

## Roehampton Restored Café & Bike Store

<b>Guidance Standard and Code</b>	Approved Document B Vol 2
<b>Building Condition</b>	New Build
<b>Number of Storey</b>	1 (Ground Level)
<b>Building Height (Height of topmost occupied storey)</b>	Less than 5m
<b>Evacuation Strategy</b>	Simultaneous evacuation strategy
<b>Purpose Group</b>	Group 4 (Shop and Commercial)
<b>Smoke ventilation</b>	Not required or provided
<b>Sprinkler System</b>	Not required (Building less than 30m)

Note 1) Actual designed height to be confirmed by architect

Note 2) The design based on the following assumption:-

1. The building is a new single storey café and bike store.
2. The café area and the bike store will be under different tenancy.
3. Cafe and kiosk is occupied by the same tenant.
4. The entire roof belongs to the same occupier.

### Requirement B2 : Internal Fire Spread (Linings)

All surface finishes should satisfy the following European Classifications (as per BS 13501-01:2018)

Small room of area not exceeding 30m <sup>2</sup> in a non-residential building - D-s3,d2
Other rooms (including garages) - C-s3,d2
Other circulation spaces - B-s3,d2

### Requirement B3 : Internal Fire Spread (Structure)

<b>Structure fire resistance</b>	
<b>Purpose Group 4</b>	60 mins
<b>Compartmentation</b>	
<b>Separation of different occupancies</b>	60 mins
<b>Place with special fire hazard</b>	30 mins
<b>Compartment floor</b>	Not required

### Requirement B4 : External Fire Spread

<b>Minimum distance between road, site boundary and adjacent building</b>	Less than 6m
<b>Designation of covering of roof based on the above distance</b>	BRoof(t4)
<b>Minimum fire resistance for external escape route</b>	30 mins (integrity and loadbearing from inside)
<b>Reaction to fire performance of external surface of wall</b>	
Purpose Group 4	No specific provision in respect of the boundaries required
<b>Cavity Barriers</b>	Cavity barriers (E30, I15) to be provided in accordance with ADB Vol. 2, i.e. within external walls around openings, at junction with compartmentation lines and to subdivide extensive cavities.
<b>PV Panel</b>	Area with PV panels should be designed in accordance with RC62: Recommendations for fire safety with photovoltaic panel installations for guidance on planning, designing, installing, and maintaining the system, this includes non-combustible substrate beneath the panels and isolator switches for use for the Fire Service.
<b>Green roof</b>	Where green roof is installed, the design and installation should refer to the document "Fire Performance of Green Roofs and Walls" published by the Department for Communities and Local Government (August 2013)

Notes:-

(1) External Fire Spread Assessment will be carried out as part of the fire strategy development to determine the amount of unprotected openings permitted with respect to external fire spread to adjacent boundaries. Site plan should be issued identifying red line boundary.

### Requirement B5 : Access and facilities for the fire services

<b>Maximum allowable floor area of any one storey in the building or any one storey in a compartment</b>	No limit
<b>Total floor area of building</b>	Less than 2000 m <sup>2</sup>
<b>Minimum requirement of position of access (% of perimeter)</b>	15% or within 45m of every point on the projected plan area of the building; whichever is the less onerous
<b>Firefighting Shaft</b>	Not required as the building is less than 18m in height
<b>Fire Main</b>	Not required as the building is less than 11m in height
<b>Fire Hydrant</b>	Should be provided within 90m of an entry point to the building and not more than 90m apart

## Number of Occupancy

Room	Area	Floor Space factor	Designed number of occupancy	Total number of occupancy
Café Seating Area	81.77	Estimated by the number of seats	72	83
Kitchen	33.29	7	5	
Kiosk	12.26	Note 1	2	
Office	4	6	1	
Staff	2.5	1	3	
Bicycle Hire	16.72	2	8	9
Bicycle Hire (Office)	0.85	6	1	

