

Valve Tower Public Safety Measures (Rev PO2 – 1/8/25)

Report submitted in respect of discharging Condition 2 (Phase 3)

While the document sets out control measures which are an improvement on the original Phase 3 planning application submission **Condition 2 regarding risks to the public should not be discharged by the LPA until further information has been provided** to enable a full assessment of the risks including:

- 1. More details on any currents or vortex that may be formed during the normal functioning of the outlets at the tower below top water level, or during emergency drawdown.**
- 2. Details on any proposed secondary means of access to the valve tower required for operational safety to evacuate staff in the event of an emergency, or for future maintenance.**

Stakeholders have repeatedly requested clarification on these issues, and it is incumbent on the LPA to ensure that it does have this information in order to fully assess the risks the valve tower may pose to the public, and whether the preventative measures proposed will be effective under all circumstances. Noting that even the applicants post mitigation risk scores remain borderline unsafe(12 major risk possible).

There is also no recognition of the fact that some members of the public will carry in canoes, paddle boards and potentially even jet skis from Warren Park, or even Rowlands Castle. The information provided to the LPA needs to specifically consider whether the preventative measures proposed are sufficient to address this additional risk.

While stakeholder feedback in 2008 was that there should not be public use of the water for recreation there was a desire amongst stakeholders and the community to see supervised use of the water for training using non-powered craft such as canoes and sail boats, to ensure the opportunities presented by a safe sheltered in land water body were not wasted. Thus the statement made in section 2.3 of the report is not accurate.

Portsmouth Water repeatedly committed to stakeholders that the opportunity for future supervised use of the water by schools, youth groups, sea cadets etc. would be kept open, so that if a competent provider came forward the supervised use of the water could be accommodated safely at the reservoir. Therefore, it is essential that Portsmouth Water honour that commitment and ensure that the design of the valve tower includes an assessment of risks related to non-powered craft using the water, **either officially or in an unauthorised manner**. The current submission **does not consider whether the risk posed by water craft using the water is different in relation to the valve tower and adequately addressed by the control measures proposed**.

With Portsmouth Water and the LPA having supported moving the tower 20m offshore the risk of drowning events occurring during the lifetime of the reservoir has been increased significantly. Further work is needed to fully understand and assess that increased risk to ensure that everything possible is done to minimise that significant risk.

Further comments on the applicants submission are provided below for action/ consideration.

[REDACTED]

[REDACTED]

28 September 2025

Additional comments for action/ consideration

1. **Currents and vortexes** could be created during drawdown (normal or emergency operations). This could significantly change the safety risk to the general public and it is essential that the report submitted to discharge condition 2 sets out;
 - a) Whether currents and vortexes could be formed, under what operating scenarios, at which structures/ outlets, and how frequently this may occur?
 - b) Consider the risks any such currents and vortexes pose to an unauthorised swimmer (including a small child) or water craft and whether the measures proposed are adequate to address that risk?

Appendix B, page 23, refers to the risk of 'entrapment drowning' and grills over the intakes. It is essential that further details is provided to the LPA on the risks associated with normal operational drawdown and emergency drawdown. The information previously submitted with the Phase 3 application was inadequate to assess the adequacy of grills to prevent access (water full & when the outlets are exposed during drawdown), page 23 refers to "grille design discussed with LPA". The details of the grille design and specification should be included in the information to discharge Condition 2 as they are needed as a control measure for public safety.

Appendix B, page 24, refers to the risk of "Strong currents during drawdown", followed by a vague reference to "Rate of drawdown *not believed to be sufficient* to pull someone under". The risk of drowning is real and this vague statement is insufficient. Could the currents be sufficient to drawdown a small child? The design engineers will be able to calculate the currents created by normal operational drawdown and emergency drawdown and provide this information along with an assessment of the risk to a child or person with different body weights. The calculations and assessment to back up this statement and provide assurance on this key point must be provided to the LPA as an appendix to the report.

There is reference in Section 3.1.1 to provision of signage to warn of submerged objects, but no reference to the fact that the submerged culverts and pipes could have adverse currents associated with them.

The text for sign A in Appendix A refers to; "There may be **HAZARDS UNDER** the **WATER** at this location. This **WILL** affect your ability to swim or help others". Clarity should be provided by the applicant on what this refers to and whether adverse currents and vortexes are anticipated under any operational conditions before this safety condition is discharged by the LPA.

