



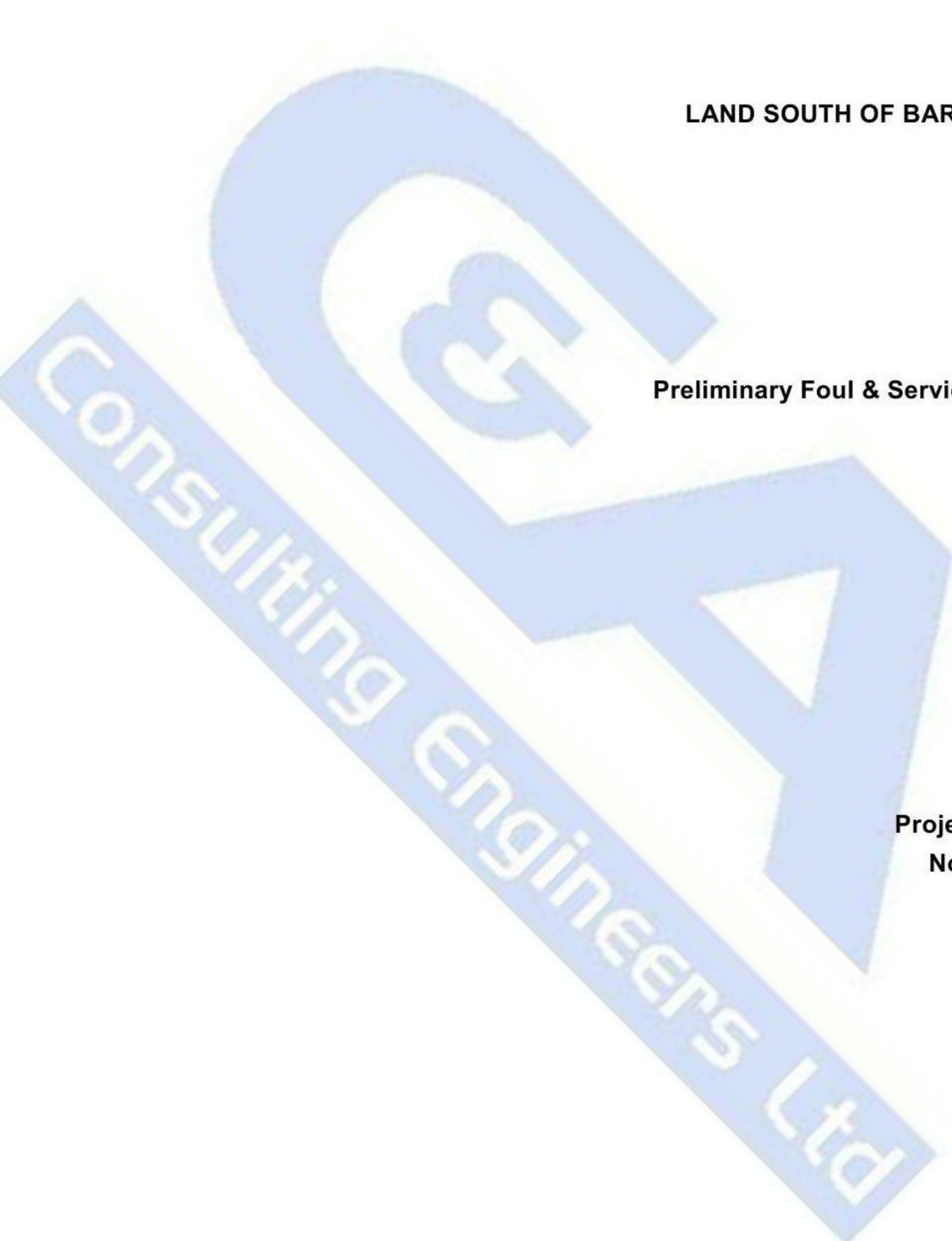
**Consulting Engineers Ltd**

**'optimising development potential'**

**LAND SOUTH OF BARTONS ROAD,  
HAVANT**

**Preliminary Foul & Services Appraisal**

**Project No. 14-018  
November 2015**



**LAND SOUTH OF BARTONS ROAD,  
HAVANT**

**Preliminary Foul & Services Appraisal**

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**Project No. 14-018  
November 2015**

## DOCUMENT CONTROL SHEET

| REV | ISSUE PURPOSE | AUTHOR | CHECKED | REVIEWED | APPROVED | DATE   |
|-----|---------------|--------|---------|----------|----------|--------|
|     | Draft         | SA     | GAC     | SA       | GAC      | Nov 15 |
| A   | Final         | SA     | GAC     | SA       | GAC      | Nov 15 |
|     |               |        |         |          |          |        |
|     |               |        |         |          |          |        |
|     |               |        |         |          |          |        |

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- Appendix B Water Supply Records & Correspondence
- Appendix C Gas Supply Records & Correspondence
- Appendix D Electrical Supply Records & Correspondence
- Appendix E Telecommunications Records & Correspondence
- Appendix F Foul Drainage Capacity Check Southern Water
- Appendix G Foul Drainage Strategy Calculations
- Appendix H Miscellaneous & Other Services Reviewed

## 1.0 INTRODUCTION

1.1 C & A Consulting Engineers have been appointed by Chidden Farms (CF) to prepare Preliminary Foul Drainage & Services Appraisal, for the proposed development at land South of Bartons Road, Havant. The site is being promoted for residential housing. The location of which is shown diagrammatically on **Figure 1**.

