

Reserved Matters Application – Havant Thicket Reservoir Phase 2 – Wetland

HBC reference: APP/24/00186

EHDC reference: 51680/008

Thank you for notifying me that an application had been received for the reservoir wetland design. While I fully support the proposal for a retained wetland at the reservoir site built in accordance with the original outline design and Technical Note – Wetland Concept and Outline Design (Reference 1: Atkins, 29/04/20, ref: HTR-ATK-XX-ZZ-RP-Z-001), the outline design has not always been followed in the more detailed design now submitted by Future Water.

I wish to **strongly object to the following aspects of the current design.**

1. **The introduction of a mound/ bund up to 2.8m high and 20m+ wide along the northern shore of wetland compartments 2, 3 & 4.** This is completely contrary to the outline design concept to create a natural looking wetland edge and will have adverse impacts on the landscape, value of the adjoining habitats for ducks, geese & waders, reducing biodiversity net gain, and interfering with the natural progression of habitats from the shore.
2. **The location and orientation of the hides shown.** The value of the hides is significantly reduced as their location has not been optimised to provide the best viewing opportunities in terms of views over the best habitats and light conditions, both key components of a hide/ view point design.

Siting, scale, external appearance and landscaping all form part of this application and these elements of the wetland design need to be urgently reviewed and updated before any consent is granted. Further explanation of my concerns and the action needed is set out in Appendix A.

Further concerns, comments and queries which need to be addressed with respect to the retained wetland design application before consent is granted are also set out in Appendix A including.

- **Concern that habitat complexity is not being provided in Compartment 1, which will reduce its biodiversity value**
- **Inadequate water depth being created at key points on the periphery of the wetland to deter predators accessing the islands**
- **Island features have not been orientated to the hide/ view point positions**
- **Ephemeral shallow features in NE - orientation not optimised to provide maximum benefit**
- **Concerns with respect to landscape details shown or not provided, especially in relation to the proposed siting of wet woodland**
- **Nothing shown to stop people/ dog access to the wetland shore at the west end of the retaining structure and wetland & fencing shown in other areas not currently adequate to prevent access**

It is disappointing to note that significant changes to the wetland design have not been discussed with community / environmental stakeholders. At the wetland workshop organised by Portsmouth Water for community stakeholders in December 2023 we were shown schematic type maps and assured by Future Water that the original outline retained wetland design was being followed. The key changes to the design now shown were not flagged for discussion. Nor does the 'You said, we did report' included with the application reflect all of the matters highlighted by stakeholders at that workshop as needing action.

I am also concerned that for the landscaping there seems to be a move to widespread seeding rather than natural regeneration, as was originally proposed following the recommendations made by very experienced wetland managers who were members of the wetland specialist subgroup in 2019/20, who helped to develop the design concepts and outline design. This requires further consideration and discussion.

I note that the Construction Environment Management Plan (& other supporting documents) for Phase 2 have not been submitted and registered with this application, but they are fundamental to the successful creation of the retained wetland habitat. Portsmouth Water have only just notified myself and other stakeholders that the CEMP & other documents for discharge of conditions relating to the wetland (Phase 2) have been submitted to the LPA and registered under the original reservoir hybrid planning application reference. I will look at the CEMP and the other documents submitted in reference to discharging conditions and provide comments separately as soon as practical, but please note that I am now away for a week. However, I wish to highlight that information in the other supporting documents registered separately may influence my response to the Phase 2 planning application. **Please consider this a holding response.**

I hope that **the LPA will not approve this application**, but instead will ask for further information from the applicant to clarify what is proposed, as well as seeking changes to the Phase 2 design, to ensure that the biodiversity, recreation and education opportunities provided by the development of the retained wetland are maximised, as was originally intended when the hybrid application was approved by the Council.

Yours sincerely,

A solid black rectangular box used to redact the signature of the sender.

Appendix A

Concerns / comments/ queries on Phase 2 Wetland application

1. Large bund to be constructed along the northern shore of the retained wetland

The Wetland Islands & Ephemeral Features Cross-Sections W1 to W4 submitted with the application show a 'Visual Screening Mound' which is up to 2.8m high and in places is more than 20m wide along the northern shore of wetland compartments 2, 3 & 4. This significant feature is surprisingly not shown on the corresponding landscape drawings submitted for these compartments. This significant design change is not referred to in the supporting documents. The mound/ bund did not form part of the outline design given planning consent in 2021 and constitutes a material change to the design.

I object to the introduction of this large mound/ bund on the northern shore which is completely contrary to the original outline design concept for the following reasons.

