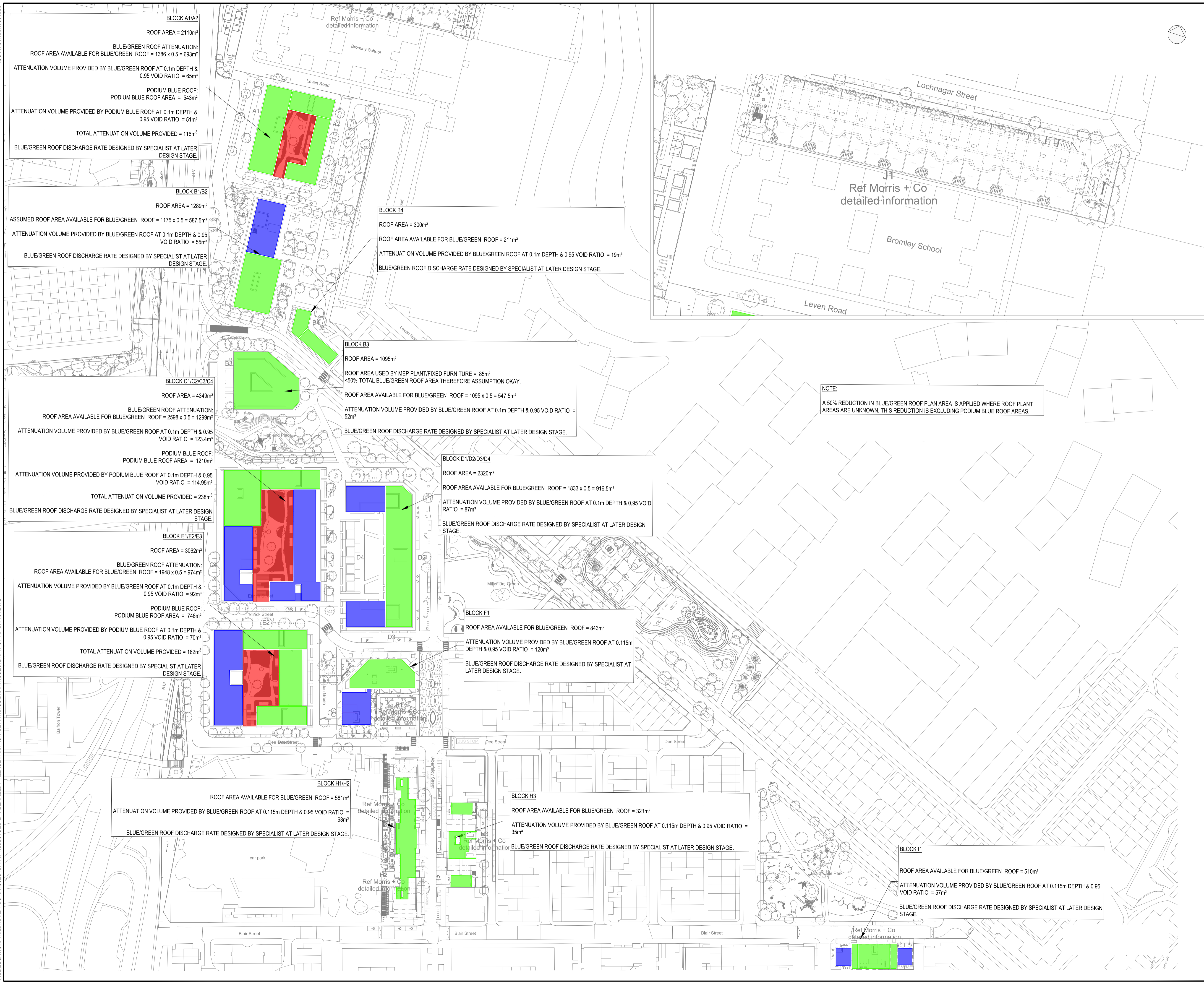


DATE: 2010/2022
 FILE LOCATION: \\MEINHARDT-OC\PROJECTS\812 - ABERFELDY VILLAGE1 - MHT\CIVIL\DRAWINGS\812-2-MHT-CV-BG-DR-01.DWG



BLOCK A1/A2
 ROOF AREA = 2110m²
 BLUE/GREEN ROOF ATTENUATION:
 ROOF AREA AVAILABLE FOR BLUE/GREEN ROOF = 1386 x 0.5 = 693m²
 ATTENUATION VOLUME PROVIDED BY BLUE/GREEN ROOF AT 0.1m DEPTH & 0.95 VOID RATIO = 65m³
 PODIUM BLUE ROOF:
 PODIUM BLUE ROOF AREA = 543m²
 ATTENUATION VOLUME PROVIDED BY PODIUM BLUE ROOF AT 0.1m DEPTH & 0.95 VOID RATIO = 51m³
 TOTAL ATTENUATION VOLUME PROVIDED = 116m³
 BLUE/GREEN ROOF DISCHARGE RATE DESIGNED BY SPECIALIST AT LATER DESIGN STAGE.

