

**Wandsworth Borough Council**

**SFRA Level 2 Addendum**

**Publication Version of the Local Plan**

**January 2022**

## **SFRA Level 2 Addendum January 2022**

Between January 4th and 1<sup>st</sup> March 2021, the Council undertook consultation on the Pre-Publication version of the Local Plan. During revision for the Publication Version of the Local Plan a further 4 sites were added to the consultation, 2 sites removed and NE12 New Covent Garden Market site was split into three areas.

In addition to the Level 2 SFRA 2020 which provides a detailed assessment of development sites which have been identified by Wandsworth Council as requiring the application of the Exception Test, the following sites have also been assessed.

- CJ6 - Peabody Estate, St John's Hill
- CJ7 - 36.46 St John's Road and 17 Severus Road
- PUT6 - 55-61 Putney High Street
- OUT3 - Springfield Hospital, Burntwood Lane/Glenburnie Road
- NE12B - Covent Garden Market B Thessaly Road
- NE12C - Covent Garden Market Apex Site

The first 4 sites are all within Flood Zone 1 and therefore do not require further site assessment. The 2 sites at Covent Garden Market are within Flood Zone 2 and 3a. The 2 sites have been included within the updated Sequential Test Report Spreadsheet and the flood site assessments for these sites are below.

**New Covent Garden Market : Site B Thessaly Road**

SITE ID:	NE12 B	Area (ha):	0.28ha
Proposed Use:	Residential	Vulnerability Classification:	More Vulnerable
<b>Flood Zones and Historic Flooding</b>			
Flood Zone 1 (<0.1% AEP): 0%	Flood Zone 2 (0.1% AEP): 0%	Flood Zone 3 (1% AEP): 100%	Flood Zone 3b (5%AEP): 0%
			Area Benefitting from Defences: 100%

**New Covent Garden Market Thessaly Road Site - Flood Zones and Flood Records**



**Figure A – Flood Zones and Flood Records**

Flood Warning Area	Tidal Thames From Battersea Power Station to Battersea Bridge.	Emergency Rest Centre	St Luke’s Church Hall
Flood Records within 500m of the site:	Tidal 0: Fluvial 0: Surface Water 0 : Groundwater : Sewer 0: Multiple Source 0: Other Source 0:		

### Tidal Flooding

New Covent Garden Market Thessaly Rd Site - Thames Breach Assessment - Maximum Flood Depth (2100)

