What are Brownfield sites?

Brownfield sites is a term often used by Government for derelict land assumed generally to be contaminated. The term used in the National Planning Policy Framework (NPPF) is ‘previously developed land’ and although synonymous with brownfield sites is defined as “Land which is or was occupied by a permanent structure, including the curtilage of the developed land (although it should not be assumed that the whole of the curtilage should be developed) and any associated fixed surface infrastructure”. Government policy is to grant automatic planning consent for development on brownfield sites, although such developments will still need relevant assessment following the guidance set out in the NPPF.

More housing on brownfield

The Campaign to Protect Rural England (CPRE) has long been a proponent of promoting the use of brownfield sites for housing over greenfield sites. A briefing paper released in 2016 ‘Brownfield comes first, why brownfield development works’ reports on a research project of development sites in 15 urban and urban-rural fringe local authorities across England, to deliver approximately 70,000 houses over 70% of which were defined as being on brownfield sites. The study found that whilst it takes approximately the same length of time for the planning process to start the projects, brownfield sites were then built out on average in 63 weeks compared with 92 weeks for greenfield land. Given the general complexities of developing brownfield land this finding is somewhat surprising.

CPRE concluded that the Government’s pledge to invest in brownfield regeneration and to establish a brownfield register will help speed up the rates of housebuilding and help to minimise building on greenfield land. CPRE consider that a proposal by Government to force local authorities to release more sites for development if housing targets are not met, is unlikely to have a direct impact on the overall numbers of new homes provided but will instead lead to developers cherry-picking greenfield land over brownfield land and CPRE want local authorities to be provided with powers not to allocate greenfield sites in local plans and to refuse planning permission on greenfield sites where these would compete with suitable brownfield sites.

In a separate study CPRE has analysed the Government’s Brownfield Register pilot scheme, comparing the information in 53 Local Authority brownfield registers against the submissions to the National Land Use Database in 2010, 2011 and 2012 which is the last occasion on which that Local Authorities submitted data on local available sites. CPRE concluded that of 53 Local Authorities that have published their data on suitable sites, the sites identified could provide 273,000 homes and that there has been a 50% increase in the number of brownfield sites identified as suitable for development. Using the data CPRE conclude that across England this would equate to 1.1 million homes which could be built on brownfield sites and that the data shows that there is a general ability to meet five-year housing land supply targets almost solely using brownfield sites.

Further information about the Brownfield Registers is presented in the MJCA Contaminated Newsletter No15.
Unlocking brownfield development

The Environmental Industries Commission (EIC) has published a position paper entitled ‘Brownfield first: Making better use of our land’. The paper sets out their position on a number of Government policy areas to improve the economics and attractiveness of brownfield development, to stimulate more brownfield development and the need for a better planning process for brownfield development. EIC state that the UK brownfield land sector is worth £1 billion a year and is expected to grow by almost 4.5 per cent per annum between now and 2020.

Key areas in the position paper include their support of The Housing and Planning Bill which places a responsibility on Local Authorities to identify brownfield sites for development. Sites which meet certain criteria, for example sites which are capable of accommodating 5 or more dwellings per 0.25 hectare and are viable to develop will then be entered on to the Brownfield Register as ‘suitable for housing’ and through the legislation such sites would be granted planning permission in principle for development. EIC wish to see sequential testing of robust data to ascertain the availability, suitability, achievability and viability of brownfield land development. Such a process could then be used to create a reliable and consistent brownfield land database that all Local Authorities could use to record, utilise and disseminate information from. EIC raise a number of points to consider regarding how this could work and state that the use of the Brownfield Register should not prohibit other non-residential end uses for example retail development on suitable brownfield land.

