



# Contaminated Land Solutions

Environmental consultants delivering practical contaminated land and flood risk solutions designed to address the specific needs of the project.



# GO CLS At A Glance



## Directors

Managing Director, Peter George: A chartered civil engineer, has worked for contractors, the public sector and consultants, involved in all aspects of project delivery. For the last fifteen years he has concentrated on contaminated land and flood risk.

Associate Director, Tam Reuter: After graduation, she worked as an environmental consultant with Mitchell McFarlane. She has since worked in manufacturing and hazardous waste, before joining GO CLS in 2019.

## Services

Contaminated Land, Phase 1 Desktop Studies, Remediation Strategies, Verification Reports, Flood Risk, Land Gas Monitoring, Vapour Monitoring, Geo-environmental Investigations, Drainage Strategies and SuDS Maintenance Plans

## Experience

The directors have a combined 50 years industry experience, enabling them to bring a rounded practical approach to projects. GO provides its services in England, Scotland and Wales.

## Qualifications

Our highly qualified team are ready to ensure the optimum outcome for your project.

## Projects

Previous projects include residential from single properties to over 100 units, commercial & retail, former petrol filling stations, farmland and industrial sites.

## Clients

Projects are undertaken for and on behalf of developers, contractors, housing associations, local authorities, architects, project managers and private individuals.

## Testimonials

“...your speedy help and assistance has been enormously appreciated.” See more comments from some of our satisfied clients.

## Managing Planning Condition Discharge

We have produced a flowchart to illustrate the process and maintain a Planning Condition Discharge Schedule on the more complex projects to enable the team to monitor progress.

# Directors



## **Peter George - Managing Director Eur Ing, B Eng, Dip EM, C Eng, MICE, MCMI, FRSPH**



On graduating he worked in Southern Africa before returning to the UK where he has worked for contractors, the public sector and consultants, gaining a wide experience.

Joining Mitchell McFarlane in 1994 he rose to become a senior associate. From the start he was involved in their environmental work developing an Environmental Services team involved in the redevelopment of contaminated land.

Projects included both commercial and residential end use, on sites as diverse as former hospitals, water treatment plants, petrol filling stations and scrap yards.

Specific projects include a superstore in Chichester with a mechanically vented void to manage gas from the underlying landfill, a multi-screen cinema on a former land fill site in Watford and the remediation and redevelopment of a former Firestone tyre factory, Lisbon, Portugal to create the largest factory retail outlet in Europe, with nearly 1M sq ft of retail and leisure. In 2003 he founded GO Contaminated Land Solutions, in order to specialise in investigating, appraising and advising on remediation of contaminated land.

## **Tam Reuter - Associate Director BSc (Hons), AMIEnvSci**

Tam began working with Peter George in 1999 when they both worked for Mitchell McFarlane until she relocated a couple of years later.

She continued to work in environmental consulting for some years, and also worked in other sectors such as education, manufacturing and hazardous waste, before returning to environmental consulting.



## **Our Vision**

**To act with integrity, provide our clients with cost effective practical advice and contribute to creating safe places for people to live and work and where nature can flourish.**

**With a growing team from a variety of backgrounds we are able to bring together a breadth of experience to ensure the optimum outcome for your project.**

### Phase 1 (Desktop) Reports

Completed in accordance with the statutory guidance and best practice, reports include a site walkover, an assessment of past and current land use both on and off-site, the geology of the area as well as the ground and surface water.

This information is then used to develop a site specific conceptual model and risk assessment from which conclusions can be drawn and recommendations made. The report may recommend that a phase 2 intrusive investigation is undertaken in order to confirm that the development may be safely used for the proposed purpose.

The report should be submitted to the relevant local authority and possibly the Environment Agency as well as other stakeholders in the project for assessment prior to undertaking any further works or investigations. A well researched Phase 1 Environmental report will enable the Phase 2 investigation to be targeted at the areas of concern and avoid unnecessary testing and investigation.



### Phase 2 Intrusive Investigations/Geo-environmental investigations

If the Phase 1 Environmental Report indicates potential contamination then a Phase 2 investigation is designed and implemented. Investigations range from near surface soil sampling to those requiring trial pits and boreholes to obtain soil or groundwater samples at depth and to monitor for land gas or vapours.

Longer term sampling or monitoring may be required to track changes due to rising or falling groundwater levels and atmospheric pressure. The scope of works will depend on the size of the site, the nature of the contamination and the proposed end use.

