PLANS DESIGNED TO THE
2018 NORTH CAROLINA STATE RESIDENTIAL BUILDING CODE

MEAN ROOF HEIGHT 18'-0" HEIGHT TO RIDGE 24'-2"

CLIMATE ZONE	ZONE 3A	ZONE 4A	ZONE 5A
MINIMUM FENESTRATION	0.15	0.15	0.15
MAXIMUM U-FACTOR	0.50	0.50	0.50
MAXIMUM SKYLIGHT U-FACTOR	0.75	0.75	0.75
CEILING R-VALUE	30 or 38*	30 or 38*	30 or 38*
WALL R-VALUE	13	13	20
FLOOR R-VALUE	13	13	30
BASEMENT WALL R-VALUE	5/13	10/13	10/13
SLAB R-VALUE	0	10	10
CRAWL SPACE WALL R-VALUE	5/13	10/13	10/13

* "38" PLANS WITH WOOD FRAMING INSULATION DOWN AND "30" INSULATED ROOFING INSULATION WITH ADEQUATE SLOPE OR TO SECTION OF INSULATION ALL

EXPOSURE & WIND SPEED (V_ULT) DESIGN PARAMETERS FOR WIND BORNE DEBRIS REGIONS												
MEAN ROOF HEIGHT	UP TO 30'			30'-1" TO 35'			35'-1" TO 40'			40'-1" TO 45'		
	115	120	130	115	120	130	115	120	130	115	120	130
ZONE 1	14.3	15.0	16.5	14.5	15.2	16.8	14.8	15.5	17.0	15.0	15.8	17.3
ZONE 2	14.3	15.0	16.5	14.5	15.2	16.8	14.8	15.5	17.0	15.0	15.8	17.3
ZONE 3	14.3	15.0	16.5	14.5	15.2	16.8	14.8	15.5	17.0	15.0	15.8	17.3
ZONE 4	15.3	16.0	17.6	15.5	16.3	17.9	15.8	16.6	18.2	16.1	16.9	18.5
ZONE 5	15.3	16.0	17.6	15.5	16.3	17.9	15.8	16.6	18.2	16.1	16.9	18.5

EXPOSURE & WIND SPEED (V_ULT) DESIGN PARAMETERS FOR NON-BORNE DEBRIS REGIONS												
MEAN ROOF HEIGHT	UP TO 30'			30'-1" TO 35'			35'-1" TO 40'			40'-1" TO 45'		
	115	120	130	115	120	130	115	120	130	115	120	130
ZONE 1	16.2	16.8	17.9	16.4	17.1	18.3	16.7	17.4	18.6	16.9	17.6	18.8
ZONE 2	16.2	16.8	17.9	16.4	17.1	18.3	16.7	17.4	18.6	16.9	17.6	18.8
ZONE 3	16.2	16.8	17.9	16.4	17.1	18.3	16.7	17.4	18.6	16.9	17.6	18.8
ZONE 4	16.2	16.8	17.9	16.4	17.1	18.3	16.7	17.4	18.6	16.9	17.6	18.8
ZONE 5	16.2	16.8	17.9	16.4	17.1	18.3	16.7	17.4	18.6	16.9	17.6	18.8

ROOF VENTILATION

SECTION R806

R806.1 Ventilation required. In vented attics and enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters shall have cross ventilation for each separate space by ventilating openings protected against the entrance of rain or snow. Ventilation openings shall have a least dimension of 1/16 inch (1.6 mm) minimum and 1/4 inch (6.4 mm) maximum. Ventilation openings having a least dimension larger than 1/4 inch (6.4 mm) shall be provided with corrosion-resistant wire cloth screening, fiberglass cloth, or similar material with openings having a least dimension of 1/16 inch (1.6 mm) minimum and 1/4 inch (6.4 mm) maximum. Openings in roof framing members shall conform to the requirements of Section R802.7.

R806.2 Minimum area. The total net free ventilating area shall not be less than 1/150 of the area of the space ventilated except that reduction of the total area to 1/300 is permitted provided that at least 50 percent and not more than 80 percent of the required ventilating area is provided for ventilation located in the upper portion of the space to be ventilated at least 3 feet (914 mm) above the eave or cornice vents with the balance of the required ventilation provided by eave or cornice vents. As an alternative, the net free cross-ventilation area may be reduced to 1/300 when a Class I or II vapor retarder is installed on the warm-in-winter side of the ceiling.

Exceptions:

1. Unheated attic/rafter spaces requiring less than 1 square foot (0.0929 m2) of ventilation may be vented with continuous soffit ventilation only.
2. Unheated attic/rafter spaces over unconditioned space may be vented with continuous soffit vent only.

SQUARE FOOTAGE OF ROOF TO BE VENTED = 2,168 SQ.FT.

NET FREE CROSS VENTILATION NEEDED:

WITHOUT 50% TO 80% OF VENTING 3'-0" ABOVE EAVE = 14.45 SQ.FT.

WITH 50% TO 80% OF VENTING 3'-0" ABOVE EAVE, OR WITH CLASS I OR II VAPOR RETARDER ON WARM-IN-WINTER SIDE OF CEILING = 7.23 SQ.FT.

GUARD RAIL NOTES

SECTION R312

R312.1 Where required. Guards shall be located along open-sided walking surfaces, including stairs, ramps and landings, that are located more than 30 inches (762 mm) measured vertically to the floor or grade below at any point within 36 inches (914 mm) horizontally to the edge of the open side. Insect screening shall not be considered as a guard.

R312.2 Height. Required guards on open-sided walking surfaces, including stairs, porches, balconies or landings, shall be not less than 36 inches (914 mm) high measured vertically above the adjacent walking surface, adjacent fixed seating or the line connecting the leading edges of the treads.

Exceptions:

1. Guards on the open sides of stairs shall have a height not less than 34 inches (864 mm) measured vertically from a line connecting the leading edges of the treads.
2. Where the top of the guard also serves as a handrail on the open sides of stairs, the top of the guard shall not be not less than 34 inches (864 mm) and not more than 38 inches (965 mm) measured vertically from a line connecting the leading edges of the treads.

R312.3 Opening limitations. Required guards shall not have openings from the walking surface to the required guard height which allow passage of a sphere 4 inches (102 mm) in diameter.

Exceptions:

1. The triangular openings at the open side of a stair, formed by the riser, tread and bottom rail of a guard, shall not allow passage of a sphere 6 inches (153 mm) in diameter.
2. Guards on the open sides of stairs shall not have openings which allow passage of a sphere 4.375 inches (111 mm) in diameter.

FRONT ELEVATION

SCALE 1/4" = 1'-0"

AIR LEAKAGE

Section N1102.4

N1102.4.1 Building thermal envelope. The building thermal envelope shall be durably sealed with an air barrier system to limit infiltration. The sealing methods between dissimilar materials shall allow for differential expansion and contraction. For all homes, where present, the following shall be caulked, gasketed, weather stripped or otherwise sealed with an air barrier material or solid material consistent with Appendix E-2.4 of this code:

1. Blocking and sealing the concrete systems and under floor walls open to unconditioned or exterior spaces.
2. Capping and sealing shafts or chases, including flue shafts.
3. Capping and sealing soffit or dropped ceiling areas.

SQUARE FOOTAGE

HEATED	
FIRST FLOOR	1356 SQ.FT.
SECOND FLOOR	374 SQ.FT.
TOTAL	1730 SQ.FT.
UNHEATED	
GARAGE	469 SQ.FT.
FRONT PORCH	36 SQ.FT.
COVERED PORCH	179 SQ.FT.
TOTAL	711 SQ.FT.

REAR ELEVATION

SCALE 1/4" = 1'-0"

FRONT & REAR ELEVATIONS

Windsor

HAYNES WEAVER HOMES

HAYNES HOME PLANS, INC.