**Note 1:** Assumption based on a maximum of 2 staffs working in the Kiosk area.

**Note 2:** Assumption based on a maximum of 2 Staff & 70 number of seats on the GA plan.

**Note 3:** Other area of the building is considered transient and not normally occupied.

## Exit capacity

Zone	Number of occupancy	Minimum Number of Exits Required	Discounting Process	Storey exits after discounting one of the exits	Capacity
Café Seating Area	72	2 x 850mm	One of the exit door discounted	1 x 850mm	110
Kitchen	5	1 x 750 <sup>Note 1</sup> mm	-	1 x 750mm	60
Back of House Area	6	1 x 750 <sup>Note 1</sup> mm	-	1 x 750mm	60

**Note 1** Widths may need to be increased to meet guidance in Approved Document M.

### Requirement B1 : Means of Warning and Escape

#### Minimum Level of Fire Detection and Fire Alarm System:-

Purpose Group 4	M (According to BS 5839-1)
Café BOH area	L3

#### Maximum allowable travel distance:-

##### Purpose Group 4

Ground Storey with a single exit	18
Storey with more than one exit	45

##### Place of special fire hazard<sup>(1)</sup>

One-way	9
Two-way	18

##### Plant room or roof-top plant

##### Distance within the room

One-way	9
Two-way	35

##### Escape route not in open air (Overall travel distance)

One-way	18
Two-way	45

##### Escape route in open air (Overall travel distance)

One-way	60
Two-way	100

##### Minimum width of escape stair

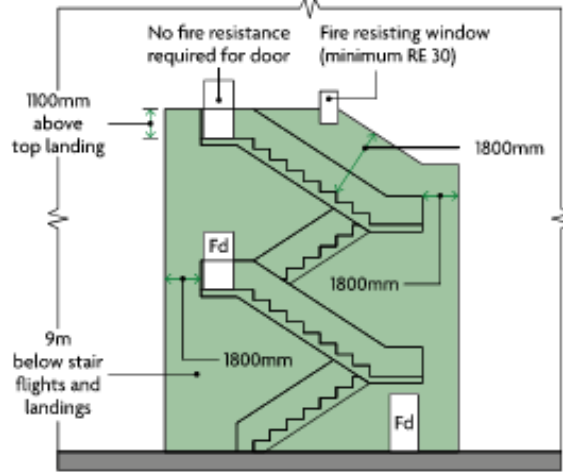
800mm
-------

Note (1):

This included oil-filled transformer room, switch gear room, boiler room, storage space for fuel or other highly flammable substance & room that houses a fixed internal combustion engine.

**Note 01**  
 A minimum of RE30 fire resisting construction is required for the building envelop within the following zones, measured from the flights and landings of the external stair.

- 1800mm above and horizontally
- 9m vertical below
- 1100mm above the top landing of the stair



**Note 02**  
 The room is designed as an inner room, and one of the following arrangement is required.

- The door or walls of the inner room contain a vision panel (minimum 0.1sqm), so people can see if a fire starts in the access room.
- The access room is fitted with an automatic fire detection and alarm system to warn occupants of the inner room if a fire starts in the access room.

