

- Groundwater control will be effected where necessary, to prevent migration of water towards the Canal.
- The edge of the site, the towpath and the Canal will be inspected on a daily basis during the reduced dig.
- Spill kits will be available on site during the period of basement excavation and construction.
- Discovery strategy

Inspection records and any other relevant information pertaining to the protection of the water course should be provided to CGL for inclusion into the final verification report.

4.7 Discovery strategy

CGL will be present on site throughout much of the ground works. However, during times when this is not possible, then a watching brief should be maintained by the Main Contractor. Should any gross contamination, such as oily material or material of an unusual colour or odour, be encountered during excavation, the following strategy is recommended:

1. Work to cease in that area.
2. Notify CGL to attend site and sample material in case it is spread around. Notify Contaminated Land Officers of the London Borough of Camden.
3. CGL to supervise the excavation of contaminated material, which should be placed in a bunded area and covered to prevent rainwater infiltration.
4. Soil samples will be obtained by CGL from both the excavated material, and the soils in the sides and base of the excavation to demonstrate that the full area of contamination has been excavated. If appropriate, in-situ testing should be undertaken on the sides and base of the excavation to assess the presence of residual contamination in the soils.
5. On receipt of chemical test results, the soils may be appropriately classified for treatment or disposal, and dealt with accordingly.

6. Detailed records of the stockpile sizes, source and location should be kept and regularly updated to allow materials to be easily tracked from excavation until leaving the site.

4.8 Health and safety

All site works will be undertaken in accordance with the guidelines prepared by the Health and Safety Executive (HSE, 1991)⁹. In this context, the risks will be low, and nominal safety precautions should be acceptable (the adoption of good hygiene practices and the use of overalls, gloves and dust masks if necessary).

During the redevelopment, precautions should be taken to minimise exposure of workers and the general public to potentially harmful substances. Attention should also be paid to restricting possible off-site nuisance such as dust and odour emissions. Such precautions should include, but not be limited to:

1. Personal hygiene, washing and changing procedures.
2. Personal protective equipment, including disposable overalls, gloves etc.
3. Measures to avoid surface water ponding and positive collection and disposal of all on-site run-off.
4. Regular cleaning of all site roads, access roads and the public highway including dust suppressions methods (e.g. water spraying), if necessary.

Excavations should be planned and inspected regularly by a competent person. No operatives will be permitted to enter unshored or otherwise protected excavations identified as unstable by a competent person, however shallow they are.

⁹ HSE (1991). Protection of Workers and the General Public During the Development of Contaminated Land. Guidance Note HS(G)66, Health and Safety Executive, HMSO, 1991.

5. VERIFICATION

The scope and details of the remediation, as presented in this *Remediation method statement*, should be agreed with the Environmental Health Officer at Camden Borough Council. Earlier correspondence received from the Environment Agency indicated that they do not have any specific requirements for the site. However, the EA stated that if piled foundations were to be used then they should be contacted again so that they could review their requirements. A copy of the correspondence is included in Appendix A.

