Total Area of Longford Place: 981.8 m2

Area A : 23.1 m2
Area B : 74.2 m2
Area C: 321.6 m2
Area D: 94.0 m2

Total Soft Area: 512.9 m2

Area E = total area - soft area = 468.9 m2

Area of soft landscaping, draining direct to ground

Area of hard landscaping, draining to formal gullies and drainage channels, discharging to the existing Below Ground Drainage (& ultimately to sewer)

CONTRACTOR TO CHECK TREE ROOTS IN ROOT PROTECTION AREAS PRIOR TO INSTALLATION OF LIGHTS.
REFER TO ARBORICULTURIST REPORT - PROJECT MINT FOR THE EXTENTS OF ROOT PROTECTION AREA FOR EXISTING TREES

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REFER TO ARBORICULTURIST REPORT - PROJECT MINT FOR THE EXTENTS OF ROOT PROTECTION AREA FOR EXISTING TREES

A 23,123,570.00

B 74,242,210.00

C 321,666,700.00

D 94,015,740.00

E 981,800,100.00

EXISTING MOVEMENT JOINT TO BE RENEWED

(Q25 310A) PAVING TYPE 1A
200 mm WIDTH x 398mm LENGTH x 50mm DEPTH, 350 mm WIDTH x 600mm LENGTH x 50mm DEPTH, GRANITE PAVING BY MARSHALLS OR EQUAL AND APPROVED

(Q25 310A) PAVING TYPE 1B
200 mm WIDTH x 398 mm LENGTH x 50mm DEPTH, 350 mm WIDTH x 600mm LENGTH x 50mm DEPTH, GRANITE PAVING

(Q25 310C) PAVING TYPE 2 A
350 mm WIDTH x 600mm LENGTH x 50mm DEPTH GRANITE PAVING BY MARSHALLS OR EQUAL AND APPROVED

(Q25 310D) PAVING TYPE 2B
350 mm WIDTH x 600mm LENGTH x 50mm DEPTH, GRANITE PAVING BY MARSHALLS OR EQUAL AND APPROVED

(Q23 170) 300 mm WIDTH x 200 mm DEPTH GRAVEL BAND, 4–8 mm SIZE RANGE TO MATCH PAVING COLOUR BY MARSHALLS OR EQUAL AND APPROVED

(Q23 225) 20mm DEEP 3mm BRITTANY BRONZE RESIN BOUND GRAVEL BY ADDAGRIP OR EQUAL AND APPROVED

(Q26 360A) 30mm DEPTH POROUS BOUND EPDM RUBBER CRUMB SURFACE EARTH BLEND COLORED BY DCM SURFACES OR EQUAL AND APPROVED

(Q25 310E) RECLAIMED GRANITE FLAGS - AZUL ESPANA 745mm WIDTH x 745mm LENGTH x 38 mm DEPTH

(Q25 311A) LENGTHS BETWEEN 600-900 mm x 600 mm WIDTH x 65mm DEPTH HUNTERS HILL YORKSTONE PAVING TO MATCH WITH THE EXISTING BY CHARCON OR EQUAL AND APPROVED

CONCRETE TACTILE FLAGS AND SLABS TO CROSSINGS AS PER LOCAL AUTHORITY RECOMMENDATION BY CHARCON OR EQUAL AND APPROVED

(Q25 320C) 400mm x 400mm x 50mm DEPTH GRANITE TACTILE FLAGS FOR STEPS CORDUROY FINISH COLOURED MATCH STEPS BY MARSHALL AND EQUAL AND APPROVED

EXISTING GRILL FOR VENTILATION TO BE RETAINED.

(Q50 210) 750mm HEIGHT x 1000mm LENGTH x 50mm Ø SHEFFIELD STAINLESS STEEL CYCLE HOOPS SATIN POLISHED FINISH BY KENT STAINLESS STEEL OR EQUAL AND APPROVED

(Q52 360A) PROPOSED YORKSTONE BOULDERS BY CED OR EQUAL AND APPROVED.

(L37 160) PROPOSED GALVANISED STEEL BALUSTRADE BY KENT STAINLESS OR EQUAL AND APPROVED.

(Q10 140A) VARIES LENGTH X 30mm WIDTH FLUSH METAL METAL EDGE BY KINLEY OR EQUAL AND APPROVED IN LONGFORD PLACE

(Q26 410B) VARIES LENGTH X 30mm WIDTH X FLUSH RUBER EDGE BY DCM SURFACES OR EQUAL AND APPROVED.

