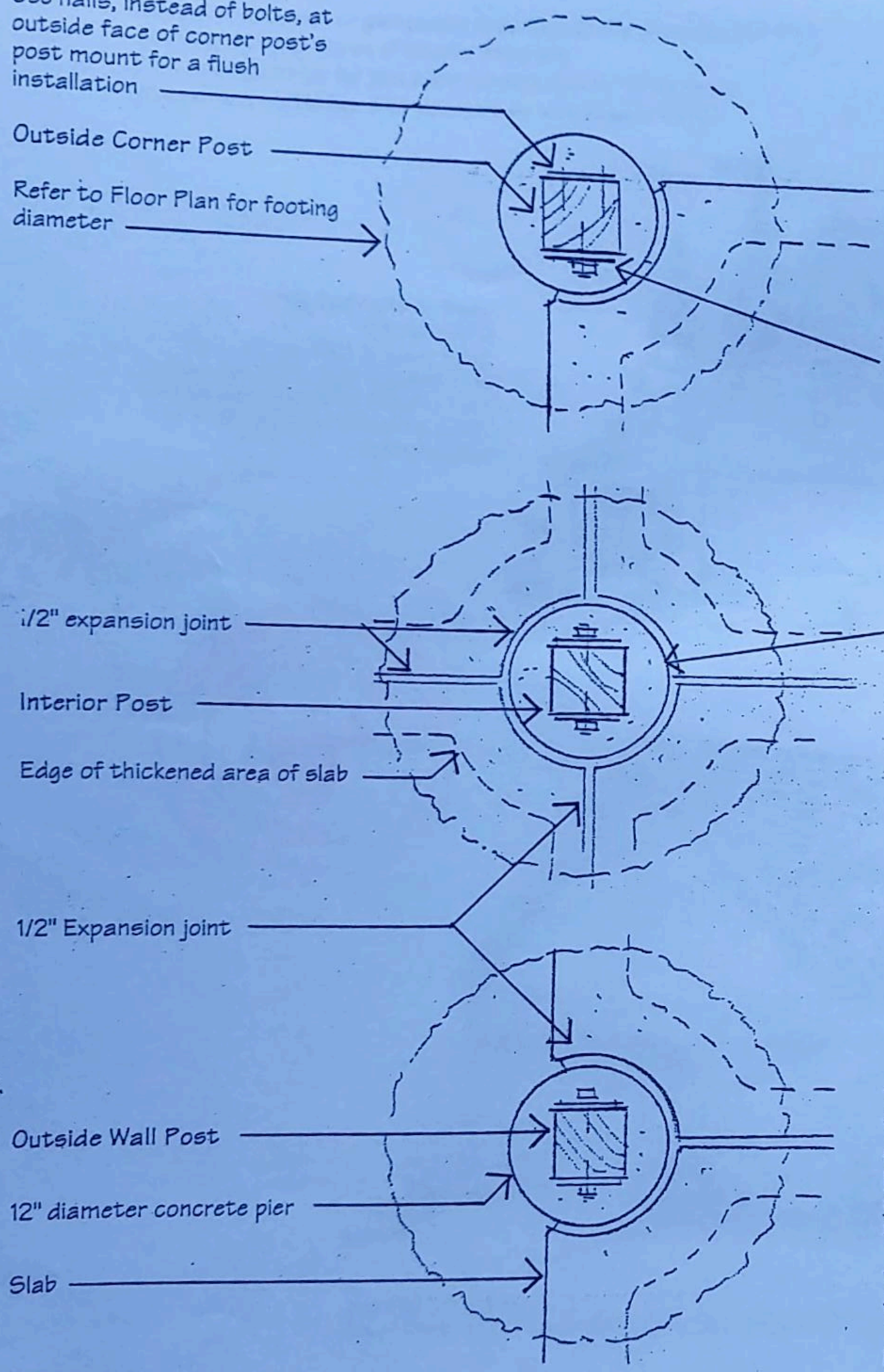


Plans

Tamped earth or clay, above 8" of clean gravel fill, may be substituted for the concrete floor slab shown.

Galvanized steel post mount nailed or bolted to wood post per manufacturer's specifications - Simpson Strong Tie #ABU66 or equal

Minimum 6" deep x 5/8" anchor bolt

Slope grade away from building

Compacted Backfill

12" diameter concrete pier formed with Sonotube or equal cardboard form

18" long, 5/8" diameter bent rebar, to tie concrete pier to concrete footing pad

Concrete footing pad may be poured directly into footing excavation, without a form

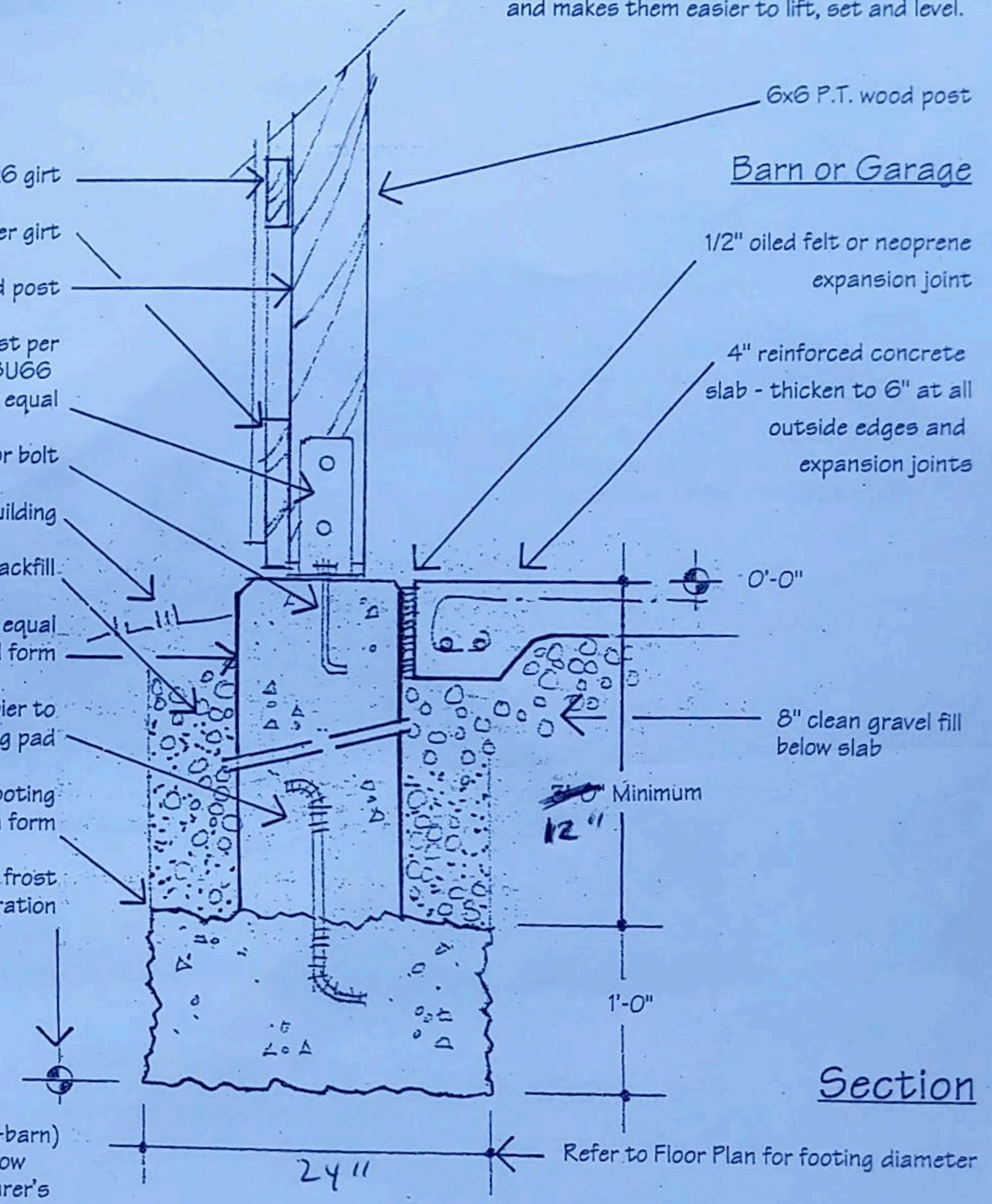
Bottom of footing pad must be below the local limit of frost penetration