Any geotechnical investigation for foundation, road and drainage design can be undertaken as a part of this investigation.

The aim of the investigation is to ensure that sufficient information is gathered to enable a cost effective remediation strategy to be developed.



### Land gas monitoring/Vapour monitoring

We have equipment for monitoring boreholes for land gas, methane and carbon dioxide. We have a PID (photo-ionization detector) monitor for identifying the presence of volatile organic compounds.

We also have a low flow meter and pump which can be used with a sorbent tube to identify the exact nature and quantity of volatiles present. This can be used to monitor boreholes or for non-intrusive monitoring within a building.

### Remediation Strategies

To minimise costs this needs to be prepared as early as possible so that if necessary the scheme can be modified to minimise remedial works.

Remediation may require removal of the contaminated soil, on site treatment or the introduction of a barrier between the contaminants and site users. A suitable barrier might be a membrane, a hard surface such as block paving or asphalt or a suitable depth of clean soil. On many sites elements of all these approaches are used to create a cost effective solution. Any remediation strategy needs to be approved by local authority.

### Monitoring

The local authority or the Environment Agency may require independent confirmation that the Remediation Strategy had been implemented correctly.

We recommend that we attend site at key points during remedial works to ensure records are in place so that the verification report can be completed speedily and without the potential for additional costs due to delays to planning condition discharge.

### Verification Reports

These include all the information required to demonstrate that the site has been cleaned up in accordance with the appropriate legislation and as specified in the Remediation Strategy and is therefore suitable for the proposed use.

It will include chain of custody documentation for materials removed from site, test results from materials remaining and brought to site and all the other monitoring data.

The local authority, Environment Agency, project funder or purchaser may all want to see the report to be assured that the land is suitable for the existing or proposed use.

### Flood Risk Assessments & Basement Impact Assessment

Qualitative flood risk assessments can be undertaken for existing and proposed developments. As part of the process the level of risks from flooding due to surface water, sewers and groundwater, rivers, seas, reservoirs and canals are assessed.

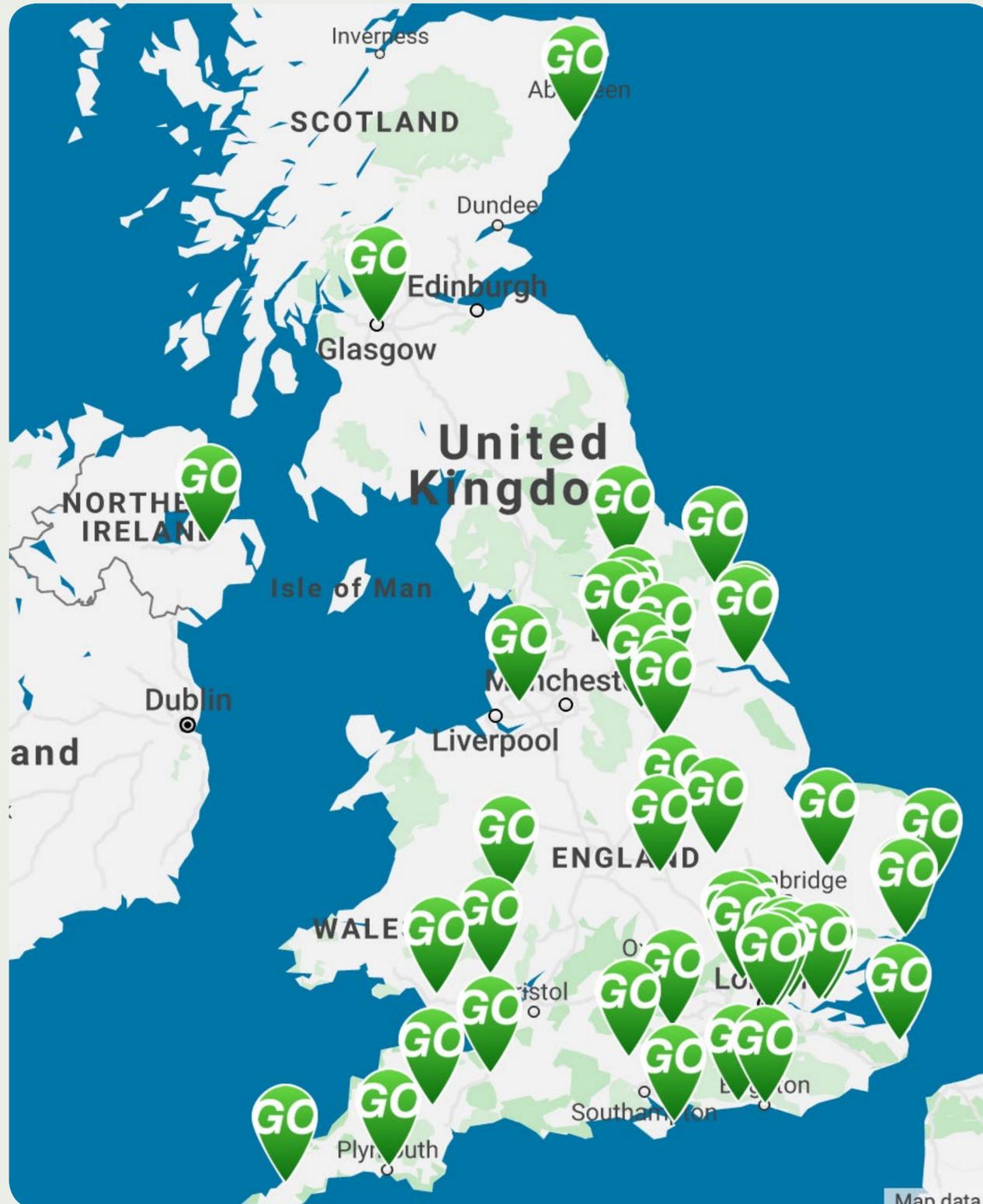
If the site is potentially subject to flooding the development may be able to proceed if suitable flood protection measures and water resilient and resistant construction are incorporated. Basement Impact Assessments are undertaken for new or extended basements.