- a) The original design concept was to create a retained wetland in the north that looked as natural as possible blending into the existing landscape, with water lapping up against the existing natural contours of the land, with a natural habitat succession from wetland edge riparian habitats through wet grassland, dry grassland to scrub and woodland habitats on the higher ground to the north. The construction of an artificial bund up to 2.8m high along the northern shore will detract from this vision, creating what will clearly be a man-made landscape, instead of a very natural looking wetland edge.
- b) The high bund will definitely have a negative impact on the landscape and setting of the new wetland. Creating a landscape that looked as natural as possible was a key design objective for the wetland, and was very important to ensuring that the new landscape blended in seamlessly to the historic landscape. A key factor given the loss of part of the Grade II listed Historic Park & Gardens & designated Conservation Area (The Avenue woodland peninsula) to the reservoir, and the proximity / views from the remainder of the park. The applicant claims that their design will result in no change to the landscape impact assessment, but no views, photomontages or detailed assessment has been carried out. Given the significant change in the design the LPA should require the applicant to provide further details on the landscape and visual impact (see 17 below).
- c) The presence of the mound/ bund on the northern shore of the wetland will reduce the wildlife value of the surrounding habitat. Wetland birds such as ducks, geese and waders graze or feed on short grassland adjacent to wetlands where the water remains in view, often starting at the water's edge and walking away from the water as they feed. While if the mound banks were not too steep and maintained by mowing at appropriate times of year the birds may use the proposed southern mound edge, they would be unlikely to regularly use the northern edge of the mound, nor the grassland to the north which will no longer have line of sight to the water. The introduction of the mound/ bank would significantly reduce the use by wetland birds of the surrounding grassland habitat which would otherwise provide suitable and valuable habitat.
- d) The construction of a mound will also reduce the overall biodiversity net gain which should have been provided by the retained wetland, as it will interfere with the natural progression of habitats from the shore, reducing the value of the habitats.
- e) The mound will interfere with the natural drainage from the woodland down the natural gradient to the shore.
- f) The bank/ mound is not necessary as other alternative solutions are available for screening the wetland from visitors (where necessary), methods such as tree and hedge planting could add wildlife value, rather than detracting from it.

Further discussion needs to take place with stakeholders (including HTR Env Sub Group) to discuss screening of the wetland. The mound/ bank should not be needed for visual screening, except perhaps in very localised areas close to the hides, or in the NW adjacent to the visitor hub where it should be set back from the wetland edge and enhanced by tree planting. The strategy must continue to be to keep people well away from the wetland (except at designated & screened hide/ view point locations) by installing a robust stockproof fence within the woodland to the north, the existing and new tree planting at appropriate locations should then provide appropriate screening, without the need to construct a 'visual screening mound'.

Note: A person is depicted between the mound and the wetland edge on cross-section W1. There should be no public access along the waters edge.

The LPA need to seek clarification as to why a person is shown on section W1 and ensure there is no plan for public access to the wetland shore.

The LPA should urgently request a plan confirming the location of the 'visual screening mound' shown on the sections along the northern shore, which is not shown on the Landscape General Arrangements drawings. This will enable discussion with stakeholders, including the HTR Env

Sub Group, as to whether there are any localised areas where screening with a mound might be the preferred option.

The LPA should require the removal of the visual screening mound in order preserve the natural progression of habitats and to protect the biodiversity value of the northern shore and associated grassland habitats for wetland birds, many of which are features of interest the nearby harbour SPA.

2. Hide locations have been moved and are not appropriate

The location and orientation of the hides shown on the application drawings has changed from the outline design. The value of the hides is significantly reduced and their location has not been optimised to provide the best viewing opportunities in terms of views over the best habitats and light conditions, both key components of a hide/ view point design.

All of the hides are shown orientated towards the SE which provides the worst possible light conditions for bird watching, as views will be into the morning sun when it is at a low angle. Good design practice is not to have hides orientated to the SE.

- The orientation of the hides should be changed before their locations are fixed to ensure that they are not SE facing.

- If hides are to be used rather than viewpoints it is important to maintain 270 degree all round visibility across the wetland and adjacent habitats, this enables users to have the widest view possible and adjust their viewing position at different times of day/ light conditions.

Specific feedback on each hide position shown on the drawings is set out below detailing the action that is needed. Note 1 below addresses why revised details need to be provided and approved now as part of this application, as knowing the hide/ viewpoint locations is intrinsic to developing the best wetland design in terms of location of islands and provision of planting for screening, to optimise recreation and education opportunities, while designing out the risks from disturbance.

a) The central hide/ view point needs to be moved

- The central hide is shown orientated to the SE overlooking Compartment 2. This hide was always intended to provide views over compartment 3, which is expected to have very good wildlife diversity due to the wide mix of habitats expected to develop. **The hide location and orientation needs to be changed to view out over Compartment 3, viewing towards the permanent and ephemeral island structures to be located nearby.** Otherwise, there will be no hide available to view the wildlife in Compartment 3. This creates the risk of desire lines being created to unauthorised and unscreened viewpoints around Compartment 3 so that visitors can view in.

- No screening is shown along the access to the central hide. If visitors are visible before they enter the hide they will scare off any wildlife present in front of the hide. To optimise viewing opportunities and avoid disturbance to the wetland the access to the hide must be screened. Ideally this should be achieved with by moving the hide to a more appropriate location, along with early planting of appropriate vegetation to add a biodiversity benefit, but in the short term some form of robust temporary screening is likely to be necessary until the vegetation develops. The location and details of the screening should be shown on the Landscape General Arrangement Drawing – Sheet 5 before the application is approved.

