



WOOL  
HARVESTING  
NOTE

NO: 1.05

DECEMBER 1980

### BUGLE YARDS

Varieties of bugle yards have been in limited use for over 50 years, but it was during the 1970's that the features of such yards were widely publicised, resulting in greater acceptance and use by woolgrowers.

Bugle yards take their name from the key feature of their physical layout, which is the curved and tapering approach to the working and drafting races.

A growing interest in the patterns of behaviour and movement of sheep in confined areas has spurred the search for yard layouts which might make yarding and handling more efficient than is the case with traditional designs.



Photo 1. Working area of a set of bugle yards having separate working and drafting races

Both circular and bugle yards depend on the principle of moving sheep around a curved path towards the working areas. Circular yards incorporate a bugle at the entry to the drafting race, but it is a minor feature of the layout in comparison to the circular laneway. For the bugle yards, it is the dominating feature. Thus, a number of principles are the same for yard layouts based on sheep flow around a curved path - it is the physical expression of these principles which gives rise to the different yard types.

An important feature of bugle yards is that existing yards based on traditional rectangular layout can often be retained and used as part of the bugle system if yards are to be modified or extended. This is usually difficult to do if circular or dee yards are to be erected.

## FEATURES OF BUGLE YARDS

Sheep are taken from a holding yard into a series of pens which form the bugle. These become narrower in width as they curve around the point where the operator stands, and thus force the sheep toward the working area while giving the operator easy access to all forcing pens. The wide end of the bugle is usually 2.4 to 3 metres wide, although in some plans the bugle expands out to 5 to 7 metres. While this wider measurement allows more sheep to be held, it reduces the operator's control as sheep can escape back past him.

The inside fence of the bugle turn is closed in or sheeted for a distance of at least 5 metres (depending on yard design) to prevent the sheep seeing the operator at the drafting or working race.

In most bugle yards the drafting and working race are separated. Where there are two persons working in the yards, this separation of the races will save time filling the working race. This is an important difference when compared with circular yards, where the working race is filled through the drafting race.

A feature of many bugle yards is a double working race. A double race can give more efficient use of work time, particularly if two operators are available to work in the yards.

The yards incorporate a drafting gate at the end of the working race to allow drafting after classing or other treatment.

Sheep can be moved from one area to another without impeding other sheep about the yards.

The bugle can be used to direct sheep to the shearing shed or dip.

Some designs have a bugle which can be varied in width at the narrow end by having the outer panels mounted on wheels which are free to run on a concrete floor section. The bugle can be closed down to form a drafting race, or opened out to give a wider access to the working race. This type of bugle yard has the working race end on to the draft (see Photo 4).

## ADVANTAGES

Sheep movement is generally improved by having them always travel through the yards in the same direction and along the same path. The same forcing area is used to deliver the sheep into the drafting race, working race, dip and shearing shed.

The curved design directs the sheep back towards the direction from which they entered the yard. Sheep flow is improved by having them move in the direction they recognise as "home", that is, moving towards the paddock.

The operator loses little time and effort in moving about the yards. The curve of the bugle and the placement of the drafting and working races allows the operator to be close to the sheep at all times.

Movement of sheep through the yards is simplified by the curved shape of the bugle. Absence of corners and the use of large gateways encourages sheep movement.

In designs where the races are separated, there is opportunity to install a double working race which can be covered if required.

Material costs are kept to a minimum by having only one forcing area, a relatively small working area, and outer holding yards of cheaper construction.

Bugle yards can be efficiently operated by one person.

## DISADVANTAGES

Care is required in planning and laying out bugle yards to get the correct shape and relationship of components.

Operators take time to become accustomed to using them.

In some designs the pens leading from the draft are small, and frequent stopping may be necessary to move sheep out of them.

The position of the drafting race between the working race and forcing area in some layouts can hinder the free movement of operators when the working race is being used.

## REPRESENTATIVE LAYOUTS

Numerous varieties of bugle yards have been used, and the diagrams and photos following represent a selection of layouts.

