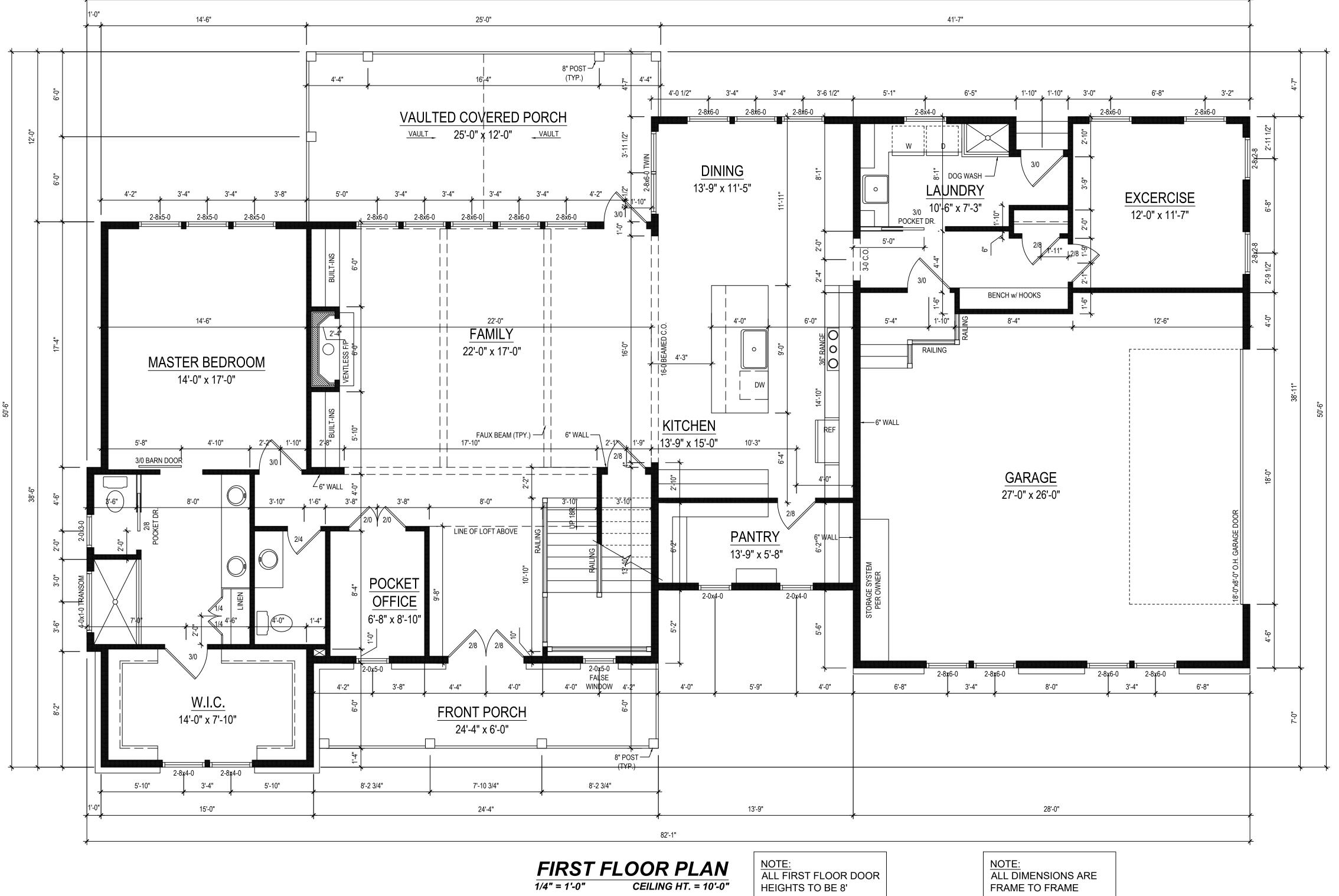
Koslowsky Residence

Koslowsky
705 Cash Street

ELEVATIONS

Sheet Number

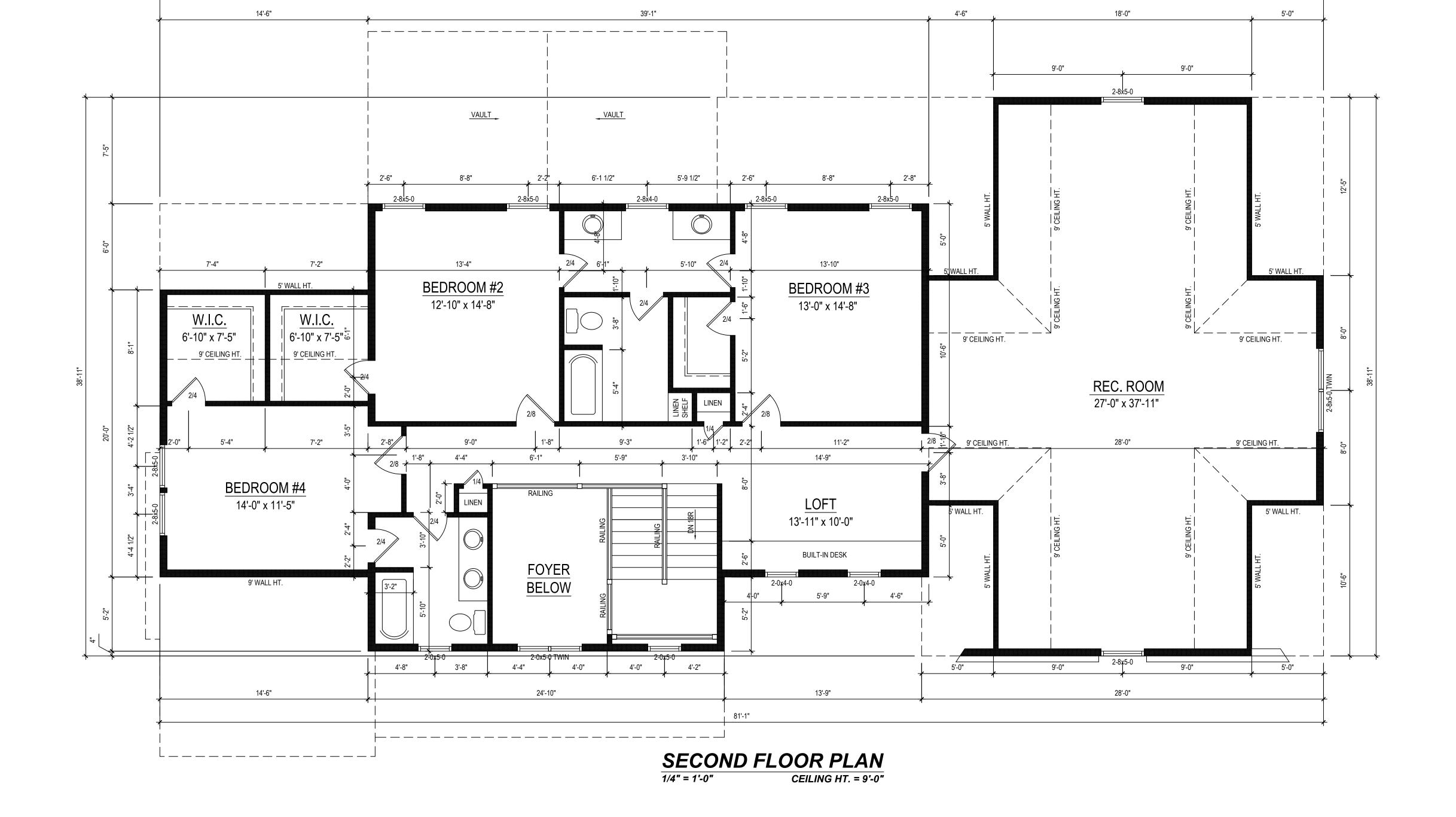
FIRST FLOOR



FIRST FLOOR PLAN **CEILING HT. = 10'-0"** 1/4" = 1'-0"

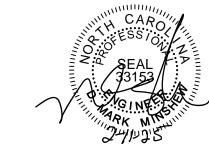
NOTE: ALL FIRST FLOOR DOOR HEIGHTS TO BE 8'

SECOND FLOOR



81'-1"







(3)2xIO SYP#2 OR SPF#2 GIRDER, TYPICAL UNO.

(2) CONCRETE BLOCK PIER SIZE SHALL BE: <u>SOLID</u> UP TO 32" UP TO 5'-0" UP TO 9'-0" UP TO 48" UP TO 64" UP TO 12'-0"

UP TO 96" 24x24 • WITH 30" x 30" x 10" CONCRETE FOOTING, UNO.

(3) WALL FOOTING AS FOLLOWS DEPTH: 8" - UP TO 2 STORY

82'-1"

ACCESS DOOR AS REQUIRED

- SOLID FILLED

MASONRY ON A

32"x32"xI0"

CONC. FTG.

(IIOB) SD

16" WIDE x 8" DEEP CONC. FTG @ SIDING

13'-9"

82'-1"

25'-0"

4" CONC. SLAB ON COMPACTED

FILL/STONE

-24"x24"xI0"¬

CONC. FTG.

7'-9"

↓ 9'-1" |||

24'-8"

DIMENSIONS ARE TO FRAMING. ADD 5" FOR BRICK VENEER.

24'-4"

4" CONC. SLAB ON COMPACTED FILL/STONE

7'-9"

3'-6" 5'-10"

58"x30"x10"

CONC. FTG.

14'-6"

/-30"x30"x10" CONC. FTG.

__24"x24"xI0"

CONC. FTG.

11'-8"

@ 16" O.C.

30"x30"x10"

CONC. FTG.

SD 20" WIDE x 8" DEEP CONC. FTG.

@ BRICK VENEER

15'-0"

@ 12" O.C.

@ 12" *O.*C.

14'-8"

/ 904 \

SD

ACCESS DOOR
AS REQUIRED

41'-7"

