WILLOW

ELEVATION B



PRINCE PLACE LOT 45

INCLUDED OPTIONS:

1st FLOOR
COVERED REAR PORCH
EXTENDED FAMILY ROOM
GOURMET KITCHEN
FIXED WINDOWS @ BREAKFAST
GUEST SUITE W/ FULL BATH
GUEST SHOWER ILO TUB
BOX OAK STAIRS
OPEN STAIR RAIL
2nd FLOOR
OWNERS TILE SHOWER
SECOND SINK @ BATH 2
BEDROOM 4

WILLOW BASE HOUSE SQUARE FOOTAGE CALCULATIONS							
ELEVATIONS	1st FLOOR	2nd FLOOR	TOTAL FIN	FRONT PORCH	GARAGE	UNDER ROOF	
ELEV. B	1053 s.f.	1287 s.f.	2340 s.f.	159 s.f	466 s.f.	2,965 s.f.	
OPTIONS SQL	JARE FOOT	AGE CALCUL					
EXTENDED FAMILY W/ ALTERNATE GUEST SUITE				130 s.f.			
COVERED PORCH				120 s.f.			

Main Street Designs of Georgia, ILC www.MainstreetDesigns of Georgia, ILC www.MainstreetDesigns of Angola (A. 57, 2022) Angola (A. 57, 2022) Angola (A. 57, 2022) Angola (A. 57, 2022) Angola (A. 57, 2022)



SHEET OPER

WILLOW

PRAWING TITLE

COVER SHEET

CS-1.0

1053 SQ FT OF FOUNDATION TO BE VENTED

CRAWL VENTING

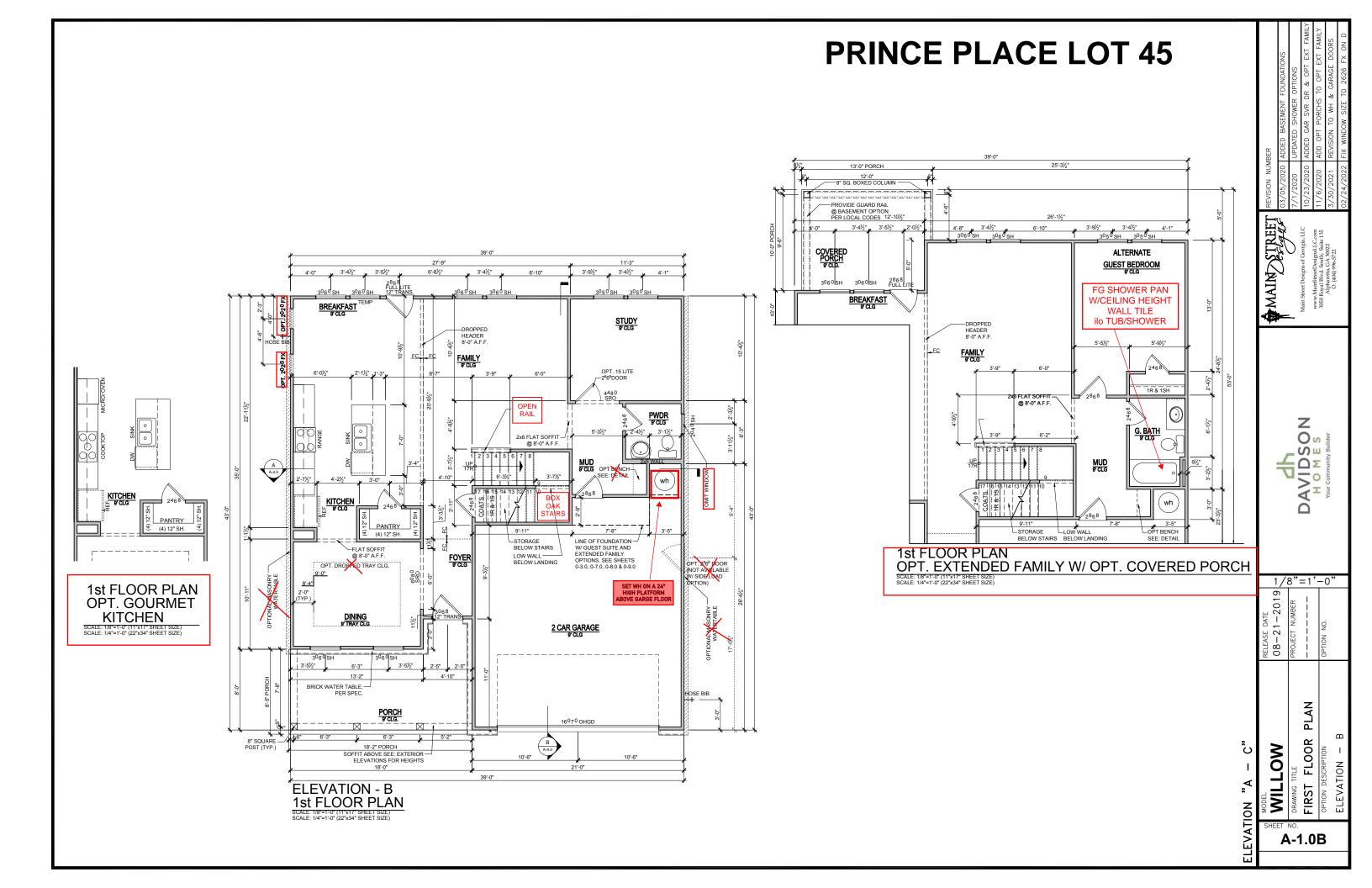
VENTS 128 SQ IN = (0.8889 SQ FT)