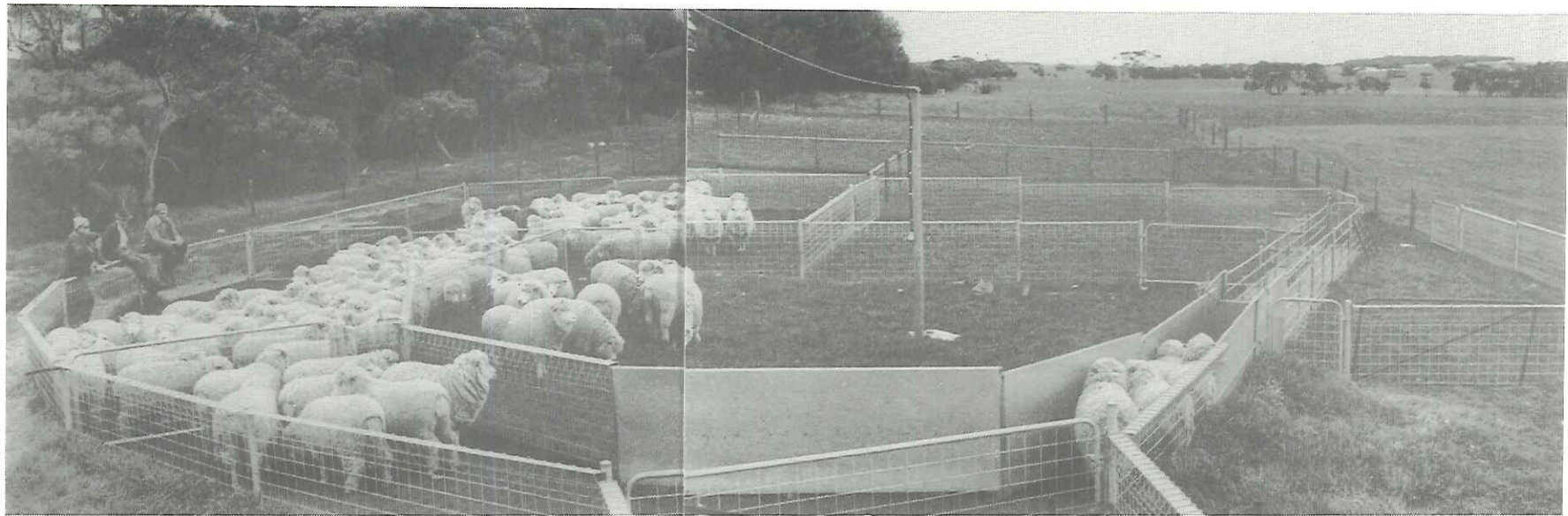


Photo 2. Bugle yards with the working race end on to the drafting race

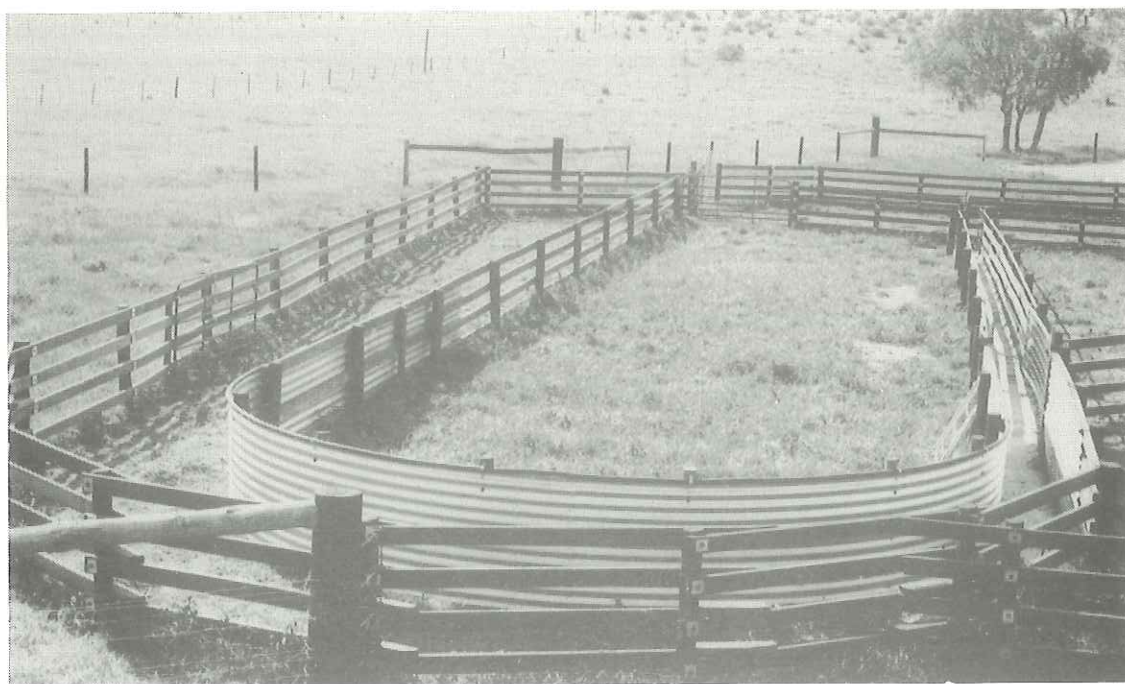


Photo 3. Bugle yard and working race

