



85 PELL STREET, READING

REMEDIATION METHOD STATEMENT
FOR
ACQUESTRA (PELL STREET) LIMITED

Project Ref:
EAL.34.24

Date:
March 2026
Revision A

Prepared for:
Acquestra (Pell Street) Reading,
92 London Street,
Reading,
RG1 4SJ

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Date:	March 2026	
Version:	Revision A	

GENERAL REFERENCE DETAILS	
SITE:	85 Pell Street, Reading
CLIENT:	Acquestra (Pell Street) Limited
DATE:	March 2026
REFERENCE:	EAL.34.24
DEVELOPMENT PROPOSAL:	Demolition of the existing buildings and construction of a three-storey residential flat

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Site Plans
Erda Associates Generic Assessment Criteria
Gas Protection Measures Inspection Checklist

1.0 INTRODUCTION

1.1 PREAMBLE

Erda Associates Ltd have been instructed by Acquestra (Pell Street) Limited (hereafter referred to as 'the client') to prepare a Remediation Method Statement (RMS) for a proposed residential redevelopment at their site at *85 Pell Street, Reading*. Site location and proposed development plans are included in **Appendix A**.

The Client proposes to develop the site through the demolition of the existing buildings and construction of a three-storey residential flat.

1.2 PREVIOUS REPORTS

This RMS is based on the findings of the following previous reports undertaken for the site;

- Erda Associates Ltd., 85 Pell Street, Reading – Phase I & II Geo-environmental Assessment (dated November 2024, Ref: EAL.34.24).

Copies of the above report have not been included, but are available upon request. The following RMS should not be referred to in isolation and should be read in conjunction with the above referenced reports.

1.3 LIMITATIONS

This report has been produced in accordance with industry best practice at the time of writing.

In the production of this report, Erda Associates Ltd., have relied upon information provided by third parties. Erda Associates Ltd cannot accept responsibility for the reliability and authenticity of this information. Erda Associates Ltd. will not be responsible for any opinions which it has expressed, or conclusions which it has drawn, in reliance upon information which is subsequently proven to be inaccurate.

This report has been prepared for the sole use of the client and shall not be relied upon or transferred to third parties without the express written consent of Erda Associates Ltd. Unauthorised third parties rely upon the information contained within this report at their own risk.

2.0 SUMMARY CONCEPTUAL SITE MODEL

Full details relating to the site setting and ground conditions encountered at the subject site are presented within the previous reports (as referenced in Section 1.2). The following section presents a summary conceptual site model as background information to put the proposals presented in the RMS into perspective.

2.1 SOURCE

The previous ground investigation undertaken by Erda Associates Ltd. have identified exceedances (above residential without produce end use GAC thresholds) of Lead and Mercury, which have been attributed to the sites former use as a fuelling station.

Asbestos fibres or other contaminants were not identified.

In lieu of a ground gas monitoring regime and due to the presence of relatively deep Made Ground (up to 2.5m) a possible on-site source of ground gas was considered likely.

The status of the former fuel tanks on site is not known and therefore is considered a possible source.

2.2 PATHWAY

The identified pathways for the contamination include the ingestion and inhalation of contaminated soil, dust and fibres, dermal contact with contaminated soil and dust and inhalation of ground gases.

2.3 RECEPTORS

The previously identified receptors include occupants of the completed development and construction workers.

2.4 CONCLUSION

Remediation is required for the proposed building with regards to ground gas as a precaution, in line with Charecteristic Situation 2 ground gas protection measures.

Furthermore, remediation with regards to soils are required in the form of the placement of a 300mm clean cap in all external landscaped areas.

3.0 REMEDIAL SCHEME

3.1 END USERS

Shallow Soils

Based on the findings to date, it is required that capping is placed in landscaped areas.

A clean cap of 300mm must be placed in landscaped areas. At the base of the clean cap, a high visibility geotextile marker membrane shall be placed.