SOLID FILLED

36"x36"x12"

CONC. FTG.

4" CONC. SLAB (TABLE R402.2) W/

FIBERMESH OR WIREMESH ON 6 MIL

VAPOR RETARDER (ÁS REQUIRED)

ON BASE COURSE (R506.2.2). SEE

R506.2.I FOR FILL REQUIREMENTS.

28'-0"

20" WIDE x 8"

/ II3A DEEP CONC. FTG.

SD / @ BRICK VENEER

MASONRY ON A

SHADED

PIERS ARE

FLUSH PIERS

(TYP.)

FTG/PQST

FOR LANDING

IF REQ'D

24"x24"xI0"

CONC. FTG.

6'-8"

25'-1"

16" - UP TO 2 STORY SIDING:

904

SD

12'-10"

–24"x24"xI0"

CONC. FTG.

24"x24"xI0"_ CONC. FTG.

16" WIDE x 8" / IIIB

DEEP CONC. SD FTG @ SIDING

/ 12'-6"

SOLID FILLED

MASONRY ON A

36"x36"x12"

CONC. FTG.

_ _ _ _ _ _ _ _ _ .

SOLID FILLED

MASONRY ON A

30"x30"x10"

CONC. FTG.

20" - 3 STORY BRICK: 16" - I STORY 20" - 2 STORY 24" - 3 STORY

 FOR FOUNDATION WALL HEIGHT AND BACKFILL REQUIREMENTS, REFER TO CODE TABLE R404.I.I (I THRU 4) NOTE: ASSUMED SOIL BEARING CAPACITY = 2000 PSF. CONTRACTOR MUST VERIFY SITE CONDITIONS AND CONTACT SOILS ENGINEER IF MARGINAL OR UNSTABLE SOILS ARE ENCOUNTERED.

(4) 2xIO SPF #2 OR SYP #2 GIRDER

(5) (2) 1.75×9.25 LVL OR LSL GIRDER

(3) 1.75x9.25 LVL OR LSL GIRDER

7. "" DESIGNATES A SIGNIFICANT POINT LOAD TO HAVE SOLID BLOCKING TO PIER. SOLID BLOCK ALL BEAM BEARING POINTS NOTED TO HAVE THREE OR MORE STUDS TO FND, TYPICAL.

