

CASE STUDY

Weston Villages Development - AquaGrip

The Weston Villages development in Somerset represents a significant expansion of housing and infrastructure to support growing regional demand. Located near Weston-super-Mare, this scheme includes the creation of several new communities, such as Haywood & Parklands Village, aimed at delivering 5000 to 6000 new homes over the next decade. A critical component of this ambitious project is the installation of a new 4.5km rising main to service the northwest (NW) housing schemes. This main will support these two new communities with a working pressure of 3 bar but has been tested to 9 bar to allow for future expansion.

Viking Johnson supplied AquaGrip flange adaptors for the new rising main. They are a mechanical fitting, easy to install and provide a high-end load restraint. AquaGrip enables the PE pipeline to be connected to ductile iron pipework allowing for the installation of multiple air valves along the network. Air valves are essential in maintaining the rising main's functionality by regulating the air pressure within the pipes. These valves prevent airlocks, which can obstruct the flow of wastewater, and minimize the risk of pipe bursts by allowing excess air to escape, ensuring a smooth and efficient system.

Viking Johnson has been working closely on this project with their key channel partner Jewson Civils Frazer, Envolve Infrastructure, the main contractor on site, and with the client, Wessex Water.



AquaGrip is a class one rated fitting.
From a pressure testing perspective this gives you the confidence that it will cope with the pressures it will be subject to.
Additionally as we get allowable movement on the end of the joint it allows us the flexibility in the connections to ensure the design gradients can be adhered to.

Alastair Lloyds Envolve Senior Project Manager



It is beneficial because AquaGrip helps us connect two different pipe materials together in an economical and efficient way. It is a good engineering solution as it is robust mechanical fitting and provides thrust restraint. On this scheme we are also using the fitting to give us flexibility and confidence in construction and design when connecting up sections of pipework that have been laid by open cut or horizontal directional drill. Transitioning from PE to DI also allows us to easily incorporate air valve arrangements on top of the pipework.

Jude Sira Network Technical Manager – Wessex Water

Wessex Water

SECTOR

Infrastructure new rising main

LOCATION

Somerset

CLIENT / END USER

Wessex Water

CONTRACTOR

Envolve Infrastructure

DISTRIBUTOR

Jewson Civils Frazer

SPECIFICATION

UltraGrip

AquaGrip Flange Adaptors (400mm & 450mm) Large Diameter Flange Adaptors FlexLock envolve³

AquaGrip[®]

FRAZER