The previous drawings call for standard post-frame (pole-barn) footings, where pressure treated wood is used at and below grade. The design depends on the durability of manufacturer's pressure treatment chemicals and processes. Please refer to supplier's warranties and specifications for the wood that you use.

This Alternative Footing Design allows a safe and durable base for your building while keeping all wood above grade.

Please review these drawings with your local Building Official or with a building professional who is knowledgeable of soil and weather conditions in your area. That professional will help you decide if this footing design is preferable for your building site.

This footing should be used for all sites with clay soil or wet soil conditions. It is recommended for all sites because of the added strength, durability and wind uplift resistance it provides. This footing reduces the length of the posts and makes them easier to lift, set and level.



Section

Refer to Floor Plan for footing diameter

NOTICE TO CONTRACTOR
All work must comply with the Harnett County Building Code and is subject to field inspection and verification.
APPROVED
Harnett County Code Officials
Permit holder responsible for full compliance with the code
03/03/2021
Harnett COUNTY NORTH CAROLINA

Recommended Alternative Footing 10

1" = 1'-0"

Customize your barn or garage with Expansion Sheds (Drawings ES1-ES5), a cupola, and your choice of exterior materials.
See Drawings S1-S4 for just a few samples of some of the barns, garages and workshops that you can build with these drawings

Drawings

S1. Sample Barns and Workshops
S2. Sample Car Barns & Garages
S3. Sample Horse Barns
S4. Sample Multi-Use Horse Barns
1 & 2. Notes, Terms & Specifications
3. Floor Plan
4. Elevations
5. Elevations
6. Framing Section
7. Wall Sections
8. Typical Pole Frame Details
9. Typical Details
10. Recommended Alternative Footing
ES1. Optional Expansion Shed – Garage, Tack Room or Shop
ES2. Optional Expansion Shed – Open Storage Shelter
ES3. Optional Expansion Shed – Run-In, Open Shelter or Carport
ES4. Optional Expansion Shed – One Stall Stable
ES5. Optional Expansion Shed – Two Stall Stable

Apple Orchard Barn
Design 4170
Floor Area: 480 Square Feet,
Storage Loft: 420 Square Feet
Sheltered Area: 480 Square Feet
Add a 24' Shelter (Drawing ES3)
on each side

Applewood Barn
Floor Area: 480 Square Feet, Storage Loft: 420 Square Feet

Applewood Garage - Design 417Y
Floor Area: 768 Square Feet, Storage Loft: 420 Square Feet
Add a 24' Garage (Drawing ES1)

REGISTERED ARCHITECT
DONALD J. BERG
012894
STATE OF NEW YORK

Applewood Barns, Garages & Shops

Donald J. Berg, AIA
PO Box 698, Rockville Centre, NY 11571

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on each side

REGISTERED ARCHITECT
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Applewood Barn
Floor Area: 480 Square Feet, Storage Loft: 420 Square Feet

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Applewood Barns, Garages & Shops

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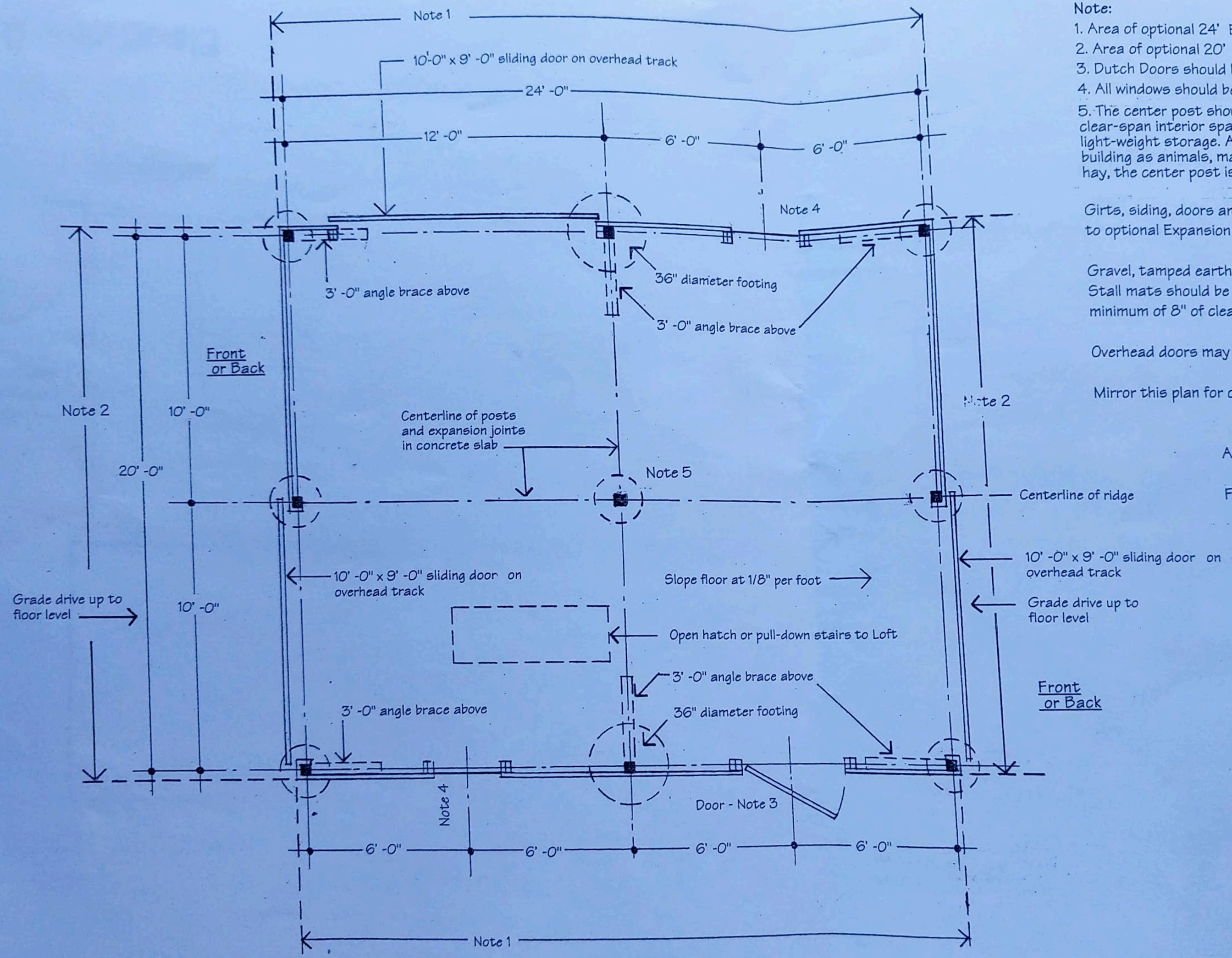