CRAWL VENT

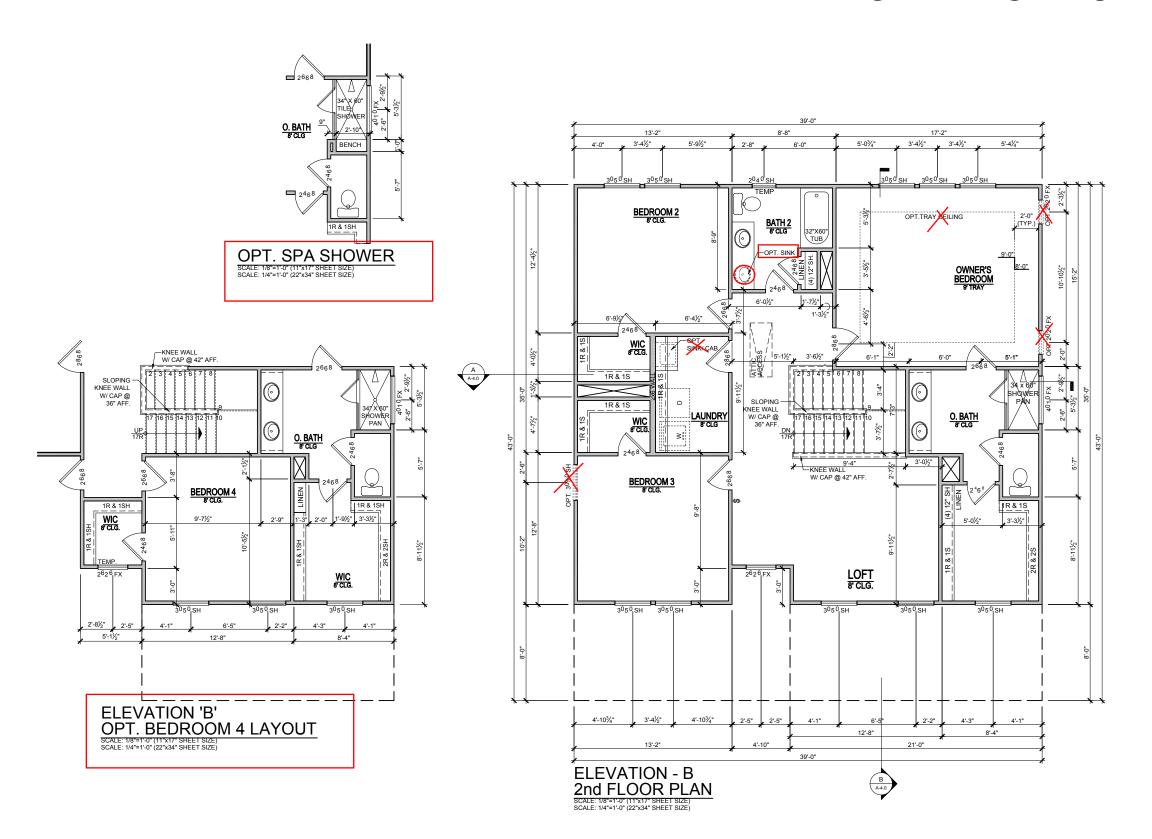
7.020 SQ FT
0.2778 SQ FT = 25.3 VENTS REQUIRED

ACTUAL CRAWL VENTS PROVIDED

NOTE: WHERE AN APPROVED VAPER BARRIER IS INSTALLED OVER GROUND SURFACE THE REQUIRED VENTILATION MAY BE REDUCED BY 50%



PRINCE PLACE LOT 45



WILLOW

MAIN STREET

DAVIDSON HOMES

1/8"=1'-0"

PLAN

FLOOR

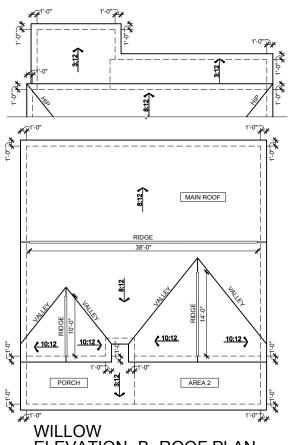
SECOND

A-2.0B

RELEASE DATE 08-21-2019

OPT. EXTENDED FAMILY W/ OPT. COVERED PORCH **ROOF PLAN**

SCALE: 1/16"=1'-0" (11"X17" SHEET SIZE SCALE: 1/8"=1'-0" (22"X34" SHEET SIZE)



ELEVATION -B- ROOF PLAN

SCALE: 1/16"=1'-0" (11"X17" SHEET SIZE) SCALE: 1/8"=1'-0" (22"X34" SHEET SIZE)

ATTIC VENT CALCULATIONS

- GENERAL CONTRACTOR SHALL VERIFY THE NET FREE GENERAL CONITACTOR SHALL VERIFY THE NEITHELE VENTILATION OF THE VENT PRODUCT SELECTED BY OWNER. VERIFY WITH MANUFACTURER OF HIGH AND LOW VENTS TO BE USED FOR MINIMUM CALCULATED VENTS REQUIRED. THE REQUIRED VENTILATION SHALL BE MAINTAINED. PROVIDE INSULATION STOP SUCH THAT INSULATION DOES NOT OBSTRUCT FREE AIR MOVEMENT AS REQUIRED.
- ALL OVERLAP FRAMED ROOF AREAS SHALL HAVE
- OPENINGS BETWEEN THE ADJACENT ATTICS IN THE ROOF SHEATHING (AS ALLOWED BY THE STRUCTURAL ENGINEER) TO ALLOW PASSAGE AND ATTIC VENTILATION BETWEEN THE TWO OR ISOLATED ATTIC SPACES SHALL BE VENTED INDEPENDENTLY TO CBC REQUIREMENTS.
- PER DEVELOPER, AT ALL CANTILEVERED FLOORS, CANTILEVERED ARCHITECTURAL POP-OUTS, AND ANY DOUBLE FRAMING PROJECTIONS THAT ARE SEPARATED FROM THE VENTING CALCULATIONS SHOWN ABOVE, PROVIDE A CONTINUOUS 2" CORROSION RESISTANT SOFFIT VENT AT UNDERSIDE OF FRAMED ELEMENT.
- ALL ROOF DRAINAGE SHALL BE PIPED TO STREET OR APPROVED DRAINAGE FACILITY.
- DASHED LINES INDICATE WALL BELOW.
- LOCATE GUTTER AND DOWNSPOUTS PER BUILDER.
- PITCHED ROOFS AS NOTED.
- TRUSS MANUFACTURER SHALL SUBMIT STRUCTURAL CALCS AND SHOP DRAWINGS TO THE BUILDER'S GENERAL CONTRACTOR AND BUILDING DEPARTMENT FOR REVIEW PRIOR TO FABRICATIONS.

MAIN ROOF

1518 SQ FT UNDER ROOF ATTIC 300 SQ FT / 1 SQ FT = 5.06 SQ FT VENTILATION

RIDGE VENTS 18 SQ IN = (.125 SQ FT) SOFFIT VENTS 9 SQ IN = (.0625 SQ FT) BOX VENTS 50 SQ IN = (.347 SQ FT)

5.06 SQ FT x 50% 2.530 SQ FT OF RIDGE 5.06 SQ FT x 50% 2.530 SQ FT OF SOFFIT

RIDGE VENT

2.530 SQ FT = 40.5 FEET OF SOFFIT VENT ACTUAL RIDGE VENT PROVIDED

ACTUAL SOFFIT VENT PROVIDED NUMBER OF BOX VENTS NEEDED (REQ - ACTUAL x .347)

PORCH ROOF

115 SQ FT UNDER ROOF 150 SQ FT / 1 SQ FT = 0.77 SQ FT VENTILATION

SOFFIT VENTS 9 SQ IN = (.0625 SQ FT) ASSUME 100% VENTING @ SOFFIT

= 12.3 FEET OF SOFFIT VENT

ACTUAL SOFFIT VENT PROVIDED

PRINCE PLACE LOT 45



OPT. EXTENDED FAMILY W/ OPT. COVERED PORCH

REAR ELEVATION BRICK FOUNDATION PER, COMM, SPECS. SCALE: 1/8"=1'-0" (11"X17" SHEET SIZE) SCALE: 1/4"=1'-0" (22"X34" SHEET SIZE)



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A-3.0B

Z

1/8"=1'-0"

