



British Precast Drainage Association

Publications from the British Precast Drainage Association (BPDA):

BPDA was formed in 2017 from the integration of the Concrete Pipeline Systems Association (CPSA) and the Box Culvert Association (BCA).

Information published by both CPSA and BCA will be rebranded and replaced as BPDA in due course. New material will be branded BPDA.

All CPSA and BCA web traffic will be redirected to the new BPDA web site at www.precastdrainage.co.uk

CPM precast concrete provides Perfect drainage solution on the first Government supported self-build supersite in St Helens

Precast concrete manhole systems have been used to provide drainage access on the first Government supported self-build supersite development.

The two-acre French Fields site at Clock Face, St Helens, is a partnership between developer Mark Ward, BuildStore and Kingspan Potton Homes. It comprises 18 individual plots for detached custom-built homes. Each plot is ready for building to commence and comes complete with access, services and site drainage already in place.

The development makes extensive use of a wide range of precast concrete drainage products including CPSA member company CPM Group's precast concrete Perfect Manhole system which was used to ensure construction of the foul drainage installation could be completed quickly and cost effectively.

The development includes six Perfect Manholes, each with a precast concrete monolithic multi-inlet base unit complete with pre-formed channels and benching. The manhole's robust design and watertight thick-walled vertical chamber rings means that it can be installed without a backfilled concrete surround, which allows the open excavation to be backfilled sooner.

The precast manhole system uses less concrete than in traditional manhole construction so its embodied carbon is up to 43% lower. There is also less construction waste and less excavated material disposed to landfill. Factory production ensures the material finish is of the highest quality and well above that achieved on site.

"One of the main advantages of the Perfect system was the speed of delivery combined with the incredible speed of site installation," says developer Mark Ward. "The end result is a system of flawless manholes, which enable the site infrastructure to proceed at a rapid rate, while maintaining high quality workmanship through each and every stage".

The surface water drainage system also makes extensive use of precast concrete products. It features 120m of 825mm diameter concrete pipes installed below the site's L-shaped access road to collect and store rainwater run-off. A vortex flow regulator limits the rate of flow from the site while ensuring excess run-off is temporarily stored in the large diameter pipes.

The French Fields project is the first self-build supersite in the UK. Currently, 14 of the 18 plots have been reserved with work on the first home already underway. The scheme is the blueprint for a series of similar developments across the country which it is hoped will inspire more people in the UK to build custom designed homes. For further information about precast concrete manholes and precast concrete pipeline systems go to www.concretepipes.co.uk

