

### GENERAL NOTES:

**1. Codes:**  
 This plan was prepared based on the 2003 I - CODES with local amendments and portions of the most recent versions of ACI 318, ACI 332R, AISC Allowable Stress Design ninth edition, and the ND9 for wood construction.

**2. Loads:**  
 This plan is based upon the following load parameters:  
**Roof:** Live Load = 30 psf  
**Floor:** Live Load = 40 psf  
**Wind:** Speed = 90 mph Exposure B (3 sec gust)  
**Seismic:** Zone 1  
**Soils:** report by: Landmark Laboratories LTD, Project # 2GADK-90121B02-101, Dated December 10, 1990  
 Capacity of helix pier to be verified in field through inspection and torque correlations.

**3. Materials:**  
 This plan is based upon the following material properties:  
**Wood:** All dimensional lumber shall be Hem Fir #1 or better unless noted otherwise on the plan.  $F_b = 250$  psi,  $F_v = 15$  psi,  $F_c = 40$  psi,  $E = 1,300,000$  psi. All Laminated Veneer Lumber shall have an allowable Flexural stress  $F_b = 2,250$  psi and Modulus of Elasticity of  $E = 1,500,000$  psi or better. Glued Laminated Lumber shall have an allowable Flexural stress  $F_b = 2,400$  psi and Modulus of Elasticity of  $E = 1,800,000$  psi or better. Timberstrand and MicroLam beams shall be by Trus Joist "Michellam" or equivalent. All Timberstrand beams shown can be replaced with equivalent size 19E Micollams.  
**Fasteners and connectors:** All fasteners and connectors in contact with pressure treated lumber shall be G05 hot-dip galvanized, type 304 stainless steel or type 316 stainless steel.  
**Steel:** Structural Steel shall A36 or better.

**4. Helix Piers:**  
 All Helix foundations and pier caps shall be as manufactured by Magnum Piering Inc. or equivalent. Helix foundation installation should be observed by a representative from Secure Foundations and Structures, Inc. (970) 472-6255 or other geotechnical engineer to verify installation torques and minimum depth.