The LPA should request that the central hide is moved to provide views over Compartment 3 in a SW-W orientation (minimum 270 degree views) looking towards the new permanent and ephemeral islands to optimise the wildlife / education viewing opportunities.

The operational access road and bund for compartment 2/3 has been moved west on the shore where it is much more exposed and harder to screen, with the access running through open grassland on high ground. This also makes screening a viewing point/ hide looking over compartment 3 more difficult.

The LPA should establish;

- **Why has the internal bund dividing compartment 2/3 been moved further west?**
- **Could the internal bund remain at the end of the former path west of the Corsican Pine Plantation?**
- **If not, can the operational vehicle access route and hide path run between the retained vegetation on the west side of the Corsican Pine plantation and the new woodland planting area (labelled E) to help screen the route?**

b) The eastern hide/ view point needs to be moved

- The eastern hide is shown orientated to the SE with a view over Compartment 1, which is expected to develop into a dense reed bed habitat, in which it will be difficult to view wildlife. The hide should be orientated to view SW to W over compartment 2 which is expected to develop into a more diverse habitat with more opportunity to view wildlife, especially birds, ensuring that the siting of the east hide optimises the viewing experience and educational opportunities.

- No screening is shown close to the access of the east hide. If visitors are visible before they enter the hide they will scare off any wildlife present in front of the hide. To optimise viewing opportunities and avoid disturbance to the wetland the access to the east hide must be screened. Ideally this should be achieved with early planting of appropriate vegetation to add a biodiversity benefit, but in the short term some form of robust temporary screening is likely to be necessary. The location and details of the screening need to be shown on the Landscape General Arrangement Drawing – Sheet 5 before the application is approved.

The LPA should request that the eastern hide is moved to provide views over Compartment 2 in a SW-W orientation (minimum 270 degree views) looking towards the new permanent and ephemeral islands to optimise the wildlife / education viewing opportunities.

c) The western hide/ interpretation hide is too small and wrongly orientated

The footprint of the interpretation hide on the NW edge of the wetland does not seem to be specified. The original hybrid planning application drawing for the NW corner (HTR-ATK-ZZ-DR-L-0015) made provision for a 10m x 20m hide to make it large enough for educational visits. The size of the hide does not appear to be stipulated in the Phase 2 application. Based on the scale bar provided on the Landscape General Arrangement Drawing – Sheet 2 **the western hide would appear to be much smaller than required, about half the size it should be under the hybrid planning consent.**

- The western hide is shown orientated to the SE with a view over Compartment 4. The hide should be designed to have a 270 degree view as a minimum, but be orientated with front facing south, viewing over the permanent and ephemeral islands in Compartment 4, ensuring the best viewing opportunities for wildlife and education are optimised.

- No access route nor screening for the west hide is shown on the Landscape General Arrangement Drawing – Sheet 2. Given that the interpretation hide is a critical part of the infrastructure for the wetland, in order that it can provide its educational function, it is essential that the location and access are incorporated fully into the wetland design at an early stage, to ensure the siting is optimised rather than bolted on at a later stage. More detail must be provided for the western interpretation hide. An intelligent environmentally led design with fully screened access which is in keeping with the rural setting will be critical to the success of this hide.

The location and details of the screening need to be shown on the Landscape General Arrangement Drawing – Sheet 5.

The LPA should request a revised Landscape General Arrangement Drawing – Sheet 2 which shows an interpretation hide of the correct dimensions orientated to the south but with 270 degree viewing aspect.

Note 1: Planning Statement Section 2.25 suggests that the siting, scale and external appearance of bird hides & interpretation buildings is shown indicatively and will be provided as part of a separate application. While the detail of appearance could follow **it is important when developing a wetland design from scratch that the siting, orientation and screening of the hides/ view points is provided, considered and determined now** (at least within a nominated footprint), as it is important that the hides/ viewpoints are embedded as an intrinsic part of the wetland design, not bolted on at the end, as so often happens. Their location is critical because it impacts where islands should be located and how they should be orientated to optimise the views from the hides, along with where planting blocks should be sited to help provide screening of access points. As a result, **it is essential that the existing inappropriate location of the hides shown on the drawings is addressed as part of this application for the detailed design of the retained wetland.**

3.0 Is there now a commitment from the developer to provide and maintain 3 hides?

The original hybrid application did not commit to hides due to concerns about vandalism and longevity associated with anti-social behaviour. Instead, the original application documents referred to hides or viewpoints. The text in this application repeatedly refers to hides, but it is not clear **are Portsmouth Water now committing to providing and maintaining 3 hides at the reservoir site?**

The LPA should request clarification from the developer as to whether there is a now commitment to provide hides, rather than viewpoints?