A clean cap is not required in areas beneath the building footprint and areas of permanent capping (i.e. car parking areas).

The capping material should comprise of an approved imported clean material, as per the testing requirements below.

Approval should be sought from the Local Planning Authority prior to importing material onto site.

Table 1. Testing frequencies for imported material

Source	Number of samples	Suite of testing
Greenfield	1 sample per 150/m ³ of material (or a minimum of three, whichever is greater).	Heavy Metals, PAHs and asbestos fibres
Brownfield	1 Sample per 50/m ³ of material (or a minimum of three, whichever is greater)	Heavy Metals, PAHs, TPH CWG and asbestos fibres

It may be possible to reuse site won, natural soils, subject to further confirmatory testing as part of the clean cap.

Capping may also not be required in areas where Made Ground is completely stripped during site enabling works, as this will break the source-pathway-receptor linkage.

All Made Ground that is excavated will require either off-site disposal to an appropriate waste handling facility or placement beneath areas of proposed hardstanding e.g., the building footprint. In either case, care should be taken to ensure that this material is stockpiled separately from all other soils in order to prevent cross contamination.

The above measures with regard to shallow soils are considered sufficient to reduce the contamination risks to acceptable levels for the proposed development.

Characteristic Situation 2 (CS2) Protection Measures

As a precaution, due to the presence of deep Made Ground, ground gas protection measures are required.

Therefore, Characteristic Situation 2 ground gas protection measures must be incorporated into the proposed buildings. Based on the proposed development, CS2 protection measures should comprise the following;

- Reinforced cast in situ suspended floor slab with minimal penetrations.
- Minimum 2000g gas protection membrane installed (incorporating Carbon Dioxide and Methane protection)
- Laps and joints bonded as per manufacturers details.
- All service entries sealed.

Or if precast beam and block is to be used;

- A passive sub floor dispersal layer conforming to at least 'good performance' (in the form of a clear void, no-fines gravel layer, polystyrene void former blanket or geocomposite void former blanket.
- Gas membrane as above.

Due to the low risk setting of the site (CS2), ground gas protection measures may be installed by the general builder/groundworker or by a qualified installer.

Independent inspection and verification will be required of the installation measures in each plot by Erda Associates Ltd.

The above measures with regard to shallow soils and ground gas are considered sufficient to reduce the contamination risks to acceptable levels for the proposed development.

3.2 CONSTRUCTION WORKERS

It is considered that the elevated concentrations of PAHs within the Made Ground do not present a significant risk to construction workers. However, basic PPE for all workers (including overalls, gloves and dust masks) and wash facilities should be provided as a precautionary measure.

Care and vigilance should be maintained throughout the removal of all Made Ground for any further evidence of potential contamination. Should any further suspected contaminated material be encountered then appropriate safety precautions to protect site personnel will be required. Further assessment by a suitably qualified person may also be required.

3.3 FORMER FUEL TANKS

The status of the former tank or tanks is not currently known and therefore it should be assumed the tanks are still present on site.

It is therefore recommended that, during the early stages of the construction phase, the location of the tanks and associated infrastructure (i.e. fuel lines) is identified and recorded.

Should the tanks still be present, they will require either full decommissioning by a competent person(s) or preferably removed from site. The soils around tanks should also be subject to additional soil sampling to determine the suitability for these soils to remain on site or not.

4.0 VERIFICATION PLAN AND REPORTING

Contaminated Soils

Capping of Made Ground is the preferred remedial option to break the source-pathway-receptor linkage however removal of Made Ground is considered a suitable alternative.

Capping

Capping is required for all areas of soft landscaping.

All capping materials will require validation via sampling and chemical screening by a suitably qualified environmental specialist. The sampling requirements are detailed in Section 3.1, above.

The chemical screening criteria for imported and site won soils are included in **Appendix B** for reference.