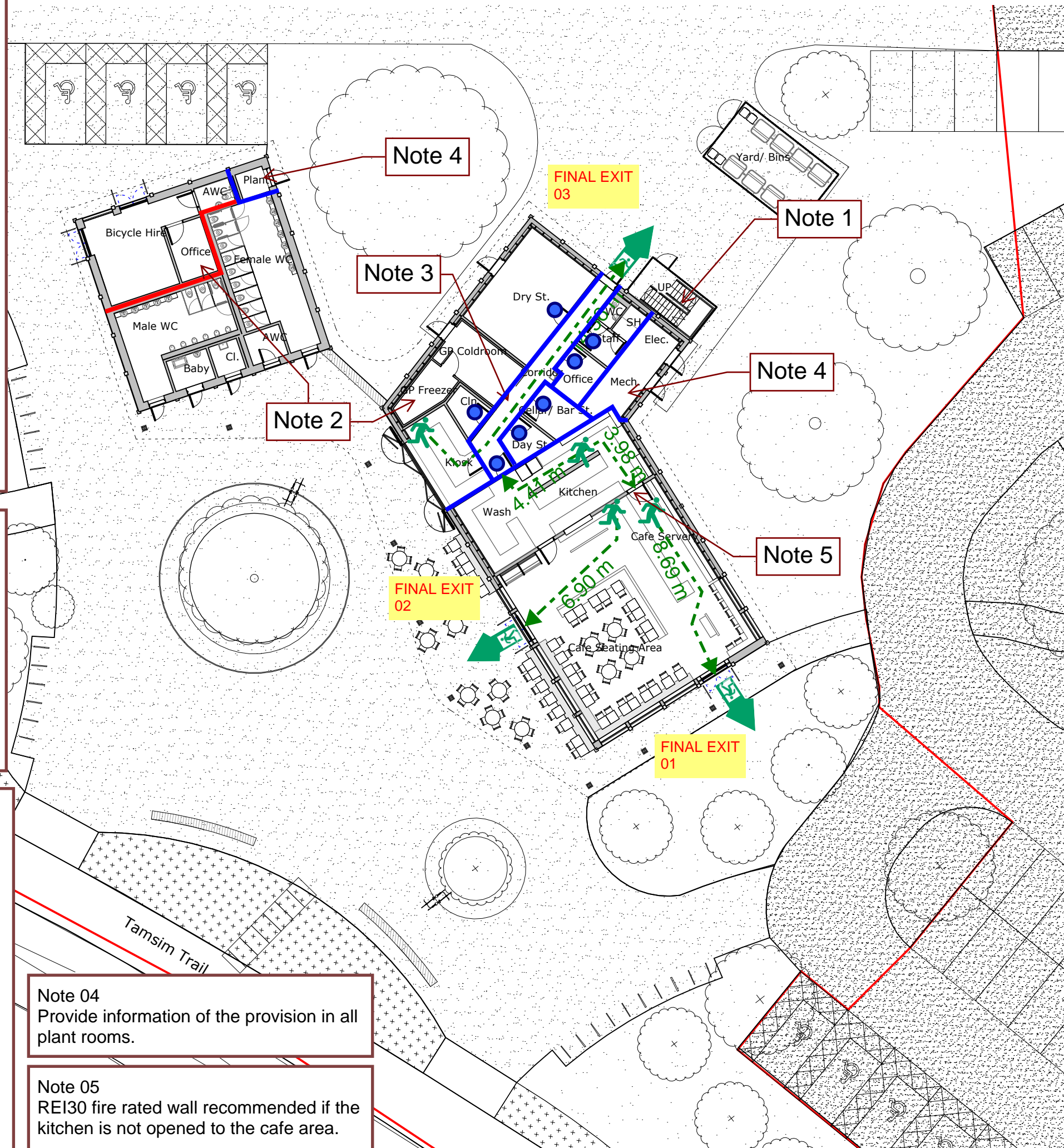
**Note 03**  
 If the Kiosk and BOH area is separated into different tenancy, then the following apply.

- The means of escape from each occupancy should not pass through any other occupancy.
- If a common corridor or circulation space is on the escape route, one of the following should apply.
  - It should be a protected corridor.
  - A suitable automatic fire detection and alarm system should be installed throughout the storey.

A category L3 fire detection & alarm system is recommended for this area.

**Note 04**  
 Provide information of the provision in all plant rooms.

**Note 05**  
 REI30 fire rated wall recommended if the kitchen is not opened to the cafe area.



© David Morley Architects  
 Do not scale off drawing.  
 Check all dimensions on site and advise any discrepancies before commencing work.  
 All dimensions in millimetres unless otherwise noted.