2. **No information is provided on whether there will be a secondary means of access**, as the application confirms that construction is underway Portsmouth Water must now know what is proposed and **should confirm before Condition 2 is discharged**;

- **Has it been confirmed that a secondary means of access to the valve tower (confined space?) is not required?** (as none is shown)
- **If not, what is the secondary means of access proposed?**
- Is a means of rescue from the valve tower roof proposed?

Section 2.2.4 does refer to the stairwell providing access to the roof for maintenance and 'emergency access'.

If so, will there be a gate in the security fencing on top of the valve tower?

Will there be steps provided from the roof to the water for boat rescue?

If so, details of the gate, means of safe egress must be provided before Condition 2 is discharged so that the impact those measure could have on public safety (and unauthorised access to the tower roof) can be fully assessed.

Noting that access covers are shown from the valve tower staircase onto the roof.

- Will a bridge be constructed from the valve tower roof to the embankment?
The LPA will be aware that there was significant concern amongst stakeholders and the community about the significantly increased risk to public safety of having a bridge, including the risk of youths/ drunks trying to access and jump off the bridge, increasing the risk of injuries or drowning.
- Page 9 refers to video surveillance covering 'both' authorised access points to the valve tower. If the main access is through the control house courtyard, where is the second access this refers to?

If a secondary means of access is planned the applicant must provide the LPA with further details so that these can be assessed in the context of how this might change the risk to the public, so that can be fully considered by stakeholders, the community and the LPA prior to the discharge of Condition 2.

3. CCTV surveillance – Given the high risks insufficient information is provided in Section 3.1.2 on the provision of CCTV to monitor the valve tower. The applicant should be required to confirm;

- How many dedicated cameras will be provided on the embankment crest directed at the valve tower, as one camera will not be adequate to give coverage on both sides of the tower in order to spot youths gathering or a person/ child swimming out to the tower in order to ensure a prompt response.
- That the quality of the image will be adequate to see anyone swimming in the water or hanging onto the chains around the structure during the day and night (i.e. that there will be some form of night vision system)
- Will the surveillance system include a sound facility which enables the camera operator to shout out a warning that an intruder has been spotted and the alarm raised to an appropriate responder?
- Will the system be monitored 24/7, 365 days a year, by whom and where, to ensure a prompt response to stop an unsafe situation developing, or respond in an emergency?
- How will the cameras be protected from vandalism that might make them ineffective?

Note 1: Text refers to cameras are to be located 'close' to the valve tower area and control house. Detail is needed on where the CCTV cameras will be located in order to assess their effectiveness to monitor and address the risks. If a camera is located at the base of the southern embankment to monitor the Control House entrance and courtyard that will provide NO surveillance to the valve tower, which is over the other side of a 20m high embankment. Multiple camera positions will be needed at the top and base of the embankment in this area.

Note 2: Appendix B (page 24) refers to the CCTV being on the visitor centre, this is a long distance from the valve tower and would not provide adequate surveillance of both sides of the valve tower, including the side closest to the shore.

4. Recreational use of the water – The statement made in Section 2.3 of the report regarding the community ‘preference’ for no water sports and water craft is an over simplification of the feedback received by Portsmouth Water. In fact there were quite mixed views from community stakeholders, with the decision on balance being to prohibit use of the water by the general public for swimming and water craft. However, there was a strong desire amongst stakeholders and the community to see supervised use of the water for training using non-powered craft such as canoes and sail boats, to ensure the opportunities presented by a safe sheltered in land water body were not wasted. Thus the statement made in Section 2.3 of the report is not accurate.

Between 2009 and 2020 Portsmouth Water repeatedly committed to stakeholders that the opportunity for future supervised use of the water by schools, youth groups, sea cadets etc. would be kept open, so that if a competent provider were to come forward at any point in the future the supervised use of the water could be accommodated safely at the reservoir. Indeed this was documented in the 2009 Portsmouth Water post consultation feedback report.