LAN

ROOF

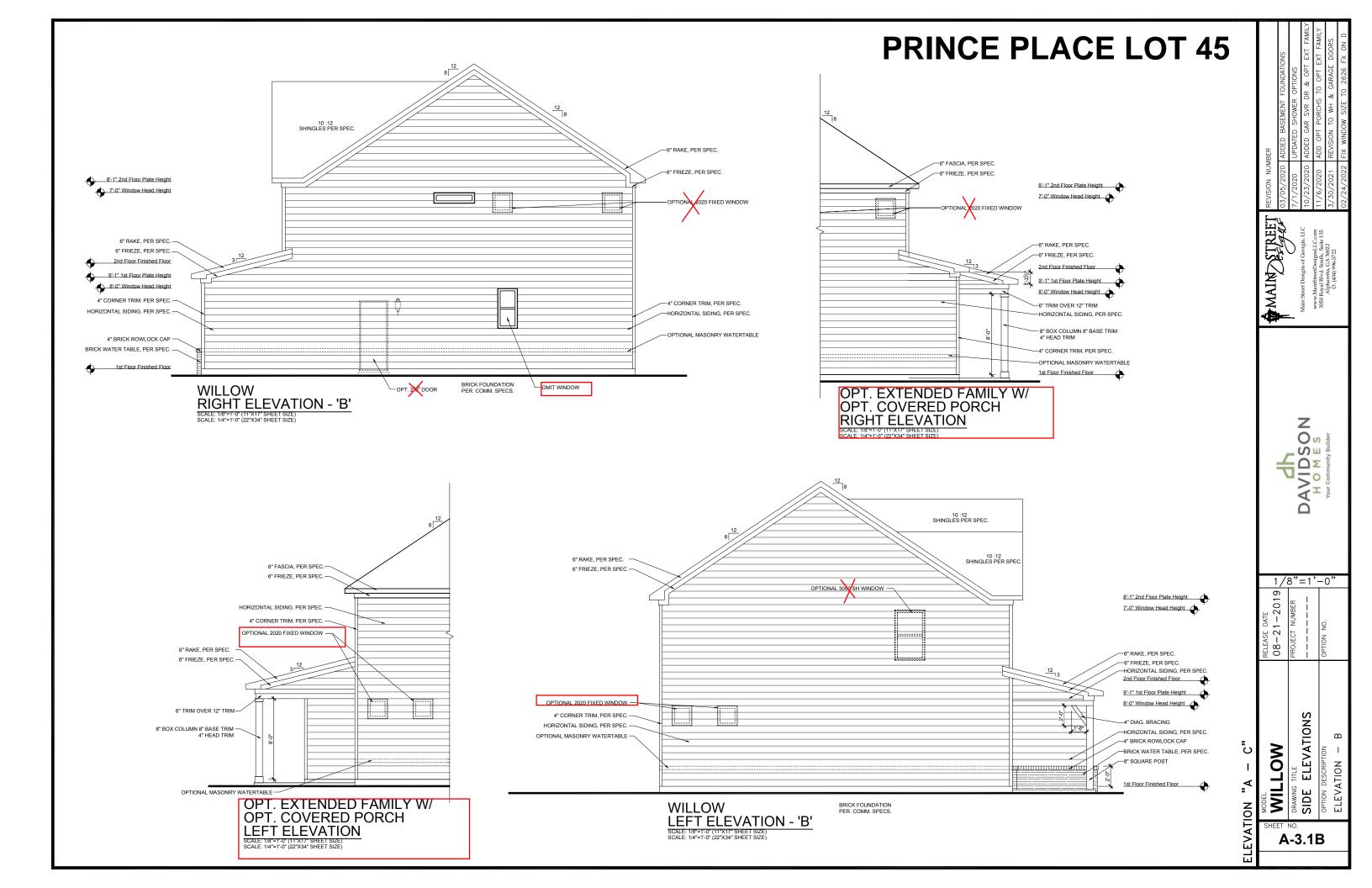
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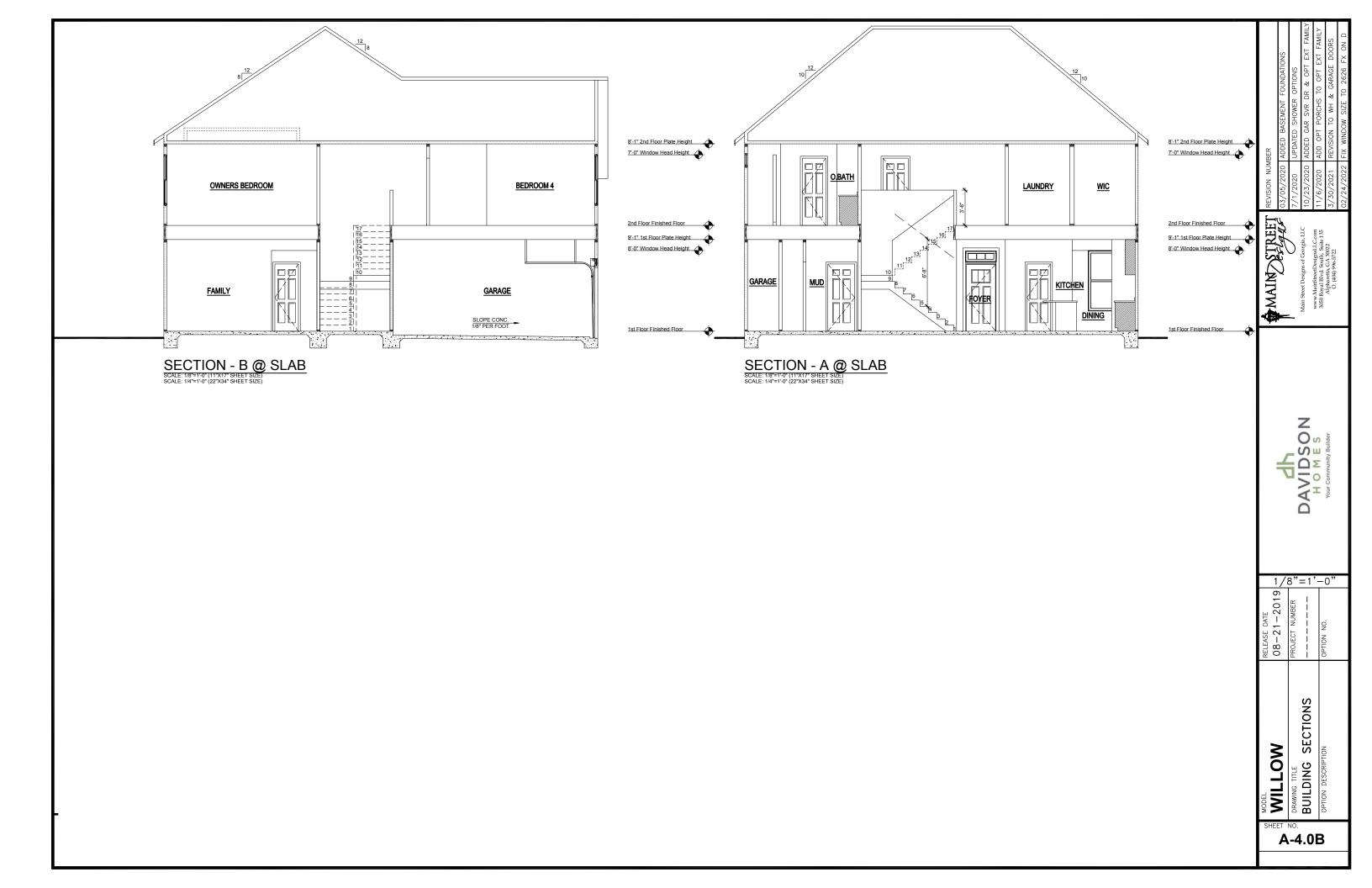
ASE DATE -21-2019