Note:

1. Area of optional 24' Expansion Shed (See Drawings ES1-ES6)
2. Area of optional 20' Expansion Shed (See Drawings ES1-ES6)
3. Dutch Doors should be 4' -0"x3' -0" over 4' -0"x4' -4" on strap hinges
4. All windows should be 2' -6"x2' -6" and may be fixed, awning or casement
5. The center post shown is recommended, but may be omitted if a clear-span interior space is required and if the Loft is intended for light-weight storage. Although it's never safe to store hay in the same building as animals, many owners do. If the Loft will be used to store hay, the center post is required.

Girts, siding, doors and windows, between posts, may be omitted for access to optional Expansion Sheds

Gravel, tamped earth or clay may be substituted for the concrete floor slab. Stall mats should be installed over concrete in the stall areas. Provide a minimum of 8" of clean gravel, for drainage, below any floor material.

Overhead doors may be substituted for sliding doors and track.

Mirror this plan for other orientations

All posts are 6x6 Pressure Treated

Footings are 24" diameter, unless noted

Design #417

Floor Plan 3

1/4" = 1'-0"

Design #417 & #418

All Windows are 2' -6" x 2' -6" fixed, awning or casement, with 1x4 trim and drip cap

Loft hatch and lift post are optional on front or back of barn

Optional Cupola

Screened and louvered vent

20' -4" Ridge

17' -8" Bottom of colar ties and Top of lift post

Optional Loft Hatch 3' -0" x 4' -0" with 1x4 trim and drip cap

Optional 4x6 Lift Post

Roofing, at owner' s option, over 5/8" exterior grade plywood deck

12
10

Lines of optional Expansion Sheds

11' -3" Top of Expansion Shed ledge

11' -8" Plate

1x4 corner boards and trim

10' -0"
Top of Loft joists

drip cap

7' -4"

Set all windows to match height of Dutch doors

Line of Optional Side Expansion Sheds

Siding, at owner' s option, over 1/2" exterior grade plywood sheathing

Slope grade away from building on all sides

Floor Elevation 0' - 0"

10' -0"x 9' -0" sliding door on overhead track

Dutch door - 4' -0"x 3' -0" over 4' -0" x 4' -4" on strap hinges

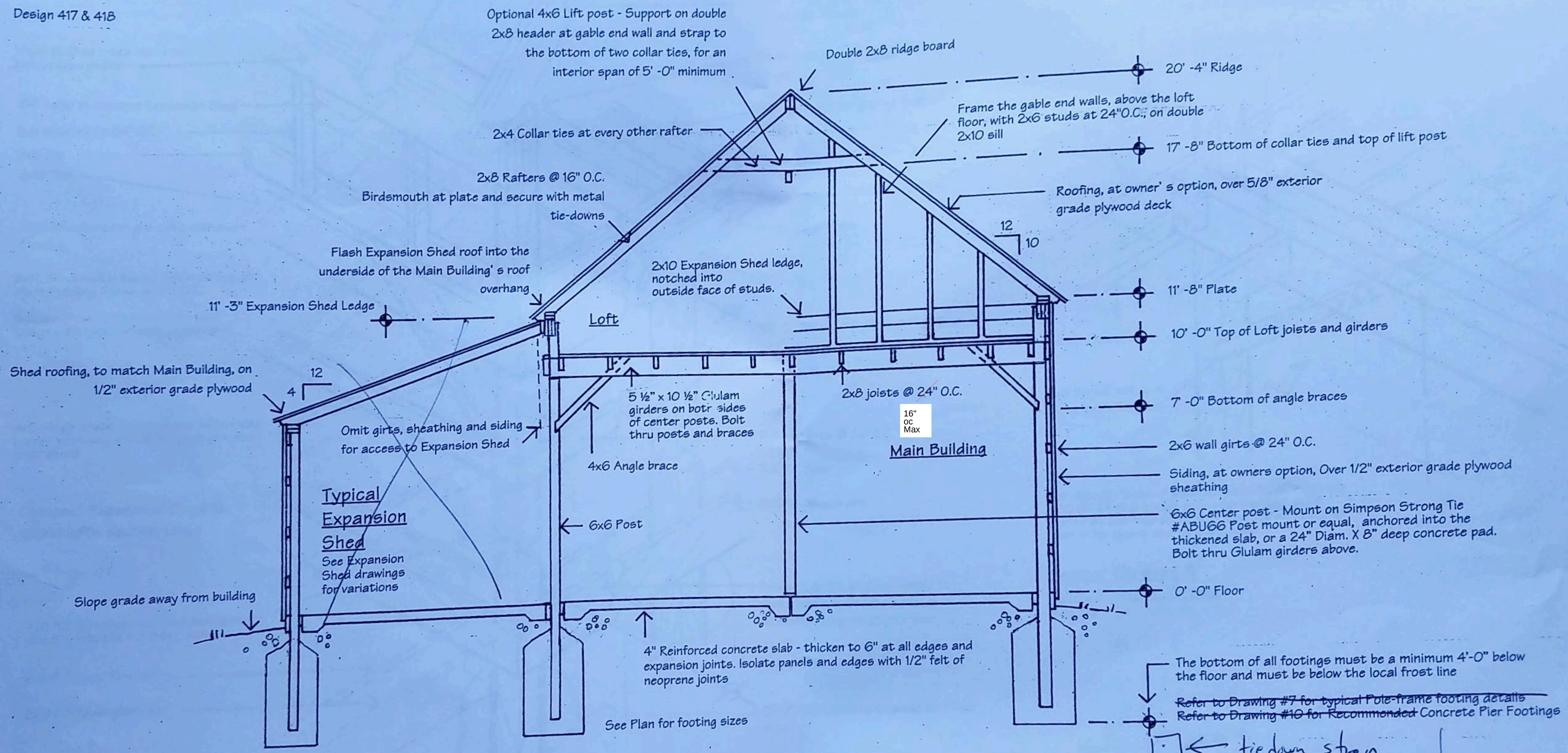
Front or Rear Elevation
1/4" = 1' -0"

Side Elevation
1/4" = 1' -0"

Substitute 2' -6"x2' -6" window for Loft hatch above Expansion Shed. See Drawing 3 for Loft window