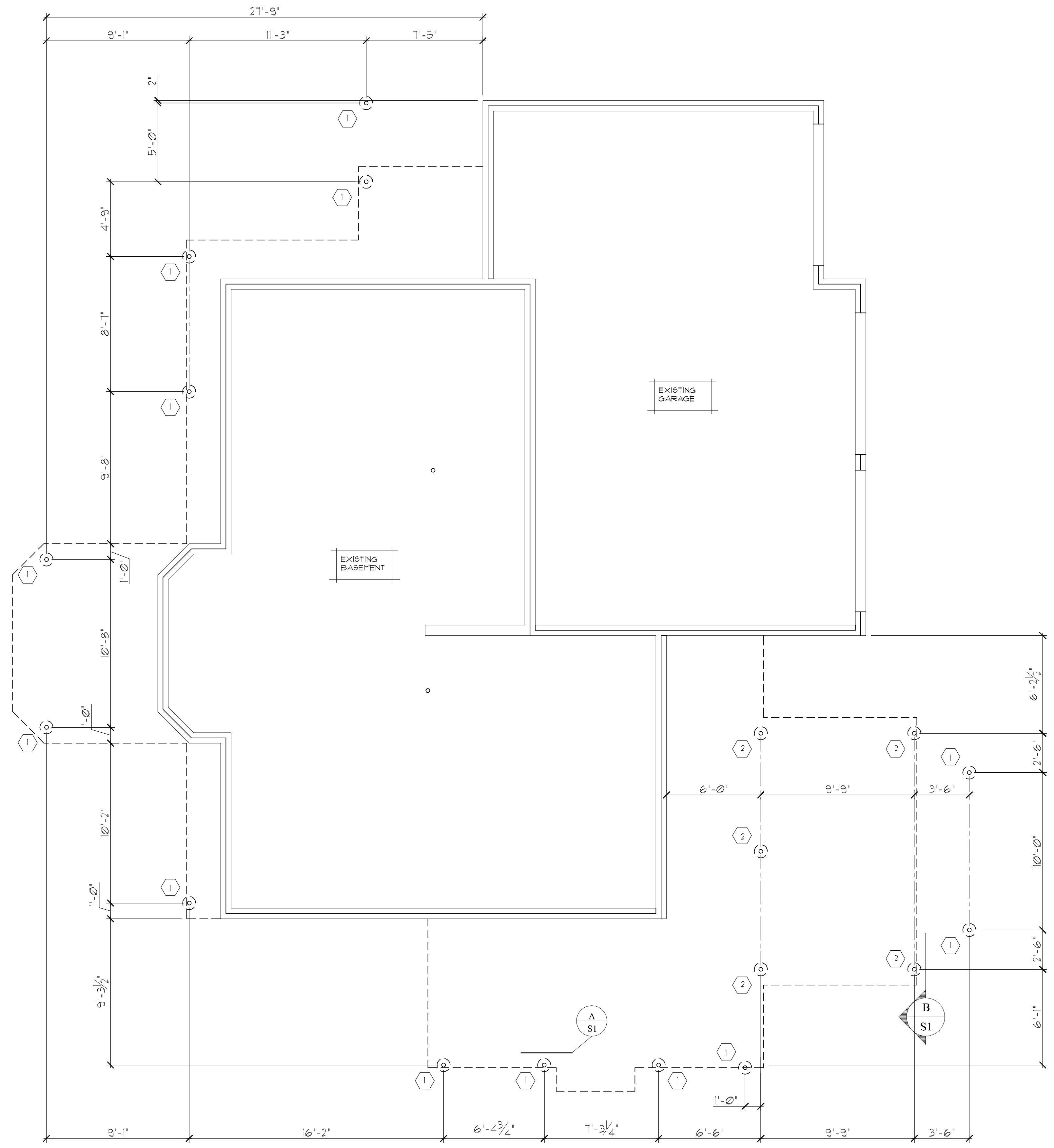
**5. Framing:**  
 See sheet 53.

**6. Drainage:**  
 Adequate drainage shall be provided around the structure. This drainage should be monitored and maintained throughout the life of the structure. At a minimum SECURE recommends a minimum slope of 1" (ft) in the first ten feet and a minimum 2% slope from that point to the property line for landscaped areas. In areas where sidewalks or paving do not immediately adjoin the structures, this slope should have a minimum grade of 10% for at least 10 feet.

