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Sent: 04 February 2026 10:42
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Subject: 25.0983 - CHANGE OF USE OF EXISTING INDUSTRIAL BUILDING (USE CLASS B2) TO DATA CENTRE (USE CLASS B8)

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Dear Ben,

Further to our telephone conversation, please find an explanation of the approach adopted to assessing flood risk and flood resilience measures for the development proposed by the change of use application at the former Liberty Steel site in Newport.

The preliminary assessment of 1:200 year (plus climate change) flood levels within the site was undertaken utilising the present NRW Flood Mapping, topographical levels and features (i.e. railway line) and available flood level data associated with the Enso Energy Battery Energy Storage System (BESS). The BESS site is situated close to the proposed Data Centre; some 350m to the southwest beyond the nearby watercourse Julians Reen. As the proposed development comprises a change in use of an existing building, this building will have featured in the model used to assess the flood levels of the BESS proposal, therefore, there are no physical changes proposed by the development that would alter flood levels or flows at the application site or the surrounding area. We have, therefore, used this information to identify the 1:200 (plus climate change) flood levels that could affect the application site as confirmed for the adjacent land by NRW in their response to the BESS assessment and planning application.

The NRW Flood Mapping suggests the existing ground levels just beyond the railway line to the east, rise up to circa 10.5m AOD. The extent of the associated flood mapping strongly suggests this provides some flood defence protection. This corroborates the information and findings presented in the BESS flood level data and demonstrates the flood levels at the boundary between the former Liberty Steel site and the BESS application would experience the same flood risk conditions.

In terms of the BESS development, this was consented in January 2024; the associated Flood Consequence Assessment was prepared mid-2023 and was based upon the Undefended Caldicot and Wentlooge (2016) model. The associated NRW correspondence is attached for information. Commentary within the NRW response highlights various characteristics of the BESS site, including that the existing ground lies at about 8.5m AOD to the north; similar to the existing ground levels within the site which range between 8.0-8.5m AOD.

Furthermore, the correspondence supported by the attached 200 year (plus climate change) Undefended Scenario flood mapping extract from the BESS FCA indicated that the worst case flood level is 9.76m AOD to the eastern boundary. Moreover, the flood mapping suggests flood levels may reach 2.0m in depth within the Data Centre site, north of Julians Reen. The resulting 10.5m (i.e. 8.5 + 2.0m) flood level is comparable to the levels east of the railway line. This is the maximum 200 year (plus climate change) flood water level and provides a spot height to inform the design and the height of the internal platform levels to

ensure the equipment to be installed as part of the proposed development is clear of the maximum flood levels and therefore not at risk of damage from flood waters.

The 10.5m AOD level formed a baseline for the initial estimation of flood levels within the Data Centre site. The Data Centre FCA states (section 9.0.5) that the anticipated 1:200 year (plus climate change) flood level is 10.75m AOD; this is considered to be the worst case. And to address residual flood risk a large freeboard of 1.15m has been applied above 10.75m providing a first floor level of 11.9m AOD. This is in excess of the typical 600 – 900mm freeboards prescribed within national guidance.

With regard to further mitigating measures, the building zone (i.e. ground floor) that may be affected by potential flood waters will be formed of flood resistant materials, primarily steel or concrete. In terms of incoming services, these will be arranged such that they are not impacted, by being placed underground or above flood levels.

Additionally, a Flood Warning Evacuation Plan (FWEP) will be developed for the building; this FWEP will be completed to best practice. It will utilise the Flood Warning service to inform users of the building and also include method statements to address any pre and post flooding conditions. For example, provision of sump pumps and similar auxiliary equipment.

This provides the necessary flood protection and resilience for the lifetime of the proposed development and is greatly in excess of the measures recommended in the NRW response to the nearby BESS planning application. We do not believe it is necessary to run the flood model for this change of use application to inform the design above the assessment we have already undertaken for the site and the recent work undertaken locally to determine safe levels for the development of the BESS facility which NRW has classified as 'highly vulnerable development'.

If there are any queries, please let me know.

Kind regards,

David Homan
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