SQUARE FOOTAGE

HEATED

UNHEATED

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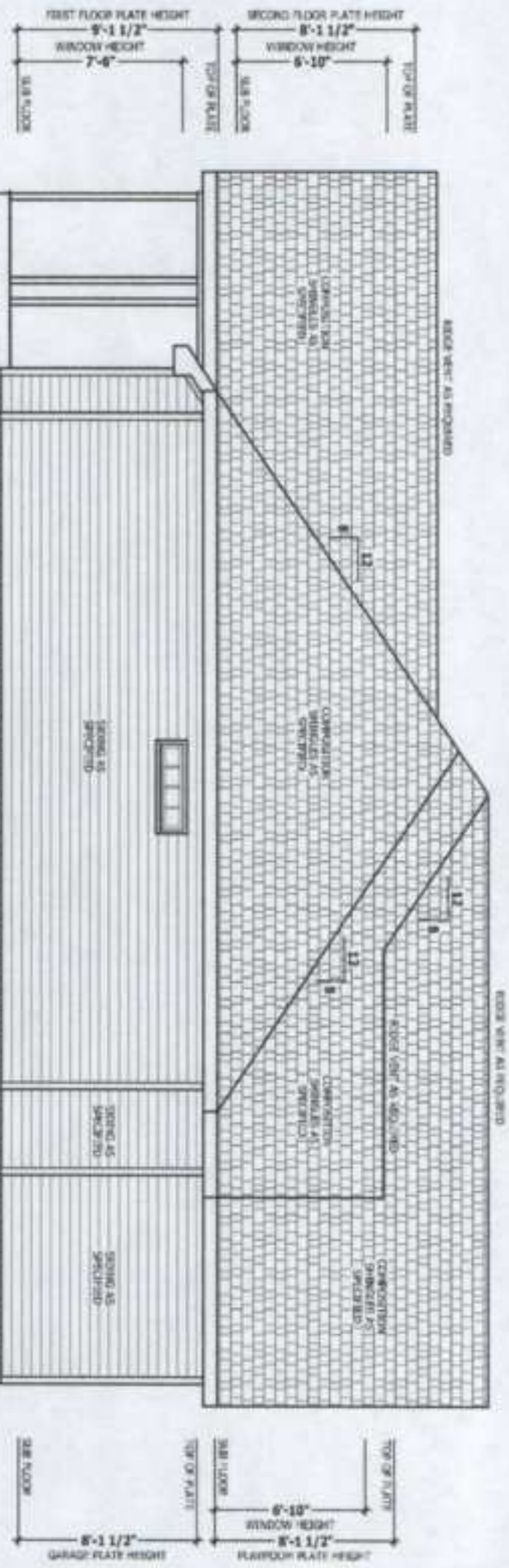
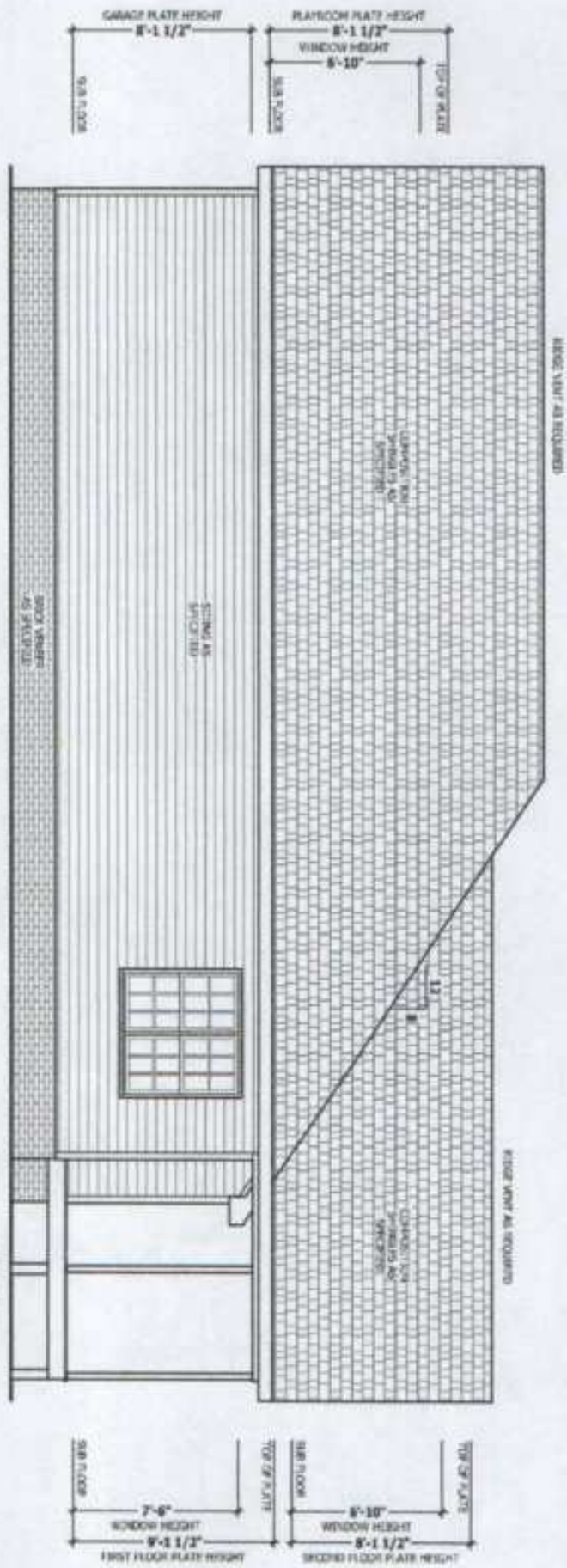


LEFT SIDE ELEVATION

SCALE 1/4" = 1'-0"



RIGHT SIDE ELEVATION

SCALE 1/4" = 1'-0"

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SQUARE FOOTAGE
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LEFT & RIGHT ELEVATIONS

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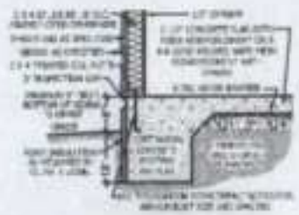
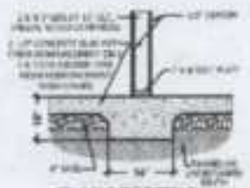
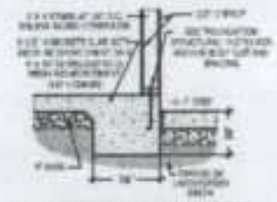


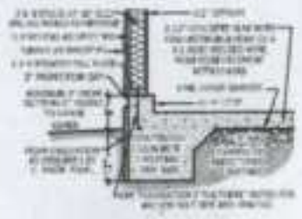
A **MONOLITHIC SLAB FOOTING**
SCALE 1/2" = 1'-0"



B **LUG FOOTING**
SCALE 1/2" = 1'-0"



C **THICKEND SLAB AT STEP**
SCALE 1/2" = 1'-0"



D **MONOLITHIC SLAB FOOTING STEM WALL AT GARAGE**
SCALE 1/2" = 1'-0"

FOUNDATION STRUCTURAL

115 to 130 mph wind zone (1 1/2 to 2 1/2 story)

CONTINUOUS FOOTING: 16" wide and 8" thick minimum, 22" wide minimum at brick veneer. Must extended 2" to either side of supported wall.

GIRDERS: (3) 2 X 10 girder unless noted otherwise.

PIERS: 16" X 16" piers with 8" solid masonry cap on 20" X 20" X 12" concrete footing with minimum pier height of 64" with hollow masonry and 160" with solid masonry.

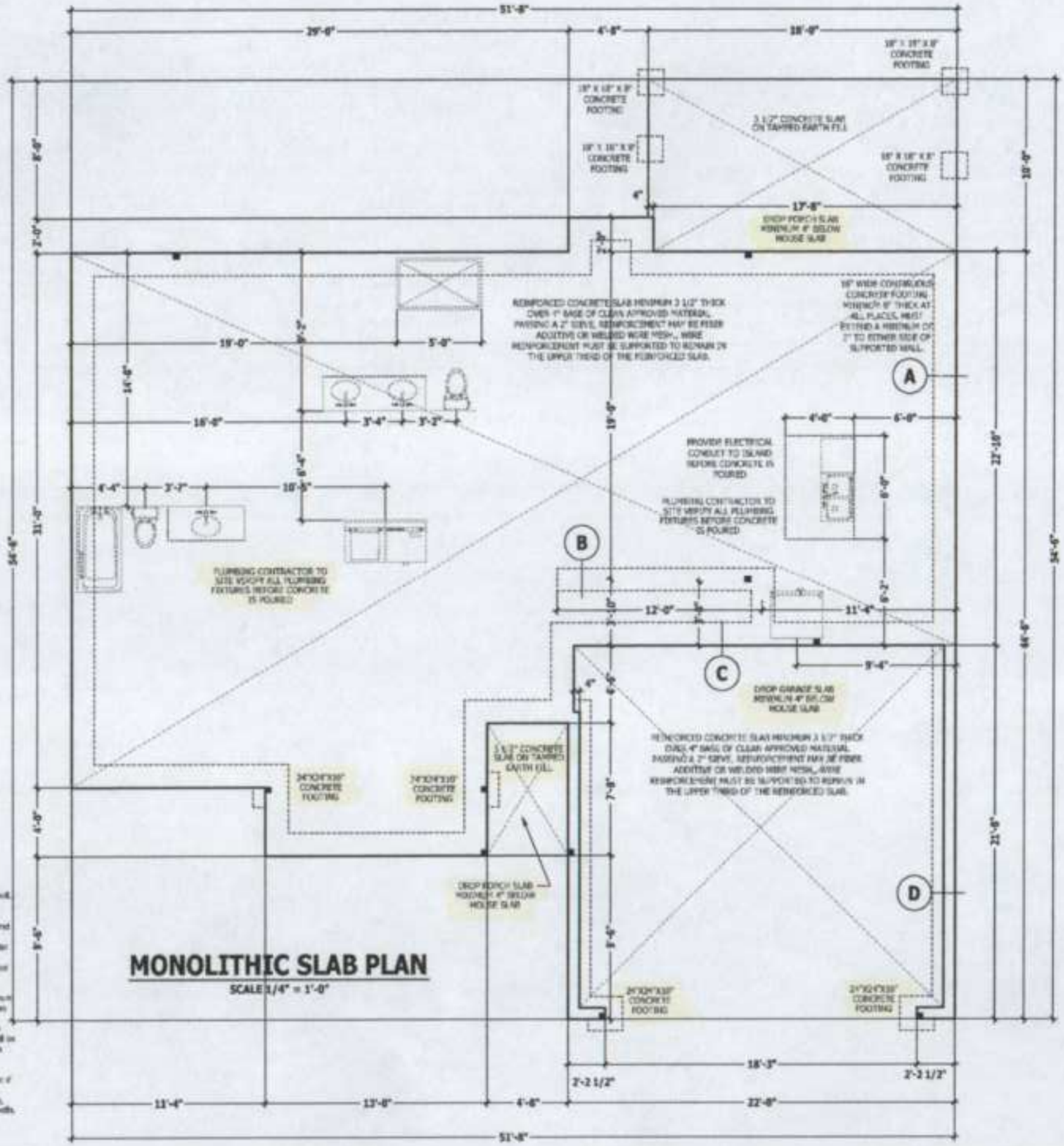
POINT LOADS: ■ denotes approximate point load and should have solid stacking to pier, girder or foundation wall.