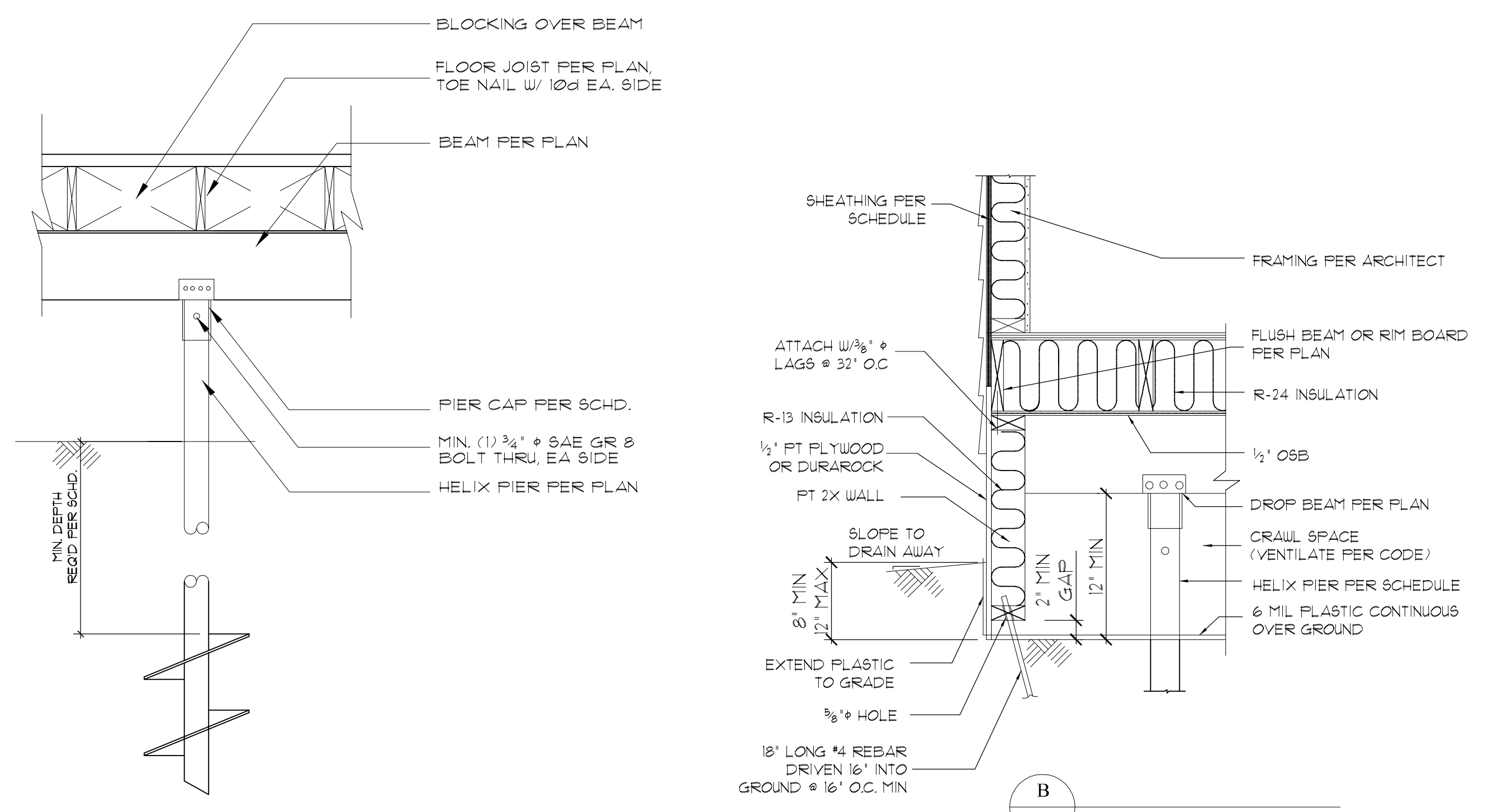
**7. Limitations:**  
 It is the contractor's responsibility to verify and coordinate all dimensions prior to construction. Brick ledges, steps, insets, beam pockets, and deck railings, etc. may or may not be shown. This foundation plan is based on the contractor/owner furnished plans and the above referenced specifications. Any discrepancies or changes should be brought to the attention of SECURE.

HELIX FOUNDATION SCHEDULE					
SYMBOL	QUANTITY	DESIGN CAPACITY	MIN. DEPTH *	PIER CAP CONNECTION	NOTES
①	13	12 KIP@	12' (FT)	MHC161 WOOD CAP W/ MIN. (4) 3/8" x LAGS EA.	MIN. 3" DIAM. Ø250 WALL HELIX SHAFT (STANDARD DUTY OR BETTER)
②	5	12 KIP@	12' (FT)	MHC161 WOOD CAP W/ MIN. (4) 3/8" x LAGS EA.	MIN. 3" DIAM. Ø250 WALL HELIX SHAFT (STANDARD DUTY OR BETTER)

\* MIN. DISTANCE BETWEEN GROUND SURFACE AND UPPERMOST HELICAL BEARING PLATE



FOUNDATION PLAN  
 SCALE 1/4" = 1'-0"



A  
 S1  
 DROP BEAM DETAIL  
 N.T.S.

B  
 S1  
 N.T.S.

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