

St Athan Surface Water Management

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Llywodraeth Cynulliad Cymru
Welsh Assembly Government



Entec

Creating the environment for business

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- **Background**

- Welsh Assembly Government's TAN 15 guidance - 'Development and Flood Risk'.
- Guides requirements for investigation

Key Requirements:

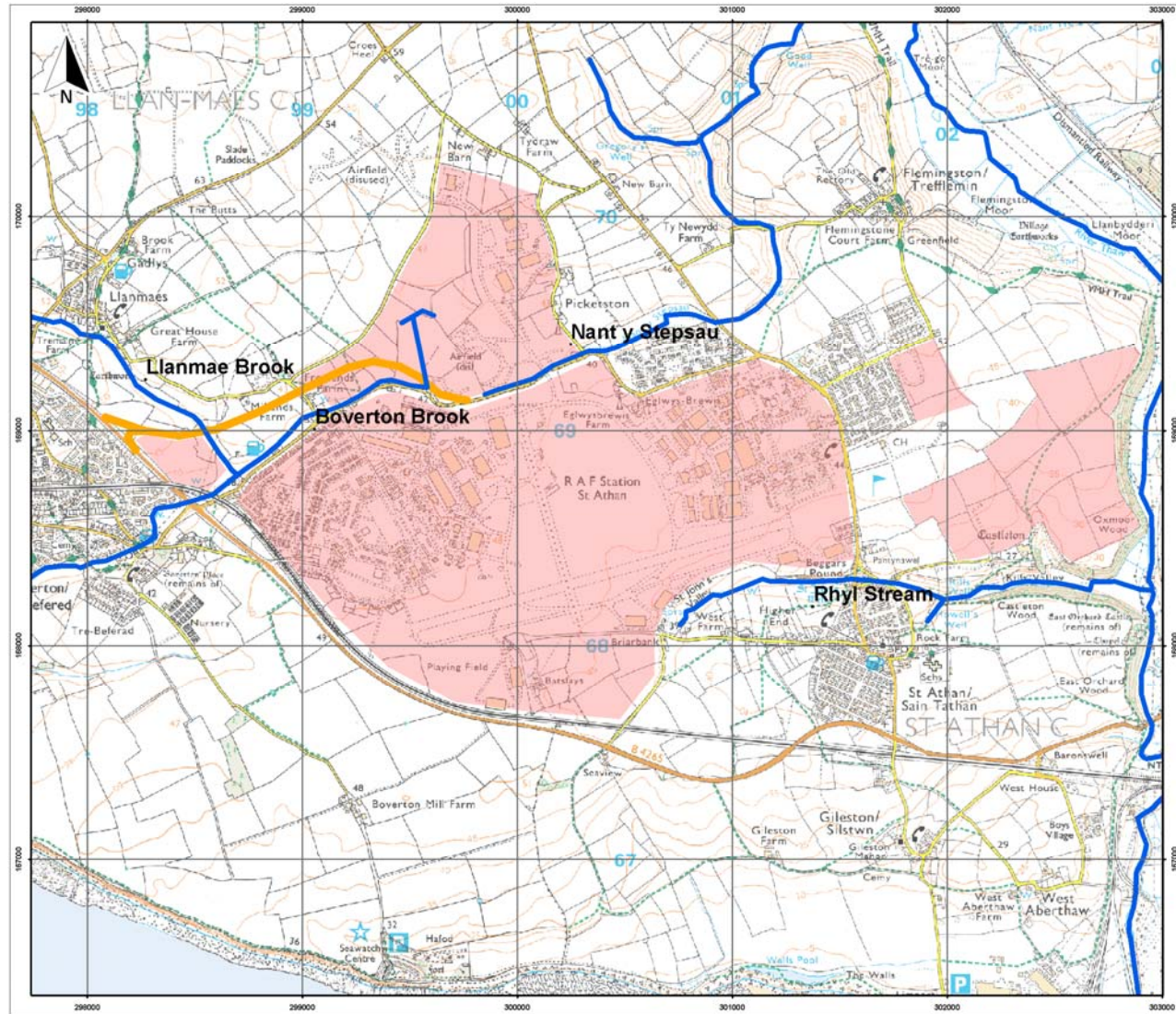
- Directs new development to areas at lowest risk of flooding
- Surface water runoff should not be increased
- Development should not increase flood risk elsewhere



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- **How are the requirements enforced?**
 - A Flood Consequence Assessment is being produced
 - Assesses flood risk associated with each part of the development
 - & also the development as a whole.
 - The Environment Agency Wales and Local Planning Authority (Vale of Glamorgan) will assess the proposals.

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● Meetings and Investigations - Runoff

- Criteria for managing surface water runoff agreed at outset with the Environment Agency Wales
- Runoff rates to be managed to keep runoff rates in future at the same level as at present
- Computer based modelling of the areas of hardstanding (roads, car parks, roofs etc) and the piped drainage systems
- Calculation of rates and volumes of runoff from these that need to be managed on site.

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- **Meetings and Investigations – Flood risk**
 - Only the new site access road runs near areas of flood risk, above the Boverton/Llanmae Brooks.
 - The flood extents along these two watercourses have been modelled by computer.
 - All proposed development is to be located in areas of lowest flood risk (TAN 15 Flood Zone A)
 - Since the developments will be constructed away from areas of flooding, they will not block flood flows or reduce the volume of available floodplain storage

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- **Mitigations – Surface Water Runoff**

- Sustainable Drainage Systems will be incorporated throughout the development.
- Allow water to infiltrate into the ground, or store water during a rain storm and then release it slowly over a longer period.
- Typically:
 - Open ponds/ditches/basins
 - Gravel trenches and soakaways
 - Storage and recycling for use within buildings

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- **Mitigations – Watercourses**

- Where the new access road has to cross the Llanmae Brook and its floodplain, a high, wide clear span bridge will be used to ensure flood flows and storage are not impacted.
- Otherwise, development will be set back away from floodplains to ensure no loss of flood storage.