



# CIVILS

Quality Plastic Solutions

## Catchpit Case Study

### Project Outline

- R.J Building Services contacted one of our stockists regarding the requirement of a 1m<sup>3</sup> attenuation system for Summerhill, Bryn y Cochin located in Ellesmere, Shropshire. There was also a requirement for a Hydro-Valve (5 l/s) for the project.
- The client had in mind that he needed a control manhole with some kind of tank solution upstream of it. When we examined the volume required and the levels available, our solution was to combine the storage volume and the control manhole as one. This solution was well received by the client.

### JFC Project Contribution

- JFC prefabricated catchpit chamber with pedestrian duty galvanised steel lid.
  - » 1.2m diameter with an overall depth of 2.0m (1.7m to outlet invert plus a 0.3m sump).
  - » 1 x 110mm inlet (0.7m to inlet invert) and 1 x 150mm outlet.
- Hydro-Valve to give 5 l/s discharge on a 1m head.

After considering the requirements and speaking to the contractor, JFC proposed a vertical chamber of 1.2m diameter with 1m difference between the inlet invert level and the outlet invert level which supplied the 1m<sup>3</sup> of storage required. We also fitted a Hydro-Valve to give the required 5 l/s discharge as specified.

### JFC Product Solutions

#### Catchpits

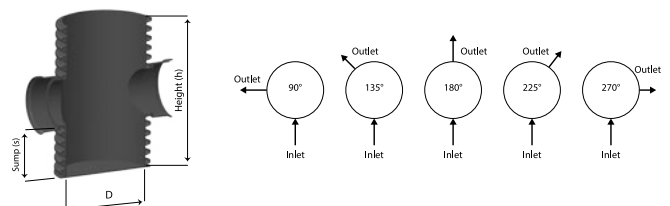
JFC design a range of catchpits / silt traps to separate silt and other particles. This improves the quality of water before it is reintroduced back into the drainage system. As each individual SuDS system is different, they are individually fabricated to take into account water flow rates and ground conditions that differ from site to site.

### Applications

Surface and stormwater drainage.

### Features & Benefits:

- Fast Installation
- Pre-fabricated
- Bespoke as per customer specifications
- Designed to fit JFC CorriPipe™
- Catchpit covers available on request



All off the above culminated in the development of a great working relationship with the site contractor and our distributor partner involved in the project.

The client was also able to make savings as the unit was prefabricated with the Hydro-Valve pre-fitted and the installation could be completed during a single excavation.

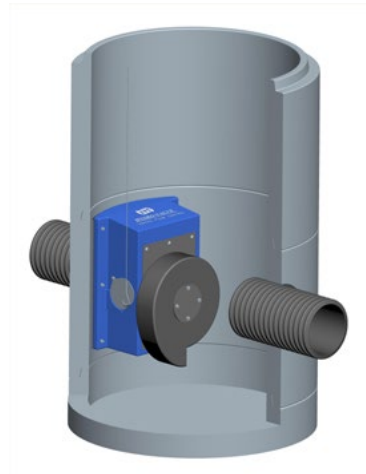
## JFC Hydro-Valves

The JFC Hydro-Valve is a vortex flow device for controlling the flow rate of stormwater before discharge into a local storm drain or water course. It is available in a range of sizes with varying flow rates to suit all specifications. Manufactured to customer specifications in order to achieve a specified flow rate at a given height. This self-activating device uses vortex principles to control and attenuate stormwater flow without the need for moving parts or the need for an external power source.

### Features & Benefits:

- WRC Certification
- Fast Installation
- Customised Specification
- 3 - 6 Times greater Oriface CSA
- Hydraulic Data available

JFC Hydro-Valve and Hydro-Valve slider fit into one of the following manhole types depending on specification.



CURVED BACK	FLAT BACK†
1200mm	1050mm
1350mm	1800mm
1500mm	2100mm
1800mm*	2400mm

\* Only available in larger units.

† Requires a concrete shuttered wall on the inside of the manhole chamber.

HYDRO-VALVE	HYDRO-VALVE SLIDER
1 - 50l I/s Typical Flow rate	1 - 20 l/s Typical Flow rate
400 - 3000mm* Typical Head Height	400 - 2500mm* Typical Head Height

\* Contact JFC for further information.

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