

Drip Distribution System -Monaghan Direct Provision Housing 160 pe

An upgrade to 3 overloaded wetlands was urgent as the adjoining stream was heavily polluted with the sewage and feeding into a sensitive catchment. It was a difficult site due to tight clay soils and a high watertable with mottling at 400mm.

A drip distribution system was proposed to improve a difficult situation. The drip tubing was mole ploughed into two fields 150mm below ground level and completed in April 2015. The dripline was Geoflow pressure compensating with root inhibitor and anti-microbial coating.

System design and commissioning of zone isolation by solenoid and check valves with time dosing by Ash Environmental with project engineering by FJ Coyle & Assoc. A significant improvement in stream water quality resulted with deeper groundwater quality continuing to improve.

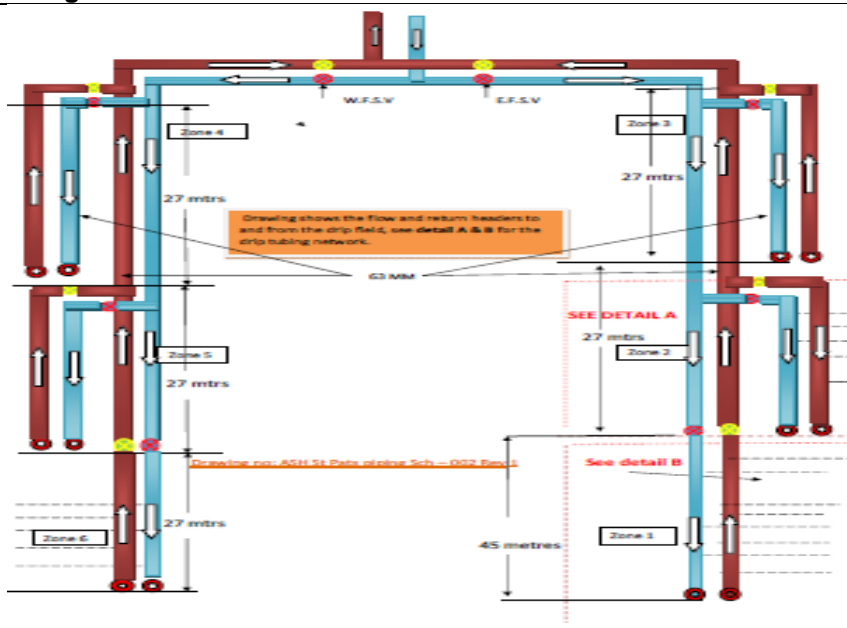
Design details:

Flow:	24,000 litres/day
Wastewater quality:	Secondary treated domestic strength wastewater.
Infiltration rate:	3 l/m ² /day
Area:	8,000 m ²
Nominal dimensions:	6 equal zones
Pump capacity:	150 litres/min
Head (TDH):	35 metres



Overloaded wetlands were polluting the adjoining stream.

Design Schematic -6 cells in 2 fields



FM secondary treatment system



PVC manifolds to multiple cells with solenoid valve controlling sequential 6 zone dosing.



Servicing by Ash Environmental



Driplefield operating well 6 months after installation



Water quality of adjoining stream is significantly improved