Elevatio

Design 417 & 418



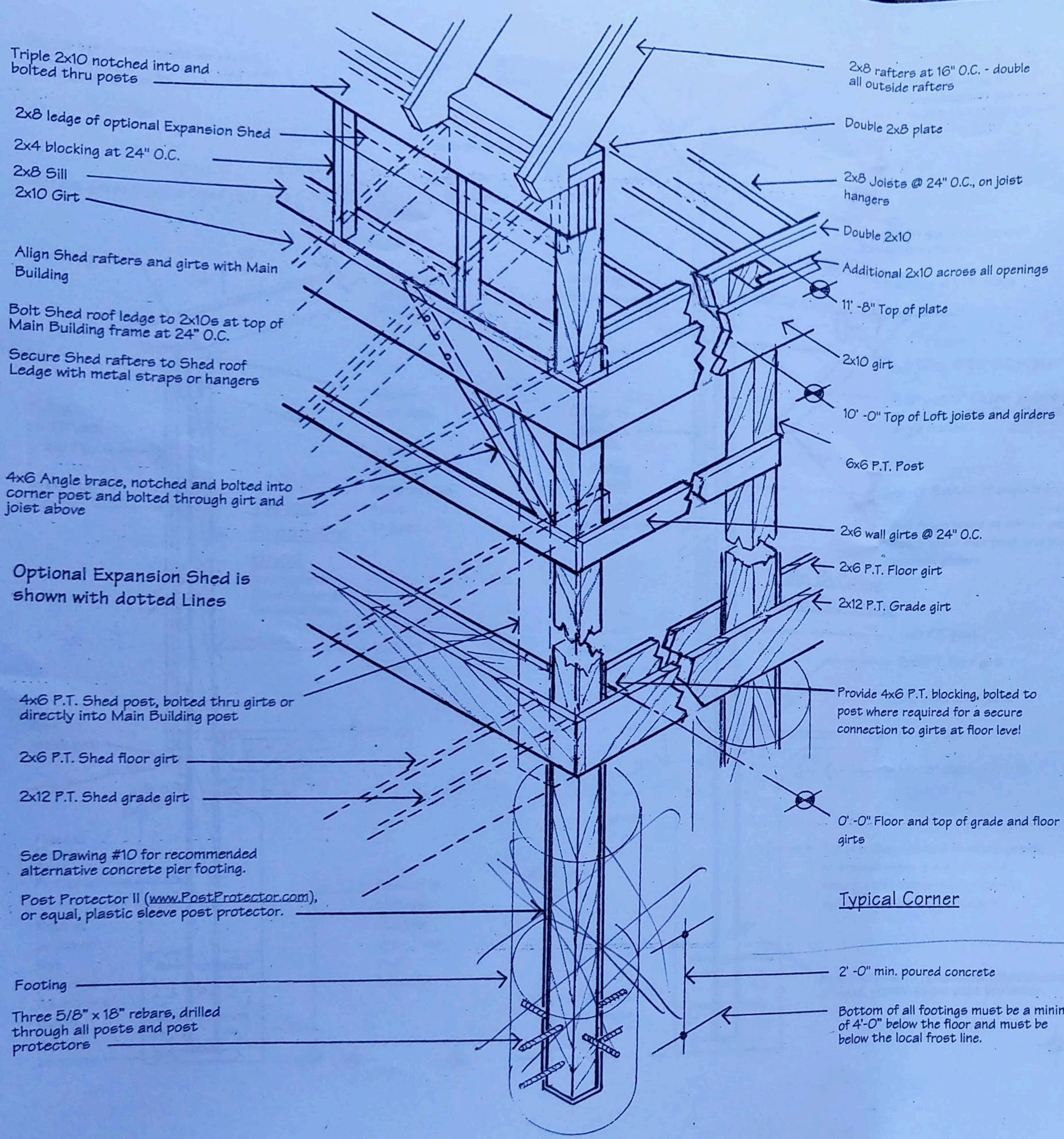
Loft floor may be 5/8" exterior grade plywood or 1x6 boards with 1/8' open joints between them

Floors of the Main Building and Expansion Sheds may be reinforced concrete, as shown, tamped earth, clay or gravel. Provide a minimum of 8" clean gravel fill, for drainage, below all floors

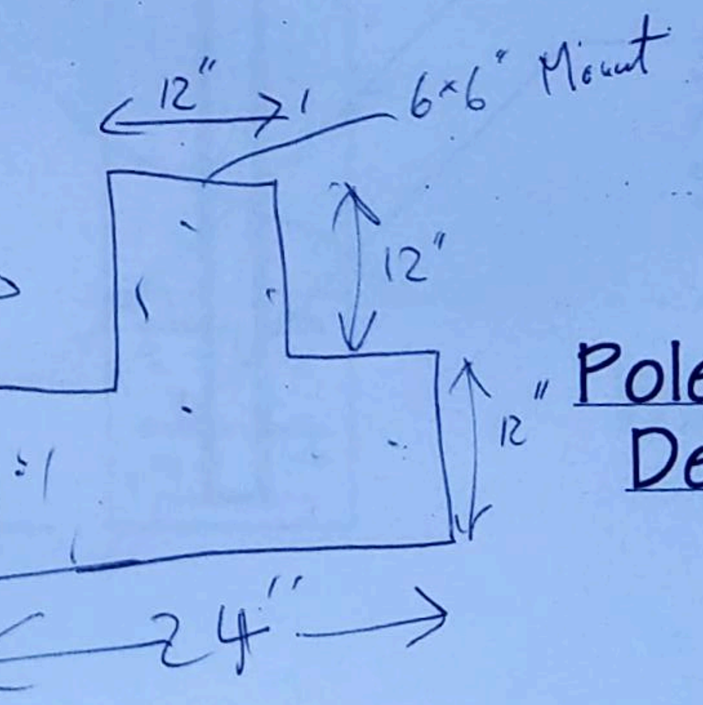
The center post shown is recommended, but may be omitted if a clear-span interior space is required and if the Loft is intended for light-weight storage. Although it's never safe to store hay in the same building as animals, many owners do. If the Loft will be used to store hay, the center post is required.