8. ABBREVIATIONS: • "SJ" = SINGLE JOIST

 "DJ" = DOUBLE JOIST "TJ" = TRIPLE JOIST

9. ADJUST SUBFLOOR THICKNESS OR JOIST SPACING AS REQ'D FOR FLOOR FINISH MATERIALS.

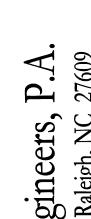
SOLID FILLED MASONRY ON A 36"x36"x12" CONC. FTG.

20"x16" MASONRY PIER ON A 36"x30"x10" CONC. FTG.

32"xI6" MASONRY PIER ON A 48"x30"x10" CONC. FTG.

FRAMING NOTE: ALL DIMENSIONAL LUMBER ON THIS SHEET MAY BE SPF #2 OR SYP #2, UNLESS SPECIFICALLY NOTED OTHERWISE.

16" MAX UNBALANCED FILL RECOMMENDED FOR HOLLOW 8" MASONRY STEMMALLS SHOWN ON NOTED DETAILS AND AT PORCHES. HIGHER UNBALANCED FILL MAY BE UTILIZED AT THE BUILDER'S AND/OR OWNER'S DISCRETION PROVIDED THAT CONSTRUCTION IS WITHIN THE CONSTRAINTS OF THE 2018 NC RESIDENTIAL CODE, ANY LOCAL CODES, DESIGN BY OTHERS, AND/OR THE BUILDING INSPECTOR'S INTERPRETATION OR APPROVAL.



Southern Engineers, I 3716 Benson Drive, Raleigh, NC 2 Phone: (919) 878-1617
License: C-4772
www.southernengineers.com

PROJECT #

24-1421.1

INC DESIGN,

Koslowsky Residence Baptist Grove Road Fuquay-Varina, NC Harnett County

FOUNDATION STRUCTURAL PLAN

SCALE: 1/4"=1'-0" REFER TO "SD" SHEET(S) FOR STANDARD DETAILS AND STRUCTURAL NOTES



PROJECT #

24-1421.1

on Drive, Raleigh, NC hone: (919) 878-1617
License: C-4772
.southernengineers.com

INC

DESIGN

oslowsky Residence Baptist Grove Road Fuquay-Varina, NC Harnett County

Southern 3716 Benson D

FRAMING NOTES

— 6x6 TRT'D POST (OR

EQUAL). SEE "PORCH

POST NOTES"

(3)2x10/

(3) 2x8

(3)2x8

(3) 1<u>.75×14 LVL</u>

(BOTTOM FLUSH)

11.875" I-JOISTS

@ 19.2" O.C.

(2) 1.75×11.875 LVL

11.875" I-JOISTS

@ 19.2" O.C.

BALLOON FRAME

TWO-STORY WALL

W/ DOUBLE 2x6 STUDS @ 16" O.C.

-1.75x11.875 LVL

DSP

DSP

-1.75x11.875 LVL

(204A) SD)

11.875" I-JOISTS

@ 19.2" O.C.

(2)1.75×11.875 LVL

@ 19.2" O.C.

(3)2x8

11.875" I-JOISTS

@ 19.2" O.C.

@ 19.2" *O.*C.

(2)1.75x11.875 LVL

(3)2x8

(2) 1.75x9.25 LVL-

(3)1.75x11.25 LVL

VAULT

DSP

(2)1.75×11.875 LVL

11.875" I-JOISTS -

@ 19.2" O.C.

SIMPSON HUS410

SINGLE JACK STUD -

AND (4) CONTINUOUS

KING STUDS

(3) 2x8

(3)2x8

6x6 TRT'D POST (OR —

EQUAL). SEE "PORCH

POST NOTES"

OPEN TO _

ABOVE

VAULT

3.5"x5.25" PSL-

OR GLULAM

STUD POCKET

LINE OF 390 PLF WALL ABOVE

- (2)1.75×11.875 LVL

(2)1.75x9.25 LVL

(3)1.75x20 LVL

SIMPSON

MTSI2

(3)2x8

(3) 1.75x11.875 LVL

@ 19.2" *O.*C.

@ 19.2" *O.*C.

(3)1.75x11.875 LVL

SIMPSON

HHUS5.50/10

@ 16" O.C.

(3) 2x8

<u>____</u>

 $\overline{}$

DSP

DSP

- BRACING METHOD AND TYPE: CONTINUOUSLY SHEATHED WSP: CS-WSP. NOTE THAT THE WALL BRACING AMOUNT PROVIDED ON THE PLANS (DETAILS AND SPECIFICATIONS) IS GREATER THAN THE AMOUNT OF WALL BRACING REQUIRED BY SECTION R602.10 OF THE CODE. SEE NOTES BELOW FOR DETAILS AND SPECIFICATIONS FOR WALL BRACING AND WALL FRAMING.
- ATTACHED WITH 8d NAILS AT A 6"/12" NAILING PATTERN (6" OC AT PANEL EDGES AND 12" OC AT INTERMEDIATE SUPPORTS). INSTALL BLOCKING AT ALL PANEL EDGES.
- MSP SHEATHING SHALL EXTEND TO THE UPPERMOST DOUBLE BEARING PLATE. BLOCK AT ROOF PER SECTION R602.10.4.5 AND ATTACH BRACED WALLS PER CODE. WSP SHEATHING BETWEEN FLOORS SHALL BE SPLICED ALONG CONTINUOUS BAND OR THE WSP SHEATHING MAY BE SPLICED ACROSS STUDS (CONTINUOUS ACROSS FLOOR SYSTEM) WITH BLOCKING AT PANEL EDGES. (MINIMUM 12" BEYOND FLOOR BREAK) OR OTHER APPROVED METHOD.
- (OR EQUIV.) **UPPER FLOORS: ATTACH BASE OF KING STUD WITH A SIMPSON
- INTERIOR BRACED WALL: (NOTED AS "IBW" ON PLANS) ATTACH I/2" GYPSUM BOARD (GB) ON EACH SIDE OF WALL WITH A MIN. OF 5d COOLER NAILS OR #6 SCREWS @ 7" O.C. ALONG THE EDGES AND AT INTERMEDIATE SUPPORTS.
- INTERIOR BRACED WALL-WOOD STRUCTURAL PANEL: (NOTED AS "IBW-WSP" ON PLANS). ATTACH ONE SIDE WITH %" WSP SHEATHING WITH 8d NAILS AT A 6"/12" NAILING PATTERN (6" OC AT PANEL EDGES AND 12" OC AT INTERMEDIATE SUPPORTS). INSTALL BLOCKING AT ALL PANEL EDGES. ATTACH GB OVER WSP AS REQUIRED. ATTACH OPPOSITE SIDE WITH I/2" GB WITH A MIN. OF 5d COOLER NAILS OR #6 SCREWS @ 1" OC ALONG THE EDGES AND AT INTERMEDIATE SUPPORTS.