(L37 315) 2000mm LENGTH X 300mm WIDTH X 150mm RAISED GRANITE STEPS BY MARSHALLS OR EQUAL AND APPROVED WITH CONTRAST STRIP AND 50mm DIA STAINLESS STEEL HANDRAIL BY KENT STAINLESS OR EQUAL AND APPROVED

INDICATIVE SMOKE BREAKOUT PANELS, FINAL DESIGNED BY CONTRACTOR

POTENTIAL LOCATION FOR FOOD STALL

(Q10 140B) VARIES LENGTH X 6mm THICK X 200mm - 550mm VARIES HEIGHT WITH 30mm ROUNDED TOP HI GRADE PERIMETER CORTEN PLANTER EDGE BY KINLEY OR EQUAL AND APPROVED

B1 (Z10 200C) PROPOSED BENCH TYPE 1

B2 (Z10 200C) PROPOSED BENCH TYPE 2

B3 (Z10 200C) PROPOSED BENCH TYPE 3

B4 (Z10 200C) PROPOSED BENCH TYPE 4

B5 (Z10 200C) PROPOSED BENCH TYPE 5

B6 (Z10 200C) PROPOSED BENCH TYPE 6

B7 (Z10 200B) PROPOSED BENCH TYPE 7

B8 (Z10 200B) PROPOSED BENCH TYPE 8

B10 (Z10 200C) PROPOSED BENCH TYPE 10

B11 PROPOSED BENCH TYPE 11

B12 PROPOSED BENCH TYPE 12

(Q10 170B) 10mm SLOT GALVANISED STEEL SLOT DRAIN WITH CHANNEL BY KENT STAINLESS OR EQUAL AND APPROVED

EXISTING SLOT DRAIN TO BE RETAINED

G EXISTING GULLIES (G) - (Outside boundary line)

EXISTING MANHOLES

INDICATIVE LOCATION EXISTING MOVEMENT JOINT

INDICATIVE LOCATION EXISTING MOVEMENT JOINT TO BE REPLACED

PP1 POTABLE WATER BOLLARD

NPP INDICATIVE LOCATION OF NON POTABLE WATER POINT

PP INDICATIVE LOCATION OF POTABLE WATER POINT

PP(X) INDICATIVE LOCATION OF PROPOSED POWER POINT

INDICATIVE LOCATION OF FOUL DRAINAGE POINT

B INDICATIVE LOCATIO PUSH BUTTON ACCES BOLLARDS

INDICATIVE LOCATIO OF LIGHT FIXING DET

INDICATIVE LOCATIO STAINLESS STEEL BOLLARD

(Q31 200) PROPOSED PLANTING

(Q31 200) PROPOSED LAWN

(Q31 200) PROPOSED TREE

(Q31 200) PROPOSED MULTI-STEM TREE

PROJECT BOUNDARY

UNDERGROUND CAR PARKING BOUNDARY

BUILDING ENTRANCE

CASH POINT

FIRE EXIT

Longford Place New Areas

28.Feb.2020

Arup SK-P-0038

GENERAL NOTES

1. DO NOT SCALE DRAWING.
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5.ORDER OF CONSTRUCTION AND SETTING OUT TO BE AGREED ON SITE.

HEALTH AND SAFETY INFORMATION

REFER TO HEALTH AND SAFETY FILE.

Rev	Description	Date
R00	First Issue	14.05.19
R01	Updated Issue	29.05.19
R02	Updated Issue	05.06.19
R03	Boulder layout updated	12.06.19
R04	TENDER ISSUE	20.06.19
R05	Stage 4 Tender Issue	28.06.19
R06	Stage 4 Tender Issue	01.07.19
R07	Tender Addendum	16.08.19

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Telephone: 020 7486 4466 Fax: 020 7935 5552

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Northumberland House 303-306 High Holborn | London WC1V 7JZ
E-mail: tla@townshendla.com
Telephone: 020 7729 9333

PROJECT REGENTS PLACE
PROJECT NUMBER 667
DATE MAY 19

STAGE 4 - TENDER ISSUE

TITLE LANDSCAPE SURFACE FINISHES PLAN
SCALE (@ A1) 1: 100
DRAWN BY SP
CHECKED BY DP
DRAWING NUMBER TOWN667(04)3010
REV R07

FOR DETAILED SURFACE FINISHES PLAN SEE DRAWING- TOWN667(04)3010

FOR DETAILED SURFACE FINISHES PLAN SEE DRAWING TOWN667(04)3012

FOR DETAILED PLANTING PLAN SEE DRAWING TOWN667(04)5024

FOR DETAILED SURFACE FINISHES PLAN SEE DRAWING- TOWN667(04)5025

FOR DETAILED SURFACE FINISHES PLAN SEE DRAWING- TOWN667(04)3013

137.3 sq m

REMOVAL OF METAL STRUCTURE ABOVE RAMP ALREADY INSTRUCTED TO LENDLEASE UNDER LANDSCAPE PROVISIONAL SUM WITHIN 1 TS BUILDING CONTRACT

