Dear Mr Kemp

Examination – Hearing Statement

The Environment Agency would like to make the following written representation in relation to the emerging Warwick Local Plan. We would also like to attend the examination hearing to support the Council on 13 December 2016.

Flooding and Water - Policy FW1 – Development in Areas at Risk of Flooding

What is the basis for the policy? What is it seeking to achieve?

The draft policy was redrafted with our full support to take into full consideration the history of flooding within the District. It also considered the recommendations of the following documents:

- Warwick D.C. Strategic Flood Risk Assessment
- River Severn River Basin Management Plan
- River Severn Basin Flood Risk Management Plan
- The National Planning Policy Framework

The Council considered our submission document, and our recommendations to change the policy and worked positively and constructively with us. This was to ensure that the policy would make a positive contribution to ensuring that new development was appropriately resilient to flooding, and supports a ‘whole catchment’ approach to reducing flood risk. It will also deliver the aspirations of the Water Framework Directive. It supports our Midlands Byelaws (required easements from the top of the bank of a watercourse) and the requirements that developers would have to meet to obtain an environmental permit, for works within our byelaw easement, any modifications to a watercourse and within the floodplain.
The policy was amended as detailed below:

Planning applications should be submitted in line with the revised validation checklist that has guidance on the national approach to meeting the sequential and exception tests and meeting the requirements of the NPPF.

Developers are advised to review the Environment Agency’s ‘flood map for planning’ at the earliest possible opportunity to consider what development would be appropriate for a potential development site to ensure that proposals are in line with the following policy requirements:

a. There will be a presumption against development in flood zone 3, and no built development will be allowed in the functional floodplain. Development must be steered to areas with the lowest probability of flooding.

b. land that is required for current and future flood management will be safeguarded from development. Where development lies adjacent to or benefits from an existing or future flood defence scheme they will be expected to contribute towards the cost of delivery and/or maintenance of that scheme.

c. new development that lies within the floodplain will be required to implement a flood alleviation scheme to reduce the risk of flooding to the proposed development site and deliver significant flood risk reduction benefits to the wider community.

d. All new development proposals will contribute to meeting ‘good status’ as defined by WFD. This will include delivery of geomorphological, chemical and biodiversity enhancements and include a minimum 8 metre buffer strip from the top of bank of all watercourses.

Where development lies adjacent to a watercourse the supporting planning application will include a WFD assessment to demonstrate how the waterbody will not deteriorate in status and will be enhanced.

- There will be no impact upon priority habitat or designated sites of nature conservation
- Modified watercourses will be restored in line with the recommendations of the Severn River Basin Management Plan
- Culverting open watercourses will not be allowed.

e. New development must be resilient to surface water, fluvial and pluvial flooding. Where new development lies in an area of flood risk it must be designed to be flood resilient with safe dry access for vehicles and pedestrians. Finished floor levels should be 600mm above the predicted flood level and include a freeboard for climate change to ensure new development is safe.

The policy provides a clear framework for developers to follow when considering development in close proximity to a watercourse or within an area of identified floodplain.

The purpose of the policy is to direct development away from area that are identified as being at risk of flooding. If for wider sustainability reasons the site is considered viable for development, then the policy measures included within the plan will ensure that the development will be appropriately flood resilient and contribute to effectively
managing flood risk not only for the proposed site, but will contribute to reducing flood risk within the wider catchment.

The River Severn Catchment Management Plan has a specific set of recommendations for the area covering Warwick District Council within the Upper Avon, and Coventry Cluster sub catchments.

Measures to manage risk in the Warwickshire Avon catchment

Preventing risk: 47 measures including:

- Avoid inappropriate development in flood risk areas.
- Improve management of surface water and promote implementation of sustainable drainage systems (SuDS).
- Investigate potential solutions for reducing flood risk at: Bilton Road, Rugby; Butt Lane, Coventry; Kenilworth.
- Maintain current level of flood risk management in areas that benefit from flood defences, subject to availability of funding.
- Work in partnership to support implementation and review of local flood risk management strategies.

Preparing for risk: 39 measures including:

- Provide incident response service.
- Maintain flood forecasting and warning capacity, improve accuracy where possible and seek opportunities to expand service where feasible.
- Work with partners and communities to understand risk of flooding from all sources and develop plans to manage the risks.
- Promote awareness of flood risk and encourage others to prepare for flooding in high risk areas.
- Promote awareness and advise on the need to avoid inappropriate development in flood risk areas and the need to manage land to avoid increasing risks.

