

Matthew Briant
Elmbridge Borough Council
Development Control
Civic Centre High Street
Esher
Surrey
KT10 9SD

Our ref: WA/2016/122923/02-L01
Your ref: 2016/2760
Date: 05 January 2017

Dear Mr Briant

Water activity centre with single storey boat house with rooms in the roof

Hurst Park Open Space, Sadlers Ride, West Molesey, Surrey

Thank you for contacting us regarding the additional information submitted regarding the proposed development noted above. We have reviewed the submitted documents with regards to our remit and have the following comments to make.

Environment Agency position

In accordance with the National Planning Policy Framework (NPPF) we **maintain our objection** to the proposed development and recommend refusal of planning permission for the following three reasons:

1. Flood risk
2. Risk to nature conservation and fisheries
3. Inadequate buffer zone to the River Thames

Details on each of the objection points are set out below. In addition to these objections, please note we have concerns regarding the potential impacts of the proposed development on river navigation, see Advice to the Applicant – River navigation.

Reason 1 – Flood Risk

The Flood Risk Assessment (FRA) by UK Flood Risk Consultants, Project Ref: QFRA564, Version: 1.0 dated 24 November 2016, submitted with this application does not comply with the requirements set out in paragraph 102 of the NPPF. The submitted FRA does not provide a suitable basis for an assessment to be made of the flood risk arising from the proposed development.

The proposed building is sited within Flood Zone 3. Detailed flood modelling shows the proposed building within the 1 in 20 year (5% Annual Exceedance Probability) flood extent. The submitted site specific topographical survey within the FRA confirms the proposed building is within the 5% AEP.

Cont/d..



The assessment of climate change undertaken within the FRA to assess the new climate change allowances have been worked out using levels from the 2D domain of the detailed flood model. These levels do not include flow data. As the increase in climate change allowances is based on increased flows it would be more appropriate to use the data from the 1D upstream node, which includes flow data to make the assessment of the new climate change allowance. We recommend the applicant refers to our Thames external guidance note on climate change.

The ground floor of the building is proposed to be used for boat storage. Changing facilities is proposed on the first floor. Whilst the development is considered 'water compatible' development, as proposed, the building has the potential to reduce flood storage capacity. The FRA states 'In order to allow free movement of flood water across the building, voids will be created by providing vents and grills in the walls.' However, the submitted drawings do not show the voids in the design. The voids should be designed up to the 1 in 100 year with an appropriate allowance for climate change flood level.

Void design

1. The underside of the proposed voids should be set higher than the 1 in 100 year with an appropriate allowance for climate change flood level.
2. The openings to the void should extend from the existing ground level to above the 1 in 100 year with an appropriate allowance for climate change flood level.
3. 1 metre wide openings should be provided in every 5 metre length of wall on all sides.
4. Void openings should be provided on all sides of the proposed building(s).
5. If security is a concern then bars to the void openings should be spaced at centres of at least 100 mm.
6. These details should be clearly provided on any submitted plans or drawings.

Proposed works to bank

According to the FRA the proposal involves 'grading of the river bank which will increase the storage capacity of the river by approximately 55m³.' It should be demonstrated that compensation for loss of flood plain storage from the building can be provided on a level for level, volume for volume basis or consider alternative mitigation should be considered. The applicant has explained they propose voids to compensate for the loss of floodplain storage provided by the development. However, further detail regarding the proposed grading of the riverbank is required.

With regards to flood risk we would wish to see the proposed building set further back from the top of bank, and in addition, we also require to see more detail on the proposed bank profile.

Overcoming our objection 1

You can overcome our objection by submitting an FRA which covers the deficiencies highlighted above and demonstrates that the development will not increase flood risk elsewhere and where possible reduces flood risk overall. If this cannot be achieved we are likely to maintain our objection to the application. Production of an FRA will not in itself result in the removal of an objection.