115 and 130 MPH ANCHORS BOLTS: 1/2" diameter anchor bolts embedded minimum 7", maximum 67-0" on center, within 12" of plate ends, and minimum two anchor bolts per plate.

130 MPH ANCHORS BOLTS: 1/2" diameter anchor bolts embedded minimum 10", maximum 4'-0" on center, within 12" of plate ends, and minimum two anchor bolts per plate.

CONCRETE: Concrete shall have a minimum 28 day strength of 3000 psi and a maximum 5" slump. Air entrained per table 402.2. All concrete shall be in accordance with ACI standards. All samples for pumping shall be taken from the end of the pump.

SOILS: Allowable soil bearing pressure assumed to be 2000 PSF. The contractor must contact a geotechnical engineer and a 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.



MONOLITHIC SLAB PLAN
SCALE 1/4" = 1'-0"

STEM WALL SLAB PLAN

Windsor

WEAVER HOMES

HAYNES HOME PLANS, INC.

SQUARE FOOTAGE
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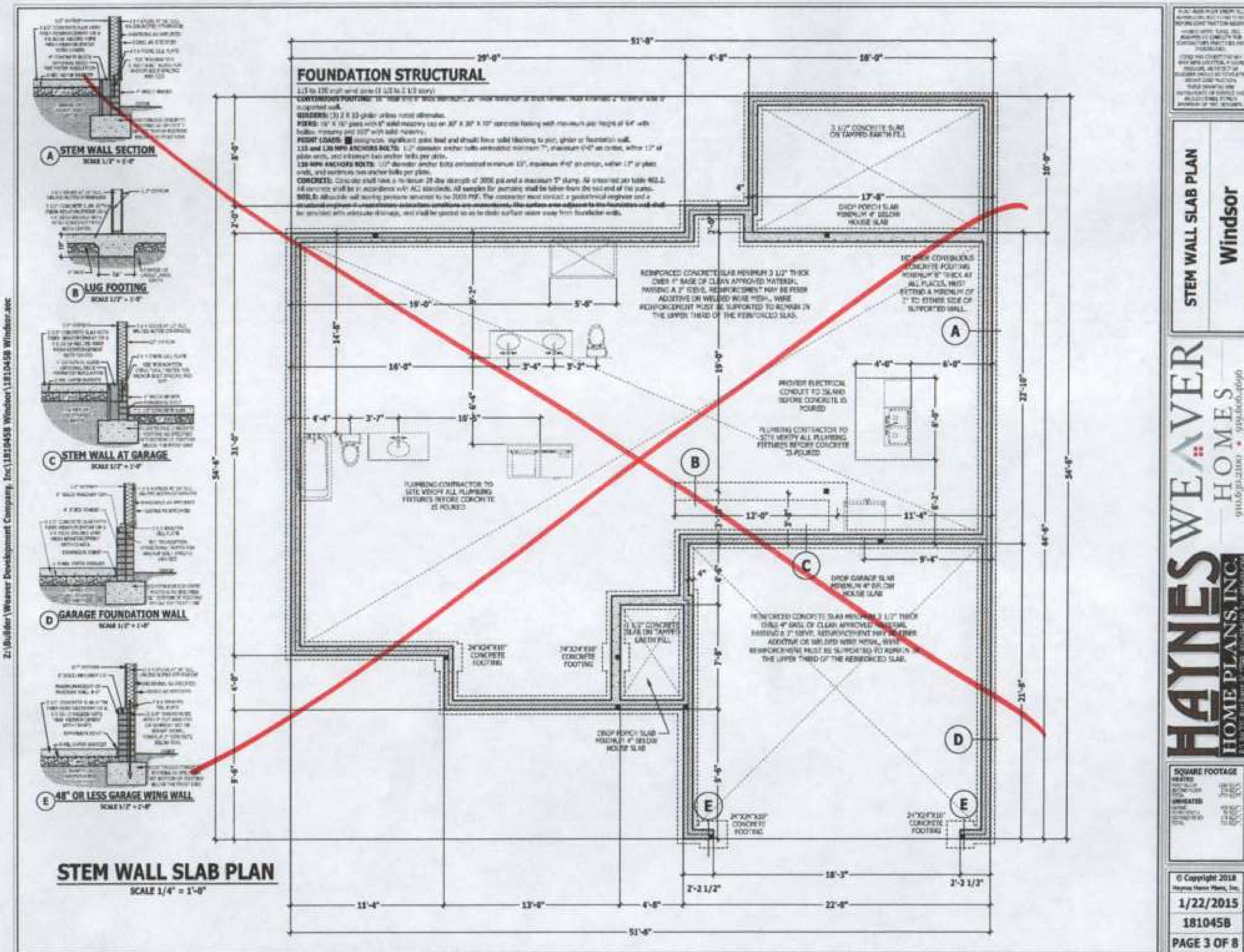
FOUNDATION STRUCTURAL
STEM WALL SECTION
LUG FOOTING
STEM WALL AT GARAGE
GARAGE FOUNDATION WALL
48" OR LESS GARAGE WING WALL
STEM WALL SLAB PLAN
SCALE 1/4" = 1'-0"
3 1/2" CONCRETE SLAB ON TAMPED EARTH FILL
DROP PORCH SLAB MINIMUM 4" BELOW HOUSE SLAB
REINFORCED CONCRETE SLAB MINIMUM 3 1/2" THICK OVER 4" BASE OF CLEAN APPROVED MATERIAL PASSING A 2" SIEVE. REINFORCEMENT MAY BE FIBER ADDITIVE OR WELDED WIRE MESH. WIRE REINFORCEMENT MUST BE SUPPORTED TO REMAIN IN THE UPPER THIRD OF THE REINFORCED SLAB.
PROVIDE ELECTRICAL CONDUIT TO ISLAND BEFORE CONCRETE IS POURED
PLUMBING CONTRACTOR TO SITE VERIFY ALL PLUMBING FIXTURES BEFORE CONCRETE IS POURED
DROP GARAGE SLAB MINIMUM 4" BELOW HOUSE SLAB
24"X24"X10" CONCRETE FOOTING
51'-8"
29'-0"
4'-8"
18'-0"
17'-8"
54'-6"
11'-4"
13'-6"
22'-6"
18'-3"
2'-2 1/2"
2'-3 1/2"
STEM WALL SLAB PLAN
Windsor
HAYNES HOME PLANS, INC.
WEAVER HOMES
SQUARE FOOTAGE
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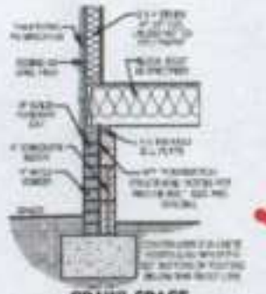
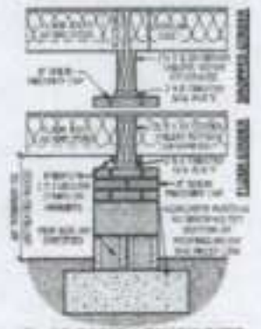
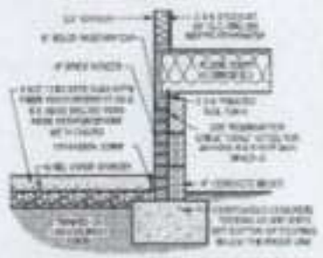


A CRAWL SPACE FOUNDATION WALL
SCALE 1/2" = 1'-0"

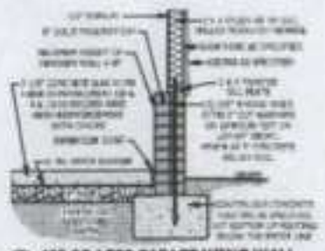


B DROPPED/ FLUSH PIER
SCALE 1/2" = 1'-0"