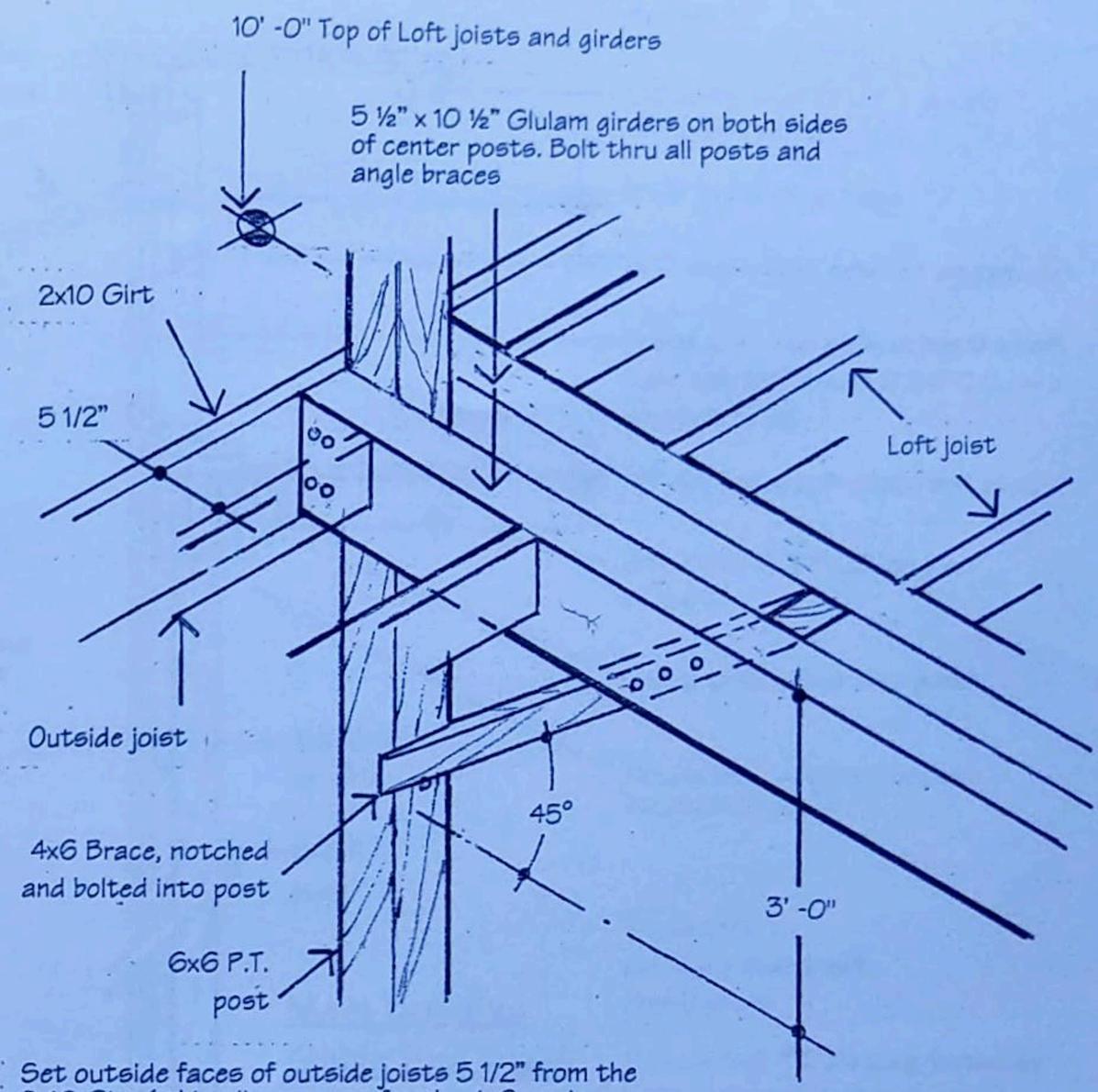
Framing Section 6

1/4" = 1'-0"



Typical Corner





Set outside faces of outside joists 5 1/2" from the 2x10 Girt (this allows space for the 4x6 angle braces at the four corners of the building and 2x6 frames for doors and windows below)