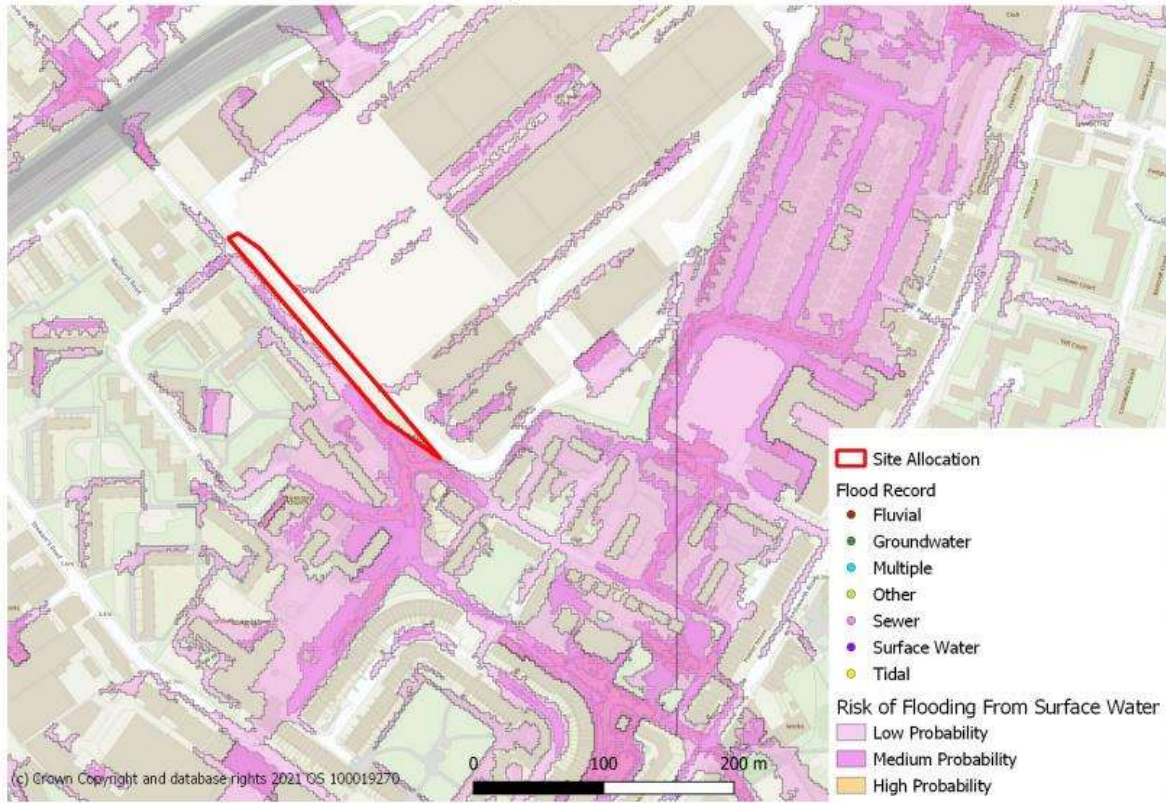


New Covent Garden Market Thessaly Rd Site - London Thames Breach Assessment - Maximum Flood Hazard (2100)





New Covent Garden Market Thessaly Road Site - Risk of Flooding from Surface Water



**Figure D – Risk of Flooding from Surface Water (RoFSW)**

Critical Drainage Area	The site is located within Critical Drainage Area (CDA) Group7_028, which is an area with localised flooding issues. The potential development must not increase flood risk to other areas in the CDA
Drainage Catchment	DC1
Groundwater Flooding	
Bedrock Geology	Clay
Superficial Geology	Sand and Gravel
Susceptibility to Groundwater Flooding (BGS)	Medium Risk Potential for groundwater flooding to occur at surface, but no historic records of groundwater flooding
Within an area with 'increased potential for elevated groundwater', as identified in the SWMP (GLA 2011)	Yes
Other sources	
Risk of flooding from reservoirs	The Long Term Flood Risk Map shows that the site is not at risk of flooding, in the event of a breach or failure of a reservoir

New Covent Garden B Thessaly Road

Summary	The site is defined as Flood Zone 3a. High probability of flooding. The River Thames flows northward approximately 640m from the northern part of the site boundary. The site is protected
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from tidal flooding from the River Thames by the presence of the raised flood defences along the Thames and the Thames Barrier further downstream.

The results from the London Thames Breach Assessment show that the site is at residual risk of tidal flooding during a breach in the Thames tidal defences. Flood water would inundate the site to a depth of 2.04m, with a corresponding hazard rating of Significant ('danger for some') on the site, for the year 2100<sup>1</sup>. Flood levels across the majority of the site are ~3.96m AOD for the year 2100.<sup>2</sup>.

The Risk of Flooding from Surface Water mapping identifies the potential for surface water to flow and pond to the south of the site along Thessaly Road, adjacent to the site. There are no groundwater flooding records in this area. Broadscale mapping suggests that the local area may be susceptible to groundwater flooding.

#### Site Specific Recommendations

The proposed use for the site includes residential uses which are defined as More Vulnerable. More Vulnerable development is only permitted on this site where it can be demonstrated that the Exception Test is satisfied i.e. (1) that the proposed development will provide wider sustainability benefits to the community that outweigh flood risk, and (2) that it will be safe for its lifetime, without increasing flood risk elsewhere and where possible reduce flood risk overall. In order to satisfy the requirements of the Exception Test, the following recommendations are made:

- Finished floor levels for sleeping accommodation should be set above the extreme water level including an allowance for climate change.
- In the event of a breach in the flood defences, dry access/egress may not be possible. In line with the requirements for sleeping accommodation, safe refuge should be provided above the extreme water level including an allowance for climate change<sup>3</sup>.
- A Flood Warning and Evacuation Plan should be prepared by occupants of the site demonstrating what actions site users will take before, during and after a flood event to ensure their safety, and to demonstrate their development will not impact on the ability of the local authority and the emergency services to safeguard the current population.
- The natural surface water flow patterns on the site should be considered when preparing the surface water drainage strategy for the site to ensure that the risk to neighbouring areas is reduced.
- The risk of groundwater flooding and groundwater levels should be further assessed during a Site Investigation

