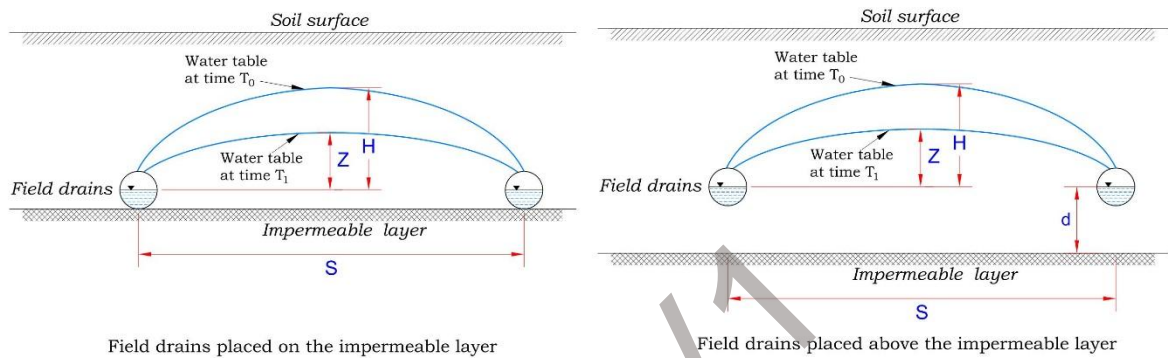Q = L* S* drainage co-efficient (where L is the length of the field drain)

Figure 5-3 – Placement of Field Drains with Respect to the Impermeable Layer

For single-interceptor lines, it is possible to calculate the Radius of Influence using Sichardt's formula (published by CIRIA), as follows:

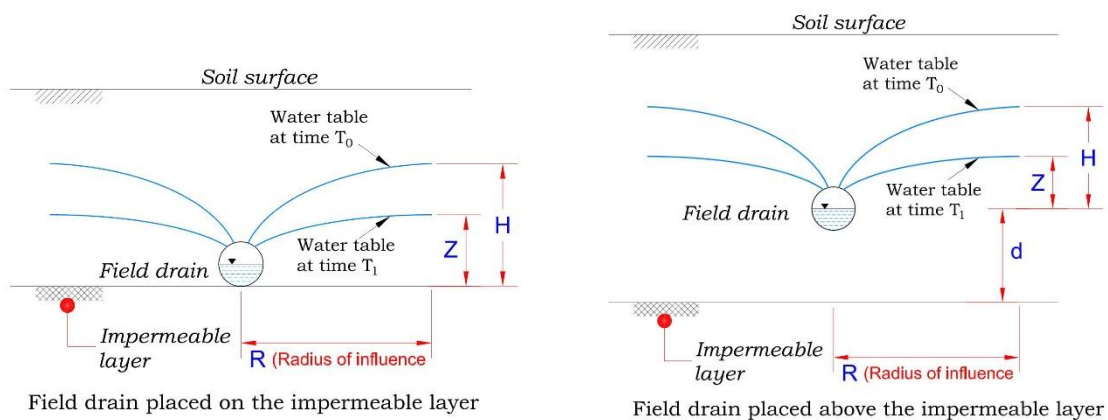| Radius of Influence	$R = 2000M\sqrt{K}$
Where: M = Drawdown (L) K = Coefficient of Permeability (L/T)	

With reference to Figure 5-4 below, the steady state discharge of single line drains can be computed using the following formulas:

drains placed above the impermeable layer	$Q = CA\dfrac{2\pi KH(d+H/2)}{4R^2}$
drains placed on the impermeable layer	$Q = CA\dfrac{KH^2}{R^2}$

Figure 5-4 – Placement of Single Field Drain with Respect to the Impermeable Layer

To calculate the value of the drawdown (H-Z), the following two methods can be used:

- United States Bureau of Reclamation Charts; or

PAGE 47