

Chapter 12

Boreholes

to persons with disabilities

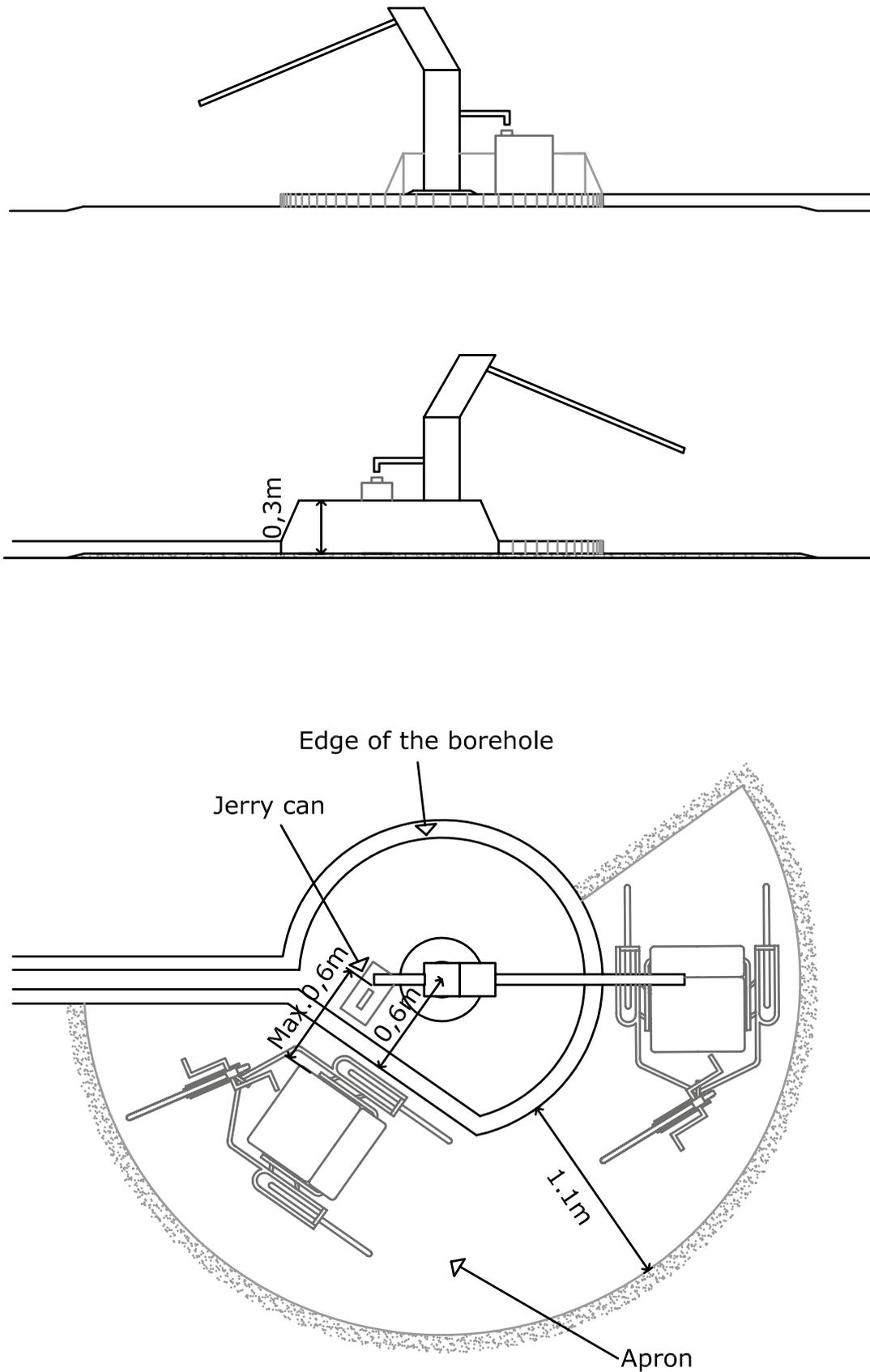


Fig. 12.1

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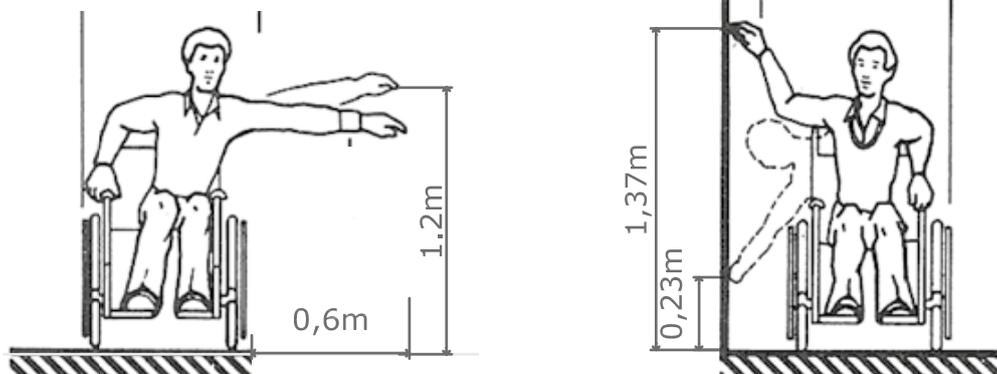


Fig. 12.2

(12.1) PLANNING PRINCIPLE

The Ugandan standard boreholes can be changed into accessible boreholes.

At the water source, the user needs to be able to get into a position to reach the water drawing mechanism, to be able to operate it, to reach the water produced and to put the jerrycan for water.

By placing a horizontal area along the borehole and changing the edge as shown in fig. 12.1, it is possible for a wheelchair and tri-cycle user to both reach the pump handle and place the jerrycan under the water tap.

(12.2) APRONS

There should be a horizontal concrete apron along the borehole from the pump handle to the tap as shown in fig. 12.1.

The apron should have a roughened finish and non-slippery surface to avoid accidents.

The apron should be minimum 1.1m wide outside the edge of the borehole to ease access to the hand pump and water drawing point by a wheelchair or tri-cycle user or any crawling person. Please note that the width is larger next to the raised edge.

(2.3) SLOPE

In case of level difference between the apron and the surrounding area, a curved slope should be established to ease access by a tri-cycle or wheelchair user.

The slope should be maximum 1:10m (see chapter 1 about ramps)

(12.4) BOREHOLE EDGE

It is necessary to make the edge close to the tap higher at 0.3m to avoid water splashing outside the edge.

The distance between the high edge and the middle of the pump should be maximum 0.6m, angled towards the edge.

The distance between the tap and the side of the tri-cycle or wheelchair seat should be maximum 0.6m. This distance enables a wheelchair or tri-cycle user to reach the tap by the jerrycan (See fig. 12.2).

(12.5) PUMP HANDLE

The pump handle should be installed at a proper height from which it can be reached, either from sitting position in a wheelchair or at the ground level.

The pump handle should be lengthened to provide more leverage, so that less strength is needed to operate it. It also allows the handle to be reached by a person sitting down (See fig. 12.2).