**SECTION 77 OF THE TOWN AND COUNTRY PLANNING ACT
1990 (AS AMENDED)**

**CALL IN INQUIRY INTO THE PROPOSED DEVELOPMENT OF THE UNITED KINGDOM HOLOCAUST MEMORIAL AND LEARNING CENTRE LOCATED WITHIN VICTORIA TOWER GARDENS, MILLBANK, LONDON SW1P 3YB**

**SUMMARY PROOF OF EVIDENCE OF CE NUNNS, BSc (HONS). CWEM, MCIWEM, CEnv**

**On behalf of**

**THE SECRETARY OF STATE FOR HOUSING COMMUNITIES AND LOCAL GOVERNMENT**

**TOWN AND COUNTRY PLANNING (INQUIRIES
PROCEDURE) (ENGLAND) RULES 2000**

**V3 08.09.20**

1. This is the Summary Proof of Evidence of Charlotte Nunns in respect of matter pertaining to flood risk.
2. I am familiar with the Application Site and the surrounding area. I have been involved in the Application to which this call-in relates, since the original application was submitted in 2018, being technical reviewer on the Flood Risk Assessment throughout.
3. The evidence which I have prepared and provide for this call-in reference APP/X5990/V/19/3240661 in this summary proof of evidence is true and I confirm that the opinions expressed are my true and professional opinions.
4. The Site is located adjacent to the River Thames, which is designated by the Environment Agency as a tidally influenced Main River. The Environment Agency are therefore a statutory consultee and competent authority in relation to Planning review on Flood Risk matters from this source. Westminster City Council (WCC), as Lead Local Flood Authority are a statutory consultee on Surface Water Drainage and Flood Risk from this source.
5. The site is located within Flood Zone 3, being at High Risk of fluvial and/or tidal flooding, however it is also within an Area Benefitting from Defences, being defended by both the Thames Tidal Barrier further downstream and the River Thames flood defence wall immediately adjacent to the eastern boundary of the site which will significantly reduce the risk of flooding on site. The Site is identified as being at low risk of surface water flooding, with an annual probability of flooding between 1 in 1000 (0.1 %) and 1 in 100 (1 %) and flood depths below 300 mm. The risk of flooding from sewers has also been identified as low.
6. A detailed Flood Risk Assessment (FRA), was undertaken by Atkins and submitted as part of the planning application in January 2019. Following various consultations, the FRA was updated, and submitted in July 2019. An addendum to the FRA was submitted in October 2019 to address the outstanding issues and included the correspondence between the Environment Agency and the applicant.
7. A Drainage Strategy was undertaken which demonstrates that the site can accommodate surface water run-off without increasing flood risk on site or elsewhere and that therefore it is considered that the Proposed Development is in accordance with national, regional and local planning policy in relation to flood risk.
8. No comments were received from the Greater London Authority in relation to flood risk. WCC confirms in its Planning Sub-Committee Report that it considers the Proposed Development is in accordance with national, regional and local planning policy in relation to flood risk, subject to the Environment Agency recommended conditions and a pre-commencement condition that would require a flood risk evacuation plan and fire escape plan to ensure early evacuation of the basement area, informed by the Environment Agency Flood Warnings.
9. The Environment Agency within its letter dated 2 December 2019 recommended conditions summarised as follows:
	1. A strategy for maintaining and improving the flood defences including a condition survey of the river wall and a scheme, to undertake any required improvements or repairs.
	2. If, additional improvements or repairs to the flood defence are found to be necessary, information detailing how these additional works will be undertaken will be provided.
	3. The ‘Proposed site plan showing vehicle access’ shall include a 16m set back from the flood wall to ensure access routes for future wall maintenance and raising works.
	4. A Monitoring Action Plan (MAP) is undertaken to ensure that the integrity of the wall is maintained.
10. There are two defences protecting the site:
	* 1. The Thames Tidal barrier which prevents tidal flood levels inundating the site. According to the Environment Agency the “Thames Barrier and associated defence system has a 1 in 1000 years standard which means it ensures that flood risk is managed up to an event that has a 0.1% annual probability.” The risk of flooding and potential failure of the barrier is considered low and not in question by the Environment Agency or any other objector.
		2. The flood wall along the eastern boundary of the site. According to the Environment Agency “The current condition grade for defences in the area is 2 (good), on a scale of 1 (very good) to 5 (very poor).” The draft Strategic Flood Risk Assessment defines that this stretch of wall is a critical reach of Embankment Wall. It also details that the Thames Embankment and Wall is under the maintenance responsibility of Crown/Parliamentary Works.
11. Paragraph 2.34 of Westminster City Plan states that Westminster is also fortunate in having excellent flood defences that will be in place for at least the duration of this plan.
12. However, the primary concern of the Environment Agency is ensuring that the integrity of the flood defence wall is maintained both during construction and during the development lifetime, to ensure flood risk is not increased to the site or adjacent properties. Also, that the development does not impede access for future maintenance. Hence the EA’s recommended conditions.
13. This is also supported by Policy 5.12D of The London Plan which advises that development adjacent to existing flood defences must protect their integrity and wherever possible should be set back from the banks of watercourses to allow for the management, maintenance and upgrading of defences to be undertaken in a sustainable and cost effective way.
14. I consider that the recommended conditions are all reasonable and pertinent to ensuring compliance with National, Strategic and Local Policies and to ensure that flood risk for the lifetime of the development when taking climate change into account, to the development and surrounding areas is acceptable. I consider that given the existing condition of the wall and the supporting survey already completed by the applicant that any additional assessment requirements could reasonably be secured by conditions.
15. The following concerns have been received from The Thorney Island Society (TTIS) in relation to flood risk.
	1. Flooding from the Sewer system, as “basements were flooded very recently during heavy rain”
		1. The Flood Risk Assessment acknowledges that should there be a breach in the riverwall flood defence (as well as failure in the Thames tidal barrier), rapid inundation of the Holocaust Memorial Learning Centre basement areas would occur. The FRA also acknowledges the historic flooding to the site.
		2. The Ground Movement Assessment details the construction methodology of the building and basement areas, which includes a minimum of 1.0m depth piling into the London Clay in order to prevent the inundation of groundwater.
		3. The Drainage Strategy demonstrates that the run-off from the development will be managed on site within the drainage system for all events up to the 1 in 100 year plus 40 % climate change flood event therefore not increasing flood risk to the site or elsewhere. In the short term this would provide a reduction in surface water coming from the site into the Thames Water System, reducing the impact of any associated flooding on the sewer network.
		4. In order to mitigate the residual risk to its occupants, were the basement to be flooded (from any source), a detailed evacuation procedure is recommended by the FRA, EA and WCC to ensure early evacuation of the basement area prior to any breach of the flood defences or surface water sewerage system exceedance.
	2. As of 15-5-19 TTIS highlighted that the Environment Agency still had “serious concerns” and has not received sufficient information to grant a flood risk activity permit.
		1. The FRA was updated in July 2019 and a FRA addendum was submitted in October 2019. The Environment Agency subsequently removed its objection (letter dated 2 December 2019).
	3. As of 3-12-19 The TTIS were concerned regarding the works within 16m of the flood wall including ability for future maintenance and that the proposed solution had not been agreed by the Environment Agency for planning or flood risk activity permit purposes.
		1. The Environment Agency subsequently removed its objection which included acknowledgement of the investigation and validation of the location of the foundations of the existing wall. The applicant recognises that a Permit will be required for works to the wall and within 16m such as the demountable seating area.
	4. The TTIS Statement of Case states that “TTIS remains very concerned about this issue [flood risk]” and “The EA clearly remains concerned about the risk to the river wall and the difficulties which the building of the HMLC will cause to its ability to deal with problems. It has withdrawn its outright objection only on the basis of the imposition of onerous conditions. There can be no confidence that its managers – whoever they will be – will be able to comply with such conditions. Dealing with these critically important points by condition is unacceptable and there is no reason why they cannot be addressed as part of consideration of the application for planning permission.”
16. As the competent authority, the Environment Agency has determined that the remaining issues can be dealt with by way of reasonable conditions. As defined by the Environment Agency, the conditions are required “to ensure that the structural integrity of the flood defence is not compromised”. Given the importance of the flood defence along the Thames frontage, it can be expected that the conditions will be enforced accordingly.
17. Also, the existing defence condition grade is ‘good’, and I consider that this therefore has an acceptable Standard of Protection, without requiring any immediate improvement/maintenance. Therefore, I consider that this is not a requirement that is required to be undertaken prior to development but could be reasonably undertaken during construction and operation of the site in accordance with the EA’s recommended planning conditions.
18. In conclusion, it is my professional opinion that the development proposed is at an acceptable level of flood risk, appropriate for the usage of the site, with sufficient measures in place to mitigate any implications.
19. It is also my opinion that the development, for its lifetime, is appropriate for its location and that it is at an acceptable level of flood risk, without increasing flood risk elsewhere.