These plans can be obtained from your county Kentucky Cooperative Extension Office, or from: Plan Service, Agricultural Engineering Department, University of Kentucky, Lexington, Kentucky 40506. The number of sheets for each plan is indicated. The cost per sheet is 25 cents. Consult your local dairy fieldman or sanitarian before selecting dairy building plans to be sure all waste disposal and sanitary milk production regulations are satisfied. See your county Extension agent for additional information on these plans.

**Milkrooms and Parlors**

*Plan No. 6033 (1 Sheet)*

Milkroom with variable dimensions to suit size of herd. Concrete block wall up to 18' above floor. Wood frame wall above block. Walls and ceilings insulated. Utility room and vestibule between barn and milk room.

*6078 (2 Sheets)*

Milkhouse. Milkroom 15'-6" wide and 20' long, with utility room 8'-6" X 20'. Toilet facilities. Milkhouse is 24' long and 20' wide overall. Will accommodate 1200-gallon bulk tank.

*6063 (3 Sheets)*

Milkhouse. Frame construction 16' wide and 20' long. Two plans shown for two door locations. Walls and ceiling are insulated. Plywood interior wall and ceiling finish.

*11.723-23 (1 Sheet)*

Three-stall milking room and milkroom with feed storage overhead. Planned as a shed addition to a tall barn already on farm. Milking room shown 11'-4" wide, 30'-8" long, with elevated side opening gate type stalls. Milkroom 13'-4" by 17'-4". Concrete block walls in milkroom and milking room. Wood construction overhead.

*5875 (2 Sheets)*

Three-stall milking plant. Plan includes milking room, milk room, feed storage, wash room, and concrete block building 17'-4" wide and 40'-8" long, to be built on sloping site.

*5846 (1 Sheet)*

Milking stall to be homemade, side entering gate type elevated stall. Constructed of standard steel pipe bent and welded together.

*5868 (3 Sheets)*

Double four-, six-, and eight-stall milking room with herringbone arrangement. Plans for the milkroom are also included. Double four milking room is 16' X 22'-8"; the double six is 16' X 29'-4"; and the double eight is 16' X 35'-4". The milkroom is 16'-9" wide and 27'-4" long with a toilet 6' X 6' added.

*6132 (2 Sheets)*

Milk house for dairy cows, double 6, 8, 10 herringbone stalls, 30' wide by 32', 38'-8" and 46'-8" long respectively. Concrete block. Milk room, rest, feed and utility room.

*5736 (3 Sheets)*

Three-, four-, and five-stall milking rooms, side opening gate type, elevated stalls. Concrete block construction. Basic plan is for three stalls. Plans for milkrooms for the milking rooms are also shown. A toilet and feed hopper room are provided, as well as a breezeway between the milking and milkroom.

*11.723-32 (1 Sheet)*

Four-stall milking room, parallel elevated type stalls, walk through stalls with feed box on door. For manufacture or Grade A milk production: Milking room 14' wide and 20'-8" long. Milkrooms shown as 14' X 18', but may be varied to meet requirements.

*11.723-26 (1 Sheet)*

Two-stall milking room, stalls parallel and elevated. Planned for a small dairy, producing milk for manufacturing purposes. May be built inside a barn. Space 10' X 15' with 7' to 8' headroom required. For herds of 7 to 20 cows.

*11.723-27 (1 Sheet)*

Two-stall milking room, V-type elevated stalls, for a small dairy, producing milk for manufacturing purposes. For herds of 7 to 20 cows.
Free Stall Housing Barns

5956 (1 Sheet)
Separate stalls for loafing shed. Stall details only.

5977 (1 Sheet)
Dairy housing equipment permanent type, free stall, tilt-up concrete silage bunk, hay rack, ramp details, ridge vent.

11.723-30 (3 Sheets)
Barn 40' wide. It is expandable in 25-foot sections and contains eight stalls, pole construction with clear-span roof truss. Alleyways 9'-8" wide extend across the barn with 7'-6" stalls on each side of the alley. Stalls are shown 4'-6" wide and 7'-6" long. Glue-nailed truss.

11.723-29 (1 Sheet)
Barn 24' or 25', depending on size of breed; expandable in 12-foot sections. Cows face out, two rows of stalls, with concrete alley 10' wide in center, lengthwise of barn. Siding starts 2' below eaves on each side to provide ventilation. Sloping rear connection board from curb to rafters. Pole construction. with alternate of concrete block as a foundation.

