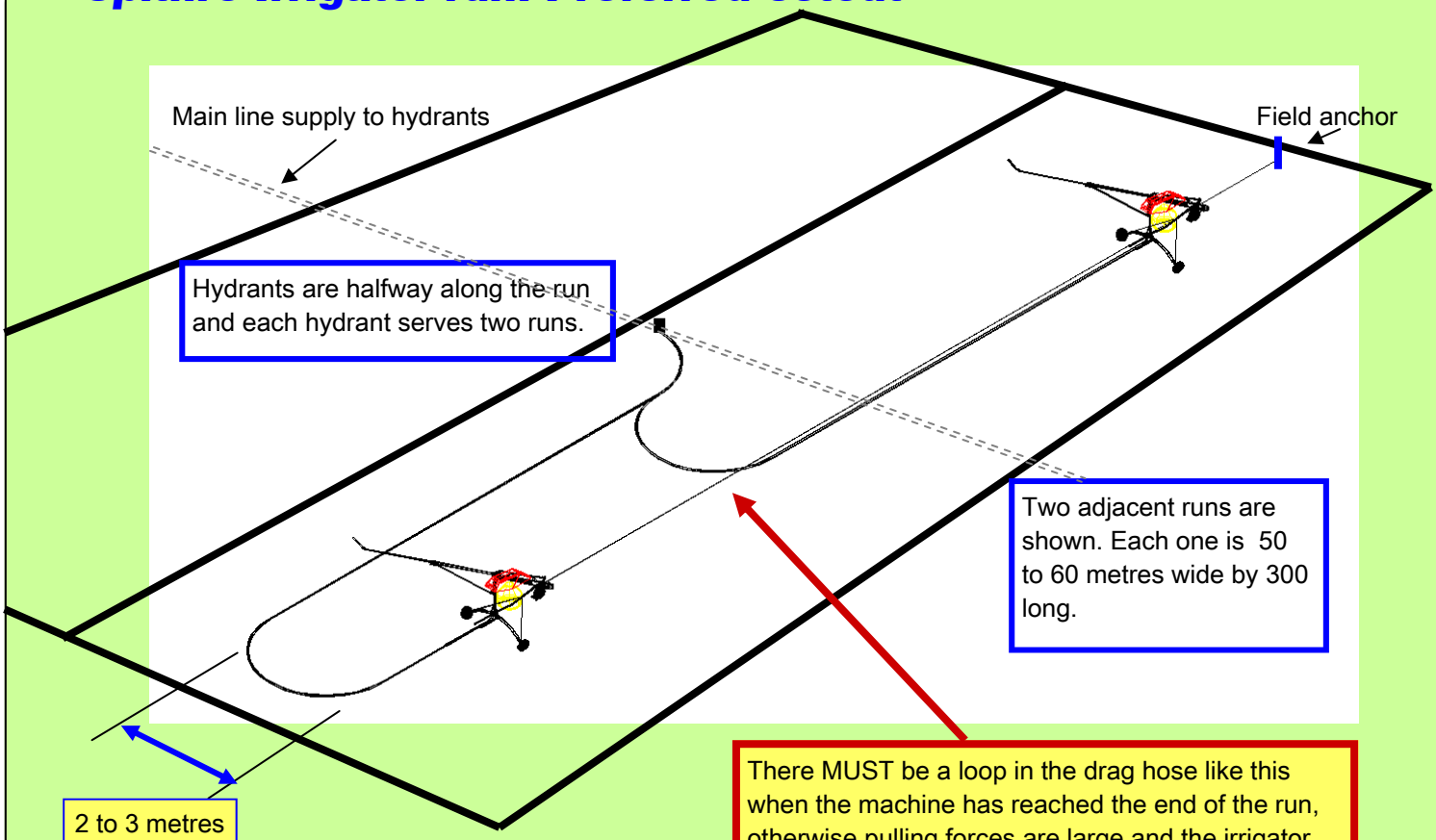
Spitfire Irrigator run: Preferred setout



Guideline notes:

- Always irrigate on to soils with a soil moisture deficit, otherwise you will lose the water (and nutrients if you are irrigating effluent) Don't apply more liquid than the soli can absorb. Let's keep effluent, especially, in the root zone!
- Make the irrigator travel down the slope rather than have it strain to pull itself and the hose up the slope
- Low operating pressure means that the wetted width is reduced and pulling power (from the thrust) is also less
- For effluent, there is less spray drift (aerosols) when the running pressure at the machine is between 280 and 300 kPa
- Scrubby clumps, ruts and anything else that the hose or wheels may catch on must be removed from the runway.
- The main pipe line size for this machine with 18 to 20 mm diameter nozzles is between 76 and 100 mm internal diameter
- The drag hose for these nozzles is usually 63 mm OD MDPE about 180—200 metres long. Longer hoses need more pressure and take longer to set up.
- Use an in-line screen at the pump to remove solid chunks from effluent before they block the nozzle. (See the web page = "In-line screens")
- Sand traps remove sand and stones before they get into pipe lines where their sedimentation can build up to block the line. Sand also wears pumps necessitating early replacement of worn parts.
- If you are pumping chunk-and-sand-free effluent (i.e. just the stuff that's been through the cow) then you can use highly efficient pumps which use about half the power of centrifugal solids pumps and deliver the same flow to every hydrant, irrespective of height or distance from the pump. (See our web page "Irrigation pumps")