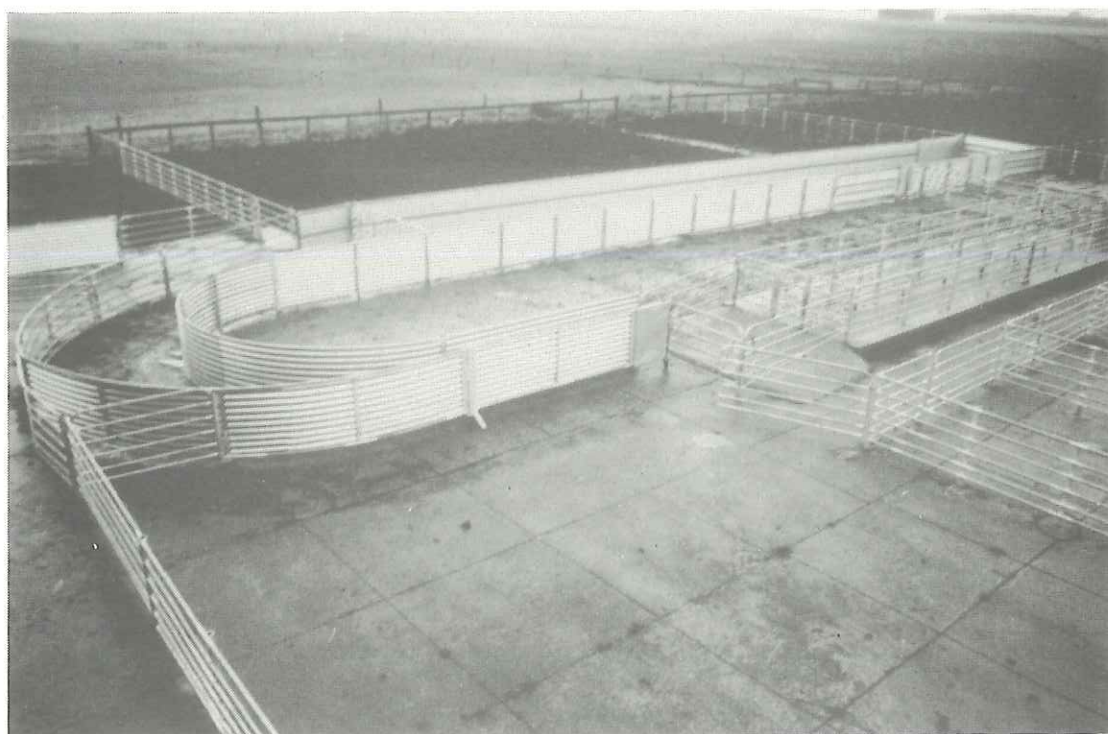


Photo 4. Bugle yard with the drafting race able to be adjusted in width. The end panels on the outer side are fitted on castor wheels (see also Diagram 8)

