

Appendix 5



Cole Easdon Consultants
Unit 2, York House
Edison Park
Dorcan Way
Swindon
Wiltshire
SN3 3RB

RECEIVED
04 NOV 2013
~~3320~~ SS
4040

Developer Services
Southern Water
Southern House
Sparrowgrove
Otterbourne
Hampshire
SO21 2SW

Tel: **0330 303 0119**
Email: **developerservices@southernwater.co.uk**

Your Ref:
SS/sc/4040sw2
Our Ref:
CC/001843

Date:
29 October 2013

F.A.O: Mr. Stuart Starr,

Site: Land at Portsdown Hill Road, Bedhampton, Havant, Hampshire, PO9 3JD.

Dear Sirs,

We have completed the capacity check for the above development site and the results are as follows:-

Foul capacity check:

There is currently inadequate capacity within the foul sewerage network to accommodate a foul flow of 2 l/s at manhole reference 4002. The proposed development would increase flows to the public sewerage system, and existing properties and land may be subject to a greater risk of flooding as a result. Additional off-site sewers, or improvements to existing sewers, will be required to provide sufficient capacity to service the development.

The nearest point where capacity is currently available is at Budds Farm WTW which is located approximately 1400m south east of the proposed development site. Rights are not issued for a direct connection to Wastewater Treatment Works. Please note that connection to the WTW will have to be agreed by Southern Water Services before being carried out.

Section 98 of the Water Industry Act 1991 provides a legal mechanism through which the appropriate infrastructure can be requested (by the developer) and provided to drain a specific location. Alternatively, carry out off site reinforcement works in order to provide

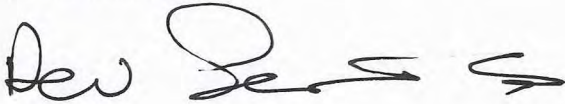
capacity for the proposed foul flow to be accommodated within the local sewerage system. The extent of the works required to provide capacity for the development site could be obtained via a level 2 Capacity Assessment (Application forms enclosed).

Unfortunately, it may be several years before adequate infrastructure is provided via a prioritised capital expenditure programme. Therefore, this proposed development would be considered premature until such time adequate sewerage infrastructure could be provided.

Before any connections are made to foul and surface sewerage network, an application form needs to be completed and approved by Southern Water Services.

Should you require any further information, please contact us at the above mentioned phone number or address.

Yours faithfully

A handwritten signature in black ink, appearing to read 'Dev', followed by a stylized flourish.

Developer services

Please note: -

The information provided above does not grant approval for any designs/drawings submitted for the capacity analysis. The results quoted above are only valid for 12 months from the date of issue of this letter.

Requested By:

SOUTHERN WATER



The positions of pipes shown on this plan are believed to be correct, but Southern Water Services Ltd accept no responsibility in the event of inaccuracy. The actual positions should be determined on site.

Based upon Ordnance Survey Digital Data with the permission of the controller of
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O.S. REF: SU6906SW

Scale: 1:1250



Printed By: Roopa

Site Location Plan

Requested By:

Date: 7-10-2013

Sewer Plot

WARNING: BAC pipes are constructed of Bonded Asbestos Cement

WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement



Southern Water



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23 DEC 2013

Cole Easdon Consultants
Unit 2, York House
Edison Park
Dorcan Way
Swindon
Wiltshire SN3 3RB

Developer Services
Southern Water
Southern House
Sparrowgrove
Otterbourne
Hampshire
SO21 2SW

Tel: **0330 303 0119**
Email: **developerservices@southernwater.co.uk**

Your Ref:
SS/sc/4040sw3
Our Ref:
CC/001901

Date:
20 December 2013

F.A.O: Mr. Stuart Starr,

Site: Land at Portsdown Hill Road, Bedhampton, Havant, Hampshire, PO9 3JD.

Dear Sirs,

Further to your recent application for a level 2 enquiry regarding the above development site.

FOUL WATER

Please find enclosed the report which details the extent of works required in order for your proposed development site to be accommodated within the local sewerage infrastructure. It should be noted that the report is only a hydraulic solution to provide capacity for the proposed development site. There are other options available to you/ your client in discharging your proposed flows from the site such as making a connection application/requisition to a sewer at a point where capacity is currently available. Section 98 of the Water Industry Act 1991 provides a legal mechanism through which the appropriate infrastructure can be requested (by the developer) and provided to drain a specific location.