Protecting from risk: 33 measures including:

- Investigate, develop and implement new flood risk management schemes and measures where feasible and subject to availability of funding.
- Identify locations where working with natural processes could reduce flood risk and improve resilience to climate change.
- Review maintenance operations and work with landowners/managers to identify opportunities for reducing intensity.
- Undertake maintenance programme to replace/refurbish flood risk assets where feasible and subject to availability of funding.
- Implement actions from local flood risk management strategies.

The Environment Agency estimates that up to 5000 homes are at risk of flooding within the area managed by Warwick District Council, and many more businesses, roads and other essential infrastructure is already vulnerable to flood risk.

The risks above can be managed at the same time as encouraging increased floodwater storage on undeveloped floodplains in order to increase attenuation and reduce flood risk to communities. This sub area presents a good opportunity for storage, as it will benefit communities locally and downstream.
The Environment Agency has seen a reduction in its ‘revenue’ budget, which is used to fund the maintenance works to existing flood risk assets. To ensure their integrity and robustness during the lifetime of a development (which benefits from them) the Environment Agency will need to secure financial contributions from developers.

The Environment Agency plans to reduce dependence on raised flood defences, as this is unsustainable in the long term, by taking opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. This would benefit many communities here and elsewhere, for example Yelvertoft, Willoughby, Rugby and Leamington Spa.

Development/redevelopment must be managed to minimise flood risks. Methods must be sustainable over the long-term. For example, making more space for rivers through urban areas via ‘blue corridors’ (i.e. restoring access for floodwater onto key strips of floodplain. This requires redevelopment to be limited to flood-compatible land uses e.g. parkland.)

In line with the recommendations of the Warwick Water Cycle Study, the National Planning Policy Framework, and Flood Risk Management Plan, it must be ensured that all new development is ‘safe’ meaning that dry pedestrian access to and from the development without passing through the 1 in 100 year plus climate change floodplain, and that emergency vehicular access is possible. An appropriate strategy to ensure ‘safe’ access is provided for areas identified to be at risk of surface water flooding.

How does the policy relate to the evidence base?
The policy is fully supported by the findings and recommendations included within the Flood Risk Management Plan, Flood Risk Management Plan and River Basin Management Plan.

Is the policy sufficiently clear? Will it provide sufficient guidance for decision making?
The policy provides a clear framework for developers to follow, and we would be able to confirm compliance of new development proposals at the planning application stage within our role as a statutory consultee.

How will the policy be implemented? Is this clear?
We would be able to implement the policy through our statutory consultee role through the preparation of statutory planning documents, and through our role as influential advisors / statutory consultees for planning applications.

How does the policy relate to national policy? How is it consistent? Are there any inconsistencies?
We confirm that we believe the policy meets the objectives of the National Planning Policy Framework, and overarching European Legislation as well as ensuring that new development meets the requirements of our byelaws which were constituted through the Water Resources Act (1991).

In overall terms is the policy justified, effective and consistent with national policy?
We fully support the policy as detailed above and we agree that it is justified, effective and consistent with national policy.

Cont/d..
Flooding and Water - Policy FW2 – Sustainable Urban Drainage

What is the basis for the policy? What is it seeking to achieve?
Man-made trends in land management and land-use have increased flood risk over time in this sub catchment

Surface water flooding is a growing problem. Local Councils are mainly responsible for managing this, but it often has to be integrated with other organisations’ assets, for example their sewers or rivers.

New developments should be designed to consider the inherent risks posed by surface water flooding, for example developers should consider the design and layout of new developments to reduce the risk of homes and businesses becoming inundated by surface water.

The draft policy was redrafted with our full support to take into full consideration the history of flooding within the District. It also considered the recommendations of the following documents:

- Warwick D.C - Strategic Flood Risk Assessment
- River Severn River Basin Management Plan
- River Severn Basin Flood Risk Management Plan
- The National Planning Policy Framework
- Warwickshire Surface Water Management Plan
- Warwickshire D.C. Water Cycle Study

The draft policy is:

a, All new major developments must incorporate SuDS that provide biodiversity, water quality and amenity benefits and be in accordance with the Warwickshire Surface Water Management Plan. There will be a presumption against underground storage of water, and it should support the delivery of green infrastructure.

b, All new development sites will discharge at the QBAR Greenfield run off rate including an allowance for climate change, for site with a life expectancy of less than 60 year a 20% allowance must be applied, for sites with an greater than 60 year life expectancy the allowance must be 30%.

c, SuDS schemes must be located outside the floodplain, ideally this should be within the development site or close to the site as part of a master planned drainage scheme. Priority should be given to SuDS that incorporate green infrastructure including green roofs, walls and rain gardens.

d, for development sites that are suspected to be contaminated the SuDS scheme will be designed to prevent the mobilisation of contaminants to waterbodies. The Environment Agency must be consulted in relation to sites suspected to be contaminated and will provide advice and guidance to the council and developers on how best to implement SuDS on a site specific basis.
Since the policy was developed the Environment Agency is no longer a statutory consultee for development located within flood zone 1, however we have been given ‘a strategic overview’ role for surface water management, and we comment in detail in respect of surface water management proposals and infrastructure located within the floodplain.

