



DESIGN OF FLOOR

The shown irrigation structures Fig. (1), (2), are subjected to percolation and uplift forces. The soil underneath the structure is assumed homogenous with Bligh's coefficient = 15 and Lane's coefficient = 6

IT IS REQUIRED TO:

- 1) Find the required end level for the unknown sheet piles depth and the dimensions to safeguard the structures against percolation by using the coefficient of Bligh and Lane.
- 2) To a reasonable scale, draw the uplift pressure diagram under the floor of the structure, showing the values of each ordinate.
- 3) To a reasonable scale, draw the seepage water pressure diagram on the first sheet pile, showing the values of each ordinate.
- 4) Check the thickness of the floor at the required sections.
- 5) Add any suitable precautions against piping.