11.723-31 (3 Sheets)
Barn 48' wide and expandable in 12-foot sections. Stalls are 3'-10" X 7'. Pole construction. Two concrete alleyways 10' wide and four rows of stalls extend lengthwise of the barn, with the stalls arranged at each side of the alley.

11.723-28 (3 Sheets)
Barn 50' wide and expandable in 12-foot sections. Four rows of stalls and two 9'-10" alleyways extend lengthwise of the barn. The stalls are 3'-9" or 3'-10" wide and 7'-6" long. Pole construction.

6042 (2 Sheets)
Barn with free stalls and center feeder. Two plans showing mechanical feeder or feed bunk in center. One plan for a barn 44' wide having 53 stalls, and another plan for a barn 48' wide with 66 stalls. Prefabricated roof trusses are used. Stalls run lengthwise of barn. Pole construction.

6030 (1 Sheet)
Barn 40' and 72' long. Free stalls for 60 cows. Three alleyways 9'-6" across barn are shown with stall 4' X 7'-3" on each side of the alley. Front side is open and back side is closed. Clear-span prefabricated roof trusses are to be used. Barn expandable in 24-foot units. Pole construction.

6034 (1 Sheet)

6067 (2 Sheets)

11.723-33 (1 Sheet)
Free stall dairy unit. Side entering. Pole supported roof. Barn 40' wide and 72' long. Stalls for 60 cows. Stalls 4' X 7'. Similar to plan No. 11.723-30, which has a clear-span roof.

6025 (1 Sheet)
Free-stall housing system for 88 cows. L-shaped arrangement. No details of construction are shown on plan.

6112 (2 Sheets)
Dairy barn, pole frame construction, raised center wagon drive, feed trough, concrete alleys free stall area, 56' X 84'.

6023 (4 Sheets)
Partially open, free-stall housing system for dairy cows. Construction possible in three phases from 35 to 56, to 77, to 154 stalls, and for changing from predominantly hay feeding to a silage-feeding operation. Layout shown for milkroom, milking parlor, and hospital area.

5985 (3 Sheets)
System for 101 cows shows location for free stall barn, silage bunk for wagon feeding, and milking parlor. Pole construction.

6035 (2 Sheets)
System for 114 cows. Barn shown as 80' wide and 120' long, plus an addition of 48' length to provide for holding area, 12 herringbone stalls, hospital area, milkroom, utility room, and office. Two 24-foot silos at one side of barn. Stalls extend lengthwise of barn and are 4' X 7'-6". Alternate layouts are shown also. Concrete block and pole construction.

6031 (4 Sheets)
Loose housing system for 124 cows, covered free-stall barn milking parlor, milk room, alternate plan with hospital. Pole construction of barn, 82' X 148'. Parlor not detailed.

5885 (1 Sheet)
System for 166 cows. Shows location of free stall barn, silage storage and feeding, and milking parlor. A manure ramp is located at the end of the feedlot. Pole construction.

6111 (3 Sheets)

6113 (3 Sheets)
Dairy Barns Designed for Nuclear Fallout Protection

5937 (3 Sheets)
Dairy barn with family shelter silo. Stanchion-type barn with 40 stanchions, silo, straw, and hay storage, feed room, milkroom, and family fallout shelter. Designed for fallout protection. Gable roof.

5938 (3 Sheets)
Dairy barn with family shelter-silo at end of barn. Stanchion-type barn, with 40 stanchions. Silo, feedroom, straw and hay storage, milkroom and family fallout shelter. Designed for fallout protection. Gable roof.

5953 (5 Sheets)

5954 (2 Sheets)
Free stall dairy barn built partially underground for fallout protection. Capacity, 60 cows. Barn is 45' wide plus roof overhang of 8' on each side of barn. Length of barn is shown as 91' and can be expanded in units of 15'. The barn has gable roof. Concrete alleys with manure flume. Stalls 7' - 9'. Maternity pen and calf pens.

5965 (2 Sheets)
Free stall barn for 60 cows. Design is the same as Plan No. 5954, except the manure flumes are omitted.

Feeding Barns and Sheds (Pole Construction)

5935 (2 Sheets)
Hay storage and feeding shed 26' X 60'. Length can be extended by adding 12-foot units. Open sides and ends. Feeding racks on two sides with front slats of racks straight up and down. Concrete pavement on four sides of the shed. Overhang of roof is 10' on each side. Nailed truss.