HEADER/BEAM & COLUMN NOTES

- OTHERWISE.
- THE NUMBER SHOWN AT BEAM AND HEADER SUPPORTS INDICATES THE NUMBER OF SUPPORT STUDS REQUIRED IN STUD POCKET OR COLUMN. THE NUMBER OF KING STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS SHALL BE ACCORDING TO ITEM "d" IN TABLE R602.3(5) OR AS BELOW PER NCDOI COMMENTARY "KING STUDS AT WALL OPENINGS" REVISED 1-9-2020:
- •• OVER 6' UP TO 9' SPAN: (3) KING STUDS OVER 9' UP TO 12' SPAN: (4) KING STUDS

PORCH POST NOTES:

- 3. POST BASE: SIMPSON ABU44 (ABU66).
- POST BASE: WOOD FOUNDATION: (2) SIMPSON

UNLESS SPECIFICALLY NOTED OTHERWISE.

I. (2) PLY 1.75" LVL BEAMS:

WOOD I-JOISTS

TJI 210 BY TRUS JOIST

LPI 20 PLUS BY LP

• BCI 5000s I.8 BY BC BLI 40 BY onCENTER

SPECIFICATIONS.

AND INSTRUCTIONS.

(SHALL BE ONE OF THE FOLLOWING):

ALL I-JOISTS SHALL BE INSTALLED

HANGERS FOR I-JOISTS ARE THE

ACCORDING TO MANUFACTURER'S

INSTALL SQUASH BLOCKS, WEB STIFFENERS,

RESPONSIBILITY OF THE I-JOIST SUPPLIER.

ETC. AS REQUIRED BY AND ACCORDING TO

THE I-JOIST MANUFACTURER'S SPECIFICATIONS

- 2. (3) PLY 1.75" LVL BEAMS:
- (3) ROWS OF IOD NAILS @ 8" O.C. ON EACH SIDE OR • (2) ROWS OF SIMPSON SDW22500 (OR EQUAL) SCREWS @ 16" O.C. FOR BEAMS UP TO 18"
- (3) ROWS OF SIMPSON SDW22500 (OR EQUAL
- 3. (4) PLY 1.75" LVL BEAMS: • (2) ROWS OF SIMPSON SDW22634 (OR EQUAL)
- (3) ROWS OF SIMPSON SDW22634 (OR EQUAL

FIRST FLOOR STRUCTURAL PLAN

SCALE: 1/4"=1'-0" REFER TO "SD" SHEET(S) FOR STANDARD DETAILS AND STRUCTURAL NOTES

NC (2018 NCRC): Wind: 115-120 mph

- EXTERIOR WALL SHEATHING: WALLS SHALL BE BRACED BY SHEATHING WALLS ON ALL STORIES WITH WOOD STRUCTURAL PANEL SHEATHING (WSP) (EXPOSURE B: 7/16". EXPOSURE C: 15/32"). SHEATHING SHALL BE
- "HD" = HOLDOWN: HOLD-DOWN DEVICE (NOTED AS "HD" ON PLANS) SHALL BE AN 800 POUND CAPACITY ASSEMBLY AS NOTED ON PLANS. SEE DETAILS FOR HD ASSEMBLY. **GROUND/FIRST FLOOR: USE "HD HOLD-DOWN DETAIL" ON SD SHEET
- CS20 OR CSHP20 STRAP DOWN ACROSS THE BAND AND DOWN TO A STUD BELOW OR HEADER BELOW. EXTEND STRAP 7" MIN ALONG EACH STUD (OR HEADER) AND ATTACH EACH END W/ (7) 8d NAILS.

- ALL EXTERIOR AND LOAD BEARING HEADERS SHALL BE MIN. (2)2x6 (4" WALL) OR (3)2x6 (6" MALL) WITH (I) SUPPORT STUD, UNLESS NOTED
- •• UP TO 3' SPAN: (I) KING STUD •• OVER 3' UP TO 6' SPAN: (2) KING STUDS
- OVER 12' UP TO 15' SPAN: (5) KING STUDS

- 4X4 (6x6) TRT'D POST (OR EQUAL). ATTACH TRUSSES (RAFTERS) AT PORCH WITH HURRICANE CONNECTORS. POST CAP: SIMPSON AC4-MAX (AC6-MAX)
- POST CAP AT CORNER: (2) SIMPSON LCE4 (MITER HEADER AT CORNER). HIGH WIND; ADD (1)
- 3.I. MONO: 5/8" ANCHOR (EMBED 7") 3.2. CMU: 5/8" ANCHOR (EXTEND TO FOOTING -HIGH WIND ONLY)
- CSI6 STRAPS AT POSTS. EXTEND 12" ONTO EACH POST (UPPER AND LOWER) OR TO GIRDER. NOTE: THE ABOVE CONNECTORS ARE
- SUGGESTIONS. EQUIVALENT CONNECTORS THAT MEET THE REQUIREMENTS OF THE NO RESIDENTIAL BUILDING CODE, LOCAL CODES, AND/OR ARE APPROVED BY THE BUILDING INSPECTOR MAY BE SUBSTITUTED.

FRAMING NOTE: ALL DIMENSIONAL LUMBER ON THIS SHEET MAY BE SPF #2 OR SYP #2,

LVL CONNECTION LEGEND

- (3) ROWS OF IOD NAILS @ 12" O.C. OR • (2) ROWS OF SIMPSON SDW22338 (OR EQUAL)
- SCREWS @ 16" O.C. FOR BEAMS UP TO 18" • (3) ROWS OF SIMPSON SDW22338 (OR EQUAL) SCREWS @ 16" O.C. FOR BEAMS GREATER THAN 18".
- SCREWS @ 16" O.C. FOR BEAMS GREATER THAN 18".
- SCREWS @ 16" O.C. FOR BEAMS UP TO 18" SCREWS @ 16" O.C. FOR BEAMS GREATER THAN 18".

0

VALLEY SUPPORT

ALIGNS W/ WALL

BELOW

<u>5' WA</u>LL HT.

9' CEILING HT.

9' CEILING HT.

5' WALL HT.

ATTACH HEADER TO

VALLEY W/ (2) 3/8"

DIA. LAG SCREWS

AT EACH END.

2x6 CJ @ 16" O.C.

VAULT

RAFTER SUPPORT 5' WALL HT.

9' WALL HT.

9' CEILING HT.

(2) 1.75×9.25 LVL-

9' CEILING HT.

(3) 2x8 _|

(3) 1.75x14 LVL

-OPEN TO BELOW

@ 16" O.C.

H-----

VAULT

L____

VALLEY SUPPORT

BELOW

ALIGNS W/ WALL —

5' WALL HT.

9' CEILING HT.

9' CEILING HT.

5' WALL HT.

NC (2018 NCRC): Wind: 115-120 mph

- BRACING METHOD AND TYPE: CONTINUOUSLY SHEATHED WSP: CS-WSP. NOTE THAT THE WALL BRACING AMOUNT PROVIDED ON THE PLANS (DETAILS AND SPECIFICATIONS) IS GREATER THAN THE AMOUNT OF WALL BRACING REQUIRED BY SECTION R602.10 OF THE CODE. SEE NOTES BELOW FOR DETAILS AND SPECIFICATIONS FOR WALL BRACING AND WALL FRAMING.
- ATTACHED WITH 8d NAILS AT A 6"/I2" NAILING PATTERN (6" OC AT PANEL EDGES AND 12" OC AT INTERMEDIATE SUPPORTS). INSTALL BLOCKING AT ALL PANEL EDGES.
- PLATE. BLOCK AT ROOF PER SECTION R602.10.4.5 AND ATTACH WITH BLOCKING AT PANEL EDGES. (MINIMUM 12" BEYOND FLOOR BREAK) OR OTHER APPROVED METHOD.
- "HD" = HOLDOWN: HOLD-DOWN DEVICE (NOTED AS "HD" ON PLANS) SHALL BE AN 800 POUND CAPACITY ASSEMBLY AS NOTED ON PLANS. SEE DETAILS FOR HD ASSEMBLY. **GROUND/FIRST FLOOR: USE "HD HOLD-DOWN DETAIL" ON SD SHEET
- **UPPER FLOORS: ATTACH BASE OF KING STUD WITH A SIMPSON STUD (OR HEADER) AND ATTACH EACH END W/ (7) 8d NAILS.
- INTERIOR BRACED WALL: (NOTED AS "IBW" ON PLANS) ATTACH 1/2" GYPSUM BOARD (GB) ON EACH SIDE OF WALL WITH A MIN. OF 5d COOLER NAILS OR #6 SCREWS @ 7" O.C. ALONG THE EDGES AND AT INTERMEDIATE SUPPORTS.
- INTERIOR BRACED WALL-WOOD STRUCTURAL PANEL: (NOTED AS "<u>IBW-WSP</u>" ON PLANS). ATTACH ONE SIDE WITH %" WSP SHEATHING WITH 8d NAILS AT A 6"/12" NAILING PATTERN (6" OC AT PANEL EDGES AND 12" OC AT INTERMEDIATE SUPPORTS). INSTALL BLOCKING AT ALL PANEL EDGES. ATTACH GB OVER WSP AS REQUIRED. ATTACH OPPOSITE SIDE WITH I/2" GB WITH A MIN. OF 5d COOLER NAILS OR #6 SCREWS @ 7" OC ALONG THE EDGES AND AT INTERMEDIATE SUPPORTS.

HEADER/BEAM & COLUMN NOTES

- SHALL BE MIN. (2)2x6 (4" WALL) OR (3)2x6 (6" WALL) WITH (I) SUPPORT STUD, UNLESS NOTED OTHERWISE.
- THE NUMBER SHOWN AT BEAM AND HEADER SUPPORTS INDICATES THE NUMBER OF SUPPORT STUDS REQUIRED IN STUD POCKET OR COLUMN. THE NUMBER OF KING STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS SHALL BE ACCORDING TO ITEM "d" IN TABLE R602.3(5) OR AS BELOW PER NCDOI COMMENTARY "KING STUDS AT WALL OPENINGS" REVISED 1-9-2020:
- OVER 9' UP TO 12' SPAN: (4) KING STUDS OVER 12' UP TO 15' SPAN: (5) KING STUDS

FRAMING NOTE: ALL DIMENSIONAL LUMBER ON THIS SHEET MAY BE SPF #2 OR SYP #2, UNLESS SPECIFICALLY NOTED OTHERWISE.

FRAMING NOTES

- EXTERIOR WALL SHEATHING: WALLS SHALL BE BRACED BY SHEATHING WALLS ON ALL STORIES WITH WOOD STRUCTURAL PANEL SHEATHING (MSP) (EXPOSURE B: 7/16". EXPOSURE C: 15/32"). SHEATHING SHALL BE
- MSP SHEATHING SHALL EXTEND TO THE UPPERMOST DOUBLE BEARING BRACED WALLS PER CODE. WSP SHEATHING BETWEEN FLOORS SHALL BE SPLICED ALONG CONTINUOUS BAND OR THE WSP SHEATHING MAY BE SPLICED ACROSS STUDS (CONTINUOUS ACROSS FLOOR SYSTEM)
- (OR EQUIV.) C520 OR C5HP20 STRAP DOWN ACROSS THE BAND AND DOWN TO A STUD BELOW OR HEADER BELOW. EXTEND STRAP 7" MIN ALONG EACH

- ALL EXTERIOR AND LOAD BEARING HEADERS
- •• UP TO 3' SPAN: (I) KING STUD • OVER 3' UP TO 6' SPAN: (2) KING STUDS •• OVER 6' UP TO 9' SPAN: (3) KING STUDS

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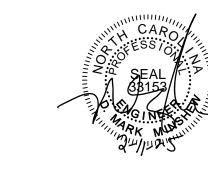
PROJECT #

24-1421.1

INC HOME DESIGN,

Koslowsky Residence Baptist Grove Road Fuquay-Varina, NC Harnett County

SECOND FLOOR STRUCTURAL PLAN



ROOF FRAMING NOTES: NC (2018 NCRC): Wind: 115-120 mph

- (I.) 2x8 RAFTERS @ 16" O.C. WITH 2x10 RIDGE, UNO.
- (2) 2x10 OR 1.75x11.875 LVL HIP. (2) 2x10 HIPS MAY BE SPLICED WITH A MIN. 6'-0" OVERLAP AT CENTER
- (2) 2xIO OR 1.75x9.25 LVL VALLEY. DO NOT SPLICE VALLEYS
- 4) 1.75x11.875 LVL OR (2)1.75x9.25 LVL VALLEY
- 5. FALSE FRAME VALLEY ON 2x10 FLAT PLATE
- (6) 2x6 RAFTERS @ 16" O.C. W/ 2x8 RIDGE, UNO.
- (7) 2xIO RAFTERS @ 16" O.C. W/ 2xI2 RIDGE, UNO.
- (8) EXTEND RIDGE 12" BEYOND INTERSECTION
- "SR" = SINGLE RAFTER "DR" = DOUBLE RAFTER
- "TR" = TRIPLE RAFTER • "RS" = ROOF SUPPORT
- "■" = (3) STUD OR 4x4 POST FOR ROOF SUPPORT (USE 2X6 STUDS OR 6X6 POST FOR SUPPORT OVER 10'-0" IN
- ATTACH VAULTED RAFTERS WITH HURRICANE CLIPS: SIMPSON "H-2.5A" OR EQUIVALENT. TIES TO BE INSTALLED ON THE OUTSIDE FACE OF FRAMING.
- INSTALL RAFTER TIES AND COLLAR TIES PER SECTION R802.3.1 OF THE 2018 NC RESIDENTIAL CODE.

FRAMING NOTE: ALL DIMENSIONAL LUMBER ON THIS SHEET MAY BE SPF #2 OR SYP #2, UNLESS SPECIFICALLY NOTED OTHERWISE.

P.A. 27609

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PROJECT #

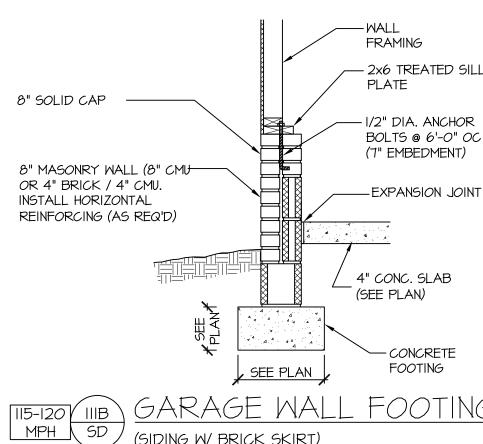
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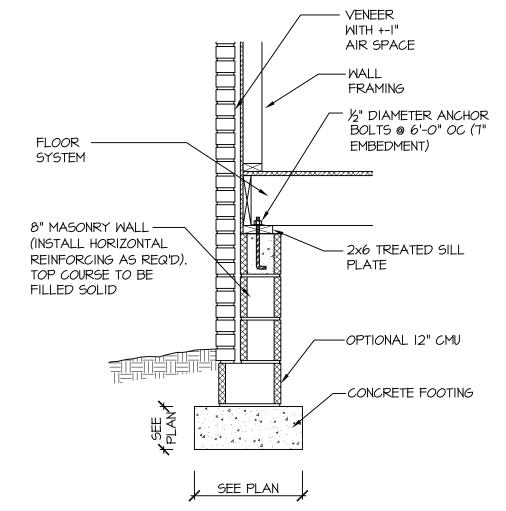
INC K&A HOME DESIGN,

Koslowsky Residence Baptist Grove Road Fuquay-Varina, NC Harnett County

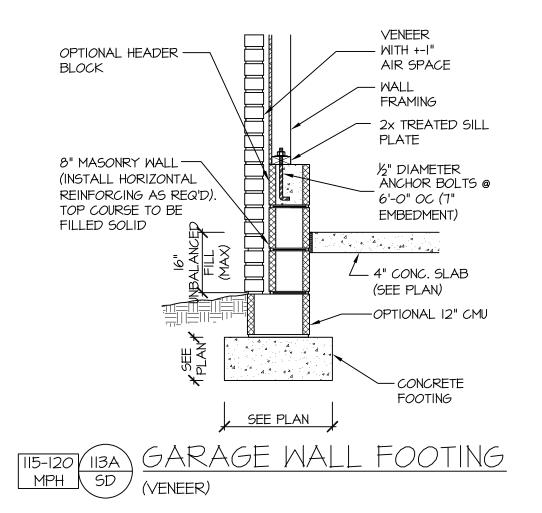
ROOF STRUCTURAL PLAN

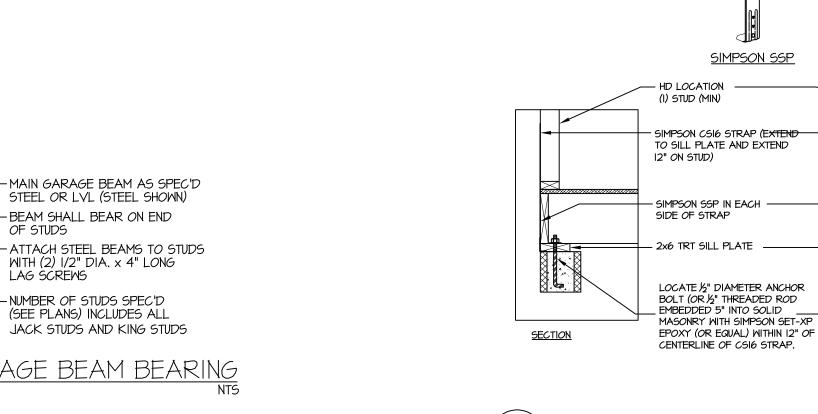
SCALE: 1/4"=1'-0" REFER TO "SD" SHEET(S) FOR STANDARD DETAILS AND STRUCTURAL NOTES

