SuDS Measures	Measures to be used on this site	Rationale for selecting/not selecting measure	Area of Feature (m^2)	Attenuation volume of feature (m^3)
Source Control				
Swales	No	Not selected. Limited availability of continuous open space along main drainage corridors. Landscaped areas fragmented by access routes and required for amenity use. Site layout and access constraints restrict opportunities for swales at meaningful scale.		
Integrated constructed Tree Pits	Yes	SuDS tree pits integrated along street frontages and at junction corners to receive runoff from roads and footpaths. Provide source control, water quality treatment and additional soil-based storage in line with SuDS guidance, complementing raingardens and permeable paving.		
Rainwater Butts	No	Not incorporated. Property-level rainwater butts are not prioritised, as catchment-wide attenuation and flow control are already achieved through integrated SuDS measures (green roofs, permeable paving and bioretention/tree pits), which provide more effective and robust storage at site scale.		
Downpipe Planters	No	Not selected. Provide limited benefit at		

		catchment scale compared with green roofs, permeable paving and bioretention/tree pits, which deliver superior water quality treatment and attenuation across the site.		
Rainwater harvesting	No	Not incorporated. The site drainage strategy already achieves required runoff rate and volume control using a SuDS treatment train (green roofs, permeable paving and bioretention/tree pits), and anticipated non-potable water demand is low, so additional rainwater harvesting infrastructure is not justified.		
Soakaways	No	Not suitable. Ground investigation and soakaway testing confirm underlying soils have very low permeability with slow/negligible infiltration rates and perched groundwater. Incompatible with BRE 365 design criteria.		
Infiltration trenches	No	Not suitable. Site-wide infiltration testing demonstrates insufficient permeability. Infiltration-based systems ruled out due to poor soil drainage characteristics.		
Permeable pavement (Grasscrete, Block paving, Porous Asphalt etc.)	Yes	Permeable paving is incorporated in car parking areas across the site, including the internal courtyard of the	**Catchment A:** 444 m² **Catchment B:** 403.20 m² **Other:**	**Catchment A:** 71.04 m³ **Catchment B:** 64.51 m³ **Other:**

		apartment block. The 400 mm clean stone sub-base with an assumed 40% void ratio provides significant sub-surface attenuation storage and improves water quality through filtration and sedimentation, while remaining compatible with the parking layout and site levels.	481.70 m^2	77.08 m^3
Green Roofs	Yes	Extensive green roofs implemented on apartment block roofs in accordance with **Dublin City Council Green & Blue Roof Guide (2021)**. Reduces runoff coefficient from 0.95 to 0.75, provides attenuation (100 mm substrate, 20% effective voids), enhances biodiversity, and improves building thermal performance. Suitable for flat/low-pitch apartment roof typology.	**Catchment A:** 765.14 m^2	**Catchment A:** 15.30 m^3
Green wall	No	Not selected. SuDS measures with greater hydraulic and treatment benefit (green roofs, permeable paving and bioretention/tree pits) are prioritised to maximise attenuation and water quality treatment. Available wall area is limited and would provide only a minor contribution at site scale.		
Filter strips	No	Not selected. Site layout constraints limit continuous green corridors along road		

		edges suitable for filter strips. Permeable paving and bioretention/tree pits provide equivalent or superior filtration and water quality benefits within the available space.		
Bio-retention systems/Raingardens	Yes	Bioretention raingardens are provided in front gardens, at junction corners and along the apartment block frontage. They receive runoff from roofs and paved areas, providing source control, silt capture and water quality treatment. Storage is estimated using a conservative 0.30 m^3/m^2 bioretention area factor, in line with the SuDS Guide.	**Catchment A:** 225.01 m^2 **Catchment B:** 511.66 m^2 **Other:** 375.12 m^2	**Catchment A:** 67.50 m^3 **Catchment B:** 153.50 m^3 **Other:** 112.54 m^3
Blue Roofs	No	Not selected. Extensive green roofs provide superior attenuation, water quality treatment, biodiversity benefits, and amenity value compared to blue roofs. Green roofs already incorporated on apartment block.		
Filter Drain	No	Not utilised. Site drainage relies on permeable paving and bioretention/tree pits, which provide more effective and space-efficient attenuation and treatment within the constrained layout, so dedicated filter drains are not required.		
Site Control				

Detention Basins	No	Not feasible. Limited green areas available for detention basin sizing. Site layout dominated by buildings and hardstanding. Above-ground basins incompatible with residential amenity requirements and space constraints.		
Retentions basins	No	Not feasible. Limited green areas and unsuitable soil infiltration capacity. Residential development layout and amenity space requirements preclude large-scale above-ground storage features.		
Regional Control				
Ponds	No	Not feasible. Limited green space and residential layout do not suit large permanent ponds; distributed SuDS (green roofs, permeable paving, bioretention/tree pits) provide more appropriate catchment-scale attenuation and treatment.		
Wetlands	No	Not feasible. Insufficient space for wetland implementation. Residential site layout and amenity requirements incompatible with constructed wetland features.		
Other				
Petrol/Oil interceptor	No	Not required. Residential development with low-		

		intensity parking (domestic vehicles only). Permeable paving provides adequate hydrocarbon filtration and water quality treatment for expected pollutant loadings.		
Attenuation tank – only as a last resort where other measures are not feasible	No	Not required. Attenuation storage for the 1 in 100 year + climate change event is provided by distributed SuDS (green roofs, permeable paving and bioretention/tree pits) within each catchment, in line with the adopted SuDS-led drainage strategy.		
Oversized pipes– only as a last resort where other measures are not feasible	No	Dedicated oversized pipes have not been adopted as an attenuation measure. A conventional surface water pipe network has been designed using standard pipe diameters. However, for Catchment B, the small residual attenuation volume (approximately 3.84 m^3) has been assumed to be accommodated within the available storage of the standard pipe network during the detailed design stage. The primary attenuation strategy remains based on green roofs, permeable paving and bioretention/tree pits.		