

Your Ref: WCC000538

Our Ref: 70019237: 269) Radford Semele

Date: 25th October 2016

CONFIDENTIAL

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Dear Jag,

Proposal: Outline planning application for: a residential development of up to 115 dwellings (Use Class C3); public open space including a children's play area; earthwork's; drainage works; landscaping and all other ancillary and enabling works. Detailed approval is sought for vehicular access from Southam Road, with all other matters to be reserved.

Location: Land on the south side of Southam Road, Radford Semele, Leamington Spa

Applicant: Taylor Wimpey Ltd

Thank you for your recent correspondence regarding the above site and your request for advice on flood risk and drainage grounds. We have reviewed the information provided to us on the planning portal in conjunction with the relevant policies in the National Planning Policy Framework (NPPF) and the Planning Practise Guidance.

The proposals are for up to 115 residential dwellings on existing greenfield land to the east of Radford Semele. The submitted Flood Risk Assessment (FRA) indicates that the site is located within Flood Zone 1 with some parts of the site along the southern boundary being a risk of surface water flooding.

Proposals are to place development away from the southern boundary and discharge at a reduced 8.3l/s for all events up to and including the 1 in 100 year plus climate change event. As such, the proposals seek to minimise risk to on-site dwellings while potentially providing betterment to the existing surface water within off-site areas.

It is noted that anecdotal evidence suggests the ditch on the southern boundary of the site is subject to flooding on regular occasion, impacting upon the existing residential areas. Topography of the area suggests the site proposals will not be at risk from this flooding mechanism and indeed, through implementation of SuDS systems and appropriate overland flow control mechanisms, it is likely that the overall run-off from the site to the southern watercourse will be reduced.

As such, we would offer **No Objection** to the outline proposals in their current form. Where approval is to be granted, we would recommend the following condition be applied:

1. No development shall take place until detailed surface and foul water drainage schemes for the site, based on sustainable drainage principles and an assessment of the hydrological and hydrogeological context of the development, have been submitted and approved in writing by the Local Planning Authority (LPA) in consultation with Warwickshire County Council (WCC). The scheme shall be subsequently be implemented in accordance with the approved details before the development is completed. The scheme to be submitted shall:
 - a. Infiltration testing, in accordance with BRE 365 guidance, to be completed and results submitted to demonstrate suitability (or otherwise) of the use of infiltration SuDS.

- b. Demonstrate that the surface water drainage system(s) are designed in accordance with CIRIA C753.
 - c. Evidence that the discharge rate generated by all rainfall events up to and including the 100 year plus 40% (allowance for climate change) critical rain storm has been limited to the QBAR runoff rates (or 5 l/s as a minimum) for all return periods.
 - d. Demonstrate detailed design (plans, network details and calculations) in support of any surface water drainage scheme, including details of any attenuation system, and outfall arrangements. Calculations should demonstrate the performance of the drainage system for a range of return periods and storms durations inclusive of the 1 in 1 year, 1 in 2 year, 1 in 30 year, 1 in 100 year and 1 in 100 year plus climate change return periods.
 - e. Demonstrate the proposed allowance for exceedance flow and associated overland flow routing.
 - f. A foul water drainage scheme including evidence from Severn Trent Water (STW) that there is adequate capacity within their sewerage assets for this development, including discharge rate and connection points.
 - g. Provide a Maintenance Plan to the LPA giving details on how the entire surface water and foul water systems shall be maintained and managed after completion for the life time of the development. The name of the party responsible, including contact name and details, for the maintenance of all features within the communal areas onsite (outside of individual plot boundaries) shall be provided to the LPA.
2. In order to fully understand the impacts of the watercourse on the southern boundary of the site and its linkage with the SuDS proposals, no development shall take place until a detailed flood modelling exercise has been submitted to, and approved in writing by the Local Authority. The modelling shall include, but not be limited to:
- a. An assessment of the 1 in 5, 20, 30, 75, 100 and 1,000 year return period events including for depth and hazard ratings
 - b. An assessment of the impact of blockage on the downstream culvert
 - c. Climate change assessments in line with current Environment Agency guidance

I trust the above is satisfactory however do not hesitate to contact me if you require anything further

Kind Regards

A handwritten signature in blue ink, appearing to read 'Dean Ward', is written over a light green rectangular background.

Dean Ward BSc (Hons) MCIWEM
Principal Engineer