1. Project & Site Details

Project / Site Name (including sub-catchment / stage / phase where appropriate)	81 Belsize Park Gardens
Address & post code	81 Belsize Park Gardens, NW3 4NJ
OS Grid ref. (Easting, Northing)	E:527395
	N:184639
LPA reference (if applicable)	
Brief description of proposed work	A refurbishment of an existing three-story college building in Belsize Park to convert the current use Class E (Gym/Leisure centre) to F1 (Education - Secondary School).
Total site Area	723m2
Total existing impervious area	708.8m2
Total proposed impervious area	692m2
Is the site in a surface water flood risk catchment (ref. local Surface Water Management Plan)?	No
Existing drainage connection type and location	The site currently does not have a surface drainage network. The surface water currently discharges into the foul drainage. This has been picked up during the drainage CCTV survey.
Designer Name	Brandon Davis
Designer Position	Engineer
Designer Company	MHA Structural Design

2. Proposed Discharge Arrangements

2a. Infiltration Feasibility

Superficial geology classification	Unproductive	
Bedrock geology classification	London Clay Formation	
Site infiltration rate	n/a	m/s
Depth to groundwater level	n/a	m below ground level
Is infiltration feasible?	No	

2b. Drainage Hierarchy

	Feasible (Y/N)	*Proposed (Y/N)*
1 store rainwater for later use	N	N
2 use infiltration techniques, such as porous surfaces in non-clay areas	N	N
3 attenuate rainwater in ponds or open water features for gradual release	N	N
4 attenuate rainwater by storing in tanks or sealed water features for gradual release	N	N
5 discharge rainwater direct to a watercourse	N	N
6 discharge rainwater to a surface water sewer/drain	N	N
7 discharge rainwater to the combined sewer.	Y	Y

2c. Proposed Discharge Details

Proposed discharge location	Existing Combined Drainage
Has the owner/regulator of the discharge location been consulted?	TBC

3. Drainage Strategy

3a. Discharge Rates & Required Storage

	Greenfield (GF) runoff rate (l/s)	*Existing discharge rate (l/s)*	*Required storage for GF rate (m^3)*	*Proposed discharge rate (l/s)*
Qbar	0.43			
1 in 1	0.37	6.8	-	3.8
1 in 30	1	14.1	-	8.9
1 in 100	1.38	14.5	-	10.7
1 in 100 + CC			-	13.2
Climate change allowance used		40%		
3b. Principal Method of Flow Control		Free Discharge. Please refer to FRA report for further clarification.		

3c. Proposed SuDS Measures

	Catchment area (m^2)	*Plan area (m^2)*	*Storage vol. (m^3)*
Rainwater harvesting	0		0
Infiltration systems	0		0
Green roofs	231.63	231.63	2.7
Blue roofs	0	0	0
Filter strips	0	0	0
Filter drains	0	0	0
Bioretention / tree pits	0	0	0
Pervious pavements	22	17.2	2.6
Swales	0	0	0
Basins/ponds	0	0	0
Attenuation tanks	0		0
Total	**253.63**	**248.83**	**5.3**

4. Supporting Information

4a. Discharge & Drainage Strategy	*Page/section of drainage report*
Infiltration feasibility (2a) – geotechnical factual and interpretive reports, including infiltration results	1.4
Drainage hierarchy (2b)	pg.10 - Please refer to the report for further clarification.
Proposed discharge details (2c) – utility plans, correspondence / approval from owner/regulator of discharge location	pg.10 - The connection will be into the existing drainage network. Discharge consent will need to be agreed with approving body by the contractor due to the requirements for provision of RAMS.
Discharge rates & storage (3a) – detailed hydrologic and hydraulic calculations	11
Proposed SuDS measures & specifications (3b)	10
4b. Other Supporting Details	*Page/section of drainage report*
Detailed Development Layout	Appendix A
Detailed drainage design drawings, including exceedance flow routes	Appendix C
Detailed landscaping plans	Appendix A
Maintenance strategy	13
Demonstration of how the proposed SuDS measures improve:	page.11-12 & Appendix C
a) water quality of the runoff?	By implementing Green roofs, porous pavement and rainwater garden
b) biodiversity?	By providing above ground SuDS features wherever possible and reducing the proposed impervious area.
c) amenity?	N/A