### Drainage Strategies and SuDS Maintenance Plans

Drainage strategies and SuDS maintenance plans can be produced separately or to accompany the flood risk assessment. Percolation tests are undertaken to provide the data for the drainage strategy.

# Experience



With a background in the design and delivery of civil and structural aspects of projects we differentiate ourselves from other environmental consultants by offering practical environmental advice that provides an optimum solution for the project.

The Company has been operating since 2003 and has since steadily grown in size.

Areas of Operation cover England, Scotland, Wales & Northern Ireland.

Recently we launched our new Midlands branch, allowing us to partner more closely with clients over a wider area.

Today we are strong in many fields, drawing on different experiences and expertise. While we have a great team we remain small enough to always deliver personal service.

We are an independent company with no shareholders, allowing us to remain in control and committed to delivering the most cost effective and sustainable solution for each project.

# Qualifications



**GO Contaminated Land Solutions  
is a member of the Environmental Industries  
Commission**

**Our Staff Are Variously Members of  
The Institution of Civil Engineers  
The Chartered Management Institute  
The Institution Of Environmental Sciences  
Society of Brownfield Risk Assessors  
United Kingdom Environmental Law Association**

## Health & Safety

**All staff undertake the three day First Aid at  
Work course and have CSCS cards for working  
safely on construction sites.**

# Projects



## Bangrave Road, Corby

It was known that much of the site had been filled to a significant depth. After consultation with the client trial pits were excavated throughout the site to allow a visual inspection to determine the depth and nature of made ground. This information was used to augment the desktop study conceptual site model and to help assess the risks to sensitive receptors both on and off-site due to soil and groundwater contamination for the proposed commercial and light industrial park.



## Brixton Hill PFS

This former petrol filling station, subsequently used as a car wash, was to be redeveloped with commercial premises at ground floor and flats above.

Some tank access covers were visible during the site walkover but there was very limited information on the number, size and location of underground tanks.

The initial intrusive investigation was kept as close to the site perimeter as possible and undertaken with the utmost care to avoid hitting unrecorded tanks. Due to the very restricted site verification had to be undertaken separately under each tank gradually working across the site.

