

Merlewood House and Eltham Police Station

Summary Information	
Site Reference	P7-E1
Address	Merlewood House, Well Hall Road, London, SE9 6SG
Area (ha)	0.87
Current Use	Office, vacant former police station site.
Current Vulnerability	Less Vulnerable
Proposed Use	Residential, commercial and community uses.
Proposed Vulnerability	More Vulnerable

Current Risk Summary					
Fluvial / Tidal			Groundwater		
FZ2	0	% of site	Limited potential for flooding to occur	100	% of site
FZ3a	0	% of site	Potential for flooding of properties below ground level	0	% of site
FZ3b	0	% of site	Potential for flooding to occur at surface	0	% of site
Surface Water			Sewer Flooding		
High	13.76	% of site	Number of incidents within the predominant postcode	20 - 30	
Medium	26.48	% of site	Is the site located within the Thamesmead area?	No	
Low	71.69	% of site			
Flood Defences			Flood Warning Area		
The site is not at risk of flooding from rivers taking into account the presence and condition of flood defences according to the EA's RoFRS layer.			The EA Flood Warning Service is not available at this site.		

See webmap supporting assessment: [Greenwich - Level 1 and 2 SFRA](#)



1.1 Surface Water

Description of Flood Mechanism	
Surface water flood risk is concentrated in the eastern, northern and southwestern areas of the site. Areas of high risk are located in the northeastern and northern areas of the site, which impacts the building curtilage, as well as the northwestern boundary of the site.	
Mitigation – Flood Risk Requirements	Mitigation – Surface Water Drainage
Development should be directed away from the eastern and northern areas of the site, towards the western and central areas of the site.	See SFRA Level 2 Report mitigation requirement 5.0 for further development stipulations.
Development should comply with SFRA - Level 2 Report Section 4 mitigation requirement numbers 4.3 and 4.9.	Developments should apply the Sustainable Drainage Hierarchy set out in Policy SI 13 of the London Plan as well as Policy E2 of the existing Greenwich Local Plan and Policy EN6 of the draft Local Plan.
	Ground investigations are required to confirm whether infiltration SuDS are suitable.
Climate Change Considerations	
During the high risk events, there is a slight increase in the extents in all directions around the existing areas of high risk, with new areas of high risk forming in the southeastern and southwestern corners of the site. The maximum depth increases from 0.2m to 0.6m, the maximum velocity increases from 0.25m/s to 0.5m/s and the maximum hazard increases from 0.75 to 1.25.	
During the medium events, the extents extend slightly in the northern area of the site, with new areas of medium risk forming in the southern area of the site. The maximum depth decreases from 0.6m to 0.3m and the maximum hazard decreases from 1.25 to 0.75. The maximum velocity remains unchanged.	
During the low risk events, the extents extend to engulf the building curtilage in the northern area of the site, as well as the roadway in the southwestern corner of the site. The maximum depth, velocity and hazard remain unchanged.	

Risk Assessment				
Parameter	High	Medium	Low	Units
Max. Depth	0.2	0.6	0.9	m
Max. Velocity	0.25	0.5	1.0	m/s
Max. Hazard	0.75	1.25	1.25	N/A



Risk Assessment – with Climate Change				
Parameter	High	Medium	Low	Units
Max. Depth	0.6	0.3	0.9	m
Max. Velocity	0.5	0.5	1.0	m/s
Max. Hazard	1.25	0.75	1.25	N/A

1.2 Sewer

Risk Assessment	Mitigation Requirements
The site falls within a postcode area where there are 20 - 30 reported flood incidents from sewer flooding. The site is assumed to be served by a foul sewer network, given its proximity to the site.	The applicant must consult with TWUL to confirm if the development site has historically flooded. TWUL must agree to any proposed sewer connections. If historic flooding has occurred, the applicant must demonstrate how this risk will be managed throughout the development's lifetime.

1.3 Groundwater

Risk Assessment	Mitigation Requirements
This site has limited potential for groundwater flooding to occur. The site is underlain by the Thames Group bedrock geology. There is no information regarding superficial deposits.	For new developments that involve groundworks, especially if basements are planned, the applicant should carry out a screening study (as a minimum) to establish if there are any subterranean flood risk issues that may require further investigation. If there is a potential level of impact, mitigation actions must be proposed. This must be prepared by a chartered professional or specialist.

1.4 Artificial

Risk Assessment	Mitigation Requirements
This site is not at risk of flooding from reservoirs.	N/A - No reservoir risk is predicted at this site.



1.5 Planning Considerations – Safety of Development

A. Can the development be future proofed for climate change considerations?
• Surface water flood risk extent is expected to increase during all events due to climate change. During the high risk events, the maximum depth, velocity and hazard increase. During the medium risk events, the maximum depth and hazard decrease. • See SFRA - Level 2 Report Section 4 mitigation requirement number 4.4 for the required flood resistant / resilient building stipulations.
B. Can the development be designed safe throughout its lifetime without increasing flood risk elsewhere?
• The development must use surface water drainage techniques to manage surface water runoff onsite through above ground SuDS and / or below ground attenuation. • Green drainage infrastructure should be prioritised to provide wider ecological / biodiversity benefits as per London Plan Policy SI 13. • See SFRA Level 2 Report mitigation requirement number 4.3, 4.8, 4.9, 5.0 and Policies E2, E3 of the Greenwich Local Plan and Policy EN6 of the draft Local Plan for further development stipulations.
C. What is the cumulative impact of the development land use change and will flood risk increase?
• The development land use is changing from 'Less Vulnerable' to 'More Vulnerable'. • The site is entirely impermeable. This offers an opportunity to improve flood attenuation through the new development.
D. How can the development reduce risk overall?
• Development should be directed towards the western and central areas of the site where there is less risk of surface water flooding. • By complying with Policy E2 of the Greenwich Local Plan and Policy EN6 of the draft Local Plan through demonstrating that the development will avoid or minimise all sources of flood risk to people and property taking climate change into account, and incorporating SuDS measures in order to manage surface water runoff as close to its source as possible and to meet the required SuDS performance standards. • By complying with SFRA - Level 2 Report Section 4 mitigation requirement 4.4.
E. Which safe access and egress routes are recommended?
Access and egress routes should be directed towards the main access road onto Well Hall Road where there is less risk of surface water flooding.
F. Will development require a flood risk permit / watercourse consent?
No, the site is not within 16m of a Tidal River, 8m of a Main River or 5m of an Ordinary Watercourse.
G. Can the site pass the Exception Test?



The site is located within Flood Zone 1 and the proposed vulnerability classification is 'More Vulnerable', therefore the Exception Test is not required.