BLOCK B1/B2
 ROOF AREA = 1289m²
 ASSUMED ROOF AREA AVAILABLE FOR BLUE/GREEN ROOF = 1175 x 0.5 = 587.5m²
 ATTENUATION VOLUME PROVIDED BY BLUE/GREEN ROOF AT 0.1m DEPTH & 0.95 VOID RATIO = 55m³
 BLUE/GREEN ROOF DISCHARGE RATE DESIGNED BY SPECIALIST AT LATER DESIGN STAGE.

BLOCK B4
 ROOF AREA = 300m²
 ROOF AREA AVAILABLE FOR BLUE/GREEN ROOF = 211m²
 ATTENUATION VOLUME PROVIDED BY BLUE/GREEN ROOF AT 0.1m DEPTH & 0.95 VOID RATIO = 19m³
 BLUE/GREEN ROOF DISCHARGE RATE DESIGNED BY SPECIALIST AT LATER DESIGN STAGE.

BLOCK B3
 ROOF AREA = 1095m²
 ROOF AREA USED BY MEP PLANT/FIXED FURNITURE = 85m²
 <50% TOTAL BLUE/GREEN ROOF AREA THEREFORE ASSUMPTION OKAY.
 ROOF AREA AVAILABLE FOR BLUE/GREEN ROOF = 1095 x 0.5 = 547.5m²
 ATTENUATION VOLUME PROVIDED BY BLUE/GREEN ROOF AT 0.1m DEPTH & 0.95 VOID RATIO = 52m³
 BLUE/GREEN ROOF DISCHARGE RATE DESIGNED BY SPECIALIST AT LATER DESIGN STAGE.

BLOCK C1/C2/C3/C4
 ROOF AREA = 4349m²
 BLUE/GREEN ROOF ATTENUATION:
 ROOF AREA AVAILABLE FOR BLUE/GREEN ROOF = 2598 x 0.5 = 1299m²
 ATTENUATION VOLUME PROVIDED BY BLUE/GREEN ROOF AT 0.1m DEPTH & 0.95 VOID RATIO = 123.4m³
 PODIUM BLUE ROOF:
 PODIUM BLUE ROOF AREA = 1210m²
 ATTENUATION VOLUME PROVIDED BY PODIUM BLUE ROOF AT 0.1m DEPTH & 0.95 VOID RATIO = 114.95m³
 TOTAL ATTENUATION VOLUME PROVIDED = 238m³
 BLUE/GREEN ROOF DISCHARGE RATE DESIGNED BY SPECIALIST AT LATER DESIGN STAGE.

BLOCK D1/D2/D3/D4
 ROOF AREA = 2320m²
 ROOF AREA AVAILABLE FOR BLUE/GREEN ROOF = 1833 x 0.5 = 916.5m²
 ATTENUATION VOLUME PROVIDED BY BLUE/GREEN ROOF AT 0.1m DEPTH & 0.95 VOID RATIO = 87m³
 BLUE/GREEN ROOF DISCHARGE RATE DESIGNED BY SPECIALIST AT LATER DESIGN STAGE.

BLOCK E1/E2/E3
 ROOF AREA = 3062m²
 BLUE/GREEN ROOF ATTENUATION:
 ROOF AREA AVAILABLE FOR BLUE/GREEN ROOF = 1948 x 0.5 = 974m²
 ATTENUATION VOLUME PROVIDED BY BLUE/GREEN ROOF AT 0.1m DEPTH & 0.95 VOID RATIO = 92m³
 PODIUM BLUE ROOF:
 PODIUM BLUE ROOF AREA = 746m²
 ATTENUATION VOLUME PROVIDED BY PODIUM BLUE ROOF AT 0.1m DEPTH & 0.95 VOID RATIO = 70m³
 TOTAL ATTENUATION VOLUME PROVIDED = 162m³
 BLUE/GREEN ROOF DISCHARGE RATE DESIGNED BY SPECIALIST AT LATER DESIGN STAGE.