Reason 2 – Risk to nature conservation and fisheries

In accordance with paragraphs 109 and 118 of the National Planning Policy Framework (NPPF) we object to the proposed development as submitted because the assessment

and mitigation of the risks to nature conservation and fisheries are inadequate. Consequently, the proposed development may result in the loss or deterioration of habitats. We therefore recommend that the planning application is refused. We will maintain our objection until the applicant has supplied information to demonstrate that the risks posed by the development to nature conservation and fisheries can be satisfactorily addressed.

Further explanation

We have reviewed the following documents and have detailed specific issues below.

Drawing 00 revision J

- The 'river bank naturalisation' area has been moved. We require clarification on the reasons for this.
- 'Chestnut Pale Fencing' has also been included creating a barrier between the river and top of the bank. We request that the applicant provide details of fence design and justification for the fencing. This fencing is also creating a narrow pathway along the re-profiled bank which will focus all the disturbance at one point along the river bank which will lead to increased erosion risks and therefore will likely introduce the need for harder bank work.
- We require clarification on whether the 'Tree Protection Fencing' is in addition to the planting screening previously suggested and how the two fit together. We require clarification on how long will this fencing be in place for. The fence line at the back of the building appears to cross a wall/water tank area. We require the applicant to confirm the proposed line.
- The layout of the fencing creates a narrow walkway between the river bank and the building/open space. This could lead to the blocking of the footpath with boats and people. It also creates a barrier to fauna species along the river bank and may cause them to be stranded within the development site.
- A new area of 'Ground Protection' is shown on the drawing – we need information on what material this is and its extent. It appears to be laid over some vegetation and two walls at the back of the building.
- A new 'Site Storage area if required' has been marked on the map. We require clarification on what this storage area would be for and what materials it would be made from.

01 Design and Access Statement

2.1 Location and site description

This should be updated to reflect the new location for the bank work.

3.2 Landscaping

The drawings should be updated to show the location of the mixed hedge planting as it is not clear from the 'Drawing 00 revision J' which has been submitted.

3.4 Above Ground Waste System & Rainwater Collection Tank

The applicant should clarify how the rainwater collection will interact with the 'soakaway' mentioned earlier in the document. The location of the tanks also needs to be confirmed as per the fencing comments in our feedback on 'Drawing 00 revision J'.

3.5 Improved riverside access

The text here doesn't match the 'Riverbank Naturalisation Scheme' proposals as the hard bank is not being completely removed and the 'gentle shelving gravel beach' is not mentioned.

4 Site layout

The proposed site has been selected to have minimal impact on the existing trees, but no justification has been given for its very close proximity to the River Thames. This section mentions a “secure outdoor compound”, however, this does not appear to be marked on the submitted plans. If the applicant is referring to the ‘Site Storage Area’ shown on ‘Drawing 00 revision J’ then we request information on how this area will be made secure as no details have been provided.

5 Flood plain

This section does not provide enough information with regards to the soakaway. It states that it will be situated at least 5 metres from the foundations of the building, but it has not been marked on any of the drawings submitted. The applicant should submit drawings and further details.

6 Appearance

This section states that there will be no outside lighting but external lighting is mentioned in the document 07 Ecological Surveys, Arboricultural Advice & Planting Strategy. We require clarification on which is correct?

7.4 Vehicular access to the site

If the proposed widening of the towpath would require an alteration to the ground surface, a Flood Risk Activity Permit from the Environment Agency will be required.

05 The Centre

Energy efficiency

Use of a soakaway is mentioned, but no further details about the soakaway are given. We require information on the design, location and operation of this feature.

Riverbank Naturalisation Scheme

Comments on this are included elsewhere in our response.

Physical Waste

The location of bins was previously marked on a map, but this has been removed. We request information on where they will be kept.

Wastewater

This section states that the wastewater treatment plant will be above ground but the drawing 00 revision J shows a walkway and fence line through this area. We require confirmation on the treatment plants location.

Waterside Access

Comments on this are included elsewhere in our response.

07 Ecological Surveys, Arboricultural Advice & Planting Strategy

Summary of specific consideration given towards Flora, Fauna, Bats & Trees

- Clarification is needed on the extent of vegetation clearance which is proposed as the drawings submitted only make reference to trees
- The location for deadwood piles mentioned here has not been shown on any of the drawings.
- This section mentions external lighting, but this contradicts the Design and Access Statement which states that there will be no external lighting

Consideration given during construction

- The location of the temporary access road should be at least 10 metres away

- from the river, measured from the top of the bank
- The proposed plant storage space should be shown on a drawing and situated away from the river bank at a distance of at least 10 metres
 - Should a bird's nest be found in any vegetation proposed to be removed, the applicant should seek advice from a suitably qualified ecologist for advice on a suitable buffer before any vegetation is removed

Surrey Wildlife Trust – Botanical Survey and Ecological Appraisal

- This summary makes little reference to the River Thames and makes no assessment of the potential impact of the development both directly and indirectly.
- We would not support the tow path being used to deliver material to site due to its proximity to the River Thames. Heavy machinery will cause soil compaction and could cause the collapse of an burrows.
- The applicant needs to outline the environmental enhancement measures which they plan to take forward. This sections states that measures detailed in the appraisal "should be carried out wherever possible" but no further information is given.

Landscape Planting Strategy

- This section does not give enough detail of the plans and should be accompanied by drawings to show the location and species being planted.
- There is mention of the possibility of removing trees which have grown into the channel, but no justification has been given for this

Enhanced information on the Riverbank Naturalisation Scheme

Improved Riverside Access

It is unclear why a special non-native species grass mix has been chosen for the bank when the document states that access to the river will be via the gravel beach. We would not support the use of non-native species within the 8 metre buffer zone.

Drawing 1

Area 1 – we do not support the use of non-native species within 8 metres of the top of the bank of the River Thames. This area also appears to be fenced off from the towpath. Please can the applicant advise how it will be accessed.

Area 2 – it isn't clear what the resulting profile of this reach of bank will be. The applicant should provide drawings which should show that the profile of the slope will not be steep and cause erosion from the higher area.

Area 3 – it is not clear what the purpose of this area is as there is a slipway downstream and boat access from the bank upstream. Again, we do not support the use of non-native species within 8 metres of the top of the bank of the River Thames.

Area 4 – comments as per Area 2.

Towpath Edge – We do not believe that a rock roll at this location is appropriate. We understand that there may be a need to prevent erosion of the towpath due to increased traffic, but a rock roll is a hard solution which will require ongoing maintenance. The aggregate is surrounded by wire mesh which is susceptible to wear thin and break which would create a trip hazard for users and potentially injure wildlife. The roll would then need to be replaced which would cause further disturbance to the river bank.

River Edge – Maintaining the lowest level of brickwork will not ensure the retention of

gravel due to wave action from the water and footfall. The scheme should be redesigned to extend the beach further to create a full slope into the water.

Transition – We require drawings to show the bank profile of this area. Without them we are unable to determine if the slope angle is too steep and will lead to erosion.

Drawing 2 – Details of Gravel Slipway

We do not believe that rock rolls are suitable for this location and will lead to exposed wire which may injure wildlife using the area. Wave action and footfall is likely to erode the gravel in between the rock rolls. It has not been stated how this area will be separated from the adjacent area and prevent the rock from coming loose from the rock roll which will lead to the risk of injury.

Drawing 3 – Details of Grass Verge and Gravel Beach

It is not clear what the use of this area will be as the drawings show it being fenced off from the towpath. We do not support the use of non-native species in the 8 metre buffer zone and would be very concerned about the use of aggressive grass species along the river bank.

Drawing 4 – Details of materials

It is not clear why a geotex liner is being proposed within the scheme and the liner will not soften the appearance of the harder aspects of the 'naturalisation scheme'. A geotex liner may lessen the loss of soil when water moves laterally, but it will not stop the movement of material from softer ground through wave action and footfall.

Materials

Please see previous comments.

RTF Turf – It isn't clear why this turf has been chosen as not only does it use non-native species, it appears to be planted with drought tolerant plants. It is proposed that it will be used next to the river where there is plentiful water available. As previously stated, we do not support the use of non-native species within 8 metres of the top of the bank of a watercourse.

Landscaping & enhanced biodiversity

Drawings should be submitted to show the exact locations of all vegetation removal and planting. The location of any deadwood piles should be shown on the drawing. The areas of "lush, bankside vegetation" have not been marked on a map so it is unclear where these will be. Clarification is needed on external lighting as it should be designed in at the planning stage rather than treated as a later addition. We would not support external lighting within 8 metres of the top of the river bank

Construction method statement

We are not satisfied that the river and associated habitat will be adequately protected during construction due to the lack of information provided.

Overcoming our objection 2

Updated documents are required to enable an assessment of the level of risk posed by the development. The documents should include the missing details mentioned above. The detailed design, construction, mitigation and compensation measures should be based on the results of the additional information gathered to ensure best practice design is used, and where possible, that there is a meaningful biodiversity gain.

Reason 03 - Inadequate buffer zone to the River Thames

In accordance with paragraphs 109 and 118 of the National Planning Policy Framework (NPPF) we object to the proposed development as submitted because the proposed development does not provide an adequate buffer zone to the River Thames.

Consequently, the proposed development may result in the loss or deterioration of habitats and access to enable river maintenance works. We recommend that planning permission should be refused on this basis.

The NPPF, paragraph 109 recognises that the planning system should aim to conserve and enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures. Article 10 of the Habitats Directive stresses the importance of natural networks of linked habitat corridors to allow the movement of species between suitable habitats, and promote the expansion of biodiversity. River corridors are particularly effective in this way. Such networks and corridors may also help wildlife adapt to climate change.

Further Information

The buffer zone is measured from the top of the bank of the watercourse, which in this case appears to be along the towpath. As previously advised, a buffer zone is managed for wildlife and should be free from built development, which includes formal landscaping, fencing and lighting. The nature of this development means that there will be an increase in disturbance to the river corridor which will not be mitigated or compensated for through the proposals.

We disagree that the proposed enhancements "make up for" the loss of river corridor. The land next to rivers provides a vital transport corridor for wildlife and it is for that reason that we object to planning applications which encroach on the river corridor. This development is not restricted by plot size and, therefore, we do not believe that a location so close to the river is the only option available.

Overcoming our objection 03

It may be possible to overcome this objection if the development is moved back to provide at least an 8 metre-wide buffer zone measured from the bank top/wetland edge (defined as the point at which the bank meets the level of the surrounding land) alongside the Thames. The buffer zone will help to reduce the impact of increased disturbance from any new development, reduce shading, and should be free from all built development including fencing, formal landscaping and lighting. To reduce light spill into the river corridor outside the buffer zone, all artificial lighting should be directional and focused with cowlings (for more information see Institute of Lighting Professionals (formerly the Institute of Lighting Engineers) "Guidance Notes for the Reduction of Obtrusive Light".

The buffer zone and river corridor should continue to form an essential part of green infrastructure.

Any scheme to provide a buffer zone will need to include a working methods statement detailing how the buffer zone will be protected during construction.

Advice to the Applicant – River navigation

In addition to the objections to the planning application detailed above we note that all structural encroachments into the river channel will need consent and are required to be licenced under section 60 of the Thames Conservancy Acts 1932.

We note that the applicant has suggested provision for 3 new mooring posts stationed 5m from the bank and 20m apart. However, they have not submitted plans to determine their proposed location. Therefore, we are unable to determine the impacts of these on river navigation. The applicant should submit a detailed plan of exactly where the proposed posts are to be placed within the channel.

Based on the proposals within the documents 'Enhanced information on the Riverbank Naturalisation Scheme' and 'Andrew Duncan Activity Centre', it is worth noting:

- There is a public right of landing throughout the towpath bank of the river. Any mooring facility along the towpath side of the river should not be designed, constructed or operated so as to obstruct or prevent public landing there. We would see this proposal as it stands as a permanent, private mooring facility that would prevent public access to a one accessible 60m section of towpath.
- Having not had detailed plans of where the proposed posts will be located, it is not clear if this proposal would reduce the amount of available public 24hr mooring at this location. As the public right of navigation extends across the full width of the river channel, it is also unclear if the extra encroachment within this area would have an impact on vessels being able to safely navigate and pass.

