Structural General Notes:

- I. Builder shall consult and follow the building code and other regulations in effect for the building site for all construction details not shown in these drawings. Requirements described here are specific to this design and/or are provided as reference. Additional building code or local requirements may apply.
- 2. Builder shall maintain a safe worksite, including but not limited to, provision of temporary supports where appropriate and adherence to applicable safety standards.
- 3. Design is based on the snow load listed on the framing plans, 90 mph basic wind speed, Exposure type B, soil bearing capacity of 2000 psf, and Seismic Category C, unless otherwise noted on the framing plans. Builder shall promptly inform Artform Home Plans of differing conditions.

Foundations

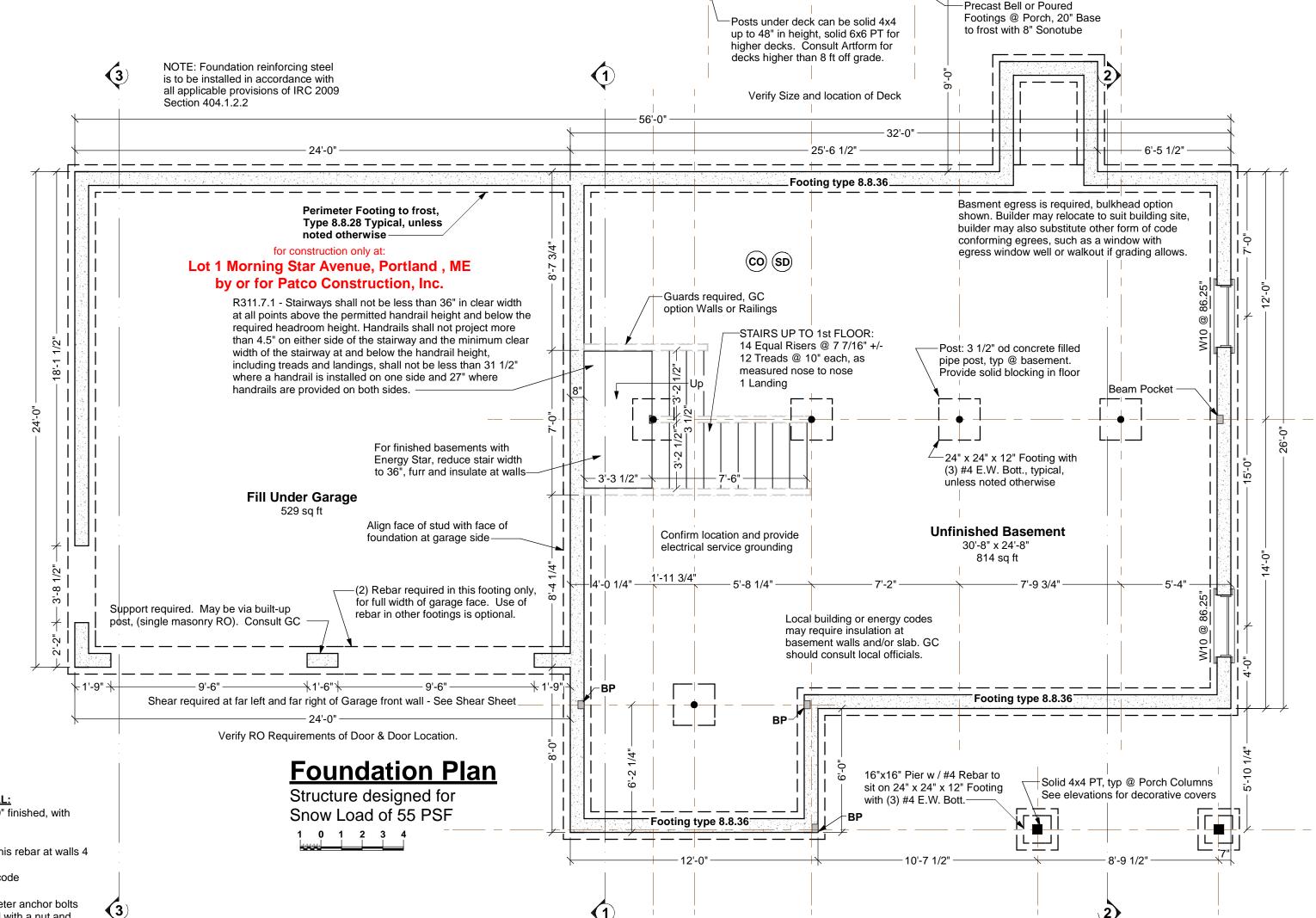
- 1. No footing shall be poured on loose or unsuitable soils, in water or on frozen ground.
- 2. All exterior footings to conform to all applicable code requirements for frost protection.
- 3. All concrete shall have a minimum compressive strength of at least 3000 PSI at 28 days.
- 4. Foundation achorage to comply with IRC 2009 Section R403.1.6, it shall consist of minimum size 1/2" diameter anchor bolts with 3/16" x 2" x 2" washers at a maximum of 72" oc for two stories or 48" oc for more than two stories, max of 12" from each corner, min of 2 bolts per wall. Anchor bolt shall extend 7" into concrete or grouted cells of concrete masonry units. Be aware that a garage under may be counted by your code officer as a story. Additional anchorage may be required at braced walls.