### Purpose

1.2 The site benefits from being an allocated housing site within the Havant Adopted Allocations Plan (July 2014). The site specific development requirements are set out in Allocation Policy UE3b – Land south of Bartons Road. The extract of Policy UE3b is provided in **Appendix A**. This allocation allows for up to 203 dwellings to be promoted on this site.

1.3 Through the pre application process, review of the site constraints and consultation with key stakeholders it is proposed to submit an outline planning application for 175 dwellings on the site.

1.4 To assist in supporting this application, this Preliminary Foul Drainage & Services Strategy has been prepared as a means of demonstrating that the site can be adequately supplied and drained for the intended development purposes. As such utility services would not constrain or impede the development of the Site should planning permission be granted.

1.5 This report has therefore been prepared to consider the extent of existing utility services on or adjacent to the site and their suitability for extension and/or reinforcement onto the site for residential use. It does not however investigate the actual cost of reinforcement or the need for and costs of diversions of any utilities due to the construction of the development and its access.

1.6 It should be noted that surface water disposal does not form part of this report, however is addressed with in the accompanying Flood Risk Assessment.

## Report limitations

1.7 The findings, recommendations and conclusions of this report are based on information obtained from a variety of external sources which are understood to be reputable. However, C&A Consulting Engineers cannot guarantee the authenticity or reliability of any data and/or records provided by third parties.

## 2.0 SITE LOCATION & DETAILS

2.1 The site is located to the east of the existing residential area of Denvilles, Bartons Road to the north and agricultural land to the east, as shown in **Figure 1**. The existing site is an open undeveloped field. The whole site within the red line boundary covers 6.8 hectares in area.

2.3 Topographic information has been obtained for the site. The land survey indicates a general slope falling from north to south across the site. The approximate levels fall from 35m AOD to 18m AOD.

2.4 Preliminary enquiries have been sent to the incumbent utility services companies and statutory authorities requesting information of existing plant and the potential as to whether or not the proposed development would effect it.

2.5 In addition, any future detailed utility report should include broad costs with respect to providing utility services to the site for its ultimate end use. These are not considered essential in terms of the outline planning permission, only confirmation that the site can be serviced is considered necessary at this stage.

## 3.0 WATER SUPPLY

3.1 The incumbent Water Supply company for the area is Portsmouth Water. Records provided confirm that water mains currently exist within the residential estate roads to the south and west of the site and along Bartons Road to the north. A 6 inch water main runs across the site entrance, on Bartons Road, as shown in the data provided by Portsmouth Water, attached as **Appendix B**.

3.2 The presence of the water main along Bartons Road, within close proximity of the development land, suggests that Portsmouth Water will be able to service the new development, without the need for any offsite mains reinforcement. Portsmouth Water have confirmed this within their response, as set out in **Appendix B**.

3.3 As such the site can be serviced by water supply.

#### **4.0 GAS SUPPLY**

4.1 The incumbent Gas Supplier is Southern Gas Networks (SGN). SGN have confirmed that existing low and medium pressure mains currently supply the surrounding residential estates. Low pressure mains exist within Bartons Road to the northern side of the carriageway, and medium pressure mains exist within Southleigh Road to the south of the site, as shown on SGN plans attached as **Appendix C**.

4.2 As such it is likely that the site will be able to be provided with gas with little or no offsite reinforcement.

#### **5.0 ELECTRICITY SUPPLY**

5.1 The incumbent Electricity Supplier is Scottish & Southern Energy Plc. (SSE). SSE's records indicate High Voltage (HV) cables run within Bartons Road and Japonica Way to the west of the site, with substations located in close proximity at the Spire Hospital, and Wyevale Garden Centre on Bartons Road and on Japonica Way to the west. The information provided by SSE is provided in **Appendix D**.

5.2 Low Voltage (LV) cables services the existing residential estates to the west and south and within Bartons Road itself. Refer **Appendix D**.

5.3 The presence of the HV cables, substations and LV networks all within close proximity of the development land suggests that SSE will be able to service the new development.

5.6 Upon receipt of a detailed layout SSE will provide a budget cost to services the site. That said the site can be serviced by existing SSE apparatus.

## **6.0 TELECOMMUNICATIONS**

6.1 Virgin Media and British Telecom have both confirmed that they have apparatus within the adjoining residential estates and along Bartons Road, as shown in **Appendix E**. Both have requested detailed layouts before they can provide budget quotations to supply the site.

6.3 BT however has a licensed obligation to provide a service to any customer requiring a telephone service to the site boundary at no cost to the developer. In addition it is usual for BT to provide ducting etc free of charge and pay the developer for laying them within the development.

6.4 Due to the proximity of their existing apparatus, it is anticipated that both Virgin Media & BT will be able to services the site. As with the other Utility providers budget costing can be produced on the provision of a detailed design layout.

## **7.0 FOUL DRAINAGE**

7.1 The incumbent Water Company for surface and foul drainage is Southern Water Ltd. Southern Water Ltd records, as shown in **Appendix F**, confirm that a public foul sewer network already bisects the site. This is supported by a topographic survey, which was undertaken for the site and also located the line and level of this public sewer more accurately.

7.2 In summary a 150mm diameter pipe crosses the site from north to southeast joining the network at manhole No 2401 within the existing agricultural field, which then connects to manhole No 2402 on Southleigh Road.

7.3 Based on the records and confirmed by topographical survey, the depth of this sewer as it crosses the site ranges from 1.3m to 2m. The sewer manhole No. 2401 has an invert of level 15.58m and is 1.37m deep.

7.4 As such the presence of the public sewer allows a connection to be made either on site or adjacent to the site for the development to drain in terms of foul discharge.