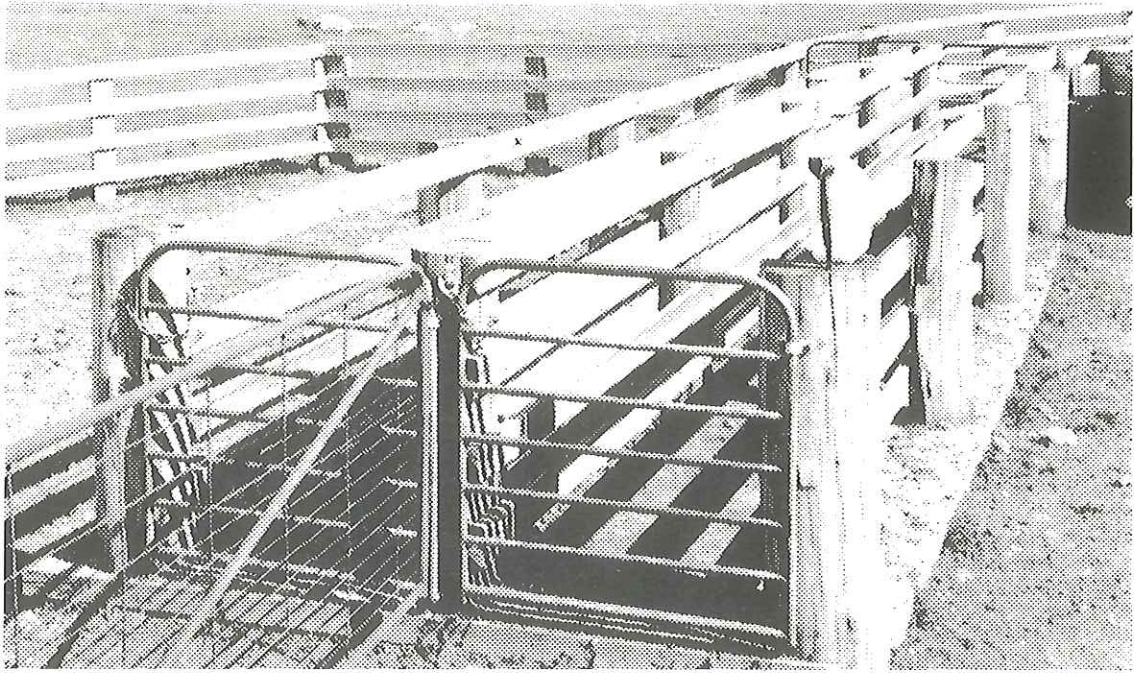


Photo 5. Double working race used with bugle yards

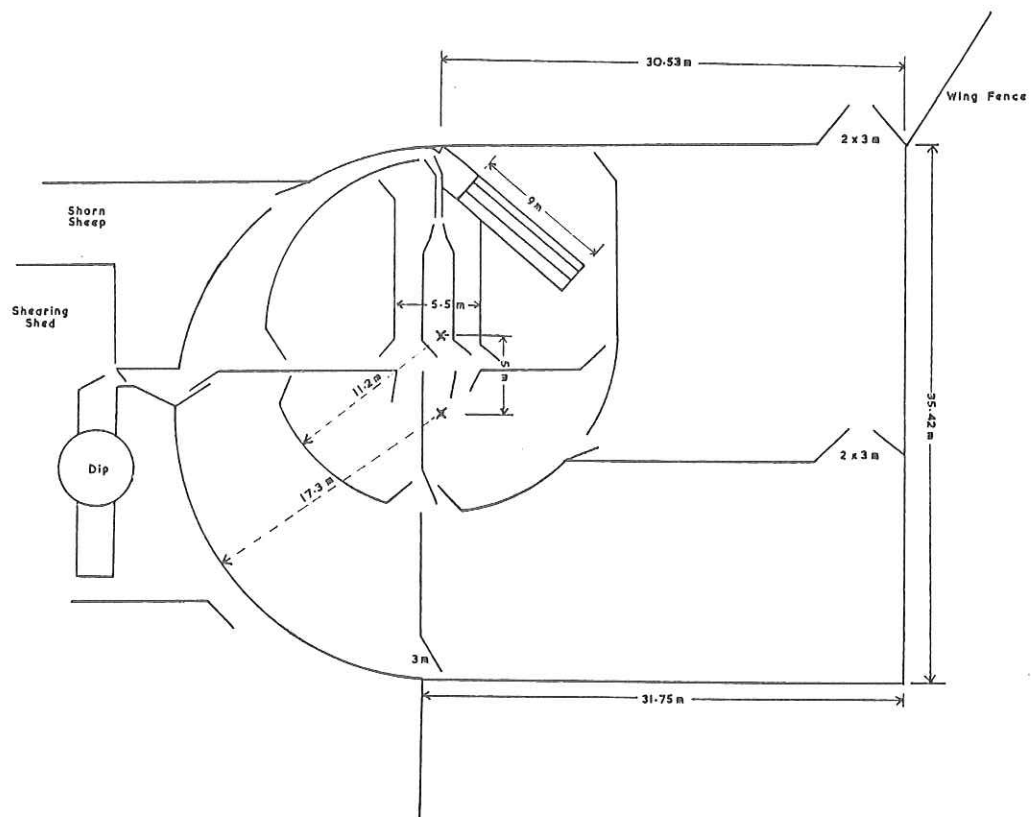
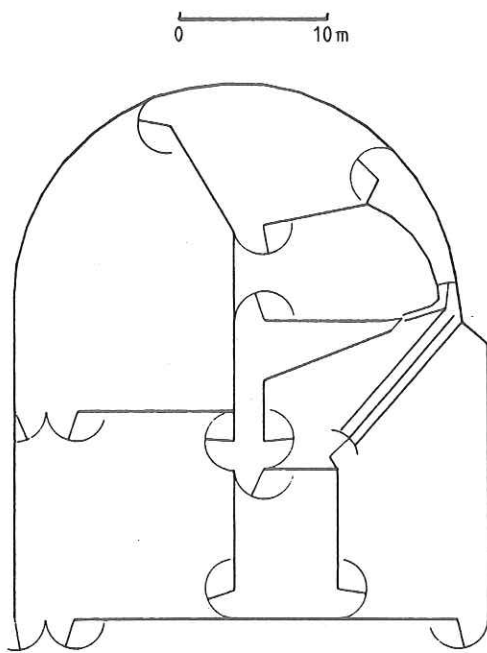
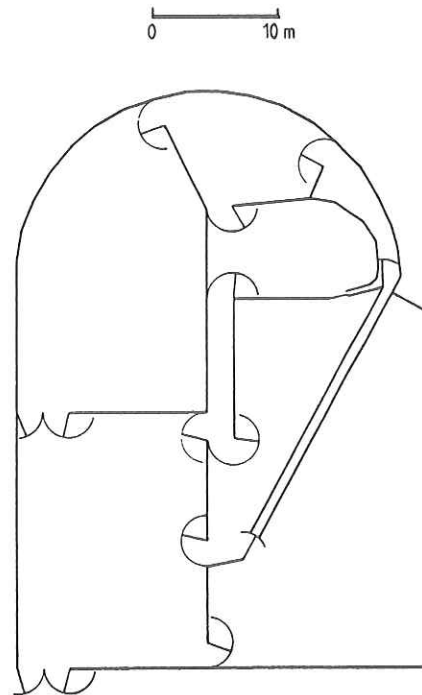