The development of brownfield sites has a range of economic barriers for example the need for site investigations, assessment of the potential risks, abnormal costs for land remediation…

The development of brownfield sites has a range of economic barriers for example the need for site investigations, assessment of the potential risks, abnormal costs for land remediation, together with additional measures for foundations and drainage. EIC are concerned that developers may default to develop less complex sites and that there needs to be financial incentives to develop brownfield sites. EIC identifies two mechanisms available to developers and landowners which could contribute towards the cost of developing brownfield sites. One is grant aid administered through the Local Enterprise Partnerships to fund projects subject to certain state aid rules being satisfied. A grant is discretionary, the application process can take time, be costly and introduce uncertainty for the development to progress. The other option is financial incentives via land remediation tax relief for the development of brownfield sites subject to eligibility criteria being met.

The Finance Act 2001 introduced up to 150% tax relief for companies incurring expenditure on the investigation and remediation of contaminated land so as to encourage development of brownfield land. Land remediation tax relief can be claimed by property investors and developers where the companies are subject to corporation tax. The legislation states that contamination must be present as a result of industrial activity to qualify for tax relief although it can also apply to costs incurred to deal with invasive plants and natural contaminants for example to install gas protection measures for radon gas. Under the definition in the Finance Act, land is in a contaminated state only if in such a condition that “…relevant harm is being caused or there is a serious possibility that relevant harm will be caused…”, which includes risks of potential impacts on living organisms and significant pollution of controlled waters. The tax relief may also be available where there is significant adverse impact on ecosystems, structural or other significant damage to buildings or other structures that significantly compromises their use. The legislation has a provision for derelict land remediation which may also qualify for the tax relief, providing that the land has been in a derelict state since April 1st 1998 or earlier. Land is defined as derelict if it is not in a productive state and cannot be put into a productive state without the removal of specific types of buildings or other structures including foundations, machinery bases, pile caps and basements, and other below ground redundant services.

EIC wish to see a reform to Land Remediation Relief with the introduction of a pre-tax credit for qualifying remediation costs. EIC also suggest that the value of the
Unlocking brownfield development continued

tax relief should be increased from the current 150% to 175%, although this increase will have only the same effect of restoring the tax relief to the same level of financial contribution that was available when the tax relief was first introduced as the level of corporation tax rate was then higher at 30%. EIC want the date of use to determine entitlement for Land Remediation Relief changed from 1998 to 2008 which would result in more sites which qualify for the tax relief.

EIC recommend that a tax relief for flood prevention measures should be reinstated as this would send clear messages to the industry that proper flood prevention or mitigation measures need to be incorporated into the development of new homes.

EIC wish to see improvements to speed up brownfield development through the planning process with standard timescales, the precedence over greenfield sites and with the introduction of the National Quality Mark Scheme provide a 'fast track' mechanism to demonstrate that reports submitted with a planning application have been reviewed by a Suitable Qualified Person to satisfy regulatory requirements. EIC recommend a final report on the verification of remediation to be provided to the planning authority which would ensure the predisposition towards granting of planning permission on brownfield sites. These actions would assure landowners, buyers and regulators that adequate site investigation and remediation strategies are developed and approved through the planning process and will aid the sale and transfer of brownfield sites.

Contamination and archaeology

Historic England have prepared consultation guidance for consultation on the assessment and management of land contamination where archaeology is also a consideration. This guidance is an update of a publication entitled "Guidance on Assessing the Risk Posed by Land Contamination and its Remediation on Archaeological Resource Management", April 2003 prepared by English Heritage and the Environment Agency.

The new guidance sets out a summary of the current legislative and planning policy framework for contaminated land and archaeology and assessment stages where there are a number of similarities in the framework for the data gathering process in preparing desk studies and applying a staged risk assessment approach to the investigation of land contamination and to archaeology. The guidance proposes a series of four consultation stages.

Early consultation / pre-assessment – where both land contamination and archaeology issues are present or suspected, there is consultation between the relevant parties for example the developer/land owner, regulators, land contamination consultant and archaeologist.

