Twickenham Riverside, Twickenham, TW1 3SD



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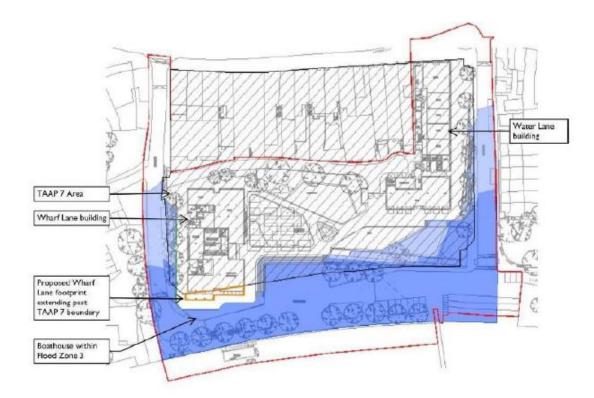
# 1. Introduction

1.1 The Twickenham Riverside planning application was submitted by Savills on behalf of the London Borough of Richmond upon Thames (the 'Applicant') in August 2021 (Ref. 21/2758/FUL). The description of development is as follows:

'Demolition of existing buildings and structures and redevelopment of the site comprising 45 residential units (Use Class C3), ground floor commercial/retail/cafe (Use Class E), public house (Sui Generis), boathouse locker storage, floating pontoon and floating ecosystems with associated landscaping, reprovision of Diamond Jubilee Gardens, alterations to highway layout and parking provision and other relevant works.'

- 1.2 The Twickenham Riverside site falls partly within Flood Zone 2, 3, 3a and 3b. This means the proposal is vulnerable to flooding with flood defences to mitigate against that. The proposals also include a new flood defence wall which will alter the topography of the site to allow uses that are classified as "More Vulnerable" and "Less Vulnerable" to be located within Flood Zone 1.
- 1.3 Local Plan policy LP21 states that future development in Zone 3a and Zone 2 will only be considered if the 'Sequential Test' has been applied in accordance with national policy and guidance. The policy goes on to state that there will be some exceptions to this, including where a site is a Local Plan proposal site that has already been sequentially tested.
- 1.4 The Twickenham Riverside site is allocated for development in the adopted Local Plan. The Twickenham Area Action Plan (TAAP) identifies the site forming part of Proposal Site TW 7. However, the figure below identifies that a small area of the Wharf Lane building (outlined in orange) falls outside of the TW7 proposal site boundary and therefore has not been sequentially tested as part of the borough's Strategic Flood Risk Assessment (SFRA).





- 1.5 As a result, in August 2022, the Applicant submitted a Sequential Test that sought to identify alternative sites with lower flood risk capable of accommodating the proposed uses in the Wharf Lane building. A methodology for the sequential test including the area of search and the approach to estimating site density was agreed with planning officers. It was also agreed that alternative sites would be assessed on their capacity to accommodate uses contained within the proposed Wharf Lane building on a disaggregated basis.
- 1.6 The sequential test concluded that there were 9 potential alternative sites with lower flood risk capable of accommodating the proposed Wharf Lane building uses when disaggregated. There were no sites that were able to accommodate all three of the Wharf Lane building uses simultaneously. Further, none of the 9 sites potential alternative sites were available (i.e., on the market) and the conclusion was therefore that the sequential test was passed.
- 1.7 As the sequential test is passed and owing to the Flood Risk Vulnerability Classification,<sup>1</sup> the Applicant is required to provide and pass the Exceptions Test.
- 1.8 The remainder of this document is structured as follows:
  - Chapter 2 Planning Policy Context;
  - Chapter 3 The Exceptions Test: Sustainability Benefits;
  - Chapter 4 The Exceptions Test: Flood Safety
  - Chapter 5 Conclusion

<sup>&</sup>lt;sup>1</sup> Paragraph 163 of the NPPF and Annex 3

**Twickenham Riverside** 



# 2. Planning Policy Context

- 2.1 At a national level, Paragraph 164 of the National Planning Policy Framework ('NPPF') defines the Sequential Test and the Exceptions Test. The paragraph states that to pass the exceptions test it should be demonstrated that:
  - a) The development would provide wider sustainability benefits to the community that outweigh the flood risk; and
  - b) The development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.
- 2.2 Further, Paragraph 165 of the NPPF makes clear that both parts (a) and (b) of paragraph 164 should be satisfied for the exceptions test to be passed and in turn, the development to be permitted.
- 2.3 Flood Risk Assessment: The Sequential Test for Applicants' PPG Guidance (2017) states that where the conclusion of a sequential test identifies there are no alternative sites capable of accommodating the development in question, the exceptions test (in line with paragraphs 164-165 of the NPPF) must be carried out to determine how an applicant will manage flood risk on the site.
- 2.4 At a local level, adopted Local Plan Policy LP21 (Flood Risk and Sustainable Drainage) requires all development to avoid or minimise its contribution to all sources of flooding including fluvial, tidal or surface water among others, accounting for climate change and without increasing flood risk elsewhere. Policy LP21 continues that development will be guided to areas of lower risk by applying the sequential test as set out in national policy guidance and, where necessary, the exceptions test will also be applied.
- 2.5 Directing development toward areas at the lowest risk of flooding is also baked in to the borough's emerging local plan. For instance, emerging Policy 8 Part A (Flood Risk and Sustainable Drainage) states that development will be guided to areas of lower risk by applying the sequential test as established in national policy guidance, and where necessary, the exceptions test is to be applied.



# 3. Exceptions Test – Sustainability Benefits

- 3.1 Paragraph 164 (a) requires the development to provide wider sustainability benefits to the community that outweigh the flood risk. This section of the Exceptions Test assesses the sustainability benefits of the proposed Twickenham Riverside scheme.
- 3.2 Twickenham Riverside is Proposal Site TW 7 in the TAAP (TW 7). The TAAP sets out that the aims for this site are (paragraph 7.5.5.1):

"to bring this derelict site back into active use, taking advantage of its riverside location and improving links between this area and the core of the town. A substantial area of open land to be retained and some of this to be green space. Bringing the site back into use will be key to the regeneration of the town. The Council will work with the owner of 1-33 King Street and the private car park in Water Lane to improve the whole area through a comprehensive, phased programme of change"

3.3 TW 7 goes on to establish nine key objectives for the redevelopment of the site (paragraph 7.5.5.2). The table below identifies these objectives and provides commentary on how the Twickenham Riverside proposals meet these objectives.

TW7 Development Objectives	Twickenham Riverside Compliance
Maintain the existing ground floor retail frontages and residential uses above on King Street and provide new specialist retail, leisure and community uses	The Proposed Development maintains active retail frontages at the sites junction with King Street. A new retail and café frontage is provided along the length of Water Lane in addition to a new pub/restaurant on the ground floor of the Wharf Lane building. A new petanque court, improved garden space, provision of river activities including a floating pontoon and a new open air event space meet the TAAP requirements for specialist leisure and community uses.
To link the existing service road to Water Lane	Efforts were made during the iterative design process to link the service road to Water Lane. However, in order to maintain adequate flood defences and storage and address challenging site levels while providing adequate height clearances and turning heads, the scheme proposes a solid edge along Water Lane with no opening into the service road. Access to the service road is maintained from Wharf Lane.
Create new open space to provide for a wide range of open uses, including on the former pool site and in the form of civic space beside Water Lane	The Proposed Development includes public realm improvements to the Embankment where a new town square with amphitheatre-style terraced seating will become a new flexible, civic space for the town centre suitable for a range of uses and pop-up events. The Diamond Jubilee Gardens will provide space for games, play and rest and relaxation. The Proposed Development provides a net uplift in children's playspace compared to the existing position.
To maintain the Embankment as a working quay and, subject to feasibility, provide mooring and landing facilities	The Proposed Development preserves the functionality of the quay through the provision of a new boat store and a floating pontoon. Detailed design of the floating ecosystems will ensure that mooring opportunities are safeguarded.



To improve the environment of the Embankment including reduction in car parking	With the exception of 6 spaces, all existing car parking will be removed along the Embankment between Water Lane and Wharf Lane. These will be used for the servicing of Eel Pie Island. The removal of these spaces is a part of the borough's CPZ review.
To improve the Water Lane and Wharf Lane links from the town centre to the Embankment as shared use spaces; to provide a link between the service road and Water Lane; and to secure the redevelopment of the car park in Water Lane with residential and/or town centre uses	The Proposed Development seeks to improve the streetscape in Water Lane and Wharf Lane through new hard surfacing and planting to unite the public realm and facilitate a more attractive desire line between the town centre and the riverside. The existing car park in Water Lane is to be replaced by the Water Lane building which includes residential uses on the upper floors and town centre uses on the lower floors.
To achieve high quality traditional design and/or reuse of buildings	The Water Lane and Wharf Lane buildings have been designed to respond to different townscape contexts with the Water Lane building mediating between the town and the river and the Wharf Lane building directly addressing its riverbank setting. The scheme proposes high quality architecture where use of brick draws on materiality in the surrounding context. Further detail is set out in the Design and Access Statement and Heritage, Townscape and Visual Impact Assessment that supports the planning application.
To conserve and enhance the Twickenham Riverside Conservation Area and its setting and the setting of the Queens Road Conservation Area	The Proposed Development is considered to contribute positively to the Twickenham Riverside Conservation Area, Queens Road Conservation and neighbouring heritage assets including listed buildings/structures and Buildings on Townscape Merit. Further detail is set out in the Planning Statement and Heritage, Townscape and Visual Impact Assessment that supports the planning application.
All new uses to take account of the unique riverside setting	The Proposed Development seeks to optimise the site's riverside setting. The site has been master-planned to ensure that physical and visual connections to the riverside are maximised. Leisure provision in the form of the boat store and the floating pontoon will encourage increased usage of the riverside for water sports and recreation. Buildings and windows have been oriented to maximise views across the river.

- 3.4 Paragraph 8 of the NPPF outlines the three overarching and interdependent economic, social and environmental objectives necessary to achieve sustainable development. The economic objective (paragraph 8 (a)) relates to building a strong, responsive and competitive economy. The social objective (paragraph 8 (b)) relates to supporting strong, vibrant and healthy communities by ensuring a sufficient number and range of homes can be provided to meet the needs of present and future generations. The environmental objective (paragraph 8 (c)) relates to protecting and enhancing our natural, built and historic environment, including improving biodiversity, minimising waste and pollution and mitigating and adapting to climate change.
- 3.5 In meeting the aims and objectives of the TAAP, the Proposed Development provides a range of environmental, economic and social benefits in line with the principles of sustainable development established in Paragraph 11 of the NPPF.
- 3.6 The list below demonstrates how the proposed development delivers on the overarching objectives of sustainable development as defined in the NPPF.



#### Twickenham Riverside: Economic Benefits

- The proposed development delivers a total of 943 sqm of commercial/retail floorspace (Use Class E) in an appropriate town centre location.
- The proposed development delivers a 444 sqm pub/restaurant (Sui Generis) at the ground floor of the Wharf Lane building.
- The proposed development includes 320 sqm of office floorspace located at the ground floor of the Wharf Lane building. This represents a 75 sqm uplift in office floorspace compared to the existing position and will allow space to meet the needs of SME businesses.
- As identified in the submitted Framework Construction, Environmental & Logistics Management Plan (2021), local contractors will be selected where appropriate to enhance the local expenditure
- A proportion of construction and end-user jobs will be filled by local residents. The exact number will be considered and agreed through negotiations with officers following the grant of planning permission.
- The regeneration of a prime town-centre, riverside site such as Twickenham Riverside will contribute to increasing Twickenham's status as a "destination" across the borough and London-wide. The increase in visitors this development will bring to Twickenham will increase visitor numbers, and in turn generate spend in the borough at the proposed retail units, pub/restaurant for example.