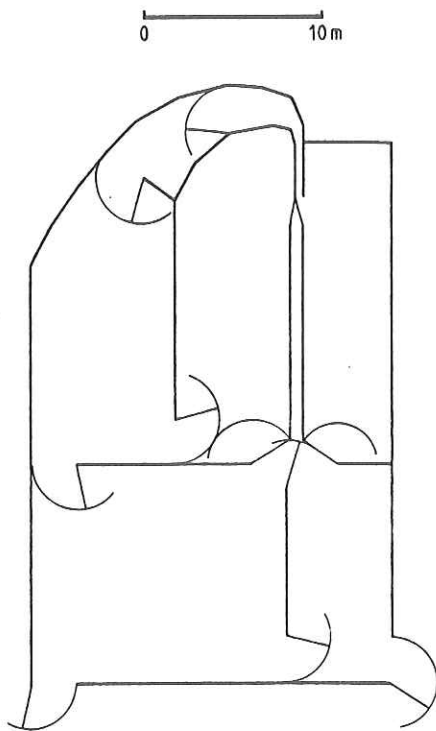
Diagram 1. Bugle yard to handle 2000 to 3000 sheep



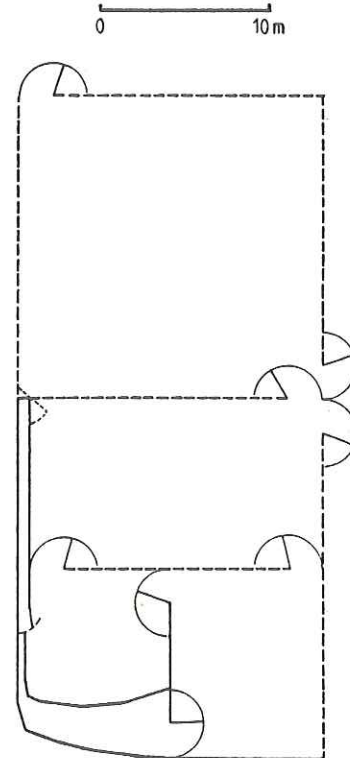
**Diagram 2.** Bugle yards with three-way draft and separate double working race