BLOCK F1
 ROOF AREA AVAILABLE FOR BLUE/GREEN ROOF = 843m²
 ATTENUATION VOLUME PROVIDED BY BLUE/GREEN ROOF AT 0.115m DEPTH & 0.95 VOID RATIO = 120m³
 BLUE/GREEN ROOF DISCHARGE RATE DESIGNED BY SPECIALIST AT LATER DESIGN STAGE.

BLOCK H1/H2
 ROOF AREA AVAILABLE FOR BLUE/GREEN ROOF = 581m²
 ATTENUATION VOLUME PROVIDED BY BLUE/GREEN ROOF AT 0.115m DEPTH & 0.95 VOID RATIO = 63m³
 BLUE/GREEN ROOF DISCHARGE RATE DESIGNED BY SPECIALIST AT LATER DESIGN STAGE.

BLOCK H3
 ROOF AREA AVAILABLE FOR BLUE/GREEN ROOF = 321m²
 ATTENUATION VOLUME PROVIDED BY BLUE/GREEN ROOF AT 0.115m DEPTH & 0.95 VOID RATIO = 35m³
 BLUE/GREEN ROOF DISCHARGE RATE DESIGNED BY SPECIALIST AT LATER DESIGN STAGE.

BLOCK I1
 ROOF AREA AVAILABLE FOR BLUE/GREEN ROOF = 510m²
 ATTENUATION VOLUME PROVIDED BY BLUE/GREEN ROOF AT 0.115m DEPTH & 0.95 VOID RATIO = 57m³
 BLUE/GREEN ROOF DISCHARGE RATE DESIGNED BY SPECIALIST AT LATER DESIGN STAGE.

NOTE:
 A 50% REDUCTION IN BLUE/GREEN ROOF PLAN AREA IS APPLIED WHERE ROOF PLANT AREAS ARE UNKNOWN. THIS REDUCTION IS EXCLUDING PODIUM BLUE ROOF AREAS.

ISSUED FOR INFORMATION

REV	DESCRIPTION	BY	DATE
P01	STAGE 2 ISSUE	LH	20/09/21
P02	DRAFT STAGE 2+ FOR PLANNING	LH	17/09/21
P03	ISSUED FOR PLANNING	LB	14/10/21
P04	REVISED ISSUE	LB	23/10/22

- NOTES:**
- DO NOT SCALE FROM THIS DRAWING
 - ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
 - THIS DRAWING IS FOR PLANNING PURPOSES.
 - DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS AND CONSULTANTS DRAWINGS AND SPECIFICATIONS.
 - THIS DRAWING IS BASED ON:
 - 3663 - LB - ZZ - 00 - DR - 000201 - Illustrative Scheme - Lower Ground Floor Plan - 1 AND - LB - ZZ - 28 - DR - 000206 - Illustrative Scheme - Roof Plan - 1 RECEIVED OCTOBER 2022

KEY:

■	PROPOSED PODIUM DECK BLUE ROOF AREA
■	PROPOSED BLUE OR GREEN ROOF AREA
■	PROPOSED BLUE ROOF AREA

CDM RESIDUAL CIVIL / STRUCTURAL DESIGN RISKS



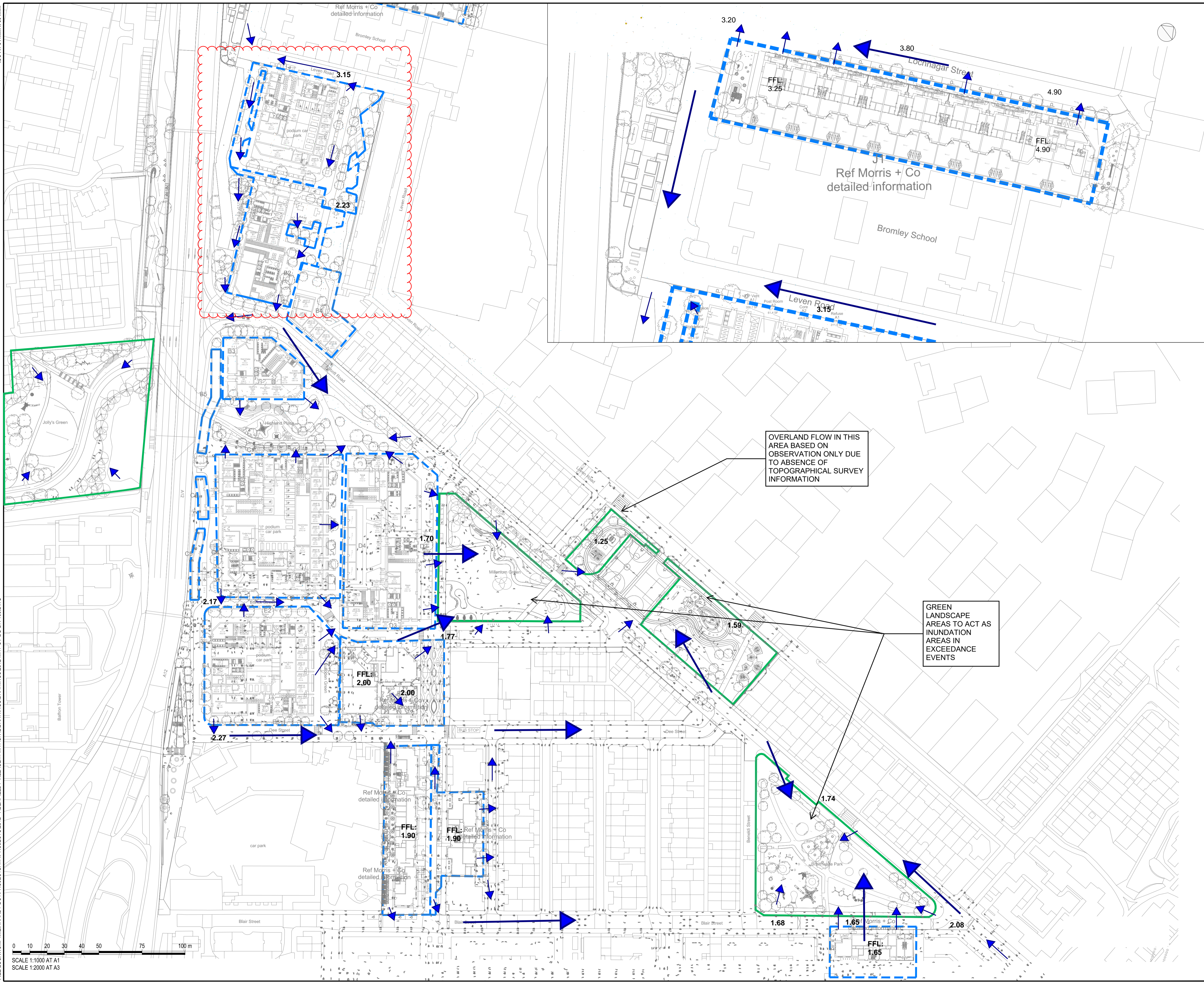
PROJECT
 ABERFELDY VILLAGE
 MASTERPLAN

CLIENT
 ECOWORLD

TITLE
 ROOF MASTERPLAN

DISCIPLINE	SCALE
CIVIL	1:1000
DRAWN	DESIGNED
LH	LH
CHECKED	APPROVED
LB	CM
DRAWING No	ISSUE
2812-MHT-CV-BG-DR-101	P04

DATE: 2010102022
 FILE LOCATION: \\MEINHARDT-OC\PROJECTS\DRAWINGS\2812-MHT-CV-BG-DR-109.DWG
 SCALE 1:1000 AT A1
 SCALE 1:2000 AT A3



OVERLAND FLOW IN THIS AREA BASED ON OBSERVATION ONLY DUE TO ABSENCE OF TOPOGRAPHICAL SURVEY INFORMATION

GREEN LANDSCAPE AREAS TO ACT AS INUNDATION AREAS IN EXCEEDANCE EVENTS

FOR INFORMATION ONLY

REV	DESCRIPTION	BY	DATE
P01	FOR INFORMATION ONLY	SA	14.02.22
P02	REVISED ISSUE	LB	01.04.22
P03	REVISED ISSUE	LB	01.06.22
P04	REVISED ISSUE	LB	31.08.22
P05	REVISED ISSUE	LB	10.10.22
P06	REVISED ISSUE	LB	20.10.22
P07	REVISED ISSUE	LB	24.10.22