11.731-2 (3 Sheets)
Hay storage and feeding shed 26' X 108'. Length can be extended by adding 12-foot units. Open sides and ends. Feeding racks on two sides with front slats or racks at an angle. Roof overhang of 4' or 8'. Concrete pavement 10' wide on both sides of the shed. Glue-nailed truss.

Pole Barns

5794 (2 Sheets)
Multi-purpose pole barn or cattle and hay barn. Building 30' X 60'. Open on one side. Nailed clear-span roof trusses. Metal straps used to fasten trusses to girders, poles 12' on center. Movable feed rack detail.

5780 (3 Sheets)
Barn with ridge line centered between posts. Plan shows barn widths of 39' and 52'. Length of barn is 60' but may be decreased or extended in units of 15'. Rafters fastened to poles using 2' X 6' scabs.

5781 (3 Sheets)
Barn with ridge line centered on row of posts. Barn shown 39' or 52' wide as desired and 60' long. The length can be increased or decreased in units of 15'. Rafters are fastened to poles with 2' X 6' blocking.

5832 (2 Sheets)
Pole barn, Type C Construction. Basic unit is a 26' wide clear-span barn, 60' long. By adding 13-foot sheds to either or both sides, the barn can be built 39' or 52' wide. The length of the barn can be decreased or increased by 15-foot units.

5833 (1 Sheet)
Details for installing doors, windows, and siding on pole barns.

Feed Racks (Hay and Silage)

Misc. 38 (No Charge)
Hay rack, 4' X 12'. Floored bottom 12" from ground. V-shaped hay space using 1" X 4" slats, 6" apart. On 4" X 6" skids.

5772 (1 Sheet)

5925 (1 Sheet)
Rack for hay or silage. Covered with metal top. Rack is 3' - 9" wide and 12' long. Box-type with sloping slats for cattle to feed through. On skids.

5908 (1 Sheet)
Self-feeding chopped hay or silage wagon. Portable rack on four wheels. Width 5' - 8" to 6' - 8", length 12' to 20'.

5777 (1 Sheet)
Movable hay rack for cattle, two wheel trailer type for cattle with or without horns.

11.772-18 (1 Sheet)
Cattle Feeder, single rack for inside of barn, or double rack for outside of barn. Double rack can also be used inside of barn.

Mineral and Salt Feeders

Misc. 105 (No Charge)
Feeder 3' wide, 4' long, on skids. Height in front 4' - 2" and 3' - 10" in back. Wood construction with feed box can be divided for minerals as desired. Metal cover. List of materials. All-weather feeder.

5759 (1 Sheet)
Feeder 5' wide, 6' long, on skids. Box 2' - 6" wide. Height in front 4' - 10" and 4' - 2" in back. Wood construction. Metal cover. All-weather feeders, with skids across ends of feeder.
5844 (1 Sheet)
Weathervane mineral feeder. Made from 55-gallon metal drum. Feeder on shaft turns with wind to protect feed.

5906 (1 Sheet)
Feeder with sloping front. Stationary setting in field. Back side and ends to be exterior plywood. Metal top. Tempered hardwood bottom. Box 20" by 35" inside.

Fence-line Feeders, Bunk Feeders

5872 (2 Sheets)
Self-feeding fences for bunker or trench silos. Two plans for suspended fences and three plans for skid-mounted fences. Different types of feeding openings shown.

6012 (1 Sheet)
Silage feed bunks. Four plans for bunks, wood or concrete. Can be used as fence line feeders. Plan for covered wood bunk shown.

5862 (1 Sheet)
Covered feeder for cattle. Concrete bottom to trough 4' wide with 12", 16", or 20" of 2" boards as sides. Overall width of trough and pavement at sides of trough 32'. Poles placed on 7'–6" centers to support cover.

5939 (1 Sheet)
Bunk feeder of wood. 5'–6 1/2" wide, length as desired. Concrete pavement 12' wide both sides of bunker. Cover or roof supported with poles.

5864 (1 Sheet)
Covered feeder for cattle. Wood trough 4'–3" wide inside and any length desired in 15-foot units. Cover supported by poles. Concrete pavement each side of trough 6' minimum.

5854 (1 Sheet)
Fence-line feeder for cattle. Concrete floored manger with concrete block at front, boards at back. Concrete pavement for cattle to stand on while feeding. Feeder is covered with shed roof.

6066 (1 Sheet)
Cattle feeders. Two types. Portable with removable leg assemblies made of welded pipe. Feeder is a flat wooden box 3' wide and up to 12' long. Holds about 400 pounds of feed.