If so, **the LPA need to apply a planning condition on any consent granted to require further submission of details about how the hides will be constructed to be robust in the environment/ urban fringe setting, with details of maintenance and a commitment to repair/ replace the hides if they are vandalised.**

4.0 Concern that habitat complexity is not being provided in Compartment 1

No detail is shown on the design drawings to show how the existing topography within Compartment 1 will be manipulated to improve habitat connectivity and diversity. The Outline Design as set out in reference 1 (page 25) indicated that the design would include;

- *Variation in water depth to be achieved by creating a peripheral ditch system with shallower interconnecting channels.*
- *The peripheral ditch system would be designed to deter access by both the public and predators such as foxes.*
- *Some interconnecting channels to provide wider scraped/ scalloped edges to the channels to increase habitat complexity as the reed develops.*

The existing ground level provides a very gentle gradient dipping to the south which will provide a very shallow uniform water body as is currently shown on the Landscape General Arrangements Drawing Sheet 5 of 6. This will not provide much habitat diversity and does not maximise the biodiversity benefit that this compartment should provide, as was set out in the outline design and recommended by wetland managers each with more than 35 years experience on the Wetland Specialist Sub Group.

The LPA need to request the applicant provide revised drawings to show how the existing ground levels in compartment 1 will be manipulated to provide a peripheral ditch system, shallower interconnecting channels and scraped/ scalloped edges to increase habitat complexity and deter access by predators, the public and dogs.

5. Inadequate water depth being created at key points on the periphery of wetland to deter predators

The water depth around the periphery of the wetland shown on cross-sections W3 & W4, close to island features will not be adequate to deter predators from accessing nesting and roosting island habitats, especially as water levels drop seasonally in the summer.

It is not clear if the position of the islands is being fixed by this application, please can the LPA clarify this? (I assume island locations are being fixed as siting does form part of this application)

The depth and width of water channels between the northern shoreline and the island features needs to be reviewed, taking into account annual seasonal variations in water levels, to ensure that the channel size and depth will be sufficient to deter predators from accessing the islands in the summer and winter. I would suggest that the minimum channel width should be 4m, with a 1.2m deep section which is 2m wide. Island features should be moved further offshore to ensure that this can be achieved. A 1.2m depth should discourage reed growth so that the channel remains open with minimum maintenance.

LPA to ask applicant to reconsider island positions and water depths to deter predators from accessing the islands.

6. Island features have not been orientated to the hide/ viewpoint positions

Island features have not been orientated to optimise viewing opportunities from the hide/ viewpoints as part of the design, nor to reduce erosion, despite these being a design objective, as recommended by wetland managers each with more than 35 years experience on the Wetland Specialist Sub Group.

Birdwatchers in the hide should be able to view along most sides of nearby islands so that there is minimal island edge out of site for birds to disappear behind. This is fundamental to the success of the hides in optimising the viewing opportunities across key wetland features.

Following advice from the wetland specialists the Outline Design (Reference 1, page 22) required that the islands should be;

- *Aligned to the south-west to reduce the potential for erosion from wave action.*

- *Aligned to viewing points e.g. education hide, with the lower and narrower point of the island directed to the viewing point to improve views across the island, as shown on Figure 3.9.*

LPA to ask applicant to reconsider island positions to ensure wildlife viewing opportunities from hides / viewpoints are optimised, while minimising the risk of erosion.

Note: Planning Statement Section 2.25 suggests that the siting & scale of the bird hides & interpretation buildings is shown indicatively and will be provided as part of a separate application. This is of significant concern as the layout of the islands needs to be orientated to optimise the views from the hides/ viewpoints to provide maximum benefit. This is recognised in the Planning Statement on page 9, bullet 2, where it is stated that islands will be aligned to viewpoints, and planting is proposed to provide adequate screening. The details provided with this application do not show that these design criteria are being met.

7. Ephemeral shallow features in NE - orientation not optimised

The location of ephemeral shallow features have been scattered across the NE shore area in various orientations without adequate consideration to the design concepts set out in the outline design (Reference 1, page 24 and shown in Figure 3.11).

The features were to be designed so that as water levels recede standing water would be held on the shore adding to habitat complexity and biodiversity value. But as importantly the orientation of the ephemeral shallows was supposed to allow the fetch of the waves along the NE shore to provide opportunities for inundation of the shallows from inland wave propagation over the high points and up the shallow slope of the shoreline. This is why in the outline design Figure 3.11 showed the ephemeral shallows orientated with their long edges parallel to the SW prevailing wind to help funnel the wave fetch up the shoreline, working with the prevailing wind direction to allow more regular wetting of the grassland closest to the shore to increase the potential for biodiversity net gain.

Note: The alternative was to have a series of ridge and furrow features along the shore orientated to the SW/NE, similar to the principle used in historic water meadows.

This design concept which was to work with the natural elements (prevailing wind & wave action) to help optimise the habitat complexity of the ephemeral shallows for the benefit of increased biodiversity has not been followed.

It is not clear if any consideration has been given to how adjacent ditch habitats could be integrated to the wet grassland design to take advantage of existing low points (Ref 1, page 24 referred).