FOR DETAILED SURFACE FINISHES PLAN SEE DRAWING TOWN667(04)3012

FOR DETAILED PLANTING PLAN SEE DRAWING TOWN667(04)5024

OCK STREET

FOR DETAILED SURFACE FINISHES PLAN SEE DRAWING- TOWN667(04)5025

FOR DETAILED SURFACE FINISHES PLAN SEE DRAWING- TOWN667(04)3013

UKPN SUBSTATI

1 TRITON SQUARE

FOR DETAILED SURFACE FINISHES PLAN SEE DRAWING- TOWN667(04)3011

FOR DETAILED SURFACE FINISHES PLAN SEE DRAWING- TOWN667(04)5022-5023

FOR DETAILED SURFACE FINISHES PLAN SEE DRAWING TOWN667(04)3012

FOR DETAILED PLANTING PLAN SEE DRAWING TOWN667(04)5024

HEATRE

1,339 sq m

FOR DETAILED SURFACE FINISHES PLAN SEE DRAWING- TOWN667(04)5025

59.1 sq m

26.5 sq m

65.4 sq m

26.7 sq m

24.6 sq m

17.4 sq m

114.6 sq m

27.9 sq m

FOR DETAILED SURFACE FINISHES PLAN SEE DRAWING- TOWN667(04)5021

FOR LANDSCAPE EDGES PLAN SEE DRAWING- TOWN667(04)3003

FOR LANDSCAPE FURNITURE PLAN SEE DRAWING- TOWN667(04)3004

FOR WATERPROOFING EXTENT PLAN SEE DRAWING- TOWN667(04)3005

N

TON ROAD

KEY

PROJECT BOUNDARY

EXISTING STRUCTURAL SLAB EXTENT

GENERAL NOTES

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R03	STAGE 4 - TENDER ISSUE	28.06.19
R04	STAGE 4 - TENDER ISSUE	01.07.19
R05	Tender Addendum	16.08.19

CLIENT

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CONSULTANT

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E-mail: tla@townshendla.com
Telephone: 020 7729 9333

PROJECT REGENTS PLACE

PROJECT NUMBER 667

DATE MAY 19

STAGE 4 - TENDER ISSUE

TITLE LANDSCAPE KEY PLAN

SCALE (@ A1) 1: 250

DRAWN BY SP

CHECKED BY DP

DRAWING NUMBER TOWN667(04)3001

REV R05

CONTRACTOR TO CHECK TREE ROOTS IN ROOT PROTECTION AREAS PRIOR TO INSTALLATION OF LIGHTS.
REFER TO ARBORICULTURIST REPORT - PROJECT MINT FOR THE EXTENTS OF ROOT PROTECTION AREA FOR EXISTING TREES

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EXISTING MOVEMENT JOINT TO BE RENEWED

B10

PPE

NPP

PPB

PPA

PP

1.04B TOWN667(04)6004
1.11C TOWN667(04)6011
1.04A TOWN667(04)6004
1.12B TOWN667(04)6012
4.05A TOWN667(04)6405
1.03A TOWN667(04)6003
4.02A TOWN667(04)6402
6.10A TOWN667(04)6601
1.11B TOWN667(04)6011
1.03C TOWN667(04)6003
1.11A TOWN667(04)6011
2.11B TOWN667(04)6211
1.02C TOWN667(04)6002
6.04A TOWN667(04)6604
6.03C TOWN667(04)6603
1.06A TOWN667(04)6006
1.03B TOWN667(04)6003
7.01D TOWN667(04)6701
1.11D TOWN667(04)6011
3.06A TOWN667(04)3602
1.03C TOWN667(04)6003
6.03B TOWN667(04)6603

(Q25 310A) PAVING TYPE 1A
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INDICATIVE SMOKE BREAKOUT PANELS, FINAL DESIGNED BY CONTRACTOR

POTENTIAL LOCATION FOR FOOD STALL

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B1 (Z10 200C) PROPOSED BENCH TYPE 1
B2 (Z10 200C) PROPOSED BENCH TYPE 2
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B6 (Z10 200C) PROPOSED BENCH TYPE 6
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G EXISTING GULLIES (G) - (Outside boundary line)

EXISTING MANHOLES

INDICATIVE LOCATION EXISTING MOVEMENT JOINT

INDICATIVE LOCATION EXISTING MOVEMENT JOINT TO BE REPLACED

PP1 POTABLE WATER BOLLARD

NPP INDICATIVE LOCATION OF NON POTABLE WATER POINT
PP INDICATIVE LOCATION OF POTABLE WATER POINT
PP(X) INDICATIVE LOCATION OF PROPOSED POWER POINT
INDICATIVE LOCATION OF FOUL DRAINAGE POINT
B INDICATIVE LOCATION OF PUSH BUTTON ACCESS BOLLARDS
INDICATIVE LOCATION OF LIGHT FIXING DETAIL
INDICATIVE LOCATION OF STAINLESS STEEL BOLLARD

(Q31 200) PROPOSED PLANTING
(Q31 200) PROPOSED LAWN
(Q31 200) PROPOSED TREE
(Q31 200) PROPOSED MULTI-STEM TREE
EXISTING TREE
+25.000 EXISTING LEVELS
+25.000 PROPOSED LANDSCAPE LEVELS