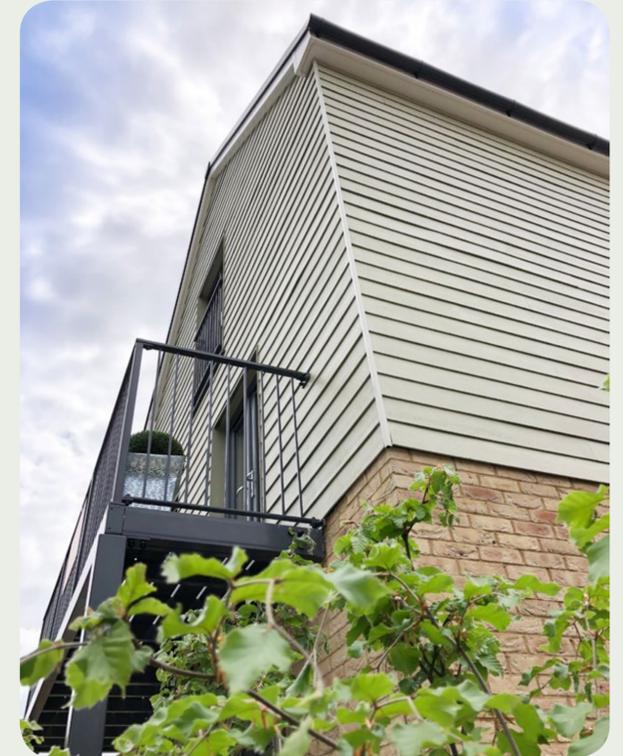
# Projects



## Trumpet Junction, Basingstoke

Some years previously this site had been filled for use as a bridge abutment for a flyover which was never constructed.

Our input included intrusive contamination testing, geotechnical advice on foundations, percolation tests, advice on cut and fill, rolling and compaction and undertaking plate bearing and Mexe Cone Penetrometer tests for roads and foundations.



## Portlethen, Aberdeen

A report was required as part of the pre purchase due diligence for a chemical storage and distribution site in Aberdeen. On site were offices and chemical storage facilities with a number of external above ground storage tanks. A drainage ditch ran along the rear boundary.

# Projects



## Solar Farm, South Wales

The proposal was for the installation of up to 3.0MWp of ground-mounted solar photovoltaic panels on farmland, with the sheep permitted to continue to graze on completion.

The site has been filled with pulverized fly ash from a nearby power plant and there was the potential for this to enter the groundwater and the nearby Llynfi River. A desktop study was undertaken and a method statement prepared to address those risks identified in the conceptual model and risk assessment. Advice was also provided on ground stability during both construction and operation.



## FRA Trident Hall, Greenwich

Trident Hall is located on the edge of the Maritime Greenwich World Heritage Site. Perhaps unsurprisingly, as it is only a few yards from the River Thames a Flood Risk Assessment was required for the proposal to convert it into a Hotel. The report was completed with flood mitigation guidance including resilient and resistant construction and a Flood Management Strategy.

# Clients & Agents



## DEVELOPERS

David Jones Associates Ltd  
DHP Ltd  
JF Project Consulting Ltd  
Lexadon Property Group  
Mantle Development  
Netherdown (Herts) Ltd  
Nodia Properties Limited  
S E Property Development  
Sterling Developments  
Stonebourne Properties Ltd  
Yellow Door Property

## CONSULTING ENGINEERS

Axiom Structures Ltd  
Buxton Associates  
Clancy Consulting  
Duffy Associates  
Evolve Consulting  
Gledsdale Associates  
Green Structural Engineering  
HL Engineers  
Icon Design  
Metabase  
Paul Owen Associates

## LAWYERS, BANKERS & SOLICITORS

Charles Taylor General Adjusting Services  
Ince & Co LLP  
Montrose Capital Ltd

## HOUSING ASSOCIATIONS & ALMOs

Eastend Homes  
Hounslow Housing  
Sanctuary Group (London & SE)  
Wandle Housing Association

## PLANNERS, SURVEYORS & PROJECT MANAGERS

Porta Planning LLP  
Anatolitis Associates  
Calfordseaden  
George Laurel & Partners  
gfplaning Ltd  
Iceni Projects  
Kirsop and Co  
Murphy Price Partnership  
Partner Engineering & Science  
Pure Real Estate Services Ltd  
Risk Management  
Spectrum Town Planning Consultant

## CHARITIES

Groundwork London  
Grow To Eat Well  
Sustainable Merton  
Transition Leytonstone  
Trees for Cities

## LOCAL AUTHORITIES

London Borough of Hounslow  
Royal Borough of Greenwich  
Three Rivers District Council