7.5 It should be noted by the Planning Authority that sewerage capacity for this development or any other is not a material planning consideration. There is a separate statutory regime, that being the Water Industry Act 1991, in place which adequately addresses the matter and application of planning policy which conflicts with this regime is unreasonable and may in some cases be unlawful.

7.6 It is also the case that should this proposed development be granted outline planning permission, Southern Water has sufficient time, knowledge and expertise to fully assess the potential impact on its sewerage network and implement any necessary improvement works that may be required to accommodate new foul flows. Southern Water has a statutory duty to ensure that the contents of its sewers are emptied and properly treated and a developer or owner has an absolute statutory right to connect to a public foul sewer.

7.7 Southern Water Ltd is also funded to ensure that improvements are made to its sewerage network in order to comply with its statutory duty to “provide, improve and extend” its network and it would therefore be unreasonable to compel the developer of this site to provide financial contributions or to unnecessarily delay the start or progress of the development once full planning permission has been granted.

7.8 Turning to the proposed development, based on the information available and discussions with Southern Water (SW), C & A Consulting have proposed a Foul Drainage strategy as shown indicatively on **Figure 2**. The associated calculations for this strategy are provided in **Appendix G**.

7.9 This proposed network suggests the diversion of the existing public sewer into the new road network under a Section 185 agreement with SW. This diverted sewer would perform the dual purpose of conveying existing flows up

stream of the site as well as development flows with new sewers being offered for adoption under a standard Section 104 agreement.

7.10 Based on the topographical survey information, existing ground levels are suitable to provide these sewers as gravity sewers to adoptable standard, ultimately connecting into the existing manhole 2401. The gravity network will be offered to Southern Water Ltd for adoption under the standard procedures set out in the Water Industry Act 1991.

7.11 It is noted that a second option for connection has been proposed by SW within their capacity check commissioned in late 2013. This option may be valid and as such has been shown on **Figure 2** as an alternative. To accommodate this option, however there would be a need to cross third party land and areas that may be ecologically sensitive.

7.12 Regardless of the option ultimately employed this reports confirm that the site can be adequately drained in planning terms.

## **8.0 MISCELLANEOUS & OTHER SERVICES REVIEWED**

8.1 In addition to the incumbent utility services providers, a number of other Statutory Bodies were contacted to ascertain if their apparatus crossed the site. These ranged from the Environment Agency, other utility companies and Havant Borough Council. All have replied confirming they are unaffected. This is provided within **Appendix H**.

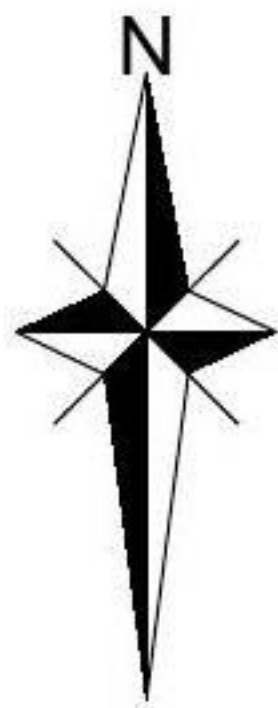
## **9.0 SUMMARY & CONCLUSIONS**

9.1 Based on information provided, services can be provided to the site by Utility Companies for all the major services required. Further investigation into costs to service the site should be undertaken at the detailed design stage.

9.4 As the site can be fully serviced there is no reason, in terms of planning, why the site should not gain outline planning permission, from a utility services point of view.

## FIGURES





| Rev | Amendments | Drn | Chk | App | Date |
|-----|------------|-----|-----|-----|------|
|     |            |     |     |     |      |



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01732 448120

|               |                                    |        |           |           |          |          |     |
|---------------|------------------------------------|--------|-----------|-----------|----------|----------|-----|
| Job Title     | Land South of Bartons Road, Havant | Scale  | 1:2500@A3 | Date      | Nov 15   | Designed | TSH |
| Drawing Title | Proposed Foul Network              | Drawn  | EV        | Checked   | TSH      | Approved | GC  |
| Client        | Chidden Farms                      | Job No | 14-018    | Figure No | FIGURE 2 | Rev      |     |

