

VZ/JL

24 October 2012

Planning and Policy Advisor - Wales
Home Builders Federation
PO Box 2512
Cardiff
CF23 0GB

For the attention of Mr Richard Price

Dear Sir,

Brownfield Sites – Remediation/Reclamation Cost Estimates

We have been approached by a number of major house builders in South Wales to write and confirm to you typical costs for the remediation/reclamation works of brownfield sites.

For many years our company has been acting as the Geotechnical and Geoenvironmental Consultant to a great number of house builders for the regeneration and redevelopment of brownfield sites. We have a good track record for dealing with many types of brownfield sites including iron and steelworks, chemical works, scrap yards, shipyards, railway sidings, disused factories, colliery sites, mine spoil heaps, gasworks, landfills, paint and tar works etc.

The typical remediation/reclamation cost per acre depends on the following:

1. The size of site (the smaller the site, the higher the cost per acre).
2. The type/category of the sites historic use.
3. The level of risk that the site poses to the environment (e.g. if the site is adjacent to a river or near to controlled waters, then there is a potentially high risk of environmental impact).

However from our experience, the reclamation/remediation costs, including the demolition of disused buildings, could vary between typically £100k and £250k per acre. In the case of highly and extensively contaminated sites such as oil refineries and tar plants, the remediation costs could be much greater than £250k per acre.

In addition to the above remediation/reclamation costs, many brownfield sites have additional abnormal development costs associated with the need for other requirements such as piled/reinforced concrete raft foundations, ground gas protection barriers, importation of clean subsoil/topsoil etc. Based on an average of 15 units per acre, a typical cost per acre for these abnormals would be circa £75k. This covers raft foundations at £2500 per unit extra over normal strips, £750 per unit for gas barrier in the slab and importation/placement of 600mm thick clean subsoil/topsoil in the gardens.

Therefore, the total cost of remediation/reclamation works and developers' abnormals for redevelopment of brownfield sites for housing would be between circa £175 and £325k per acre.

We trust that the above is a useful guide. If you should have any queries or require any further information, please do not hesitate to contact us.

Yours faithfully

A handwritten signature in black ink, appearing to read 'V. Zarifian', written in a cursive style.

Vahe Zarifian B.Sc., M.Sc., D.I.C., M.I.C.E, C.Eng.