

# Technical note

<b>Project:</b>	Hampstead Heath Ponds Project	<b>To:</b>	Jonathan Markwell, London Borough of Camden
<b>Subject:</b>	Ladies' Bathing Pond MOL Assessment	<b>From:</b>	Vicky Evans
<b>Date:</b>	23 Jul 2014	<b>cc:</b>	Joanne Farrar

Further to your request by email 8<sup>th</sup> July 2014 for confirmation of the existing and proposed volumes of the Ladies' Bathing Pond building and confirmation of calculations for volume and floor area, please find the required details within this technical note and on the enclosed drawings.

## Existing and proposed internal floor area

The existing and proposed internal floor areas are 97m<sup>2</sup> and 121m<sup>2</sup> respectively, as confirmed in the Ladies' Bathing Pond Replacement Facility DAS. The attachment 1008-SoA-140711 is an extract from the Ladies' DAS which shows how these figures have been arrived at.

## Existing external floor area and volume

For MOL calculations the external floor area is normally used. Attached annotated drawing number HH 5064/02/B (in 'annotated drawings' PDF) shows how the external floor area has been calculated for the existing **main changing room building**:

Area A – 8.8m x 5.4m = 47.52m<sup>2</sup>

Area B – 12m x 3.7m = 44.4 m<sup>2</sup>

Total A + B = **91.92m<sup>2</sup> (rounded to 92m<sup>2</sup>) (external floor area)**

Please see attached annotated drawing PD1300 (in 'annotated drawings' PDF) where heights are shown:

Height of lowest part of the roof of the main changing room building = 2.8m

So volume of the building without roof is - 2.8m (height) x 92m<sup>2</sup> (floor area) = 257.6m<sup>3</sup> (rounded to 258m<sup>3</sup>)

Roof volume – 5m (roof width) x 9.1m (roof length) x 0.9 (height of roof) / 2 (as it is a triangle) x 2 (as there are two of them) = 40.95m<sup>3</sup> (rounded to 41m<sup>3</sup>)

So total **volume of main changing room building** is – 41m<sup>3</sup> + 258m<sup>3</sup> = **299m<sup>3</sup>**

The external floor area and volume of the three portacabins and one shower shed (all to be removed) is calculated below – please see attached annotated drawing PD1300 (in 'annotated drawings' PDF):

**Portacabin 1** – 4m x 2m = **8m<sup>2</sup> (=external floor area)** x 3m (height) = **24m<sup>3</sup> (=volume)**

**Portacabin 2** – 3m x 2m = **6m<sup>2</sup> (=external floor area)** x 3 = **18m<sup>3</sup> (=volume)**

**Portacabin 3** – 4m x 2m = **8m<sup>2</sup> (=external floor area)** x 3 (height) = **24m<sup>3</sup> (=volume)**

**Shower shed** – 1m x 1m = **1m<sup>2</sup> (=external floor area)** x 3 (height) = **3m<sup>3</sup> (=volume)**

The shower shed and portacabin 3 are not on the existing drawings, however should be included as they are permanent buildings on site that will be removed if the proposed development goes ahead. The location of portacabin 3 is behind the existing main changing facility as shown at <http://binged.it/1sLI65f>.

# Technical note

**Total external floor area of existing building and portacabins = 115m<sup>2</sup>**

**Total volume of existing building and portacabins = 368m<sup>3</sup>**

## Proposed external floor area and volume

Attached annotated drawing PD1010 (in 'annotated drawings' PDF) shows how the external floor area of the proposed building has been calculated.

Area A (lifeguard area) – 11.1m x 5.3m = 58.83m<sup>2</sup> (rounded to 59m<sup>2</sup>)

Area B (changing and plant) – 12.5m x 7.5m = 93.75m<sup>2</sup> (rounded to 94m<sup>2</sup>)

Minus Area C (external showers) – 2m x 2m = 4m<sup>2</sup>

**Total proposed external floor area – 58.83 + 93.75 - 4 = 149m<sup>2</sup>**

**Total proposed volume – 148.58 x 3.2m (height) = 476.8m<sup>3</sup> (rounded to 477m<sup>3</sup>)**

## Percentage increases

	Existing	Proposed	Percentage Increase
Internal Floor Area	97m <sup>2</sup>	121m <sup>2</sup>	24.7%
External Floor Area	115m <sup>2</sup>	149m <sup>2</sup>	29.5%
Volume	368m <sup>3</sup>	477m <sup>3</sup>	29.6%