Hazard identification and hazard assessment – comprises detailed consultation between the archaeologist and land contamination consultant to assess cost implications, the programme and phasing of works, the review of a conceptual site model, the uncertainties and limitations in the information and exchange of data sources and information.

Risk estimation - the site investigation approach and techniques are planned together with a mitigation strategy to address the potential contamination issues and where possible, to protect the archaeological assets.

Risk evaluation - an appropriate remediation strategy is prepared taking account of archaeological assets and a need to break any pollutant linkage, including an assessment of whether or not the archaeology is part of the source or linkage.

There are a number of case studies which provide examples of archaeological assets as a source, a pathway and as a receptor of contamination and which demonstrate why archaeological assets should and can be considered alongside contamination issues.

“…there are a number of similarities in the framework for the data gathering process in preparing desk studies and applying a staged risk assessment approach to the investigation of land contamination and to archaeology...”
Contamination and archaeology continued

The guidance includes a summary of site investigation techniques and explains how surveys can be combined to not only enhance the understanding of a key issues, but also to inform the scope of further assessment. A summary is provided of some of the possible impacts on archaeology that can arise from remediation and options are presented to avoid, reduce or compensate for these impacts.

The UK’s industrial heritage may have contributed to a legacy of land contamination across the country however preserving or documenting this heritage remains an important aspect in the development of land.

Update of DoWCoP

The Definition of Waste: Development Industry Code of Practice (DoWCoP) is a voluntary code developed by CL:AIRE with the support of the Environment Agency (EA) and has been operating successfully since 2008 providing a pragmatic solution to the use of excavated materials including contaminated soils and made ground on development sites in a sustainable manner without involving waste legislation.

In a recent CL:AIRE newsletter with respect to guidance on identifying disposal operations and clarification regarding the use of the DoWCoP, it is stated that:

“...Where the project has been refused a recovery permit, and/or the recipient of the soil is being paid to accept it (charging a ‘gate fee’) then clients should be asked to seek further advice from the Environment Agency...”

The wording in the Declaration which needs to be submitted by a Qualified Person (QP) has been revised to include:

“The EA/NRW have not objected to the reuse of materials on the grounds that it a.) constitutes a waste management operation or b.) has had a previous application for an environmental permit for waste recovery refused (on the grounds that the project represents waste disposal)”

The wording implies that there is a need to consult with the EA and Natural Resources Wales (NRW) before the submission of a Declaration, whereas for certain scenarios set out in the DoWCoP such consultation would not be necessary generally, for example a Direct Transfer scenario where clean natural occurring soils are transfer from a donor site to a receiver site.

However, there is no revision to the wording in the Declaration statement to address the issue of a ‘gate fee’. Whether a fee is being charged by either the donor site or the receiver site has no direct bearing on whether the material is or is not a waste and so should in our view have no relevance under the DoWCoP.

The need to consult with the EA on for scenarios where this was not necessary previously is of particular concern with regard to the delay this will cause to projects. It is invariably difficult to identify and obtain an opinion from an appropriate individual within the EA when specific advice is needed on these matters and the resources available to staff in the EA is limited and becoming more so. One of the main purposes of the DoWCoP is to remove this delay in the progress of development projects by setting out agreed ‘rules’ which can be applied and assessed by QPs. There is a real danger that this objective is being eroded without any clear justification.
Asbestos — JIWG

CL:AIRE has published recently the Joint Industry Working Group (JIWG) Asbestos in Soil and Construction & Demolition (C&D) Materials guidance entitled “Control of Asbestos Regulations 2012: Interpretation for Managing and Working with Asbestos in Soil and Construction & Demolition materials: Industry Guidance” (CAR-SOIL™). The document has been prepared with the support of the Health and Safety Executive (HSE) and presents an explanation of how the legal requirements of the Control of Asbestos Regulations 2012 (CAR 2012) have been interpreted to apply to work with asbestos contaminated soil and C&D materials. The report has been reviewed by a number of agencies including the HSE, Environment Agency, Scottish Environmental Protection Agency, Natural Resources Wales, Northern Ireland Environment Agency, Public Health England, Institute of Occupational Medicine together with representatives from industry, environmental consultancy and remediation contractors.