LPA to ask applicant to reconsider the position of the ephemeral shallow features to optimise the layout to work with the prevailing wind direction to provide the potential for maximum biodiversity benefit in line with the outline design concept.

8. Concerns with respect to landscape details shown or not provided

Section 2.24 of the planning statement confirms that the details of soft and hard landscaping set out on the drawings are submitted for reserved matters approval now. It is just the planting mix, hard landscape materials specification and maintenance that will be subject to a subsequent application to discharge Condition 28. As a result, it is clear that the broad details and areas allocated for different landscape features must be appropriate/ correct before this application is approved. Concerns that need to be addressed are set out below.

a) Wet woodland planting areas not appropriate

Wet woodland areas are currently shown on the landscape drawings on high ground which is unlikely to be suitable for planting species that favour wetter ground. For example on the NW edge of Compartment 2 and NE edge of Compartment 3. Surprisingly for the latter area the dry woodland has been illustrated on lower ground closer to the wetland shore. While I understand that the detailed planting plan does not form part of this reserved matters application the general landscaping does.

The LPA should ask the applicant to reconsider the location of wet woodland planting to ensure that it is located in appropriate low-lying areas where it will have its best chance of survival.

b) Not taking account of retained trees in the former Corsican Pine Plantation area

On the NE side of Compartment 2 to the north of the former Corsican Pine Plantation area the existing extent of the retained deciduous woodland is not shown. Instead it is shown as green hatch, which elsewhere is woodland to be planted. The retained woodland should be shown in a different shading to woodland to be planted in this area.

On the west side of the Corsican Pine Plantation a strip of trees has been retained, the retained trees are not shown on Sheet 4. The retained strip of trees should be shown in a different shading to woodland to be planted.

The LPA should ask the applicant to update the drawings to show where woodland has been retained, to aid understanding of the proposed landscape plans.

c) Retention of trees in the valley of compartment 3 and 4

The habitat in the flooded valleys of Compartment 3 & 4 is unclear. Forestry England's response to this application confirmed that they have asked for the existing trees in the valley to be retained.

The LPA should ask the applicant to update the Landscape General Arrangements Drawings Sheet 4 (& 2?) to show where the existing trees are to be retained as part of the flooded woodland.

d) Concern about placement of soil & grass over elements of the retaining structures

There was a concern at the outline design stage of the retaining structures that creating surfaces suitable for large numbers of geese and gulls to nest/ roost could create negative impacts in terms of water quality in the retained wetland and deter other more desirable species. It was suggested by wetlands specialists with experience of managing such sites that soil should not be placed that would encourage grass growth and that having a stone surface may be more beneficial.

The cross section submitted showing the Landscape & Ecology Proposals for the retaining structures currently refer to the top and sides of the bund being dressed with topsoil (up to 150mm) and seeded to establish a grass sward, with soil and grass even shown on top of the access road. This needs further discussion with wetland specialists. Especially as it could also make annual maintenance & inspection more difficult as vegetation becomes established more quickly. Non-desirable vegetation would find it harder to establish in a stone surface.

The LPA should ask the applicant to have further discussion with wetland specialists who have experience of managing wetlands for birds to agree an appropriate landscape strategy for the retaining structures which will optimise their biodiversity value and reduce ongoing maintenance requirements.

e) Lack of detail on benching proposed on the slopes of retaining structures

The benching of the slope to increase the biodiversity value of the retaining structures is shown on the Landscape & Ecology Proposal cross section. The text arrow indicated that "the marginal bench varies in width to suit context". The width range of the benches is not specified. The width and extent of the benching is also not shown on the Landscape General Arrangement Drawings. As the location of the retaining structures are being fixed by this application it should be possible for the applicant to provide a drawing showing the extent of the benching proposed for all of the wetland retaining structures, including the internal compartment bunds. This is important as the benching is critical to enhancing the biodiversity value of the retaining structure & internal compartment slopes and will thus contribute to the amount of biodiversity net gain delivered, with the extent of the shelving needing to be maximised along the structures, more detail needs to be provided to show that this will be achieved.

The LPA should ask the applicant to provide a drawing showing the extent of the tiered shelving along the wetland retaining structures and compartment bunds before the application is approved, to enable a better understanding as to whether the biodiversity benefit/ opportunities are being maximised.

f) Lack of detail on Geotech Matting to be used extensively on the slopes

No detail has been provided on the Geotech Matting to be used as reinforcement to reduce erosion of the retaining structures. The cross-sections show that this is to be used extensively across the wetland structure slopes. No information has been provided on what it will look like, what colour it is, or how long it will be expected to last? The outline design referred to a rock mattress, armour stone or a stone surface which sounded more robust, presumably the Geotech Matting is a cheaper solution? The surfacing of the slopes forms a fundamental part of the design that the applicant is seeking approval for, it is reasonable to expect further information to be provided.

The LPA should ask the applicant to provide more information on the Geotech matting, its appearance, properties, longevity and maintenance requirements for consideration before the application is approved. This should show how easily plug planting can be achieved with this

material and examples (with photos) of where it has been used in similar environments elsewhere.

