

Examination of the Welwyn Hatfield Local Plan

Water End Residents Group Statement for the Stage 8 Hearing

Policy SADM 31, Site HS22 (BrP4), Land west of Brookmans Park Railway Station

Matter 1 – Environmental Considerations

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At paragraph 100 the National Planning Policy Framework (NPPF) says that Local Plans should develop policies to manage flood risk from all sources. It also points out at para. 109 that the planning system should prevent new and existing developments from contributing to or being put at unacceptable risk from or being adversely affected by unacceptable levels of water or noise pollution. At paragraph 123 it further points out that planning policies should avoid noise from giving rise to significant adverse impacts on health and quality of life as a result of new development. There is significant representation against this site in the context of the possible contribution its development could make to off-site flooding.

67) How would the surface water at this site be managed?

68) Has a flood risk assessment been carried out?

69) Are there any on or off-site ramifications for flood risk that would result from the implementation of the proposed development?

70) If so how are they to be mitigated?

71) Would the site's development require a balancing pond?

72) If so, how extensive would this be and where would it be located?

Response

Many of the representations about the site's possible contribution to flooding are from residents of nearby Water End, which is located entirely within Flood Zones 2 and 3. When you live in a functional flood plain, and the view from your back door can look like the photo below, then, as I am sure you will appreciate, you become acutely aware of the ever present risk of flooding and finely attuned to any possibility, no matter how small, that might exacerbate the risk.



View from cottage in Warrengate Road

We engaged with the Council early on in the Local Plan process to raise awareness of the flood risk posed to Water End by the development of BrP4/HS22 and were repeatedly told the following or similar: *“The Environment Agency will require development on green field sites to achieve green field runoff rates. This would mean that water is stored on site through a variety of attenuation measures - the Sustainable Drainage Systems (SuDS) - and released at a green field runoff rate based on the 1:100 year storm”*.

This is of little comfort when the Environment Agency's own report 'Rainfall Runoff Management for Developments SC 030219 October 2013' states runoff from a developed site can be as much as ten times higher than green field runoff and that it is virtually impossible to control the 1:100 flood runoff for all rainfall events:

Para 3.2 *"In extreme rainfall events, the total volume of runoff from a developed site is typically between 2 and 10 times the runoff volume from the same site in a greenfield state. It is important to control this additional volume from the developed site for two reasons. Firstly a large proportion of runoff tends to be released much more quickly than the greenfield runoff (even where attenuation storage is provided to address the difference in the rate of runoff). Secondly, even if this volume was released at the peak rate of the greenfield runoff, due to the finite storage volume provided by floodplains, flood depths and extents in rivers will still be increased.*

*In theory, therefore, the 100 year flood runoff from a site should be controlled to both greenfield volume and rates of runoff to ensure the same conditions occur downstream after development. In practice although this is **virtually impossible to achieve for all rainfall events**, this should be the objective in managing site runoff from rainfall."*

We believe that Water End is in a unique situation, being the terminus of the large catchment area of the Mimmshall Brook. Ordinarily, the Mimmshall Brook disappears underground through a series of swallow holes in the unique SSSI at Water End, but when their capacity is exceeded, the surrounding area becomes a lake and excess water is carried away in an overflow channel that becomes a feeder for the River Colne.

The overflow channel flows through a culvert under Swanland Road and the A1M. Ultimately, when the finite capacity of the culvert is reached, then any water in excess of the combined capacity of the swallow holes and culvert has nowhere to go, and this is when dwellings in Water End flood.

There has not been sufficient consideration within the Council's Strategic Flood Risk Assessment of the specific constraints of the culvert under Swanland Road and the A1M.

There has also been no consideration of the potential of the attenuation offered by the East Coast Main Line railway line embankment. The runoff from any site located to the east of the railway line has to pass through culverts placed in the embankment of the elevated railway line which have finite capacity and would therefore attenuate flows to Water End.

