A BOUNDARY ELEMENT METHOD FOR STEADY INFILTRATION FROM A SINGLE CHANNEL

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ABSTRACT

The matric flux potential and horizontal and vertical flux distributions are obtained using integral equation techniques for a single irrigation channel. The theory is based on the assumption that the hydraulic conductivity is an exponential function of the soil water potential. In the relevant special cases the results are compared with results obtained previously by Batu [4] and Warrick and Loman [20].

Keywords : *matric flux, irrigation channel, hydraulic conductivity.*

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