

CASE STUDY - Horse Stable

Non-Return Valves



Objective:

To prevent backflow flooding traveling up an existing drainage pipe from an irrigation pond.

Solution:

Fernco's Non-Return Valves

A stormwater management solution was implemented for a horse stable complex to manage and direct stormwater runoff effectively. The solution incorporates retention tanks designed to collect and store stormwater from the complex. To ensure optimal operation and protect downstream infrastructure, a Fernco Non-Return Valve (NRV) was installed as part of this system.

The stormwater retention system includes large retention tanks connected to a 150mm drain line. Once the retention tanks reach 80% capacity, the system discharges, releasing water through the 150mm drain line. This drain line channels water into a nearby irrigation pond, supporting sustainable water use within the property.

The Fernco Non-Return Valve (NRV) was strategically placed within the drainage line by Collins & Sons Ltd, to prevent backflow travelling from the irrigation pond up into the retention system, protecting the drainage line

from contamination and damage. Additionally, the NRV helps maintain the quality of water within the system by blocking foreign matter and preventing rodent ingress. By allowing only one-directional flow, the Fernco NRV ensures uninterrupted water discharge while maintaining system integrity and preventing blockages.

The installation of the Fernco NRV within the retention tank discharge system has proven essential in maintaining a safe, efficient, and environmentally friendly stormwater management solution. The NRV has minimized maintenance needs and improved the overall reliability of the stormwater system by preventing backflow and protecting against potential contaminants and pests.