Furthermore, the Strategic Flood Risk Assessment Level 2 Site Assessment for BrP4/HS22 in the Action and Egress section incorrectly states the following:

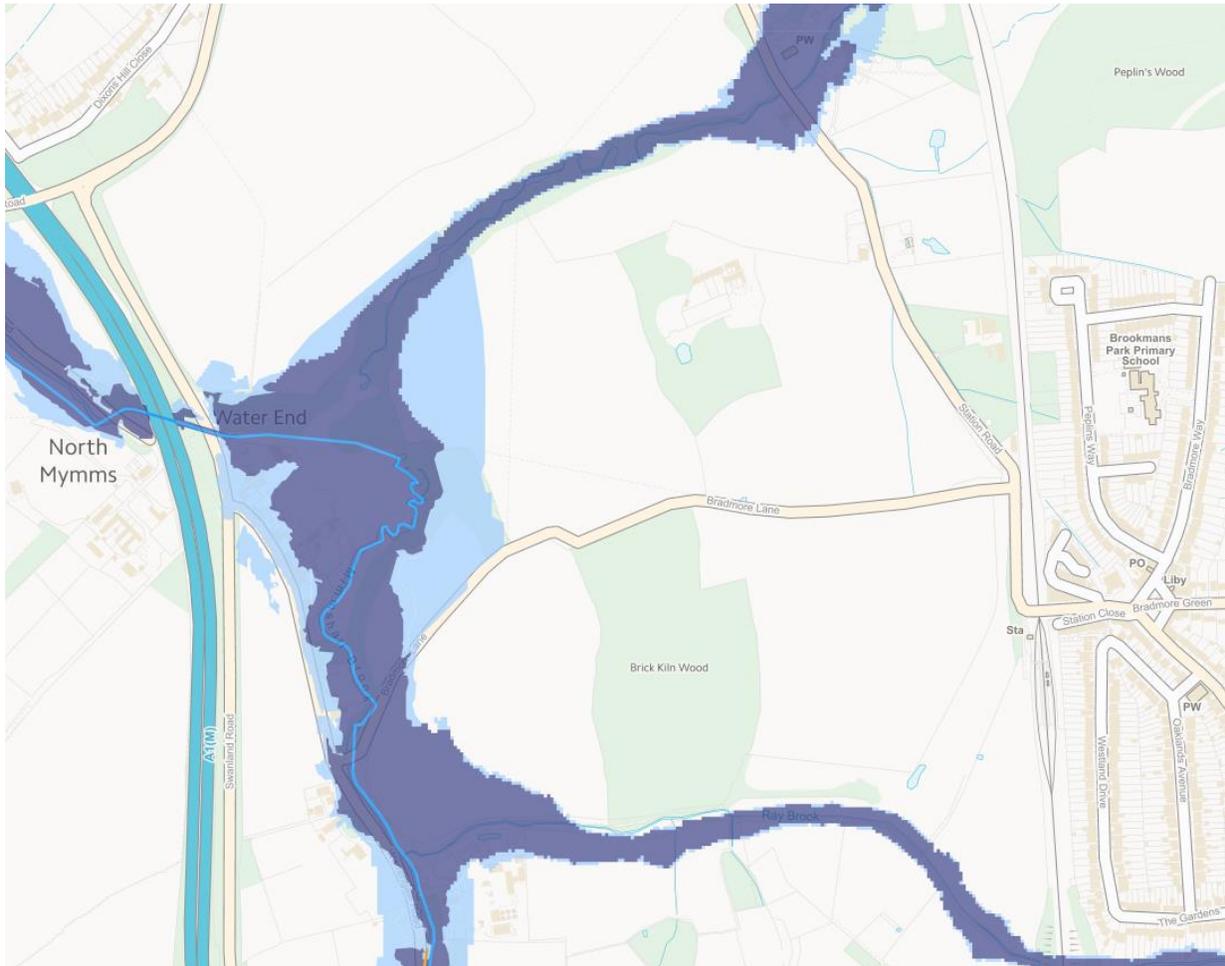
"Primary access and egress to the site would be achieved via Station Road or Bradmore Lane. These are shown not to be impacted by fluvial flooding. However, there is risk of the surface water flooding to Bradmore Lane in higher storm events (100-year and 1,000-year). Consideration needs to be given to how the site can be reached in times of heavy rainfall."