## OWNERS & OPERATORS

Benedict School  
Dartfordians RFC  
Newpark Drilling Fluids International LLC  
St Thomas A Becket School  
Terraforma Roadways Ltd  
Transwaste Ltd  
Harding Cargo Handling

## CONTRACTORS

ADL PROJECTS (LONDON) Ltd  
Allenbuild - Places for People  
Arvi Construction Ltd  
AVZ GeoEng  
Beamridge  
Chelmer Site Investigation  
Fastrack Site Investigations  
Geoffrey Osborne Ltd.  
Harvey Construction (Cheshunt)  
headoffice3  
Henry Construction  
Kier Partnership Homes  
Kingston landscape Group  
Morespace Basements Ltd.  
MTD Formwork Ltd  
On Line Design

## PROPERTY AGENTS

SHW (formerly Stiles Harold Williams)  
Strutt & Parker

## ARCHITECTS

ARC 3  
Abode First  
CDP Architecture  
Crawford Partnership  
David Miller Architects  
DBL.O Associates Architects  
Donald Insall Associates  
Emmerson Architects Ltd  
Francis Philips Architects  
Green & Teggin Architects  
Howard: Fairbairn: MHK  
Incalmo Architects Limited  
KCA architects  
LBF Architects  
Macallan Penfold Ltd.  
MDR Associates  
Miiodesign Ltd  
Niche Architects LLP  
Open Architecture  
Re-creo Architecture  
RG+P Ltd  
RGP Architects  
Risner Design  
Robert Allerton Ltd  
Russell+May Associates  
Simon Gill Architects  
Square Feet Architects  
Stolon Studio Ltd

# Testimonials



Dear Peter and the GO Team,  
Thank you for your hard works and we are delighted that we now have a green light for our application.

Young-In Oh, Director,  
Young-In Architects

Thank you very much to the team at GO – your speedy help and assistance has been enormously appreciated by us.

Best regards,  
Francis,  
Salte London Ltd.

I have greatly appreciated and valued Peter's advice over the years and believe that he would be a useful addition to the team.

Alan Pemberton,  
Clancy Consulting

We have built up a good relationship with GO Contaminated Land Solutions and used them on a number of projects and have always found their reports to be thorough, easy to understand and professional.”

Richard Newman, Partner,  
Calfordseaden LLP.

Good afternoon,  
Hope you all well. Following from my conversation with the planning consultant, I am pleased to inform you that Luton Borough Council has now approved the above stated development subject to S106 and affordable housing. For your information, there were no objections and the application was supported by the committee members. I would like to take this opportunity to thank you everyone for your time and effort on this project. I look forward to working with you all again soon. Have a good week. Many thanks,

Eric Wong RIBA, Associate  
MDR Associates

Hi Peter, GO Contaminated Land Solutions are incredibly cost effective whilst providing a highly-professional and efficient service. Despite a limited timeframe and a challenging brief, they provided a comprehensive report which was immediately accepted by the local authority without any questions.

We'll certainly keep in touch and recommend them in the future. Many thanks,

Tim Spiller, Associate  
Crawford Partnership

Dear Peter, Many thanks for the reports, I will of course definitely consider you again and recommend you for future projects.

Thanking you for your co-operation in this matter. Best Regards

Scheuch Developments Ltd.

Dear Peter,  
I also wanted to thank you very much for the assistance with 39 Waterloo Road, the planning has been finally granted, we received the decision notice yesterday.

