

NEW HOUSING DEVELOPMENT

CLIENT:

Bellway Homes NW Ltd

SITE:

G & J Distillery

CONTRACT SUM:

£ 0.55 M

CONTRACT INFO:

Green Remediation were commissioned by Bellway Homes to undertake the remediation and preparatory earthworks for a large derelict site in Warrington which had former uses dating back over a hundred years comprising a distillery, laundry, iron foundry and railway sidings. The overall project involved the phased construction of 125 residential dwellings with gardens and associated roads and drainage works. URS have acted as the Qualified Person (QP) reviewer.



A site investigation report including a remediation and earthworks strategy resulting from early contractor involvement was initially produced for the site by Betts Associates, which received full approval from Warrington Borough Council and the Environment Agency (EA).

It was decided that the use of a materials management plan (MMP) approach would be ideally suited for the project, using the CL:AIRE Definition of Waste: Development Industry Code of Practice (Version 2, March 2011) (CoP). The materials movements encompassed, breaking out, crushing and re-use of artificially hard materials (concrete, brick and bituminous surfacing), bulk excavation and placement of both made ground and naturally occurring subsoil and topsoil materials, totalling approximately 105,000m³. Proposed development levels across the site had to be raised to satisfy minimum flood levels which necessitated a significant proportion of this material having to be imported.



Green Remediation developed comprehensive earthworks/materials movements drawings and schematics referenced to the MMP and the requisite supporting documentation which enabled the QP reviewer to provide a signed declaration without difficulty. The QP declaration was submitted to the EA, thus allowing the re-use of materials on the site to commence swiftly, meeting the Client's programme.



The original MMP was produced in April 2011 and has undergone five revisions during May and June 2011 to eventually encompass the full range of scenarios available under the CoP:

- 1) Reuse on the site of origin (original MMP).
- 2) Direct Transfer of clean naturally occurring soil and mineral materials (Revs A, B, C and E: imports from donor sites).
- 3) Cluster Project (Rev D: import from a fixed soil treatment facility (acting as a hub/donor site) in a two site cluster operating under EA permit).



For the original MMP and the revisions at each stage, Green Remediation demonstrated the four factors required by the CoP:

- 1) Protection of human health and protection of the environment
- 2) Suitability for use, without and with (i.e. crushing) further treatment
- 3) Certainty of use
- 4) Quantity of material

Green Remediation put in place a system of materials tracking and a verification plan, which is a further requirement of the CoP, to demonstrate that the placed materials are geotechnically, as well as chemically suitable and to enable validation by Betts Associates that the site has been prepared to the approved specification required by the Client and agreed with the regulators.

Revisions to the MMP were undertaken and reported to the QP for review at every stage, who in turn submitted the signed declarations to the EA to keep them informed of revisions to the MMP. This progressive approach has led to the EA amending their site referencing identification for any future QP document revision(s).



Again, the quick turnaround and clarity of the materials movements drawings and schematics referenced to the MMP and supporting documentation provided, enabled a swift response from the QP reviewer. This was particularly important during the revision stages of the MMP, when a quick response was required to secure materials for import from donor sites which had their own Clients' programmes to meet.



Sustainability Benefits:

- Re-use of materials which were surplus to requirements at other sites which may have otherwise been disposed of at landfill sites.
- Re-use of materials within the site that may have otherwise required land filling.
- Reduced vehicle emissions and carbon footprint due to less materials transportation (locally sourced imports).
- Re-used materials from other sites rather than quarried virgin materials.
- Reduced flood risk.
- Resultant cost and time savings of all the above.