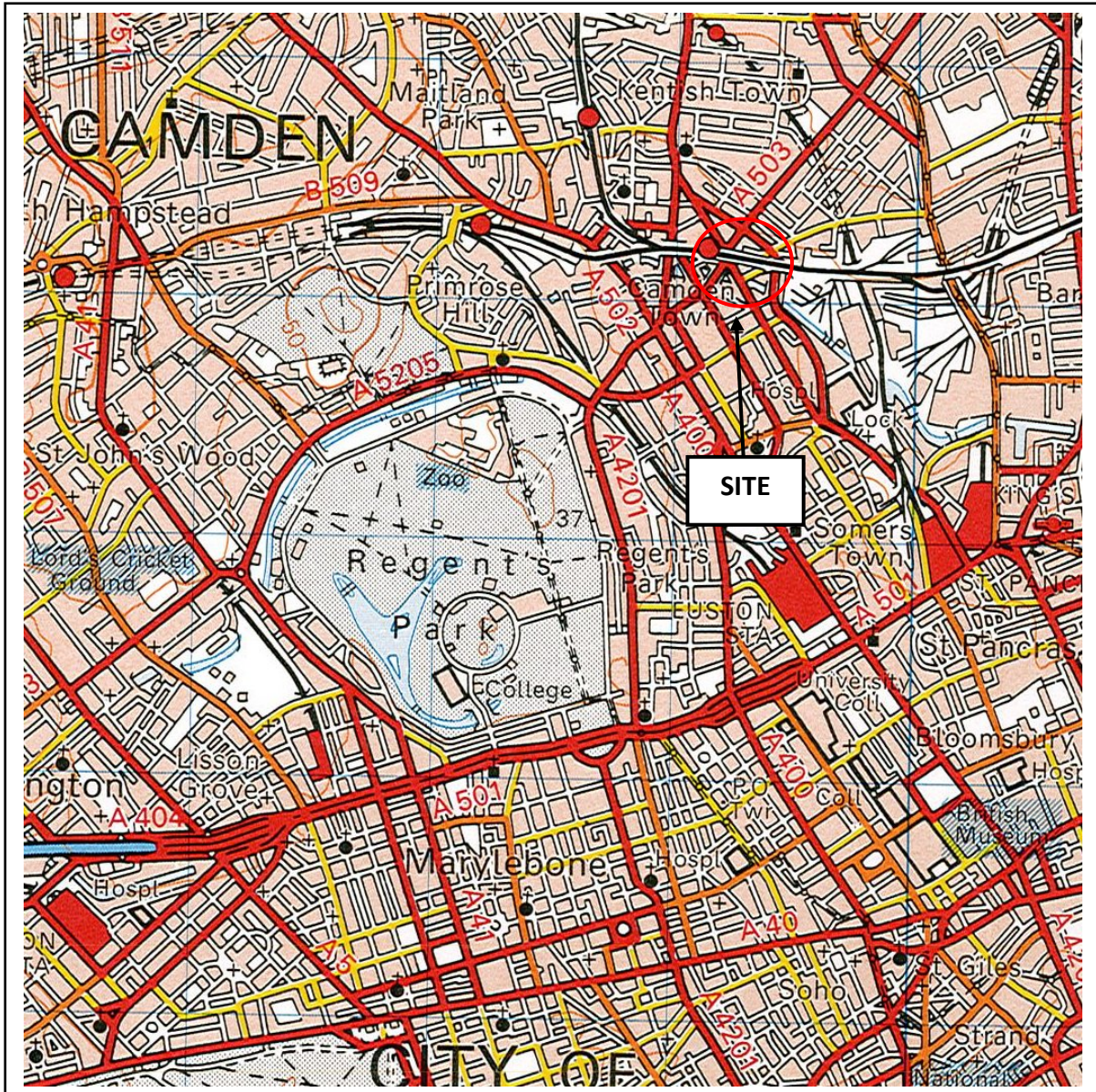
Verification inspections and sampling will be carried out by CGL to ensure that the remediation measures have been undertaken in accordance with the recommendations and procedures contained within this *Remediation method statement*. Relevant lines of evidence must be provided in order that they can be included within the final verification report. A remediation verification plan is provided in Appendix B, which outlines the documents that will be required for inclusion into a final verification report.

On completion of the works a verification report will be produced, which will include, but not be limited to the following:

- Site visit records and photographic records of the relevant site works.
- Location and details of all tanks and contaminated material encountered and remediation measures taken, including chemical test results for residual soils.
- Duty of care records for disposal of waste material including the landfill site(s) where the material has been disposed and a copy of the Contractor's current waste carrier's licence (to be provided by Contractor).
- Details of source and chemical test results for imported materials.
- Confirmation of capping layer thicknesses.
- Compliance testing of capping layer materials.
- Confirmation of water supply pipe materials.
- Confirmation of protection of the Regent's Canal.

The *Verification Report* will be provided to the Environmental Health Officer for Camden Borough Council, and the Environment Agency (if required), as evidence of the works carried out and will eventually form part of the Health and Safety File for the site.


