

PE1557/A

Geodesign Barriers Ltd Email of 3 March 2015

Dear Mr Pentland,

My name is Britt Warg and I am the UK Manager for Geodesign Barriers Ltd - the UK branch of a Swedish mother company. We produce a temporary, mobile, self-anchoring, flat-packed, metal panel barrier, draped in plastic. It has been used extensively in England by the EA, power companies and councils since 2001 and the barrier frequently appears on TV news when flooding occurs. Almost all of the EA's stock of temporary barrier consists of our barrier. The barrier system has been BSI Kitemarked since 2003 (at the launch of this PAS 1188-2 standard), it has been independently tested up to 2.40m – and we have a very long proven record of successful uses since the 1990s – globally.

To the point:

I have discussed and proposed our solution for the flooding problem at Whitesands in Dumfries for many years now, again and again, back and forth... both with local council representatives, MSPs, Scottish Flood Forum, the local Fire Brigade and traders along the water front. Our first demonstration, presentation and site visit was with the council was back in 2005, held at the fire station. I felt there was a very positive view on using temporary barriers back then. But nothing really happened. I was back in 2010 during the flooding in November and followed up with more meetings in 2011. To be honest, I've forgotten how many times I've been to Dumfries.

Since then, a lot of flood water has flowed under the bridges. And various consultancy work has been carried out, on behalf of the council. To me, it feels like the council does not really want a temporary solution and are now instead welcoming the permanent solution and 'bund'-landscaping of Whitesands. Admittedly, the permanent solution looks very good, but I still don't feel our solution has been considered enough. Our temporary barrier is a solution for sites where a permanent scheme is not suitable for various reasons – economical, feasibility related, aesthetical reasons or where it would take many years before a scheme can be realised. My impression is that the people in charge at the council today don't really have the relevant, **updated** information about our barrier. The barrier has developed considerably since our first demo in Dumfries and I fear decisions will now be made based on old information. I feel there is a 'seeing problems rather than solutions' attitude when it comes to temporary barriers.

I read on a BBC website that you called for solutions and "targeted effective plans" for Whitesands and that you were "calling on local people and the local council to get

around the table and actively engage in working together for Whitesands.” So, even though I’m not local, I thought I’d ‘actively engage’ to make you aware of our – much cheaper – and effective solution:

Our solution:

- Deploy around 400m (or whatever length you deem necessary) of temporary barrier **in the street** (NB - not on the car park) and let the end of each barrier finish on higher ground, near the two adjacent bridges. (Attachments to walls or parapets are available – were they to be needed.)
- Dam height: Depends on what you want to protect against, but our available dam heights are: 0.45m, 0.65m, 0.80m, 0.85m, 1m, 1.25m, 1.50m, 1.80m and 1.40m.

The advantages:

- The main advantage is that you would keep Whitesands the way it is, river views and car park intact – and only use the barrier as and when needed.
- With a barrier deployed closer to the properties (and not on the car park), the dam height would be lower. This means a quicker deployment – and a cheaper barrier.
- With the barrier taking up the space of only half the street, you can leave the other half open for emergency vehicles, behind the barrier. And for pedestrians, for access. (The latter obviously depends on your H&S rules but it has been done in England, Sweden etc and never been a problem).
- We can train local volunteers, traders, fire brigade staff etc how to set up the barrier so they can deploy themselves – or together with council staff. It is really very easy to deploy this barrier. No tools. No fixtures. (Think: ‘Meccano’ metal parts you assemble and then drape in a plastic membrane.) We regularly train staff from the EA, National Grid, Northern PowerGrid, UK Power Networks, Scottish and Southern Energy etc. for best practice.
- The life span of this galvanised steel barrier is 60-80 years – so please do consider its **life cost**. How much money would it save the traders – and others – after just one flood in terms of lost trade, refurbishing etc. Not to mention the general misery of being flooded...
- The traders along the waterfront might be able to get flood insurance if they can prove protective measures have been put in place – i.e. a temporary flood barrier.
- Training together can also add to a positive community experience.

Storage solutions:

- For a faster deployment, you can store the barrier (flat-packed) in stackable crates either in a couple of 20ft containers nearby – or even **on** site, complete with our pumps and everything else needed. The locked containers could be ‘landscaped in’, with trees or bushes around them.
- As you do get **some** warning for Whitesands, you could also store it – on higher ground – at the fire station, in their yard. Having been trained by

ourselves, they can also assist with the deployment, with backup staff on a rota, in case they are out on a shout.

- You could set up a 24/7 hrs contract with a local contractor who could store the barrier in their yard and also deliver to site as and when needed, with rigids and hiabs. They could also be trained by ourselves in how to deploy the barrier.

I appreciate you probably being unfamiliar with our barrier but I can assure you that we have been around for a long time and have a lot of experience of using the system in the UK and across the world – and it has never failed anywhere. I would very much welcome your views on my suggestion and I would be happy to give a new presentation in Dumfries or elsewhere, if you want me to.

Website:

Meanwhile, please have a look at our website www.geodesignbarriers.com.

Our leaflet in case you want to download:

<https://dl.dropboxusercontent.com/u/6347680/Geodesign%20Barriers/Geodesign%20Barriers%20Leaflet%202011.pdf>

Look forward to hearing from you,

Yours sincerely,

Britt Warg