## MOL Policy

MOL is provided with the same protection as Green Belt land. The NPPF confirms that new buildings are inappropriate in the Green Belt; however exceptions include the replacement of a building provided that the new building is in the same use and is not materially larger than the one it replaces. The above table shows the percentage increases from existing to proposed (24.7% for internal floor area, 29.5% for external floor area and 29.6% for volume). All of the percentage increase figures are moderate and would not be considered to be materially larger as required by NPPF policy. It should be noted that the NPPF policy does not provide a set percentage increase allowable, instead each application should be assessed on its individual merits. In terms of whether the proposed facility would be materially larger the assessment should take into consideration the fact that the proposed replacement facility would be on the same site as the existing facility, the development would be much more contained on site due to the removal of the two portacabins and would have a reduced roof height in comparison to the existing building (down from a maximum of 3.7 to 3.2 metres).

In addition to the NPPF allowance for replacement buildings as discussed above, it also allows for new buildings in MOL locations provided they are appropriate facilities for outdoor sport and recreation which preserve the openness of the Green Belt and do not conflict with the purposes of including land within it. Due to the nature of the use of this pond (for swimming) and the fact that it is a year round activity, the proposed replacement facility would be considered to be essential for the swimming use of the pond. The proposed building provides only the essential facilities to allow the use to continue (changing rooms, lifeguard areas, showers and toilets); the increase in size of the building allows it to be built to efficient modern standards and to comply with the Equality Act and health and safety requirements.

The proposed replacement facility would ensure compliance with the Equality Act and Health and Safety requirements, full details are provided in the Ladies' Bathing Pond DAS and are briefly listed below:

# Technical note

- The current lifeguard facilities do not contain adequate welfare facilities (e.g. no showering facilities, office space, kitchenette, WC) and the existing windows do not allow for full sightlines over the pond raising health and safety concerns. The proposed facility addresses these inadequacies.
- The current facilities do not enable disabled access and the disabled WC doubles as a first aid room and is inadequate in size. The proposed facility includes level access, accessible WC and shower and accessible first aid.
- The current plant room is not health and safety compliant, the proposal is to include this within the existing building.
- The existing equipment and first aid area is not accessible from the deck, raising health and safety concerns.
- Store room serves as a plant room, which does not comply with health and safety requirements.

## 2. Brief

Walters and Cohen’s brief for the work at the Kenwood Ladies’ Bathing Pond is to replace the existing buildings with new buildings located on the existing deck. The existing buildings are in no longer large enough to accommodate the needs of lifeguards and users, and changing rooms and toilets do not meet current building standards and regulations. Most importantly the new buildings will address safety, equal access and welfare issues as follows:

- Improved changing rooms, shower and toilets to meet requirements in line with the Equality Act (EA) and National Building Regulations
- Improved lifeguards’ observation area for safety of swimmers
- Improved lifeguards’ office and rest area
- Improved observation of swimmers
- Improved crowd management and observation on the deck area

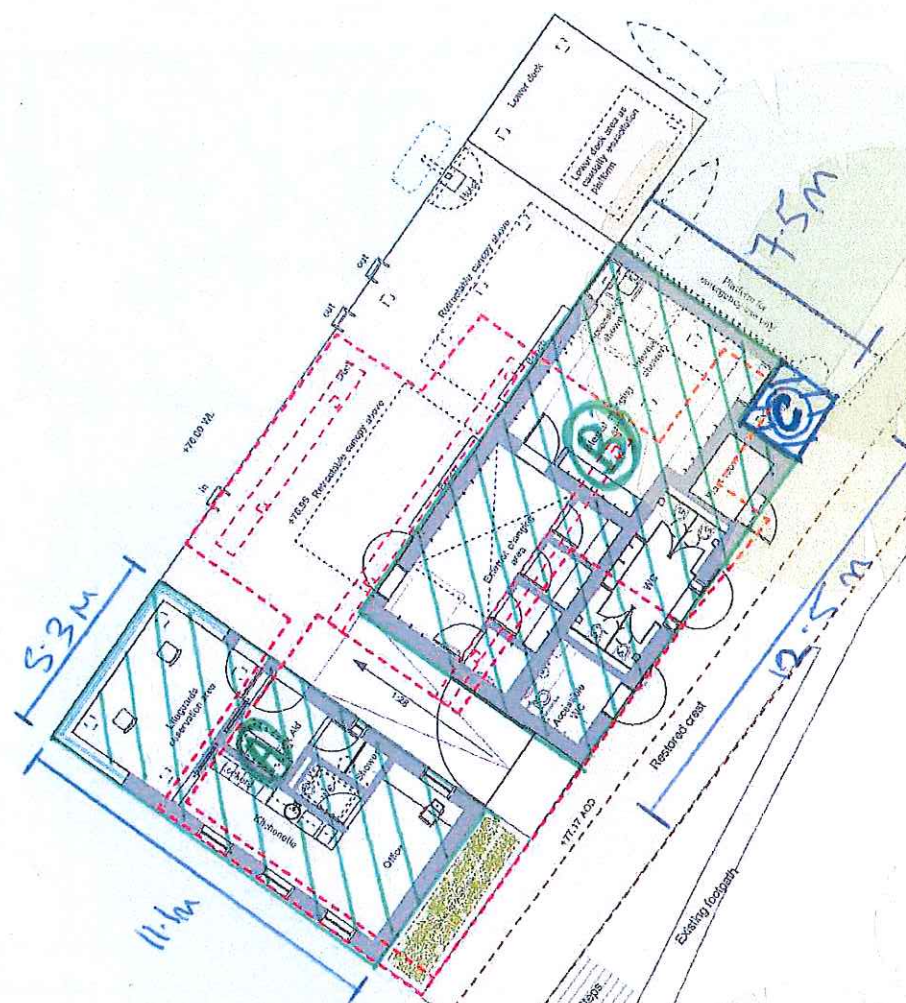
### Existing accommodation schedule

Room names	Description	Area	Notes
Lifeguard area	Observation area		
	Office space		
	Kitchenette		
	WC		
	Shower	34 sqm	No adequate welfare facilities for lifeguards
WC area	Washbasin		
	WC		
	Accessible WC/ first aid	17 sqm	Not a designated accessible WC. Size not compliance
External changing area	Changing cubicles		
	Communal changing area	24 sqm	
Internal changing area	Shower/accessible shower		Shower not accessible and not adequate size.
	Communal changing area	20 sqm	
Platform area	External covered area		
	External non-covered area		
Plant room		2 sqm	Not heath and safety compliance
Platform area		100 sqm	
Gross internal area		97 sqm	

### Proposed accommodation schedule

Room names	Description	Area	Notes
Lifeguard area	Observation area		
	Office space		
	Kitchenette		
	WC		
	Shower/ first aid	46 sqm	Increase for designated first-aid room and welfare facilites
WC area	Washbasin		
	WC		
	Accessible WC	22 sqm	Increase to accommodate compliant accessible WC
External changing area	Changing cubicles		
	Communal changing area	24 sqm	
Internal changing area	Shower/accessible shower		Increase to accommodate compliant accessible shower
	Communal changing area	26 sqm	
Platform area	External covered area		
	External non-covered area		
Plant room		3 sqm	Increase to be compliance
Platform area		100 sqm	
Gross internal area		121 sqm	





NOTES:  
Please refers to Atkins' dam engineer drawings for details of spillway.  
Please refers to Atkins' landscape architect drawings for details of landscape and trees.

Rev	Date	Amendment
-	20.06.14	Issue to Atkins for review



**WALTERS  
& COHEN  
ARCHITECTS**

## Kenwood Ladies' Bathing Pond

2 Wilkin Street  
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mail@waltersandcohen.com

## Planning

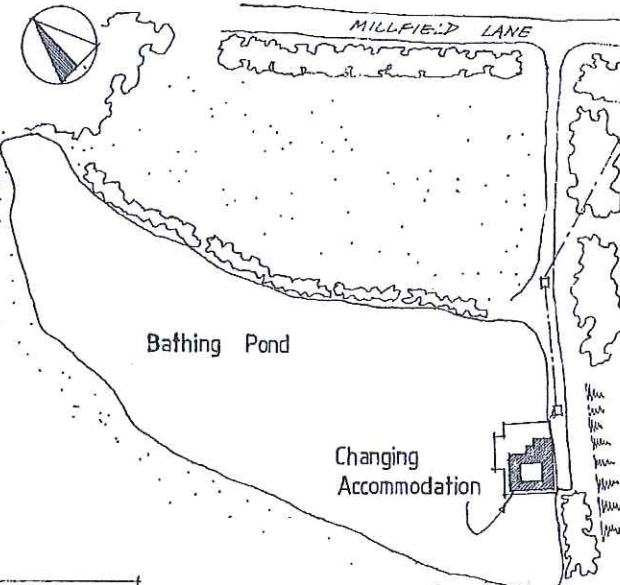
Proposed ground floor plan

Checked by JW	Scale 1:200@A3	Date Drawn 20.06.2014	Job No. 1008	Drawing No. PD1010	Revision -
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© This drawing is copyright. Do not scale. Check dimensions on site



LOCATION PLAN  
SCALE 1:1000



Notes  
Do not scale. All dimensions to be checked on site.  
Errors to be reported to supervising officer

**FOUNDATIONS:**  
EXISTING CONCRETE RAFT APPROX 150mm THICK. PROTECTING OVER POUD SUPPORTED ON CONCRETE PILES.

**WALLS:**  
EXTERNAL WALLS IN 200mm THICK THERMALE TRISO BLOCKWORK IN 1:1.5 C.S. MORTAR MIX FINISHED EXTERNALLY IN 10mm RENDER & INTERNALLY IN PLASTER/C.S. RENDER.  
INTERNAL WALLS IN 100mm BLOCKWORK GENERALLY PLASTER & SCIM BOTH SIDES.  
DPC IN THE FORM OF 3N° COMBES. ENGINEERING BRICKS TO ALL WALLS.

**FLOORS:** ALL FLOORS EXCEPT DECK CHANGING AREA TO RECEIVE 20mm THICK MASTIC ASPHALT FINISH DRESSED UP INTERNAL WALLS TO FORM SKIRTING 150mm HIGH.