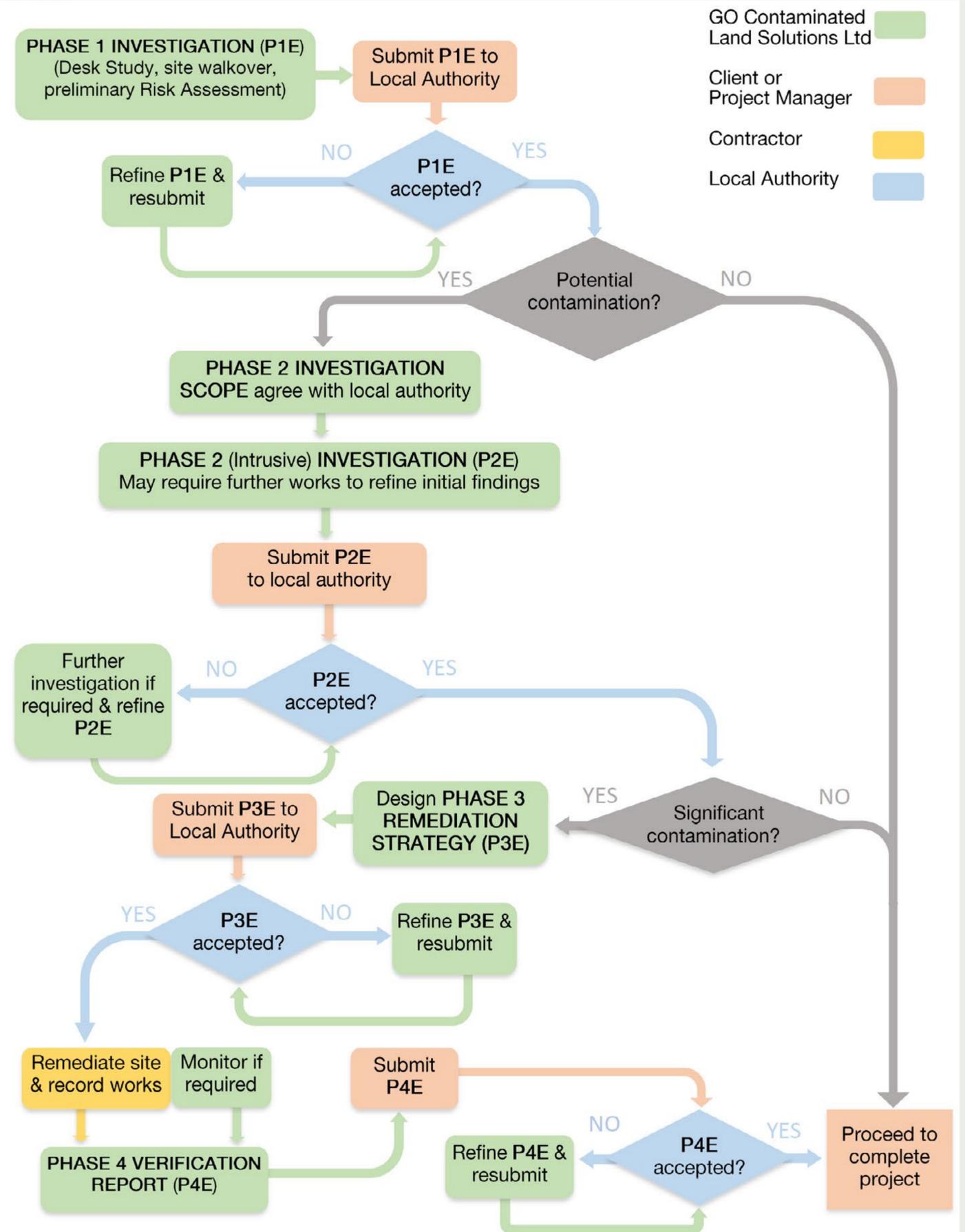
We will be in touch with further business

Eva Siskinova,  
Dandi Living Limited

# Flowchart

## GO with the Flow

Your guide to the murky swamp of contaminated land



# Planning Pg 1



| Planning Condition Discharge Schedule                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 |                                                |               |                                   |                        |                  |       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|------------------------------------------------|---------------|-----------------------------------|------------------------|------------------|-------|
| Project Number                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                 | 9999                                           |               |                                   |                        |                  |       |
| Project Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                 | Gas Works Lane, London                         |               |                                   |                        |                  |       |
| Planning Ref.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                 | 2017/01444/GAS                                 |               |                                   |                        |                  |       |
| Documents to be Submitted By                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                 | Client, Project Manager or Planning Consultant |               |                                   |                        |                  |       |
| Planning Condition extract                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Investigation Phase             | Report Reference                               | Report Status | Date Submitted to Local Authority | Date Condition Cleared | Condition Status | Notes |
| <b>CONDITION 37</b> - No development shall commence until a preliminary risk assessment report is submitted to and approved in writing by the Council. This report shall comprise: a desktop study which identifies all current and previous uses at the site and surrounding area as well as the potential contaminants associated with those uses; a site reconnaissance; and a conceptual model indicating potential pollutant linkages between sources, pathways and receptors, including those in the surrounding area and those planned at the site; and a qualitative risk assessment of any potentially unacceptable risks arising from the identified pollutant linkages to human health, controlled waters and the wider environment including ecological receptors and building materials | Phase 1 desktop study           | 9999-P1E-1-A                                   | complete      | 22/11/17                          | 03/01/18               | cleared          |       |
| <b>CONDITION 38</b> - No development shall commence until a site investigation scheme is submitted to and approved in writing by the Council. This scheme shall be based upon and target the risks identified in the approved preliminary risk assessment and shall provide provisions for, where relevant, the sampling of soil, soil vapour, ground gas, surface and groundwater                                                                                                                                                                                                                                                                                                                                                                                                                   | Phase 2 Scope of Works          | 9999-P2E-1-Scope                               |               |                                   |                        |                  |       |
| <b>CONDITION 39</b> - no development shall commence until, following a site investigation undertaken in compliance with the approved site investigation scheme, a quantitative risk assessment report is submitted to and approved in writing by the Council. This report shall: assess the degree and nature of any contamination identified; include a revised conceptual site model based on the information gathered through the site investigation to confirm the existence of any remaining pollutant linkages and determine the risks posed by any contamination to human health, controlled waters and the wider environment.                                                                                                                                                                | Phase 2 Intrusive Investigation | 9999-P2E-1-B                                   | com.          |                                   |                        |                  |       |