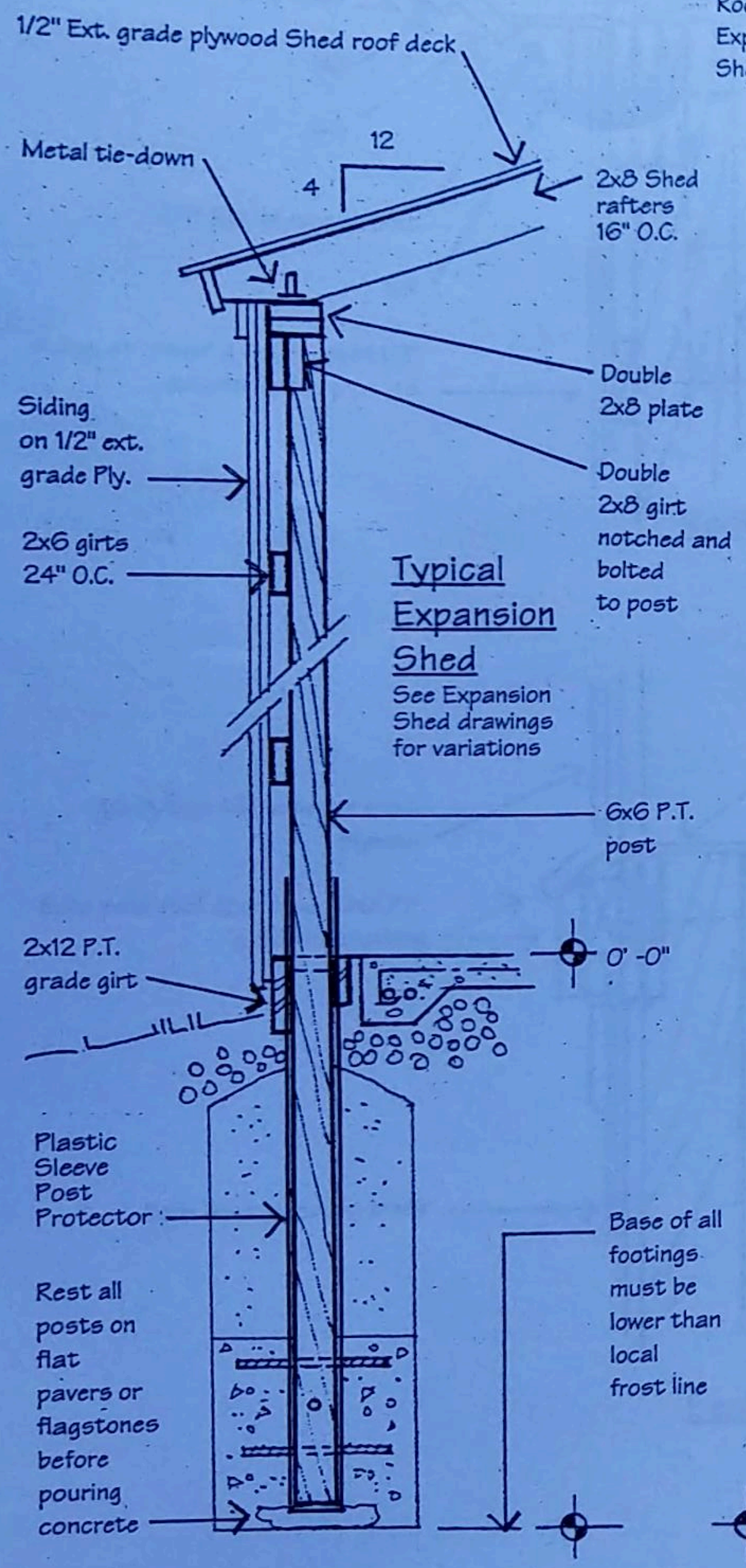
Center Girders & Typical Angle Brace

See Plan for locations

Typical Pole-Frame Details 8

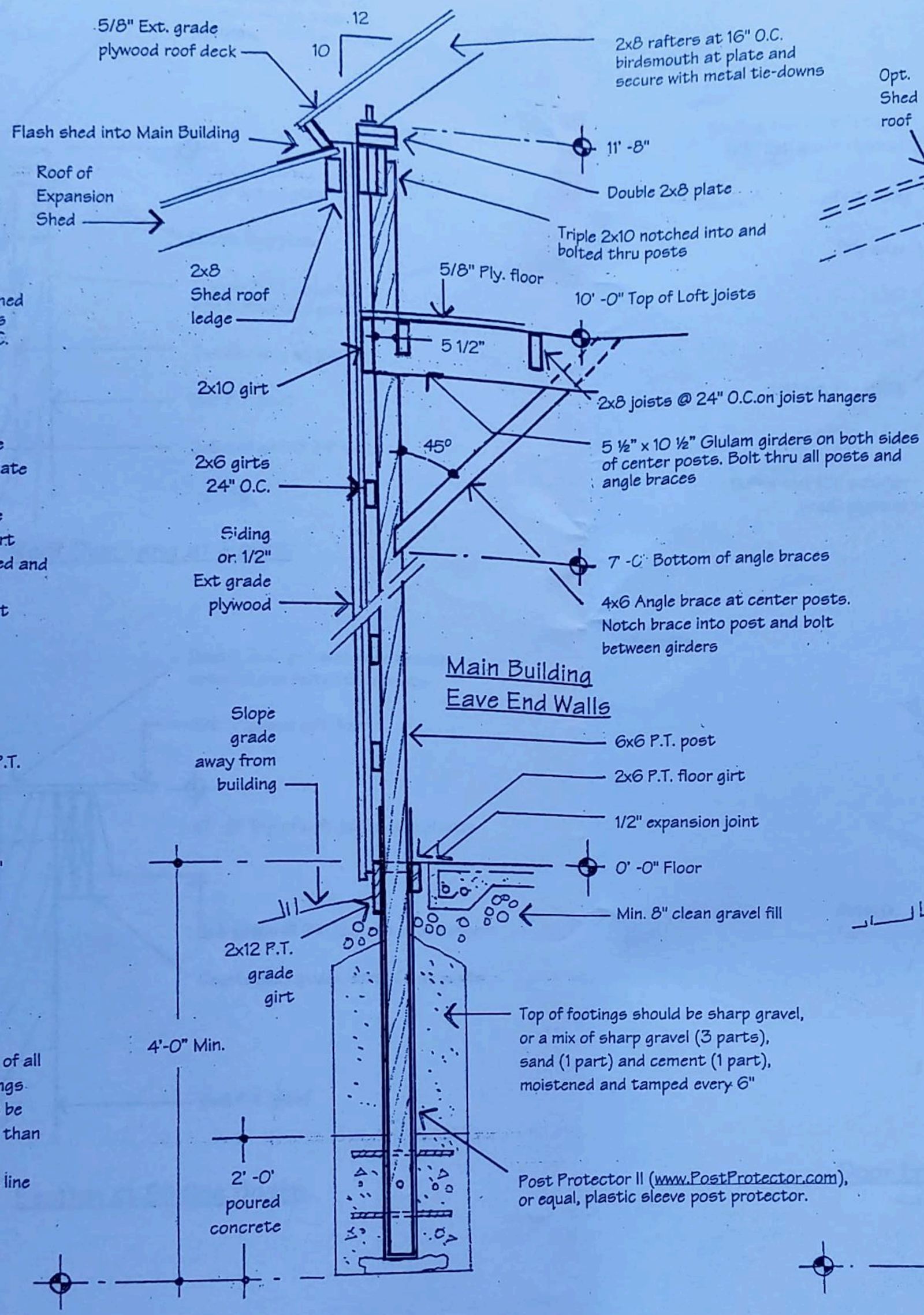
Not to Scale

Floors may be concrete as shown, or tamped earth, gravel or clay over 8" of clean gravel fill.