**Diagram 3.** Bugle yards with two-way draft and separate long working race



**Diagram 4.** Bugle yards with working race following a three-way draft



**Diagram 5.** Rectangular yards modified by adding bugle approach to draft and working race

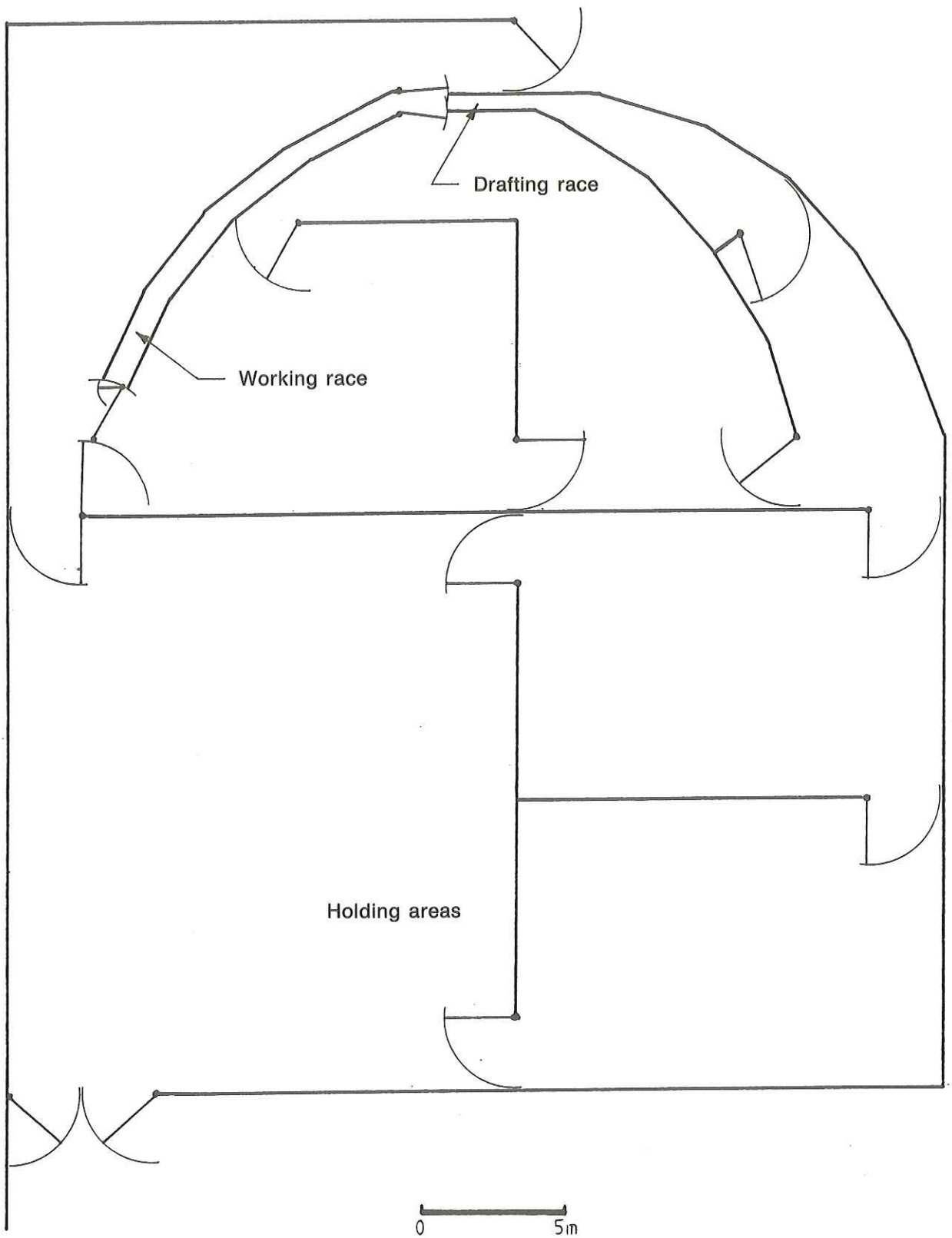


Diagram 6. Bugle yards with curved working race end on to the drafting race

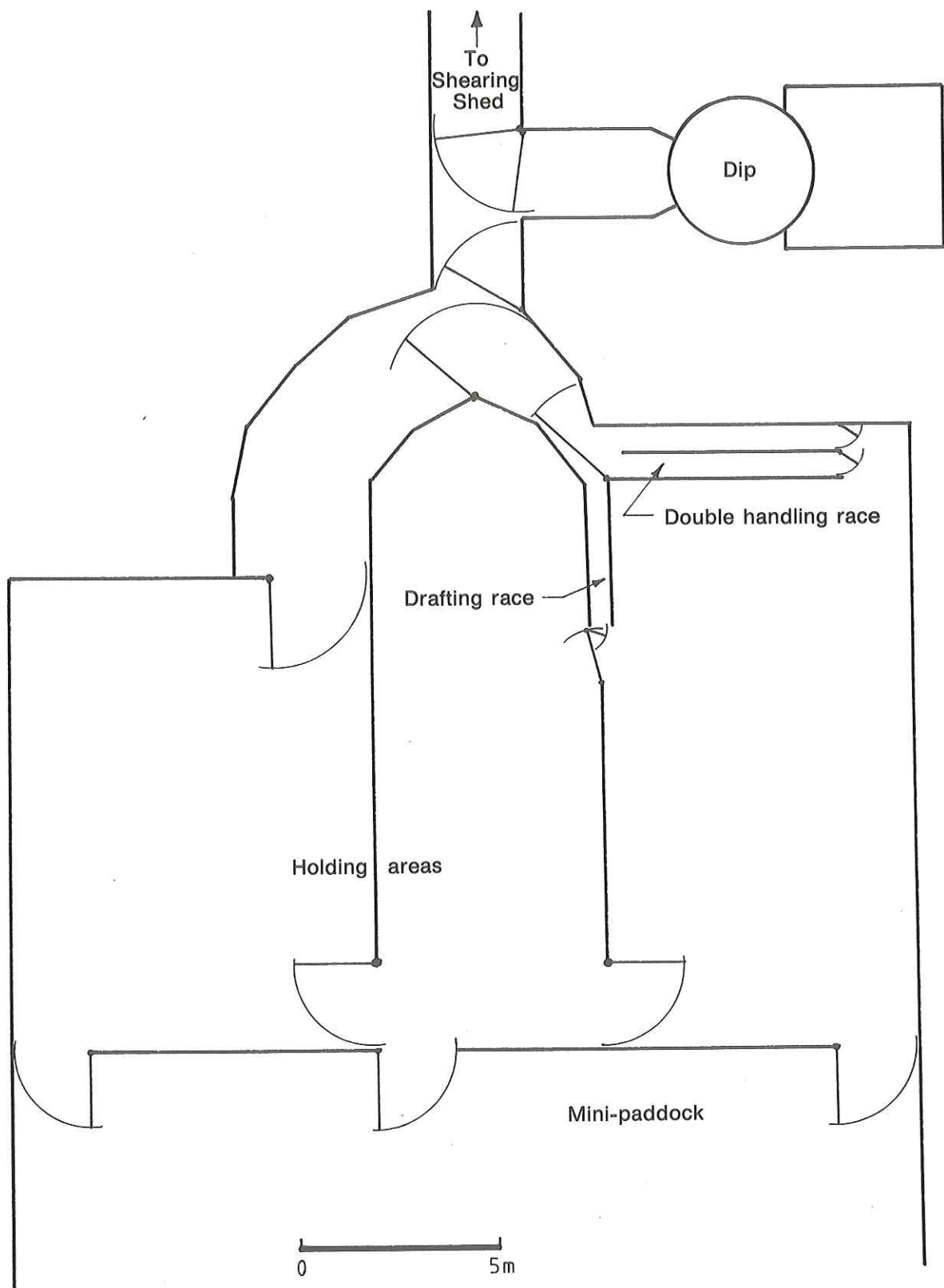


Diagram 7. Bugle yards with double working race and two-way draft



