

Saskatchewan Agriculture and Food

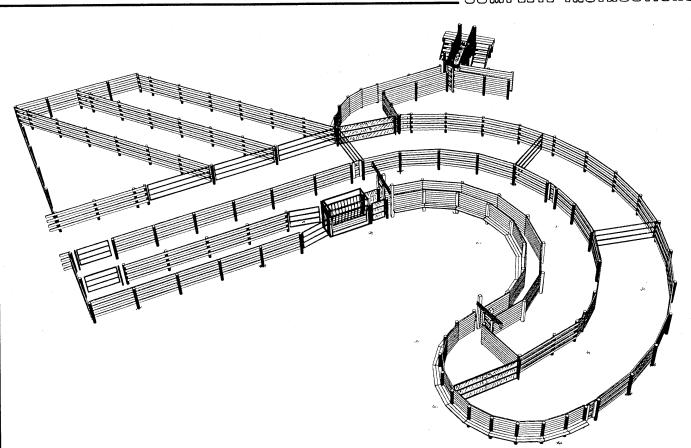
Agricultural Engineering Branch Saskatchewan Rural Development

Extension Service

## Plan S-187

Semi-Circular Crowding Alley and Working Chute

COMPLETE INSTRUCTIONS



This plan shows a semi-circular crowding alley and working chute designed to handle large numbers of cattle. Cattle are run into the crowding alley and presorted back into diagonal pens adjacent to the lead-up alley. Size the sorting pens to accomodate as many animals as desired.

Cattle are moved to the chute from the lead-up alley and/or from the sorting pens. The crowding alley will accommodate 70 mature animals. One person can easily crowd animals towards the working chute.

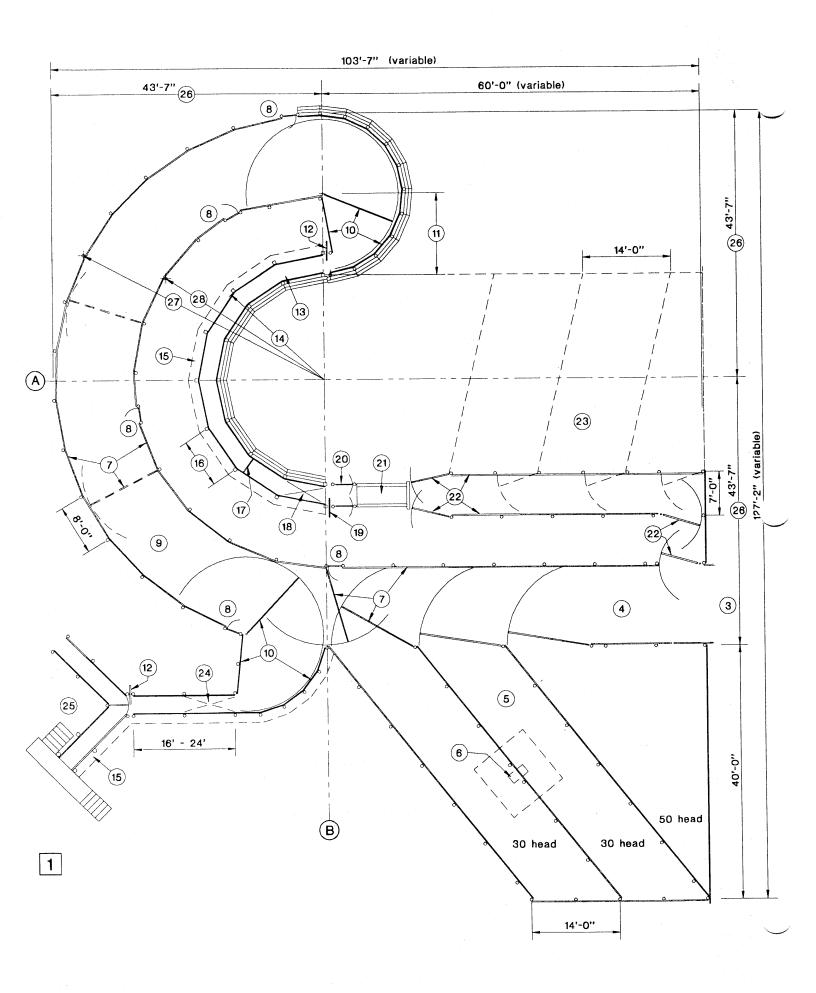
A solid sided crowding tub and self-locking crowding gate allow animals to be efficiently manoeuvred into the working chute. The curved working chute has solid sides to improve animal movement. This layout allows one person to work a relatively large number of animals within a small area. The semi-circular design saves steps since the squeeze is close to both the crowding alley and crowding tub.