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ELECTRICAL KEY \Rightarrow DUPLEX RECEP. SPLIT SWITCHED RECEP. FLOOR RECEP QUADPLEX RECEP GROUND FAULT RECEP

EXAUST FAN

EXAUST FAN / LIGHT EXAUST FAN / HEAT LIGHT

ledow

VAPOR PROTECTED LIGHT

HANGING CEILING LIGHT

Ю

WALL SCONCE LIGHT

DIMMER SWITCH

PHONE JACK

DIRECT WIRE

SECURITY SYSTEM PHONE JACK

SMOKE DETECTOR

CARBON MONOXIDE DETECTOR

ELECTRICAL PANEL

DISCONNECT SWITCH ELECTRIC METER

2 TUBE FLUORESCENT FLOOD LIGHT

CHIMES

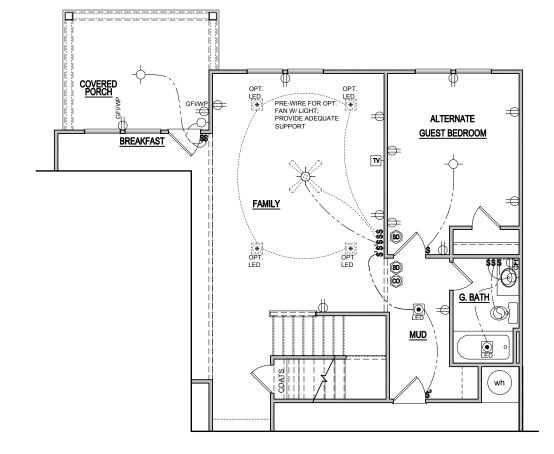


CEILING FAN

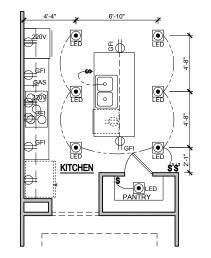


CEILING FAN W/ LIGHT

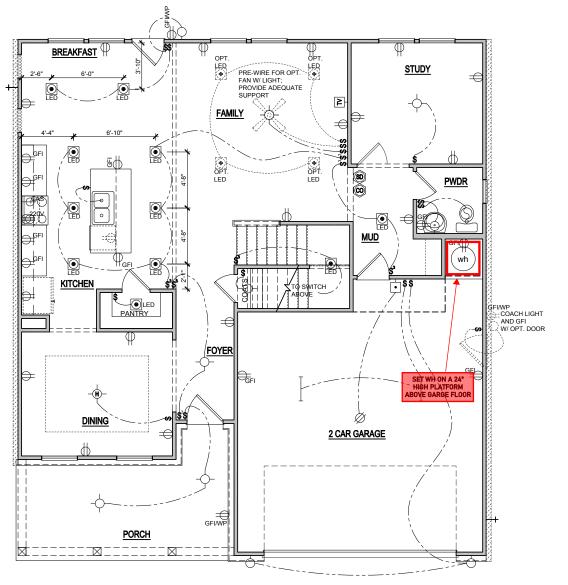
PRINCE PLACE LOT 45



ELECTRICAL PLAN OPT. EXTENDED FAMILY W/ OPT. COVERED PORCH SCALE: 1/8"=1'-0" (11"x17" SHEET SIZE) SCALE: 1/4"=1'-0" (22"x34" SHEET SIZE)



1st FLOOR PLAN OPT. GOURMET KITCHEN SCALE: 1/8"=1'-0" (11"x17" SHEET SIZE) SCALE: 1/4"=1'-0" (22"x34" SHEET SIZE)



ELEVATION - B FIRST FLOOR ELECTRICAL PLAN SCALE: 1/8"=1'-0" (11"x17" SHEET SIZE) SCALE: 1/4"=1'-0" (22"x34" SHEET SIZE)

WILLOW

1ST E-1.0B

MAIN STREET

Z

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AVIDS(

1/8"=1'-0"

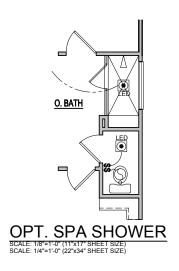
PLAN

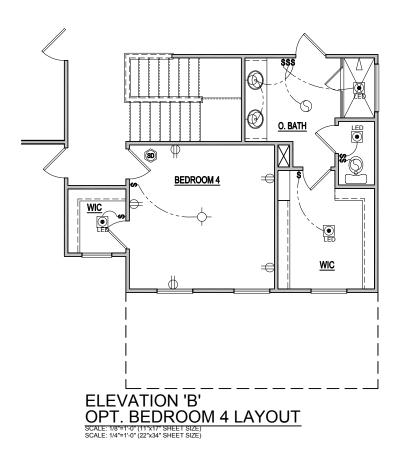
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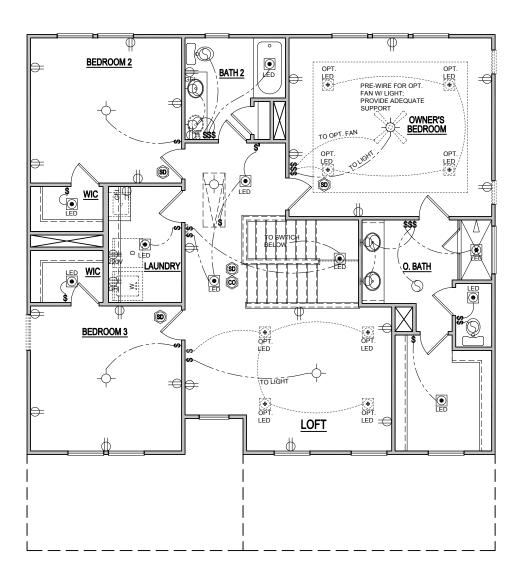
FLOOR

RELEASE DATE 08-21-2019

PRINCE PLACE LOT 45







ELEVATION - B SECOND FLOOR ELECTRICAL PLAN SCALE: 1/8"=1"-0" (11"x17" SHEET SIZE) SCALE: 1/4"=1"-0" (22"x34" SHEET SIZE)

