



Ground and Environmental Services Limited

**Unit 2 Montpelier Business Park
Dencora Way
Ashford
Kent
TN23 4FG
01233 646237**

**St Columba's Close
Gravesend
Kent
DA12 4AJ**

Remediation Strategy Report

On behalf of Oakwood Building Contractors

Document Reference: 13217/RS

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air quality assessment contaminated land ecology environmental audits noise assessment
environmental impact assessments flood risk assessments geotechnical engineering ground investigation
hydrogeology noxious weeds remediation design risk assessments waste management

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Prepared by:	PAD
Reviewed by:	KB
Authorised by:	PAD
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Table of Contents

1	INTRODUCTION	1
2	SITE LOCATION.....	1
3	GEOLOGY AND HYDROGEOLOGY	2
4	DATA REVIEW	3
4.1	EXISTING REPORTS	3
5	REMEDIAL OPTIONS APPRAISAL	4
6	REMEDIAL WORKS METHODOLOGY	5
6.1	Generic Remedial Measures	5
6.2	Clean Cover Systems	7
6.3	Growth Media Specification	8
6.4	In Situ Soils Testing.....	9
6.5	Asbestos.....	9
6.6	Site Derived Dust	10
6.7	Protection of Services	10
6.8	Waste Classification	10
7	WATCHING BRIEF AND DISCOVERY STRATEGY	11
8	FINAL REMEDIATION VERIFICATION REPORT	14
9	CONCLUSIONS	15

1 INTRODUCTION

Ground and Environmental Services Ltd (GES) was commissioned by Oakwood Building Contractors (The Client) to produce a Remediation Strategy Report on a proposed residential redevelopment site off St Columba's Close, Gravesend, Kent, DA12 4AJ.

It was understood that the proposed redevelopment of the site would comprise the demolition of Nos. 1-12 St Patricks Gardens. Nos. 36-41 St Patricks Gardens and Nos. 28-42 even nos. only St Columba's Close, and the caretakers facility, and the erection of 2no. 2 storey buildings, 1no. 3 storeys building and 1no. part 3 and part 4 storey building; to provide 46 residential dwellings (Class C3) residential use, with associated vehicle and pedestrian access, amenity space with hard and soft landscaping, car and cycle parking, refuse and recycling storage provision, and other associated works.

In preparing this report reference was made to a Phase 1 Preliminary Risk Assessment and Phase 2 Geo-Environmental and Geotechnical Site Investigation Report prepared by RPS Group (Report Ref: JER9191 (Revision 1), dated December 2022), which should be read in conjunction with this report.

This **Remediation Strategy Report** describes the proposed remediation recommended within the aforementioned report, and the validation process and its reporting which is to be undertaken following the completion of the remedial works described below.

The purpose of this report is to set out clearly the plan and procedures in place to carry out the remediation required on site based on current Contaminated Land Legislations as required in order to satisfy Condition 4c of Gravesham Borough Council's Planning Application number 20221179.

2 SITE LOCATION

The site is located off St Columba's Close, Gravesend in a predominantly residential area, at National Grid Coordinates 565980E 172131N. It is roughly rectangular in shape and occupies an area of approximately 1.07 ha.

At the time of the original site investigation, the site generally comprised of occupied residential buildings. Photographs depicting the site layout together with a detailed description have been included within the historical report produced by RPS Group.

GES have not visited the site and therefore cannot comment on the current site layout or whether any demolition works have been undertaken.

The following features surround the proposed development area:

- To the north, by St Columba's Close and residential housing beyond.
- To the east, by residential properties with St Dunstan's Drive beyond.
- To the south, by St Patrick's Gardens with the recently developed residential housing block and associated playground. Residential housing was present beyond.
- To the west, by Valley Drive with roads and residential housing beyond.

3 GEOLOGY AND HYDROGEOLOGY

Reference to the British Geological Survey geological mapping of the area, indicates that the solid geology underlying the site comprises a bedrock geology comprising of the Lewes Nodular, Seaford, and Newhaven Chalk Formation (undifferentiated) which was confirmed during the undertaking of the intrusive site investigation.