Key

KEY	PAGE 2 of 4
	60 minutes fire-resistance
	30 minutes fire-resistance
	Means of escape
	Final Storey exit
	FD60S Fire Door with smoke seals
	FD 60 Fire Door
	FD30S Door with smoke seals
	FD 30 Fire Door
	Fire fighting roadway route

<b>Scheme:</b>	Roehampton Restored Cafe		
<b>Document Reference:</b>	Roehampton Restored Cafe Fire Safety BV comments		
<b>Job Number:</b>	S24052670	<b>Date:</b>	19/07/2024
<b>Mark-ups &amp; Comments</b>		<b>Issue:</b>	01
<b>Drawn by:</b>	SP		
<b>Reviewed by:</b>	SK		
Bureau Veritas Fire Engineering Fifth Floor, 66 Prescot Street, London E1 8HG T: +44(0)207 392 0130 W: www.bureauveritas.co.uk			

P2	03/07/24	Issue for information
P1	12/04/24	Draft Issue for Planning
Rev.	Date	Description

DavidMorleyArchitects

170 Kennington Lane London SE11 5DP  
 T +44 (0)20 7430 2444  
 davidmorleyarchitects.co.uk

Project  
 Roehampton Gate, Richmond Park  
 Client  
 The Royal Parks

Title  
 Ground Floor Plan

Project and Drawing Number	Revision
732-15-002	P2
Date	Scale
12/04/2024	1 : 250 @ A3



**Note 1**

-Based on the provided roof plan, it appears that some of the external escape routes are within 1,800mm of the external walls. Where an external escape route is beside an external wall of the building, that part of the external wall within 1,800mm of the escape route should be provided with a minimum of 30 minutes fire-resisting construction (integrity only-from inside the building), up to a height of 1,100mm above the ground level (including any openings, doors, windows, etc.).

-Alternatively wider external escape routes can be provided but it should be ensured that the width of the external egress path accommodate the number of occupants passing through the escape route **(1,800mm + min. required escape width = approximately 2.55m clear width - To be confirmed once the final occupancy figure are confirmed by the design team)**. In this case, fire protection to the external walls would not be required.

**General Note-1**

As confirmed PV panel is used. Although PV panel installations are not covered under Part B the Building Regulations, reference should be made to RC62: Recommendations for fire safety with photovoltaic panel installations for guidance on planning, designing, installing, and maintaining the system, which may also be expected by the client and / or their insurers.