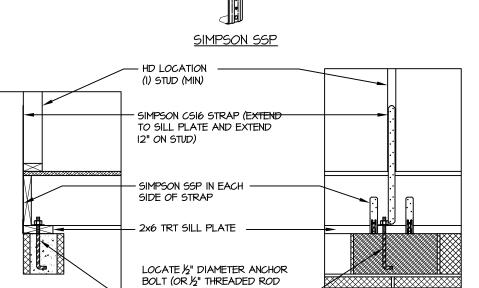




CRAWL SPACE FOOTING







(904) BRACED WALL END CONDITION " HD"

NOTE: SIMPSON DTT-IZ IS ACCEPTABLE ALTERNATE NOTE: ALTERNATE HD HOLD-DOWN DEVICES OR SYSTEMS MAY BE USED TO MEET THE CODE REQUIRED 800 LB CAPACITY IN LIEU OF THE ABOVE DETAIL.

XC/LOFX

STRAP



- ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS INCLUDING ROOF RAFTERS, HIPS, VALLEYS, RIDGES, FLOORS, WALLS, BEAMS AND HEADERS, COLUMNS, CANTILEVERS, OFFSET LOAD BEARING WALLS, PIER & GIRDER SYSTEM, FOOTING, AND PILING SYSTEM. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT INCLUDING ROOF SYSTEM. ALL REQUIREMENTS FOR PROFESSIONAL CERTIFICATION SHALL BE PROVIDED BY THE APPROPRIATE PROFESSIONAL. SOUTHERN ENGINEERS, P.A. CERTIFIES ONLY THE STRUCTURAL COMPONENTS AS SPECIFICALLY STATED.
- 2. ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE 2018 NC RESIDENTIAL CODE, 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 FOR 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. "CONSTRUCTION REVIEW" SERVICES ARE NOT PART OF OUR CONTRACT ALL MEMBERS SHALL BE FRAMED ANCHORED, TIED AND BRACED IN ACCORDANCE WITH GOOD CONSTRUCTION PRACTICE AND THE BUILDING CODE.
- 3. DESIGN LOADS (LISTED AS: LIVE LOAD, DEAD LOAD, DEFLECTION)
- ROOMS OTHER THAN SLEEPING ROOMS: (40 PSF, IO PSF, L/360) SLEEPING ROOMS: (30 PSF, IO PSF, L/360)
- ATTIC WITH PERMANENT STAIR: (40 PSF, IO PSF, L/360)
- ATTIC WITHOUT PERMANENT STAIR: (20 PSF, IO PSF, L/360) ATTIC WITHOUT STORAGE: (IO PSF, IO PSF, L/240)
- STAIRS: (40 PSF, 10 PSF, L/360) DECKS AND EXTERIOR BALCONIES: (40 PSF, IO PSF, L/360)
- PASSENGER VEHICLE GARAGES: (50 PSF, IO PSF, L/360)
- SNOW: (20 PSF)
- 4. WALLS SHALL BE BRACED BY SHEATHING WALLS ON ALL STORIES WITH WOOD STRUCTURAL PANELS. SEE FRAMING NOTES FOR THICKNESS AND NAILING REQUIREMENTS.
- 5. SEE APPENDIX M (DCA6) FOR EXTERIOR DECK REQUIREMENTS INCLUDING ATTACHMENTS FOR LATERAL LOADS.
- 6. CONCRETE SHALL HAVE A MINIMUM 28 DAY STRENGTH OF 3000 PSI AND A MAXIMUM SLUMP OF 5 INCHES UNLESS NOTED OTHERWISE (UNO). AIR ENTRAINED PER TABLE 402.2. ALL CONCRETE SHALL BE PROPORTIONED, MIXED, HANDLED, SAMPLED, TESTED, AND PLACED IN ACCORDANCE WITH ACI STANDARDS. ALL SAMPLES FOR PUMPING SHALL BE TAKEN FROM THE EXIT END OF THE PUMP. CONTROL JOINTS IN SLABS SHALL BE SPACED ON A GRID OF +-30 TIMES THE DEPTH (D). CONTROL JOINTS SHALL BE SAWCUT TO A DEPTH OF I/D. (I.E. 4" CONCRETE SLABS SHALL HAVE ¼" DEEP CONTROL JOINTS SAWCUT IN SLAB ON A +-IO'-O" x +-IO'-O" GRID).
- 7. ALLOWABLE SOIL BEARING PRESSURE ASSUMED TO BE 2000 PSF. THE CONTRACTOR MUST CONTACT A GEOTECHNICAL ENGINEER AND THE STRUCTURAL ENGINEER IF UNSATISFACTORY SUBSURFACE CONDITIONS ARE ENCOUNTERED. THE SURFACE AREA ADJACENT TO THE FOUNDATION WALL SHALL BE PROVIDED WITH ADEQUATE DRAINAGE, AND SHALL BE GRADED SO AS TO DRAIN SURFACE WATER AWAY FROM FOUNDATION WALLS.
- 8. ALL FRAMING LUMBER SHALL BE SPF #2 (Fb = 875 PSI) UNLESS NOTED OTHERWISE (UNO). ALL TREATED LUMBER SHALL BE SYP # 2. PLATE MATERIAL MAY BE SPF # 3 OR SYP #3 (Fc(perp) =
- 9. L.V.L. SHALL BE LAMINATED VENEER LUMBER: Fb=2600 PSI, Fv=285 PSI, E=I,9xI0 PSI. 9.I. P.S.L. SHALL BE PARALLEL STRAND LUMBER: Fb=2900 PSI, Fv=290 PSI, E=2.0xI0 PSI. 9.2. L.S.L. SHALL BE LAMINATED STRAND LUMBER: Fb=2250 PSI, Fv=400 PSI, E=1.55xI0 PSI. INSTALL ALL CONNECTIONS PER MANUFACTURERS INSTRUCTIONS.
- IO. ALL ROOF TRUSS AND I-JOIST LAYOUTS SHALL BE PREPARED IN ACCORDANCE WITH THE SEALED STRUCTURAL DRAWINGS. TRUSSES AND I-JOISTS SHALL BE INSTALLED ACCORDING TO THE MANUFACTURE'S SPECIFICATIONS. ANY CHANGE IN TRUSS OR I-JOIST LAYOUT SHALL BE COORDINATED WITH SOUTHERN ENGINEERS.
- II. ALL STRUCTURAL STEEL SHALL BE ASTM A-36. STEEL BEAMS SHALL BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3 1/2" INCHES AND FULL FLANGE WIDTH. PROVIDE SOLID BEARING FROM BEAM SUPPORT TO FOUNDATION. BEAMS SHALL BE ATTACHED TO EACH SUPPORT WITH TWO LAG SCREWS (I/2" DIAMETER x 4" LONG). LATERAL SUPPORT IS CONSIDERED ADEQUATE PROVIDING THE JOIST ARE TOE NAILED TO THE SOLE PLATE, AND SOLE PLATE IS NAILED OR BOLTED TO THE BEAM FLANGE @ 48" O.C. ALL STEEL TUBING SHALL BE ASTM A500.
- 12. REBAR SHALL BE DEFORMED STEEL, ASTM615, GRADE 60. LAP ALL REBAR SPLICES 30 BAR
- 13. FLITCH BEAMS SHALL BE BOLTED TOGETHER USING (2) ROWS OF 1/2" DIAMETER BOLTS (ASTM A325) WITH WASHERS PLACED UNDER THE THREADED END OF BOLT. BOLTS SHALL BE SPACED AT 24" O.C. (MAX), AND STAGGERED AT THE TOP AND BOTTOM OF BEAM (2" EDGE DISTANCE), WITH 2 BOLTS LOCATED AT 6" FROM EACH END.
- 14. BRICK LINTELS (WHEN REQUIRED) SHALL BE 3 1/2"x3 1/2"x1/4" STEEL ANGLE FOR UP TO 6'-0" SPAN AND 6"x4"x5/16" STEEL ANGLE WITH 6" LEG VERTICAL FOR SPANS UP TO 9'-0". SEE PLANS FOR SPANS OVER 9'-O". SEE ALSO SECTION R703.8.3 LINTELS.
- 15. METAL CONNECTORS REFERENCED ON PLANS CORRESPOND TO SIMPSON STRONG-TIE BRAND. CONNECTORS OF EQUAL OR BETTER CAPACITY ARE ACCEPTABLE. CORROSION RESISTANCE PER CODE AND AS RECOMMENDED BY MANUFACTURER.