## **APPENDIX A**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| <b>Site Name:</b><br>Land South of Bartons Road                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>Site Ref/Policy Number:</b><br>UE3b |
| <b>Description of Site:</b><br>Located to south east of the Havant Garden Centre (UE43). There is an existing public right of way through the site from Denvilles onto Bartons Road. The site is in agricultural use, and detailed soil reports indicate most is Grade 3 quality.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                        |
| <b>Known Constraints:</b> <ul style="list-style-type: none"> <li>• Moderate potential for previously unidentified archaeological deposits</li> <li>• TPOs</li> <li>• Mineral Safeguarding Area</li> <li>• Adjacent to listed building</li> <li>• Site includes or is close to existing sewerage infrastructure</li> <li>• Southern Water has advised that sewerage capacity in network closest to site is limited</li> <li>• Adjacent to the undeveloped gap</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                        |
| <b>Existing Transport Provision:</b> <ul style="list-style-type: none"> <li>• Existing bus routes available within 600m both north and south of the site (but potential to extend bus route(s) to serve the site)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                        |
| <b>Existing Accessibility to Local Services/Facilities:</b> <ul style="list-style-type: none"> <li>• Local shop within 400m</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                        |
| <b>Site Opportunities:</b> <ul style="list-style-type: none"> <li>• New homes including affordable housing</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                        |
| <b>Policy UE3b - Site Specific Development Requirements:</b> <ul style="list-style-type: none"> <li>• Heritage Statement, of an appropriate level of detail, to support planning application</li> <li>• Design and layout to respect the context and setting of listed building</li> <li>• Strong landscape buffer on eastern boundary required</li> <li>• Design and layout to aim to retain and protect TPO trees</li> <li>• The site is subject to a S106 legal agreement which the landowners and the Council (as parties to the original agreement) will need to vary to allow development to take place</li> <li>• Vehicular access to be provided north onto Bartons Road (running to the east of land at Helmsley House)</li> <li>• Pedestrian/cycle access to be provided south into existing residential development in Denvilles (improvement to existing link)</li> <li>• Improvements to increase natural surveillance and useability of the pedestrian/cycle link onto Bartons Road (west of Eastleigh House). This requirement may not be necessary should more suitable pedestrian/cycle access be made available through Havant Garden Centre, also a residential allocation (UE43)</li> <li>• Long term provision should be made available should further residential development be sought on land to the immediate west of the vehicular access (land at Helmsley House). This should ensure no ransom strips are in place and allow for coordination of development so that residential properties could (if sought) be providing facing onto the access road. This would improve natural surveillance of the access proposed and provide for coordination of development</li> <li>• Consultation with HCC alongside any planning application in relation to minerals and whether prior extraction may be required</li> <li>• Employment and Skills Plan to support planning application</li> <li>• Southern Water request connection to the sewerage system at the nearest point of adequate capacity</li> <li>• Appropriate easement from existing sewage/waste infrastructure</li> </ul> |                                        |

## **APPENDIX B**

21<sup>st</sup> May 2015

**For the Attention of Mr. S Brown**  
C & A Consulting Engineers Ltd  
Office 17, Wealden Place  
Bradbourne Vale Road  
Sevenoaks  
Kent  
TN13 3QQ

**Registered Office:**  
Portsmouth Water Ltd  
PO Box 8  
West Street  
Havant  
Hampshire PO9 1LG

Tel: 023 9249 9888  
Fax: 023 9245 3632  
Web: [www.portsmouthwater.co.uk](http://www.portsmouthwater.co.uk)

Please ask for: Mr Hayler  
Our reference : JAH/IE328  
Your reference:

Dear Mr Brown,

**LAND SOUTH OF BARTONS ROAD, HAVANT, HAMPSHIRE**

Thank you for your recent payment of £74.40 (Inc VAT) paid as a standard charge for an initial enquiry in respect of water mains at the above location. Our official invoice has been forwarded under separate cover.

In response to your enquiry I would comment as follows:-

**1. On-Site Mains**

I regret that I am unable to give any guidance regarding costs and terms for on-site mains, until you are in a position to provide me with:

A payment of £300.00 plus VAT.

Two no. 1:500 (or larger) true-to-scale plans, showing the layout of the development including all buildings, roads, plot numbers, utility strips / footpaths and widths. These must be free of colour, dark shading or any proposed service layouts. They should also include a scaling pole and have contours and spot-level layers removed. In addition, the drawings need to show existing infrastructure to enable us to accurately plot our existing mains. If these drawings are to be emailed, they should be compatible with Autocad 2010 or PDF and saved to scale at your end. Emails are to be sent to [j.hayler@portsmouthwater.co.uk](mailto:j.hayler@portsmouthwater.co.uk).

A further plan marked up to confirm the extent of the highway to be adopted by the local authority.

A Soil Report, including ground analysis.

**2. Off-Site Mains**

I do not foresee any necessity for off-site mains.

**3. Diversionary Work**

I do not envisage that any diversionary work will be necessary as a result of this development.

**4. Pressure**

We advise that properties constructed higher than 2 storeys should consider a storage and booster arrangement to maintain constant water supplies.

## **5. Terms and Conditions**

Once I have sufficient information to determine the total cost of on-site and off-site mains, I will then be able to offer you terms and conditions for the provision of mains.

You will be offered two options:

- (a) To enter into an agreement, in accordance with section 42 of the Water Industry Act, 1991, to guarantee for twelve years, a fixed return of our total estimated mainlaying costs and depositing this sum with us for a period of twelve years, or
- (b) making a once and for all contribution towards the cost of the mains, in accordance with section 91 of the Water Industry Act 2003.

When we calculate the amount to be paid under each option, we take account of our income (in the form of water charges) from the new properties concerned.

Please note that the terms and conditions would exclude individual service connections and building water. Statements of Cost for these would only be prepared, on application from yourselves, once the new mains were commissioned. A Scheme of Charges is available on our website [www.portsmouthwater.co.uk](http://www.portsmouthwater.co.uk)

VAT is charged according to the type of development concerned.

- (c) We are also able to offer developers a 'self lay' option. Please see our website [www.portsmouthwater.co.uk](http://www.portsmouthwater.co.uk) for details.

## **6. Existing Mains and Services**

The enclosed extract of Ordnance Survey sheet shows our existing water mains in a blue line. I regret that I am unable to indicate any water services that have been taken from these mains but wherever there are surface stopcock or meter boxes, it should be assumed that a service has been connected to the main.

Should accurate information regarding the Company's installation be required, then trial holes should be taken by hand digging and no mechanical plant should be used within two metres of the Company's mains.

Please note that all enquiries regarding drainage should be directed to Southern Water, who is the responsible undertaker in this area.

## **7. Contaminated Land**

I have no reason to believe that the site is contaminated. Certain contaminants can permeate polyethylene water pipes. If these are found, any mains and services would be laid in barrier pipe or some other impermeable material. We would also require that your underground service pipes be laid in an impermeable material. Please note that if the service pipes are laid in an impermeable material, our standard scheme of charges for services would not apply.