**WINDOWS:** SINGLE GLAZED TOP HUNG FROM BOULTON & PAUL RANGE.

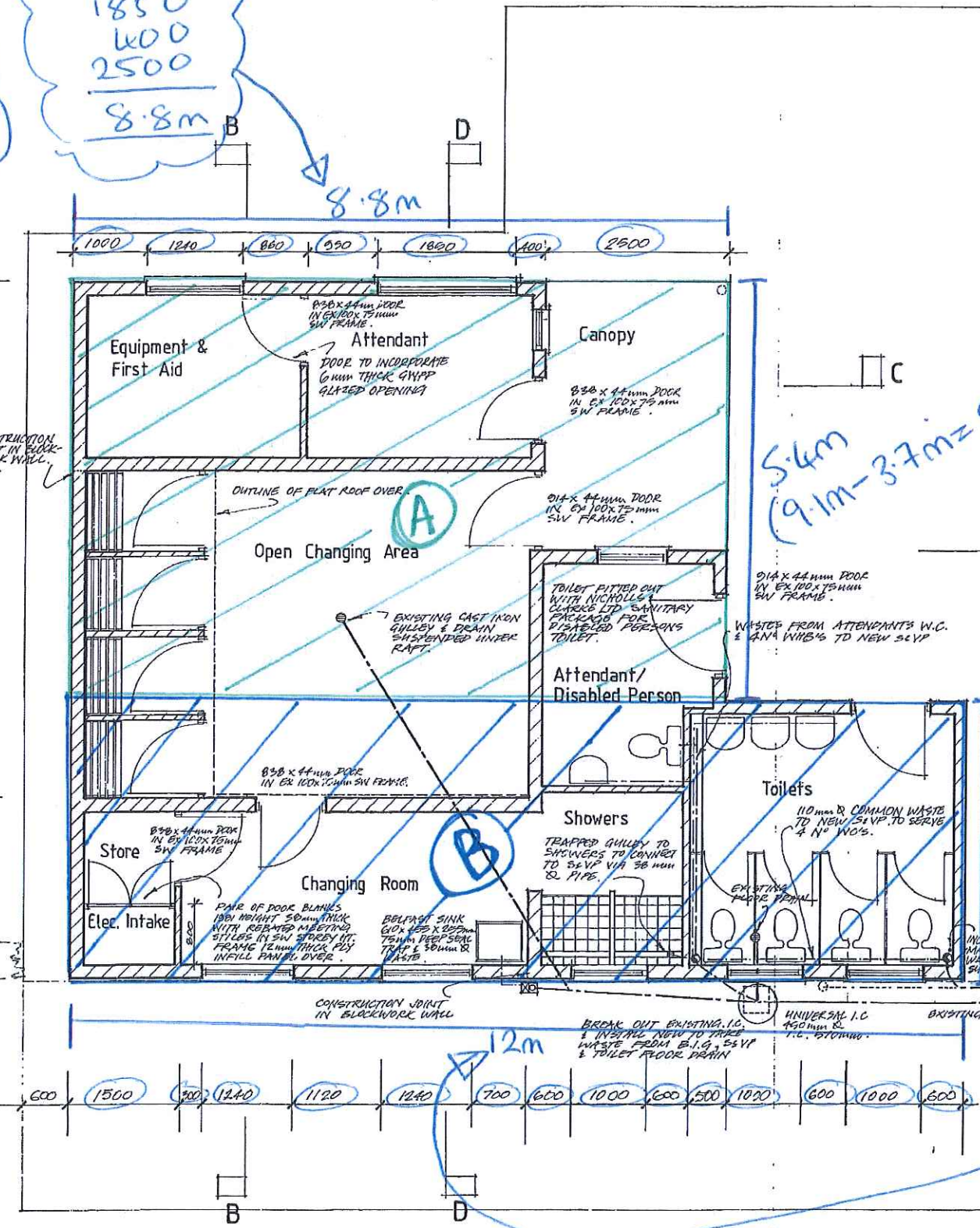
**ROOF:**  
3 LAYER BUILT UP HIGH PERFORMANCE FELT ON 50mm GOULD PULPERK INSULATION ON VAPOUR BARRIER IN 15mm EXTERIOR GRADE PLY PECKING ON ROOF JOINTS.

**DRAINAGE:**  
NEW SEVP IN 110mm Ø UPVC TO CONNECT TO EXISTING DRAINAGE SYSTEM.  
TRAPS TO SHOWER & SINK TO BE 75mm DEPT SEAL.  
RAINWATER GOODS IN C.I. 100mm Ø 1/2" DOWN GUTTER & 75mm Ø FWP

**OPENINGS:**  
CONCRETE LINDBLE OVER OPENINGS MIN. 150mm EACH END

# KENWOOD LADIES BATHING POND PROPOSED LAYOUT

HH5064/02



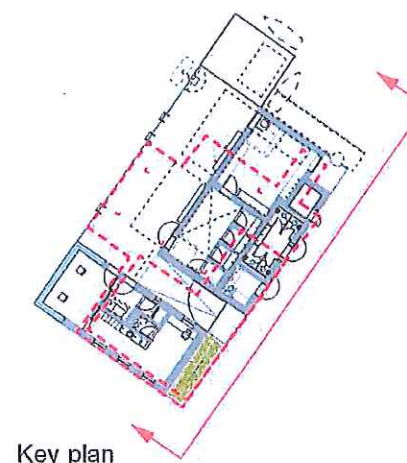
5.4m  
(9.1m - 3.7m = 5.4m)

1500  
300  
1240  
1120  
1240  
700  
600  
1000  
600  
500  
1000  
600  
600  
12m