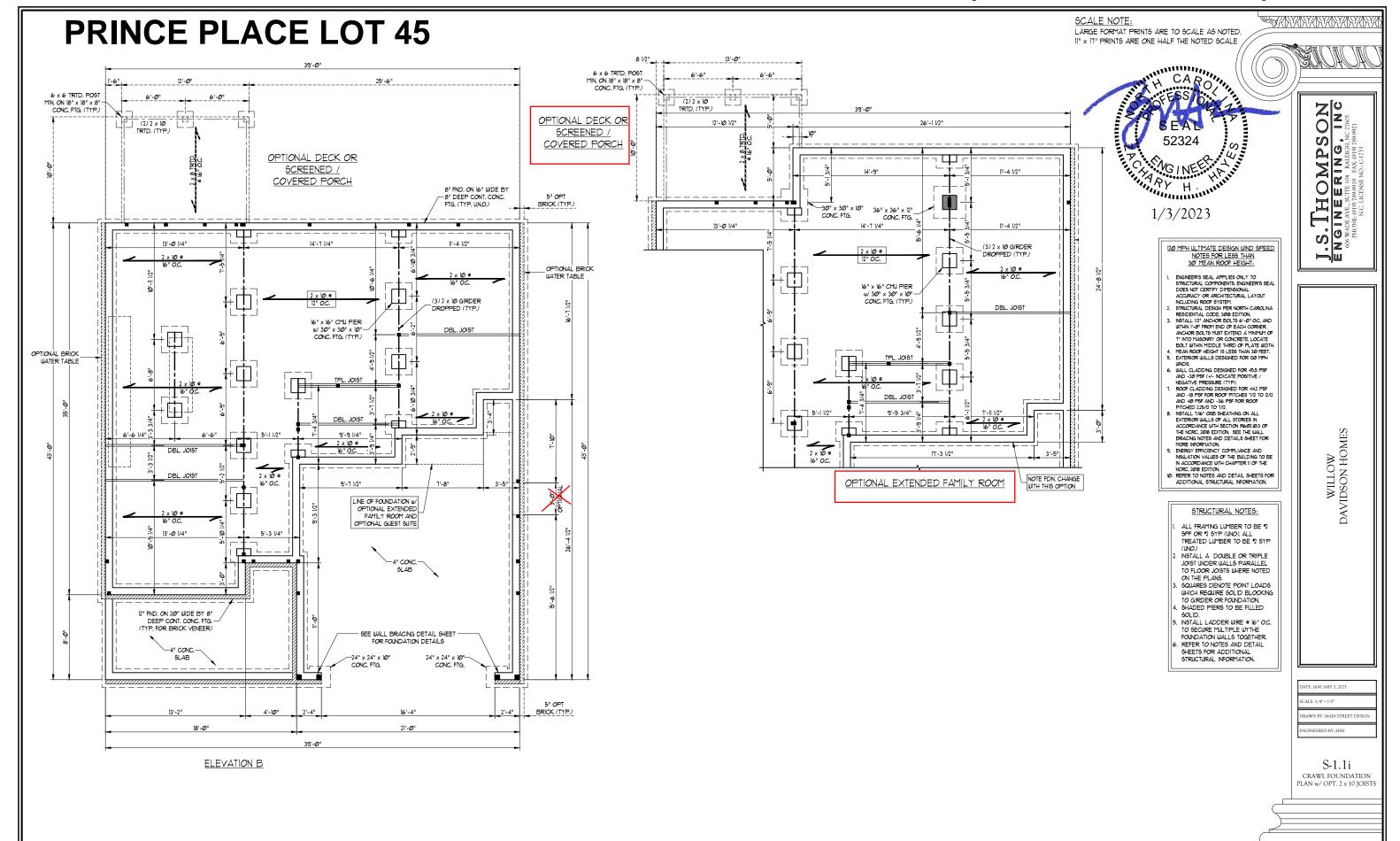
WILLOW E-2.0B

DAVIDSON

1/8"=1'-0"