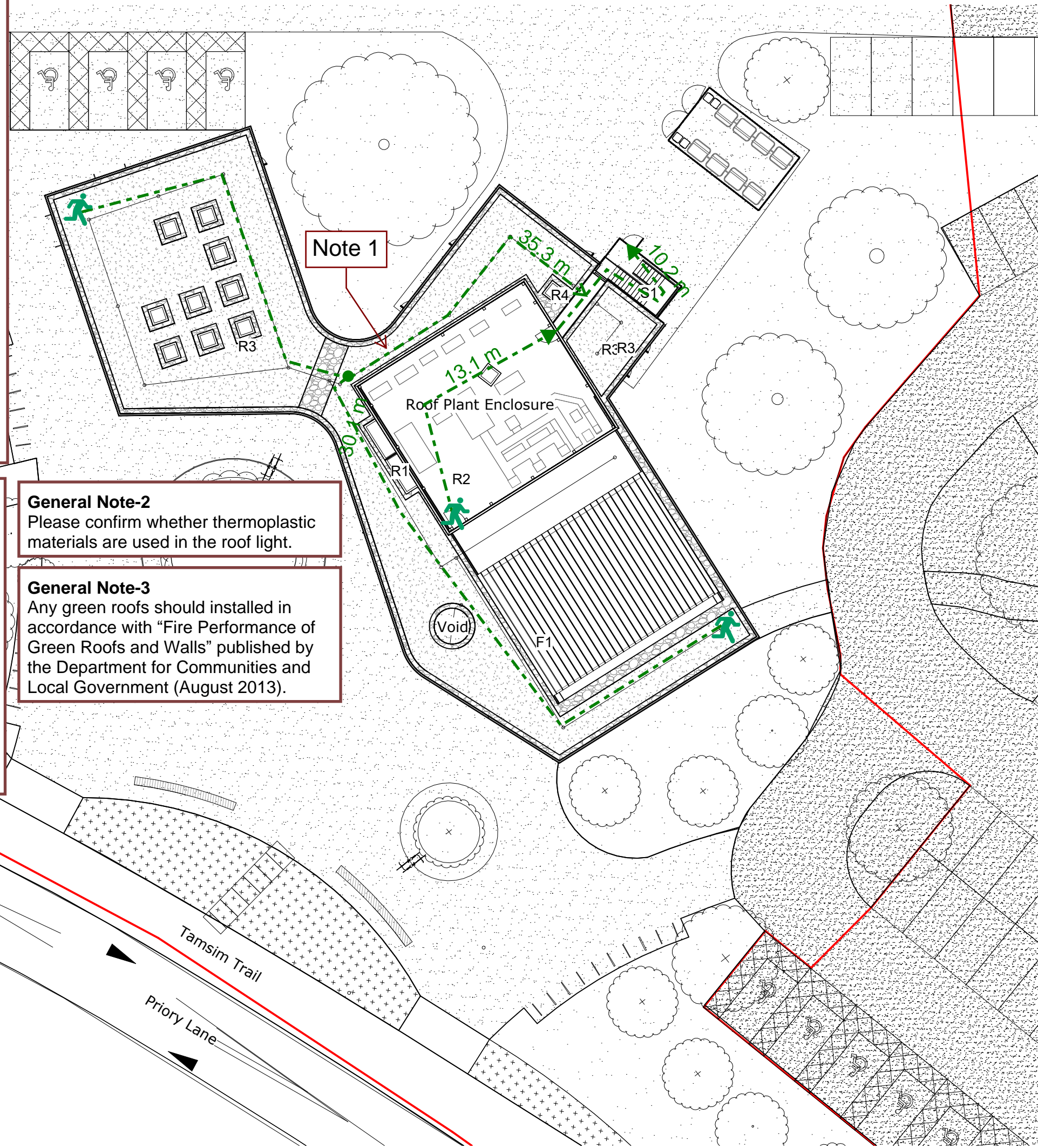
This includes non-combustible substrate beneath the panels and isolator switches for use by the Fire Service.

**General Note-2**

Please confirm whether thermoplastic materials are used in the roof light.

**General Note-3**

Any green roofs should be installed in accordance with "Fire Performance of Green Roofs and Walls" published by the Department for Communities and Local Government (August 2013).



© David Morley Architects  
Do not scale off drawing.  
Check all dimensions on site and advise any discrepancies before commencing work.  
All dimensions in millimetres unless otherwise noted.



Key

C1	Timber Cladding
D1	Aluminium glazed Main Entrance/ Exit Doors
D2	Timber Doors
D3	Folding Doors
D4	Steel Security Doors
F1	Fall Arrest/Restraint System
G1	Glulam columns
L1	Plant Enclosure Louvres
P1	Flexible Photovoltaic
R1	Roof Lights
R2	Bitumen Membrane Flat Roof
R3	Green Roof
R4	Sun Tunnels
S1	External Galvanised Steel Stairs
W1	Aluminium Window
W2	Motorised Ventilation Aluminium Window
Z1	Standing Seam Roof/Cladding

P2	03/07/24	Issue for information
P1	12/04/24	Draft Issue for Planning
Rev.	Date	Description