This assessment is not correct; The western end of Bradmore Lane is actually designated Flood Zone 3, which means it has a high probability of 1 in 100 or greater of fluvial flooding and is also part of a functional floodplain. Part of Station Road is also designated Flood Zone 3 which means it also has a high probability of 1 in 100 or greater of fluvial flooding.

In addition, Appendix H of the Housing Sites Selection Background Paper 2016, which underpinned the allocation of the site, also only mentions surface water flooding to Bradmore Lane and fails to mention that parts of both Bradmore Lane and Station Road are designated as Flood Zones 3.

Any access via Bradmore Lane from the west would have to be from Warrengate Road which is also designated as Flood Zones 2 and 3 in its entirety.

Bradmore Lane, Warrengate Road and Station Road are unpassable in times of flood.



GOV.UK Flood Map for Planning showing Bradmore Lane, Station Road and Warrengate Road.



Bradmore Lane



Warrengate Road near Bradmore Lane

77) What impact would the proposal have on the wider landscape?

Response

The proposal would have a significant impact on the wider landscape:

- 1) Highways improvements to Station Road are required to improve visibility and safety of the bend leading to the railway bridge. The realignment will require the extension of Station Road from an elevated position into open countryside. The road would be supported on substantial earthworks, the massing and bulk of which, would significantly impact the openness of the Green Belt and wider landscape.
- 2) There is a small gap between the southern boundary of the site and the Royal Veterinary College (RVC) Major Development Site to the south, but because of the valley topography, the site will visually adjoin with the RVC. The gap is situated in the valley of the Ray Brook between the site and the RVC, which are both on higher ground. When viewed from Bradmore Lane or Station Road the proposal would appear to extend as far as the eye can see to the RVC on the horizon of the crest of the ridge.

- 3) The proposal will necessitate significant highway upgrades along the full stretch of Bradmore Lane and Warrengate Road which will change their character from a rural country lane to a suburban road. This is likely to require the replacement of the single track bridge over the Mimmshall Brook at Water End.
- 4) The site is assessed in the [Housing Background Paper Part 2 – Distribution Options October 2012](#) (HOU/6) as having **medium to high sensitivity to change and low capacity to accommodate new development**. It was stated that development to the west of the railway line would result in urban encroachment into the countryside which would have a significant impact on openness. The assessment concluded the following: “***The area to the west of the railway line is not considered suitable to take forward as a village extension. (BrP4)***”. Please note that the underlining of the word not and bold text is how it is presented in the document.

The assessment in the [Landscape Sensitivity and Capacity Study October 2012](#) (ENV/5) concludes the site has **High Sensitivity with a low capacity for development**.

The site is further assessed in the *Landscape Sensitivity Assessment (July 2019)* as **Moderate High Harm** to the landscape if developed and in the Stage 3 Green Belt Study as “*open and rural in character*” having high levels of physical and visual openness.

The proposal introduces built development over the railway line into a large 12 hectare area of previously undeveloped countryside and would extend Brookmans Park as far as the eye can see to Brick Kiln Wood to the west and as far as the eye can see to the RVC to the south. In effect there would be no wider landscape visible, other than to the north. The openness of the landscape to the north is already compromised by the presence of dwellings and medical centre and would be further significantly compromised by the introduction of inter-visibility between the proposal and Welham Green.

78) If this is likely to be adverse, to what extent can it be overcome through mitigation?

Response

We cannot comprehend any mitigation that could possibly overcome, to any meaningful extent, the significant impacts listed above.

79) What is the potential impact on the Water End Site of Special Scientific Interest?

Response

The entire site is located within a Groundwater Course Protection Zone 1 (SPZ1), and there is potential for an unacceptable impact on water quality. It is important that the quality of water entering the Water End Swallow Holes SSSI is maintained, in order to protect the chalk aquifer and water resources.

Because the site is located within an Inner Protection Zone there may be a restriction on the type of SuDS that can be used.

81) What is the potential impact on the nearby woodland?

82) If there is any potential unacceptable impact? Can it be satisfactorily mitigated?

Response

The entire western boundary of the proposal is adjacent to Brick Kiln Wood which is a Wildlife Site and Ancient Woodland.

Ancient Woodlands have great value because they have a long history of woodland cover with very high biodiversity with many features that have remained undisturbed. Although a 15 metre wide buffer is proposed, it would be inevitable that the disruption of the construction process and subsequent habitation of 300 dwellings (potentially as many as 450) by people and their pets in such close proximity would result in significant deterioration of species and irreplaceable habitats.

Although Brick Kiln Wood is considered to be a robust Green Belt boundary, it is entirely possible that any significant deterioration could result in the ultimate declassification of the woodland as a wildlife site (as has previously happened at WeG6 Skimpans Farm site).

In addition, the ancient woodland designation does not cover the most northerly part of the wood (approximately a quarter of the woodland) adjacent to Bradmore Lane. The woodland and land beyond to the west is in the same ownership as Brp4/HS22 and it is not inconceivable that if the wood was declassified as a wildlife site, there would be nothing to stop the felling of the newer part of the wood and extending built development further to the west, ultimately as far as the A1M, with the argument made in a future Local Plan that the boundary would be stronger than existing!

We accept that this is all just hypothesis but thought it important to highlight the potential future weakness of a seemingly moderately strong Green Belt boundary, and why it is important not to breach the existing very strong boundary of the railway line. The 2012 NPPF is quite clear that when defining Green Belt boundaries they should be likely to be permanent.

83) Would the proposal have an impact on the setting of any listed buildings?

84) If so to what extent would there be harm? And could it be mitigated?

Response

The 2016 HEELA states “A secondary access from Bradmore Lane has been indicated by the site promoters; however the current width of Bradmore Lane is too narrow to serve a major access, as per the highway authority’s design standards, without significant highway upgrades along the full stretch of the road which would change its character from a rural country lane to a suburban road”.

Bradmore Lane connects with Warrengate Road, which is also a narrow, single track, semi-rural road without pavements and predominantly without street lights. It is therefore, by definition, also too narrow to serve as a major access, and would need to be widened and upgraded along the full stretch of the road, which would change its character from a rural country lane to a suburban road.

Water End is a small, linear hamlet of thirty dwellings situated in the Green Belt along Warrengate Road. Most of the buildings are pre-WW2, not urban in character, and include five Grade II listed buildings. Any road widening and upgrades would fundamentally change the setting of the listed buildings from semi-rural to urban and would be impossible to mitigate.

In addition, one of the site specific considerations contained within Policy SADM31 of the submission Local Plan states “*Realignment of Station Road will be required to provide safe access to the site*” and [Appendix 3 of the December 2019 HEELA](#) further states “*Any primary or secondary point of access onto Bradmore Lane would only be supported if its design is carefully considered such that it does not encourage vehicles to arrive/depart from the west, and **ensures that the junction of Bradmore Lane/Station Road is improved***”.

The realignment of Station Road and/or the creation of an access onto Bradmore Lane will result in the complete loss of ten WW2 tank traps and their setting, which are located at the junction of Bradmore Lane and Station Road. Although not statutorily listed, they are listed in the Hertfordshire Historic Environment Records on Heritage Gateway: [HER No. 6717](#) as “***the largest surviving formation of conical blocks in the county and are worthy of preservation***” and as such are an important local heritage asset.

Please note that to date there has not been any mention or acknowledgement of the existence of the tank traps within the Local Plan process.