n Engineers, Drive, Raleigh, NC one: (919) 878-1617 License: C-4772 Southern 3716 Benson D

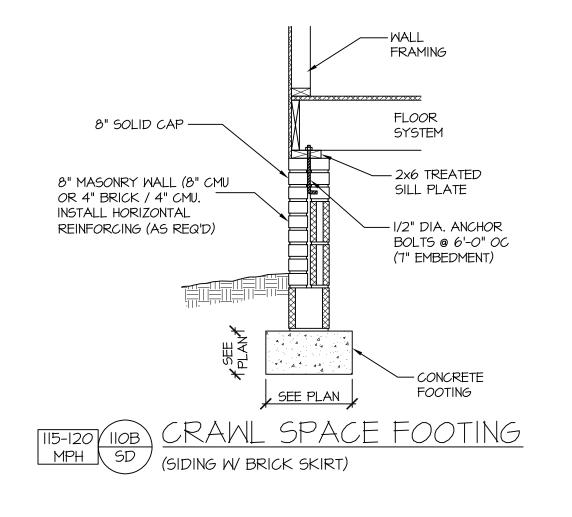
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INC **DESIG**

ence sid تة \mathbf{A} Slowsky
Baptist Gre
Fuquay-Va
Harnett 0



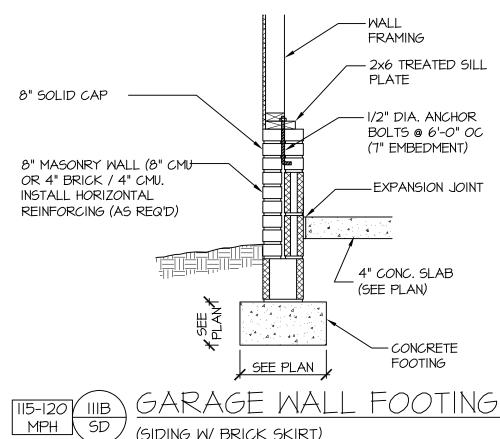
(122A) DROPPED GIRDER

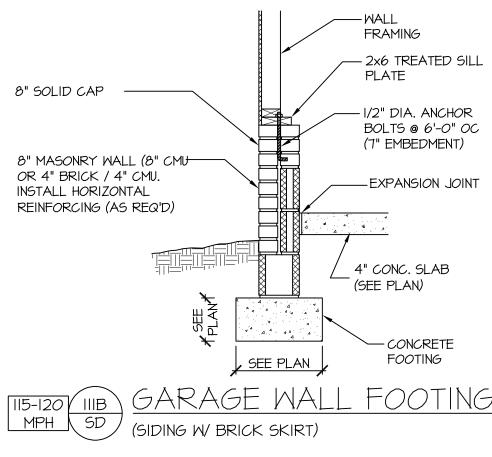
SUB FLOOR -

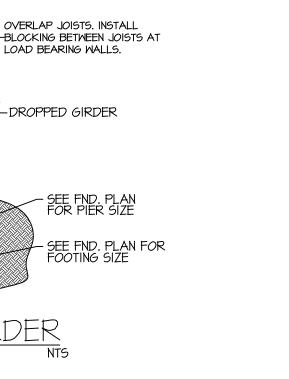
FLOOR JOIST -

TREATED SILL

8" SOLID FILLED MASONRY CAP, (CMU OR BRICK)







LOAD BEARING WALLS.

-DROPPED GIRDER