PROJECT BOUNDARY
UNDERGROUND CAR PARKING BOUNDARY
BUILDING ENTRANCE
CASH POINT
FIRE EXIT
INDICATIVE LOCATION DRY RISER
+25.000 TOP PROPOSED TOP OF PLANTER LEVELS
+25.000 TOP PROPOSED TOP OF BENCH LEVELS

GENERAL NOTES

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Telephone: 020 7729 9333

PROJECT REGENTS PLACE
PROJECT NUMBER 667
DATE MAY 19

STAGE 4 - TENDER ISSUE

TITLE LANDSCAPE SURFACE FINISHES PLAN
SCALE (@ A1) 1: 100
DRAWN BY SP
CHECKED BY DP
DRAWING NUMBER TOWN667(04)3010
REV R07

File Note

246868 30 June 2020

A2 Calculated Storm Flows from Longford Place

Using Calculation methodology NB 2.2 from BS EN 12056-3:2000, Gravity drainage systems inside buildings, part 3: roof drainage, layout and calculation.

- Using Figure NB.6, 2 min storm, 1 in 5 years = 4.0mm (2 min M5)

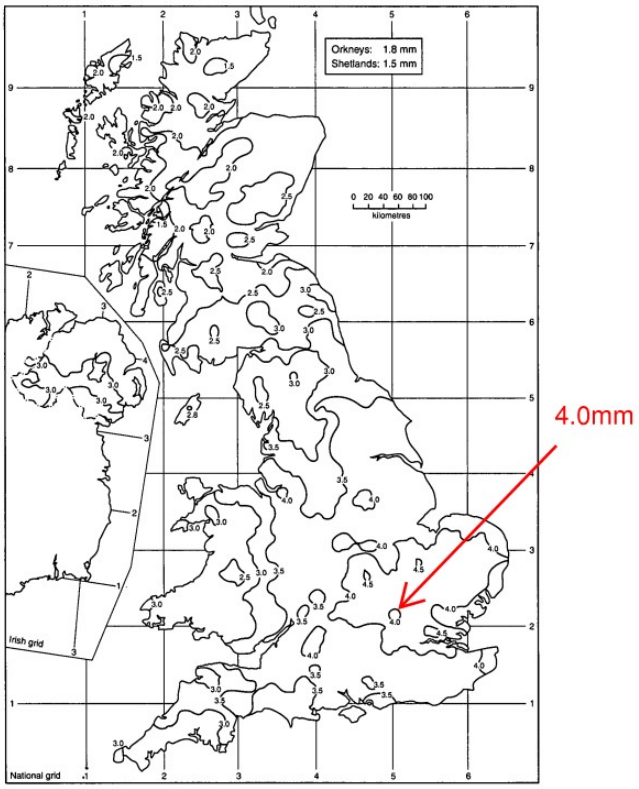

Figure NB.6 — Rainfall depth, in mm, for a 2 min duration storm event with return period of 5 years (2 min M5)

- Using table NB.1, obtain M5 rainfall depth for 10 minute storm (10 min M5). Fraction = 2.74

Storm duration, *D* (min)	Fraction of 2 min M5
1	0.58
2	1.00
3	1.33
4	1.62
5	1.86
6	2.07
7	2.30
8	2.47
9	2.60
10	2.74