The Aquifer Designation Dataset shows the site to be set upon a Principal Aquifer within the chalk strata which are classed as having a high level of water storage and may support water supply and / or river base flow on a strategic scale.

Superficial Head (clay, silt and sand), which is classified as a secondary undifferentiated aquifer, is indicated to be present just to the west of the site.

The site is also located within an Environment Agency defined Groundwater Source Protection Zone 2 (Outer Zone). The outer zone covers pollution that takes up to 400 days to travel to the borehole, or 25% of the total catchment area, whichever area is the biggest. This travel time is the minimum amount of time that pollutants need to be diluted, reduced in strength, or delayed by the time they reach the borehole.

Information provided by the EA indicates that there are three records of active licensed groundwater abstractions within 2km of the site, with the closest being a direct potable water supply located 1371m north-west of the site.

4 DATA REVIEW

4.1 EXISTING REPORTS

Phase 1 Preliminary Risk Assessment and Phase 2 Geo-Environmental and Geotechnical Site Investigation Report (RPS Group) – December 2022

The original site works are described in full in the aforementioned report and comprised: two cut-down cable percussion boreholes to a depth of 10m below ground level (bgl); five window sample boreholes to depths of between 1.00m and 3.00m bgl; excavation of three trial pits to depths of between 2.00m and 2.80m bgl, with soil infiltration testing in all locations; excavation of five foundation inspection pits to depths up to 1.2m bgl using hand tools; and dynamic cone penetrometer (DCP) testing at 11 locations.

Ground conditions comprised Topsoil and/or Made Ground to a maximum depth of 1.90m bgl, overlying superficial Head to a maximum depth of 2.10m bgl, overlying Seaford Chalk Formation to the maximum investigation depth. No groundwater was encountered during intrusive investigation works or during subsequent monitoring visits.

The proposed development is for a residential end use, with the inclusion of some private gardens within the north of the site. When compared against assessment criteria for a residential end use with plant uptake, the concentration of three Polycyclic Aromatic Hydrocarbon (PAH) species within samples from two locations exceeded the relevant assessment criteria. As such, it was considered that a risk is posed to future site users within private gardens, and this should be mitigated via installation of a clean cover system (comprising subsoil and topsoil) of at least 600mm in these areas.

When compared against assessment criteria for residential public open space no concentrations of contaminants of concern exceed the relevant screening, and as such it was considered that no significant risk to future site users will be present within areas of proposed public open space. The pathway for dermal contact and ingestion would be broken in areas of proposed building cover and hardstanding.

Whilst it was not possible to sample groundwater during the investigation, it was considered that the given the depth to groundwater (c. 20m bgl) and the relatively low levels of contamination encountered within the shallow soils, it is unlikely that any significant risk to groundwater is present.

Ground gas monitoring undertaken on site as part of the investigation indicated CIRIA CS1 was applicable to the site, whereby no ground gas protection measures are required for new buildings.

It was recommended that a site-specific Remediation Strategy incorporating Validation Plan and protocols for managing any contamination encountered during redevelopment is produced. The Remediation Strategy should include details of the covers systems required in areas of soft landscaping.



It was considered that there is the potential that soil and groundwater contamination that has not been previously identified will be encountered during the development phase and therefore a watching brief should be in place and an appropriate discovery strategy should be included as part of the Remediation Strategy.

Any soil imported for soft landscaping to be incorporated as part of the redevelopment should be analysed to confirm suitability for use.

Any specific soils that are to be disposed of off-site should be subject to waste characterisation prior to removal from site.

Given their age, it was considered possible that asbestos containing material is present within the buildings on site. A formal Asbestos Refurbishment / Demolition Survey should be carried out prior to any demolition work commencing.

5 REMEDIATION OPTIONS APPRAISAL

Near surface madeground soils on site within the vicinity of exploratory holes CP01 and TP03, where slightly elevated concentrations of PAH compound contaminants have been recorded, would not be suitable for use in any proposed soft landscaped areas on site.