FIGURES



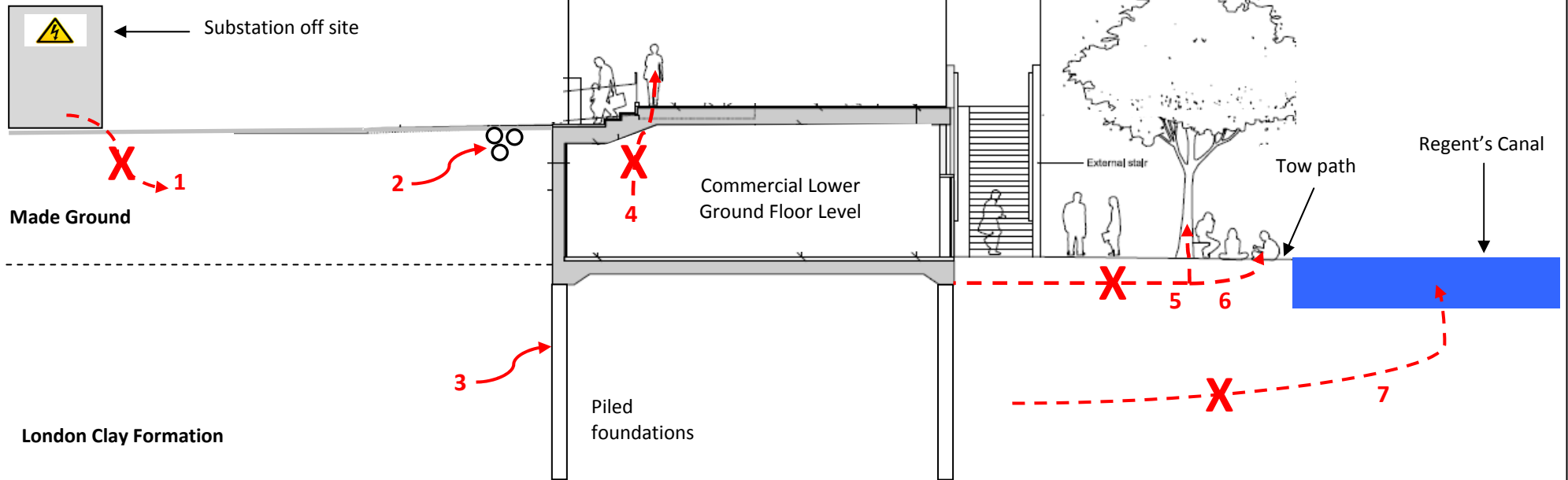
Reproduced from the Ordnance Survey 1:50,000 map with permission of the Controller of Her Majesty's Stationary Office, Crown Copyright.