If required we will prepare a schedule showing which reports or investigations are required for discharge of each planning condition or part thereof in order to keep all members of the project team fully informed.

We can also take responsibility for submission of reports and obtaining discharge of the relevant planning conditions.

# Planning Pg 2



Contaminated  
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                             |                              |                                 |  |  |                            |                                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|------------------------------|---------------------------------|--|--|----------------------------|------------------------------------------------------------------------------------------------------------------------|
| <p><b>CONDITION 40</b> - Unless the Council agree in writing that a set extent of development must commence to enable compliance with this condition, no development shall commence until, a remediation method statement is submitted to and approved in writing by the Council. This statement shall detail any required remediation works and shall be designed to mitigate any remaining risks identified in the quantitative risk assessment.</p>                                                                                                                                                                                                                                                              | <p>Phase 3<br/>Remediation<br/>Strategy</p> | <p>9999-P3E-1-<br/>Draft</p> | <p>in hand</p>                  |  |  | <p>to be<br/>addressed</p> |                                                                                                                        |
| <p><b>CONDITION 41 part 1</b>- Unless the Council agree in writing that a set extent of development must commence to enable compliance with this condition, no development shall commence until the approved remediation method statement has been carried out in full and a verification report confirming these works has been submitted to, and approved in writing, by the Council. This report shall include: details of the remediation works; results of any verification sampling, testing or monitoring including the analysis of any imported soil; all waste management documentation showing the classification of waste, its treatment, movement and disposal; and the validation of gas membrane.</p> | <p>Phase 4<br/>Verification<br/>Report</p>  |                              | <p>awaiting<br/>instruction</p> |  |  | <p>to be<br/>addressed</p> |                                                                                                                        |
| <p><b>CONDITION 41 part 2</b> - If, during development, contamination not previously identified is found to be present at the site, the Council is to be informed immediately and no further development (unless otherwise agreed in writing by the Council) shall be carried out until a report indicating the nature of the contamination and how it is to be dealt with is submitted to, and agreed in writing by, the Council.</p>                                                                                                                                                                                                                                                                              | <p>Unexpected<br/>contamina-tion</p>        |                              | <p>as phase 4</p>               |  |  | <p>to be<br/>addressed</p> | <p>Not anticipated.<br/>To be addressed if<br/>required, otherwise<br/>verification report<br/>to state none found</p> |
| <p><b>CONDITION 42</b> - Unless the Council agree in writing that a set extent of development must commence to enable compliance with this condition, no development shall commence until an onward long-term monitoring methodology report is submitted to and approved in writing by the Council where further monitoring is required past the completion of development works to verify the success of the remediation undertaken. A verification report of these monitoring works shall then be submitted to and approved in writing by the Council when it may be demonstrated that no residual adverse risks exist.</p>                                                                                       | <p>Long term<br/>monitoring</p>             |                              | <p>as phase 4</p>               |  |  | <p>to be<br/>addressed</p> | <p>Not anticipated.<br/>To be addressed if<br/>required.</p>                                                           |

# Community



The team has worked at the local Sydenham Gardens, a charity that supports mental health in the community.

You can support them at [www.sydenhamgarden.org.uk](http://www.sydenhamgarden.org.uk)