10min M5 depth of rain = 2.74 x 4.0 = 10.96mm

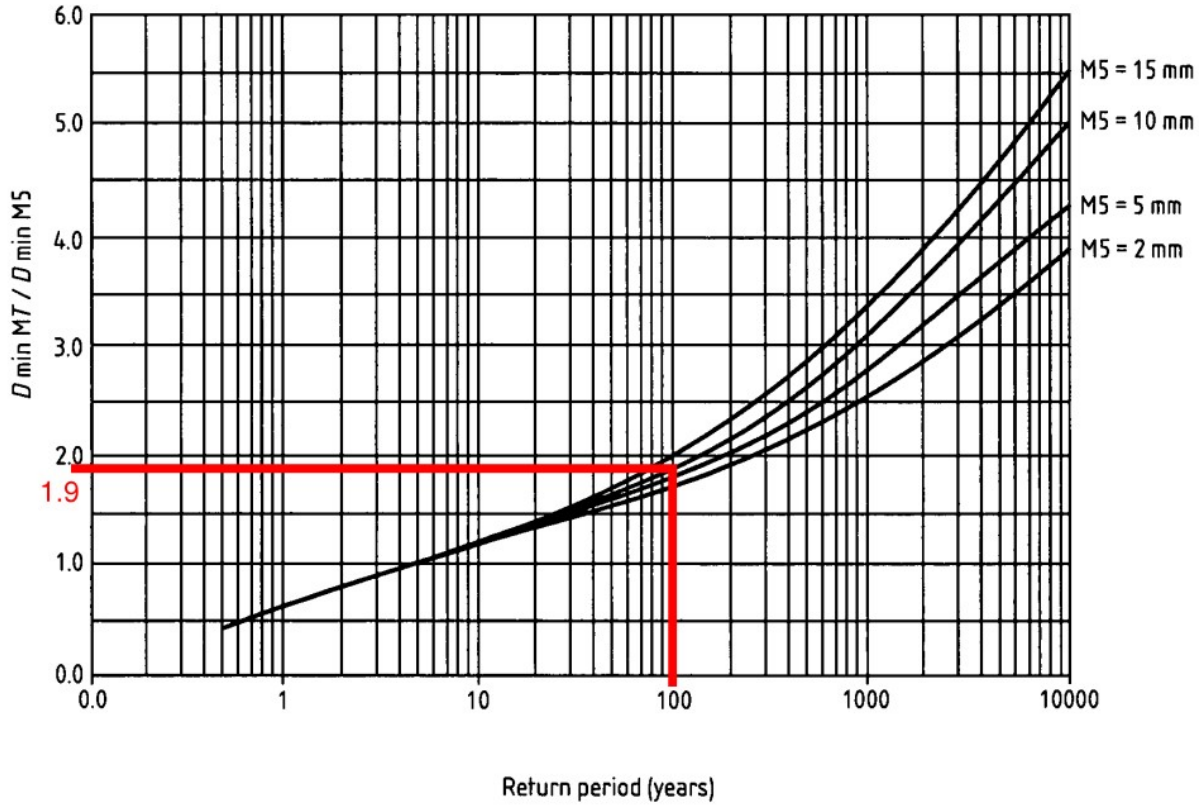

Figure NB.7 — Ratio of rainfall intensity for different return periods but for the same duration

- Using figure NB.7 for 1 in 100 year storm

  (10 min M100) / (10minM5) = 1.9 (from NB7)

  10min M100 = 1.9 x (10min M5)

  = 1.9 x 10.96

  = 20.8 mm

- R = (10min M100) / (100 x 60)

  = 20.8 / (100 x 60)

  = 20.8 / 6000

  = 0.0034 l/s/m2 for 1 in 100 year storm

File Note

246868 30 June 2020

Add 40% for climate change = 0.0048 x 1.4 = 0.0048 l/s/m2

Hardstanding area = 469m2

Flow rate = 469 x 0.0048 = 2.2 l/s for 1 in 100 year + 40% 10 minute storm.

File Note

246868 30 June 2020

A3 Original Condition 13 SUDS submission for 1 Triton Square

Refer over page.

DOCUMENT CHECKING (not mandatory for File Note)

	Prepared by	Checked by	Approved by
Name	Kate Fletcher		
Signature			

BRITISH LAND

1 TRITON SQUARE

DISCHARGE OF PLANNING CONDITION 13: SUSTAINABLE URBAN DRAINAGE

21st JUNE 2018

ARUP ASSOCIATES

File Note

ARUP

13 Fitzroy Street
London
W1T 4BQ
United Kingdom
www.arup.com

t +44 20 7636 1531
d +44 20 7755 4664

Project title	1 Triton Square	Job number	246868
cc		File reference	
Prepared by	Paria Moghaddar	Date	10 April 2018
Subject	Discharge of Planning Condition No. 13: Sustainable Urban Drainage		

1 Introduction

This file note sets out the designed Sustainable Urban Drainage Systems incorporated in the design of 1 Triton Square in order to discharge the SUDS planning condition. It will address the below items set out in planning condition number 13.

- Rainwater harvesting
- Landscaping on Longford Place
- Brown roofs (commercial element only)
- 280m3 attenuation tank with pumped flow control

2 Rain Water Harvesting including Attenuation

The building utilises a combined rainwater harvesting, treated grey water and attenuation tank.

The building has two main areas where surface water is collected and discharged to rain water harvesting tank:

- The main roof (including the four core roofs)
- The terraces at level 6

File Note

246868 10 April 2018

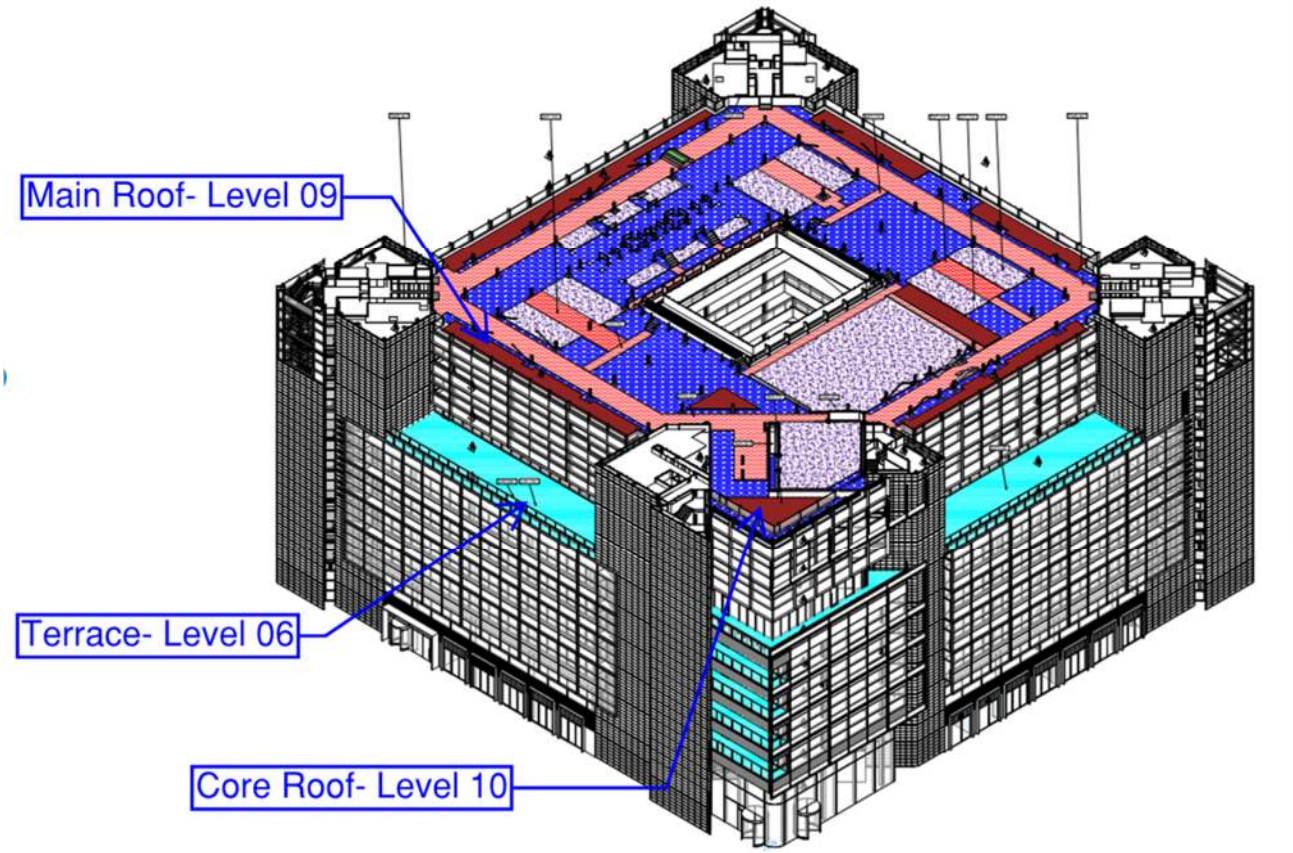

Figure 1: 1 Triton Square- Roofs & Terraces

Rainwater from the four core is discharged via gravity pipes onto the main roof. The surface water from the main roof is then conveyed to the combined tank in the basement via siphonic systems, enabling the required horizontal runs at the basement. Separate siphonic systems are also used to convey surface water from the four terraces to the tank.

The combined tank also receives treated grey water which is collected from cycle showers in ground floor. The collected grey water is treated via separate treatment plant in the basement before discharging to the combined tank.

The collected reclaimed water (i.e. rain water harvesting and treated grey water), feeds a non-potable cold water package (break tank and pump set). The non-potable cold water package is then used to serve all WCs and Urinals within the building.

The combined tank has a capacity of 280m3 to accommodate attenuation for the building. This capacity allows for any storm up to and including 1:100 year storm plus 40% climate change. The attenuation volume is based on pump sets set at 30 l/s discharge rate to sewer. This leaves 5l/s run-off rate for St. Ann's Building giving a total discharge to the sewer of 35l/s.

The combined tank utilises a weather monitoring system so that the tank empties itself if it is told there is a storm coming to ensure sufficient capacity is available to take the expected incoming flow and to accommodate for attenuation.

Refer to Appendix A1 for further details related to Rain Water Harvesting & Attenuation Systems:

A.1.1: Public Health Services- Rainwater Harvesting & Grey Water Treatment Schematic

A.1.2: Public Health Services- Pipes Services- Basement- Layout

A.1.3: Public Health Services-Drainage- Basement- Layout

A.1.4: Equipment Data Sheet-P-13: Combined Attenuation and Water Recycling Package

A.1.5: Rain Water Harvesting, Grey Water and Attenuation Calculation

A.1.6: BREEAM Calculator- Water

3 Landscaping on Longford Place

The detailed provision for landscaping of this area is currently in design development stage.

4 Brown Roofs

There is a total area of 427 SQM of brown roofs situated on main roof-Level 09 of the building.

The brown roof system is a monolithic, fully bonded, hot-applied membrane roof system with biodiverse roof garden build up with an indicative depth of 130mm.

The finishing layer comprises of a moisture retention layer, biodiverse growing medium including crushed brick and composted green waste planted with a Med0 S1 Wildflower Seed Mix by Radmat.