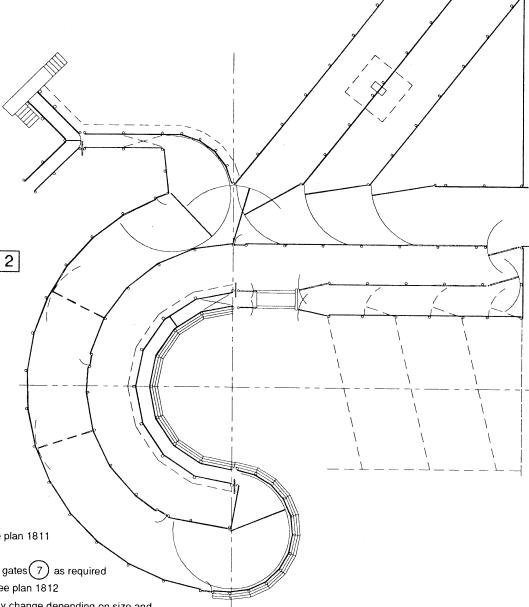
Blocking gates, one way gates and man gates are placed as required.

The loading chute may be located at any position along the crowding alley.

All dimensions are approximate and must be adjusted to fit specific site restrictions.

Locate the facility in a well drained area accessible to all animal confinement areas and to trucks in all weather.





1. Plan View

- 2. Reverse Plan View
- 3. access from all pens or pastures
- 4. lead-up alley
- 5. sorting pens
- 6. optional waterer for overnight holding
- 7. 12' gates and open corral fencing see plan 1811
- 8. man gate install as required
- 9. crowding alley, approx. 70 head; place gates (7) as required
- 10. 12' crowding gate and solid fencing see plan 1812
- 11. crowding tub with 13' radius; radius may change depending on size and construction of gate (10); posts @ 4' o.c. in crowding pen; solid sides
- 12. open faced blocking gate see plan 1814
- 13. working chute with catwalk see plan S-184
- 14. 20' radius to inside edge of post
- 15. optional catwalk on outside of chute
- 16. posts maximum 8' o.c.; 6' o.c. suggested
- 17. one way chute gate see plan S-182; location and number as required
- 18. scale location; ensure post spacing will accomodate dimensions of scale type chosen
- 19. solid faced blocking gate see plan 1814
- 20. palpation gates
- 21. squeeze and headgate
- 22.6' sorting gates and open corral fencing
- 23. optional sorting pens and 6' gates
- 24. optional scale location
- 25. loading chute; chute and tub can be placed anywhere along crowding alley
- 26. approximation only; this dimension is determined by the combination of
  - , (11), the chute width chosen and the material used to line the chute. See the example

## Example as drawn:

Assuming the working chute (13) is tapered, the finished inside width at ground level is 22", the working chute lining material is 2" dimension rough lumber and the crowding alley posts are 6" diameter, then:

- dimension (27) will be 43'-7" to the centre of the posts
- dimension (28) will be 30'-7" to the centre of the posts

For assistance in determining exact dimensions, contact your local agricultural engineer.

## Note:

- Initiate construction by locating lines "A" and "B"; the intersection being the centre of the circular chute.
- An option to consider is 4" thick rough surfaced concrete from the start of the crowding tub through the working chute to the end of the squeeze. This would prevent base erosion due to animal traffic.