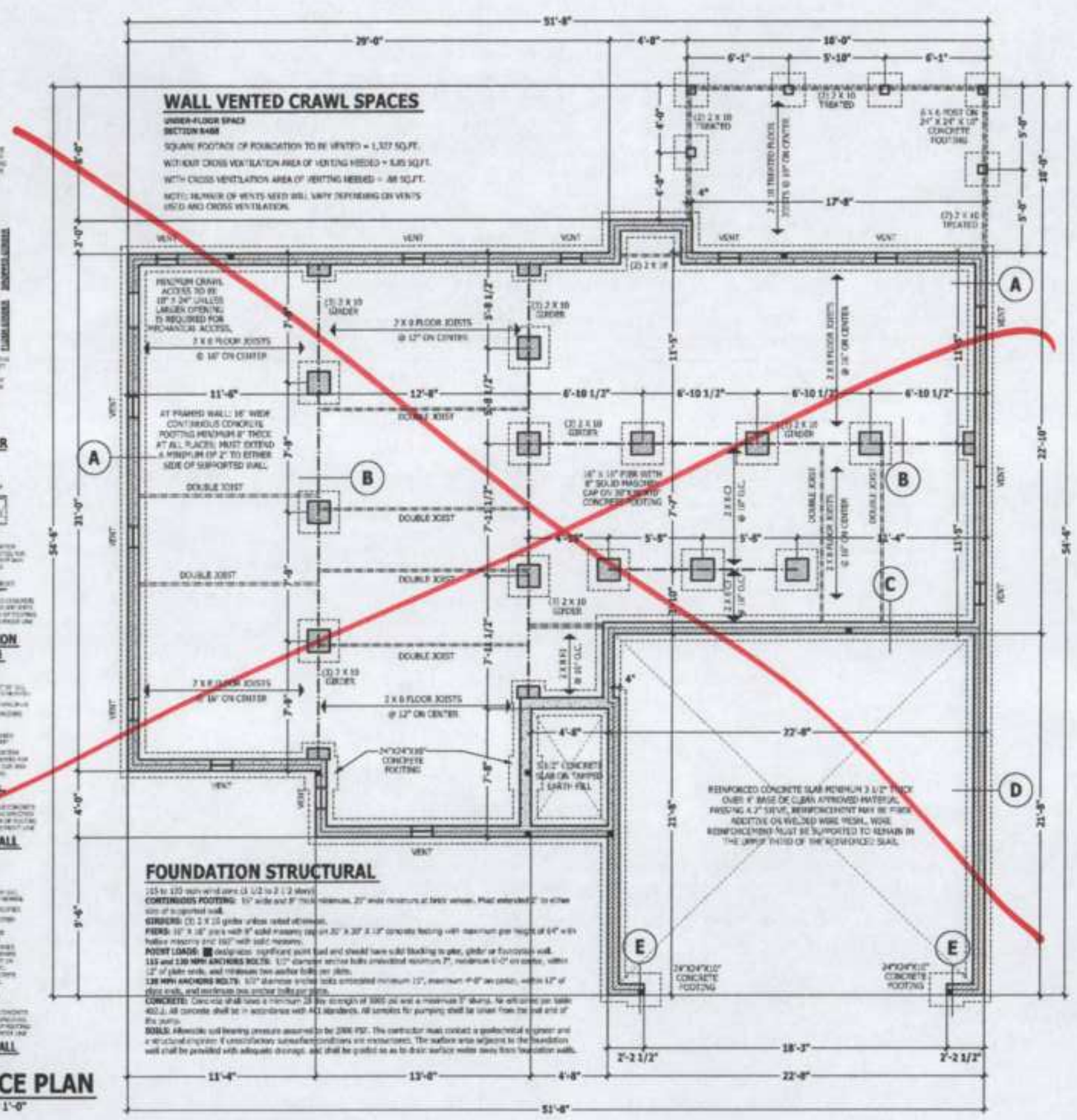
C CRAWL SPACE FOUNDATION WALL AT GARAGE SLAB
SCALE 1/2" = 1'-0"

D GARAGE FOUNDATION WALL
SCALE 1/2" = 1'-0"



E 48" OR LESS GARAGE WING WALL
SCALE 1/2" = 1'-0"

CRAWL SPACE PLAN
SCALE 1/4" = 1'-0"



FOUNDATION STRUCTURAL

115 to 120 mph wind zone (1 1/2 to 2 1/2 story)

CONTINUOUS FOOTING: 15" wide and 8" thick minimum, 20" wide minimum at brick veneer. Pad extended 2" to either side of supported wall.

GIRDERS: (3) 2 X 10 girder unless noted otherwise.

PIERS: 16" X 16" piers with 8" solid masonry cap on 32" X 32" X 12" concrete footing with maximum pier height of 64" with hollow masonry and 160" with solid masonry.

POST LOADS: ■ designates significant point load and should have solid blocking to piler, girder or foundation wall.

115 and 120 MPH ANCHORS BOLTS: 1/2" diameter anchor bolts embedded minimum 7", minimum 6'-0" on center, within 12" of plate ends, and minimum two anchor bolts per plate.

130 MPH ANCHORS BOLTS: 5/8" diameter anchor bolts embedded minimum 15", maximum 4'-0" on center, within 12" of plate ends, and minimum two anchor bolts per plate.

CONCRETE: Concrete shall have a minimum 28 day strength of 3000 psi and a maximum 5" slump. Air entrainment per table 402.2. All concrete shall be in accordance with ACI standards. All samples for pumping shall be taken from the end end of the pump.

SOILS: Allowable soil bearing pressure assumed to be 2000 PSF. The contractor must contact a geotechnical engineer and a 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.

CRAWL SPACE PLAN
Windsor

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HEATED
UNHEATED

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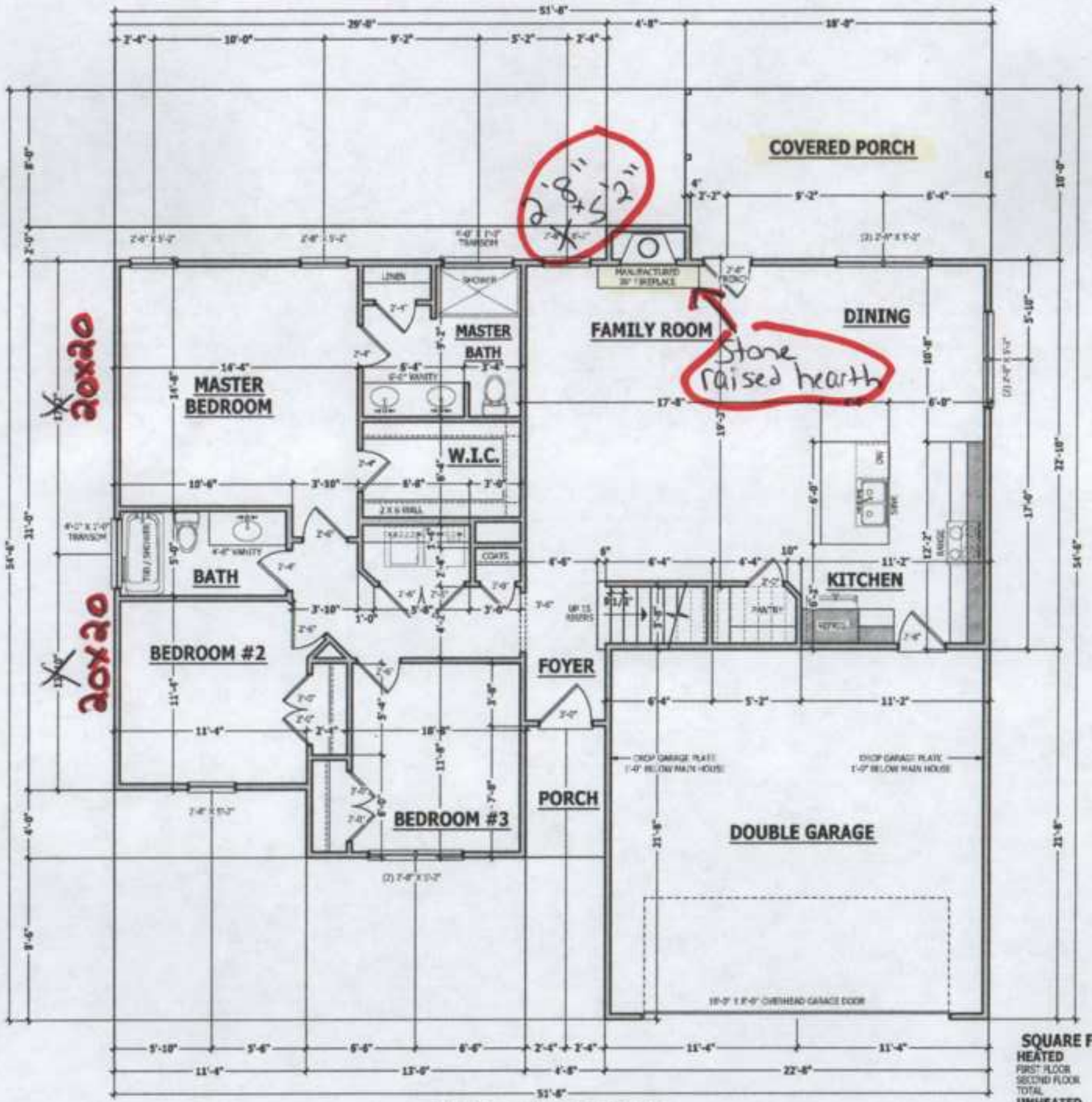


DWELLING / GARAGE SEPARATION

REFER TO SECTIONS R302.5, R302.6, AND R302.7 WALLS. A minimum 1/2" gypsum board must be installed on all walls supporting floor/ceiling assemblies used for separation required by this section.

STAIRS. A minimum of 1/2" gypsum board must be installed on the underside and exposed sides of all stairways.

CEILINGS. A minimum of 1/2" gypsum must be installed on the garage ceiling if there are no habitable room above the garage. If there are habitable room above the garage a minimum of 5/8" type X gypsum board must be installed on the garage ceiling.

OPENING PENETRATIONS. Openings between the garage and residence shall be equipped with solid wood doors not less than 1 3/8 inches (35 mm) in thickness, solid or honeycomb core steel doors not less than 1 3/8 inches (35 mm) thick, or 20-minutes fire-rated doors.

DUCT PENETRATIONS. Ducts in the garage and ducts penetrating the walls or ceilings separating the dwelling from the garage shall be constructed of a minimum no. 26 gage (0.48 mm) sheet metal or other approved material and shall have no openings into the garage.

OTHER PENETRATIONS. Penetrations through the separation required in Section R302.6 shall be protected as required by Section R302.11, Item 4.

FIRST FLOOR PLAN

SCALE 1/4" = 1'-0"

SQUARE FOOTAGE

HEATED	
FIRST FLOOR	1296 SQ.FT.
SECOND FLOOR	374 SQ.FT.
TOTAL	1770 SQ.FT.
UNHEATED	
GARAGE	469 SQ.FT.
FRONT PORCH	36 SQ.FT.
COVERED PORCH	179 SQ.FT.
TOTAL	711 SQ.FT.