RELEASE DATE 08-21-2019

MAINSTREET

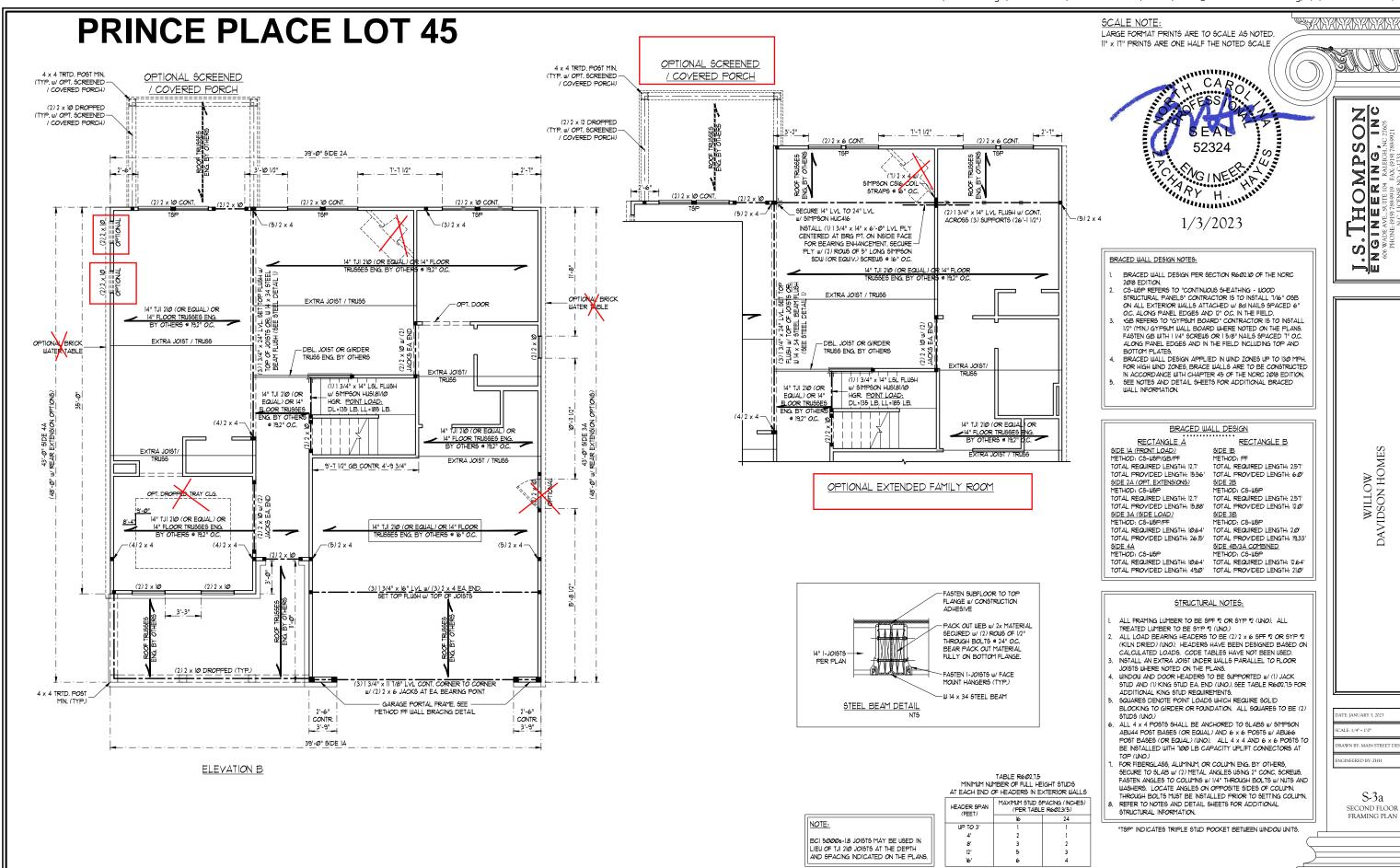


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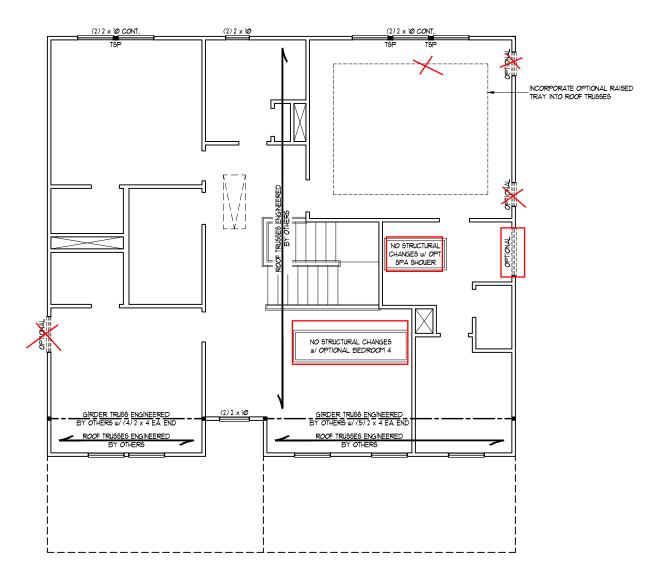
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S-3a



PRINCE PLACE LOT 45



ELEVATION B

SCALE NOTE:

LARGE FORMAT PRINTS ARE TO SCALE AS NOTED. 11" x 17" PRINTS ARE ONE HALF THE NOTED SCALE

WATER HARRIES

1/3/2023

BRACED WALL DESIGN NOTES:

- BRACED WALL DESIGN PER SECTION R602.10 OF THE NORC
- 2016 EDITION.
 CS-USP REFERS TO "CONTINUOUS SHEATHING WOOD STRUCTURAL PANELS" CONTRACTOR IS TO INSTALL 1/16" OSB ON ALL EXTERIOR WALLS ATTACHED W/ 80 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 MALL BOARD WHERE NOTED ON THE PLANS. FASTEN GB WITH I I/4" SCREWS OR I 5/8" NAILS SPACED T" 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

- PER SECTION R602.103.2 OF THE 2018 NCRC, THE AMOUNT OF BRACING ON THE SECOND FLOOR EXCEEDS THE AMOUNT
- 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 TIME 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 *2 SPF
- OR \$2 SYP (UNO). ALL LOAD BEARING HEADERS TO BE (2) 2 x 6 (UNO).
- (2) 2 X B (UNO).

 WINDOW AND DOOR HEADERS TO BE SUPPORTED W/ (1) JACK STUD AND (1) KING STUD EA. END (UNO.). SEE TABLE R602.1.5 FOR ADDITIONAL KING STUD REQUIREMENTS. SQUARES DENOTE POINT LOADS
- WHICH REQUIRE SOLID BLOCKING TO GIRDER OR FOUNDATION. SQUARES TO BE (2) STUDS (UNO.)
- REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL

"TSP" INDICATES TRIPLE STUD POCKET BETWEEN WINDOW UNITS.

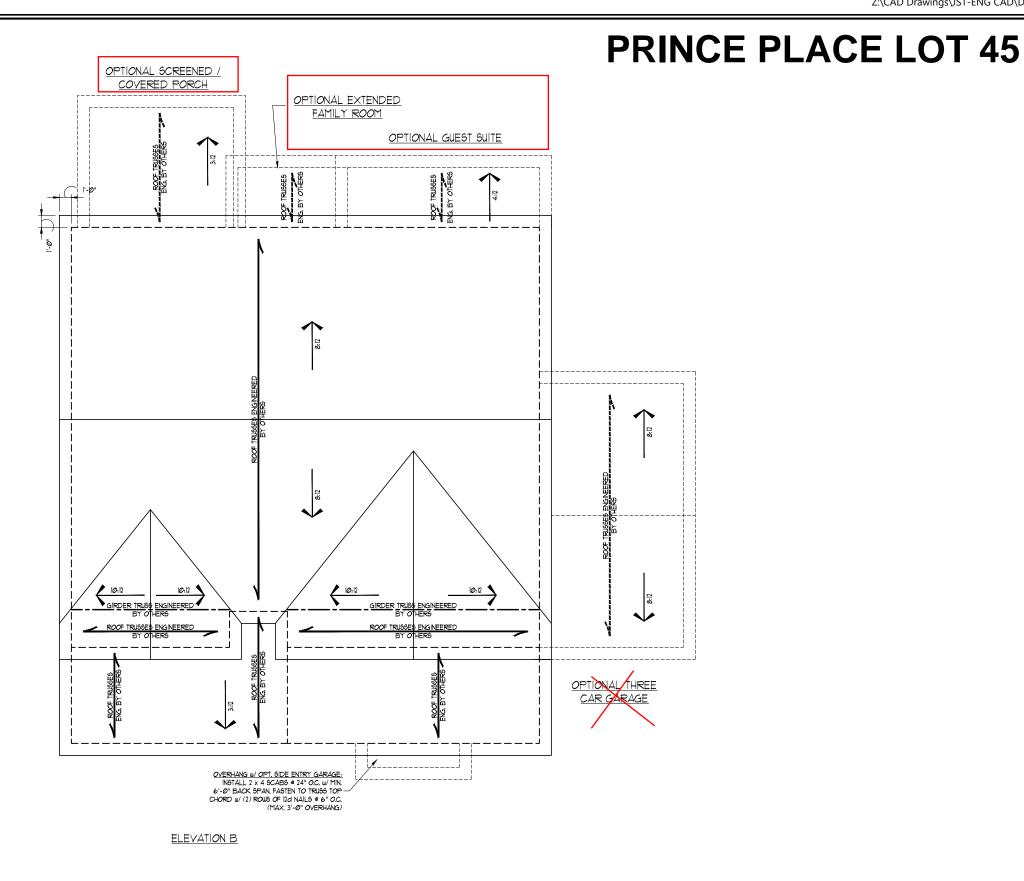
MINIMUM NUMBER OF FULL HEIGHT STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS

MAXIMUM STUD SPACING (INCHES). (PER TABLE R6Ø23(5)			
16	24		
1	1		
2	1		
3	2		
5	3		
6	4		
	(PER TABLE		

DATE: JANUARY 3, 2023				
SCALE: 1/4" = 1'-0"				
DRAWN BY: MAIN STREET DESIGN				
ENGINEERED BY: ZHH				

S-4a ATTIC FLOOR FRAMING PLAN

ഗ THOMPS INEERING, တ်ဖြ



SCALE NOTE:

LARGE FORMAT PRINTS ARE TO SCALE AS NOTED. 11" x 17" PRINTS ARE ONE HALF THE NOTED SCALE

WATE H. LINE

1/3/2023

STRUCTURAL NOTES:

- ALL FRAMING LUMBER TO BE 12 SPF OR 12 SYP (UNO). STICK FRAME OVER-FRAMED
- 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.
 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.
 REFER TO SECTION R802.11 OF THE
 2018 NCRC FOR REQUIRED UPLIFT
 RESISTANCE AT RAFTERS AND
 TRUSSES.
 REFER TO NOTES AND DETAIL
- REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

. THOMPSON
SINEERING, INC So WAD

DRAWN BY: MAIN STREET DESIG GINEERED BY: ZHH

> S-5a ROOF FRAMING PLAN

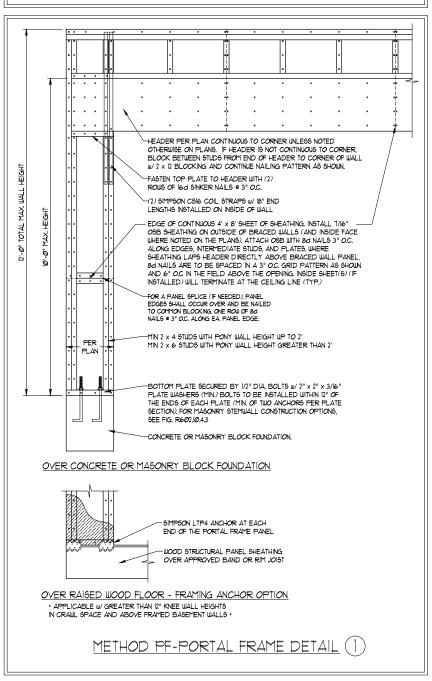
SCALE NOTE:

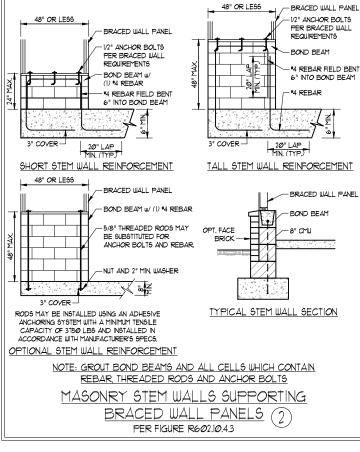
GENERAL WALL BRACING NOTES:

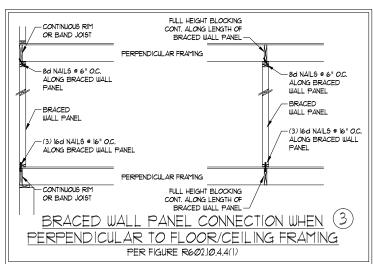
WALL BRACING DESIGNED IN ACCORDANCE WITH CHAPTER 6 OF THE 2018 NC RESIDENTIAL BUILDING CODE (NCRC.) TABLES AND FIGURES REFERENCED ARE FROM THE 2018 NORC.
SEE THIS SHEET FOR GENERAL DETAILS, REFER TO THE 2018 NORC FOR ADDITIONAL INFORMATION AS NEEDED.

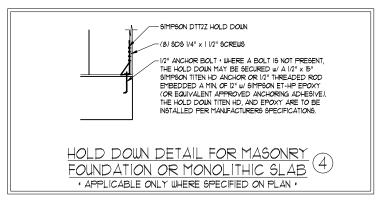
AND SHEAR FORCES IN ACCORDANCE WITH ACCEPTED ENGINEERED PRACTICE.

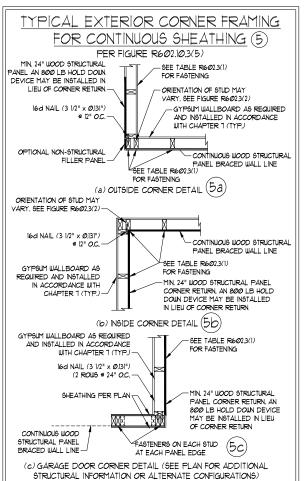
- BRACED EXTERIOR WALLS SUPPORTING ROOF TRUSSES AND RAFTERS, INCLUDING STORIES BELOW THE TOP FLOOR, HAVE BEEN DESIGNED PER R602.3.5 (3), WALL SHEATHING AND FASTENERS HAVE BEEN DESIGNED TO RESIST COMBINED UPLIFT
- 4. SEE STRUCTURAL SHEETS FOR BRACED WALL LOCATIONS, DIMENSIONS, HOLD DOWN TYPE AND LOCATIONS, BRACED WALL LINE KEY WITH WALL DESIGN SUMMARY OF REQUIRED/PROVIDED TOTALS FOR EACH WALL LINE AND ANY SPECIAL NOTES OR REQUIREMENTS.
- ALL EXTERIOR WALLS ARE TO BE SHEATHED WITH CS-WSP IN ACCORDANCE WITH SECTION R602.10.3 UNLESS NOTED OTHERWISE.
- 6. 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 R602.10.1
- CS-USP 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/13" DIAMETER) NAILS SPACED 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN THE FIELD (UNO.).
- 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 1/4" SCREWS OR 15/8" NAILS SPACED TO OC. ALONG PANEL EDGES INCLUDING TOP AND BOTTOM PLATES AND INTERMEDIATE SUPPORTS (UN.O.). YERRY ALL FASTENER OPTIONS FOR 1/2" AND 5/8' GYPSUM PRIOR TO CONSTRUCTION. FOR INTERIOR FASTENER OPTIONS SEE TABLE RT02.35. FOR EXTERIOR FASTENER OPTIONS SEE TABLE R602.3(I). EXTERIOR GB TO BE INSTALLED VERTICALLY.
- REQUIRED BRACED WALL LENGTH FOR EACH SIDE OF THE CIRCUMSCRIBED RECTANGLE ARE INTERPOLATED PER TABLE READ. 103, METHOD CE-MEP CONTRIBUTES 115 ACTUAL LENGTH, METHOD GB CONTRIBUTES 5 115 ACTUAL LENGTH, AND METHOD PF CONTRIBUTES 15 IMPES 115 ACTUAL LENGTH.