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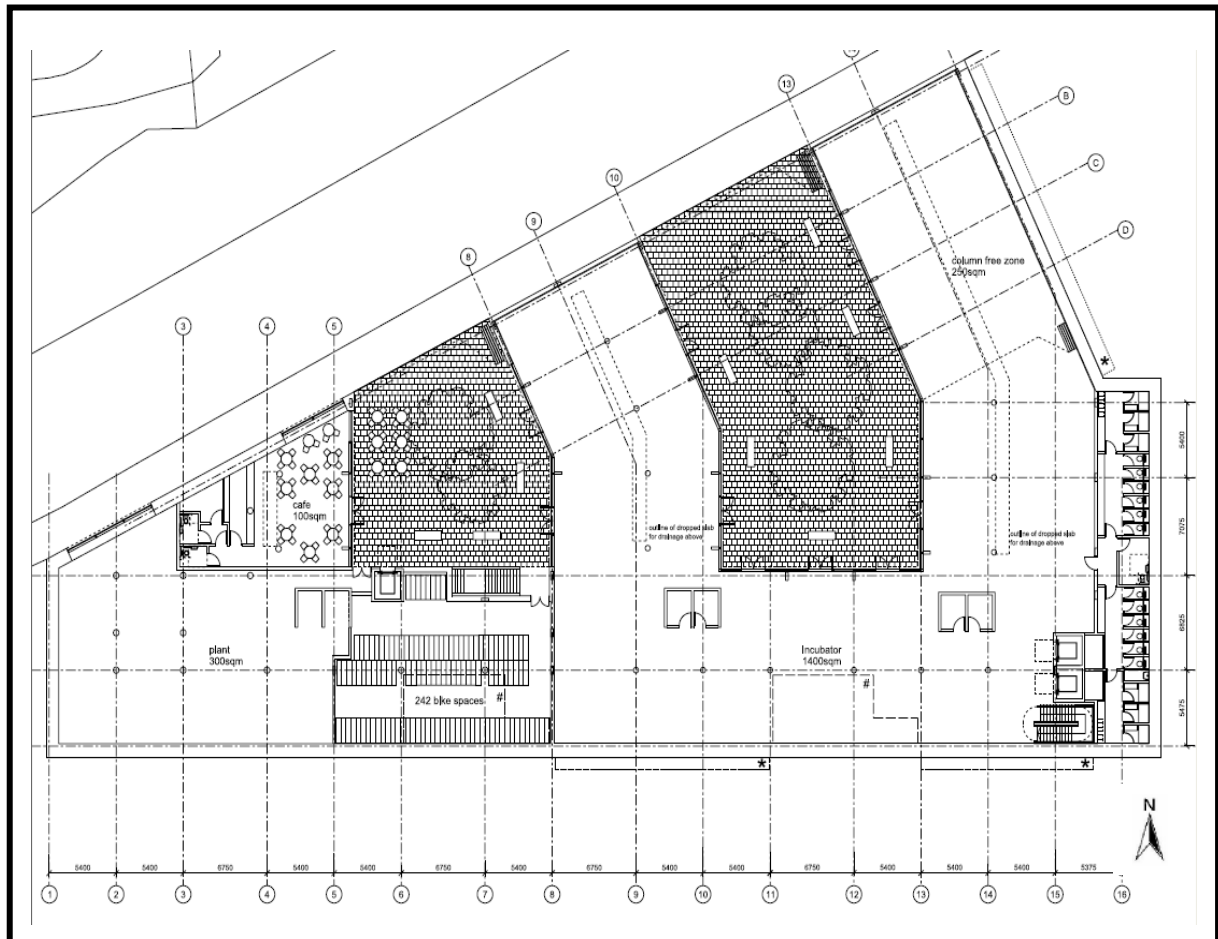
Client Urbanest UK Limited	Project 103 Camley Street, London	Job No CG/5521d
	Title Site location plan	Figure 1


1. Negligible concentrations of PCBs detected on site, therefore, no risk from the off-site substation.
2. Potable water supply barrier pipework to prevent permeation of residual hydrocarbons into drinking water from remaining Made Ground.
3. Sulphates in London Clay and remaining Made Ground to be mitigated through the use of an appropriate design class of concrete.
4. Removal of Made Ground will further mitigate risks from soil borne gases/vapour, although a negligible gas regime has been identified on site.



5. Removal of the Made Ground and tanks (sources) from site to allow for the ground floor level will mitigate risks of plant uptake by plants. A capping layer has been recommended to promote healthy plant growth.
6. Removal of the sources will mitigate risks to future occupiers. Site workers will need to employ the use of PPE to mitigate risks of exposure to hydrocarbons, asbestos etc. during ground works.
7. Limited groundwater contamination identified and site is not in an SPZ. Canal is lined and mitigation measures will be undertaken during the development to ensure the canal does not become impacted.

Client	Project	Job No
Urbanest UK Limited	103 Camley Street, London	CG/5521d
	Title	Figure 3
	Updated Conceptual Site Model	



Client Urbanest UK Limited	Project 103 Camley Street, London	Job No CG/5521d
	Title Footprint of basement	Figure 4

APPENDIX A

Correspondence with the Environment Agency

Andy Stanford
Walsh Associates
32 Lafone Street
London
SE1 2LX

Our ref: TL/2010/105365/01-L01
Your ref: .
Date: 17 January 2011

Dear Andy

103, Camley Street, Camden.

Multi-storey student accommodation of up to 12 storeys, with 'incubation space' for student business enterprise, cycle parking and a café in a basement. Areas of green space adjacent to the canal towpath.