Advice to Applicant

This development may require an Environmental Permit from the Environment Agency under the terms of the Environmental Permitting (England and Wales) (Amendment) (No. 2) Regulations 2016 for any proposed works or structures, in, under, over or within 8 metres of the top of the bank of designated 'main rivers'. This was formerly called a Flood Defence Consent. Some activities are also now excluded or exempt. **An environmental permit is in addition to and a separate process from obtaining planning permission.** Further details and guidance are available on the GOV.UK website: <https://www.gov.uk/guidance/flood-risk-activities-environmental-permits>.

Advice to the Applicant/LPA

We have reviewed this planning application twice and do not believe that the applicant has address our concerns. We will maintain our objections to the proposed development until these issues have been fully addressed.

Final comments

Once again, thank you for contacting us. Our comments are based on our available records and the information submitted to us. Please use our reference number in any future correspondence.

If you are minded to grant planning permission contrary to our advice please contact us prior to doing so.

If you have any further questions please contact us.

Yours sincerely

Mr Oliver Rathmill
Sustainable Places | Planning Advisor

Direct dial 0208 4747 682

E-mail planning-wallington@environment-agency.gov.uk

Thames Area Climate Change Allowances

Guidance for their use in flood risk assessments

August 2016

We recently updated our national guidance on climate change allowances for Flood Risk Assessments. This document should be used together with that guidance to inform developments within our Thames area boundary.

Climate change allowances - overview

The government's Planning Practice Guidance refers planners, developers and advisors to the Environment Agency to our guidance on considering climate change in Flood Risk Assessments. We updated this guidance in February 2016 and it should be read in conjunction with this document to inform planning applications, local plans, neighbourhood plans and other projects. It provides:

- Climate change allowances for peak river flow, peak rainfall, sea level rise, wind speed and wave height
- A range of allowances to assess fluvial flooding, rather than a single national allowance
- Advice on which allowances to use for assessments based on vulnerability classification, flood zone and development lifetime

Updated climate change allowances guidance:

<https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances>

Planning Practice Guidance:

<http://planningguidance.communities.gov.uk/>

Assessing climate change impacts on fluvial flooding

Table A below indicates the level of technical assessment of climate change impacts on fluvial flooding appropriate for new developments depending on their scale and location (flood zone). Please note that this should be used as a guide only.

Ultimately, the agreed approach should be based on expert local knowledge of flood risk conditions, local sensitivities and other influences. For these reasons we recommend that applicants and consultants contact the Environment Agency at the pre-planning application stage to confirm the assessment approach on a case-by-case basis.

Table A defines three possible approaches to account for flood risk impacts due to climate change in new development proposals:

1. Basic

Developer can add an allowance to the 'design flood' (i.e. 1% annual probability) peak levels to account for potential climate change impacts. The allowance should be derived and agreed locally by Environment Agency teams.

2. Intermediate

Developer can use existing modelled flood and flow data to construct a stage-discharge rating curve, which can be used to interpolate a flood level based on the required peak flow allowance to apply to the 'design flood' flow.

3. Detailed

Perform detailed hydraulic modelling, through either re-running Environment Agency hydraulic models (if available) or construction of a new model by the developer.