9. Nothing to stop access at the west end of the retaining structure

Where the western end of the retaining structure is shown joining the NW visitor hub area there is no fencing or hedge planting shown to prevent public or dog access onto the retaining structure. The landscaping drawing just shows grass. This will be a very busy area where the barriers to public / dog access must be extremely robust. The detail must be provided on the Landscape General Arrangement Drawing Sheet 2 to show how that will be achieved in a robust but sensitive way that does not detract from the landscape and views.

The LPA should require that the applicant provides details now of the robust but sensitive barriers to be provided at the western end of the retaining structure to prevent visitor and dog access, which would adversely impact the wildlife using the wetland.

Note: Assurance is given in the 'You said we did report' page 3 that design of the spillway in compartment 4 has been widened from 4m to 10m to discourage any attempt to access the main wetland retaining structure. This is indicated to be shown on drg.HTR-GHD-WL-ZZ-DR-S-0072, but that drawing does not seem to be in the planning submission?

- A drawing should be provided to show that the flat part of the spillway is 10m wide.
- Even if the spillway is widened a robust barrier in the form of stockproof fencing and hedging is still required at the west end of the retaining structure where it joins the land.

10. Natural regeneration to be favoured over landscape planting

I am also concerned that for the landscaping there seems to be a move to widespread seeding rather than natural regeneration, as was originally proposed following the recommendations made by very experienced wetland managers who were members of the wetland specialist subgroup in 2019/20, who helped to develop the design concepts and outline design. This requires further consideration and discussion.

While page 17 of the Planning Statement confirms the Outline Design Concept that there is a preference for natural vegetation/ wetland species colonisation, the cross-sections all refer to extensive seeding and plug planting rather than natural regeneration. With page 9, bullet 11, referring to seeding around the edges of the reservoir site.

Before the detailed planting plan is developed the LPA needs to encourage the applicant to have more detailed discussion with relevant stakeholders, including the HTR Env Sub Group, as to how and where use can/ will be made of natural regeneration.

Note: A key concern of the original Wetland Specialist Subgroup was that importing wetland plants brings with it a significant risk of importing invasive species that could be detrimental to the wetland. The more detailed landscape strategy to be submitted to discharge the condition needs to include a strategy for addressing the risk of importing invasive species.

11. North-west shore of the wetland excluded from the red line

The Phase 2 application relates to the design for the wetland. The NW shore of the wetland forms a critical part of the design, yet it has been excluded from the red line area for this application. This is of significant concern.

Compartment 4 is expected to be one of the best wetland compartments for wildlife with excellent habitat variety being provided by the flooded valley features, giving much complexity in water depths and thus habitat diversity for a wide range of different species. How the habitat on the north-west shore will be created and the compartment screened from the busy NW Visitor hub area is critical to the success of the wetland in this area.

The LPA should require that the applicant provides details of the habitats and screening to be provided along the NW edge of the retained wetland before the application is determined.

12. Access to the wetland east hide from the NE perimeter track is not shown gated

All paths that lead to the wetland need to be gated and the paths fenced with stockproof material to allow access to the hide/ viewpoint, while preventing access for people and dogs to the wetland. PW/FE have previously advised stakeholders that the existing path on FE land along the NE edge of the

reservoir site (running E to W) will be retained but screened with new planting. However, it is not clear on the latest design drawings;

- If this path will remain open?
- If it will, then it must be gated (inc. no dog signs) at the east end of the path closest to the FE car park.
- The arrangement for stockproof fencing and gates also needs to be clarified on the Landscape General Arrangements Drawing Sheet 6 where the operational access road to the wetland crosses the existing E-W track. The current position of the operational access gate seems to assume that people will only be coming from the north, which is not the case if the existing eastern route is to remain open.

LPA to request further information and revised drawings to show access, additional fencing and gates along the existing track running E to W just north of the NE area of the reservoir.

Note: Page 10 of the Planning Statement (first bullet) refers to willow scrub being retained along the SE boundary of Havant Thicket to help reinforce the visual barrier between the grassland on the reservoir side and footpath. This suggests that the footpath is to remain and that gates do need to be added to the design at appropriate locations to protect the retained wetland.

13. Robust stockproof fencing needed to protect the wetland - Fencing details not clear

The Planning Statement page 14 indicated that fencing to prohibit public access will be installed at the locations shown. The key to the Landscape General Arrangement Drawings indicated that a blue dashed line illustrates the proposed location of stockproof fencing. However, stockproof fencing is not currently shown protecting the wetland from access by people and dogs in all areas where it will be needed including the following.

