

# MWPS-72687

## Swine Finishing Unit

Open shed with lot, 100 pigs. This plan is for a 16' x 32' pole-frame open shed with an outdoor lot. The unit houses 100 pigs-about 12 litters-but can be lengthened.

This plan is for the producer who wants to get more of his operation off pasture and out of the mud, but who does not want an enclosed building. The capacity of the unit is about 3 cycles per year; twice as many pens will be needed for farrowing 12 sows 6 times per year. Use bedding in winter.

### **CAUTION!**

Additional professional services will be required to tailor this plan to your situation, including but not limited to: assurance of compliance with codes and regulations; review of specifications for materials and equipment; supervision of site selection, bid letting and construction; and provision for utilities, waste management, roads or other access. **Furthermore, any deviation from the given specifications may result in structural failure, property damage, and personal injury including loss of life.**

### **WARRANTY DISCLAIMER**

This plan provides conceptual information only. **Neither midwest plan service nor any of the cooperating land-grant universities, or their respective agents or employees, have made, and do not hereby make, any representation, warranty or covenant with respect to the specifications in this plan.** Additional professional services will be required to tailor this plan to your situation, including but not limited to: assurance of compliance with codes and regulations; review of specifications for materials and equipment; supervision of site selection, bid letting and construction; and provision for utilities, waste management, roads or other access.

<b>MIDWEST PLAN SERVICE</b>
Cooperative Extension Work in Agriculture and Home Economics and Agricultural Experiment Stations of North Central Region - USDA Cooperating
Swine Finishing Unit Open Shed with Lot, 100 pigs
Title Page
MIDWEST PLAN NO. 72687

**Plan MWPS-72687**  
**SWINE FINISHING UNIT**  
 Open Shed with Lot, 100 Pigs

This plan is for a 16' x 32' pole-frame open shed with an outdoor lot. The unit houses 100 pigs—about 12 litter—but can be lengthened.

This plan is for the producer who wants to get more of his operation off pasture and out of the mud, but who does not want an enclosed building. The capacity of the unit is about 3 cycles per year; twice as many pens will be needed for farrowing. 12 sows 6 times per year. Use bedding in winter.

Locate the unit where surface drainage can be channeled away. Runoff from the lot must not pollute a waterway—install an approved disposal system, such as a settling basin or a serpentine infiltration channel.

Note: the concrete curb to deflect drainage around the feeder.

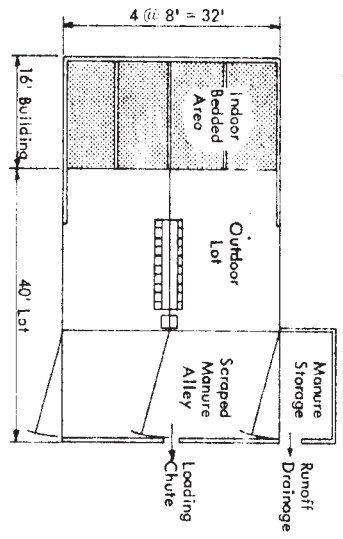
**Floor Slopes and Building Construction**

Slope floors down to the manure alley to remove rainwater and melting snow from the feed floor. Side storage.

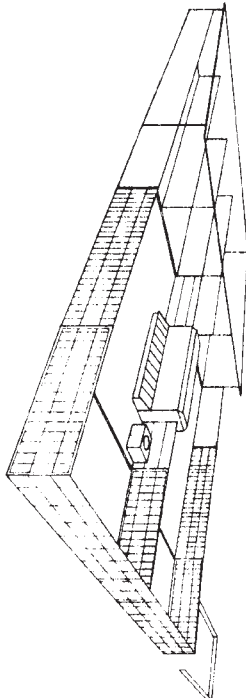
Especially if more than the length of building shown is built, the manure alley gets too deep and the step from the feed floor and the manure alleys too high.

Therefore, this plan recommends a double-slope system:

- The building is level or horizontal, but the floor slope is toward the end.
  - Slope the entire floor about 1/2" per foot (1/4" toward the lot end, from left to right on Floor Plan 2-2).
  - Slope the floor sections in 1/2" in 10' in doors. If the feeding area is toward the manure alley, toward the step between the feeding area and the manure alley. Building Cross Section 1-3).
  - The top of the rear wall under the ventilation doors is level so that uniform doors and framing fit along the entire building length. The rear wall is from 16" high at the high end of the floors to 19" high at the low end of the floors.
  - Make the partition walls of uniform height. For the roof to be horizontal, increase the height of the lumber and plywood framing over the partition walls.
  - Back slope the manure storage area so that liquids can be drained off. The runoff can cause pollution; provide for approved disposal.
- Building space and production cycles.**
- Although many variations are successful, the following are typical meat hog production systems. Plan building capacity for some extra animals to allow for larger litter size, or slow growth rate.
- Farrow during 3 weeks. Some stalls can be used twice.
- WEEKS:**
- a) Move sows and litters to sow-pig nursing pens at 1-3 weeks, depending on how soon the farrowing stalls are needed for the next sows.
  - Wean pigs at 3-6 weeks, putting 3-4 litters together.
  - Return sows to breeding and gestation facilities.