A validation inspection of the capping layer once it has been placed will also be required to confirm that it is in accordance with the above strategy (i.e. the material is visibly clean and at least 300mm thick with a high visibility geotextile marker membrane at the base – confirmatory laboratory testing will also be scheduled)

A capping validation report summarising the above works will be provided to the local authority for review, comment and approval once completed.

Ground Gas Protection Measures (CS2)

All plots will require a gas membrane inspection prior to being covered.

The gas membrane installation quality will be inspected by a suitably qualified person from Erda Associates Ltd and marked against the enclosed checklist in **Appendix C**. Any necessary alterations will be made and re-inspected until approved by Erda Associates Ltd.

A gas protection measures verification report detailing the inspection records (including inspection photographs) will be provided for each plot.

Former Fuel Tanks

Following the site strip, the presence or absence of the fuel tanks must be reported upon – it is currently not known if these remain in-situ.

It is recommended that Erda Associates are consulted during the site strip.

Should the tanks be identified, either complete decommissioning or removal from site must be undertaken.

It will be necessary to undertake validation sampling on the soils around the former tanks to determine their suitability to remain on site.

A verification report must be submitted including photographic evidence and laboratory testing certificates. If the tank is not identified/located, this must also be reported.

4.1 ADDITIONAL INVESTIGATION

Should further suspected contamination (e.g., significant volumes of ash or hydrocarbons) be identified during the site developments works, a qualified environmental specialist should be consulted to assess the risk posed to end users and the environment. This may include scheduling of additional samples for chemical screening and modification of this Remediation Method Statement accordingly.

Appendix A





KEY:

● Approximate Site Location

85 Pell St, Reading RG1 2NP

DO NOT SCALE



TITLE:

Site Location Plan

PROJECT:

Pell St, Reading

PROJECT No:

EAL.34.24

DATE:

10/2024

SCALE:

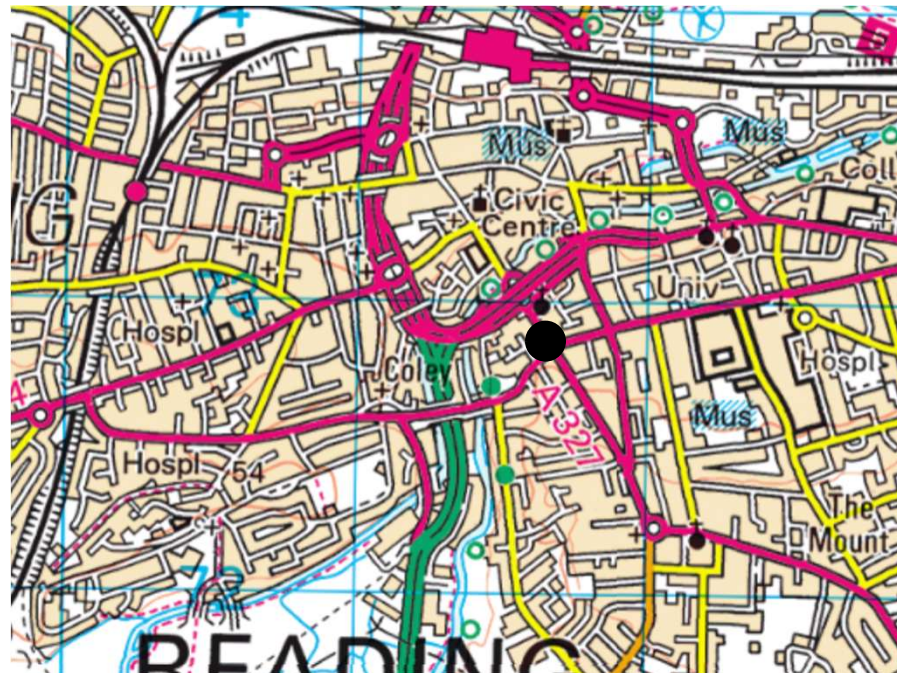
NTS

DRAWN:

DW

DWG No:

Figure 1





KEY:



Site Boundary

DO NOT SCALE



TITLE:

Site Layout

PROJECT:

Pell St, Reading

PROJECT No:

EAL.34.24

DATE:

10/2024

SCALE:

NTS

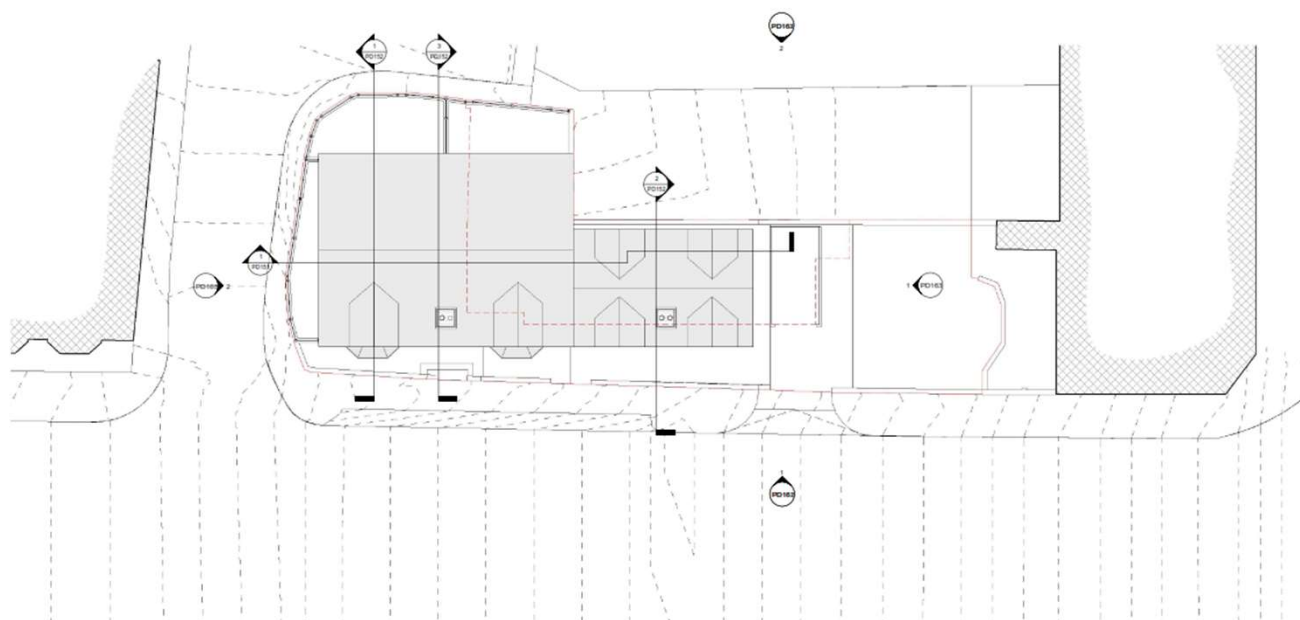
DRAWN:

DW

DWG No:

Figure 2





KEY:

DO NOT SCALE



TITLE:

Development Proposal

PROJECT:

Pell St, Reading

PROJECT No:

EAL.34.24

DATE:

10/2024

SCALE :

NTS

DRAWN :

DW

DWG No:

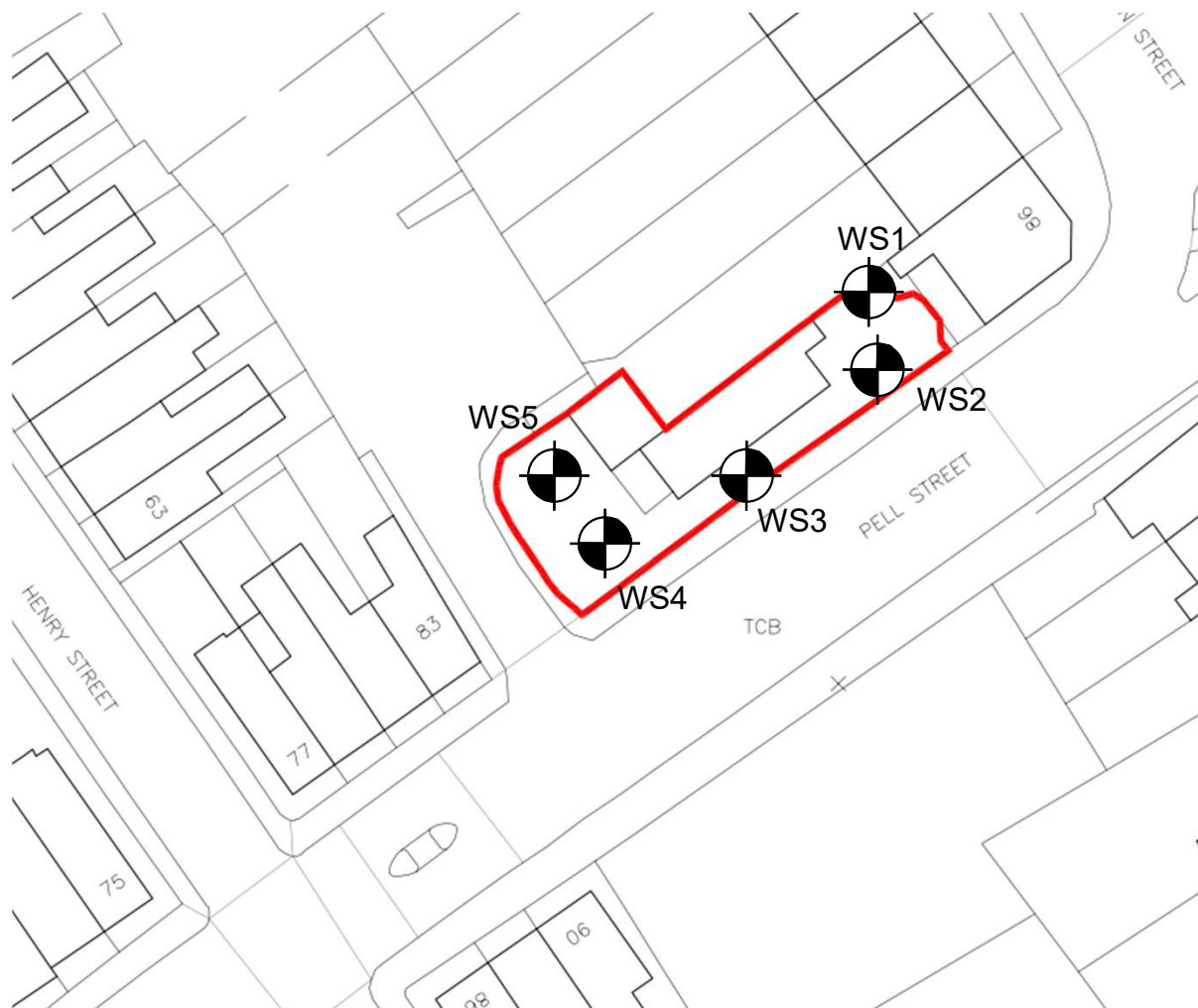
Figure 3



KEY:



WS Borehole



DO NOT SCALE



TITLE:

Exploratory Hole Location Plan

PROJECT:

Pell St, Reading

PROJECT No:

EAL.34.24

DATE:

10/2024

SCALE :

NTS

DRAWN :

DW

DWG No:

Figure 4

Appendix B



Tier 1 Assessment Criteria

Determinand	Residential Without Produce (mg/kg) - 1% SOM			Source
Arsenic	40.00			LQM S4UL
Boron	11000.00			LQM S4UL
Cadmium	150.00			C4SL
Chromium III	910.00			LQM S4UL
Chromium VI	6.00			LQM S4UL
Lead	310.00			C4SL
Mercury, elemental	1.20			LQM S4UL
Mercury, inorganic	56.00			LQM S4UL
Mercury, methyl	15.00			LQM S4UL
Selenium	430.00			LQM S4UL
Nickel	180.00			LQM S4UL
Copper	7100.00			LQM S4UL
Vanadium	1200.00			LQM S4UL
Zinc	40000.00			LQM S4UL
Total Cyanide	34.00			In House*
	Polycyclic Aromatic Hydrocarbons			
	SOM 1%	SOM 2.5%	SOM 6%	
Benzo(a)pyrene	3.20	3.20	3.20	LQM S4UL
Dibenz(ah)anthracene	0.31	0.32	0.32	LQM S4UL
Acenaphthene	3000 (57) ^{sol}	4700 (141) ^{sol}	6000 (336) ^{sol}	LQM S4UL
Acenaphthylene	2900 (86.1) ^{sol}	4600 (212) ^{sol}	6000 (506) ^{sol}	LQM S4UL
Anthracene	3100 (1.17) ^{vap}	35000.00	37000.00	LQM S4UL
Benzo(a)anthracene	11.00	14.00	15.00	LQM S4UL
Benzo(b)fluoranthene	3.90	4.00	4.00	LQM S4UL
Benzo(ghi)perylene	360.00	360.00	360.00	LQM S4UL
Benzo(k)fluoranthene	110.00	110.00	110.00	LQM S4UL
Chrysene	30.00	31.00	32.00	LQM S4UL
Fluoranthene	1500.00	1600.00	1600.00	LQM S4UL
Fluorene	2800 (30.9) ^{sol}	3800 (76.5) ^{sol}	4500 (183) ^{sol}	LQM S4UL
Indeno(123cd)pyrene	45.00	46.00	46.00	LQM S4UL
Phenanthrene	1300 (36) ^{sol}	1500.00	1500.00	LQM S4UL
Pyrene	3700.00	3800.00	3800.00	LQM S4UL
Naphthalene	2.30	5.60	13.00	LQM S4UL

Note:

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* Values calculated using CLEA v1.071

^{sol} - S4UL presented exceeds the solubility saturation limit, which is presented in brackets.

^{vap} - S4UL presented exceed the vapour saturation limit, which is presented in brackets.

Tier 1 Assessment Criteria

Determinand	Residential Without Produce			Source
	1% SOM	2.5% SOM	6% SOM	
Benzene	0.38	0.70	1.40	LQM S4UL
Ethylbenzene	83.00	190.00	440.00	LQM S4UL
Phenol	750.00	1300.00	2300.00	LQM S4UL
Toluene	800 (869) ^{vap}	1900.00	3900.00	LQM S4UL
Xylene, o-	88.00	210.00	480.00	LQM S4UL
Xylene, m-	82.00	190.00	450.00	LQM S4UL
Xylene, p-	79.00	180.00	430.00	LQM S4UL
Aliphatic C5-C6	42	78	160	LQM S4UL
Aliphatic C6-C8	100	230	530	LQM S4UL
Aliphatic C8-C10	27	65	150	LQM S4UL
Aliphatic C10-C12	130 (48) ^{vap}	330 (118) ^{vap}	760 (283) ^{vap}	LQM S4UL
Aliphatic C12-C16	1100 (24) ^{sol}	2400 (59) ^{sol}	4300 (142) ^{sol}	LQM S4UL
Aliphatic C16-C35	65000 (8.48) ^{sol}	92000 (21) ^{sol}	110000	LQM S4UL
Aliphatic C35-C44	65000 (8.48) ^{sol}	92000 (21) ^{sol}	110000	LQM S4UL
Aromatic C5-C7	370	690	1400	LQM S4UL
Aromatic C7-C8	860	1800	3900	LQM S4UL
Aromatic C8-C10	47	110	270	LQM S4UL
Aromatic C10-C12	250	590	1200	LQM S4UL
Aromatic C12-C16	1800	2300 (419) ^{sol}	2500	LQM S4UL
Aromatic C16-C21	1900	1900	1900	LQM S4UL
Aromatic C21-C35	1900	1900	1900	LQM S4UL
Aromatic C35-C44	1900	1900	1900	LQM S4UL
Combined Aliphatic and Aromatic C44-C70	1900	1900	1900	LQM S4UL

Note:

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^{vap} - S4UL presented exceed the vapour saturation limit, which is presented in brackets.