- a) What happens to the stockproof fence on the east side of the valley where top water level goes below the Cat A FE track? No fencing is shown on the Landscape General Arrangements Drawing Sheet 3 in this area along the Cat A track.
- b) Where the fences along the Cat A track about the flooded valleys what will the detail be to prevent people walking around the end of the fence? Will the fence extend into the water? (not shown) The position of the fencing needs to consider how access is prevented as water levels drop seasonally.
- c) Not clear where the fence will be in relation to the ditch on the south side of the Cat A track. The fence needs to be on the south side of the ditch to enable maintenance of the ditch to take place. Clarification is needed on where the stockproof fence is to be placed.
- d) Stockproof fencing is shown along the path down to the central hide on Sheet 4, but the drawing does not extend far enough north to see where the fence joins to. Does it join to a new fence to be provided all along the south side of the Cat A FE track?
- e) Stockproof fencing is shown along the path down to the eastern hide on Sheet 5, but the drawing does not extend far enough north to see where the fence joins to. Does it join to a new fence to be provided all along the south side of the Cat A FE track?
- f) Stockproof fencing is not shown on the eastern side of the wetland alongside the existing N to S path, nor along the NE existing E to W path (Sheet 6)

As well as confirming/ clarifying the detail queried above it would be extremely helpful if the applicant could confirm that the existing stockproof fence on the south side of the Havant Thicket woodland will also be maintained to provide a second barrier to access.

LPA to request further information from the applicant on where the fencing will be located that is to stop the public and dogs accessing the wetland.

14. Clarification of the detail for fencing and gates north of compartment 3 / 4 bund

The design of the gated access north of the compartment 3/4 bund needs to reflect that this will inevitably become a viewpoint. The gate needs to be located no further forward than the woodland edge, so that the woodland provides the necessary screening for people standing at this gate. The gate is currently shown just south of the woodland edge, this will result in people standing at the gate being more visible to birds using the wetland.

The blue dashed line showing the fence appears to cut into the existing woodland which will require further trees to be cut down. This seems to be to accommodate 2 gates, but it is not clear why 2 gates are needed? Why can't the existing track/gate position be used for the operational access?

LPA should ask for further consideration to be given to the layout here to avoid the gates being located further forward than the woodland edge, while also avoiding cutting down more trees.

15. How will screens shown on the penstock culvert be maintained?

The trash screens x8 shown at each end of the penstock culverts are remote from the retaining structure and under water. The screens will need to be cleaned on a fairly regular basis. Cleaning/ maintenance activities associated with the screens will inevitably cause disturbance to wildlife using the wetland. Will divers be used? Is there anyway of siting the screens to make them more accessible and easier to maintain? Designing out risky activities and those that can cause disturbance should be a priority.

Note: In Compartment 2 the slope drops south towards the screen, so more potential for the screen to become blocked.

The LPA should request further information on how it is proposed that the screens will be accessed for maintenance/ cleaning and how often this will be required?

16. Phasing of work?

No information provided on the phasing of the works?

Will all ground manipulation works take place at the same time that the retaining structure is constructed? For example, island features, compartment 1 features and ephemeral shallows?

Or is any of the work included as part of this application to take place over a longer time frame?

Will the tree planting needed to provide tree/ hedge screens be undertaken early in the programme so that trees have more time to become established before the reservoir wetland opens to the public?

LPA to seek clarification as to the programme for the works to construct the structures which form part of this application, as well as the landscape planting.

- **Can the early planting of the trees to provide screening be required by planning condition?**

17. Lack of landscape impact assessment for the detailed wetland design

When the original reservoir outline hybrid planning application was submitted, we were told that the developer could not provide photomontages from key viewpoints as the detailed design of the wetland had not been completed, which would determine the final location of the wetland retaining structure and islands. This design work is now complete and particularly given the significant design change to introduce a high bank along the northern shore it would be **reasonable to expect the applicant to provide the LPA with a landscape impact assessment including photomontages from key view points**. This should include; from the view points on the reservoir embankment at the end of the Avenue and at Gammon Hill, from the NW shore (visitor centre area), from the interpretation hide on the NW shore of compartment 4, from the culvert view point where the compartment 4 stream entry crosses the category A FE track, from the proposed central hide (looking east and west) and from the eastern hide (looking west).

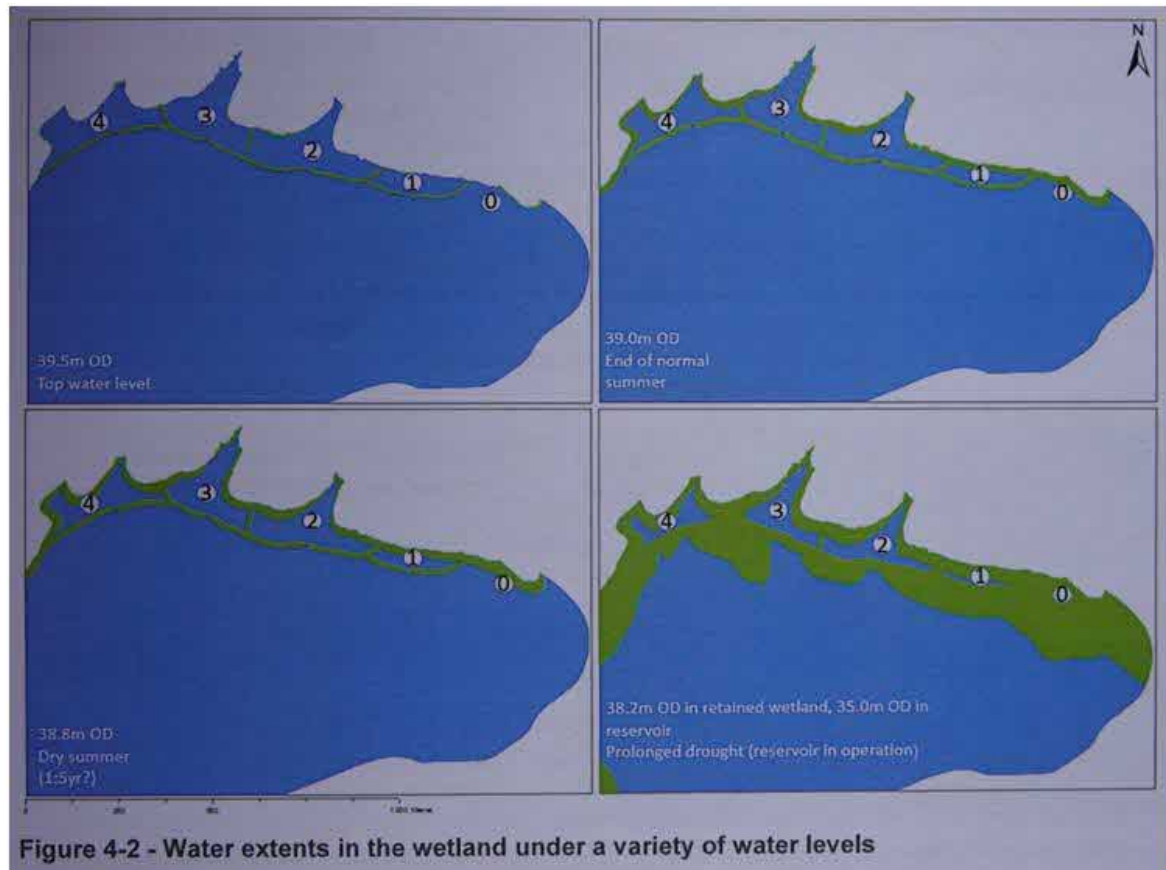
This should include a comparison of what the views would have looked like before the introduction of the proposed new high bank along the northern shore.

In addition, to assess the landscape impact and value of the habitats being created, the LPA should request that the developer provide a series of maps showing the impact on the water level in the retained wetland under different operating regimes/ climate scenarios. For the outline design Technical Note (Reference 1) page 28 the developer's consultant provided Figure 4.2 (see copy below) which illustrated water extents in the wetland under a variety of water levels.

When assessing the detailed design of the wetland it is important to understand that the spillway level of 38.8m is not the lowest the water level within the retained wetland will reach. Now that the island locations and detail for the ephemeral shallows have been determined it would be extremely helpful to provide the equivalent maps for the new design to understand the impacts on views and upon the value of the wetland under different scenarios (i.e. how much water would remain and where mud will be exposed. This will help to identify further refinements needed to the wetland design to optimise its value under low water level scenarios.

Note: Stakeholders did ask that this information be submitted with the planning application. The statement made in the Planning Statement Section 2.4 that "water within the wetland area will be maintained at 38.8m AOD regardless of main reservoir levels, unless the wetland is drained for

maintenance or emergency reasons” is not true. As shown on the maps below evaporation during prolonged dry spells will reduce the water level below 38.8m.



I would ask that the LPA request the developer provide the following information for consideration before the application is determined;

- A landscape impact assessment for the detailed design including photomontages from key viewpoints, ideally illustrating the impact of different water levels.
- A series of maps showing the impact on the water level in the retained wetland under different operating regimes/ climate scenarios, to update the maps shown above.

18. Proposal for a box culvert not clear/ not shown on the drawings

Section 2.8 of the planning statement acknowledges that spillways will be used to connect the wetland to the main reservoir, but states that “flows within the wetland compartments would be managed by a series of box culverts from, and between each compartment’s.” Whereas the drawings submitted show correctly that spillways will be used to enable flow between wetland compartments, with no mention of ‘box culverts’.

The LPA needs to ask the applicant to confirm that there is no plan for box culverts between wetland compartments, or if there is to provide plans and cross sections to show where these are planned so that the implications and appropriateness of this can be considered by stakeholders before the application is determined.

19. Design changes not discussed with community/ environment stakeholders

It is disappointing to note that significant changes now proposed to the wetland design have not been discussed with community / environmental stakeholders. At the wetland workshop organised by Portsmouth Water for community stakeholders in December 2023 we were only shown schematic style drawings and assured by Future Water that the original outline retained wetland design was being followed. The key changes to the design now shown were not flagged for discussion. Nor does the ‘You said, we did report’ reflect all of the matters highlighted by stakeholders at that workshop as needing action.

Further genuine engagement regarding the wetland design needs to take place with the HTR Env Sub Group before detailed designs are finalised.