- NOTES:**
- DO NOT SCALE FROM THIS DRAWING
 - ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
 - THIS DRAWING IS FOR INFORMATION ONLY.
 - DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS AND CONSULTANTS DRAWINGS AND SPECIFICATIONS
 - PERMEABLE PAVING TO BE UTILIZED IN PRIVATELY MANAGED PUBLIC SPACE WHERE FEASIBLE.
 - THIS DRAWING IS BASED ON:
 - LEVITT BERNSTEIN ARCHITECTURAL MASTERPLAN 3663 - 100A - Proposed LGF Plan - Scenario A - P11, DATED: 20/10/22
 - TOPOGRAPHICAL & UTILITIES COMBINED SURVEY FULL SITE V2

- KEY:**
- PROPOSED BLOCK BOUNDARY
 - PROPOSED GREEN SPACE BOUNDARY
 - OVERLAND FLOW ROUTE

CDM RESIDUAL CIVIL / STRUCTURAL DESIGN RISKS



PROJECT
ABERFELDY VILLAGE

CLIENT
ECOWORLD

TITLE
OVERLAND FLOW ROUTES

DISCIPLINE	SCALE		
CIVIL	1:1000		
DRAWN	DESIGNED	CHECKED	APPROVED
SA	LB	LB	GB
DRAWING No	ISSUE		
2812-MHT-CV-BG-DR-109	P07		

Appendix D – Tower Hamlets SUDS Proforma

1. Project & Site Details	Project / Site Name (including sub-catchment / stage / phase where appropriate)	Aberfeldy Village
	Address & post code	Poplar Riverside, Aberfeldy Village, E14, London
	OS Grid ref. (Easting, Northing)	E 538365
		N 181398
	LPA reference (if applicable)	
	Brief description of proposed work	The Aberfeldy Village Masterplan aims to deliver, up to 1628 new homes, new workspace, a new high street, new and improved open space and the pedestrianisation of the A12 Abbott Road
	Total site Area	91000 m ²
	Total existing impervious area	37000 m ²
	Total proposed impervious area	32000 m ²
	Is the site in a surface water flood risk catchment (ref. local Surface Water Management Plan)?	no
	Existing drainage connection type and location	Traditional piped system, multiple connection points
	Designer Name	Luke Boustead
	Designer Position	Senior Engineer
Designer Company	Meinhardt	

2. Proposed Discharge Arrangements	2a. Infiltration Feasibility		
	Superficial geology classification	Alluvium - Clay, Silt, S	
	Bedrock geology classification	London Clay Formation	
	Site infiltration rate	1.12x10 ⁻⁴ and 2.55x10 ⁻⁴ m/s	
	Depth to groundwater level	m below ground level	
	Is infiltration feasible?	No	
	2b. Drainage Hierarchy		
		<i>Feasible (Y/N)</i>	<i>Proposed (Y/N)</i>
	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	Y	Y
	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	locations to Thames Water public combine		
Has the owner/regulator of the discharge location been consulted?	to Thames Water. Response received confirm		

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	22.4			
1 in 1				22.4
1 in 30				23.4
1 in 100				24.4
1 in 100 + CC				25.4
Climate change allowance used		40%		
3b. Principal Method of Flow Control		Vortex Flow control (Hydro-Brake or similar)		
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	7000	3500	335	
Blue roofs	11000	6500	620	
Filter strips	0	0	0	
Filter drains	0	0	0	
Bioretention / tree pits	3500	730	0	
Pervious pavements	0	0	0	
Swales	0	0	0	
Basins/ponds			0	
Attenuation tanks	48334		2715	
Total	69834	10730	3670	

3. Drainage Strategy

4a. Discharge & Drainage Strategy	Page/section of drainage report
Infiltration feasibility (2a) – geotechnical factual and interpretive reports, including infiltration results	Section 2.1.3
Drainage hierarchy (2b)	Section 2.1.3
Proposed discharge details (2c) – utility plans, correspondence / approval from owner/regulator of discharge location	Appendix B
Discharge rates & storage (3a) – detailed hydrologic and hydraulic calculations	Appendix C
Proposed SuDS measures & specifications (3b)	Throughout report
4b. Other Supporting Details	Page/section of drainage report
Detailed Development Layout	Appendix B
Detailed drainage design drawings, including exceedance flow routes	Appendix B
Detailed landscaping plans	Appendix E
Maintenance strategy	Section 2.5
Demonstration of how the proposed SuDS measures improve:	Section 2
a) water quality of the runoff?	Section 2.1.5
b) biodiversity?	Section 2.1.6
c) amenity?	Section 2.1.6

4. Supporting Information