11.77013-1 (1 Sheet)
Silage feed cart for transporting silage from a silo down a feed bunk. Cart pushed along over bunk by hand.

Holding Pens, Squeeze and Head-Gates, Loading Chutes and Stocks

6037 (1 Sheet)
Automatic crowding gate. Circular design. Steel frame gate closes by weight counterbalance. End of gate wheel supported.

6092 (2 Sheets)
Dairy crowding gates for crowding dairy cows from the holding area into the milking parlor. Two lightweight designs using an electric fence charger. Gate supported by barn door track.

11.772-17 (2 Sheets)
Holding pen arrangement, holding and loading chute, headgates, squeeze gates, scales. Detail of headgate shown. Opening of headgate adjusted at top by changing location of bolt in crosspiece.

6077 (1 Sheet)
Walk-thru headgate. Rope and level top adjustment may be mounted on chute.

11.8815-1 (1 Sheet)
Squeeze and headgate details. Pens not shown. Opening of headgate adjusts with rope.

11.772-25 (1 Sheet)

6133 (2 Sheets)
Squeeze chute for cattle, variable width, trailer mounted, headgate metal frame.

5465 (1 Sheet)
Squeeze and headgate. No pens shown. Opening of headgate adjustable with lever and iron straps at top of headgate. Body squeeze adjustable at top also, with lever and iron straps.

5793 (1 Sheet)
Stationary or movable loading chute. Side posts in ground or on skids. Steps up, slatted ramp, tamped earth or rock fill for floor of chute.

5960 (1 Sheet)
Loading ramp for cattle. Base of ramp concrete. Elevated catwalk along one side.

5681 (1 Sheet)
Movable loading chute on two wheels. Can be trailed on highway. Clearance inside 2'–6", 12' long and 4' high.
6141 (2 Sheets)
Trailer for cattle, goose neck type. 6' X 16' bed, metal frame, wood floor.

5740 (1 Sheet)
Cattle stock. Can be used for hoof trimming. Canvas fits under animal and rollers used to lift animal. Headgate for holding also shown.

6153 (1 Sheet)
Cattle chute, adjustable type, one side of chute metal frame hinges at bottom, swings in or out at top for adjustment.

6102 (4 Sheets)
Heifer barn, free stalls for various ages, two versions of stall arrangement shown. Pole construction. Barn 40' wide, length as desired.

6065 (1 Sheet)
Movable shelter for calves for use on pasture. Shelter is 12' wide and 19' long; wood construction 8' high in front and 6' high at back. Open on one side. On skids.

5970 (2 Sheets)
Calf barn, open front, pen type. Ten calf pens, feed room at one end. Building 8'—2" wide and 48' long. Pole construction.

11.772-36 (3 Sheets)
Calf barn with controlled environment 22' wide, 40' long; 24 stalls, concrete block construction.

6052 (1 Sheet)
Eleven calf pens for seven calves. Steel frame. Expanded metal or wire mesh floors.

11.772-33 (1 Sheet)
Eleven calf stall, wood slat, for pail feeding. 22" X 24".

11.772-34 (1 Sheet)
Eleven calf stall, wood slat, pail, hay, and grain rack.

5933 (1 Sheet)
Calf pens. Two methods of building pens shown. The frame may be of either steel or wood covered with wire. Pens shown 4' wide, 8' long, with one-half of pen covered with metal roofing.

5962 (2 Sheets)

5969 (2 Sheets)

Liquid Manure Tanks

5981 (3 Sheets)
Rectangular concrete manure tank. PCA plan. Designed for 20' width; lengths from 20' to 100', and depths of from 6' to 10'. Capacities from 18,000 to 150,000 gallons. Reinforced concrete construction.

5987 (1 Sheet)
Liquid manure tank. Widths from 12' to 24', length as desired, and depth of 10'. Reinforced concrete construction.

Watering

5909 (1 Sheet)

Bull Pen, Breeding Stall and Maternity Barn

5143 (1 Sheet)
A safety bull pen with breeding stall and paddock building 14' X 18'.

5851 (3 Sheets)
Two bull barns and lots, breeding rack.

5853 (1 Sheet)
Permanent breeding rack for cattle.

5840 (1 Sheet)
Dairy stalls for artificial breeding 8'—5" X 12'—6".

6146 (2 Sheets)
Maternity barn for dairy cows. Ten stalls, calf stalls, 34' X 72'.