^{sol} - S4UL presented exceeds the solubility saturation limit, which is presented in brackets.

Appendix C



Appendix 5 –Verification Proforma

Copied Directly From Appendix A5 CIRIA C735

Mallett, H, Cox (nee Taffel-Andureau), L, Wilson, S, Corban, M (2014) Good practice on the testing and verification of protection systems for buildings against hazardous ground gases, CIRIA, C735, London (ISBN: 978-0-86017-739-5). Go to: www.ciria.org

VISUAL INSPECTION OF GAS PROTECTION MEASURES

Site name:	Gas characteristic situation:
Job number:	Type of development and building/block checked: (residential/commercial/other)
Date:	Building description:
Visit by:	Foundation type: (suspended floor/raft/other)
Weather at time of inspection:	Gas protection type: passive/active

No.	Item	Comments (see notes)
1 Gas membrane		
1.1	Condition of sub-grade and underside of gas membrane	
1.2	Gas membrane type	
1.3	Gas membrane condition	
1.4	Joining tape product	
1.5	Lapping design	
1.6	Laps, welds and joints seals	
1.7	Service entries seals	
2 Passive venting		
2.1	Sub-floor void	
2.2	External wall airbricks	
2.3	Internal sleeper walls	
2.4	External vent trenches/ducts	
3 Active venting		
3.1	System details	
Additional notes:		

Notes: inspection checklist

1.1	Underside of gas membrane	Check that the sub grade does not contain rough/uneven surfaces, is appropriately clean and that there are no hard/sharp objects. That protective sand blinding or geotextile (if specified) is present and meets the design criteria.
1.2	Gas membrane type	Manufacturer and product specification, gauge, colour, brand/name, material batch/roll numbers, storage arrangements (protected from dirt/damage?)
1.3	Gas membrane condition	Open punctures, tears, rips, stretching? Excessive footprints/evidence of traffic? Presence of debris? Repairs? Signs of weakness such as raised or sunken indentations? Protection plan in place to restrict access to lain gas membrane?
1.4	Joining tape product	Product type, brand, thickness, material, width, colour? Use of double sided tape?
1.5	Lapping design	Joints lapped and sealed in accordance with manufacturer's requirements/ specification? Minimum overlap insured? Sections taped twice?
1.6	Laps and joints sealed	Welds complete? Appropriate joining/double sided tape used?
1.7	Service entries sealed	Top hats seal arrangements fixed around service entries? Use of Jubilee clips?
2.1	Sub-floor void	Is a check possible? Void former? Gravel (type/specification)? Height of void space? Is it clear?
2.2	External wall airbricks	Numbers, size, positions as design drawing?
2.3	Internal sleeper walls	Ventilation holes (honeycomb brickwork/pipe crossings?) – size, spacing, location in accordance with design?
2.4	External vent trenches/ducts	Located and constructed in accordance with design drawings? If open-topped gravel – gravel type/presence of fines? If pipe or other vent, check position and construction for functionality and absence of blockages. Ability of void former to withstand bearing of the superstructure?
3.1	Active venting	Type of air supply: mechanical, natural, combined? Location/condition/number of fans and vents? Location and size of inlets? Provision of air-cleaning devices and air heaters? Supply and exhaust ductwork? Alarm provision/installation? Gas monitoring system in under-floor void?

Photographs

No.	Description

The gas protection measures inspected:	a Are acceptable and comply with the specification
	b Are acceptable but attention is drawn to issues related to item no. xxx
	c Are not acceptable due to the issues related to item no. xxx

Name:

Signature:

Date: