

# Method Statement



## **Method Statement for Remediation & Validation Works**

**at the**

**Former North Allotment Gardens, Radcliffe  
Road, Southampton, Hampshire**

**For**

**Kier Partnership Homes**

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**REPORT J9619  
Revision 1.02**

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# Method Statement For Remediation & Validation Works

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**Job Title: Former North Allotment Gardens, Radcliffe Road,  
Southampton, Hampshire**

**Client: Kier Partnership Homes**

## CONTROL DOCUMENT

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Note: This is not a valid document for use in the design of the project unless it is titled **Final** in the Document Status box.

	Name	Signature
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Current regulations and good practice were used in the preparation of this report. The recommendations given in this report must be reviewed by an appropriately qualified person at the time of preparation of the scheme design to ensure that any recommendations given remain valid in light of changes in regulation and practice, or additional information obtained regarding the site.

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L I M I T E D

**Method Statement for  
Remediation & Validation Works  
at the  
Former North Allotment Gardens, Radcliffe Road, Southampton,  
Hampshire  
For  
Kier Partnership Homes**

**General**

1. Martlet Development Consultants commissioned Soils Limited, on behalf of Kier Partnership Homes, to prepare this Method Statement for the remediation of land at the former North Allotment Gardens, Radcliffe Road, Southampton.
2. This Method Statement sets out procedures to ensure that contamination issues are fully addressed and provides the methodology for the remedial works.
3. The recommendations relating to contamination of soil given are based on current United Kingdom risk assessment practice based on the Contaminated Land Exposure Assessment Model (CLEA), the technical basis for which is given by DEFRA R&D Publication CLR10 March 2002.
4. Prior to commencement of the site works, consultation and agreement must be obtained from all relevant Statutory Authorities on the proposed methods of remediation.

### **Proposed Remediation Methods for Soil Contamination Hazards**

5. The measures outlined in the following sections are designed to ensure that the level of contamination within the soil does not endanger groundworkers or the end-users of the proposed development and that end-users do not come into contact with contaminated materials.
6. No remedial action is to be taken with respect to the Made Ground soils underlying areas of permanent hardstanding across the site. The Groundwater Risk Assessment demonstrated that the Made Ground could remain under areas of permanent hardstanding without posing any risks to groundwater.
7. Made Ground will require removal in all soft-landscaped areas, both in private gardens and communal gardens, and in all proposed soakaway locations. All remediation works will be carried out to the specification given in the Remediation Strategy Report, rev. 1.02 ref: J9619 February 2007 and as directed on-site by an experienced Geo-environmental Engineer assigned by Soils Limited. All imported Topsoil will require certification from Soils Limited to approve its suitability for use in garden areas.
8. Materials to be removed off-site must be classified by carrying out Waste Acceptance Criteria (WAC) testing and taken to a licensed facility. A registered contractor must undertake the removal of waste. Full liaison must be made with the Environment Agency prior to the removal of any material and must be conducted to meet their full approval.
9. The formation level surfaces for both garden areas and soakaway locations must be inspected by an experienced Geo-environmental Engineer assigned by Soils Limited to verify the removal of Made Ground. Upon removal of the Made Ground, validation samples will also be recovered from the base levels and sent off for chemical laboratory analysis.
10. The thickness of Topsoil must be sufficient to sustain the proposed plant growth as specified by the site design horticulturalist.
11. Stockpiled contaminated Made Ground must be placed on an impermeable liner. During periods of rainfall, the stockpile must be covered over to minimise leaching and run-off into the underlying soils.
12. Chemical analysis certificates must be supplied by the developer or groundworks contractor to Soils Limited before any soils are placed in

garden areas. This is to ensure that the imported soils are suitable for the purpose for which they are intended.

13. To avoid mixing any clean imported soils, which will be used to backfill garden areas, with any Made Ground which will still be remaining under areas of permanent hardstanding, a barrier must be installed against the side of the excavations.
14. Full liaison must be made with the statutory authority, prior to the implementation of this method statement and/or the removal of any material from site. All works must be undertaken to meet their full approval.

### **Proposed Methods for Installing Gas Protection Measures**

15. Precaution measures must be taken with respect to bio-gases in all building structures.
16. A well constructed suspended slab with an underfloor void must be used for the ground floor construction. The underfloor void must have a minimum height of 150mm.
17. Periscope ventilators will be required to allow the underfloor void to be vented. These must be installed to the manufacturer's specifications, which specify that vents are to be provided at a maximum 500mm from returns (corner of building), at a maximum 1800mm centres along a run of wall and a minimum 300mm away from a gas entry. Air bricks and cranked void ventilators must provide 1500mm<sup>2</sup>/m area of ventilation. If there are any internal sleeper walls, ventilation gaps must be placed to ensure adequate flow through. This will allow the underfloor void to be properly ventilated and will avoid any dead spots caused by bio-gases accumulating.
18. A minimum 1200 gauge polyethylene membrane resistant to carbon dioxide must be used for each building. The membrane must be lapped at joints and pass beneath internal walls. The gas membrane must be installed on a smooth surface to prevent any tearing and sealed to the DPC, which is to be taken through the blockwork, up the wall and incorporated below the damp proof course on the outer leaf. The gas membrane needs to be overlapped onto the DPC by a minimum of 200mm and bonded with double sided tape. This joint must then be secured with jointing tape. The gas membrane must then be covered by a screed immediately after installation to protect it. Gas membrane installations will be inspected by an experienced Geo-environmental Engineer assigned by Soils Limited.

19. The floor construction must have minimal penetration of services (electric, gas, water). Where services are penetrated through the ground floor slab, top hat covers must be used and adequately sealed with jointing tape and jubilee clips to secure the top hat and create a tight fit around the pipes. They need to be installed to manufacturer's specifications.
20. Confined spaces within buildings must be adequately ventilated.

### **Proposed Methods for Protection of Groundworkers**

21. The groundworkers must be made aware of the potential presence of metallic and benzo (a) pyrene contamination in the Made Ground soils.
22. All workers will be required to maintain a good standard of personal hygiene and the wearing of overalls, boots, gloves, eye protectors and the use of dust masks during periods of dry weather is essential.
23. During the development of the site washing facilities must be provided and eating and smoking restricted to designated areas.
24. Guidance as to safe working practices may be obtained from "*Protection of Workers and the General Public During the Development of Contaminated Land*", London HMSO.

### **Reporting**

25. On completion of the remediation and validation works, Soils Limited will provide a validation and closure report detailing the operations undertaken, inspection and certification of remedial works, records of materials taken off and onto site, results of chemical analysis and certification for fitness for purpose.
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