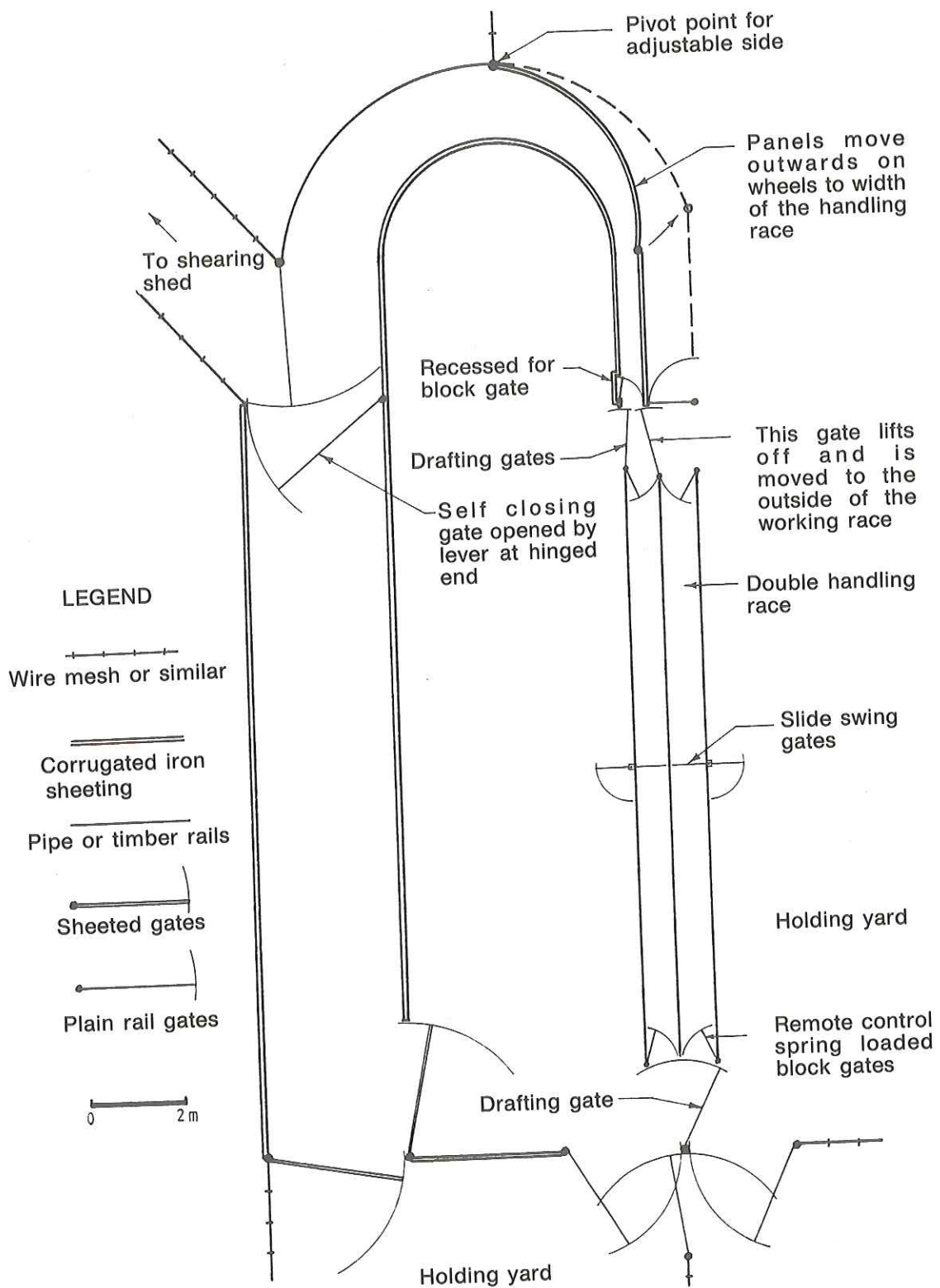


Diagram 8. Bugle yard with bugle adjustable in width

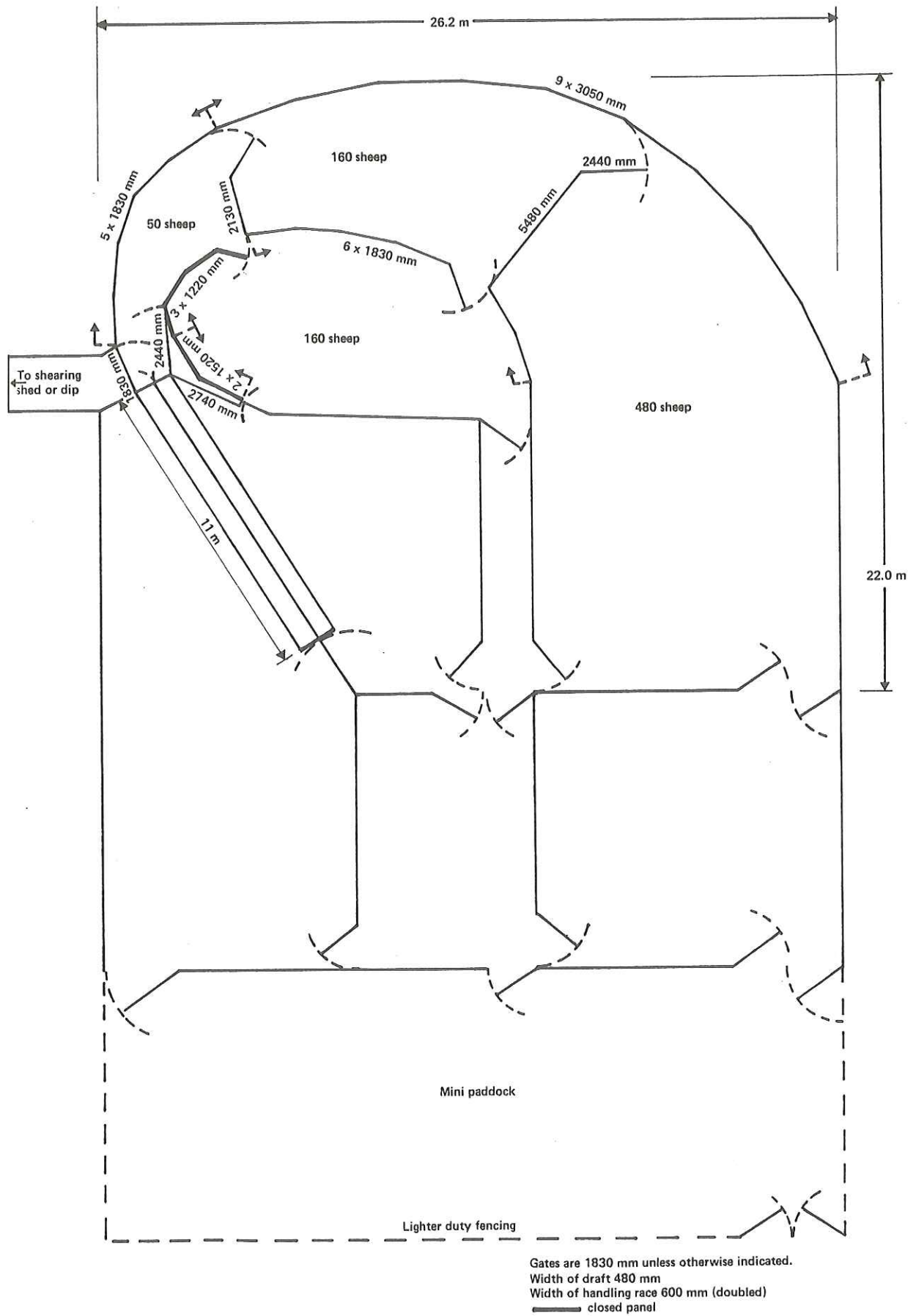


Diagram 9. Bugle yards with separate drafting and working races