**FLOOR PLAN**



**Open Shed with Lot**

Or

- b) Wean pigs at 4-6 weeks (20-25 lb).
- Move pigs to nursery.
- Return sows to breeding and gestating facilities.

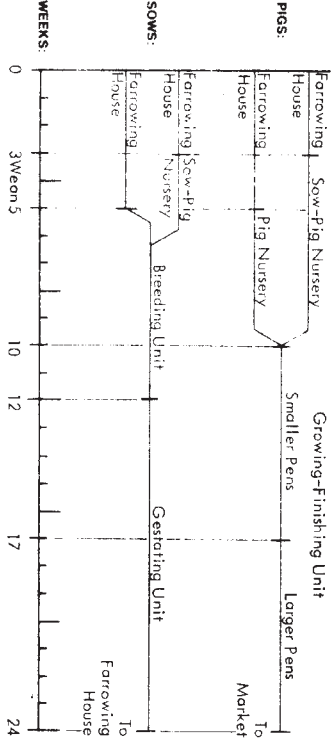
Move pigs to finishing unit at 10 weeks (60 lb). As farrowing intensifies to more than 6 times per year, pigs may be reared at about 8 weeks. Put into smaller pens if you have two pen sizes. Put more pigs per pen if you have only one pen size.

Move pigs to larger pens or reduce number of pigs per pen at about 17 weeks (125 lb).

As they approach market weight, and if the finishing unit is crowded, larger hogs can be marketed early.

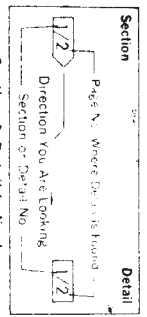
Sows are often rebred during the first or second heat period after weaning and farrow about 16 weeks later.