It was also recognised by managers at Portsmouth Water that it would be impossible to stop youths and adults carrying canoes, paddle boards and potentially even jet skis in from the adjacent residential areas at Warren Park, or Rowlands Castle, and using the water in an unauthorised manner when the visitor centre is closed. In the report there is no recognition of the fact that offenders will carry in canoes, paddle boards and potentially even jet skis in Section 3.2.1 and 3.2.2. The information provided to the LPA needs to specifically consider whether the preventative measures proposed are sufficient to address this additional risk.

It is essential that Portsmouth Water honour their commitment to future proofing the recreational use of the site and ensure that the design of the valve tower **includes an assessment of risks related to non-powered craft using the water, either officially or in an unauthorised manner as it will happen.**

The current submission **does not consider whether the risk posed by ‘craft’ (canoe’s, paddle boards etc.) using the water is different and adequately addressed by the control measures now proposed for the valve tower.**

5. Mud substrate exposed – The table in Section 2.1 confirms that during drawdown there will be NO water present between the shoreline and the valve tower. No information is provided on the substrate that will be exposed and any health & safety risks related to it. Rip-rap covered in weed will be slippery. Presumably where the rip-rap ends the base of the reservoir will be slippery mud and with time covered in deep mud. The offshore valve tower will remain a draw for unauthorised access even during drawdown.

- There is no information in the main report provided by the applicant on what the risks will be during drawdown and how they will be addressed. The information in Appendix B page 25/26 is too vague.
- This was previously raised by stakeholders and the community as a concern at the time of the Phase 3 planning application. **The increased risks that the valve tower poses during drawdown must be considered more fully and addressed before the discharge of Condition 2.**

6. **Delay to consultation** - If the report to discharge Condition 2 was submitted to the LPA on 6/8/25 why has it taken so long to share it with stakeholders and councillors?

- Especially when the development has already commenced and it was councillors on the planning committee reacting to concerns from the community that required the addition of the safety condition to the planning consent for the Phase 3 application.

Further observations

A) Section 2.1 confirms that the tower is just 19.5m offshore at its closest point, with the water depth around the tower ranging under normal operation from 2.6 to 3.7m deep. This confirms that the tower is very close the shore and certainly deep enough to swim and drown in. It is inevitable that youths and drunks will be tempted to swim out to, and/or around the tower, presenting a significant risk of drowning.

B) The presence of Rip-Rap rocks on the shore will NOT stop youths or drunks from accessing the water. Page 11 provides a photo example of Rip-Rap.

C) As for the Phase 3 application there are no images or illustrations to show how much more ugly and visually intrusive than Figure 7 the valve tower will be when the enormous safety signs and other ancillary infrastructure have been added on top of the structure. Nor from how far away the structure will be visible.

D) Education is unlikely to be effective against youths and drunks most likely to exhibit the anti-social behaviour of concern and enter the water.

E) There is a risk that gates controlled with a combination lock could be compromised if the code for the gate becomes known (Section 3.2.2 refers).

F) Section 3.2.2 refers to "Launching of unauthorised watercraft arriving by vehicle/ trailer will be prevented due to the lack of access/ proximity to the water's edge." This fails to recognise that the water's edge is close enough to the residential housing areas that watercraft can be carried into the site, especially paddleboards and canoes. Noting that locals have previously indicated to Portsmouth Water staff that they will carry in their jet ski!

G) The distance from the shore to the valve tower is 19.5m at its closest point. It is not practical for to throw a 'throwline' that distance. The need to keep the throwline cabinet locked will delay any rescue attempt.

H) Page 16, Section 3.3.2 refers to the valve tower being 'partially submerged and no longer visible upon filling of the reservoir'. This is not true. Figure 1b, 7 & 8 show correctly that the combined height of the valve tower and security fencing will stick out of the water by between 2.8m and 3.8m during normal operation with seasonal variation, with the full height of the tower exposed and visible during drawdown. The structure will be very visible at all times.

I) Appendix B – additional controls column refers to 'Patrols' but no detail is provided in the report on how often the area will be patrolled during the day and at night?

j) Some of the risks assessed by the applicant in Appendix B even with the control measure proposed remain at 12, which is borderline on being assessed as 'not safe', score 12 - major risk possible). **This shows that the concerns raised by the community when the valve tower was moved offshore were completely valid and that the decision to move the valve tower offshore leaves unacceptable risks which cannot be adequately be overcome.**