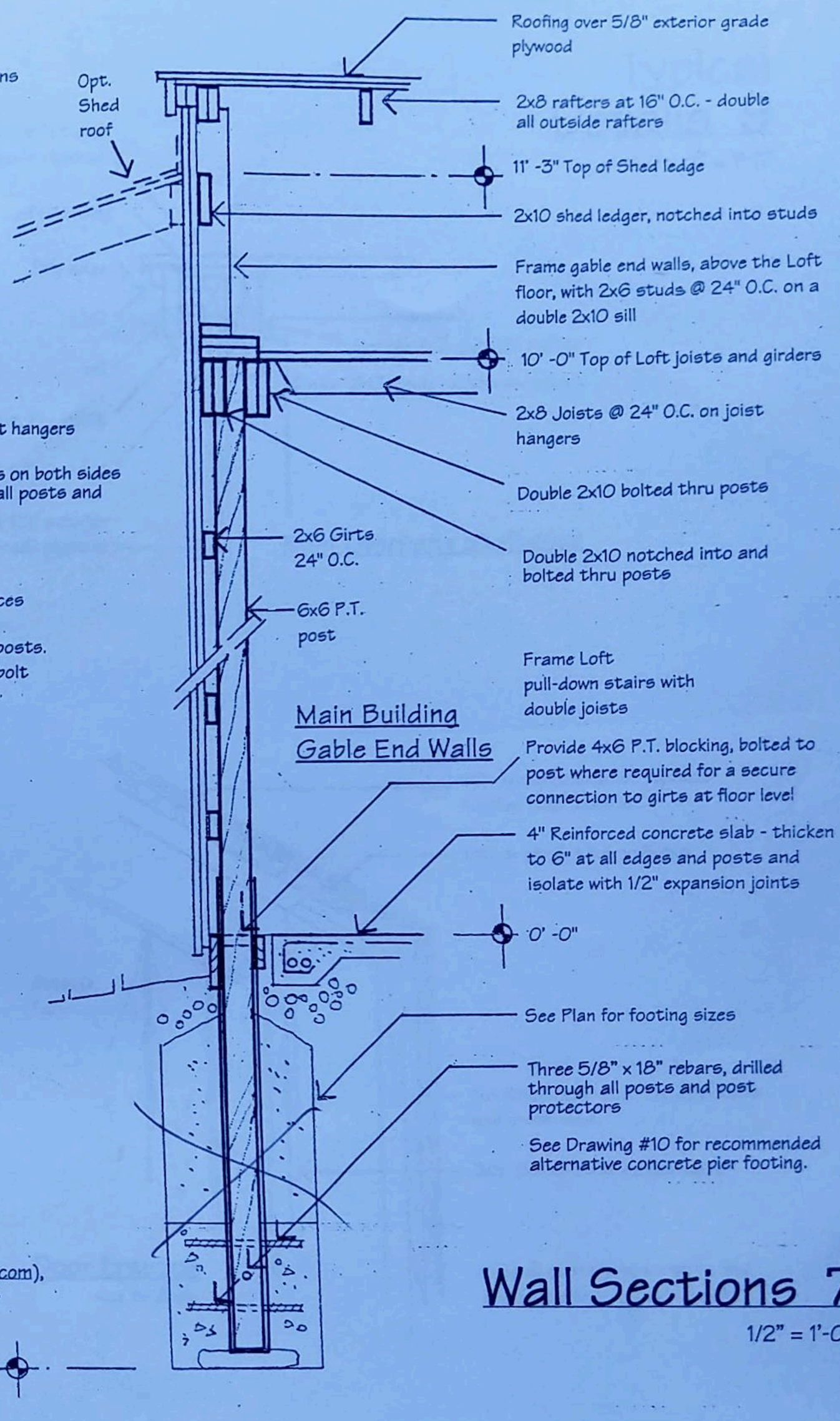


Typical Expansion Shed

See Expansion Shed drawings for variations



Main Building Eave End Walls



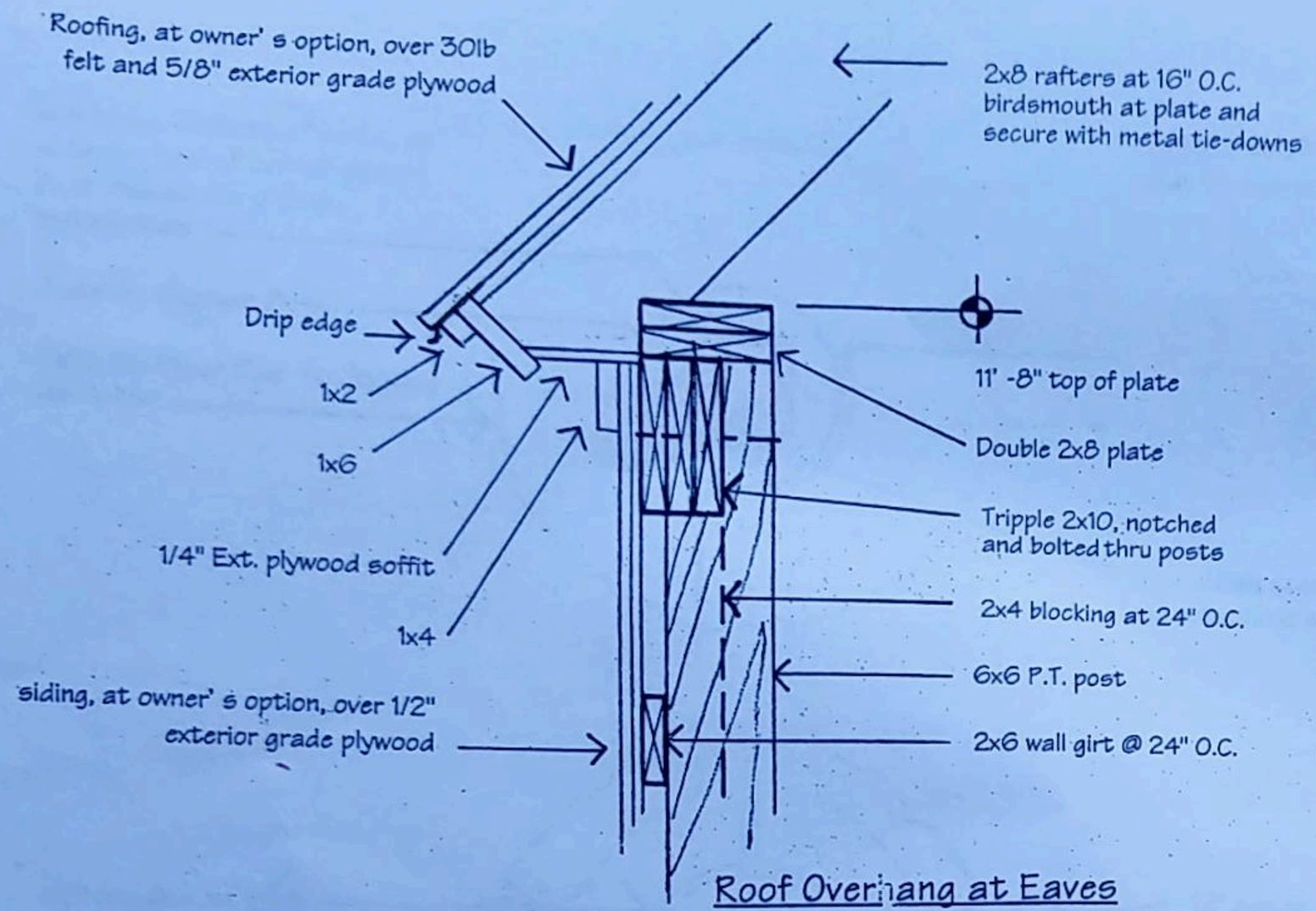
Main Building Gable End Walls

Wall Sections 7

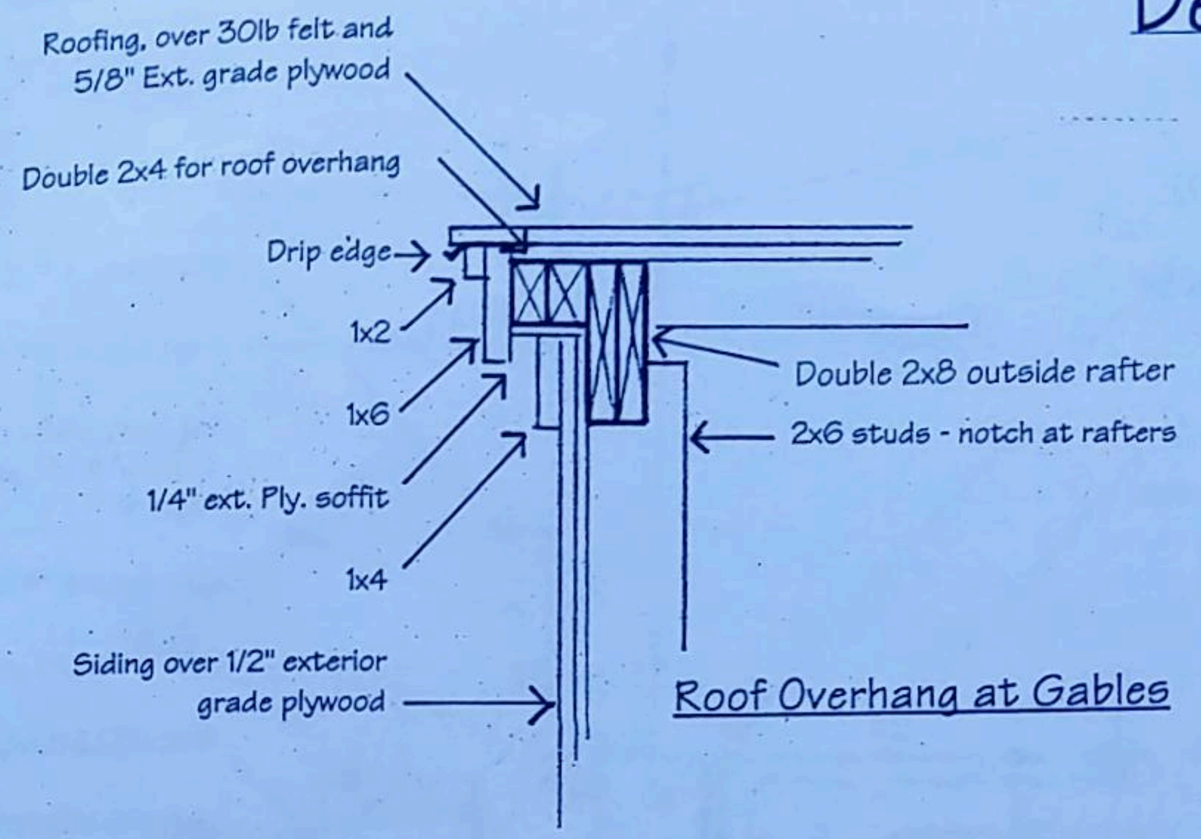
1/2" = 1'-0"