I would request a copy of the soil report when it becomes available.

## **8. Private Water Mains/Long Supply Pipes**

The site layout may necessitate the installation of private water mains and long supply pipes which normally the developer will install. We are pleased to be able to offer specialist pipework service which includes the installation of private mains, supply pipes, fire mains and hydrants. Should they be of interest to you, more details can be found on our website [www.portsmouthwater.co.uk](http://www.portsmouthwater.co.uk)

When you are in a position to provide the information requested above, I will be pleased to offer you terms and conditions for the development.

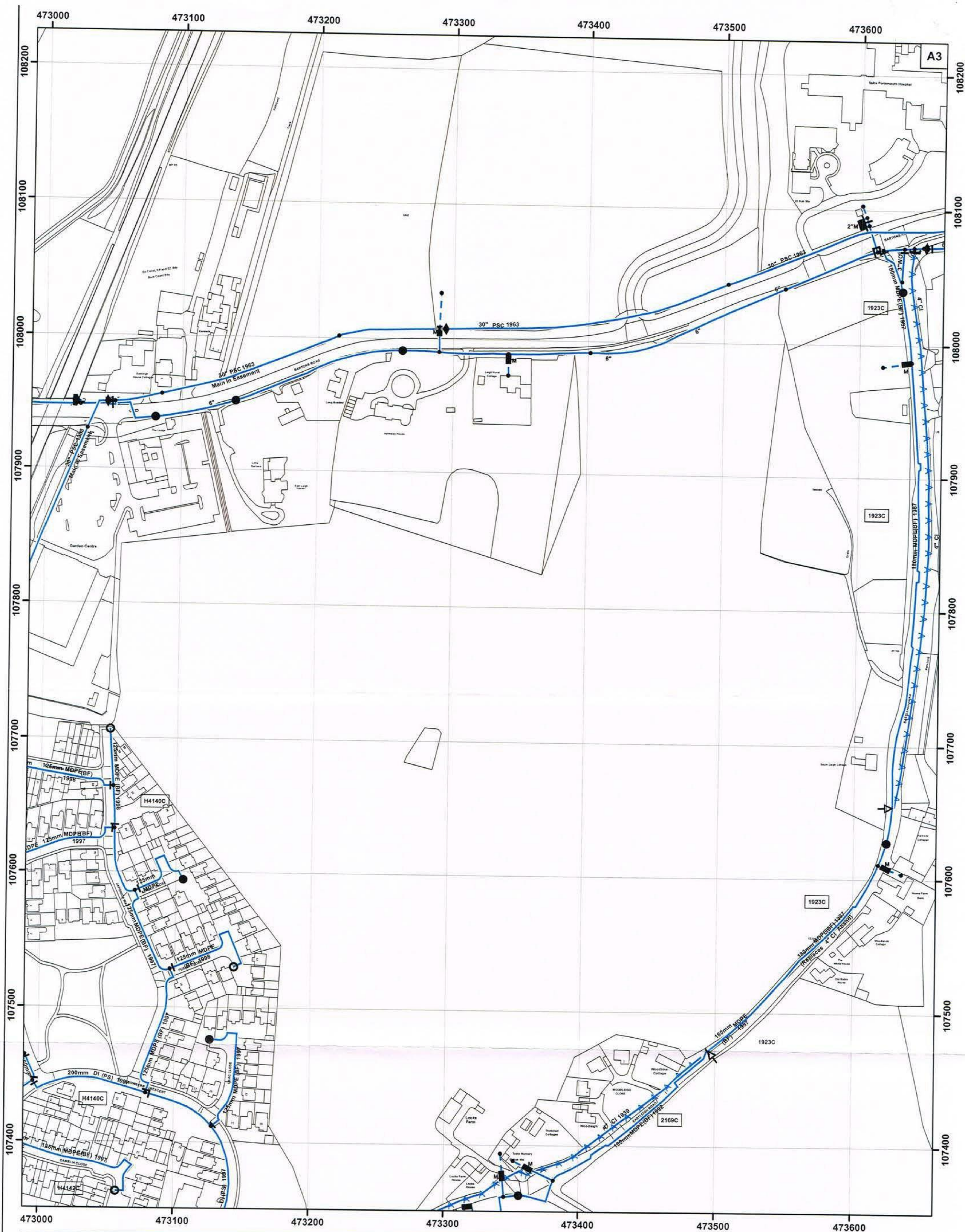
Yours sincerely,

[Redacted Signature]

G Simmonds  
Distribution Engineer

[Redacted Contact Information]

Encs



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P.O. BOX NO. 8, West Street, Havant,  
Hampshire. PO9 1LG.  
Registered in England No. 2536455  
Telephone: (023) 9249 9888  
Fax: (023) 9245 3632  
Website: [www.portsmouthwater.co.uk](http://www.portsmouthwater.co.uk)

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The information supplied is given in good faith as a guide to locating underground apparatus. Its accuracy cannot be guaranteed, nor does it include comprehensive information about the existence or location of service pipes or cables to individual premises. The responsibility for locating and avoiding damage to apparatus on site shall be that of the person proposing to excavate in the street who shall be liable to the apparatus owner and any third party who may be affected in any way for any loss or damage caused by their failure to do so.