As you are aware the owner or occupier of the premises or private sewer or drain must give the sewerage undertaker notice of the proposed works. Upon receipt of the notice the undertaker may, within 21 days, refuse to allow him to make the connection if it considers that the mode of construction or the condition of the connecting sewer or drain either does not satisfy the standards reasonably required by the undertaker, or is such that the making of the communication would be prejudicial to its sewerage system.

The right of refusal is limited to these criteria alone and the undertaker cannot refuse to allow the connection on the grounds that the sewerage system is inadequate to take the extra liquid that the connection will discharge into it. This is a matter that should be dealt with at the planning stage.

Yours faithfully

D.S.
for

Developer Services

Please note: -

The information provided above does not grant approval for any designs/drawings submitted for the capacity analysis. The results quoted above are only valid for 12 months from the date of issue of this letter.



**STUDY INTO THE OPTIONS FOR
FOUL DRAINAGE PROVISION AT
LAND AT PORTSDOWN HILL ROAD
BEDHAMPTON
HAVANT
HAMPSHIRE
PO9 3JD**

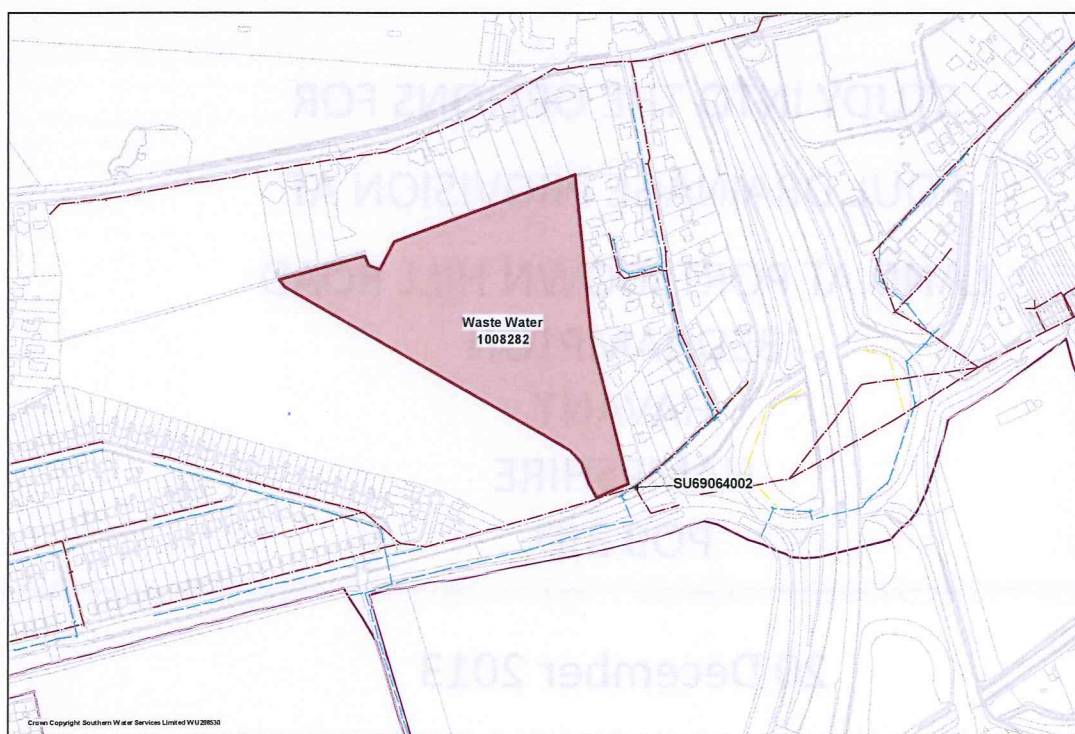
20 December 2013

**REQUESTED:
COLE EASDON CONSULTANTS**

Development Details:

The proposal is to discharge 2 l/s of foul flow to the local foul sewerage systems at manhole reference SU69064002 which is located in Bedhampton Hill Road.

Figure 1 - Proposed Development



II. Results and Conclusions:

Foul Water:

There is currently inadequate capacity within the local foul sewerage network to accommodate a flow of 2 l/s at manhole reference SU69064002. The proposed development would increase flows to the local network and as a result existing properties and land may be subject to a greater risk of flooding.