DavidMorleyArchitects

170 Kennington Lane London SE11 5DP  
T +44 (0)20 7430 2444  
davidmorleyarchitects.co.uk

Project  
**Roehampton Gate, Richmond Park**  
Client  
**The Royal Parks**

Title  
**Roof Plan**

Project and Drawing Number	Revision
<b>732-15-003</b>	<b>P2</b>
Date	Scale
<b>12/04/2024</b>	<b>1 : 250 @ A3</b>

KEY	PAGE 3 of 4
	Means of escape
	Final Storey exit
	Fire fighting roadway route

Scheme:	Roehampton Restored Cafe		
Document Reference:	Roehampton Restored Cafe Fire Safety BV comments		
Job Number:	S24052670	Date:	19/07/2024
Mark-ups & Comments	Issue: 01		
Drafted by:	SP		
Reviewed by:	SK		
Bureau Veritas Fire Engineering Fifth Floor, 66 Prescot Street, London E1 8HG T: +44(0)207 392 0130 W: www.bureauveritas.co.uk			



**Fire fighting access (Total floor area less than 2000m2)**

If dry risers are not provided, fire fighting access should be within 15% of the perimeter and within 18m of a fire appliance parking position or within 45m of every point of the footprint of the building.

It appears that the requirement is met since for a building perimeter of 120m the fire fighting access is provided to in excess of circa 18 m.

**Table 15.2 Typical fire and rescue service vehicle access route specification**

Appliance type	Minimum width of road between kerbs (m)	Minimum width of gateways (m)	Minimum turning circle between kerbs (m)	Minimum turning circle between walls (m)	Minimum clearance height (m)	Minimum carrying capacity (tonnes)
Pump	3.7	3.1	16.8	19.2	3.7	12.5
High reach	3.7	3.1	26.0	29.0	4.0	17.0

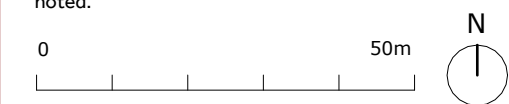
**NOTES:**

1. Fire appliances are not standardised. The building control body may, in consultation with the local fire and rescue service, use other dimensions.
2. The roadbase can be designed to 12.5 tonne capacity. Structures such as bridges should have the full 17-tonne capacity. The weight of high reach appliances is distributed over a number of axles, so infrequent use of a route designed to accommodate 12.5 tonnes should not cause damage.

**External water supply**

For buildings not provided with fire mains hydrants should be provided within 90 m of an entry point to the building and not more than 90 m apart, it is known that no existing hydrant is provided to the site. **(New hydrant location(s) TBC by the design team).**

© David Morley Architects  
Do not scale off drawing.  
Check all dimensions on site and advise any discrepancies before commencing work.  
All dimensions in millimetres unless otherwise noted.



KEY		PAGE 4 of 4
	Fire access coverage area	
	Fire access	
	Fire fighting roadway route	

<b>Scheme:</b>	Roehampton Restored Cafe		
<b>Document Reference:</b>	Roehampton Restored Cafe Fire Safety BV comments		
<b>Job Number:</b>	S24052670	<b>Date:</b>	19/07/2024
<b>Mark-ups &amp; Comments</b>		<b>Issue:</b>	01
<b>Drafted by:</b>	SP		
<b>Reviewed by:</b>	SK		
Bureau Veritas Fire Engineering Fifth Floor, 66 Prescot Street, London E1 8HG T: +44(0)207 392 0130 W: www.bureauveritas.co.uk			

P3	03/07/24	Issue for information
P2	01/07/24	Issue for information
P1	12/04/24	Draft Issue for Planning
Rev.	Date	Description

DavidMorleyArchitects

170 Kennington Lane London SE11 5DP  
T +44 (0)20 7430 2444  
davidmorleyarchitects.co.uk

Project  
**Roehampton Gate, Richmond Park**  
Client  
**The Royal Parks**

Title  
**Site Plan**

Project and Drawing Number	Revision
<b>732-15-001</b>	<b>P3</b>
Date	Scale
<b>12/04/2024</b>	<b>1 : 1000 @ A3</b>

