

The facts concerning sw drainage in Westwells:

The Sands Quarry site is subject to flooding as witnessed by the flood of September 2014 where the whole of the site was flooded and some people were even using kayaks on the site to paddle about on the flood waters.

So even when 100% of the site is exposed as permeable ground, (i.e. not covered in the proposed buildings and car parks) the water cannot soak in fast enough to avoid a flood. And ARK say they are going to rely on infiltration as the ultimate destination of the surface water falling on the site. History proves this does not work.

In Sept 2014 there was so much flood water that it overwhelmed the existing private surface water drain and the storm water simply flowed through my house instead.

So when Hydrock say there is no history of flooding, this is incorrect. Indeed, when Hydrock say that they can rely on infiltration, this is also incorrect. The flood of 2014 proves them wrong whatever the theoretical computer-generated figures might say.

Wiltshire Council Drainage department are fully aware of the flood of 2014 and the damage it caused and it is all recorded with a Flood Investigation report (section 19). Easy for Hydrock to access.

There are several road/kerb gullies in the dip at the bottom of Westwells Road adjacent to No.4, and these are also connected into that same surface water drain that become over loaded during the 2014 storm.

The EA flood risk map, referred to by Hydrock, shows my house as in a 'high risk' area and the 'Sands Quarry' site as low risk. In the 25 years that I have lived in Westwells, when my house has flooded so too has Sands Quarry site. There has never been an occasion where one has flooded and the other has not. So, in reality, they are both the same risk, whatever the EA computer prediction plan shows. Reality must take precedent over computer generated predictions.

The Sands Quarry site is in a depression at the bottom of Westwells Road. All the surface water in the local area migrates to this site by gravity one way or another. There is even an overflow pipe from the top of Westwells Road, by the double mini roundabout, that runs down to the manhole that blew it's cover off during the 2014 storm. All the surface water drains there.

Indeed, Bellway have recently pulled out of a deal to build houses at the top of the hill as they could not figure out a way to dispose of the surface water without using that over flow drain. Wilts Council drainage department would not allow that. Good on them.

The whole area is now overloaded with surface water as more and more natural infiltration areas are covered with impermeable surfaces. This just increases the pressure on the private surface water drain which is now stretched beyond its limits. That private surface water drain was never designed to take all this water, it was installed when the

area either side of Westwells road was fields, where the majority of the surface water could soak into the ground. Now the endless car parks, roads and buildings have removed these soakaway zones.

So when the storms come again, all that rainwater flows down the hill to the Sands Quarry site where it collects in that depression, and then when the ground is saturated, and the water cannot infiltrate any further, it over flows the site onto Westwells Road. It then combines with the other storm water flowing into the area and overwhelms the private drain and ends up flowing through my house. Again!

Covering the Sands Quarry site with 70% impermeable surfacing in the form of buildings and car parks will obviously exacerbate the situation and make run off a bigger issue than it is today as there will be less permeable ground. That existing surface water drain was never built to accept this level of surface water.

And as we have already established, infiltration ultimately does not work, remember 2014.

Government NPPF

The relevant Government NPPF regarding 'Flood Risk and coastal change' states in the first paragraph, under the heading '**other flood risk considerations**':

'How to assess the suitability of development where there is a possibility it will increase flood risk elsewhere.'

Development or the cumulative impacts of development may result in an increase in flood risk elsewhere as a result of impacts such as the loss of floodplain storage, the deflection or constriction of flood flow routes or through inadequate management of surface water.....

There is no indication in Hydrock's reports that any consideration has been given to the effects this data centre development will have on the surrounding area. This is a government requirement, why are Wiltshire Council not insisting this is included? It would be interesting to hear how Hydrock are planning to mitigate this issue.

This is another example of ARK simply not caring about the area and the neighbours and the devastating effect this data centre will have on us. They are not complying with Government guidelines and Wiltshire Council are not insisting they do. Why is this?

The flood risk issues raised by changes of use

What issues need to be considered and what does the applicant need to do?

Applicants for permission to change the use of a property need to meet the requirements to provide a site-specific flood risk assessment set out in [footnote 55 of the National Planning Policy Framework](#). It is for the applicant to show

that the change of use meets the objectives of the National Planning Policy Framework's policy on flood risk. For example, how the operation of any mitigation measures can be safeguarded and maintained effectively throughout the lifetime of the development.

This planning application for a data centre is a change of use of the land and so this paragraph applies. And once again Hydrock have not included a satisfactory response.

And [footnote 55 of the National Planning Policy Framework](#) states:

Planning and flood risk

170. Inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk (whether existing or future). Where development is necessary in such areas, the development should be made safe for its lifetime **without increasing flood risk elsewhere**.

There are more paragraphs that apply, I have not copied them here.

Again this portion of Government guidance has been ignored by Hydrock and Wiltshire Council don't seem to be insisting that Hydrock address it. Why is this?

This is crucial to the 500 people who have submitted objections to this application.

Water usage

A recent BBC investigation highlighted the high water usage of data centres. As Hydrock point out, all the collected rainwater will be used for cooling. But when there is insufficient rainwater in the catchment tanks then they will have to use the mains water supply, from Wessex Water presumably.

Google says medium sized data centres of 15MW will use as much as **THREE** average sized hospitals. **THREE**. I confess to not knowing exactly how big the data centre that ARK are planning for Sands Quarry – this information is not included in the planning application. However they currently have 46MW over five units, it is safe to assume that the new one will be at least 10MW.

So it would only use the same as **TWO** medium sized hospitals!

And you thought water was a precious resource!

Google says that a 1MW data centre will use around 25 million litres of water annually. That's 25,000m³ or 250,000 m³ for a 10MW unit. ARC propose install holding tanks of 1,300m³ of holding tanks.

Data centres normally use a reverse osmosis system to purify the water to avoid any issues with contamination in the cooling systems. Reverse osmosis systems typically use around 4 litres of water to create a single litre of purified water.

So, of the 250,000m³ of water that the data centre will use during a year, around 200,000m³ will be sent to a drain and the remaining 50,000m³ used for cooling. How does this sound as a viable use of a scarce resource?

For reference the Corsham annual rainfall is 844mm per annum. So, if the site is 7.37 hectares, or 73,700m², so approx. 62,202m³ of water will be expected to fall on the site each year.

And ARK are going to use 250,000m³ of water for cooling.

So ARK are proposing to add a load of 200,000m³ of waste water to the already overloaded water drainage system in Westwells – that's three times the current annual rainfall in the area.

So where does this excess go? ARK are suggesting that it infiltrates into the ground! But as we know from the 2014 storm, the ground cannot absorb that much.

A surface water drainage strategy is a Primary Consideration of this planning application. There is a known risk of the flooding in the area and this has not been addressed. The appeal inspector at the last application even went to far as to add a Grampian Order on the previous appeal, yet the Wiltshire Council seem to be allowing the applicant to omit crucial considerations that are required by Government NPPF.

This application should be refused.