Drg No:

Job No:

OS Ref: SU7307NW

Scale: 1:2,500

Date: 06/05/2015

## APPENDIX C

Our Ref: SO/0058218  
 Your Ref: LM 37493/SD  
 Date: 29/07/2015



Shovon Das, .  
 Atkins  
 The Hub  
 500 Park Avenue  
 Aztec West  
 Almondsbury

Plant Location  
 95 Kilbirnie Street  
 Glasgow  
 G5 8JD  
 Phone: 0141 418 4093  
 Phone: 0845 070 3497  
 Fax: 0141 429 6432  
 Email: plantlocation@sgn.co.uk

Dear Customer,

**Re: Enquiry at: Bartons Road, Havant PO9 5NB.**

### Searches - Important Information

Thank you for your enquiry regarding the above location. If your client plans to carry out any on site works they **must** contact ourselves directly so that a full safety and engineering risk assessment can be carried out **prior** to any work starting.

Listed below is the **minimum** information we would require from your client and our contact details:

- Full contact details (name, company name, address, telephone number and e-mail address)
- Full site address, post code and easting/northing grid reference.
- Plan showing the site boundary.
- Details of the work to be carried out.
- The proposed start date (please specify if work is at the planning stage).

Our contact information is:

Address - Scotia Gas Networks, Plant Location Dept, 95 Kilbirnie Street, Glasgow, G5 8JD.

E Mail - plantlocation@sgn.co.uk

Fax - 0141 429 6432

It must be stressed that both direct and consequential damage to gas plant can be dangerous both for your client's employees and the general public, repairs to any such damage will incur a charge. Your client's works should be carried out in such a manner that we are able to gain access to our apparatus throughout the duration of your client's operations.

**24 hour gas escape number 0800 111 999\***  
**\*Calls will be recorded and may be monitored**

Southern Gas Networks plc is part of the Scotia Gas Networks Group  
 Registered Office: St Lawrence House Station Approach Horley  
 Surrey RH6 9HJ  
 Registered in England & Wales No. 05167021  
<http://www.sgn.co.uk>

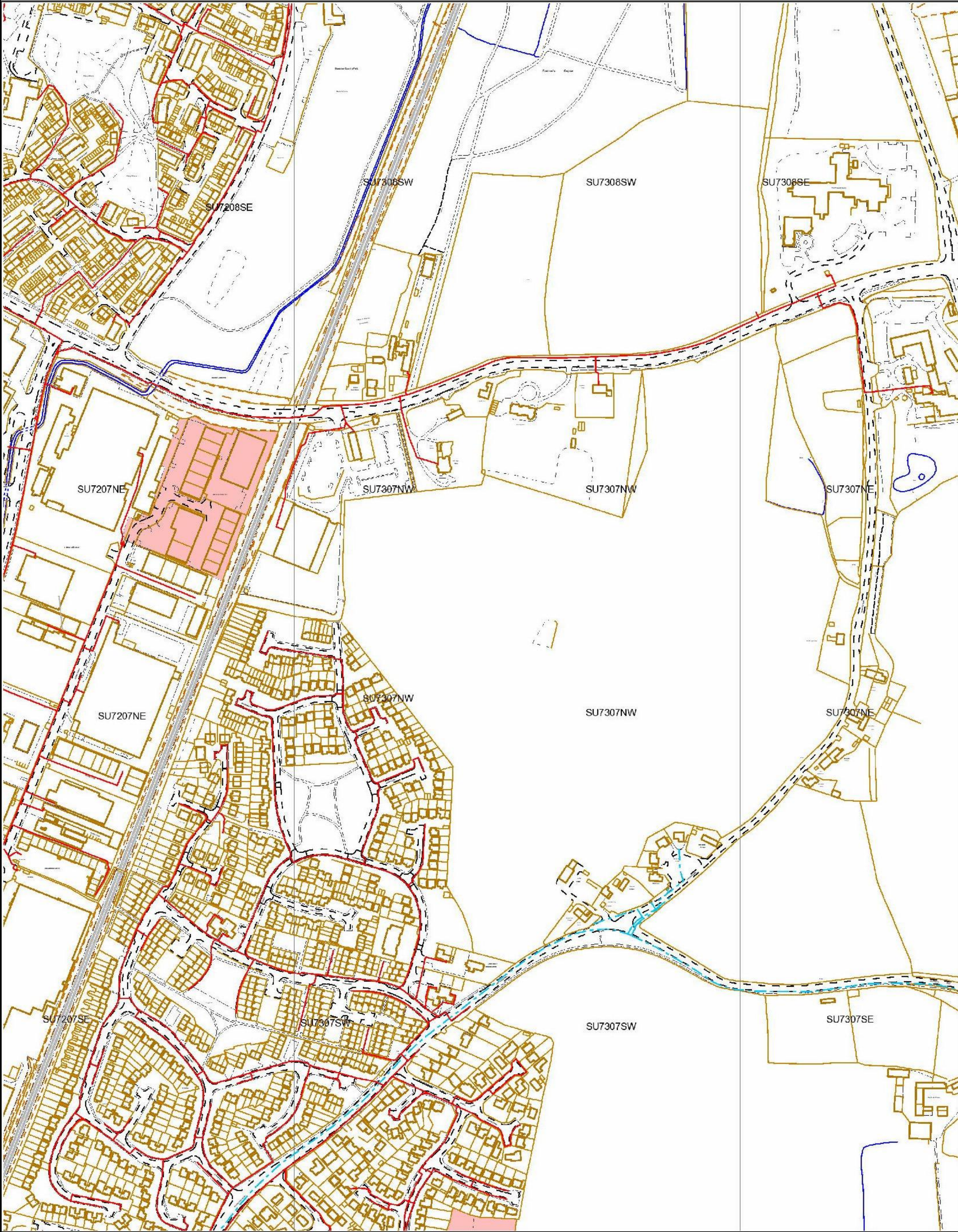
**Please note that the information supplied by Scotia Gas Networks is given without warranty. Whilst we understand the information supplied to be correct, no reliance should be given in respect of the location of our apparatus. We can locate apparatus on site at your client's request prior to any development works to be carried out in the vicinity of our pipelines.**

If you require any further information please contact the number below.