The guidance presents a comprehensive framework and practical guidance which can be applied to assess the potential risks associated working with soil and C&D materials contaminated with asbestos, including for site investigations and management of C&D materials primarily through site clearance and site remediation activities to address the overarching requirements set out in CAR2012. Most of the document is applicable to soils and C&D materials that will be managed during site development and site remediation works where there is likely to be significant disturbance of the ground where there may be asbestos contaminated material.

It is generally accepted, based on extensive industry experience, that the nature and degree of potential risks from exposure to asbestos fibres when working with asbestos-contaminated soil or C&D materials in the external environment is significantly lower than that which might be expected when working with asbestos containing materials (ACMs) internally within buildings. According to the HSE, there is now significant monitoring evidence available within the ground investigation and remediation industry to suggest that significant visible quantities of bound ACMs will need to be present to give rise to exposures above a value of 0.01 f/ml, which is equivalent to one tenth of the control limit, unless the materials are subjected to highly energetic processes for example crushing, screening and grading of demolition waste and made ground or soil.

The investigation and excavation of the ground can be unpredictable and it is common to find asbestos in many different forms including free fibres of asbestos in soils and made ground on brownfield and derelict sites particularly in C&D waste. However not all forms of asbestos can be observed in the field, for example it may be present as free fibres in the soil matrix which can be observed only under laboratory conditions.

The CL:AIRE guidance provides an account of licensed and non licensed work in accordance with the regulations and provides details for the assessment of risks during the works, the need for training, competency and information on preventing and reducing exposure to asbestos, including the provision, use and maintenance of control measures and arrangements to deal with accidents, incidents and emergencies.

Work associated with ground investigations and/or surveys for the on-site collection and inspection of samples for the purpose of analysis for the presence of asbestos, including mechanical excavation of trial pits, trenches and boreholes is likely to be a non-licensed activity where a risk assessment can demonstrate that the exposure anticipated during the work will be sporadic and low intensity exposure and the control limit will not be exceeded. The guidance document provides a comprehensive account of assessing where particular site activities may be licensed work and a practical spreadsheet based risk assessment Decision Support Tool has been developed that facilitates the assessment of licensing status of work as part of the risk assessment required under CAR 2012.

“The investigation and excavation of the ground can be unpredictable and it is common to find asbestos in many different forms and free fibres of asbestos in soils and made ground …”
Asbestos — JIWG continued

The spreadsheet includes a series of options for each identified factor and these factors are grouped into stages with each stage providing a numerical and/or qualitative hazard or risk ranking phrase. The support tool assists decisions on probable licensing status and the need for appropriate respiratory protective equipment (RPE) and the control measures that need to be used and implemented during work with asbestos-contaminated soil and C&D materials. The spreadsheet can be downloaded from the CL:AIRE JIWG asbestos in soil website here.

JIWG are preparing currently further guidance ‘Asbestos in Soil Code of Practice’ which is anticipated to provide greater clarity with regard to the presence of asbestos contamination in soils and C&D waste materials and their suitability for reclamation and deposition at inert waste landfill sites.

National Quality Mark Scheme — 2017

The National Quality Mark Scheme (NQMS) supported by a register of Suitably Qualified Persons (SQP) was launched in January 2017. The initiative was developed by the Land Forum and the scheme will focus on activities such as site characterisation including desk studies and site investigation together with risk assessment, remediation option appraisal and the verification of remedial works. The scheme is intended to make sure that these activities are carried out in line with established good practice procedures and to meet legislative aims. The scheme will be administered by Contaminated Land: Applications in Real Environments (CL:AIRE) and a register of the SQP is available via the CL:AIRE website.

Details about the scheme are available here.