#### Twickenham Riverside: Social Benefits

- The proposed development includes 45 new homes
- The proposed development includes 21 on-site affordable homes (50% affordable by habitable rooms).
- The site will be publicly accessible at all times and the proposed active frontages on the ground floor of the Wharf Lane and Water Lane buildings. This has been specifically designed to increase natural surveillance
- The proposed development will reprovide and enhance the Diamond Jubilee Gardens and children's playspace. These spaces will allow for five play apparatus including a sandpit, a large area of hardstanding for events, two petanque courts and hard and soft landscaping.
- The provision of event space.
- Increased footfall into Twickenham town centre.
- Improved security of the area.
- Increased accessibility of the public realm.
- The proposed boathouse storage lockers are set at a 45-degree angle and staggered in arrangement to accommodate different sizes of kayaks and paddleboards to make provision for activity and leisure at the riverfront.
- The proposed development will deliver 3,635 sqm of open space within the Diamond Jubilee Gardens and 5,642 sqm of open space overall across the site.
- The provision of new free public toilets.
- Improvements to the riverfront environment, Water Lane and Wharf Lane will deliver legible and accessible routes along desire-lines between King Street and the River Thames. The activity around the proposed boathouse storage lockers will increase activity around the riverfront area of the site to increase natural surveillance and minimise "dead space" across the site.
- 10% of the proposed homes will be wheelchair accessible/adaptable homes in line with the relevant Building Regulations standards.
- The submitted Fire Safety Strategy establishes a set of recommendations required to ensure the buildings are fire-compliant. These include, but is not limited to:



- Provide refuges in all escape stairs
- Provide 60 minute fire-protected escape stairs
- o Install dry rising mains within escape stairs

### Twickenham Riverside: Environmental Benefits

- The Water Lane and Wharf Lane buildings successfully address their respective townscape contexts. The Water Lane building mediates between the urban character of King Street and the riverine character of the Thames to the south. The Wharf Lane building is situated on the riverbank and is therefore more fundamentally part of the riverine character of the Thames. The design takes cues from river industry, particularly the boathouses and boatyards on Eel Pie Island.
- The Water Lane building proposes a red brick façade to relate to the existing material palette in the town centre, particularly on Church Street creating a continuous visual materiality within the conservation area.
- The proposed landscape and public realm revitalises a derelict town centre site and provides a variety of spaces for different uses and activities with planting designed to frame spaces within the gardens and provide a tree line along the river. Trees are spaced to allow for vistas to the river from the gardens.
- The masterplan places new buildings at the sites edges allowing the Diamond Jubilee Gardens to become the focal in a visual axis towards the River Thames. At four storeys, the height of the Water Lane building is commensurate with neighbouring buildings on King Street. The set back of the building from the Water Lane mitigates the increased height relative to buildings on the northern side of Water Lane. The height and scale of the Wharf Lane building is considered appropriate for the river facing south west corner of the site which will add architectural interest to the existing back-land environment on Wharf Lane.
- The Proposed Development would improve substantially upon the current low contribution the Site makes to the character of this area through its enhanced visual and architectural engagement with both the riverside to the south, and the town centre to the north.
- The proposed development is a car-free scheme save for the provision of on-site accessible car parking spaces, which encourages the use of sustainable and active travel modes.
- The scheme proposes a total of 117 cycle parking spaces, demonstrating its commitment to encouraging sustainable transport methods, which encourages the use of active travel methods.
- The proposed development is air quality neutral.
- The proposed development results in a biodiversity net gain of 19%, exceeding the 10% policy benchmark.
- The proposed development has an Urban Greening Factor score of 0.39 once relevant highways are removed from the calculation area.
- Subject to appropriate mitigation, where necessary, the proposed development delivers acceptable internal noise conditions for existing and prospective residents.
- All proposed non-residential uses will achieve BREEAM 'Excellent'.
- The proposed development has a thermally efficient envelope and highly efficient building systems, therefore allowing the residential element to achieve on-site reduction in carbon emissions of 64%.
- In relation to trees/arboriculture, where tress are proposed to be retained, Construction Exclusion Zones will be adopted and enforced during the construction phase to prevent damage to tree roots.
- The submitted CAVAT valuation of trees to be removed is £64,900.90. This will provide for a significant quantity of offsite tree planting and maintenance.