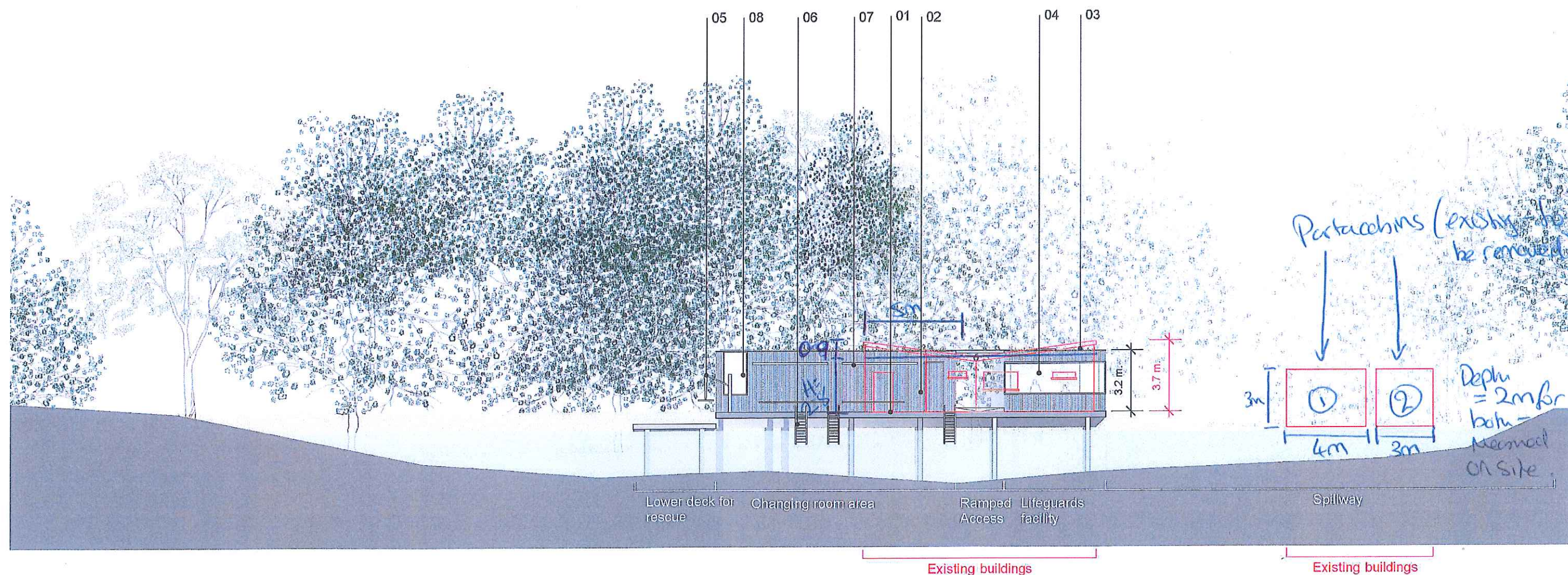
B. 1. A. REVISIONS	23 11/01
Revision	Drawn Date
CORPORATION OF LONDON	
Department of Building and Services GS Curry DipArch DipTP RIBA MRTPI Director of Building and Services Corporation of London PO Box 270 Guildhall London EC2P 2EJ 071-606 3030 Fax 260 1140	
Date	JAN.1991
Drawn	BJB
Scale	1:50
Des	App
Project	
KENWOOD LADIES BATHING POND HAMPSTEAD HEATH	
Drawing	
CHANGING ACCOMMOD. PROPOSED LAYOUT	
Drawing No. HH 5064/02/B	
Rev	A B



1. Existing concrete deck
2. Dark stained timber cladding
3. Sedum roof
4. Dark timber framed windows
5. Safety and disabled hoist
6. Access ladder to pond
7. Retractable canopy
8. Window with opaque glazing



Key plan



NOTES:  
Please refers to Atkins' dam engineer drawings for details of spillway.  
Please refers to Atkins' landscape architect drawings for details of landscape and trees.

Rev	Date	Amendment
-	20.06.14	Issue to Atkins for review



**WALTERS  
& COHEN**  
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**Kenwood Ladies' Bathing Pond**

Checked by  
JW

Scale  
1:200@A3

Date Drawn  
20.06.2014

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Proposed North Elevation

Drawing No.  
PD1300

Revision

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