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Table 3a Construction steps used to create a clay core dam in the 18th century *(based on information provided by Binnie, Grundy and Hinde cited by Roberts, 2001)*

1. Dig a sizeable trench for the foundation of the clay core, excavate the ground until solid bedrock is uncovered
2. Use the clay that has been discovered for the clay core, this should be rammed and built upwards
3. Layer the clay in sheets between 6 and 7 inches for the core, if a dusting of sand was applied to the clay it prevented the tools that were in use from sticking to the clay
4. Raise the sides of the dam simultaneously to the height of the core, the earth should be rammed
5. Graded slopes on the dam upstream with protection in the form of stone pitching and a ratio between 5:1 and 3. 5:1 and on the downstream slope protect the slope of ratio 2:1 with sods of earth

Table 3b Construction steps for the lining of the dam in the 18th century (Based on the information provided by Binnie, Grundy and Hinde cited by Roberts, 2001)

1. Clear the excavated ground of objects such stones and rocks; use clay to fill any holes on the ground
2. Cover the excavation in the initial clay lining, approximately 6 inches thick, starting at the lowest end
3. Use slaked lime on the clay to ease the ramming works and reduce the excess water through absorption. This method also prevents foreign bodies sticking in the clay.
4. Rammers used by the labourers working in gangs. Tread on the clay in boots or use trained animals (sheep)
5. Flat beaters used by labourers to clear the floor for another layer of clay
6. At each additional clay layer add water to prevent the clay drying out and cracking and to make the clay workable
7. Repeat the number of layers until the desired height is reached. Allow each layer to consolidate before adding a new layer
8. Cover the penultimate lining with 2 inches of chalk and add a final outer layer of clay
9. Smooth the top layer, with the back of a spade for example
10. The sides of the lake should have a thicker layer of clay to prevent them drying out when there is less water in the lake in summer