3.7 The Twickenham Riverside site is allocated for development in the Twickenham Area Action Plan ('TAAP', 2013). The TAAP was subject to a strategic sustainability appraisal conducted by the London Borough of Richmond upon Thames in July 2013. The Sustainability Appraisal is a tool for ensuring that policies set out in the TAAP accord with sustainable development principles. The Sustainability Appraisal objectives are therefore a useful tool for benchmarking the sustainability benefits of the proposed development, which we have provided in the table below. Please see the bullet points above for more detailed points of how the proposed development meets the objectives of the Sustainability Appraisal.

Objective	Environmental	Economic	Social	Twickenham Riverside Proposals
To promote	$\checkmark$			$\checkmark$
sustainable	•			•
waste				
management,				
including				
prevention,				
reducing waste				
and waste				
disposal,				
preparing for				
reuse, recycling				
and recovery				
before disposal.				
To make the	$\checkmark$			$\checkmark$
most efficient use	•			•
of land,				
remediate and				
reuse				
contaminated				
land and				
safeguard soil				
quantity and				
quality.				
Reduce air and	$\checkmark$			$\checkmark$
noise pollution,	·			-
including				
reducing				
emissions of				
greenhouse				
gases, and				
ensure air quality				
improves.				
Minimise	$\checkmark$		$\checkmark$	$\checkmark$
congestion and				
pollution by				
reducing the				
need to travel,				
encourage				
alternatives to the				
car and making				
best use of				
existing transport				
infrastructure.				



			-	
To maintain	$\checkmark$		$\checkmark$	$\checkmark$
groundwater and	· · ·		· ·	r.
surface water				
quality, conserve				
water and reduce				
the risk of				
flooding				
To promote	$\checkmark$			
	~			$\checkmark$
sustainable				
energy use				
through reducing				
energy use by				
maximising				
energy efficiency,				
use of zero- and				
low carbon				
technologies and				
reduce carbon				
dioxide emissions				
through the				
increased use of				
renewable				
energy.				
Conserve and	$\checkmark$			$\checkmark$
enhance	•			•
biodiversity,				
avoiding				
irreversible				
losses, through				
responsible				
management of				
all wildlife sites				
and species, and				
through the				
enhancement of				
wildlife corridors.				
Promote high				
quality places,	✓	✓	✓	V
spaces and				
buildings and				
conserve and				
enhance the				
borough's				
landscape and				
townscape				
character and its				
heritage assets.				,
To make best	$\checkmark$			$\checkmark$
use of previously				
developed land				
and existing				
buildings,				
encouraging				
sustainable				
construction				
practices.				



				· · · · · · · · · · · · · · · · · · ·
To provide new		$\checkmark$	$\checkmark$	$\checkmark$
housing				
opportunities and				
sufficient				
affordable				
housing that				
meets local				
needs.				
To create and	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
maintain safer				
and more secure				
communities.				
To facilitate the		$\checkmark$	$\checkmark$	$\checkmark$
improved health				
and well-being of				
the population,				
including				
enabling people				
to stay				
independent and				
ensuring access				
to those health,				
education,				
environment,				
sport, leisure and				
recreation				
facilities and				
services that are				
required.				
To increase the				
vitality and		v	v	v
viability of				
existing town				
centres, local				
centres and				
parades.				
To promote and		./	./	
encourage a		v	v	v
buoyant and				
diverse economy				
that will provide				
sustainable				
economic growth.				
Provide		./		
appropriate		v	v	v
commercial				
development and				
training				
opportunities to				
meet the needs				
of the local and				
sub-regional				
economy.				



# 4. Exceptions Test – Flood Safety

- 4.1 Paragraph 164 (b) requires the development to be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall. It should be noted that 'lifetime' is considered to be 100 years for residential development.
- 4.2 As outlined in Chapter 1 of this document, the majority of the Twickenham Riverside site has been strategically tested within the Strategic Flood Risk Assessment (SFRA). The SFRA assesses the flood risk suitability at a borough-wide level.
- 4.3 The SFRA has strategically tested the majority of the Twickenham Riverside site and concludes the site is safe/appropriate for development. As a small section of the site falls outside of the SFRA-tested site, this section of the Exceptions Test assesses the flood safety of the proposals.

### Engagement with the Environment Agency

- 4.4 To ensure appropriate flood mitigation measures have been adopted, the Applicant has engaged with the Environment Agency (EA) throughout the pre-application process. The below is an extract of the response letter received (see Appendix 2 of submitted Planning Statement (2021) for full extract:
  - Any development must achieve appropriate set back from the flood defences. We would object to any building forming part of the defence line or buildings on stilts over the flood defence.
  - The flood defence line must be formed of permanent, fixed structures. We would not permit the use of moveable structures, such as flood barriers or gates. Flood defence heights must be maintained and raised in line with the Thames Estuary 2100 Plan.
  - Site users must be kept safe from flooding for the lifetime of the development.
  - Finished floor levels must be set appropriately and we strongly advise incorporating additional resistance and resilience measures

### Proposed flood defence wall and reclassification of Flood Zone

4.5 There is a high risk of the site flooding from fluvial and tidal sources (i.e., the River Thames). This means the site has an annual probability of fluvial flooding greater than 1% or tidal flooding greater than 0.5%. To ensure the proposed development will not increase flood risk on-site or elsewhere, a proposed new flood defence wall has been designed to reclassify the entire site from Flood Zone 3 to Flood Zone 1, meaning both "More Vulnerable" and "Less Vulnerable" uses will fall within Flood Zone 1.

Flood Zone	Tidal Flood Level	Fluvial Flood Level	Critical Flood Level
Flood Zone 1	≥ 6.9m	≥ 6.98*m	≥ 6.98*m
Flood Zone 2	5.8m – 6.90m	5.69m – 6.94m	5.8m – 6.98*m
Flood Zone 3**	≥ 5.8m	≥ 5.69m	≥ 5.8m

\*Conservatively estimated from existing EA Flood Zone extent map. Flood Zone 2 appears to extend higher on both Water Lane and Wharf Lane in the proposed Flood Zones. This is not due to change in road levels but due to the maximum level for Flood Zone 2 being conservative estimates.



\*\*LBRuT SFRA classifies the Flood Zone 3 area of the site as Flood Zone 3b Functional Floodplain.

4.6 At 7.4m the proposed flood defence wall will provide flood protection equal to or greater than the TE2100 defence level of 6.9m.

#### Proposal will not increase flood risk on-site or elsewhere

4.7 It is a requirement that any change in levels within a flood area is assessed against the existing levels to determine if there is any reduction in available flood storage which could lead to an increase in flood risk either onsite or elsewhere. A comparison of the existing and proposed storage volumes up to the required 6.9m datum point has been undertaken by modelling the site in civils 3D and the result is that there is a positive increase of 529 cubic metres of available storage volume for the site when compared to the existing. Based on this, the proposed development would not increase flood risk on-site or elsewhere.