Having reviewed that application we have no objection to the proposed development.

Informative/ advice to LPA

The Environment Agency considers that the controlled waters at this site are of low environmental sensitivity, therefore we will not be providing detailed site-specific advice or comments with regards to land contamination issues for this site.

The London Clay will protect the underlying principal aquifer. If this strata is likely to be penetrated through as part of the development (e.g. by deep piled foundations, ground source heat pumps etc) please contact us again, we would wish to review our response.

It is recommended that the requirements of PPS23 and the Environment Agency guidance 'Guiding Principles for Land Contamination' should be followed.

The Environment Agency recommends that developers should:

- 1) Follow the risk management framework provided in CLR11, Model Procedures for the Management of Land Contamination, when dealing with land affected by contamination.
- 2) Refer to the Environment Agency Guiding Principles for Land Contamination Reports for the type of information that we require in order to assess risks to controlled waters from the site.
- 3) Refer to our website at www.environment-agency.gov.uk for more information.

Environment Agency
30-34 Albert Embankment, London, SE1 7TL.
Customer services line: 08708 506 506
Email: enquiries@environment-agency.gov.uk
www.environment-agency.gov.uk

Cont/d..

The Agency recommends the removal of all underground storage tanks (USTs) that are unlikely to be reused. Such removal should be undertaken following the guidance found in the 'Blue Book'* All product must be removed and disposed of correctly. Once the tanks and associated pipelines have been removed, samples of soil and groundwater should be taken to check for subsurface contamination. If soil or groundwater contamination is found, additional investigations (possibly including a risk assessment) should be carried out to determine the need for remediation.

*Guidance for the design, construction, modification and maintenance of petrol filling stations, (1999) ISBN 0 85293 217 0, Association for Petroleum and Explosives Administration/ Institute of Petroleum

The recovery, treatment and disposal of contaminated soils and groundwater is regulated by waste legislation and requires an Environmental Permit.

Treatment of contaminated soil by mobile plant requires a mobile treatment permit. Soil may be re-used on-site as part of a soil recovery operation by registering an exemption with the Environment Agency or by obtaining an Environmental Permit.

Developers should ensure that all contaminated materials are adequately characterised both chemically and physically, and that the permitting status of any proposed on site operations are clear. If in doubt, the Environment Agency should be contacted for advice at an early stage to avoid any delays.

It is recommended that developers should refer to the Environment Agency's:

- Position statement on the Definition of Waste: Development Industry Code of Practice and;
- website at www.environment-agency.gov.uk for further guidance.

Contaminated soil that is excavated, recovered or disposed of, is controlled waste. Therefore, its handling, transport, treatment and disposal is subject to waste legislation, which includes:

- i) Duty of Care Regulations 1991
- ii) Hazardous Waste (England and Wales) Regulations 2005
- iii) Environmental Permitting Regulations 2010

Developers should ensure that all contaminated materials are adequately characterised both chemically and physically, and that the permitting status of any proposed off site operations is clear. If in doubt, the Environment Agency should be contacted for advice at an early stage to avoid any delays.

General Advice

It is considered positive that it is intended to use Sustainable Drainage Systems (SUDS) such as green roofs to reduce peak flows by 50%.

We recommend that the applicant contacts the British Waterways in case they have any relevant comments, requirements or information, particularly with regard to discharging surface water to the canal rather than the combined sewer.

Yours sincerely

Joe Martyn on behalf of

Cont/d..