Refer to Appendix A2 for further details related to Brown Roof including:

A.2.1: General Arrangement Plan- Ninth Floor- Plant Level- Roofing

A.2.2: Details- Roof Systems- Plant level interfaces- Roofing

5 280m3 attenuation tank with pumped flow control

Refer to section 2 above for further details.

File Note

246868 10 April 2018

A1

This appendix provides details related to related to Rain Water Harvesting & Attenuation Systems:

A.1.1: Public Health Services- Rainwater Harvesting & Grey Water Treatment Schematic

A.1.2: Public Health Services- Pipes Services- Basement- Layout

A.1.3: Public Health Services-Drainage- Basement- Layout

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A.1.6: BREEAM Calculator- Water

A2

This appendix provides details related to Brown Roof including:

A.2.1: General Arrangement Plan- Ninth Floor- Plant Level- Roofing

A.2.2: Details- Roof Systems- Plant level interfaces- Roofing

DOCUMENT CHECKING (not mandatory for File Note)

	Prepared by	Checked by	Approved by
Name	Paria Moghaddar	Kate Fletcher	Kate Fletcher
Signature			

Appendix A.1.1

29/03/2018

A1

Core 1A | Core 1 | Core 1B | Core 2 | Roof Light | Core 3 | Core 4

Level10 | Level 9 | Level 8 | Level 7 | Level 6 | Level 5 | Level 4 | Level 3 | Level 2 | Level 1 | Ground Floor | Basement

75Ø SWO-BR-1A1 | 75Ø SWO-BR-1A2 | 75Ø SWO-BR-1B1 | 75Ø SWO-BR-1B2 | 75Ø SWO-BR-1B3 | 75Ø SWO-BR-1B4

75Ø SWO-RL-1 | 75Ø SWO-RL-2 | 75Ø SWO-RL-3 | 75Ø SWO-RL-4

110Ø SWO-BR-2A1 | 110Ø SWO-BR-2A2 | 110Ø SWO-BR-2B1 | 110Ø SWO-BR-2B2

110Ø SWO-BR-3A1 | 110Ø SWO-BR-3A2 | 110Ø SWO-BR-3B1 | 110Ø SWO-BR-3B2

110Ø SWO-BR-4A1 | 110Ø SWO-BR-4A2 | 110Ø SWO-BR-4B1 | 110Ø SWO-BR-4B2

75Ø SW-G-BR-1A1 | 75Ø SW-G-BR-1B1 | 75Ø SW-G-BR-1B2 | 110Ø SW-G-BR-2A1 | 110Ø SW-G-BR-2B1 | 75Ø SW-G-RF-1 | 75Ø SW-G-RF-2 | 75Ø SW-G-RF-3 | 75Ø SW-G-RF-4 | 110Ø SW-G-BR-3A1 | 110Ø SW-G-BR-3B1 | 110Ø SW-G-BR-4A1 | 110Ø SW-G-BR-4B1

160Ø SWRGO-1A1 | 160Ø SWRGO-1A2 | 160Ø SWRGO-1B1 | 160Ø SWRGO-1B2 | 160Ø SWRGO-2A1 | 160Ø SWRGO-2A2 | 160Ø SWRGO-2B1 | 160Ø SWRGO-2B2 | 160Ø SWRGO-3A1 | 160Ø SWRGO-3A2 | 160Ø SWRGO-3B1 | 160Ø SWRGO-3B2 | 160Ø SWRGO-4A1 | 160Ø SWRGO-4A2 | 160Ø SWRGO-4B1 | 160Ø SWRGO-4B2 | ROOF GUTTER

SW-PS-1A | SW-SS-1B | SW-PS-2A | SW-SS-2B | SW-PS-3A | SW-SS-3B | SW-PS-4A | SW-SS-4B

75Ø SWT6O-1A2 | 160Ø SWT6O-1A1 | SW-PS-T6-1A | SW-SS-T6-1B | 160Ø SWT6O-1B1 | 75Ø SWT6O-1B2 | 160Ø SWT6O-2A1 | SW-PS-T6-2A | SW-SS-T6-2B | 160Ø SWT6O-2B1 | 160Ø SWT6O-3A1 | SW-PS-T6-3A | SW-SS-T6-3B | 160Ø SWT6O-3B1 | 160Ø SWT6O-4A1 | SW-PS-T6-4A | SW-SS-T6-4B | 160Ø SWT6O-4B1

110Ø SW-G-1A | 110Ø SW-G-1B

75Ø SWT5O-1B2 | 75Ø SWT5O-1B1

75Ø SWT4O-1B2 | 75Ø SWT4O-1B1

75Ø SWT3O-1B2 | 75Ø SWT3O-1B1

75Ø SWT2O-1B2 | 75Ø SWT2O-1B1

Security Room
75Ø SWO-SR-1 | 75Ø SWO-SR-2
75Ø SW-G-SR

Connect to existing RW pipe at HL Basement.
Connect to existing RW pipe at HL Basment in Service Road.
Connect to existing RW pipe at HL Basement.