#### Flood Emergency Evacuation Procedure

- 4.8 The Applicant has recommended that the Applicant's property management team sign up to the Environment Agency's flood warning service, so that when the Environment Agency issues a flood alert or warning the service will send an automated warning message. This warning message has the three categorisations, below:
  - Trigger 1 Flood Alert
  - Trigger 2 Flood Warning
  - Trigger 3 Severe Flood Warning
- 4.9 The table below outlines the proposed flood evacuation measures that will be adopted to ensure maximum user- safety of the site.
- 4.10 The Applicant has proposed safe access/egress routes to and from the proposed development in the instance of flooding. The route proposes routes toward the northern part of the site which is raised above the flood defence wall.

EA Warning Trigger	Procedures
Environment Agency Flood Alert	Review Flood Warning and Evacuation Plan Procedures
Environment Agency Flood Warning	Issue Flood Warning, representing a state of readiness ahead of a potential flood situation. Move any critical equipment and information to a safe location. Encourage site occupants to evacuate via Water Lane.
Environment Agency Severe Flood Warning	Immediately start evacuation of site. Use allocated evacuation route to facilitate/direct the safe evacuation of all personnel. Contact the Emergency Services and EA to confirm that the site is being closed due to possible risk of flooding.



#### Drainage strategies

4.11 The proposed development adopts a number of sustainable drainage strategies such as:

- 50% impervious paving / 50% of water on paving lost to evaporation/infiltration
- Infiltration through increases in soft landscaped areas
- Scope for an infiltration tank
- A rainwater attenuation tank
- Rainwater discharged into the River Thames
- Rainwater from the building discharged into an existing surface water sewer
- 4.12 A Micro Drainage Assessment is outlined in the submitted Flood Risk Assessment and SuDS Report. This concludes that the proposed development does not reduce runoff rates into the existing surface water network to greenfield runoff rates. Further, the runoff rate is reduced by more than 50% in line with local planning policy.
- 4.13 The drainage system has been designed to minimise maintenance requirements. For example, the below-ground piped system should be inspected a minimum of every 10 years, to be repaired and cleansed where necessary.

#### Freeboard

4.14 The proposed finished floor level is 7.4m (AOD). This provides 0.5m of freeboard above the Thames Estuary 2100 future defence level. Further, this provides a 0.46m freeboard above the fluvial flood level for the 1 in 100 year event (incl. 35% climate change buffer). This is greater than the minimum freeboard of 300 mm specified by the council's SFRA.

### Essential Services

4.15 Essential services for the proposed development will be located in the reclassified Flood Zone 1 once the new flood defence wall has been constructed. These services will also be located above required flood levels. Services serving the area below the flood defence wall such as the street lighting and foul pump chamber will be wired into separate circuits from the proposed buildings; this allows them to be easily isolated and turned off during the event of a flood and will be flood resilient to ensure they can be reinstated quickly once the River Thames flood water levels have dropped back to normal.

#### Residual Risk of Flooding

4.16 Residual risk has been managed by lifting the vulnerable buildings and surrounding areas above the fluvial flood level (whilst ensuring no loss in flood storage on the site), providing occupants a safe escape route from the site to higher ground and locating water compatible development on the lower levels of the proposed development. A site-specific flood evacuation plan has also been created for the site as well (see paragraphs 4.8-4.11 above).



# 5. Conclusion

- 5.1 Paragraph 167 of the NPPF states that when determining planning applications, local planning authorities should ensure flood risk is not increased elsewhere and should only consider development appropriate in areas at risk of flooding where informed by a site-specific flood risk assessment, sequential test and exceptions test. It must also be demonstrated that the "More Vulnerable" uses are located in areas of lowest flood risk, the development is appropriately flood resistant, resilient and sustainable drainage systems have been incorporated.
- 5.2 In applying the exceptions test the Applicant has demonstrated there are wider sustainability benefits arising from the proposed development that outweigh any potential flood risk concerns and the proposed development will remain safe from flooding for the remainder of its lifetime. In addition, the More Vulnerable uses (such as the proposed residential and pub/restaurant uses) have been located within Flood Zone 1 through the provision of new flood defence wall. Therefore, the exceptions test is passed in accordance with Paragraph 164 of the NPPF and the Planning Practice Guidance.