Ms North London Planning
North London Planning Liaison Team

Direct dial 02070914043

Direct fax 02070914090

Direct e-mail northlondonplanning@environment-agency.gov.uk

APPENDIX B

Remediation verification plan

Reference	Principal requirements	Design or construction related	Site visit required by CGL	Supporting documentation	Variations	Information to be supplied by Contractor to CGL
1.0 General principles	<p>The proposed development will comprise multi-storey student residence with commercial space in a lower ground floor level, areas of hard standing and landscaping.</p> <p>The site remediation requirements are as follows:</p> <ul style="list-style-type: none"> • Tank decommissioning and removal by Contractor • Secondary source removal (Made Ground) during bulk excavation to accommodate lower ground floor level • Waste disposal • Provision of a capping layer (in areas of soft landscaping) • Protection of services – water supply pipework • Protection of canal <p>Amendments may be made to accord with any differing conditions encountered during the progress of the works.</p>	Site preparation and construction	Yes observations and inspections during site works to monitor works of the Contractors	<p>Remediation method statement</p> <p>Details of the demolition and construction programme are to be provided by Lee Demolition and Mansell Construction Services Limited</p> <p>Site visit reports</p>	N/A	<p>Test certificates</p> <p>Photographs</p> <p>Waste management plan</p> <p>Waste transfer/disposal records</p> <p>Correspondence</p> <p>Inspection records</p>
2.0 Site management	<p>The site will be managed by the Contractor represented by a resident Site Agent/Manager. The Site Agent will be responsible for the conformance of work to the designs and specifications, the quality of the work and compliance with health and safety legislation and safe working practices. The Contractor's site management system will comply with the requirements of the Health and Safety at Work Act (1974), the Construction (Design and Management) Regulations (2007) and other statutory legislation.</p>	Site preparation and construction	N/A	Details of Site Agent to be provided	Not validated	<p>Details of Site Agent</p> <p>Provision of CDM Health and Safety plan.</p>

Reference	Principal requirements	Design or construction related	Site visit required by CGL	Supporting documentation	Variations	Information to be supplied by Contractor to CGL
3.0 Compliance with legislation	The construction and remediation activities on the site will be undertaken in accordance with current health and safety, waste management and environmental legislation.	Site preparation and construction	N/A	Health and Safety Plan	N/A	Contractor(s) to provide waste management plan Duty of care records for disposed waste
4.0 Tank removal	Testing of contents to be completed prior to removal together with exposing associated pipework. The tanks and associated infrastructure should be drained with any associated sludges/liquids drained and disposed in accordance with current legislation. Combustible gas levels within the tanks should be checked. Scrap metals from the tanks should be recycled where possible.	Site preparation	Yes - observations and inspections during site works to monitor works of the Contractors environmental consultant	RMS	N/A	Photographs Test certificates Waste disposal records – liquids/sludges and metals
5.0 Disposal of material	Any material excavated from the site and requiring removal should be disposed at a licensed landfill site or soil treatment centre. The material will require transporting and disposal in accordance with the Environmental Protection (Duty of Care) Regulations 1990.	Site preparation	Yes - observations and inspections during site works to monitor works of the Contractors	Chemical test results and Duty of Care records. Evidence of compliance with waste acceptance criteria. RMS	N/A	Waste management plan Chemical test results and Duty of Care records. Registration and license details of receiving facility and waste carrier.
6.0 Provision of capping	Capping to include a minimum thickness of 0.3m topsoil over a geotextile in landscaped areas. Verification chemical testing at rate of 1 per 50m ² as placed. Topsoil to comply with BS 3882:1994 Classification – General Purpose Grade or better	Construction	Yes – to take samples once imported material is laid in situ.	RMS	N/A	‘As built drawings’ Construction photographs and evidence of capping thickness Details of supplier(s) with pre-import test data from soil supplier demonstrating chemical composition and compliance with BS 3882

Reference	Principal requirements	Design or construction related	Site visit required by CGL	Supporting documentation	Variations	Information to be supplied by Contractor to CGL
7.0 New services	<p>The main services will be located within a corridor of clean granular fill within Made Ground.</p> <p>No plastic services likely to be permitted in Made Ground – Protectaline, or similar specification barrier pipework likely to be required, subject to agreement with Thames Water</p>	Construction	No	<p>RMS</p> <p>Correspondence with Thames Water</p>		<p>‘As built’ drawings and construction photographs</p> <p>Correspondence with water company</p> <p>Specification for pipe materials</p>
8.0 Protection of canal	<p>Groundwater control</p> <p>Daily inspection of canal during reduced dig</p>	Site preparation and construction	No	RMS		<p>Inspection records</p>