Yours faithfully,

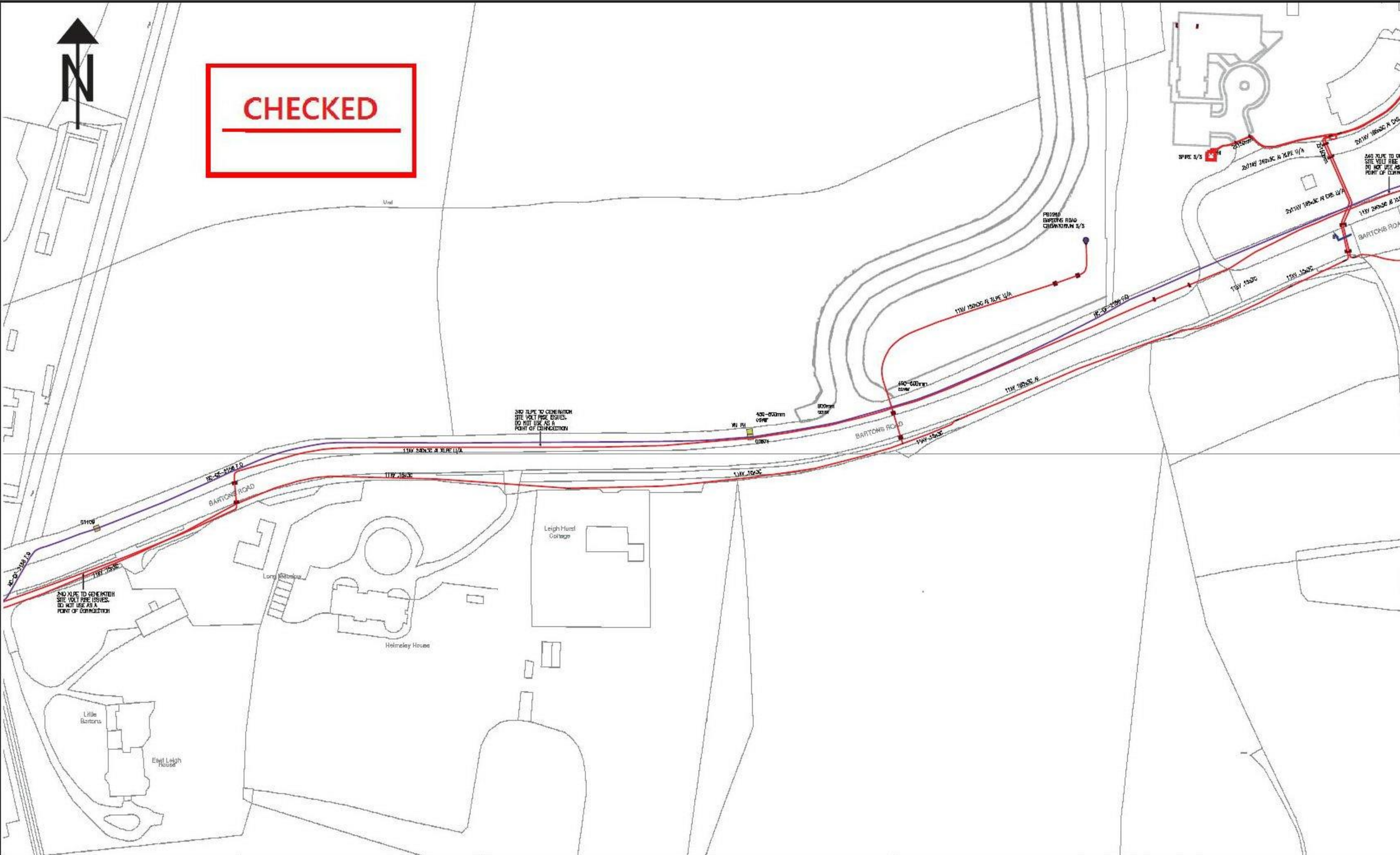
June Sheridan

[Redacted Signature]



|                                                     |                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                            |                              |                                                                                                                                                                               |
|-----------------------------------------------------|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>SCALE :</b> 1 : 3812                             | <b>LP MAINS</b>        | <p>This plan shows the location of those pipes owned by Scotia Gas Networks (SGN) by virtue of being a licensed Gas Transporter (GT). Gas pipes owned by other GTs or third parties may also be present in this area but are not shown on this plan. Information with regard to such pipes should be obtained from the relevant owners. No warranties are given with regard to the accuracy of the information shown on this plan. Service pipes, valves, siphons, sub-connections etc are not shown but their presence should be anticipated. You should be aware that a small percentage of our pipes/assets may be undergoing review and will temporarily be highlighted in yellow. If your proposed works are close to one of these pipes, you should contact the SGN Plant Protection Team on 08450703497 for advice. No liability of any kind whatsoever is accepted by SGN or its agents, servants or sub-contractors for any error or omission contained herein. Safe digging practices, in accordance with HS (G)47, must be used to verify and establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that plant location information is provided to all persons</p> | <b>Intranet WebGIS 2.1</b> |                              |                                                                                                                                                                               |
| <b>USER ID :</b> lp54998                            | <b>MP MAINS</b>        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                            | <b>Hampshire County Area</b> |                                                                                                                                                                               |
| <b>DATE :</b> 29/07/2015                            | <b>IP MAINS</b>        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                            |                              | <p>This plan is reproduced from or based on the OS map by Scotia Gas Networks plc, with the sanction of the controller of HM Stationery Office. Crown Copyright Reserved.</p> |
| <b>INTERNAL USE ONLY</b>                            | <b>LHP MAINS</b>       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                            |                              |                                                                                                                                                                               |
| <b>GRID REFERENCE :</b><br>E473210,N107713,SU 73 07 | <b>HISTORY DATA</b>    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                            |                              |                                                                                                                                                                               |
| <b>Some examples of Plant Items</b>                 | <b>LAS</b>             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                            |                              |                                                                                                                                                                               |
| <b>Valve</b> <b>Syphon</b> <b>Depth of Cover</b>    | <b>GTs</b>             | <b>SSSIs</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                            |                              |                                                                                                                                                                               |
| <b>Diameter Change</b>                              | <b>Material Change</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                            |                              |                                                                                                                                                                               |