<sup>1</sup> These flood levels are from the most up to date modelling at the time of the preparation of this Level 2 SFRA. The most up to date modelling flood levels should always be obtained from the Environment Agency to inform future development proposals. Contact [klenquiries@environment-agency.gov.uk](mailto:klenquiries@environment-agency.gov.uk)

<sup>2</sup> These flood levels are from the most up to date modelling at the time of the preparation of this Level 2 SFRA. The most up to date modelling flood levels should always be obtained from the Environment Agency to inform future development proposals. Contact [klenquiries@environment-agency.gov.uk](mailto:klenquiries@environment-agency.gov.uk)

<sup>3</sup> An appropriate allowance of climate change should be applied in line with the guidance available at <https://www.gov.uk/guidance/floodrisk-assessments-climate-change-allowance>

New Covent Garden Market C Apex Site

SITE ID:	NE12C	Area (ha):	1.73 ha	
Proposed Use:	Mixed Use including residential	Vulnerability Classification:	More Vulnerable	
Flood Zones and Historic Flooding				
Flood Zone 1 (<0.1% AEP): 0%	Flood Zone 2 (0.1% AEP): 0%	Flood Zone 3 (1% AEP): 100%	Flood Zone 3b (5%AEP): 0%	Area Benefitting from Defences: 100%

New Covent Garden Market Apex Site - Flood Zones and Flood Records



Figure A – Flood Zones and Flood Records

Flood Warning Area	Tidal Thames From Battersea Power Station to Battersea Bridge.	Emergency Rest Centre	St Luke’s Church Hall
Flood Records within 500m of the site:	Tidal 0: Fluvial 0: Surface Water 0: Groundwater 0: Sewer 0: Multiple Source 0: Other Source 0:		