Table A – Indicative guide to assessment approach

Vulnerability classification	Flood zone	Assessment by development type		
		Minor	Small-Major	Large-Major
Essential infrastructure	Zone 2	Detailed		
	Zone 3a	Detailed		
	Zone 3b	Detailed		
Highly vulnerable	Zone 2	Intermediate/Basic	Intermediate/Basic	Detailed
	Zone 3a	Not appropriate development		
	Zone 3b	Not appropriate development		
More vulnerable	Zone 2	Basic	Basic	Intermediate/Basic
	Zone 3a	Basic	Detailed	Detailed
	Zone 3b	Not appropriate development		
Less vulnerable	Zone 2	Basic	Basic	Intermediate/Basic
	Zone 3a	Basic	Basic	Detailed
	Zone 3b	Not appropriate development		
Water compatible	Zone 2	None		
	Zone 3a	Intermediate/Basic		
	Zone 3b	Detailed		

Definitions of terms in Table A

Minor

1-9 dwellings/less than 0.5 ha; office/light industrial under 1ha; general industrial under 1 ha; retail under 1 ha; travelling community site between 0 and 9 pitches.

Small-Major

10 to 30 dwellings; office/light industrial 1ha to 5ha; general industrial 1ha to 5ha; retail over 1ha to 5ha; travelling community site over 10 to 30 pitches.

Large-Major

30+ dwellings; office; light industrial 5ha+; general industrial 5ha+; retail 5ha+; gypsy/traveller site over 30+ pitches; any other development that creates a non-residential building or development over 1000 sqm.

Further info on vulnerability classifications:

<http://planningguidance.communities.gov.uk/blog/guidance/flood-risk-and-coastal-change/flood-zone-and-flood-risk-tables/table-2-flood-risk-vulnerability-classification/>

Further info on flood zones:

<http://planningguidance.communities.gov.uk/blog/guidance/flood-risk-and-coastal-change/flood-zone-and-flood-risk-tables/table-2-flood-risk-vulnerability-classification/>

Specific local considerations

Where the Environment Agency and the applicant or their consultant has agreed that a basic level of assessment is appropriate, the figures in Table B below can be used as an allowance for potential climate change impacts on peak design (i.e. 1% annual probability) fluvial flood level rather than undertaking detailed modelling.

Table B – Local allowances for potential climate change impacts

Watercourse	Central	Higher central	Upper
Thames	500mm	700mm	1000mm

Use of these allowances will only be accepted after discussion with the Environment Agency.

Fluvial food risk mitigation

Please use the [national guidance](#) to find out which allowances to use to assess the impact of climate change on flood risk.

For planning consultations where we are a statutory consultee and our [Flood Risk Standing Advice](#) does not apply, we use the following benchmarks to inform flood risk mitigation for different vulnerability classifications.

These benchmarks are a guide only. We strongly recommend you contact us at the pre-planning application stage to confirm this on a case-by-case basis. Please note you may be charged for pre-planning advice.

For planning consultations where we are not a statutory consultee or where our Flood Risk Standing Advice does apply, we recommend local planning authorities and developers use these benchmarks but we do not expect to be consulted.

Essential Infrastructure

For these developments, our benchmark for flood risk mitigation is for it to be designed to the **upper end** climate change allowance for the epoch that most closely represents the lifetime of the development, including decommissioning.

Highly Vulnerable

For these developments in flood zone 2, the **higher central** climate change allowance is our minimum benchmark for flood risk mitigation. In sensitive locations it may be necessary to use the **upper end** allowance.

More Vulnerable

For these developments in flood zone 2, the **central** climate change allowance is our minimum benchmark for flood risk mitigation. In flood zone 3 the **higher central** climate change allowance is our minimum benchmark for flood risk mitigation. In sensitive locations it may be necessary to use the **higher central** (in flood zone 2) and the **upper end** allowance (in flood zone 3).

Water Compatible or Less Vulnerable

For these developments, the **central** climate change allowance for the epoch that most closely represents the lifetime of the development is our minimum benchmark for flood risk mitigation. In sensitive locations it may be necessary to use the **higher central** to inform built in resilience, particularly in flood zone 3.

Further info on our Flood Risk Standing Advice:

<https://www.gov.uk/guidance/flood-risk-assessment-local-planning-authorities>

There may be circumstances where local evidence supports the use of other data or allowances. Where you think this is the case we may want to check this data and how you propose to use it.

For more information

Please contact our Thames area Customers and Engagement team:

WTEenquiries@environment-agency.gov.uk