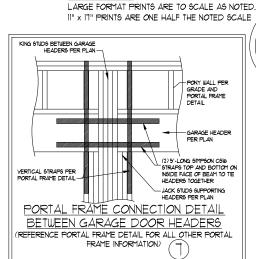


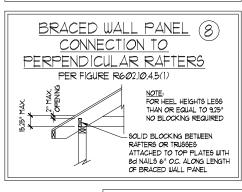


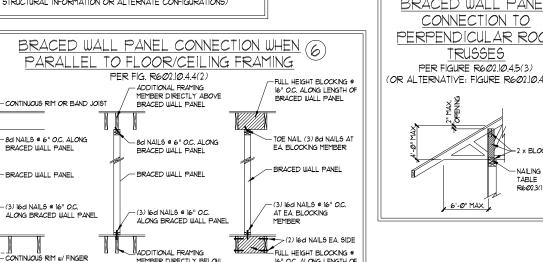












16" O.C. ALONG LENGTH OF BRACED WALL PANEL

BRACED WALL PANEL PERPENDICULAR R*oo*f (OR ALTERNATIVE: FIGURE R602,10,45(2)) x BLOCKING NAILING PER

ALLEN O A CHAPTER CARO NGINEER PY H 1/3/2023

ATE: JANUARY 3, 2023 RAWN BY: MAIN STREET DE INEERED BY: ZHI

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JOISTS OR DBL. BAND JOIST

MEMBER DIRECTLY BELOW

BRACED WALL PANEL

Z S O ERIN IN S

WILLOW DAVIDSON HOMES

D-4 WALL BRACING NOTES AND DETAILS

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 I AYOUT 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 R301.1)

DESIGN CRITERIA:	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION (IN)		
ATTIC WITH LIMITED STORAGE	2Ø	10	L/240 (L/360 w/ BRITTLE FINISHES)		
ATTIC WITHOUT STORAGE	10	10	L/360		
DECK9	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/36Ø		
PASSENGER VEHICLE GARAGE	5Ø	10	L/36Ø		
ROOMS OTHER THAN SLEEPING ROOM	40	10	L/36Ø		
SLEEPING ROOMS	3Ø	10	L/36Ø		
STAIRS	40	10	L/36Ø		
WIND LOAD	(BASED ON TABLE R3Ø12(4) WIND ZONE AND EXPOSURE)				
GROUND SNOW LOAD: Pg	2Ø (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 15 TO COMPLY WITH SECTION R403.16 OF THE NCRC, 2018 EDITION. FOR 130 MPH, 140 MPH, AND 150 MPH WIND ZONES, FOUNDATION ANCHORAGE 15 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

- 1. 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 \$LAB\$ AND FOOTING\$, THE AREA WITHIN THE PERIMETER OF THE BUILDING ENVELOPE \$HALL HAVE ALL VEGETATION, TOP \$OIL AND FOREIGN MATERIAL REMOVED. FILL MATERIAL, \$HALL BE FREE OF VEGETATION AND FOREIGN MATERIAL. THE FILL \$HALL BE COMPACTED TO A\$\$URE UNIFORM \$UPPORT OF THE \$LAB, AND EXCEPT WHERE APPROVED, THE FILL DEPTH\$ \$HALL NOT EXCEED 24" FOR CLEAN \$AND OR GRAVEL. A 4" THICK BA\$ED COURSE CONSISTING OF CLEAN GRADED \$AND OR GRAVEL \$HALL BE PLACED. A BA\$E COURSE IS NOT REQUIRED WHERE A CONCRETE \$LAB IS INSTALLED ON WELL-DRAINED OR \$AND-GRAVEL MIXTURE \$OIL\$ CLASSIFIED AS GROUP I, ACCORDING TO THE UNITED \$OIL CLASSIFICATION \$Y\$TEM IN ACCORDANCE WITH TABLE R4Ø5.1 OF THE NCRC, 2018 EDITION.
- 3. PROPERLY DEWATER EXCAVATION PRIOR TO POURING CONCRETE WHEN BOTTOM OF CONCRETE \$LAB 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 1 1/2" FOR 55 BARS OR SMALLER, AND NOT LESS THAN 2" FOR 65 BARS OR LARGER.
- 5. MASONRY UNITS TO CONFORM TO ACE 530/ASCE 5/TMS 402. MORTAR SHALL CONFORM 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 S 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/ASCE 5/MS 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.LI(5) OF THE NCRC, 2018 EDITION. STEP CONCRETE FOUNDATION WALLS TO 2 x 6 FRAMED WALLS AT 16" OC WHERE GRADE PERMITS (UNO)

FRAMING NOTES

- 1. ALL FRAMING LUMBER SHALL BE 12 SPF (Fb = 815 PS), Fv = 315 PS), E = 1600000 PS)) OR 12 SYP (Fb = 915 PS), Fv = 175 PS), E = 16000000 PS)) MINIMUM UNLESS NOTED OTHERWISE (UNO). ALL TREATED LUMBER SHALL BE 12 SYP MINIMUM UNLESS NOTED OTHERWISE (UNO).
- 2. LAMINATED VENEER LUMBER (LVL) 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 = 1800000 PSI. PARALLEL STRAND LUMBER (PSL) MORE THAN 1" DEPTH SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fc = 2900 PSI, E = 2000000 PSI. INSTALL ALL CONNECTIONS PER MANUFACTURER'S SPECIFICATIONS.
- 3. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS

A. W AND WT 9HAPES: ASTM A992
B. CHANNELS AND ANGLES: ASTM A36
C. PLATES AND BARS: ASTM A36
D. HOLLOW STRUCTURAL SECTIONS: ASTM A506

D. HOLLOW STRUCTURAL SECTIONS: ASTM A5000 GRADE B E. STEEL PIPE: ASTM A53, GRADE B, TYPE E OR S

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).

 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 @ I6" O.C. OR (2) ROWS OF 1/2" DIAMETER BOLTS @ I6" O.C. IF I/2" BOLTS ARE USED TO FASTEN THE NAILER, THE STEEL BEAM SHALL BE FABRICATED w/ (2) ROWS OF 9/16" DIAMETER HOLES @ I6" O.C.

- 5. 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 1 1/2" MINIMUM BEARING (NO.). 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 EQUIAL LENGTHS (UNO).
- 8. FLITCH BEAMS SHALL BE BOLTED TOGETHER USING 1/2" DIAMETER BOLTS (ASTM A3Ø1) 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 1-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.
- IØ. 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 RE02.10.
- II. 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.
- 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 (UNO). 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 RT03.82.1 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 ROUS OF 12d NAILS AT 16" O.C. FRAME DORMER WALLS ON TOP OF DOUBLE OR TRIPLE RAFTERS AS SHOUN (UNO)
- 14. FOR TRUSSED ROOFS: FRAME DORMER WALLS ON TOP OF 2 × 4 LADDER FRAMING AT 24" O.C. BETWEEN ADJACENT ROOF TRUSSES. STICK FRAME OVER-FRAMED ROOF SECTIONS WITH 2 × 8 RIDGES, 2 × 6 RAFTERS AT 16" O.C. AND FLAT 2 × 10 VALLEYS (UNO).
- IS. ALL 4 x 4 AND 6 x 6 POSTS TO BE INSTALLED WITH 100 LB CAPACITY UPLIFT CONNECTORS TOP AND BOTTOM (UNO.) POSTS MAY BE SECURED USING ONE SIMPSON H6 OR LTSI2 UPLIFT CONNECTOR FASTENED TO THE BAND AT THE BOTTOM AND THE BEAM AT THE TOP OF EACH POST. ONE 16" SECTION OF SIMPSON CSI6 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.

SCALE NOTE:

LARGE FORMAT PRINTS ARE TO SCALE AS NOTED.

11" x 17" PRINTS ARE ONE HALF THE NOTED SCALE



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1/3/2023

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DATE: JANUARY 3, 2023

RAWN BY: MAIN STREET DES

D-5 STANDARD STRUCTURAL NOTES