FIRST FLOOR PLAN
Windsor

HAYNES HOME PLANS INC

SQUARE FOOTAGE
HEATED
UNHEATED

1/22/2015

181045B

STRUCTURAL NOTES

All construction shall conform to the latest requirements of the 2018 North Carolina Residential Building Code, plus all local codes and regulations. This document in no way shall be construed to supersede the code.

JOB SITE PRACTICES AND SAFETY: Haynes Home Plans, Inc. assumes no liability for contractors practices and procedures or safety programs. Haynes Home Plans, Inc. takes no responsibility for the contractor's failure to carry out the construction work in accordance with the contract documents. All excavations shall be trenched, anchored, and braced in accordance with good construction practice and the building code.

DESIGN LOADS	LIVE LOAD	DEAD LOAD	DEFLECTION
USE	(PSF)	(PSF)	(L/)
Attics without storage	10		L/240
Attics with limited storage	20	10	L/360
Attics with fixed stairs	40	10	L/360
Balconies and decks	40	10	L/360
Fire escapes	40	10	L/360
Guardrails and handrails	200	--	--
Guardrail in-fill components	50	--	--
Passenger vehicle garages	50	10	L/360
Rooms other than sleeping	40	10	L/360
Sleeping rooms	30	10	L/360
Stairs	40	--	L/360
Snow	20	--	--

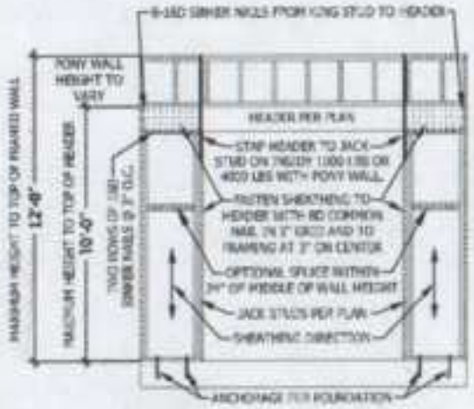
FRAMING LUMBER: All non-treated framing lumber shall be SYP #2 (Fb = 875 PSI) or SYP #2 (Fb = 750 PSI) and all treated lumber shall be SYP #2 (Fb = 750 PSI) unless noted other wise.

ENGINEERED WOOD BEAMS:
Laminated veneer lumber (LVL) - Fb=2600 PSI, Fv=285 PSI, E=1.9x10^6 PSI
Parallel strand lumber (PSL) - Fb=2900 PSI, Fv=290 PSI, E=2.0x10^6 PSI
Laminated strand lumber (LSL) Fb=2250 PSI, Fv=400 PSI, E=1.55x10^6 PSI
Install all connectors per manufacturers instructions.

TRUSS AND I-JOIST MEMBERS: All roof truss and I-joist layouts shall be prepared in accordance with this document. Trusses and joists shall be installed according to the manufacturer's specifications. Any change in truss or I-joist layout shall be coordinated with Haynes Homes Plans, Inc.

LINTELS: Brick lintels shall be 3 1/2" x 3 1/2" x 1/4" steel angle for up to 6'-0" spans, 6" x 4" x 5/16" steel angle with 6" leg vertical for spans up to 9'-0" unless noted otherwise, 3 1/2" x 3 1/2" x 1/4" steel angle with 1/2" bolts at 2'-0" on center for spans up to 18'-0" unless noted otherwise.

CONCRETE AND SOILS: See foundation notes.



PF **PORTAL FRAME AT OPENING**
(METHOD PF PER FIGURE AND SECTION R602.10.1)
SCALE 1/4" = 1'-0"

BRACE WALL PANEL NOTES

EXTERIOR WALLS: All exterior walls to be sheathed with CS-WSP or CS-SFS in accordance with section R602.10.3 unless noted otherwise.

GYPSUM: All interior sides of exterior walls and both sides interior walls to have 1/2" gypsum installed. When not using method GB gypsum to be fastened per table R602.3.5. Method GB to be fastened per table R602.10.1.

REQUIRED LENGTH OF BRACING: Required brace wall length for each side of the circumscribed rectangle are interpolated per table R602.10.3. Methods CS-WSP and CS-SFB contribute their actual length. Method GB contributes 0.5 it's actual length. Method PF contributes 1.5 times its actual length.

HDs: 800 lbs hold down hold down device fastened to the edge of the brace wall panel closest to the corner.

Methods Per Table R602.10.3

CS-WSP: Shall be minimum 3/8" OSB or CDX nailed at 6" on center at edges and 12" on center at intermediate supports with 6d common nails or 8d(2 1/2" long x 0.113" diameter).

CS-SFB: Shall be minimum 1/2" structural fiber board nailed at 3" on center at edges and 3" on center at intermediate supports with 1 1/2" long x 0.12" diameter galvanized roofing nails.

GB: Interior walls shown as GB are to have minimum 1/2" gypsum board on both sides of the wall fastened at 7" on center at edges and 7" on center at intermediate supports with minimum 5d cooler nails or #8 screws.

PF: Portal frame per figure R602.10.1

ROOF TRUSS REQUIREMENTS

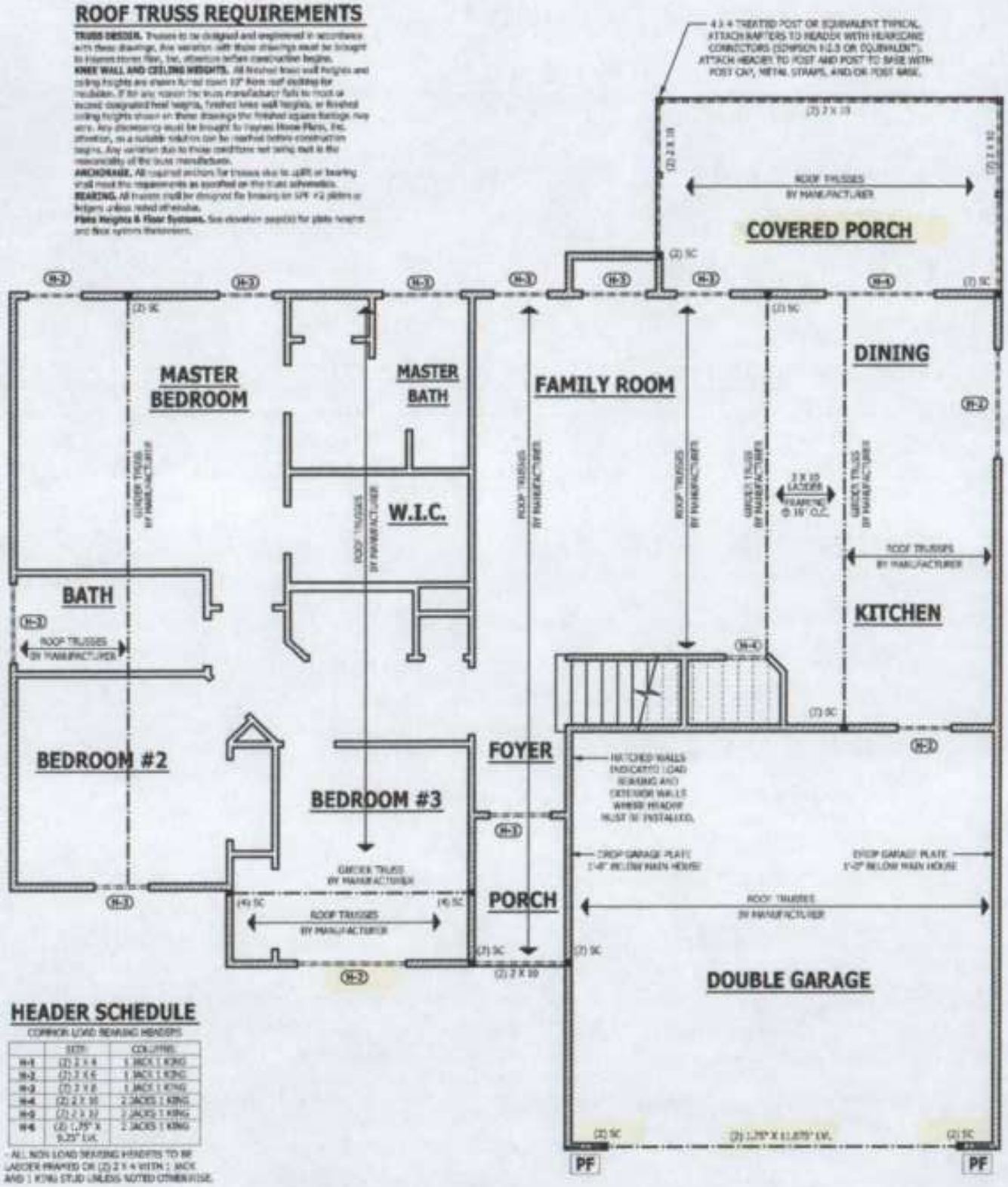
TRUSS DESIGN. Trusses to be designed and engineered in accordance with these drawings. Any variation with these drawings must be brought to Haynes Home Plan, Inc. attention before construction begins.

KNEE WALL AND CEILING HEIGHTS. All finished knee wall heights and ceiling heights are shown furred down 12" from roof decking for insulation. If for any reason the truss manufacturer fails to meet or exceed designated heel heights, finished knee wall heights, or finished ceiling heights shown on these drawings the finished square footage may vary. Any discrepancy must be brought to Haynes Home Plans, Inc. attention, as a suitable solution can be reached before construction begins. Any variation due to truss conditions not being built to the reasonably of the truss manufacturer.