Additional off-site sewers or improvements to existing sewers will be required to provide sufficient capacity to service the proposed development as indicated in Figures 2 & 3 and Table 1.

Alternatively, the nearest point where capacity is currently available is at Budds Farm WTW located approximately 1400 metres south east of the proposed development site. Section 98 of the Water Industry Act 1991 provides a legal mechanism through which the appropriate infrastructure can be requested (by the developer) and provided to drain a specific location.

Figure 2- Proposed Improvements – Foul system

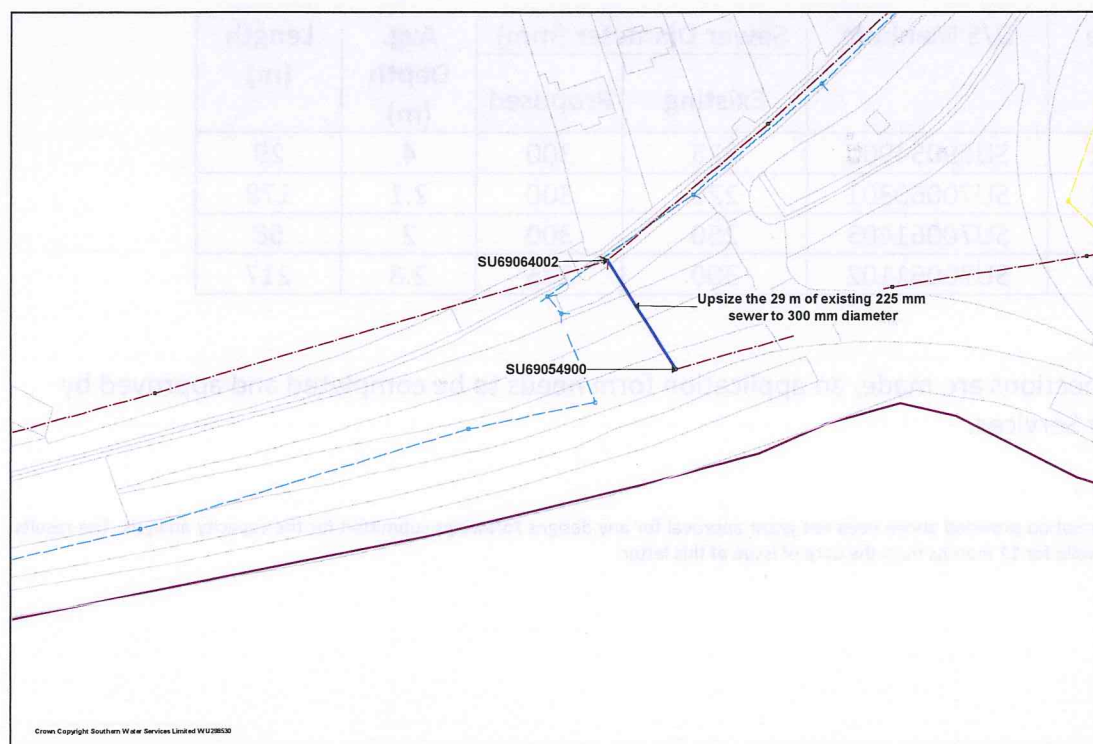
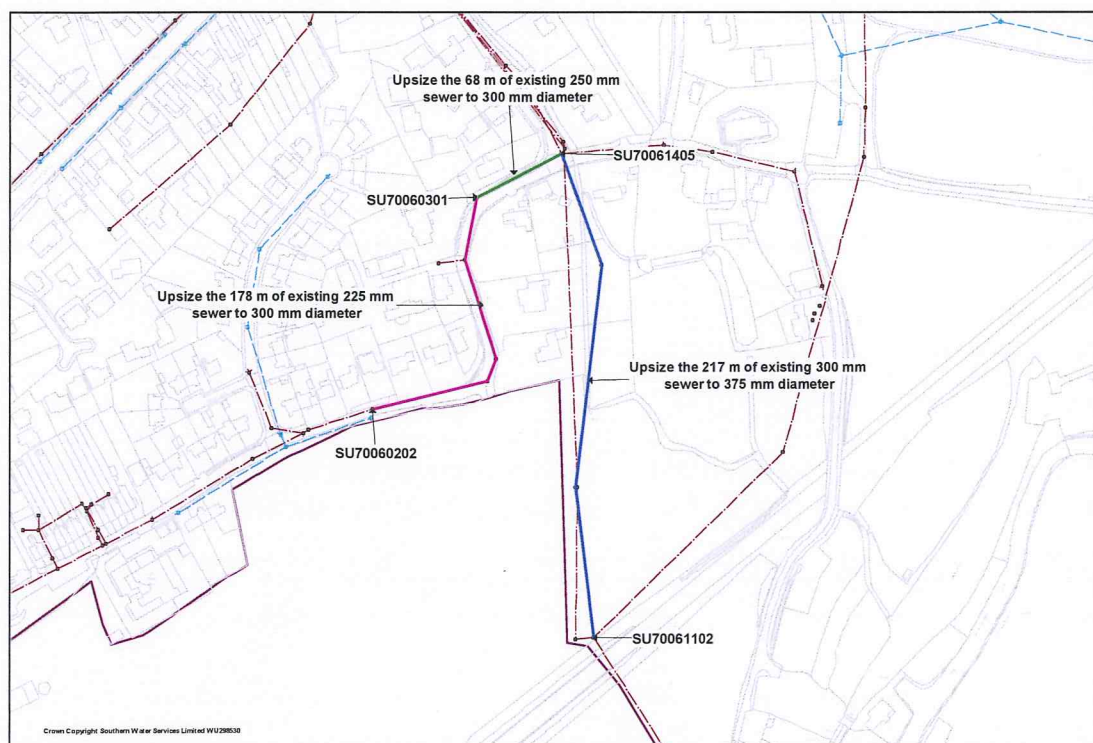