SIPHONIC BREAK

TO LONGFORD STREET SEWER NETWORK THROUGH 300Ø OUTFALL-Core 3 TO DISCHARGE MAX. 30 L/S

INCOMING GREY WATER FROM CYCLE SHOWERS + VENT FROM GREY WATER COLLECTION BUFFER TANKS & VENT FROM COMBINED TANK TO ATMOSPHERE. REFER TO DRAWING PX-52812

GREY WATER COARSE FILTER

COMPRESSORS

GWRS CONTROL PANEL

MEMBRANE ASSEMBLY

4000L

LEVEL SENSOR

AQUALITY STORM CONTROL LEVEL SENSOR WEATHER DATA CLOUD BASED

Vent for Combined Tank

BV6 RAINWATER FILTER

Over Flow

DP

ATTENUATION PUMPS

HAMMER ABSORBER

MAINS WATER FILTER

SUB METER

MAIN WATER TO TOP UP NON-POTABLE COLD WATER SYSTEM. REFER TO PX-53802.

NON-POTABLE COLD WATER TO SERVE WCS, URINALS AND BIB TAPS FOR WASH DOWN OF FACADE AND BIN STORES. REFER TO PX-53802.

TEST CONNECTION

Pre-Filter 25 micron | Pre-Filter 5 micron

UV Package

AQUALITY REMOTE MONITORING

WEATHER DATA CLOUD BASED

GREY WATER COLLECTION BUFFER TANKS

GREY WATER TREATMENT: MEMBRANE BIO-REACTOR TANK

TREATED GREY WATER TRANSFER TANK & PUMP

COMBINED ATTENUATION, RAIN WATER HARVESTING AND TREATED GREY WATER TANK

NON_POTABLE PACKAGE INCLUDING BOOSTER PUMP SET & BREAK TANK

TO BELOW GROUND DRAINAGE SYSTEM VIA STUB STACK

TO BELOW GROUND DRAINAGE SYSTEM VIA TUNDISH OR FLOOR GULLEY

TO BELOW GROUND DRAINAGE SYSTEM VIA TUNDISH OR FLOOR GULLEY

PACKAGED COMBINED ATTENUATION AND WATER RECYCLING PACKAGE TO BE PROVIDED BY SPECIALIST

CAWRP-B01-1
Refer to EDS-P13

FIGURED DIMENSIONS ONLY TO BE USED

Safety, Health and Environmental Information

In addition to the hazards/risks normally associated with the types of work detailed on this drawing and noted in the designer risk assessments and health and safety plan, note the following:

- It is assumed that all works on this drawing will be carried out by a competent contractor working, where appropriate, to an approved method statement.
- Where applicable, significant residual risks are highlighted in the body of the drawing.

Surface Water Notes

1. This drawing is to be read in conjunction with all Tender information including other drawings and reports by ARUP and other consultants. Where inconsistencies exist between documents, the more onerous document will prevail.

2. The design of siphonic system to be confirmed by the specialist siphonic system designer and contractor. The sizes are just indicative.

3. All roofed areas to have two flow paths. Allow for secondary overflow systems where required.

4. Rodding points to be positioned at the base of downpipes and direction changes.

5. Refer to drawing 52800 for Public Health Legend.

LEGEND

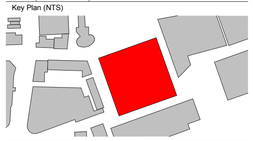
- MAINS WATER
- NON-POTABLE WATER SERVICES
- SIPHONIC SURFACE WATER SYSTEM
- GRAVITY SURFACE WATER SYSTEM
- GREY WATER
- TREATED GREY WATER
- PUMPED SURFACE WATER TO SEWER
- FOUL WATER TO SEWER
- CONTROL CABLES
- COMPRESSED AIR
- MAINS POWER

T03

This drawing was previously issued at stage 3 under the reference: 246868-A_A-XX-XX-DR-PX-52806

Issue	Date	
T03	18/12/2017	Updated Tender Issue - revised as clouded
T02	27/10/2017	Tender Issue
T01	18/08/17	Stage 3+ Tender Issue
P07	29/06/17	Stage 3 AFL Issue
P06	09/06/17	Draft Stage 3
P05	26/05/17	Draft Stage 3
P04	17/02/17	Updated Stage 2
P03	12/05/16	Stage 2 Contractor Issue
P02	05/05/16	Stage 2 Issue
P01	22/04/16	Draft Stage 2

Key Plan (NTS)



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Client

British Land Property Management Limited

Job Title

1 Triton Square

Drawing Title

Public Health Services
Rainwater Harvesting & Grey Water Treatment Schematic

Scale at A1: NTS

Discipline: Public Health Services

Job No: **246868**

Drawing Status: **Tender**

Drawing No: **246868-A_A-XX-XX-DR-PX-52811**

Issue: **T03**

14/02/2018 12:15:27

Do not scale