**Chippenham Site Allocation Plan**

**Developing to the East of Chippenham is raising the odds on Chippenham Town and Monkton Park flooding and causing serious damage to property, and putting lives at risk. The evaluation by Wiltshire Council of the flood risk to Chippenham and upstream has lacked evidence, and is therefore unsound in the decision to recommend sites B & C for development.**

EVIDENCE

The National Planning Policy Framework document states “Development should not take place adjacent to a flood plain”

The area of land as option C in the Core Strategy put forward for development is Flood Zone 1, but the land adjacent and alongside the Rivers Avon & Marden is Flood Zones 2 & 3.

Council officers from the Flood Working Group, the Chairman Howard Greenman and Chief Flood Engineer Steve Scothern have advised Wiltshire Council not to build to the East of Chippenham.

Those officers are experienced and know the ground well, and the engineering solutions available to mitigate flooding.

NPPF Para 99 states “Local Plans should take into account Climate Change over the longer term, including factors of flood risk.

NPPF Para 100 states “Inappropriate development in areas at risk of flooding should be avoided by directing development away from areas of the highest risk, but where development is necessary, making it safe *without* increasing the flood risk elsewhere”

The Council assessment of flood risk showed sites B & C as being the highest risk of flooding from all the sites available for development.

Development to the East of Chippenham *will increase* the risk of flooding both downstream at Chippenham Town and upstream at the parishes of Bremhill, Langley Burrell, Christian Malford and Sutton Benger.

On 23rd November 2012 the River Avon and Marden flooded causing properties to flood, and Maud Heath Causeway floods blocking the road. (see photo)

On 20th December 2012 the River Avon and Marden flooded causing damage to farmland and properties. Maud Heath Causeway is flooded. (see photo)

December 23rd 2013 heavy rain, which had fallen in the previous days culminated in Chippenham Town nearly being flooded. A Wiltshire Flood engineer forwards a photograph to the planning department at Monkton Park asking them to look out of the window to see how close the River Avon had come to breeching the banks.

December 24th 2013, a chicken farmer loses 80,000 chickens as the River Avon bursts its banks at Foxham. Homes at Sutton Benger are flooded, and traffic cannot pass Maud Heath’s Causeway. (see photo)

February 7th 2014 , River Avon and Marden flood, Maud Heath Causeway floods closing the road to Chippenham for 2 days.

These serious floods have become an annual occurrance, and have increased in frequency in the last ten years. Before 2005 such floods occurred every 3 – 4 years. This increase in frequency is down to Climate Change delivering more rain in a shorter time frame. Some months in the last two years has seen rainfall of up to 200mm in one month, this is up from an average of 70mm. (see rainfall chart)

As part of Wiltshire Council’s preparations for the last Core Strategy report by Scott Wilson engaged by the Council stated, “ The Bristol Avon catchment area includes a large majority of North Wiltshire. There is a flood risk to *people*, and a reduction of risk to life associated with fast flows is required”

The Scott Wilson report commissioned by Wiltshire Council at Policy 5 stated” In the area of Chippenham, flooding in this area is currently felt to be HIGH and will continue to be HIGH in the future”

The report went on to say, the existing level of flood risk management is NOT sufficient with significant risk to people and assets.

The above statements from the Scott Wilson reports commissioned by Wiltshire Council in 2011 clearly outline the risks to Chippenham Town.

Council officers have been warned about development to the east of Chippenham, the Scott Wilson report offers sound advice in support of this warning. In view of the evidence the selection of sites B & C are unsound.

In addition the NPPF Technical Document states “ Rainfall intensity between 2015-2025 will increase by 5% and river flows of the Avon and Marden will increase by 10%. However from 2025 -2055 the rainfall intensity will increase by 10% and the river flow by 20%”

This additional rain will increase the flow of both rivers. Chippenham Town may be overwhelmed by the increased flow. Resulting in damage to property and a threat to human life. Additional housing to the east WILL increase the risk of flooding to Chippenham Town and upstream in the villages of Foxham, Sutton Benger, and Christian Malford.

At the cabinet meeting on 10/3/2015, senior Council Officers were unaware of the NPPF Technical document on the matter of Climate Change. Not being aware of this important information indicates that the site selection at B & C was unsound.

When Chippenham and surrounding areas flood, and if 2,000 houses are constructed adjacent to the flood plain to the east of Chippenham the run off from the houses, roads, offices, and driveways will push the rainfall quickly into the rivers.

An average 4-bedroom house with driveway will produce 2,000 litres of water an hour in heavy rain. With 2000 houses on sites B & C this will produce 4 million litres of water an hour. With 6 hours of rain that creates 24 million litres of water to be absorbed into the ground.

Where are the engineering solutions to prove that this volume of water can be absorbed within the ground without putting any excess into the rivers?

How can Wiltshire Council select areas B & C without any consideration to the engineering solution?

There are other areas of land (Area D) available for development where the risks are much less, and in some areas non-existent, the Council should consider directing development to those areas and especially brown field sites.

Sir Michael Pitt reported on floodwater management as a result of the Flood & Water Management Act of 2010.

At para 3.3 Areas susceptible to Ground Water Flooding:

The areas that are identified as being susceptible to ground water flooding are located close to the Upper Bristol Avon and the river Marden (sites B & C) By comparing the data set it is apparent that those grid squares identified as having an area greater than 50% with high to very high susceptibility to ground water flooding.

This site is Oxford and Kellaways clay with low permeability; this does not allow ground water flow.

Additional evidence states “In the Chippenham area, bedrock geology ground water and surface water interactions along the Bristol Avon river will be limited due to underlying Kellaways Clay member.

The Scott Wilson report commissioned by Wiltshire Council stated “Any consideration to build to the east of Chippenham will require a hydrological survey for several years before confidence can be assured that a development can be undertaken at this location.”

The Council has been questioned on numerous occasions during the consultation process on managing the flood water from dvelopments to the east of Chippenham and Director of Planning Toby Sturgis has stated that SuDS will provide the solution to flooding at sites B & C. But there is no visibility of how SuDs will work at these sites and how efficient they will be.

The creation of Attentuation SuDS is not a science, and unless the figures for ground storage are sufficient, then water will pass into watercourses. It advises multiple storage areas for water retention.

The DEFRA report into flood risk in the UK has stated that Chippenham is ranked at 444, and that there are 690 homes at risk.

The report states that a ground investigation will be required to assess the suitability of SuDS.

SuDs techniques and attenuation should take into account local geological and ground water conditions.

Chippenham Town is given specific mention in the DEFRA report and it states “In Chippenham, where deep and fast flood water flows can occur opportunities to direct water away from the areas of high social impact.

The decision to build to the east will direct more water towards Chippenham Town as it is downstream, should SuDS fail.

The DEFRA report concludes that a Flood Risk Assessment should always be provided with a planning application:

Where the site is greater than 1 hectare, and located in Flood Zone 1. Site C is in Flood Zone 1.

The development site is located in an area known to have critical flooding problems from any source.

When the Council was asked if there was an FRA being undertaken for this site, the response was “A flood assessment was conducted in 2007, and we are relying on that report”

In view of Climate Change is it sound to rely on a Flood Risk Assessment that is 8 years out of date? To make a judgment on this site based on an out of date FRA is an unsound decision.