Figure 3 - Proposed Improvements – Foul Flow



Study into the Options for Foul Water Drainage Provision along Bedhampton Hill Road, Budds Farm

Table 1 Proposed Improvements Schedule

U/S Manhole	D/S Manhole	Sewer Diameter (mm)		Avg. Depth (m)	Length (m)
		Existing	Proposed		
SU69064002	SU69054900	225	300	4	29
SU70060202	SU70060301	225	300	2.1	178
SU70060301	SU70061405	250	300	2	68
SU70061405	SU70061102	300	375	2.8	217

Before any connections are made, an application form needs to be completed and approved by Southern Water Services.

Please note: - The information provided above does not grant approval for any designs /drawings submitted for the capacity analysis. The results quoted above are only valid for 12 months from the date of issue of this letter.

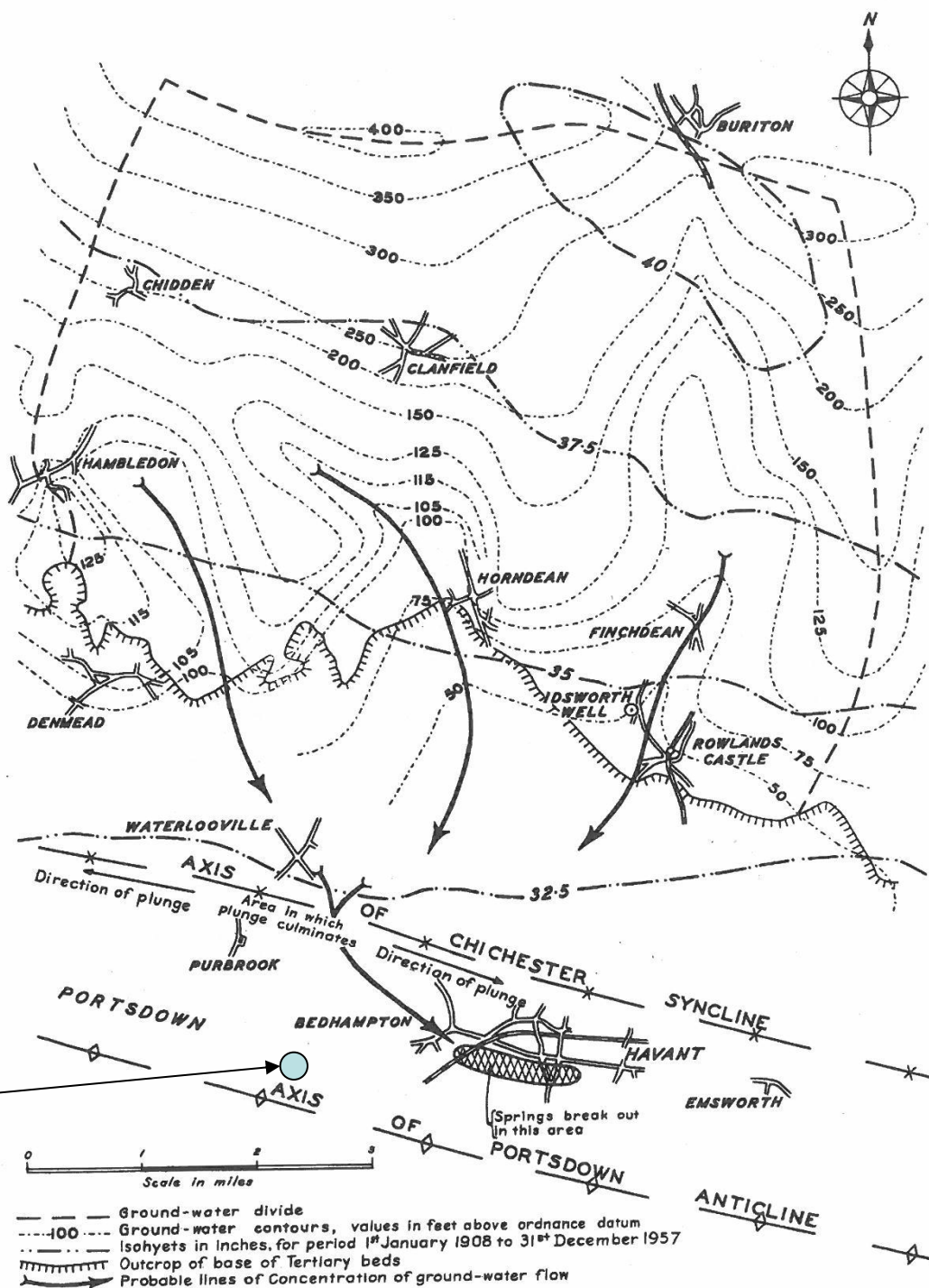


Fig. 1 Ground-water catchment of the Havant and Bedhampton springs.

Stuart Starr

From: Bucknall, James
Sent: 28 November 2013 10:59
To: Stuart Starr
Subject: FW: SS/bpf/4040 - Portsdown Hill Road, Bedhampton, PO9 3JD
Attachments: GW flow - Portsdown Hill Rd development.ppt

Dear Mr Starr,

Thank you for your consultation with Portsmouth Water on the proposed development off Portsdown Hill Road, PO9 3JD.

The proposed site is located on the chalk outcrop, which is classed as a principal aquifer, with the nearest spring used for abstraction being approximately 1km to the east. The groundwater flow in the chalk block is through a complex network of solution enlarged fissures and fractures, the exact location of which are unknown, but it is accepted that a convergence of the groundwater occurs between Waterlooville and Bedhampton before swinging to the east towards the springs at Havant and Bedhampton (see attachment). However, as you have identified, the site is situated outside of the modelled Source Protection Zone 1 for the Havant and Bedhampton springs and is also south of the abstraction point and therefore viewed as being 'downstream' of the springs emergence.

Therefore, we view the proposed development as low risk in relation to our abstraction. However, for our records we would like to request the details of the proposed SUDS system.

As the site is to utilise SUDS infiltration drainage systems I would also like to highlight that there is a mapped spring that emerges to the south of the development (469301, 105588), which discharges into Langstone Harbour.