The remediation of the site is required to ensure the site is safe for sensitive receptors, including future site users, by severing any open potential contaminant to sensitive receptor pathways.

Remediation options to control risks to future site users from soil-based contamination would be either,

1. to treat the contaminated soils *insitu*,
2. remove impacted material for *exsitu* remediation treatment or off-site disposal or,
3. use an appropriate thickness of clean cover soils to cap the impacted materials.

Given the very localised and low level of contamination, a combination of option 2 and option 3, removal of any necessary near surface soils in order to allow the required formation levels, and the application of clean cover soils, would be carried out within the localised identified areas proposed for soft landscaping as part of the proposed redevelopment.

Therefore, the use of clean suitable cover soils to provide an appropriate thickness of soils mixing zone for any residual contamination would provide the remediation required on site to remove any potential risks to future site users from soil-based contamination.

Topsoil used in soft landscaped areas should be certified as suitable for use and re-tested *insitu* once placed.

6 REMEDIAL WORKS METHODOLOGY

6.1 Generic Remedial Measures

6.1.1 Enabling Works

Enabling works are required across site to ensure that the subsequent development of the site can proceed with continuity and minimise risks to programme delivery.

It is considered likely that the required construction enabling works to be carried out across the site will effectively remove the majority of the potentially contamination-impacted made ground from the areas of soft landscaping for use elsewhere on site as levelling fill.

Following the site strip, the underlying soils will be inspected for any signs of contamination under the watching brief in place on site. Any such contamination signs noted would instigate the implementation of the discovery strategy described below.

6.1.2 Soils/Materials Handling Protocols

Although significant contamination was not proven in the Phase 2 Site Investigation, with the exception of some very localised PAH compounds within the near surface soils in the vicinity of excavation location CP01 and TP03, contaminated soils may be discovered during the proposed siteworks.

In addition, if the event that final levels on site dictate that excavation and removal of surplus soils is required, then off-site disposal at an appropriately licensed facility would be required.

In such a case and in order to ensure compliance with the requirements of the Landfill Regulations a programme of waste segregation and classification would need to be implemented at source, to ensure that any contaminated soils are managed and disposed of appropriately.

The following Soils Materials Handling Protocol would therefore be implemented if the need arose on site.

Soils Materials Handling Protocol #1 – Contaminated Soils Removal	
STEP 1	Initial Segregation Plan - On the basis of the existing body of analytical data following removal of any waste soils and any unwanted hardstanding, a zonation / segregation plan will be developed. Identified pockets / hotspots will be recorded on a plan together with any discrete layers of contamination identified within the fill. This will then be used as a tool to manage and plan the excavation and removal of the fill materials to reduce the risk of intermixing / cross contamination of 'clean' and grossly contaminated materials and ensure that all wastes are authorised / accepted at the respective intended disposal facility.
STEP2	Watching Brief - The excavation / sorting of soils will be undertaken under the supervision of a suitably qualified and experienced consultant / engineer to ensure that all contamination soils are classified and managed appropriately; and any contamination not previously identified is inspected, classified and managed appropriately.



Soils Materials Handling Protocol #1 – Contaminated Soils Removal	
STEP 3	Quarantine Area - A secure area lined with polythene sheet and appropriate warning signage will be established to quarantine any suspected hazardous materials / soils. Polythene sheeting will also be available to cover any quarantined materials [when encountered] to minimise the risk of potentially contaminated run-off or hazardous effluvia being generated. Representative samples of such materials will be recovered and submitted to a UKAS and MCERTS accredited laboratory for chemical analysis including WAC testing to ensure that the materials are suitable for disposal at an appropriately licensed facility and to evaluate whether or not any form of pre-treatment is required if appropriate.
STEP 4	Verification Sampling & Testing - Samples of fill / soils will be recovered by the supervising consultant and submitted for testing by a UKAS & MCERTS accredited laboratory to ensure the correct waste classifications are assigned to contaminated materials. Once excavation and removal of contaminated soils is in progress and essentially complete, verification samples may be recovered at subformation level, based on visual and olfactory inspection together with a PID screen to confirm the successful removal of identified contamination and ensure that no potentially significant contamination remains. The same principle would be undertaken should reduced level excavations be required across soft landscaped areas to facilitate the incorporation of clean soil cover layers.
STEP 5	Copies of all waste transfer notes / consignment notes for material removed from site will be collated and retained for inclusion within the validation report.

Given the identified requirement for the importation of clean soils to specific parts of the site, the following Soils Materials Handling Protocol will be implemented for the imported clean soils which will be required as growing medium within the proposed soft landscaped areas on site, specifically to the areas in the vicinity of CP01 and TP03.

Soils Materials Handling Protocol #2 – Clean Import	
STEP 1	Initial Review of Candidate Sources Candidate sources of clean backfill / soils for soft landscaped areas will be identified. Copies of the latest soil quality reports will be obtained for review from established registered Soil Manufacturing Facilities. If the source site(s) do not comprise registered soils manufacturing facilities a review of the site history and any information relating to ground conditions will be undertaken to establish potential suitability.
STEP 2	Verification Inspection & Sampling – Source End Samples of candidate soils will be recovered at a rate of at least one sample for every 500m ³ of imported soil at source for analysis by a UKAS / MCERTS accredited laboratory. In terms of soils for landscaped areas a single sample per garden or soft landscaped area would be sufficient and, the suitability of the soils will be assessed for compliance against 'P20' derived SSTLs defined to protect underlying groundwater in the aquifer and either CLEA Soil Guideline Values for a residential end use or the appropriate GAC threshold criteria where no SGVs exist. SP1010 Category 4 screening levels and LQM suitable for use levels will also be used.

Soils Materials Handling Protocol #2 – Clean Import	
STEP 3	Verification Inspection & Sampling – Following Placement Following placement of the clean soil cover, samples will be recovered at a suitable rate and submitted for analysis by a UKAS / MCERTS accredited laboratory follow as a final level of verification.
STEP 4	Verification Report All information relating to the verification inspection, sampling and testing described above will be collated for inclusion within the Remediation Verification Report.

To minimise the risk of future occupant exposure to identified ground contamination it will be necessary to provide clean soil cover systems where the encountered ground contamination coincides with proposed soft landscaped areas, i.e within the areas in the vicinity of CP01 and TP03. Details of how the identified contamination will be managed together with proposals for sourcing suitable clean soils as backfill have been described in the aforementioned tables. Other specifics relating to provision of Clean Cover Systems are described below.

As part of the enabling works and in order to achieve site levels it is envisaged that made ground material may have to be removed from the specified areas of site destined to be areas of soft cover or gardens within the vicinity of excavations CP01 and TP03.

6.2 Clean Cover Systems

Elevated levels of certain PAH compounds contaminants have been found in near surface made ground on site which could pose a risk to future occupants if exposed to the material for instance in a soft landscaped area. Current development proposals include such areas of softcover.

There is not sufficient clean growth media currently in place in the proposed soft landscaped areas on site within the affected areas around CP01 and TP03, therefore it would be necessary to excavate the Made Ground material in these proposed soft landscaped areas and replace it with clean sub soil and topsoil.

With regard to these areas it is considered likely that suitable growth media would need to be imported into these areas of the site.

Whilst existing on-site soils would be suitable to remain on site within other areas, following the enabling works in the proposed garden areas in the vicinity of CP01 and TP03, on site material will be excavated and certified clean sub soils and topsoil imported for the proposed soft landscaping to these areas. It is noted that clean subsoils are present on site and clean surplus site derived subsoil would be suitable for use in gardens below imported topsoil.

As per the recommendations contained within the Geo-Environmental Investigation Report produced by RPS Group, a simple cover system of a minimum of 600mm soils

would be required to sever the linkage of pollutants in the soil below in the proposed soft landscaped areas proposed for the affected areas of the site. Typically, 250 mm topsoil over approximately 350 mm clean free draining subsoils would generally be considered sufficient.

No such clean cover will be imported to site and placed until the construction phase is completed to avoid over compaction by site plant.

All imported material will be from a known source, with haulage certification provided to confirm collection and delivery addresses. The material should be tested at source to confirm it is suitable for placement in areas of soft landscaping and tested on placed *in situ*. The specification for the imported soils is detailed below.

6.3 Growth Media Specification

All imported growth media would be subject to analytical testing to determine its suitability for use in any areas of soft landscaping as required. The soils would be tested for a range of metals and metalloids and speciated TPH and PAH. The testing would include for asbestos containing material. The results would be compared to the SGVs as appropriate and where applicable GAC values derived using CLEA UK for TPH fractions and specific PAH compounds will be used as limit values. In addition, to the 'CLEA Suite' any imported soil material will be tested for boron, cyanide, sulphate, zinc, copper, phenols and pH. In addition, where appropriate, the suitable for use LQM levels will be used and the SP1010 category 4 screening values.

The material would be inspected to ensure it had no aggressive weeds, invasive species including the rhizomes and seeds of such species.

The specifications of BS3882 regarding textural classification and maximum stone content will be met for the material including it being free of hazardous material. The major determinands proposed and respective guideline values are tabulated below.

Determinand	Maximum Concentration
	(mg/kg)
Arsenic	<37
Cadmium	<22
Chromium (tot)	<200
Lead	<200
Mercury	<15
Nickel	<75
Selenium	<260
Benzo(a)Pyrene	<5
Dibenzo(a,h)anthracene	<1.3
PAH (EPA 16)	<20
TPH (speciated)	Relevant GAC Guideline
Boron	3

Cyanide	25
pH	5.0 to 8.2
Copper	pH dependant, <111
Zinc	pH dependant, <300
Phenols	<5
Asbestos	absent

In addition, testing will be carried out to classify the material according to its type and texture and to ensure conformity to the following ranges,

- Stone size (%): > 2 mm 60, > 20 mm 30, > 50 mm 10
- Nutrient content: phosphorus index minimum 2, potassium index minimum 2, magnesium index minimum 1 and nitrogen % (w/w) minimum 0.2
- The loss on ignition % (m/m) will also be determined to ensure the level is consistent with the soil type/textural class.

6.4 In Situ Soils Testing

Following the placement of the imported growth media, the soft landscaping soils within the remediated areas of the site, i.e. within the vicinity of CP01 and TP03, will be inspected to profile the depth of imported soils and retrieve any final validation test samples to be reported in the Final Remediation Validation Report for submission at the end of the remedial works.

Cover soil thicknesses will be measured by digging an inspection pit and photos will be taken within areas of soft landscaping.

Samples will be retrieved for validation testing from the imported topsoil *in situ* and from soils in place below the imported soil, that is, the base level.

6.5 Asbestos

In light of the age of the buildings on site and the presence of pre-2000 made ground on site due regard to the potential for the presence on site of asbestos fragments or fibres in soils will be given.

As part of the watching brief, if any visible asbestos containing material (ACM) is encountered in soils during the enabling works, then the discovery strategy described below will be implemented and the extent of such will be delineated under the supervision of a suitably competent consultant/engineer.

As recommended within the RPS Group report, a formal Asbestos Refurbishment / Demolition Survey should be carried out prior to any demolition work commencing.



6.6 Site Derived Dust

In order to mitigate site derived wind-blown dust water suppression sprays will be used during ongoing construction works to dampen soils to limit the potential for dust generation.

6.7 Protection of Services

Following an assessment, the levels of organic contaminants capable of degrading service pipes on site are generally considered to be low. It is not considered that incoming services will require protection, however, it is always advisable that confirmation from utility suppliers be sought with regards to protection of services, particularly potable water.

However, in the event that any stained material or material showing olfactory evidence of contamination, in either the soil arisings or service trench sides/base, is discovered during the excavation of the service runs required on site then such material would be chased out to its origin. Regardless of whether any contamination is noted in these trenches the backfill material would be an engineering grade aggregate material likely to be single size gravel material.

6.8 Waste Classification

Where any offsite disposal of site derived soils was required and in order to ensure compliance with the requirements of the Landfill Regulations 2002 (as variously amended) a programme of waste segregation and classification would need to be implemented at source, to ensure that any contaminated soils are managed and disposed of appropriately.

Surface materials will likely be stripped from site to allow for construction activities.

Suitable soils would be re-used on site wherever possible however existing near surface made ground soils from the area in the vicinity of CP01 and TP03 would not be considered suitable for use as growth media or where they could come into contact with future site users.

Any material movements off site would be carried out in accordance with the duty of care waste regulations and details of the hauliers including waste carried number, landfill facility including permit number and address and copies of the waste transfer notes for each load being retained with the developer and made available for inspection.

7 WATCHING BRIEF AND DISCOVERY STRATEGY

The watching brief in place on this site for the duration of site enabling and construction works ensures the timely adoption of a suitable discovery strategy which in turn specifies the actions required in the event that previously unidentified contamination is found during groundworks. This may require running through Phase 2 stage again to delineate the impact.

Whilst, in general, no significant evidence of contamination was encountered as part of the site investigation, should discreet hotspots be encountered during the site clearance or groundworks, these should be dealt with accordingly by informing all parties involved with the site and drafting new contamination proposals if necessary.

A number of options are available for handling any such hotspot derived material, which include:

- The removal from site and disposal to a suitably licensed landfill of all material suspected of being contaminated.
- Short-term storage of the suspected material while undertaking verification testing for suspected contamination. The storage area should be a contained area to ensure that contamination does not migrate and affect other areas of the site. Depending upon the amounts of material under consideration, this could be either a skip or a lined area.
- Treatment of the identified contamination as discussed above.
- Having a suitably experienced Environmental Engineer either on-call or with a watching brief for the visual and olfactory assessment of the material, and sampling for verification purposes.

Watching Brief

During the course of the proposed development it will be the responsibility of the on-site manager to ensure watching briefs are undertaken and documented. The watching brief will consist of a record of:

- Observations of contamination made during the course of development by members of site staff, contractor or visitor; and
- Photos of any contamination found during the course of the development, the formation levels of excavations, any reduced level dig/mass excavation, formation of landscaped or garden areas, etc.

Examples of observations that should be recorded as part of a watching brief are included within the Discovery Strategy below. Upon completion of associated works, a written and signed statement should be prepared by the following parties:

St. Columba's Close, Gravesend, Kent, DA12 4AJ

Remediation Strategy Report



- On site manager upon completion of groundworks and landscaping work
- Environmental Consultant upon completion of groundworks and landscaping works

The written statement would clearly state whether or not evidence of contamination was identified during the course of the development and the action that was taken.

Where significant contamination is indicated or expected the site contractors and visitors, should be briefed on the potential presence of land, water or air-borne contamination and any potential hazards before commencing work on the site.

The on-site manager will need to provide written confirmation that site staff were briefed about contaminated land in line with these recommendations.

New Site-Specific Construction Workers Risk Assessments will be produced where required in accordance with current guidance, before works commence onsite and appropriate personal protective equipment should be worn by all construction workers.

Discovery Strategy

If significant unexpected contamination is found at any time then this must be reported to the council within seven days and development would be stopped if required at that part of the Site.

The discovery strategy sets out the actions that must be taken if contamination is encountered during the course of a development.

A significant observation includes any observation of contamination. Examples of the types of observations that would be considered significant are set out in the following table.

Evidence	Description
Visual	• Fuel or oil staining/monolayer sheen floating • Waste materials (refuse, industrial wastes, ash, tar, etc.) • Variation in soil colour may indicate contamination • Ash and clinker • Evidence of asbestos
Odour	• Fuel, oil/organic odours • Egg odours
Wellbeing	• Light headedness and/or nausea in or near confined space • Burning of nasal passages, throat, lungs or skin. • Blistering/reddening of skin after contact with soil

Note: The examples provided in this table are indicative only and not exhaustive.

St. Columba's Close, Gravesend, Kent, DA12 4AJ

Remediation Strategy Report



The following table sets out the actions that must be taken if significant or suspected land, water or air contamination is observed by site staff, contractors or visitors.

Person observing contamination	To be reported to:	Action to be taken
Site visitor	Site Manager	Stop work and make area safe and secure area before reporting to site manager/others
Contractor	Site Manager	
On site manager	Direct to company superior, the appointed Environmental Consultant, and the Council's planning and contaminated land departments	
Environmental Consultant	Site Manager, the Planning Authority and Contaminated Land Officer	Advise that work stops and make area safe where possible

The following table identifies other organisations that may need to be contacted in an emergency or where pollution of controlled waters or nuisance is occurring.

Occurrence	Description	Contact
Risk to the public	Any perceived, actual or potential risk health at risk as a result of contamination found during the course of investigation, remediation or development works	- Emergency Services if risk to life - Contaminated Land officer/Planning Authority - HSE
Nuisance to public	Any nuisance has been or is likely to be caused to the public for example odours, dust, noise, vibration, etc.	Council Contaminated Land officer/Pollution Control/Planning Authority
Pollution of controlled waters	Pollution of any water resource	- Environment Agency - Planning Authority and - Contaminated Land Officer
Pollution of adjoining land	Any offsite impact of adjoining land caused by contamination on site	- Land owner - Planning Authority and - Contaminated Land Officer

If gross contamination is encountered during groundworks, the advice of an Environmental Consultant must be sought. Soil arising from areas where visual or olfactory evidence of contamination is observed should be handled as potentially hazardous and temporarily stockpiled.



All stockpiled contaminated soils should be contained on and covered by visqueen or equivalent sheeting to prevent rainwater infiltration and possible leaching of soil contaminants to the ground. Stockpiled soils will then require validation testing to determine whether they can be used elsewhere on the Site at or close to the ground.

The Contaminated Land Officer for the council would be contacted to agree any further remedial works that become necessary during the course of the development before the agreed works being implemented.

8 FINAL REMEDIATION VERIFICATION REPORT

Following the implementation of the remedial measures recommended and the subsequent imported soil validation testing proposed a detailed Final Remediation Verification Report will be prepared and presented to the appropriate authorities.

This report will include a full description of the site works and remediation undertaken including garden soil quality validation details and duty of care documentation pertaining to any soils which are removed from site and chemical test results confirming the suitability of the remaining soils on site for the intended site end use.



9 CONCLUSIONS

The measures recommended in this remediation strategy are designed to ensure the site is suitable for use and ensure there are no remaining risks to future site users. The remedial works are deemed necessary following the findings of a detailed site investigation undertaken by RPS Group.

Significant levels of mobile contamination were not proven on site. However, near surface made ground within very localised areas of the site is impacted with certain contaminants as detailed within this report and would not be suitable to remain in place where future site users could be exposed.

The development proposals include areas of communal soft landscaping, buildings and areas of hardstanding.

The only areas on site which could present such a pollutant to receptor pathway would be any soft landscaped areas, and in particular the proposed areas of soft landscaping within the vicinity of exploratory holes CP01 and TP03. The use of imported appropriately certified clean growth media as a cover system to such areas will sever the linkage and the remaining risks to future site users would be considered to be low.

Clean subsoils and topsoil, to a minimum depth of 600mm across the specific parts of the site as indicated within this report, would therefore be imported complete with appropriate analytical test results and re-tested post-placement *in situ*.

It is recommended that a watching brief is implemented on this site during enabling works and should any contamination or potentially contaminative sources be discovered during the proposed enabling works all site works would cease and suitably competent consultants/engineers will attend site to agree a formal remediation strategy.

Based on the nature of the proposed development the site would not be considered to pose a potential risk of significant harm to human health in the context of Part 2A following the recommended remediation highlighted above.

Following the implementation of the remedial measures recommended in this report, a detailed **Final Remediation Verification Report** will be prepared and presented to the Council.