**TYPICAL HOUSING CYCLES**



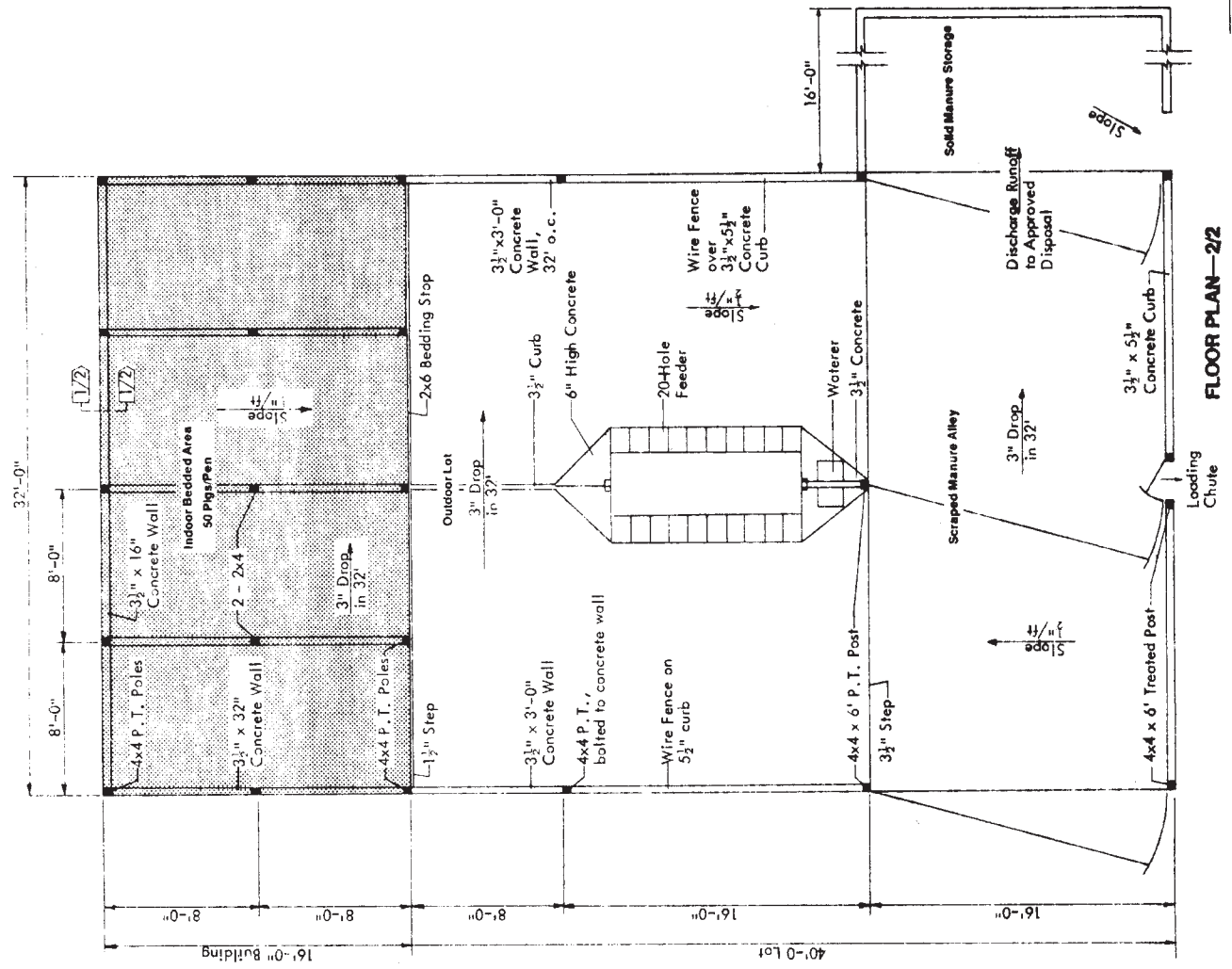
**LUMBER SPECIFICATIONS**

- 2x4, Construction Grade (Doug Fir or Southern Yellow Pine)
- 2x6 No. 2 (Doug Fir or Southern Yellow Pine)
- Trusses and Headers: No. 1 or 1500r machine rated (Doug Fir or Southern Yellow Pine)
- Posts and Sillboards: Pressure Preservative Treated (Southern Yellow Pine or equivalent Creosote—10 pcf, Pentac—0.50 pcf, ACA or CCA Type A or B—0.40 pcf)
- P. T. means pressure treated against insect and fungus attack.

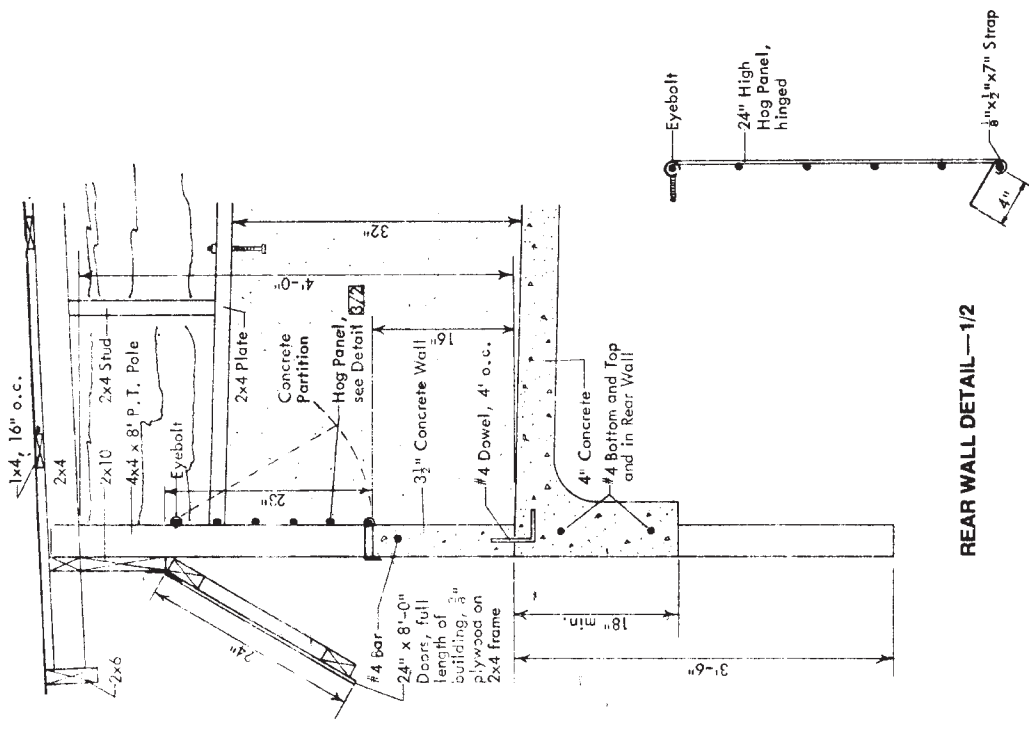


**Section & Detail Indicator**

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**FLOOR PLAN—2/2**

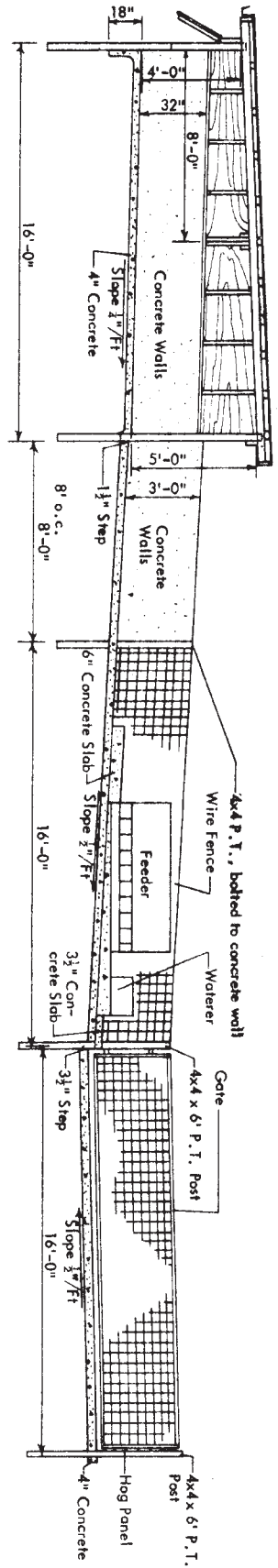


**REAR WALL DETAIL—1/2**

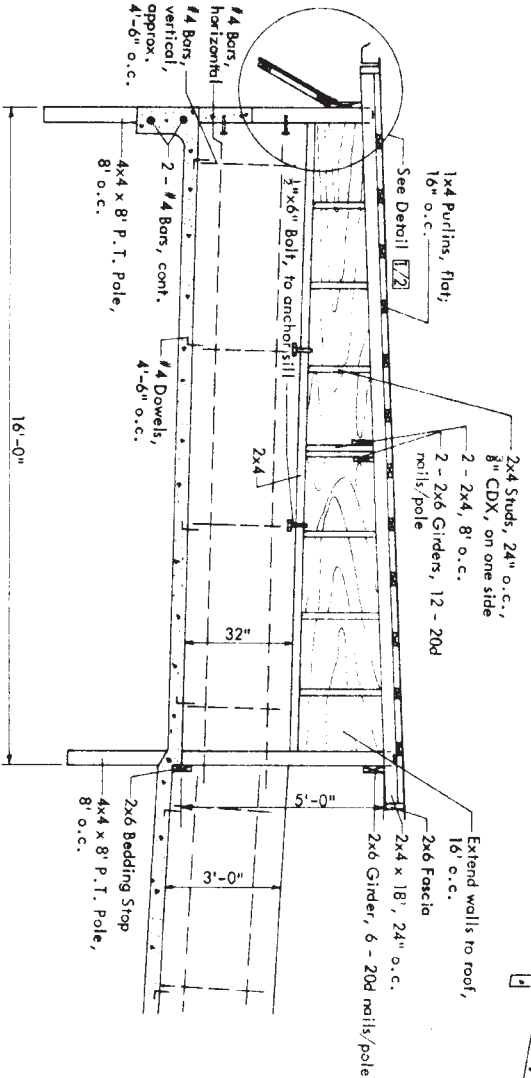
**HOG PANEL DETAIL—3/2**

**Caution:** Restrict travel of commercial feed trucks to prevent disease spread.

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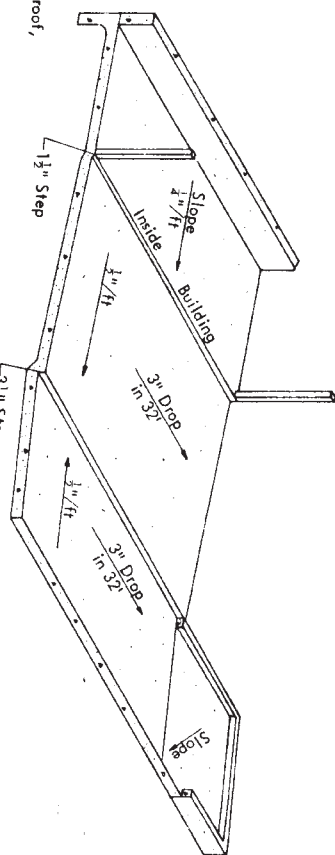


CROSS SECTION—1/3



BUILDING CROSS SECTION—2/3

Cast dowels or vertical bars in floor. Put 3/4" x 4" lag bolts in, or run bars through, poles before casting walls.



FLOOR SLOPE DETAIL—3/3

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