Kind Regards

James Bucknall
DWSP Scientist

Portsmouth Water
02392-249285
J.Bucknall@portsmouthwater.co.uk

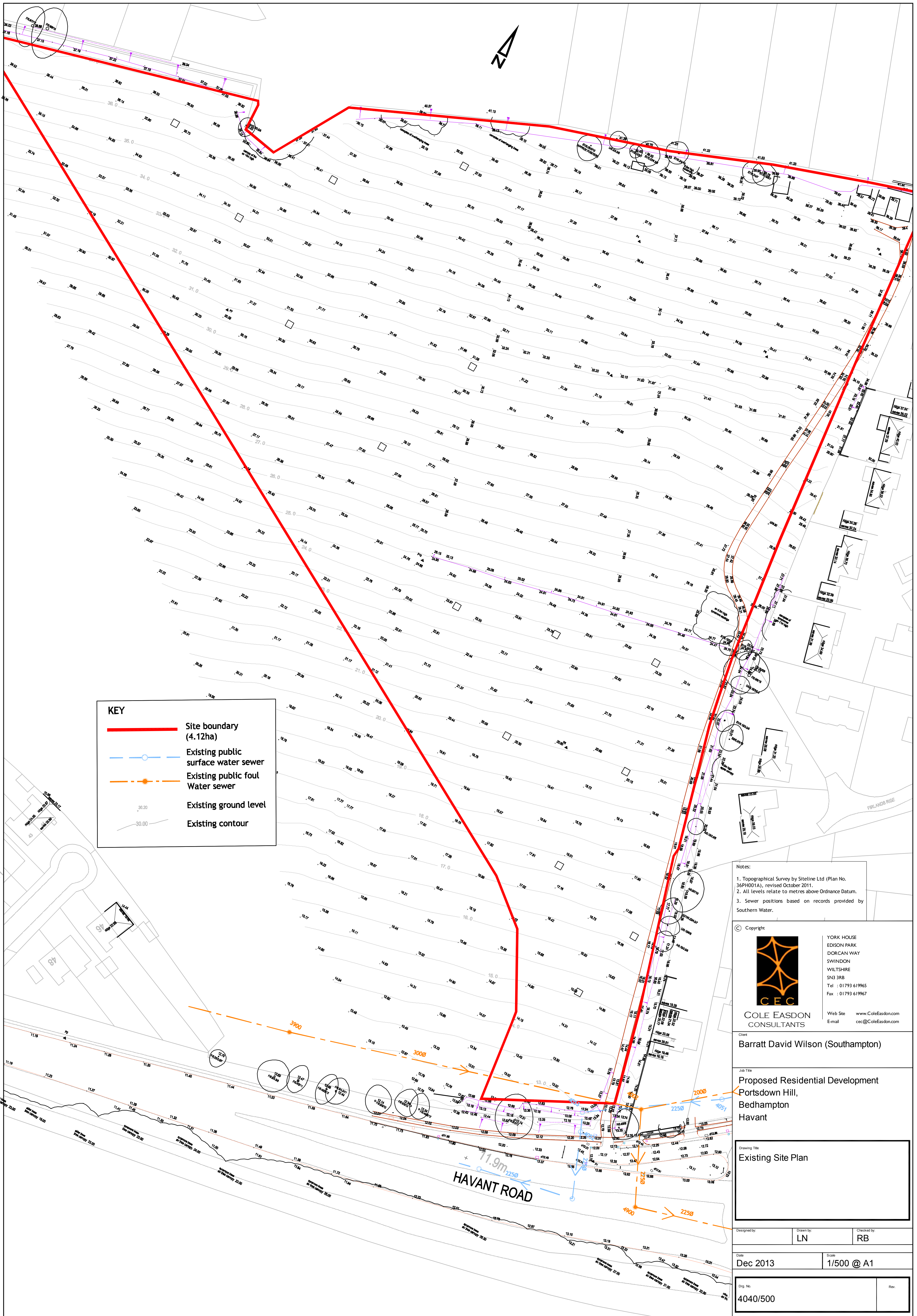
2013 RoSPA Health and Safety GOLD MEDAL Winner

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Registered Office: Portsmouth Water Ltd, P.O. BOX NO. 8, West Street, Havant, Hampshire. PO9 1LG.
Telephone (02392)499888. Fax (02392) 453632. Registered in England No 2536455. VAT No. GB 615375835

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through the MessageLabs Virus Control Centre.

Appendix 6



KEY

- Site boundary (4.12ha)
- Existing public surface water sewer
- Existing public foul water sewer
- Existing ground level
- Existing contour

Notes:

- Topographical Survey by Siltline Ltd (Plan No. 36PH001A), revised October 2011.
- All levels relate to metres above Ordnance Datum.
- Sewer positions based on records provided by Southern Water.

