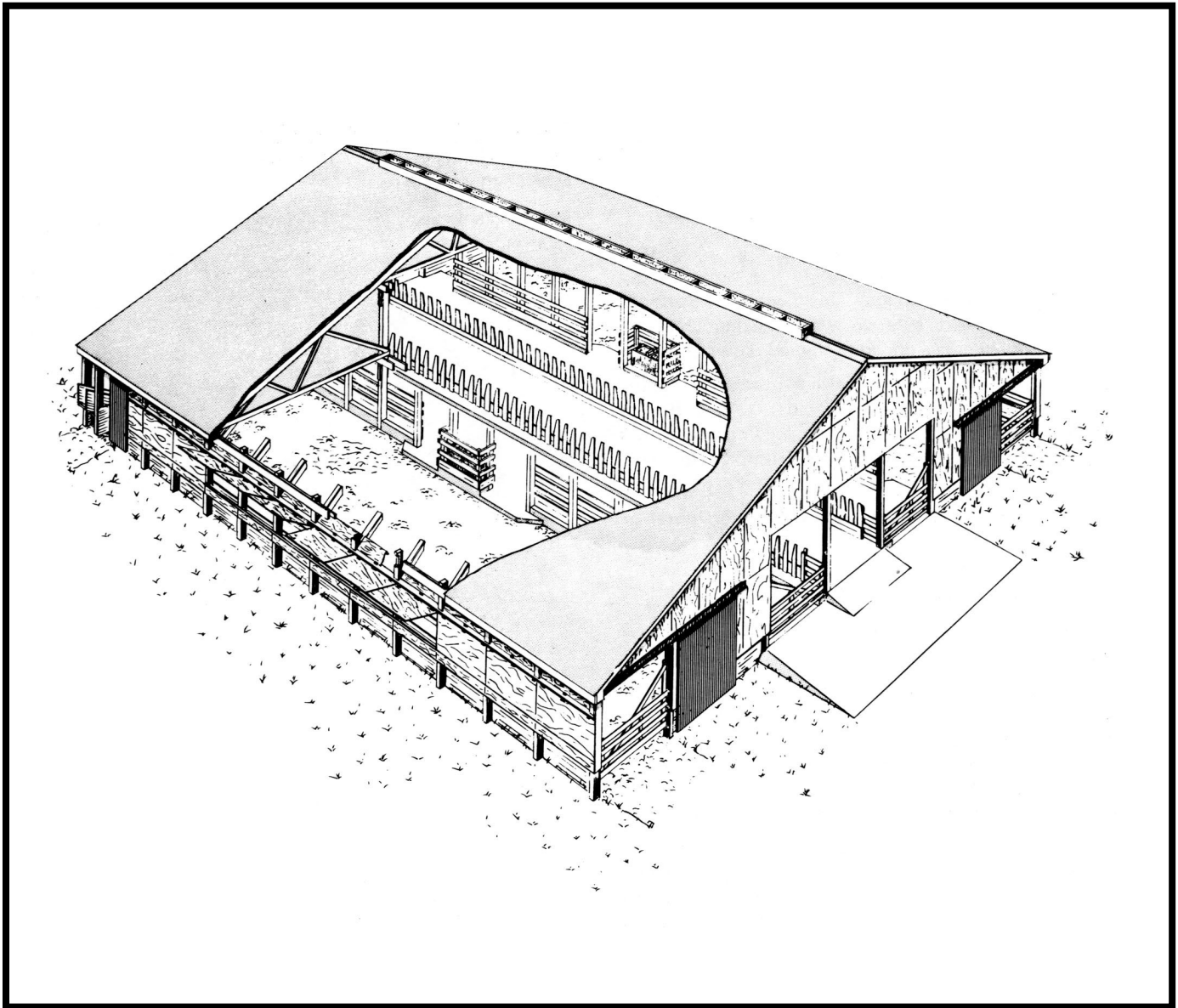


# OPEN - END BEEF BARN DRIVE - THROUGH FEEDING



DEVELOPED BY CANADA PLAN SERVICE

## 310-02

# OPEN-END BEEF BARN DRIVE-THROUGH FEEDING

CPS

PLAN 1114

NEW: 11:76

This is a plan for a 98 ft wide, totally covered feedlot unit in which the length can be any multiple of 8 ft.

It has a cattle resting area with deep manure pack on each side of a central feeding area with feed fence and drive-through alley. The barn is of single-skin construction providing a 'modified' environment (inside winter temperature usually 2 to 7°C above that outside). It is designed to be used in a cattle feeding operation where the cattle are on full feed.

This plan is similar to plan #1113 except for the feeding system and building span.

### CONSTRUCTION FEATURES

The building is a pole-frame construction with a row of poles separating the feeding and resting areas on each side.

The roof is supported by single-slope trusses over the resting areas and a double-slope truss over the central feeding area.

The floor of the feeding area on each side of the central feed alley is paved with concrete. In the resting areas (under manure pack) it may be compacted earth (unless experience indicates that the ground cuts up when resting areas are cleaned out – in which case a concrete floor is required).

The feeding area contains a central drive-through feed alley with fenceline feed bunk on each side, which fits in particularly well with silage and/or grain feeding and make use of a self-unloading wagon or mobile mixer for feed distribution.

The feeding system can be used with either horizontal or vertical silos.

### CATTLE PENS AND HANDLING

Cattle are naturally divided into two groups by the central feed alley.

Further divisions on each side are possible by the use of partitions across the resting areas and corresponding gates across the feeding area. One such division across the building will provide separate accommodation for up to four lots of cattle. Further lateral divisions may also be made. This unit is designed to be used without an outside cattle yard (total cattle confinement).

The plan shows cattle working chute, cutting gate, scales, headgate, and loading ramp along the rear wall and tied into the feeding area so that the feed alley along one side of the bunk may be used as a cattle holding area.

### MANURE HANDLING

In the resting area, bedding is applied as required (two to three times a week) to develop a manure pack and keep the resting area clean and dry. Once (or at most twice) a year clean-out is all that is required. Bedding is stored in another location.

In the feeding area, no bedding is used. The concrete floor is scraped clean periodically (usually two to three times a week). This manure (a semi-liquid) may be stored in either an above-grade walled yard or a below-grade tank.

### VENTILATION

Essentially, this barn provides only a shelter and is operated 'cold' in winter.

It is of single-skin construction with an inch of polystyrene insulation suggested under the roof to prevent moisture condensation during cold weather.

Sidewalls are constructed with continuous tip-in panels that run the full length of the building. These panels, in combination with an open ridge, provide a natural winter ventilation system. Continuous tip-out panels are also suggested for additional cross-ventilation in summer.

The wall at the south end of the feeding area is usually left open to aid air movement, although it may be closed off with sliding doors if desired for winter operation.

### BARN CAPACITY

Type of cattle	Feed program	No. of cattle per ft of bldg length
Growing animals (400-750 lb)	Full feed	4
Finishing animals (750-1100 lb)	Full feed	3