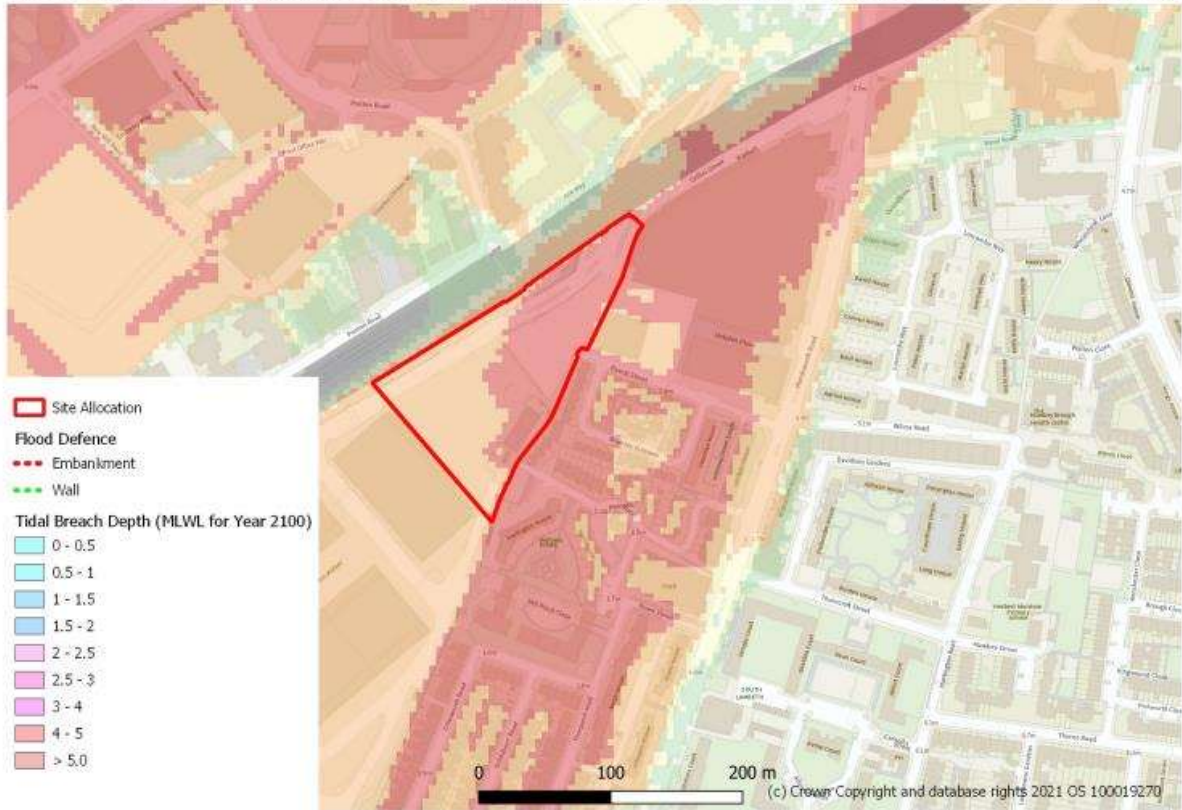
## Tidal Flooding

New Covent Garden Market Apex Site - London Thames Breach Assessment - Maximum Flood Hazard (2100)