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Web Site : www.ColeEasdon.com
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Client:
Barratt David Wilson (Southampton)

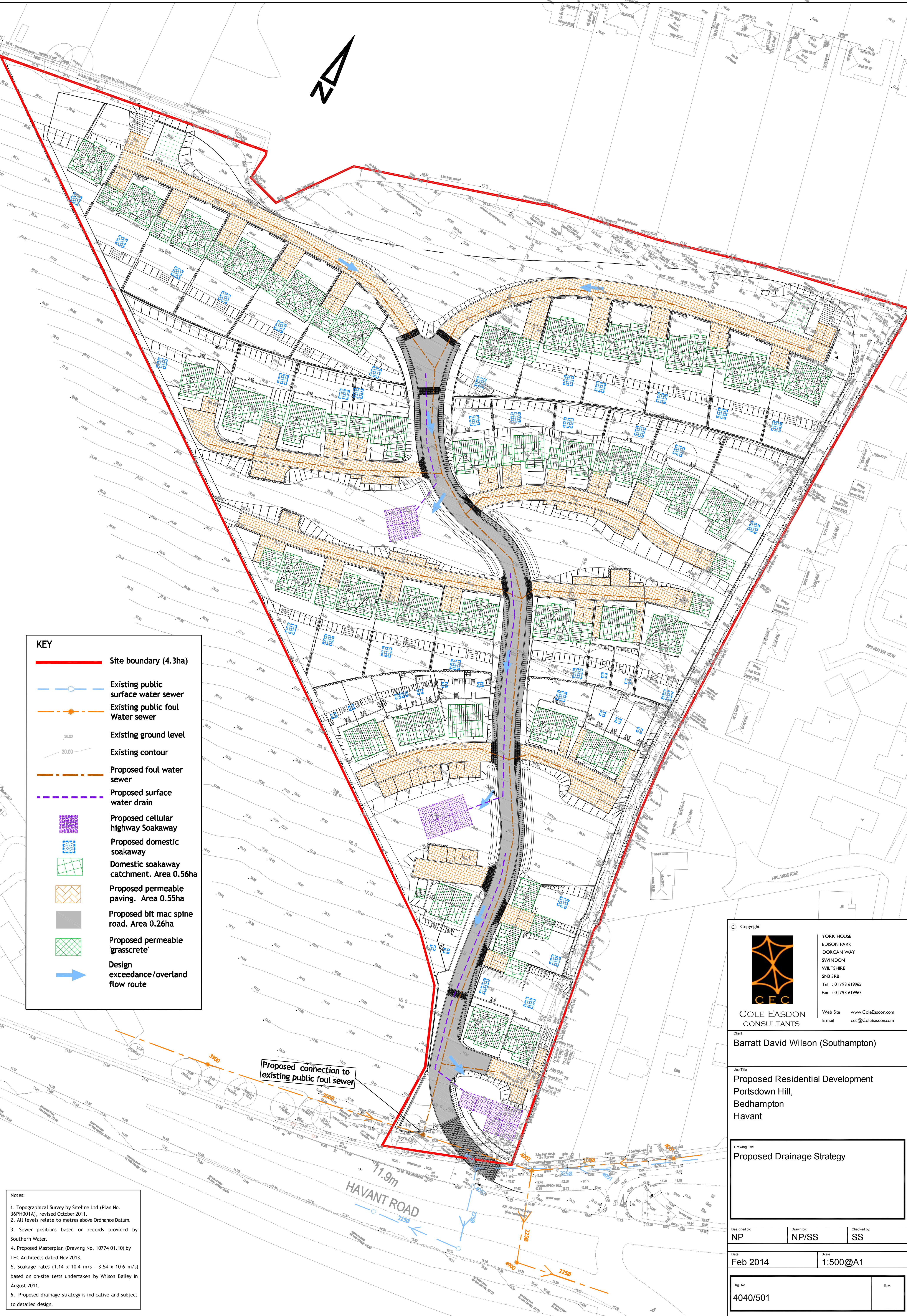
Job Title:
Proposed Residential Development
Portsmouth Hill,
Bedhampton
Havant

Drawing Title:
Existing Site Plan

Designed by: LN Drawn by: RB Checked by:

Date: Dec 2013 Scale: 1/500 @ A1

Dwg. No: 4040/500 Rev:



KEY

- Site boundary (4.3ha)
- Existing public surface water sewer
- Existing public foul water sewer
- Existing ground level
- Existing contour
- Proposed foul water sewer
- Proposed surface water drain
- Proposed cellular highway soakaway
- Proposed domestic soakaway
- Domestic soakaway catchment. Area 0.56ha
- Proposed permeable paving. Area 0.55ha
- Proposed bit mac spine road. Area 0.26ha
- Proposed permeable 'grasscrete'
- Design exceedance/overland flow route

Notes:

1. Topographical Survey by Siteline Ltd (Plan No. 36PH001A), revised October 2011.
2. All levels relate to metres above Ordnance Datum.
3. Sewer positions based on records provided by Southern Water.
4. Proposed Masterplan (Drawing No. 10774 01.10) by LHC Architects dated Nov 2013.
5. Soakage rates (1.14 x 10⁻⁴ m/s - 3.54 x 10⁻⁶ m/s) based on on-site tests undertaken by Wilson Bailey in August 2011.
6. Proposed drainage strategy is indicative and subject to detailed design.

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Client
Barratt David Wilson (Southampton)

Job Title
Proposed Residential Development
Portsdown Hill,
Bedhampton
Havant

Drawing Title
Proposed Drainage Strategy

Designed by
NP

Drawn by
NP/SS

Checked by
SS

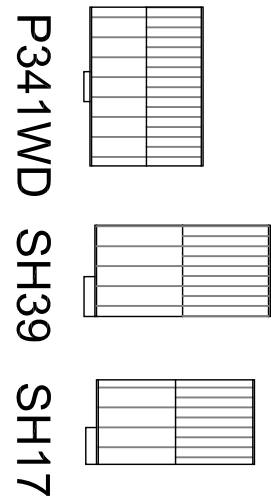
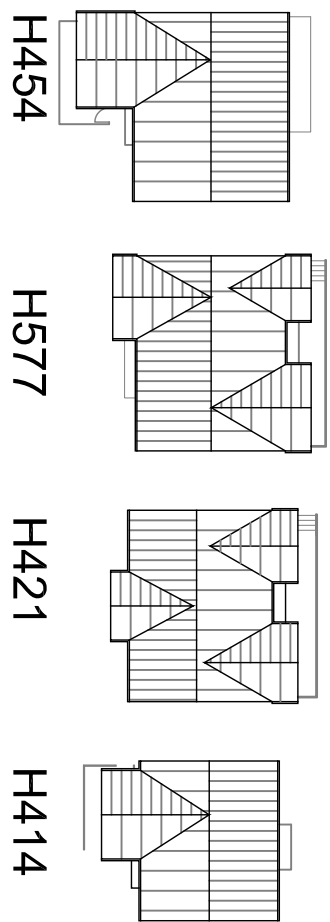
Date
Feb 2014

Scale
1:500@A1

Orig. No.
4040/501

Rev.

HOUSE TYPES



Electricity sub station



SCHEDULE OF ACCOMMODATION

TOTAL FLOORSPACE =69,868sqft / 6,430sqm					
NAME	BEDS	SIZE (sqft)	STOREYS	NO.	TOTAL (sqft)
H454 Por.	4	2085	2	5	10,425
H577 Por.	5	1972	2	10	19,720
H421 por.	4	1771	2	9	15,939
H414 por.	4	1406	2	7	9,842
P341WD Por.	3	1001	2	2	2,002
PRIVATE				33	57,928
SH39 Por.	3	930	2	8	7,440
SH17 Por.	2	750	2	6	4,500
AFF.				14	11940
TOTAL				47	69,868



REVISION	DATE	COMMENTS	AUTHOR	CHECKED
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TITLE
PORTDOWN HILL
HAVANT

DEFINITION
MASTER PLAN

DATE
FEB 2014

SCALE
1:300 @A1

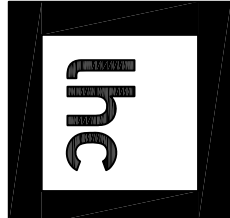
DRAWING NO.
10774 01-10

DRAWING - STATUS
PLANNING

AUTHOR
MH / DMH

REVISION
1

DATE
FEB 2014



urbanism
landscape

LHC GROUP

0182 44434

01725 44434

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