## APPENDIX D



|                                                |                           |       |        |                                                                |                                                                         |  |                                                                                                          |  |                      |        |
|------------------------------------------------|---------------------------|-------|--------|----------------------------------------------------------------|-------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------|--|----------------------|--------|
| NORMAL DEPTH TO THE TOP OF THE CABLE WHEN LAID |                           |       |        | <div>WARNING</div> <div>drawing_functions se_fatal_error</div> | drawing_functions se_uncontrolled_copy                                  |  | <div>Scottish and Southern Energy</div> <div>H.V. MAINS RECORD</div> <div>PORTSMOUTH 023-8262-4200</div> |  | Grid Ref: SU73370800 |        |
| services                                       | L.v.                      | h.v.  | e.h.v. |                                                                |                                                                         |  |                                                                                                          |  | Scale:               | 1:1250 |
| FOOTPATH                                       | 0.40m                     | 0.45m | 0.60m  | 0.75m                                                          | drawing_functions se_uncontrolled_copy<br>drawing_functions se_master_1 |  | Date: date                                                                                               |  |                      |        |
| ROAD CROSSING                                  | 0.60m                     | 0.60m | 0.75m  | 0.90m                                                          |                                                                         |  |                                                                                                          |  |                      |        |
| L.v./services                                  | - up to 1000V.            |       |        |                                                                |                                                                         |  |                                                                                                          |  |                      |        |
| h.v.                                           | - over 1000V. to 11,000V. |       |        |                                                                |                                                                         |  |                                                                                                          |  |                      |        |
| e.h.v.                                         | - 22,000V. to 132,000V.   |       |        |                                                                |                                                                         |  |                                                                                                          |  |                      |        |









WARNING  
GAS IN PLOT AREA

| NORMAL DEPTH TO THE TOP OF THE PIPE WHEN LAID |       |          |        |
|-----------------------------------------------|-------|----------|--------|
| MAINS                                         |       | SERVICES |        |
| FOOTPATH                                      | 0.60m | PRIVATE  | 0.375m |
| VERGE                                         | 0.75m | PUBLIC   | 0.45m  |
| ROAD                                          | 0.75m |          |        |

WARNING

drawing\_functions se\_fatal\_error

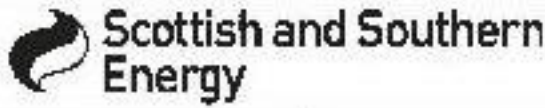
drawing\_functions se\_fatal\_error

drawing\_functions se\_fatal\_error

Template: HHS DETA C01. All plot GAS

drawing\_functions se\_fatal\_error

drawing\_functions se\_uncontrolled\_copy  
drawing\_functions se\_master\_1



| GAS Record                  |  | Grid Ref: | SU73110778 |
|-----------------------------|--|-----------|------------|
| PORTSMOUTH<br>023-9282-4200 |  | Scale:    | 1:1250     |
|                             |  | Date:     | date       |
|                             |  |           |            |







| NORMAL DEPTH TO THE TOP OF THE CABLE WHEN LAID |                           |       |       |             |
|------------------------------------------------|---------------------------|-------|-------|-------------|
|                                                | services                  | l.v.  | h.v.  | e.h.v.      |
| FOOTPATH                                       |                           | 0.40m | 0.45m | 0.60m 0.75m |
| ROAD CROSSING                                  |                           | 0.60m | 0.60m | 0.75m 0.90m |
| L.v./services                                  | - up to 1000V.            |       |       |             |
| h.v.                                           | - over 1000V. to 11,000V. |       |       |             |
| e.h.v.                                         | - 22,000V. to 132,000V.   |       |       |             |

WARNING

drawing\_functions se\_fatal\_error

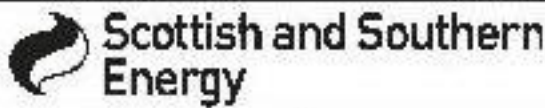
drawing\_functions se\_fatal\_error

drawing\_functions se\_fatal\_error

Transfer: SAC 1974R 03. AS 04

drawing\_functions se\_fatal\_error

drawing\_functions se\_uncontrolled\_copy  
drawing\_functions se\_master\_1



| H.V. MAINS RECORD           |  | Grid Ref: | SU73260757 |
|-----------------------------|--|-----------|------------|
| PORTSMOUTH<br>023-8262-4200 |  | Scale:    | 1:1250     |
|                             |  | Date:     | date       |