ANCHORAGE. All required anchors for trusses due to uplift or bearing shall meet the requirements as specified on the truss schematics.

BEARING. All trusses shall be designed for bearing on SPF #2 plates or ledgers unless noted otherwise.

Plate Heights & Floor Systems. See elevation page(s) for plate heights and floor system thicknesses.



HEADER SCHEDULE

COMMON LOAD BEARING HEADERS

	SIZE	CONDITION
H-1	(2) 2 X 4	1 JACK 1 KING
H-2	(2) 2 X 6	1 JACK 1 KING
H-3	(2) 2 X 8	1 JACK 1 KING
H-4	(2) 2 X 10	2 JACKS 1 KING
H-5	(2) 2 X 12	2 JACKS 1 KING
H-6	(2) 1.75" X 9.25" LVL	2 JACKS 1 KING

- ALL NON LOAD BEARING HEADERS TO BE LADDER FRAMED OR (2) 2 X 4 WITH 1 JACK AND 1 KING STUD UNLESS NOTED OTHERWISE.

FIRST FLOOR STRUCTURAL

SCALE 1/4" = 1'-0"

FIRST FLOOR STRUCTURAL
Windsor

HAYNES WEAVER HOME PLANS, INC.

SQUARE FOOTAGE
HEATED
UNHEATED

1/22/2015
181045B

ROOF TRUSS REQUIREMENTS

ATTIC ACCESS

SECTION R807

HEADER SCHEDULE

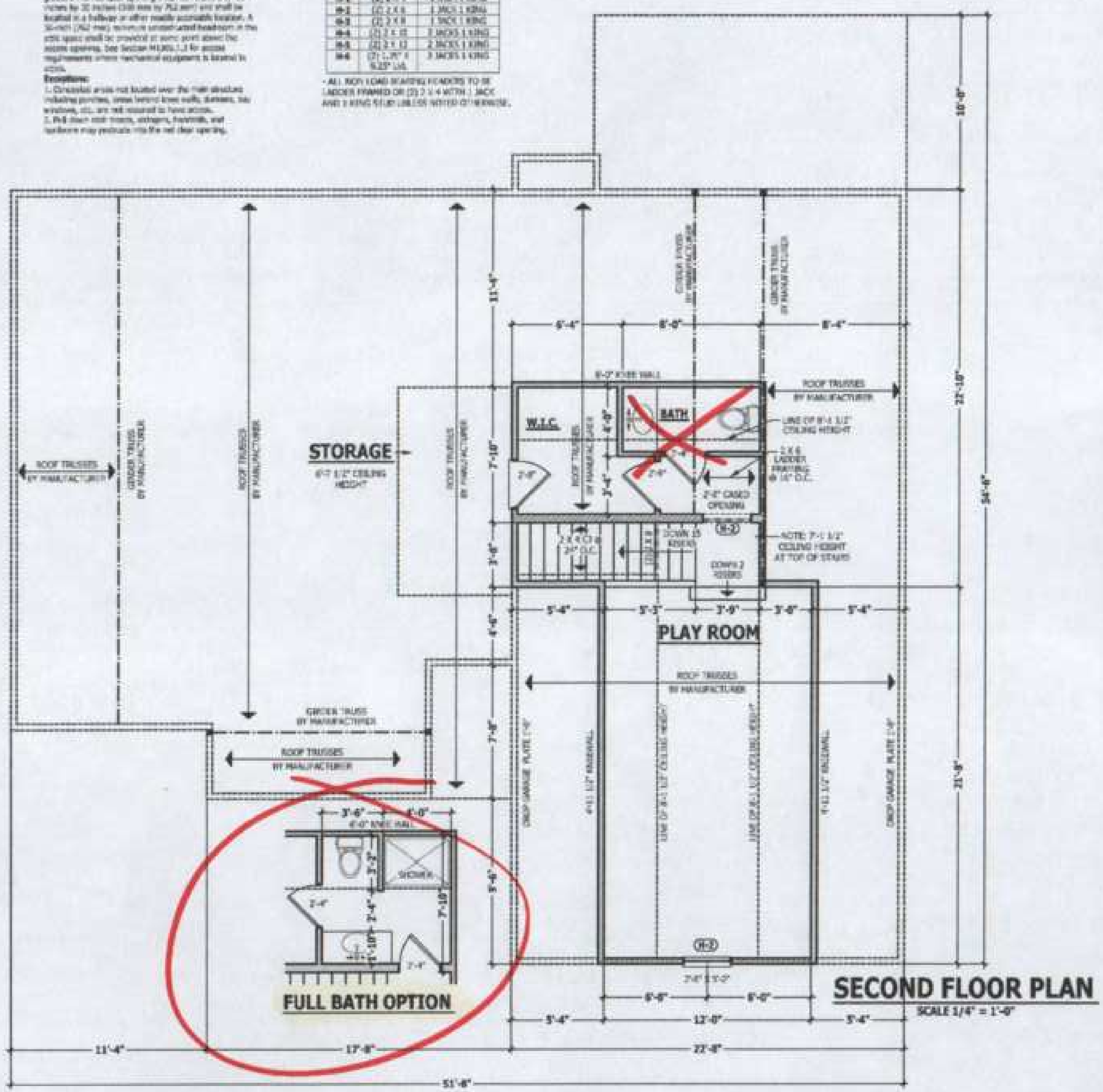
COMMON LOAD BEARING HEADERS

	SIZE	COLUMNS
H-1	(2) 2 X 4	1 JACK 1 KING
H-2	(2) 2 X 6	1 JACK 1 KING
H-3	(2) 2 X 8	1 JACK 1 KING
H-4	(2) 2 X 10	2 JACKS 1 KING
H-5	(2) 2 X 12	2 JACKS 1 KING
H-6	(2) 1.75" X 9.25" LVL	3 JACKS 1 KING

* ALL NON LOAD BEARING HEADERS TO BE LADDER FRAMED OR (2) 2 X 4 WITH 1 JACK AND 1 KING STUD UNLESS NOTED OTHERWISE.

BRACING NOT SHOWN ON UPPER STORY PER R602.10.3.2 (5) & (6)

STRUCTURAL NOTES



SECOND FLOOR PLAN

SCALE 1/4" = 1'-0"

SECOND FLOOR PLAN

Windsor

HAYNES HOME PLANS, INC.

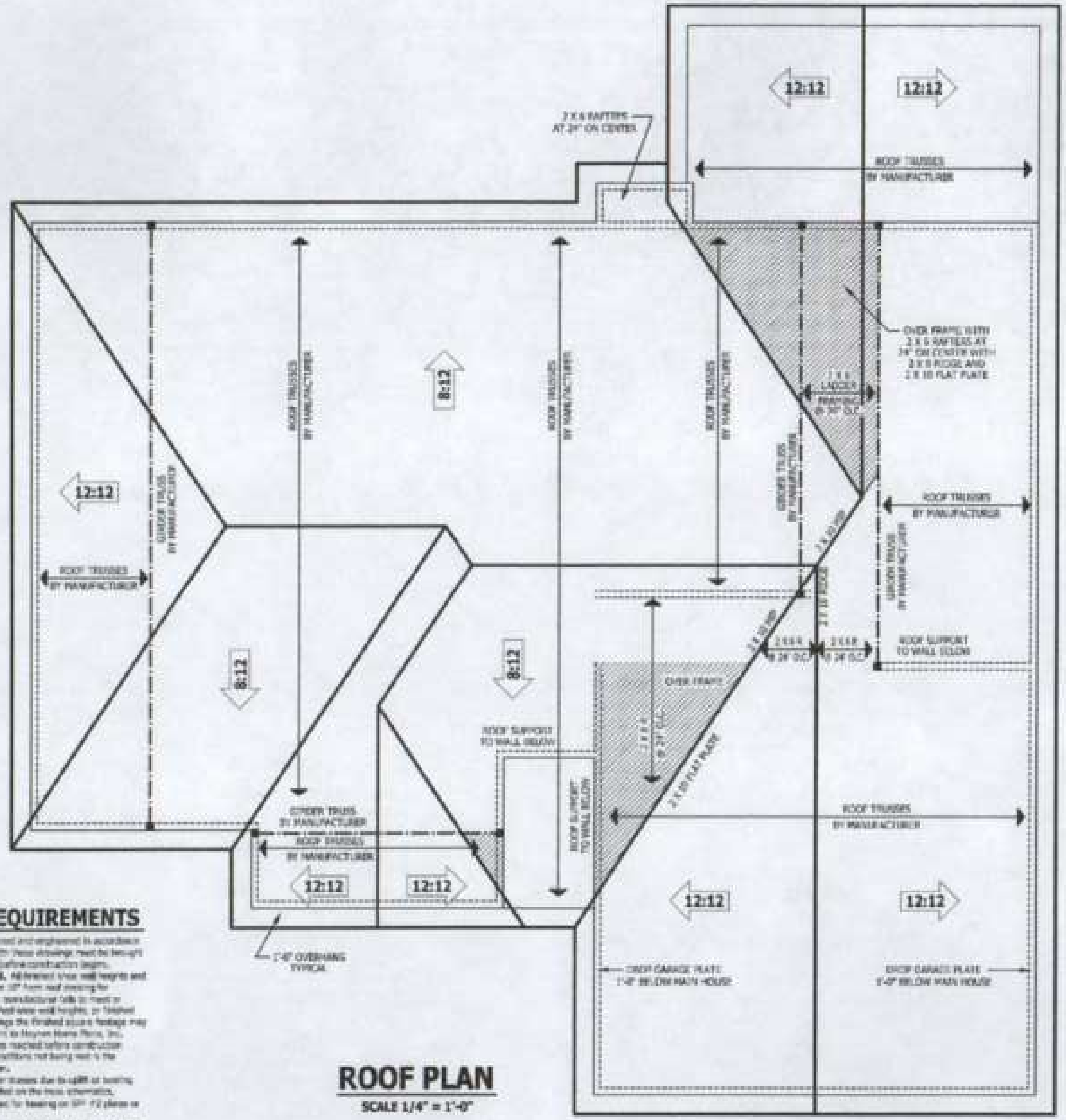
WEAVER HOMES

SQUARE FOOTAGE

1/22/2015

181045B

Z:\Builder\Weaver Development Company, Inc\181045B Windsor\181045B Windsor.aec



ROOF TRUSS REQUIREMENTS

TRUSS DESIGN. [illegible]

KNEE WALL AND CEILING HEIGHTS. [illegible]

ANCHORAGE. [illegible]

BEARING. [illegible]

Plate Heights & Floor Systems. [illegible]

HEEL HEIGHT ABOVE FIRST FLOOR PLATE

HEEL HEIGHT ABOVE SECOND FLOOR PLATE

ROOF PLAN

SCALE 1/4" = 1'-0"

ROOF PLAN

Windsor

HAYNES HOME PLANS, INC.

WEAVER HOMES

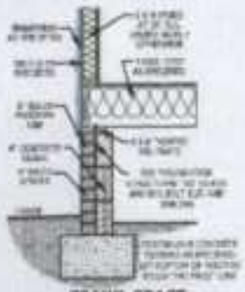
SQUARE FOOTAGE

HEATED

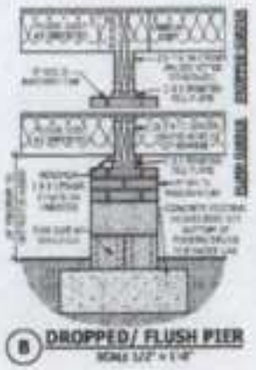
UNHEATED

1/22/2015

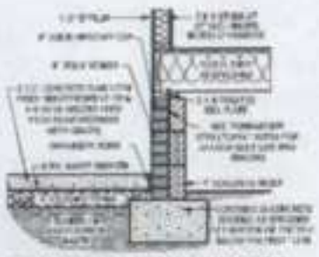
181045B



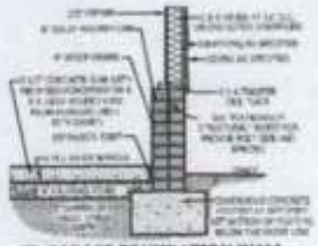
A CRAWL SPACE FOUNDATION WALL
SCALE 1/2" = 1'-0"



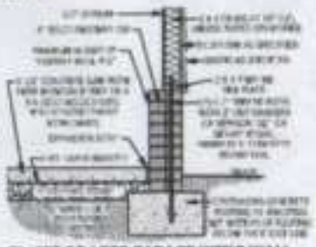
B DROPPED/ FLUSH PIER
SCALE 1/2" = 1'-0"



C CRAWL SPACE FOUNDATION WALL AT GARAGE SLAB
SCALE 1/2" = 1'-0"



D GARAGE FOUNDATION WALL
SCALE 1/2" = 1'-0"



E 48" OR LESS GARAGE WING WALL
SCALE 1/2" = 1'-0"

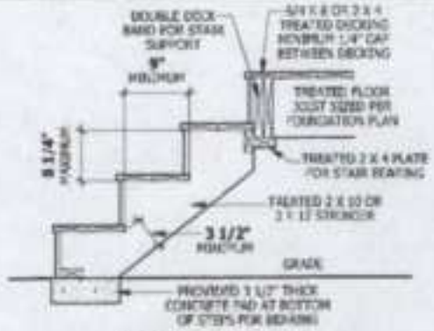
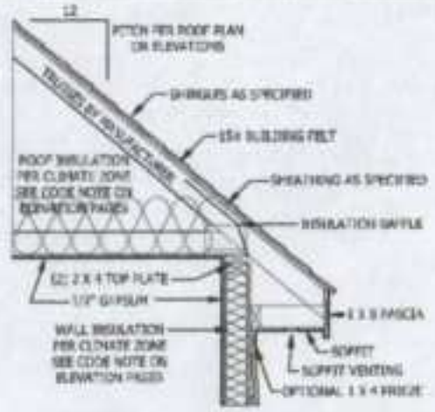


FIGURE AM110
TYPICAL DECK STAIR DETAIL
SCALE 3/4" = 1'-0"

DECK STAIR NOTES

SECTION AM110

AM110.1 Stairs shall be constructed per Figure AM110.



TYPICAL WALL SECTION
SCALE 3/4" = 1'-0"

DECK BRACING

SECTION AM109

AM109.1 Deck bracing. Decks shall be braced to provide lateral stability. The following are acceptable means to provide lateral stability.

AM109.1.1. When the deck floor height is less than 9'-0" above finished grade per Figure AM109 and the deck is attached to the structure in accordance with Section AM104, lateral bracing is not required.

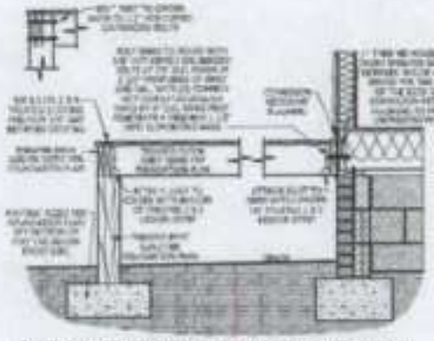
AM109.1.2. 4 x 4 wood knee bracing may be provided on each column in both directions. The knee braces shall attach to each post at a point not less than 1/3 of the post length from the top of the post, and the braces shall be angled between 45 degrees and 60 degrees from the horizontal. Knee braces shall be bolted to the post and the girder/joist/band with one 5/8 inch hot dipped galvanized bolt with nut and washer at each ends of the knee per Figure AM109.1

AM109.1.3. Per freestanding decks without knee braces or diagonal braces, lateral stability may be provided by embedding the post in accordance with Figure AM109.2 and the following:

POST SIZE	MAX. TRIBUTARY AREA	MAX. POST HEIGHT	MINIMUM DEPTH	CONCRETE DIAMETER
4 X 4	40 SF	4'-0"	2'-0"	1'-0"
6 X 6	120 SF	6'-0"	3'-0"	1'-0"

AM109.1.4. 2 x 6 diagonal vertical cross bracing may be provided in two perpendicular directions for freestanding decks or parallel to the structure at the exterior column line for attached decks. The 2 x 6's shall be attached to the posts with one 5/8 inch hot dipped galvanized bolt with nut and washer at each end of each bracing member per Figure AM109.3.

AM109.1.5. For embedment of piles in Coastal Regions, see Chapter 45.

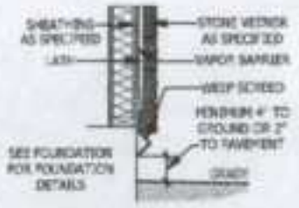


DECK ATTACHMENT DETAIL TO FRAMED WALL
SCALE 1/2" = 1'-0"

WEEP SCREEDS

All weep screeds and stone veneer to be installed per manufacturers instructions and per the 2012 North Carolina Residential Building code.

R703.6.2.1 - A minimum 0.019-inch (0.5 mm) (No. 26 galvanized sheet gage), corrosion-resistant weep screed or sheets weep screed, with a minimum vertical attachment flange of 3½ inches (89 mm) shall be provided at or below the foundation plate line on exterior stud walls in accordance with ASTM C 926. The weep screed shall be placed a minimum of 4 inches (102 mm) above the earth or 2 inches (51 mm) above paved areas and shall be of a type that will allow trapped water to drain to the exterior of the building. The water-resistive barrier shall lap the attachment flange. The exterior lath shall cover and terminate on the attachment flange of the weep screed.



WEEP SCREED
SCALE 3/4" = 1'-0"

STAIRWAY NOTES

R311.7

R311.7.2 Headroom. The minimum headroom in all parts of the stairway shall not be less than 6 feet 8 inches (2032 mm) measured vertically from the sloped line adjoining the tread nosing or from the floor surface of the landing or platform on that portion of the stairway.

R311.7.4 Stair treads and risers. Stair treads and risers shall meet the requirements of this section. For the purposes of this section all dimensions and dimensioned surfaces shall be exclusive of carpets, rugs or runners.

R311.7.4.1 Riser height. The maximum riser height shall be 8 1/4 inches (210 mm). The riser shall be measured vertically between leading edges of the adjacent treads.

R311.7.4.2 Tread depth. The minimum tread depth shall be 9 inches (229 mm). The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's leading edge. Winder treads shall have a minimum tread depth of 9 inches (229 mm) measured as above at a point 12 inches (305 mm) from the side where the treads are narrowest. Winder treads shall have a minimum tread depth of 4 inches (102 mm) at any point.

R311.7.4.3 Profile. The radius of curvature at the nosing shall be no greater than 9/16 inch (14 mm). A nosing not less than 3/4 inch (19 mm) but not more than 1 1/4 inches (32 mm) shall be provided on stairways with solid risers.