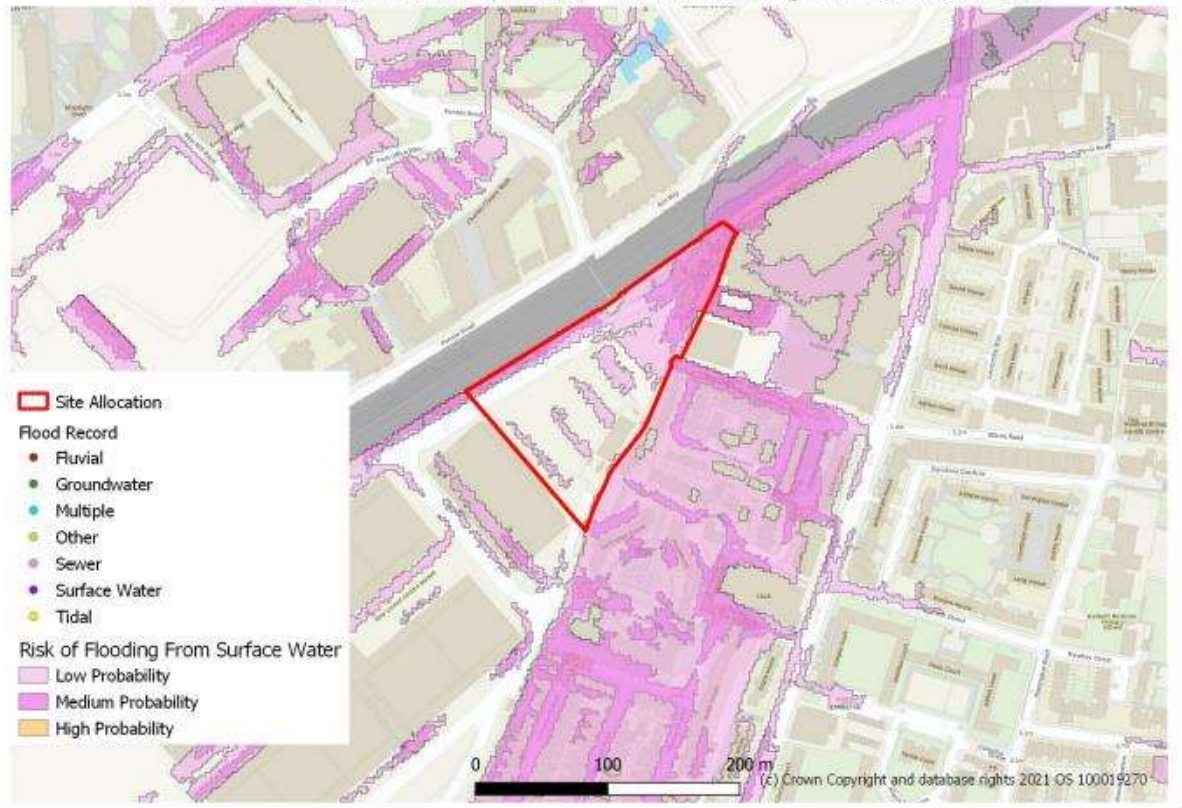




### New Covent Garden Market Apex Site - Thames Breach Assessment - Maximum Flood Depth (2100)



### New Covent Garden Market Apex Site - Risk of Flooding from Surface Water



**Figure D – Risk of Flooding from Surface Water (RoFSW)**

Critical Drainage Area	The site is located within Critical Drainage Area (CDA) Group7_028, which is an area with localised flooding issues. The potential development must not increase flood risk to other areas in the CDA
Drainage Catchment	DC1
Groundwater Flooding	
Bedrock Geology	Clay
Superficial Geology	Silt
Susceptibility to Groundwater Flooding (BGS)	Potential for groundwater flooding of property situated below ground level . Potential for groundwater flooding to occur at surface.
Within an area with ‘increased potential for elevated groundwater’, as identified in the SWMP (GLA 2011)	Yes
Other sources	
Risk of flooding from reservoirs	The Long Term Flood Risk Map shows that the site is not at risk of flooding, in the event of a breach or failure of a reservoir

**New Covent Garden C APEX Site**

Summary
<p>The site is defined as Flood Zone 2 and 3a. Medium and High probability of flooding. The River Thames flows northward approximately 390m from the northern part of the site boundary. The site is protected from tidal flooding from the River Thames by the presence of the raised flood defences along the Thames and the Thames Barrier further downstream.</p> <p>The results from the London Thames Breach Assessment show that the site is at residual risk of tidal flooding during a breach in the Thames tidal defences. Flood water would inundate the site to a depth of 1.7m, with a corresponding hazard rating of Extreme (‘danger for all’) on the site.<sup>4</sup></p> <p>The Risk of Flooding from Surface Water mapping identifies the potential for surface water to flow and pond on to the north east of the site.</p> <p>There are no groundwater flooding records in this area. Broadscale mapping suggests that the local area may be susceptible to groundwater flooding.</p>
Site Specific Recommendations
<p>The proposed use for the site includes residential uses which are defined as More Vulnerable. More Vulnerable development is only permitted on this site where it can be demonstrated that the Exception Test is satisfied i.e. (1) that the proposed development will provide wider</p>

<sup>4</sup> These flood levels are from the most up to date modelling at the time of the preparation of this Level 2 SFRA. The most up to date modelling flood levels should always be obtained from the Environment Agency to inform future development proposals. Contact [kslenquiries@environment-agency.gov.uk](mailto:kslenquiries@environment-agency.gov.uk)

sustainability benefits to the community that outweigh flood risk, and (2) that it will be safe for its lifetime, without increasing flood risk elsewhere and where possible reduce flood risk overall. In order to satisfy the requirements of the Exception Test, the following recommendations are made:

- Finished floor levels for sleeping accommodation should be set above the extreme water level including an allowance for climate change.

The site is located 640m south of the tidal River Thames. The site is defined as Flood Zone 3 High probability of flooding. The site is protected from tidal flooding from the River Thames by the presence of the raised flood defences along the Thames and the Thames Barrier further downstream. The results from the London Thames Breach Assessment show that the site is at residual risk of tidal flooding during a breach in the Thames tidal defences. Flood water would inundate the site to a depth of 1.5-2m, with a corresponding hazard rating of Extreme ('danger for all') on the site. Flood levels across the majority of the site are ~4.08m AOD1 for the year 2100.

- In the event of a breach in the flood defences, dry access/egress may not be possible. In line with the requirements for sleeping accommodation, safe refuge should be provided above the extreme water level including an allowance for climate change<sup>5</sup>.

- A Flood Warning and Evacuation Plan should be prepared by occupants of the site demonstrating what actions site users will take before, during and after a flood event to ensure their safety, and to demonstrate their development will not impact on the ability of the local authority and the emergency services to safeguard the current population.

- The natural surface water flow patterns on the site should be considered when preparing the surface water drainage strategy for the site to ensure that the risk to neighbouring areas is reduced.

- The risk of groundwater flooding and groundwater levels should be further assessed during a Site Investigation

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<sup>5</sup> An appropriate allowance of climate change should be applied in line with the guidance available at <https://www.gov.uk/guidance/floodrisk-assessments-climate-change-allowance>