Wood Framing

- 1. All structural wood shall be identified by a grade mark or certificate of inspection by a recognized inspection agency.
- 2. Structural wood shall be Spruce-Pine-Fir (SPF) #2 or better.
- 3. When used, LVL or PSL indicate Laminated Veneer Lumber or Parallel Strand Lumber, respectively. Products used shall equal or exceed the strength properties for the size indicated as manufacturered by TrusJoist.
- 4. When used, AJS indicates wood I-joists as manufactured by Boise Cascade. Products of alternate manufacturers may be substituted provided they meet or exceed the strength properties for the member specified.
- 5. All floor joists shall have bridging installed at mid-span or at
- 6. Floor systems are designed for performance with subfloor
- 7. At posts, provide solid framing/blocking to supports below. Provide minimum 1 1/2" bearing length for all beams and headers, unless noted otherwise.
- 8. All wood permanently exposed to the weather, in contact with concrete or in contact with the ground shall meet code requirements for wood in these environments.
- 9. Deck ledgers shall be securely attached to the structure and/ or independently supported, including against lateral movement, per building code requirements and best practices. Unless otherwise noted, decks shall have solid 4x4 pt posts up to 6 ft above grade, and solid 8x8 for heights above that.
- 10. Wherever beams are noted as Flush framed, install joist hangers at all joists, sized appropriately for the members being
- 11. Support the lower end of roof beams via minimum 2" horizontal bearing on a post, ledger or via an appropriately sized and configured hanger.
- 12. Where multiple beams are supported on one post, provide min 2" bearing for each, via either appropriately sized post cap or additional post(s).
- 13. Hangers, post caps, ties and other connectors shall be as manufactured by Simpson Strong Tie, as designed to connect the members shown, and shall be installed per manufacturer's

Prefabricated Wood Trusses

- I. Where trusses are indicated on the drawings, truss design shall be provided by truss manufacturer.
- 2. Trusses shall be designed in accordance with applicable provisions of the latest edition of the National Design Specifications for Wood Construction (NDS), American Forst and Paper Association (APA), and Design Specifications for Metal Plate Connected Wood Trusses (ANSI/TPI 1), Truss Plate Institute (TPI) and code of jurisdiction.
- 3. Manufacturer shall furnish design drawings bearing seal and registration number of a structural engineer licensed in the state where project will be built.



TYPICAL PERIMETER FOUNDATION WALL:

- 8" poured concrete, 8 ft forms, min 7'-10" finished, with
- total of 3 rebar, as follows: • (1) #4 rebar, 4" from top
- (1) #4 rebar @ vertical midpoint. Omit this rebar at walls 4 ft high or less.
- (1) #4 rebar, min 3" from bottom or per code
- Lap corners & splices of rebar per code.
- that extend 7" into concrete and tightened with a nut and washer @ 6' oc & max 12" from each corner & each end @ wood sill splices - if built-up sill, bolts must extend through all sill plates or straps must secure all sill plates.

TYPICAL PERIMETER FOOTING:

- 1. Verify that depth of home matches chart. Depth is foundation dimension eave to eave. Contact Artform Home Plans if you believe the chart does not match the
- 2. Select column for snow load shown on the structural plans. 3. Select soil bearing pressure based on soil type and/or consultation with code officer.
- 4. The required footing size is at the intersection of the Snow Load and Soil PSI. Rebar is not required. Key or pin foundation wall to footing per code. For the purposes of permitting, soil bearing for New England is assumed to be 2,000 PSI.

FAQ - Adding rebar to footings does not reduce the required width. Rebar affects performance with earth movement, like an earthquake and has near zero effect on bearing capacity.

Guide to Soil PSI

3,000 Sandy gravel and/or gravel (GW and GP) 2,000 Sand, silty sand, clayey sand, silty gravel and clayey gravel (SW, SP, SM, SC, GM and GC) 1,500 Clay, sandy clay, silty clay, clayey silt, silt and sandy silt (CL, ML, MH and CH)

Footing Size Type 8.8.28		up to 28 ft plan depth 8 ft nominal basement height 8" foundation wall Full basement plus 2 stories				
		Snow Load				
		50	60	70	80	
Soil	3,000	16" x 8"	16" x 8"	16" x 8"	16" x 8"	
PSI	2,000	18" x 8"	18" x 8"	18" x 8"	20" x 8"	
631	1,500	22" x 8"	22" x 8"	24" x 8"	24" x 8"	

Footin Type 8	g Size 3.8.36	33-36 ft plan depth 8 ft nominal basement height 8" foundation wall Full basement plus 2 stories					
		Snow Load					
		50	60	70	80		
Soil PSI	3,000	16" x 8"	16" x 8"	16" x 8"	16" x 8"		
	2,000	20" x 8"	20" x 8"	22" x 8"	24" x 8"		
	1,500	26" x 8"	28" x 8"	30" x 8"	30" x 8"		

Your use of these drawings constitutes an acceptance of responsibility as outlined in "Dear Code Officer" on the first page of these drawings, and on our web site: http://www.artformhomeplans.com/TermsConditions.a5w

If you have any concerns or questions, please feel free to contact us. We are happy to clarify matters that fall within our scope, as listed on the first page. We can also often provide affordable support for issues that are your responsibility, such as energy design/calcs, or additional detailing.



AFHP Design # 190.124 KR

April Calla, Classic Lot 1 Morning Star Avenue Portland, ME

1/4"=1'-0" unless noted otherwise / Print @ 1:1 PDF created on: 9/16/2014, drawn by ACJ

R2: 9.15.14 - Reverse