SuDS involve a range of techniques that mimic the way that rainfall drains in natural systems and avoids any increase in flood risk or adverse effect on water quality. Many existing drainage systems can cause problems of flooding, pollution or damage to the environment and are not proving to be sustainable in the long term.

The key objectives in the use of SUDS are:
- reducing flood risk;
- maintaining and restoring natural flow rate and volume of surface runoff to reduce the risk of flooding;
- improving water resources;
- enhancing amenity and minimising diffuse pollution;
- reducing pressure on the sewerage network, and;
- Improving biodiversity and local amenity.

Furthermore, there have been a number of serious flood events within the council area, and surface water has been a significant contribution to them, often developers only consider if there is sufficient capacity within the sewage undertakers infrastructure to remove surface water from their site, they generally do not realise that at the end of the network there is a river which may not have sufficient channel capacity to convey the water. To effectively manage flood risk from fluvial sources, there needs to be a robust policy to ensure that discharges from new developments stores as much water as possible.


We provide bespoke comments in relation to development proposals that could cause pollutants to enter an underlying aquifer, as it could potentially contaminate water that could be abstracted for human consumption. The policy highlights the need for us to comment on planning applications in relation to the protection of controlled waters, we note that the Councils remit is to comment in relation to matters concerning human health.

**How does the policy relate to the evidence base?**
The policy is fully supported by the findings and recommendations included within the Flood Risk Management Plan, Flood Risk Management Plan and River Basin Management Plan, Surface Water Plan and Water Cycle Study.

We support this policy because it will also help to meet wider sustainability objectives including those relating to biodiversity, and it supports the delivery of green and blue infrastructure.

**Is the policy sufficiently clear? Will it provide sufficient guidance for decision making?**
The policy provides a clear framework for developers to follow, and we are able to confirm compliance of new development proposals through planning applications within our role as a statutory consultee for surface water management proposals.
within the floodplain, and for the Lead Local Flood Authority to assess in their role as Statutory consultees.

**How will the policy be implemented? Is this clear?**
This policy will be implemented by us, where proposals fall within our remit (protection of controlled waters and development in the floodplain) the Lead Local Flood Authority (who are statutory consultees to the planning system for development within flood zone 1). For developments within Warwick District Council the Lead Local Flood Authority is Warwickshire County Council.

**How does the policy relate to national policy? How is it consistent? Are there any inconsistencies?**
We confirm that we believe the policy meets the objectives of the National Planning Policy Framework, and overarching European Legislation as well as ensuring that new development meets the requirements of our byelaws which were constituted through the Water Resources Act (1991).

**In overall terms is the policy justified, effective and consistent with national policy?**
We fully support the policy as detailed above and we agree that it is justified, effective and consistent with national policy.
Flooding and Water - Policy FW3 – Water Conservation

What is the basis for the policy? What is it seeking to achieve?
Currently a water efficiency standard of 125 litres/person/day (lpd) is set in the Building Regulations, but the Government is proposing to allow local authorities to introduce a tighter level of 110 lpd in areas of high water stress. The Water Cycle Study (2010) carried out on behalf of the Council suggested that a water efficiency standard of 105 lpd (exclusive of external water use) should be applied to all new dwellings. When an allowance of 5 lpd for external water use is applied, this figure is equivalent to the Government’s proposed higher water efficiency level of 110 lpd

This optional requirement delivers a substantial improvement of the two projections under the low scenario which would give a range of between 15% -16% neutrality if the local plan accepted the standard 125 litres per household per day, and helps to ensure that the proposed growth within the district is more sustainable, and measures to achieve this would be relatively cost neutral for developers.

It also supports the recommendations of the River Severn River Basin Management Plan.

We support the policy as drafted below:

The Council will require new residential development of one dwelling or more to meet a water efficiency standard of 110 litres/person/day. This includes 5 litres/person/day for external water usage.
For non-dwellings, applicants must demonstrate that they have incorporated appropriate water efficiency measures into the building.
All new development must incorporate water efficiency measures.