R311.7.7 Handrails. Handrails shall be provided on at least one side of each continuous run of treads or flight with four or more risers.

R311.7.7.1 Height. Handrail height, measured vertically from the sloped plane adjoining the tread nosing, or finish surface of ramp slope, shall be not less than 34 inches (864 mm) and not more than 38 inches (965 mm).

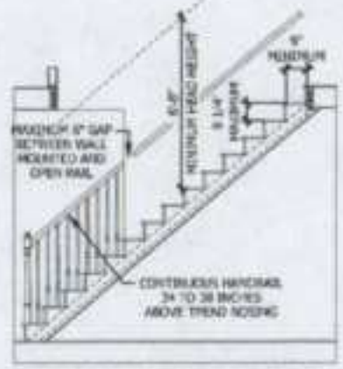
Exceptions:

1. The size of a volute, turnout or starting easing shall be allowed over the lowest tread.
2. Where handrail fittings or bendings are used to provide continuous transition between flights, the transition from handrail to guardrail, or used at the start of a flight, the handrail height at the fittings or bendings shall be permitted to exceed the maximum height.

R311.7.7.2 Continuity. 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 of the flight. 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 1½ inch (38 mm) between the wall and the handrails.

Exceptions:

1. Handrails shall be permitted to be interrupted by a newel post.
2. The size of a volute, turnout, starting easing or starting newel shall be allowed over the lowest tread.
3. Two or more separate rails shall be considered continuous if the termination of the rails occurs within 6 inches (152 mm) of each other. If transitioning between a wall-mounted handrail and a guardrail handrail, the wall-mounted rail must return into the wall.



TYPICAL STAIR DETAIL
SCALE: 3/4" = 1'-0"

SMOKE ALARMS

SECTION R314

R314.1 Smoke detection and notification. All smoke alarms shall be listed in accordance with UL 217 and installed in accordance with the provisions of this code and the household fire warning equipment provisions of NFPA 72.

R314.2 Smoke detection systems. Household fire alarm systems installed in accordance with NFPA 72 that include smoke alarms, or a combination of smoke detector and audible notification device installed as required by this section for smoke alarms, shall be permitted. The household fire alarm system shall provide the same level of smoke detection and alarm as required by this section for smoke alarms. Where a household fire warning system is installed using a combination of smoke detectors and audible notification device(s), it shall become a permanent fixture of the occupancy and owned by the homeowner. The system shall be monitored by an approved supervising station and be maintained in accordance with NFPA 72.

Exception: Where smoke alarms are provided meeting the requirements of Section R314.4.

R314.3 Location. Smoke alarms shall be installed in the following locations:

1. In each sleeping room.
2. Outside each separate sleeping area in the immediate vicinity of the bedrooms.
3. On each additional story of the dwelling, including basements and habitable attics (finished but not including crawl spaces, uninhabitable (unfinished) attics and uninhabitable (unfinished) attic-dormers. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.

Where more than one smoke alarm is required to be installed within an individual dwelling unit the alarm devices shall be interconnected in such a manner that the actuation of one alarm will actuate all of the alarms in the individual unit.

R314.4 Power source. Smoke alarms shall receive their primary power from the building wiring when such wiring is served from a commercial source, and when primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection. Combination smoke alarms shall be interconnected.

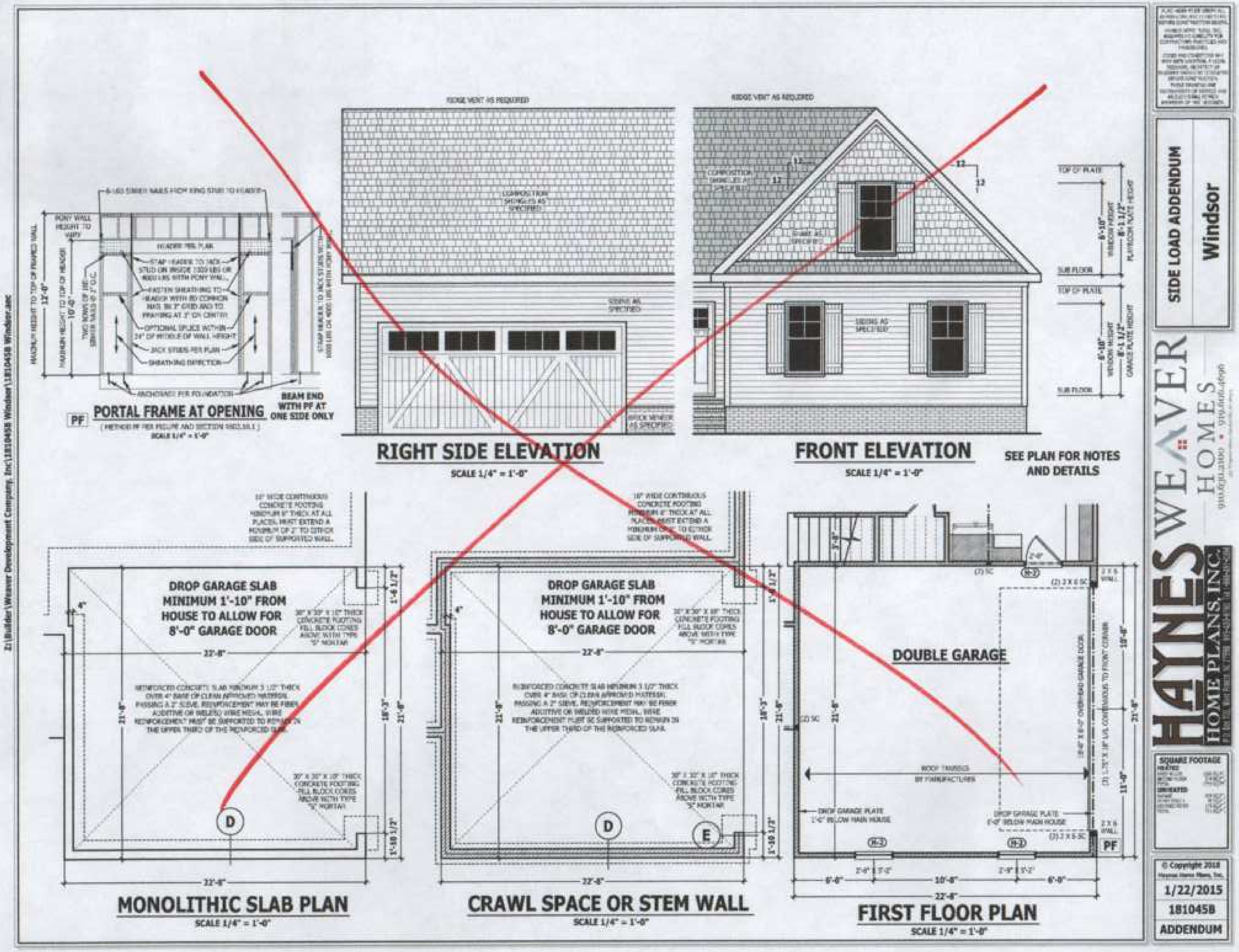
CARBON MONOXIDE ALARMS

SECTION R315

R315.1 Carbon monoxide alarms. In new construction, dwelling units shall be provided with an approved carbon monoxide alarm installed outside of each separate sleeping area in the immediate vicinity of the bedroom(s) as directed by the alarm manufacturer.

R315.2 Where required in existing dwellings. In existing dwellings, where interior alterations, repairs, fuel-fired appliance replacements, or additions requiring a permit occurs, or where one or more sleeping rooms are added or created, carbon monoxide alarms shall be provided in accordance with Section 315.1.

R315.3 Alarm requirements. The required carbon monoxide alarms shall be audible in all bedrooms over background noise levels with all intervening doors closed. Single station carbon monoxide alarms shall be listed as complying with UL 2034 and shall be installed in accordance with the code and the manufacturer's installation instructions.


PORTAL FRAME AT OPENING
SCALE 1/4" = 1'-0"
BEAM END WITH PF AT ONE SIDE ONLY
PF
RIDGE VENT AS REQUIRED
COMPOSITION SHINGLES AS SPECIFIED
SIDING AS SPECIFIED
BRICK VENEER AS SPECIFIED
RIGHT SIDE ELEVATION
SCALE 1/4" = 1'-0"
RIDGE VENT AS REQUIRED
COMPOSITION SHINGLES AS SPECIFIED
SHAKE AS SPECIFIED
SIDING AS SPECIFIED
12
TOP OF PLATE
SUB FLOOR
FRONT ELEVATION
SCALE 1/4" = 1'-0"
SEE PLAN FOR NOTES AND DETAILS
DROP GARAGE SLAB MINIMUM 1'-10" FROM HOUSE TO ALLOW FOR 8'-0" GARAGE DOOR
22'-8"
21'-8"
18'-3"
D
MONOLITHIC SLAB PLAN
SCALE 1/4" = 1'-0"
DROP GARAGE SLAB MINIMUM 1'-10" FROM HOUSE TO ALLOW FOR 8'-0" GARAGE DOOR
D
E
CRAWL SPACE OR STEM WALL
SCALE 1/4" = 1'-0"
DOUBLE GARAGE
ROOF TRUSSES BY MANUFACTURER
DROP GARAGE PLATE
6'-0"
10'-0"
22'-8"
FIRST FLOOR PLAN
SCALE 1/4" = 1'-0"
SIDE LOAD ADDENDUM
Windsor
WEAVER HOMES
HAYNES HOME PLANS, INC.
SQUARE FOOTAGE
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1/22/2015
1810458
ADDENDUM