

## Introduction

We encourage early consultation on development proposals to consider how they may impact on the **location** and **capacity** of our water and sewerage assets including underground pipes and tanks and above ground operational sites.

As part of an initial assessment, the planning liaison team will review operational data and consult with our engineering team. An initial site appraisal will enable us to identify whether there is current capacity within our existing networks or further appraisal work is needed.

A detailed appraisal will use computer network modelling to consider improvement schemes. We have regional computer models for water and drainage which are updated as part of a rolling programme.

This level of appraisal may incur a fee.

## Clean water network modelling

Computer modelling of the existing water supply network will be recommended to check that adequate pressure will be available for existing and new customers within that particular area.

Modelling will be recommended where:

- there are existing pressure issues in the local network
- the local mains are inadequate for the proposed scale of development
- there have been recent operational changes in the local network.

We will provide results from modelling studies two to four weeks after receiving all the required information. Modelling will typically recommend upsizing of water mains and / or the recalibrating of system valves. We may recommend the use of storage tanks for high demands or commercial supplies.

## What we need from you:

- a site location plan
- a site layout plan, if available
- finished floor levels (FFLs), if known
- details of your required estimated peak instantaneous flow (litres per second) and yearly estimated requirement (cubic metres) if the development does not relate to standard housing.

If the figures you provide do not align with our design standards, we will discuss this with you.

## What we provide as a result of modelling:

- a description of the off site reinforcement
- a budget cost if requested and the site is either allocated in Local Development Framework or a planning application has been submitted
- an estimate if modelling was undertaken subsequent to planning approval and submission of a fully completed new connections application form.

## Sewerage network modelling

Computer modelling of the existing sewerage network will be recommended to check that additional flows from a development will not lead to an increased risk of flooding and pollution.

Modelling will be recommended where:

- there are existing flooding issues
- the local sewers and / or downstream pumping stations are of inadequate size in comparison to the development size
- a sewer overflow downstream of the development will be impacted by additional development flows.

Drainage network modelling is more complex due to the difficulty in monitoring surface water discharges to sewers. Flow monitoring is usually required to enable us to determine available capacity and network performance.

Where a drainage area model is not up to date, flow monitoring will be required and this will impact on timescales and cost.

We will usually scope the network modelling development proposals. The initial scoping report will identify the issues involved, the cost of modelling activities and potential solutions.

Scoping will begin when we have received a £2,000 contribution from the applicant which is accepted on a rechargeable basis. Scoping usually takes two to four weeks to complete once we have received the required information.

Depending upon flow surveying requirements full modelling will normally take between two to 12 months to complete and will cost between £6,000 and £40,000 (we will agree costs for recharge and offset against recommended capacity scheme).

## What we need from you:

- a site location plan
- the scale of development (number of residential units, area of commercial development, etc)
- a site layout plan including proposed on site sewer network (if available), the preferred point of connection and whether this can be achieved by gravity or pumped connection
- any trade effluent information.

Plans should be in electronic format in Autocad or alternatively Adobe.

## What we provide as a result of modelling:

- a description of the capacity improvements (letter / presentation)
- a budget estimate
- delivery framework.

## Surface water network modelling

This is only carried out under exceptional circumstances and where preceding options in the sustainable drainage systems (SuDS) hierarchy have been discounted. Please contact the local development engineer for further discussion – for details see the contacts page at [www.wessexwater.co.uk/developers](http://www.wessexwater.co.uk/developers)

## Sewage treatment modelling

Sewage treatment capacity is assessed on a rolling programme considering Local Development Frameworks and population projections.

Appraisal will be needed where an unplanned development of significant size in the catchment is proposed or where a new trade effluent discharge is required. Please contact the planning liaison team for further discussion.

## Costs of off site reinforcement / capacity improvements

The cost of off site reinforcement to the water supply network can normally be included in Section 41 (Water Industry Act) arrangements. The cost of capacity improvements to the foul drainage network can normally be included in Section 98 (Water Industry Act) arrangements.

It means that future income generated by the development can be offset against the capital costs of the works.

## Further information

### Planning liaison team

email [planning.liaison@wessexwater.co.uk](mailto:planning.liaison@wessexwater.co.uk)  
call 01225 526169