How does the policy relate to the evidence base?
The evidence strongly supports the Council’s approach to including a policy which requires developers to meet the ‘optional’ requirement as detailed within the National Technical Standards and Building Regulations.

Is the policy sufficiently clear? Will it provide sufficient guidance for decision making?
The proposed policy is accurately describes the water efficiency requirements for developers to meet in their developments.

How will the policy be implemented? Is this clear?
We would expect the policy will be implemented by planning condition. For large developments we will comment on this policy as statutory consultees for developments requiring an Environmental Impact Assessment (EIA).

How does the policy relate to national policy? How is it consistent? Are there any inconsistencies?
The approach is consistent with the River Severn River Basin Management Plan, National Planning Policy Framework, and Water Cycle Study.
In overall terms is the policy justified, effective and consistent with national policy? We consider that the proposed policy is justified, effective and consistent with the National Planning Policy Framework and Building Regulations.

Is Policy FW3 justified in light of the new National Technical Standards and Building Regulations? Policy FW3 is in accordance with the technical standards, and the technical update issued in 2016.
Flooding and Water - Policy FW4 – Water Supply

What is the basis for the policy? What is it seeking to achieve?


This catchment includes the rivers Avon, Swift, Leam, Itchen, Dene and Stour, and the conurbations of Rugby, Warwick and Stratford-upon-Avon. Arable farming is the dominant land use activity and the catchment sits within a Nitrate Vulnerable Zone.

Draycote Water is part of a designated drinking water protected area with the River Leam and the principal aquifers in the catchment are important for public water supply. In the south the River Stour rises in the Cotswolds, an Area of Outstanding Natural Beauty and other designated sites include the River Itchen, a Site of Special Scientific Interest in the Itchen Valley.

The main pressures impacting on water bodies in the catchment are physical modifications, wastewater and polluted run-off from rural and urban land. Some water bodies have been modified to accommodate urbanization or flood defences, which has damaged the physical habitat for wildlife, introduced barriers to fish movements and altered flow regimes. Improving habitats and mitigating low flow problems will be costly, but there may be opportunities to combine solutions with other planned development.

Wastewater problems originate from infrastructure associated with the water industry and private domestic facilities, including poorly maintained septic tanks and package sewage treatment plants. Although sewage treatment within the catchment has improved significantly over recent years, further investment, together with new technologies coordinated with action on other phosphate sources, is needed to meet the required river standards.

There is a significant issue with regard to water resources and waste water management that requires a policy to be included within the Local Plan.

We fully support the inclusion of the policy as outlined below:

Developers must ensure that there is adequate water supply and waste water infrastructure to serve the existing and proposed developments by:

a, minimising the need for new infrastructure by directing development to areas where there is a guaranteed and adequate supply of water having due regard to Severn Trent’s Water Resources Management Plan and Strategic Business Plan as well as the finding of the Water Cycle Study

b, In accordance with the Water Framework Directive’s Objectives, development must not affect the waterbodies’ ability to reach good status or potential as set out in the River Severn Basin Management Plan (RBMP).

How does the policy relate to the evidence base?

The policy is supported by the evidence base, including the River Severn River Basin Management Plan, the Warwick D.C. Water Cycle Study and the Water Framework Directive monitoring data collected by us.
Is the policy sufficiently clear? Will it provide sufficient guidance for decision making?
For large developments, confirmation will need to be sought from Severn Trent PLC that there is sufficient capacity within the receiving waste water treatment works to treat the waste waters without breaching Severn Trent’s Operational Permits granted by us.

This confirmation could be submitted in support of a planning application to demonstrate compliance with this policy.

How will the policy be implemented? Is this clear?
We are statutory consultees to the planning system and planning applications that fall into our remit will be reviewed for compliance of this policy by us.

How does the policy relate to national policy? How is it consistent? Are there any inconsistencies?
The approach is consistent with the River Severn River Basin Management Plan, National Planning Policy Framework, and Water Cycle Study. In overall terms is the policy justified, effective and consistent with national policy? We consider that the proposed policy is justified, effective and consistent with the National Planning Policy Framework.

In conclusion
We fully support the above planning policies, and we would like to highlight the positive and constructive approach taken by Warwick D.C. to include them within their plan.

Furthermore, the inclusion of the policies above ensure that the additional site allocations proposed in the lasted addition to the local plan will not compromise environmental objectives within our remit.

Yours sincerely

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