Typical Details 9

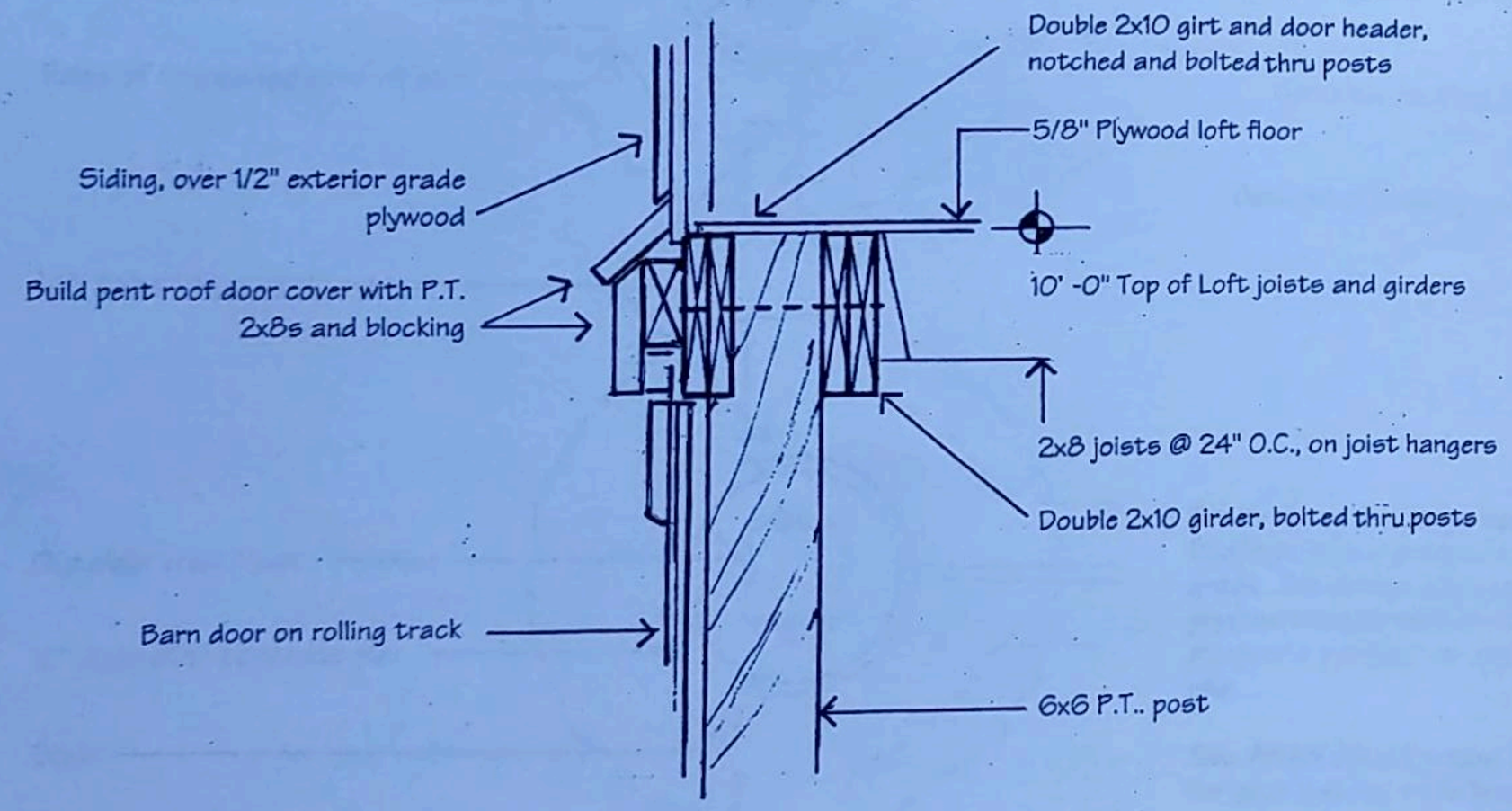
1" = 1'-0"



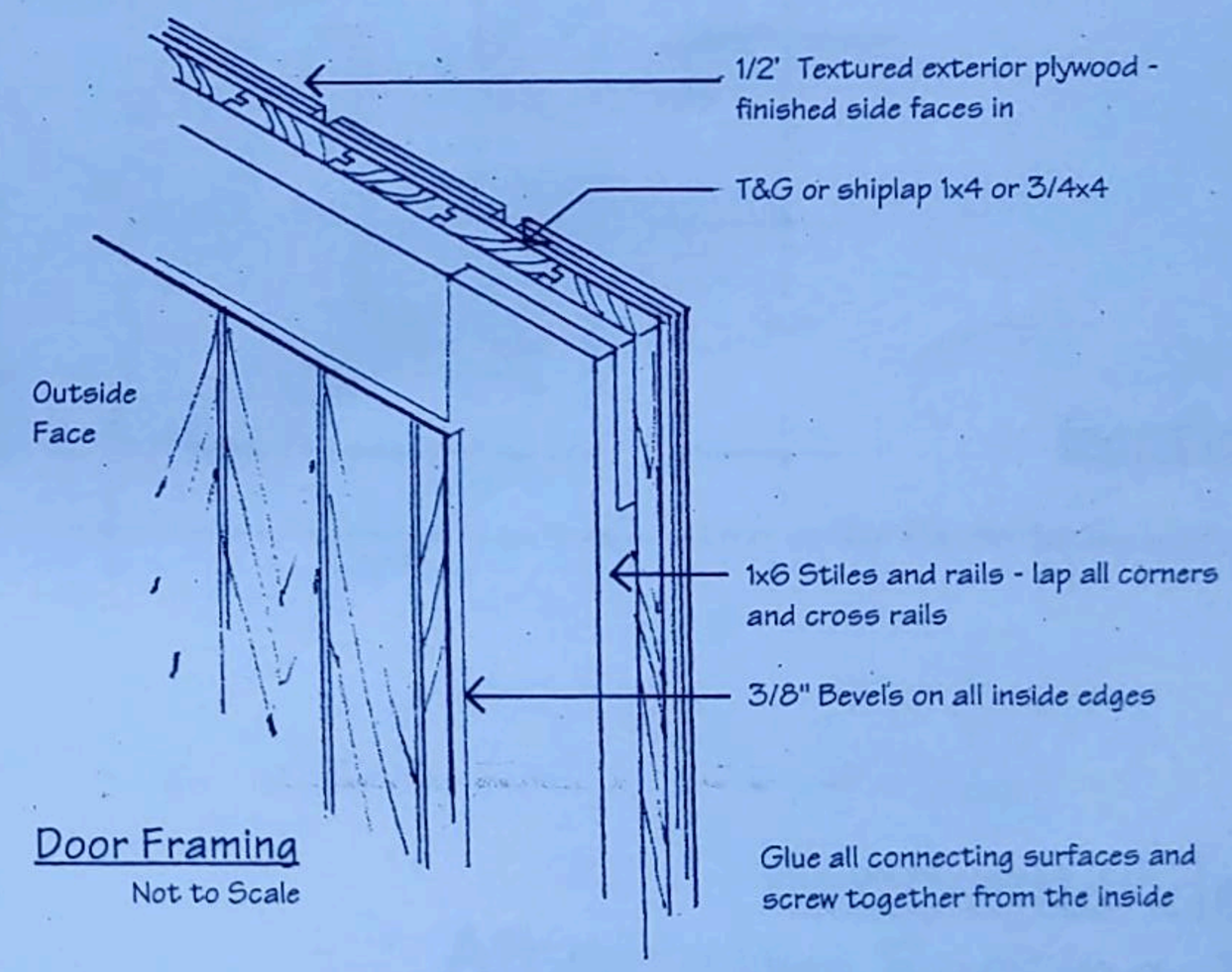
Roof Overhang at Eaves



Roof Overhang at Gables



Section at Sliding Doors



Door Framing

Not to Scale

Design 417 & 418